



SCOPING OPINION

Proposed Sizewell C Nuclear Development



June 2014



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EXECUTIVE SUMMARY

This is the Scoping Opinion (the Opinion) provided by the Secretary of State in respect of the content of the Environmental Statement for Sizewell C Proposed Nuclear Development, Near Leiston in Suffolk.

This Opinion sets out the Secretary of State's opinion on the basis of the information provided in EDF Energy's ('the applicant') report entitled 'Sizewell C EIA Scoping Report (April 2014)' ('the Scoping Report'). This Opinion can only reflect the proposals as currently described by the applicant.

The Secretary of State has consulted on the Scoping Report and the responses received have been taken into account in adopting this Opinion. The Secretary of State is satisfied that the topic areas identified in the Scoping Report encompass those matters identified in Schedule 4, Part 1, paragraph 19 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended).

The Secretary of State draws attention both to the general points and those made in respect of each of the specialist topic areas in this Opinion. The main potential issues identified are:

- Socio-economic;
- Transport;
- Terrestrial ecology and ornithology;
- Groundwater;
- Surface water;
- Coastal geomorphology and hydrodynamics; and
- Construction impacts (including noise and vibration and air quality).

Matters are not scoped out unless specifically addressed and justified by the applicant, and confirmed as being scoped out by the Secretary of State.

The Secretary of State notes the potential need to carry out an assessment under the Habitats Regulations¹.

¹ The Conservation of Habitats and Species Regulations 2010 (as amended)

1.0 INTRODUCTION

Background

- 1.1 On 23 April 2014, the Secretary of State (SoS) received the Scoping Report submitted by the applicant under Regulation 8 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (SI 2263) (as amended) ('the EIA Regulations') in order to request a scoping opinion for the proposed Sizewell C Proposed Nuclear Development ('the proposed development'). This Opinion is made in response to this request and should be read in conjunction with the applicant's Scoping Report.
- 1.2 The applicant has formally provided notification under Regulation 6(1)(b) of the EIA Regulations that it proposes to provide an ES in respect of the proposed development. Therefore, in accordance with Regulation 4(2)(a) of the EIA Regulations, the proposed development is determined to be EIA development.
- 1.3 The EIA Regulations enable an applicant, before making an application for an order granting development consent, to ask the SoS to state in writing their formal opinion (a 'scoping opinion') on the information to be provided in the environmental statement (ES).
- 1.4 Before adopting a scoping opinion the SoS must take into account:
 - (a) the specific characteristics of the particular development;
 - (b) the specific characteristics of the development of the type concerned; and
 - (c) environmental features likely to be affected by the development'.

(EIA Regulation 8 (9))
- 1.5 This Opinion sets out what information the SoS considers should be included in the ES for the proposed development. The Opinion has taken account of:
 - i the EIA Regulations
 - ii the nature and scale of the proposed development
 - iii the nature of the receiving environment, and
 - iv current best practice in the preparation of environmental statements.
- 1.6 The SoS has also taken account of the responses received from the statutory consultees (see Appendix 2 of this Opinion). The matters addressed by the applicant have been carefully considered

and use has been made of professional judgement and experience in order to adopt this Opinion. It should be noted that when it comes to consider the ES, the SoS will take account of relevant legislation and guidelines (as appropriate). The SoS will not be precluded from requiring additional information if it is considered necessary in connection with the ES submitted with that application when considering the application for a development consent order (DCO).

- 1.7 This Opinion should not be construed as implying that the SoS agrees with the information or comments provided by the applicant in their request for an opinion from the SoS. In particular, comments from the SoS in this Opinion are without prejudice to any decision taken by the SoS (on submission of the application) that any development identified by the applicant is necessarily to be treated as part of a nationally significant infrastructure project (NSIP), or associated development, or development that does not require development consent.
- 1.8 Regulation 8(3) of the EIA Regulations states that a request for a scoping opinion must include:
- (a) 'a plan sufficient to identify the land;
 - (b) a brief description of the nature and purpose of the development and of its possible effects on the environment; and
 - (c) such other information or representations as the person making the request may wish to provide or make'.
- (EIA Regulation 8 (3))*
- 1.9 The SoS considers that this has been provided in the applicant's Scoping Report.

The Secretary of State's Consultation

- 1.10 The SoS has a duty under Regulation 8(6) of the EIA Regulations to consult widely before adopting a scoping opinion. A full list of the consultation bodies is provided at Appendix 1. The list has been compiled by the SoS under their duty to notify the consultees in accordance with Regulation 9(1)(a). The applicant should note that whilst the SoS's list can inform their consultation, it should not be relied upon for that purpose.
- 1.11 The list of respondents who replied within the statutory timeframe and whose comments have been taken into account in the preparation of this Opinion is provided at Appendix 2 along with copies of their comments, to which the applicant should refer when undertaking the EIA.

- 1.12 The ES submitted by the applicant should demonstrate consideration of the points raised by the consultation bodies. It is recommended that a table is provided in the ES summarising the scoping responses from the consultation bodies and how they are, or are not, addressed in the ES.
- 1.13 Any consultation responses received after the statutory deadline for receipt of comments will not be taken into account within this Opinion. Late responses will be forwarded to the applicant and will be made available on the Planning Inspectorate's website. The applicant should also give due consideration to those comments when undertaking the EIA.

Structure of the Document

- 1.14 This Opinion is structured as follows:

Section 1 Introduction
Section 2 The proposed development
Section 3 EIA approach and topic areas
Section 4 Other information

This Opinion is accompanied by the following Appendices:

Appendix 1 List of consultees
Appendix 2 Respondents to consultation and copies of replies
Appendix 3 Presentation of the environmental statement

2.0 THE PROPOSED DEVELOPMENT

Introduction

- 2.1 The following is a summary of the information on the proposed development and its site and surroundings prepared by the applicant and included in their Scoping Report. The information has not been verified and it has been assumed that the information provided reflects the existing knowledge of the proposed development and the potential receptors/resources.

The Applicant's Information

Overview of the proposed development

- 2.2 The proposed development, Sizewell C, is a new nuclear power station comprising two European Pressurised Reactors (EPRs), associated access roads, and temporary development associated with construction. Sizewell C will be located predominantly to the north of the existing operational Sizewell B power station, east of the settlement of Leiston, Suffolk. The proposed development is expected to have an electrical capacity of approximately 3,260 megawatts (MW) when operational.
- 2.3 Section 3 of the Scoping Report describes the proposed development, which has been separated into consideration of the 'Main Development Site' and 'off-site associated development'.
- 2.4 The Main Development Site would include both permanent and temporary development. Permanent development within the Main Development Site includes the following:
- Two EPRs including reactor buildings and associated buildings (referred to as the 'Nuclear Island');
 - Turbine halls and electrical buildings (referred to as the 'Conventional Island');
 - Cooling water pumphouses and associated buildings;
 - An Operational Service Centre;
 - Fuel and waste storage facilities, including Interim Spent Fuel Store (ISFS);
 - External plant, including storage tanks;
 - Internal roads;
 - Ancillary, office and storage facilities;
 - Drainage and sewerage infrastructure;
 - Cooling water infrastructure;

- Access road to the B1122 road and related junction arrangements;
- A bridge connecting the power station to the new access road to the north;
- Car parking, some ancillary buildings and a helipad;
- Flood defence and coastal protection measures;
- Installation of a cut-off wall around the operational platform;
- A beach landing facility to receive deliveries of Abnormal Indivisible Loads (AILs) by sea;
- Simulator Building/Training Centre;
- Options for a Visitor Centre; and
- Landscaping of the areas to be restored following construction.

2.5 Temporary development within the Main Development Site comprises the following:

- Construction working areas, including laydown areas, workshops, storage and offices;
- Temporary structures, including concrete batching plant;
- Management of spoil/stockpile arrangements, including potential sourcing on-site of construction fill materials;
- Temporary bridge between the power station and adjacent construction areas;
- Temporary jetty for transport of bulk construction materials, equipment and AILs by sea;
- Options for a temporary rail route extending into the Main Development Site;
- Works area on the foreshore for the installation of flood defence and coastal protection measures;
- Construction roads, fencing, lighting and security features;
- Site access arrangements and coach, lorry and car parking; and
- A development site accommodation campus.

2.6 In addition to the Main Development Site, additional land will be required for associated development to support the construction of the nuclear power station. Section 3.3 of the Scoping Report describes the off-site associated development currently considered for the impact assessment. The off-site associated development includes lead sites (likely, but not definite sites for associated development) and those where lead sites have not yet been determined (i.e. options). The off-site associated development currently undergoing investigation includes:

- Two temporary park and ride sites (one to the north of Sizewell C at Darsham and one to the south of Sizewell C, at Wickham Market);
- A potential postal consolidation facility and construction induction centre may also be located at one of the park and ride sites;
- A temporary extension of the existing Saxmundham to Leiston railway line into the construction site (two options are currently being considered) or a new rail terminal and freight laydown area north of King George's Avenue, Leiston; and
- The need for permanent highway improvements to the A12 road. Three potential options have been identified to date:
 - A Farnham bypass;
 - Road widening at Farnham Bend; or
 - HGV traffic controls at Farnham Bend.

2.7 Sections 3.4 to 3.6 of the Scoping Report describe the construction, operation and decommissioning phases of the proposed development. Section 3.7 of the Scoping Report describes the proposed approach to conventional waste management, whilst Section 3.8 describes the approach to spent fuel and radioactive waste management.

Description of the site and surrounding area

The Main Development Site

2.8 The Main Development Site lies predominantly to the north of the existing Sizewell A and operational Sizewell B power stations complex; to the east of the town of Leiston, Suffolk and adjacent to the North Sea. The Main Development Site comprises the area allocated for the power station (the 'operational platform construction area'), together with a wider area associated with the construction works (the 'temporary construction area') and an accommodation campus site. These construction areas are presented on Figure 3.2.1 in the Scoping Report.

2.9 The nearest principal settlement is Leiston, located to the west of the Main Development Site. Further inland is the town of Saxmundham. A number of villages, hamlets and isolated dwellings are distributed throughout the wider landscape. The coast in the vicinity of the development contains limited settlement, with the exception of the village of Sizewell to the south of the existing Sizewell A and B power stations complex. The coastal towns of Thorpeness and Aldeburgh are located to the south. Dunwich and Southwold are located to the north.

2.10 There are a number of statutory and non-statutory designated sites for nature conservation that lie within and immediately

adjacent to the Main Development Site. The Scoping Report identifies a total of 16 international and nationally statutory designated sites for nature conservation within 20km of the proposed development. Seven County Wildlife Sites (CWS) and a Suffolk Wildlife Trust Nature Reserve were also identified within 3km of the proposed development.

- 2.11 The majority of the non-designated habitats within the Main Development Site are identified as comprising agricultural farmland with smaller areas of deciduous woodland, coniferous plantation, acid grassland/lowland heath, and neutral grassland. Two hills are present within and adjacent to the site, Goose Hill and Kenton Hills. These predominantly comprise plantation woodlands. All agricultural land within the Main Development Site, described as being surveyed to date, comprises subgrade 3b (moderate quality) soils or lower. Dune and shingle habitats are present on the coastal frontage of the Main Development Site. The area of Sizewell Marshes SSSI located within the Main Development Site includes a mosaic of open water, reedbed, and wet woodland habitats.
- 2.12 The Main Development Site lies almost entirely within the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) and partially within areas designated as the Suffolk Heritage Coast. A small area of the Main Development Site lies within an area designated as a Special Landscape Area, whilst the entire terrestrial development lies within the Suffolk Coast and Heaths National Character Area. The area for cooling waters and associated infrastructure and the jetty lie within the Suffolk Coastal Waters Seascape Character Area.
- 2.13 No Scheduled Ancient Monuments (SAM) are identified within the Main Development Site. The nearest SAM is Leiston Abbey and moated site located approximately 600m west of the Main Development Site. This SAM also includes the remains of St Mary's Abbey, a Grade I Listed Building, and three Grade II Listed Buildings, the Retreat House, Barn and Guesten Hall. There are three Grade II Listed Buildings either located within or immediately adjacent to the Main Development Site: Upper Abbey Farmhouse; Barn at Upper Abbey Farmhouse; and Abbey Cottage. The terrestrial designated heritage assets baseline study identified over 300 designated assets within a study area of 2 to 3km from the proposed development. A desk-based assessment for the Marine Historic Environment identified 162 wrecks within the study area of 20km x 20km, with the Main Development Site at its centre.
- 2.14 Two long distance paths, the Suffolk Coastal Path and Sandlings Walk, a bridleway, a Sustrans route and permissive paths are located within the Main Development Site. Permissive routes include those around Goose Hill and Kenton Hills. A number of areas of Open Access Land occur beyond the Main Development

Site, including land near Leiston Common, Sizewell Common land to the north of Dower House, and parts of The Walks and Aldringham Common. Registered Common Land is also present within the local area, mainly to the south and east of Leiston.

- 2.15 A number of watercourses were identified within a study area of water catchments, including a small number located within the Main Development Site. Two major drains are crossed by the Main Development Site. The Leiston Drain flows along the north of the Sizewell Belts. The Sizewell Drain rises from the south of Sizewell B Power Station and joins with the Leiston Drain at the north of Sizewell B Power Station before flowing north to the coast at Minesmere Sluice, where they discharge to the sea. The Sizewell Marshes SSSI/Sizewell Belts lie adjacent to the Main Development Site, which comprise a series of interconnected drainage ditch systems. There are also two small lakes within the SSSI.
- 2.16 The marine environment, in which the jetty and cooling water and associated infrastructure would be located, includes a sand bank approximately 1.5km from the shore. This bank is referred to as Sizewell Bank and Dunwich Bank, and comprises a continuous feature running parallel with the shore, extending approximately 8km north to south. The cooling water intakes for the proposed development are described within the Scoping Report as likely to be located to the east of the bank, further offshore. The area in which the marine elements of the proposed development are located lies within the East Suffolk Zone of the Anglian River Basin District.
- 2.17 Commercial navigation, in the form of aggregate dredging, fishing, and offshore wind farm development occur within the North Sea surrounding the proposed development. Fish and shellfish fisheries are also noted to operate in the area. Recreational navigation occurs in the locality including: sea kayaking, canoeing, and sailboarding in creeks and minor rivers; dinghy and small boat sailing in rivers and offshore to c.15nm; cruising under motor and sail; and use of personal watercraft. Two medium-use recreational sailing routes are identified as passing the Main Development Site, including the Coastal Route North and the Long Distance Route North. The Coastal Route North is an inshore route that passes between Sizewell B's intake and outfall head structures and Sizewell Bank.

The Off-Site Associated Development

- 2.18 The proposed development includes a number of potential associated off-site elements. A description of each element and its surroundings is described below.

Northern Park and Ride site

- 2.19 The Northern Park and Ride lead site would be located in an area of open land to the west of the village of Darsham. The site is bounded by the main line Saxmundham-Halesworth railway to the south and west of the site, the A12 in part to the east of the site, and Willow Marsh Lane to the north.
- 2.20 Nine statutory designated sites for nature conservation are located within 5km of the site. The site is located outside the Suffolk Coast and Heaths AONB, which lies approximately 3.5km to the east. The site is also outwith the Special Landscape Area. There are a number of Public Rights of Way (PRoW) within the vicinity of the site. There are no SAM or Listed Buildings within the site. However, a number of Listed Buildings are located within the local area.
- 2.21 There are no statutory or non-statutory geological designated sites within 500m of the site and there is no known on-site contamination of the site. The site does not lie within a Source Protection Zone (SPZ); however, there is a licensed abstraction located on the southern edge of the site. A small watercourse is located approximately 250m south-west of the site, which flows into the Minsmere Old River c1.2km downstream. The Minsmere Old River forms part of the Water Framework Directive (WFD) water body 'Leiston Beck and Minsmere Old River', which is identified as heavily modified. The River Yox is located 160m south-east of the site.

Southern Park and Ride site

- 2.22 The Southern Park and Ride lead site is located to north-east of Wickham Market between the A12 and B1078/B1116. The site currently comprises the following areas: an indicative Wickham Market park and ride site (approximately 20.47ha); and additional land for potential development (approximately 22.84ha).
- 2.23 The B1078/B1116 is located to the west of the site; the A12 carriageway is located to the south. The site is bounded by field boundaries and two wooded copses lie to the northern and eastern boundaries of the indicative Wickham Market park and ride site. The closest residential properties are located to the west of the site, at a distance of approximately 100m.
- 2.24 No statutory designated sites are located within 5km of the site and the site is located outside of the Suffolk Coast and Heaths AONB; however, it is noted that a Special Landscape Area lies adjacent. The Roman settlement of the River Deben is located approximately 400m to the west of the site. There is a pond located within the site boundary. There are a number of PRoW within the vicinity of the site, including a number in close proximity to the southern site boundary. A bridleway crosses

between the indicative park and ride site and the additional land for potential development.

- 2.25 The soils within the site are deep, well-drained loams over slowly permeable sub-soils and are classified as Agricultural Land Classification (ALC) grade 3. There are no designated geological sites within 500m of the site and there are no known sources of ground contamination. The site lies within an outer SPZ (SPZ2), although the abstraction associated with this SPZ is located approximately 2km south-south east of the site. The nearest groundwater abstraction is located on the eastern edge of the site.

Rail Line Extension

- 2.26 The potential blue or green rail route options would provide a temporary extension of the Saxmundham-Leiston branch line. The blue route would spur off the existing Saxmundham-Leiston branch line shortly after (east of) the Westhouse level crossing and would be constructed largely within open countryside to the north of Hill Farm, Abbey Lane, and the remains of Leiston Abbey. The blue route would enter the south of the lead site for the campus accommodation for the development, north of the Abbey Farmhouse buildings, and then into the proposed construction area.
- 2.27 The green route would spur off the Saxmundham-Leiston branch line shortly after (east of) the Saxmundham Road level crossing. The proposed route would cross open countryside to the north of Leiston and south of Abbey Lane and the remains of Leiston Abbey. The green route would enter the development in the vicinity of Fiscal Policy woodland, in an area to the north of Lovers Lane.
- 2.28 The third option would be a new rail freight terminal currently under consideration would be located on land north east of Leiston industrial estate, to the north of King George's Avenue, Leiston. This option would not require an extension to existing rail lines, although would not enable direct rail access to the development site.
- 2.29 A total of eight statutory designated sites for nature conservation are located within 5km of the rail route options, the nearest of which is Sizewell Marshes SSSI, located 415m to the east. The blue and green rail routes lie partially within the Suffolk Coast and Heaths AONB. The blue route also extends into an area defined as the Suffolk Heritage Coast and an area designated as a Special Landscape Area. Both the blue and green routes cross a number of PRoW, including two long-distance paths: the Sandlings Walk and Suffolk Coastal Path, and permissive paths around Goose Hill and Kenton Hills.

- 2.30 There are no SAM and Listed Buildings within the rail route boundaries. The blue and green routes would pass in close proximity to a number of designated heritage assets including listed buildings and the Leiston Abbey SAM.
- 2.31 The rail extensions and rail freight terminal site do not cross any SPZ. There are no watercourses located within or adjacent to the new rail freight terminal or the green rail route; however, the blue route is located close to the Hundred River. This river is classified as a heavily modified waterbody under the WFD, and is currently considered to have 'poor' ecological potential.

A12 Road Improvements

- 2.32 There are three potential options for the A12 road improvements that may be required to facilitate the development, including: a Farnham bypass; road widening at Farnham; and HGV traffic controls at Farnham bend.
- 2.33 The Farnham bypass would be located to the north of the village of Farnham. It would be approximately 1km in length and comprise a single-lane carriageway in each direction. At the southern end it would adjoin the existing A12 close to Stratford St Andrew. At the northern end it would adjoin the existing A12 north of Farnham. The road widening and HGV traffic control options would both occur on the A12 at Farnham Bend.
- 2.34 Nine statutory and seven non-statutory designated sites for nature conservation are located within 5km of the Farnham Bypass. The surrounding area supports 10 to 20 ponds within 500m of the proposed road improvements. The road improvement works do not lie within the Suffolk Coast and Heaths AONB but are within an area designated as a Special Landscape Area. There are a number of Listed Buildings within close proximity to proposed developments, including the Old Post Office Grade II Listed Building and the Grade II* Listed Church of St Mary.
- 2.35 A number of PRoW are present within the local area, the majority of which are pedestrian links. There are no areas of Open Access Land within the locality.
- 2.36 The route does not cross a SPZ. The Farnham bypass option would be constructed within agricultural land to the north of Farnham, parts of which are in the floodplain. The route would also cross the River Alde and various drainage ditches.

Visitor Centre

- 2.37 Two siting options for the Visitor Centre are currently under consideration: a site at Coronation Wood (Site 1 on Figure 8.6.1 to the Scoping Report), which would serve both construction and operational phases of the proposed development; and a two-

phased approach, with the temporary use of land either east of west of Leiston during the construction phase (Sites 2C or 2B on Figure 8.6.1, respectively) and a site at Goose Hill within the Main Development Site (Site 2A on Figure 8.6.1), which would be constructed after the completion of the power station and used throughout its operational phase. As the Coronation Wood and Goose Hill sites are located within the Main Development Site, the site and surrounding area are described within the Main Development Site above.

- 2.38 There are up to 12 statutory designated sites within close proximity to the two Visitor Centre option sites in Leiston. Both sites are located outside of the Suffolk Coast and Heaths AONB and Suffolk Heritage Coast. There are a number of PRoW that pass through Leiston. A limited number of areas of Open Access Land are present within the local area, including Sizewell Common and much of The Walks and Aldringham Common.
- 2.39 There are no SAM within close proximity to the option sites. The option site to the east of Leiston lies outside of a SPZ, but there are two licensed abstractions located at the edge of the search area.

Alternatives

- 2.40 Schedule 4 of the EIA Regulations requires the ES to include an outline of the main alternatives studied by the applicant and provide an indication of the main reasons for the applicant's choice, taking into account environmental effects.
- 2.41 Chapter 4 of the Scoping Report addresses the consideration of alternatives for both the Main Development Site and the off-site associated infrastructure.
- 2.42 The Scoping Report states that no alternative sites for the power station will be considered, as the site meets the Strategic Site Assessment (SSA) criteria for nuclear power stations and determined suitable for the deployment of a nuclear power station within National Policy Statement (NPS) for Nuclear Power Generation (EN-6).
- 2.43 The Scoping Report states that no alternative reactor designs will be considered, as the reactor design has been developed and completed within the UK's Generic Design Assessment (GDA) process, with the award of a Design Acceptance Confirmation from the Office of Nuclear Regulation (ONR) and a Statement of Design Acceptability from the Environment Agency. Although the reactors will not be subject to alternative design considerations, Section 4.2 of the Scoping Report confirms that potential alternative layouts for the new nuclear power station within the Main Development Site will be explored, particularly for the land required during construction, and alternative designs of elements of the

development other than the reactors, and alternatives to the layout of the development will be considered in the ES.

2.44 Section 4.3 of the Scoping Report describes the key alternative design options to be considered for the on-site infrastructure associated with the Main Development Site. Key alternative design options will include the consideration of:

- masterplan design concepts and layout of the Main Development Site;
- landscaping;
- sea defences along the eastern edge of the site;
- length, location, and design of the cooling water intakes and outfall structures;
- transmission infrastructure;
- length, structure, and location of beach landing facility;
- length, structure, and location of a temporary jetty;
- on-site interim storage of spent fuel;
- access road alignment and design of the bridges;
- drainage strategies; and
- location of temporary construction areas.

2.45 Section 4.4 of the Scoping Report describes the approach to the selection of suitable sites for off-site associated development. The Scoping Report states that the applicant is currently undergoing this selection process, the findings of which will be reported within the ES.

Description of the proposed Main Development Site

2.46 Sizewell C nuclear power station would comprise two EPRs together with associated infrastructure, with an expected combined electrical capacity of approximately 3,260 megawatts (MW). The main permanent operational platform would be located to the immediate north of the operational Sizewell B power station, and would be built at a platform height of approximately 6.4m Above Ordnance Datum (AOD). A new access road would connect to the power station from the B1122. The access road would include a new, permanent bridge over the Sizewell Marshes SSSI.

2.47 Cooling water infrastructure would be installed from the power station to offshore, with intake structures installed at a distance of approximately 3km from the shore, and outfall structures installed between 0.8 and 3km from the shore. The outfall and intake structures would be connected to the station by horizontal tunnels below the sea bed. These would be installed through the use of

tunnel boring machinery rather than cut and fill. Flood defence and coastal protection measures would also be installed from the foreshore for the power station.

- 2.48 The permanent development within the Main Development Site will include a National Grid 400kV substation, plus one National Grid pylon, removal of an existing pylon and associated realignment of overhead lines.
- 2.49 The strategy for managing spent fuel and radioactive waste would include the initial storage of spent fuel underwater in a reactor fuel pool. Following the initial storage period, the spent fuel assemblies would be transferred to a separate on-site ISFS, where they would be stored until a Geological Disposal Facility is available and the spent fuel is removed for final disposal. The ISFS would be designed for a life of at least 100 years, which would be extended if necessary. The ISFS would be designed to operate independently from other parts of the power station due to its operating lifetime, which would be beyond the life of the proposed development.

Description of the proposed off-site associated development

- 2.50 As described within Paragraph 2.6 of the Scoping Opinion, the proposed off-site associated development currently comprises: two park and ride sites; a potential postal consolidation facility and construction induction centre at one of the park and ride sites; temporary extension of the existing Saxmundham to Leiston railway line into the construction site (blue and green rail route options) or a new rail terminal and freight laydown area north of King George's Avenue, Leiston; and permanent highway improvements to the A12 road, of which three potential options are being considered: a Farnham bypass; road widening at Farnham Bend; or HGV traffic controls at Farnham Bend.

Northern and Southern Park and Rides

- 2.51 The Northern Park and Ride would be located at Darsham and occupy an area of approximately 28ha. The Southern Park and Ride is proposed for a site to north-east of Wickham Market between the A12 and B1078/B1116. The lead site currently comprises the following areas: an indicative Wickham Market park and ride site (approximately 20.47ha); and additional land for potential development (approximately 22.84ha).
- 2.52 The Northern and Southern park and rides would include the following:
- car parking areas with up to approximately 1,000 spaces per site;
 - bus terminus and parking, including shelters;

- perimeter security fencing and lighting;
- welfare building;
- on-site soil storage pending restoration once Sizewell C is built; and
- external areas including roadways, footways, landscaping and drainage.

2.53 Either the Northern or Southern park and ride may also include an induction centre for construction workers and a postal consolidation facility.

Rail Line Extension

2.54 The options currently being explored for off-site associated development include two options for a temporary extension to the existing Saxmundham to Leiston railway line into the construction site (blue and green routes) or a new rail terminal and freight laydown area north of King George's Avenue, Leiston.

2.55 These rail line extensions are currently being explored as a potential mitigation option to reduce and manage the traffic on the local highway network as a result of movement of freight during construction. The rail routes could be used to deliver bulk construction materials to the proposed development site in advance of the temporary jetty construction.

A12 Road Improvements

2.56 Three road improvements to the A12 are currently being explored as a result of preliminary findings that indicate that traffic associated with the proposed development could increase the potential for congestion and exacerbate safety concerns associated with the narrow bend at Farnham. Road improvements are therefore being investigated as potential mitigation measures.

2.57 The precise alignment, any associated junction arrangements, and the permanent and temporary landtake requirements for the Farnham bypass are not yet determined. The details of the road widening or HGV traffic controls are also not provided at this stage; however, it is considered likely that the road widening option at Farnham Bend would affect the Grade II Listed Building, The Old Post Office, at this location.

Visitor Centre

2.58 The Visitor Centre would be a joint facility with Sizewell B and would replace the existing Visitor Centre. Two main options are being explored, as set out at 2.37 above. The Visitor Centre would predominantly comprise exhibition space, galleries, and service areas. Dedicated parking and access to the facility would also be required.

Proposed access

Main Development Site

- 2.59 The proposed access for the Main Development Site would be a new access road from the B1122. No information is provided regarding the proposed access to the development site prior to construction of the new access road.

Off-site Associated Development

- 2.60 The entrance to the Northern Park and Ride site is described as 1.3km north of the A12/B1122 junction. The proposed access to the Southern Park and Ride site is not described within the Scoping Report; however, the site is described as being located with the B1078/B1116 to the west and A12 to the south.
- 2.61 The rail extension routes are described within Section 8.4 of the Scoping Report. The blue route option would spur off the existing Saxmundham-Leiston branch line shortly after the Westhouse level crossing. The routes of the proposed blue and green options, together with the new freight terminal are shown on Figure 8.4.1; however, no detail regarding landtake and construction access is provided at this stage.
- 2.62 No information is provided regarding access to the options for the Visitor Centres. The potential Visitor Centre for the operational power station would be located within the Main Development Site.

Construction

- 2.63 Section 3.4 of the Scoping Report provides a brief overview of the construction phase of the proposed development.
- 2.64 The Scoping Report states that there would be initial works to relocate buildings and activities currently located to the north of Sizewell B power station to enable the construction works for the Sizewell C power station. The relocation site for these existing buildings and activities is currently being considered and includes the Sizewell B power station site and Coronation Wood.
- 2.65 Construction works are described as commencing with site clearance and preparation. These works would include:
- construction of a new access road into the site from the B1122;
 - establishment of temporary construction areas;
 - permanent and temporary bridges linking to the main platform on which the power station would be built;
 - construction of a jetty; and

- commencement of earthworks, including platform development, a cut-off wall, deep excavations, stockpiling and grading of materials prior to re-use and backfilling.
- 2.66 The Scoping Report states that prior to the jetty becoming operational and the construction of any temporary extension of the Saxmundham-Leiston branch railway line into the construction site (off-site associated development), construction materials could be delivered and exported either by rail via the existing railhead at Leiston or by road. To facilitate the use of the existing railhead, the Scoping Report states that small-scale refurbishment of the railhead is likely to be required prior to the completion of any additional rail development.
- 2.67 The construction phase is described within the Scoping Report as requiring the excavation of large amounts of spoil (comprising soil, made ground, peat, alluvium and Crag sand) to reach the required foundation depths for the buildings and structures within the Main Development Site. Additional engineering fill material would be required to raise the Main Development Site platform to 6.4m AOD. This additional material is stated to either be won from the temporary construction area or sourced from off-site. The Scoping Report describes that excavated peat and alluvium may either be retained on site for earthworks or could be used within a new nature reserve currently being created at Wallasea Island, Essex. Material would need to be exported to the latter via barge from the development jetty.
- 2.68 Following initial site preparation works, the main construction of the proposed development is likely to take between seven and nine years. At its peak, the construction workforce is likely to comprise 5,600 persons.
- 2.69 Following construction, the Scoping Report describes that the land used temporarily would be landscaped in line with a wider landscape strategy.
- 2.70 The Scoping Report identifies that a number of the potential off-site associated development options are temporary. No information has been provided regarding the removal of the temporary elements of potential off-site associated development. The temporary elements indicated to be removed following construction include the following (should they be carried forward within the development application):
- northern Park and Ride and southern Park and Ride (including induction centre at one of the park and ride sites);
 - rail line extension; and
 - temporary Visitor Centre within Leiston.

- 2.71 The Farnham bypass/road widening at Farnham bend would be permanent road improvements. However, it is unclear from the Scoping Report whether the HGV traffic controls at Farnham Bend would remain.

Operation and maintenance

- 2.72 Section 3.5 of the Scoping Report provides a brief overview of the operational phase of the proposed development. Sizewell C power station would have a design life of 60 years. During operation, planned refuelling and maintenance outages would take place approximately every 18 months for each EPR reactor unit and last typically between one and three months. It is expected that during these periods approximately 900 staff would be employed.

Decommissioning

- 2.73 The decommissioning of the Main Development Site is discussed briefly within Section 3.6 of the Scoping Report.
- 2.74 The Scoping Report states that the EPR has been designed with decommissioning in mind, to limit the quantities of radioactive waste that would be present when decommissioning takes place. The proposed strategy for the decommissioning of Sizewell C is described within the Scoping Report as 'early site clearance', and would take place as soon as practicable after the end of electricity generation. The decommissioning of Sizewell C, with the exception of the ISFS, is stated as potentially being achieved within approximately 20 years following the end of electricity generation. The ISFS would continue to operate until a UK Geological Disposal Facility is available and the spent fuel is ready for disposal. The ISFS life span would be at least 100 years.
- 2.75 A high-level environmental assessment of decommissioning is proposed to be included with the Sizewell C ES, which would identify and summarise the types of environmental impacts anticipated to occur during decommissioning.
- 2.76 The Scoping Report acknowledges that the decommissioning of Sizewell C power station would be subject to separate consent from the ONR under the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended), which will require the submission of an ES following an EIA and period of public consultation.

The Secretary of State's Comments

Description of the application site and surrounding area

- 2.77 Very little textual information is provided in the introductory chapters regarding the existing conditions at the Main Development Site and the features of the surrounding area. In

addition to detailed baseline information to be provided within topic specific chapters of the ES, the SoS would expect the ES to include a section that describes the baseline of the Main Development Site, plus any off-site associated development, and its surroundings. This would identify the context of the proposed development, any relevant designations and sensitive receptors. This section should identify land that could be directly or indirectly affected by the proposed development and any associated auxiliary facilities, landscaping areas, and potential off-site mitigation or compensation schemes.

Description of the proposed development

- 2.78 The description of the project provided within the Scoping Report is limited and of high-level. The applicant should ensure that the description of the proposed development that is being applied for is as accurate and firm as possible as this will form the basis of the environmental impact assessment. It is understood that at this stage in the evolution of the scheme, the description of the proposals and the location of elements of the proposed development may not be confirmed. The applicant should be aware, however, that the description of the development in the ES must be sufficiently certain to meet the requirements of paragraph 17 of Schedule 4 Part 1 of the EIA Regulations and there should therefore be more certainty by the time the ES is submitted with the DCO. The applicant's attention is directed to the comments of the Environment Agency regarding the description of the project in Appendix 2.
- 2.79 Any proposed works and/or infrastructure required as associated development, or as an ancillary matter, (whether on or off-site) should be considered as part of an integrated approach to environmental assessment.
- 2.80 The SoS recommends that the ES should include a clear description of all aspects of the proposed development, at the construction, operation and decommissioning stages, and include:
- Land use requirements, including land required for any off-site associated development;
 - Site preparation;
 - Construction processes and methods;
 - Transport routes, both temporary and permanent;
 - Operational requirements, including the main characteristics of the production process and the nature and quantity of materials used, as well as waste arisings (both conventional and radioactive waste) and their disposal;
 - Maintenance activities including any potential environmental impacts, and

- Emissions- water, air and soil pollution, noise, vibration, light, heat, radiation.
- 2.81 The environmental effects of all wastes to be processed and removed from the site should be addressed. The ES will need to identify and describe the control processes and mitigation procedures for storing and transporting waste both on and off-site. All waste types should be quantified and classified.
- 2.82 The Scoping Report makes reference to the potential for dredging activities associated with the construction and operation (maintenance) of the proposed development; however, the requirement for and information provided is limited. The ES will need to detail the requirements and methodologies associated with any identified dredging activities, together with an assessment of potential impacts on the environment. The applicant's attention is drawn to the comments of the MMO regarding dredging and licensable activities (see Appendix 2). The MMO response also identifies that licensing under the Marine and Coastal Access Act 2009 may be required for other activities associated with the proposed development. The SoS recommends that consultation with the MMO regarding the need (or otherwise) for licences is undertaken early in the EIA process.
- 2.83 The SoS notes that the proposed development would include a National Grid 400kv substation, plus a pylon, removal of an existing pylon, and associated realignment of overhead lines. However, it is not clear how the proposed development would connect to the national grid. This should be clarified in the ES.

Alternatives

- 2.84 The ES requires that the applicant provide 'An outline of the main alternatives studied by the applicant and an indication of the main *reasons for the applicant's choice, taking into account the environmental effects*' (See Appendix 3).
- 2.85 The SoS notes that no alternatives will be considered for the location of the Sizewell C site and the design of the reactors, as these have been determined through a site selection assessment and the UK GDA process, as outlined above. The SoS welcomes the proposed consideration of alternatives in respect of the design and layout of remaining aspects of the development, with consideration given to environmental effects.
- 2.86 The applicant is directed to the comments of the Environment Agency in Appendix 2 regarding the consideration of alternatives associated with the treatment of radioactive waste. The applicant is also directed to the comments of Suffolk County Council regarding the consideration of alternatives (see Appendix 2).

- 2.87 The SoS notes that alternatives for the off-site associated development have been considered as part of a site selection process and are continuing to be developed/assessed. The SoS reminds the applicant to provide details of the alternatives considered for the off-site associated development and to assess the impacts of selected options.

Flexibility

- 2.88 The Scoping Report confirms that a Rochdale/Design Envelope approach will be applied to the proposed development and states that the approach will be to clearly define the project design parameters and assessment made on a realistic worst case scenario identified for each receptor/topic group. Information regarding the likely design parameters of each element of the proposed development has not been provided within the Scoping Report at this stage.
- 2.89 The applicant's attention is drawn to Advice Note 9 'Using the 'Rochdale Envelope', which is available on the Planning Inspectorate's website and to the 'Flexibility' section in Appendix 3 of this Scoping Opinion which provides additional details on the recommended approach.
- 2.90 The applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the scheme have yet to be finalised and provide the reasons. At the time of application, any proposed scheme parameters should not be so wide ranging as to represent effectively different schemes. The scheme parameters will need to be clearly defined in the draft DCO and therefore in the accompanying ES. It is a matter for the applicant, in preparing an ES, to consider whether it is possible to robustly assess a range of impacts resulting from a large number of undecided parameters. The description of the proposed development in the ES must not be so wide that it is insufficiently certain to comply with requirements of paragraph 17 of Schedule 4 Part 1 of the EIA Regulations.
- 2.91 It should be noted that if the proposed development changes substantially during the EIA process, prior to application submission, the applicant may wish to consider the need to request a new scoping opinion.

Proposed access

- 2.92 The Scoping Report identifies the requirement for a new access road, a temporary and permanent bridge to the main operational platform, together with various roads and river crossings potentially associated with off-site associated development. However, it does not provide information regarding the location of these routes and ingresses/egresses to be used for the proposed development both during the construction and operational phase.

The SoS understands that these elements are still under consideration; however, the SoS would expect the final ES to provide this information, including access to any off-site associated development and an assessment of the impacts of constructing and using such accesses.

Construction

- 2.93 Paragraph 3.4.7 of the Scoping Report notes that the main construction period, following site preparation, would last between seven and nine years. However, the SoS considers that a clearer indication of the phasing of the timescales for the entire construction period, including site preparation, enabling works, and any off-site associated development should be provided within the ES.
- 2.94 The SoS considers that the following information on the construction phase should be included and assessed within the ES: construction methods and activities associated with each phase; siting and size of construction compounds (including on and off-site); lighting equipment/requirements; and number, movements and parking of construction vehicles (both HGVs and staff). Information should also be provided within the ES on whether any construction activities are restricted to a particular time of year.
- 2.95 The SoS notes that there are various aspects of the proposed development that are described as temporary. The ES should clearly describe the elements of the project that are temporary, including the timescales and methodology for their removal.
- 2.96 The SoS also notes that prior to the jetty becoming operational and the construction of any temporary extension of the Saxmundham-Leiston branch railway line into the construction site (off-site associated development), construction materials could be delivered and exported by rail via the existing railhead at Leiston, which would require small-scale refurbishment of the railhead. This refurbishment should be considered within the ES, which should also clarify whether this work would form part of the DCO application or would be consented under a separate regime. Construction traffic movements associated with the refurbished rail head would also need to be considered in the ES.
- 2.97 The Scoping Report describes that excavated peat and alluvium could potentially be used within a new nature reserve currently being created at Wallasea Island, Essex. The applicant's attention is directed to the response of Essex County Council regarding planning conditions attached to the Wallasea Island project in Appendix 2 of this Opinion, in particular, the restrictions in respect of material type and the timing for receipt of material associated with this project.

Operation and maintenance

- 2.98 Information on the operation and maintenance of the proposed development should be included in the ES and should cover, but not be limited to, such matters as: the number of full/part-time jobs; the operational hours and if appropriate, shift patterns; the number and types of vehicle movements generated during the operational stage.

Decommissioning

- 2.99 In terms of decommissioning, the SoS acknowledges that separate consent will be required from the ONR under the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended). The SoS welcomes the inclusion of a high-level environmental assessment of the decommissioning of the proposed development with the ES. An assessment of environmental impacts at the decommissioning stage is necessary to enable the decommissioning works to be taken into account in the design and use of materials, such that structures can be taken down with the minimum of disruption. The SoS considers that the process and methods of decommissioning should be considered and options presented in the ES, where possible.
- 2.100 The SoS notes that the operational life of the Sizewell C power station is 60 years. The life of the spent fuel storage element of the development would be at least 100 years, beyond the life of the operational power station. The SoS recommends that the EIA considers how the spent fuel storage would be maintained throughout the anticipated 100 years life of the facility.

3.0 EIA APPROACH AND TOPIC AREAS

Introduction

- 3.1 This section contains the SoS's specific comments on the approach to the ES and topic areas as set out in the Scoping Report. General advice on the presentation of an ES is provided at Appendix 3 of this Opinion and should be read in conjunction with this Section.
- 3.2 Applicants are advised that the scope of the DCO application should be clearly addressed and assessed consistently within the ES.

Environmental Statement (ES) - approach

- 3.3 The information provided in the Scoping Report sets out the proposed approach to the preparation of the ES. Whilst early engagement on the scope of the ES is to be welcomed, the SoS notes that the level of information provided at this stage is not always sufficient to allow for detailed comments from either the SoS or the consultees.
- 3.4 The SoS would suggest that the applicant ensures that appropriate consultation is undertaken with the relevant consultees in order to agree, wherever possible, the timing and relevance of survey work as well as the methodologies to be used. The SoS notes and welcomes the intention for ongoing liaison with key statutory consultees and other interested parties, including scope of survey work as described within a number of topic areas in Section 7 of the Scoping Report.
- 3.5 The SoS recommends that the physical scope of the study areas should be identified under all the environmental topics and should be sufficiently robust in order to undertake the assessment. The extent of the study areas should be on the basis of recognised professional guidance, whenever such guidance is available. The study areas should also be agreed with the relevant consultees and, where this is not possible, this should be stated clearly in the ES and a reasoned justification given. The scope should also cover the breadth of the topic area and the temporal scope, and these aspects should be described and justified. The SoS notes and welcomes the intention to define the spatial and temporal scope within the ES.
- 3.6 It is not clear from the Scoping Report which elements are temporary during construction, at what stage these will be decommissioned and how these will be considered within the proposed ES. The ES will need to ensure that an assessment of all activities associated with the proposed development is included within the EIA.

Matters to be scoped out

- 3.7 The applicant has identified that at present none of the identified topics within the relevant sections of the Scoping Report are to be 'scoped out' from the assessment of the Main Development Site. The Scoping Report states that there is the potential to scope out topics from the assessment of associated off-site development. The topics identified to be scoped out for each element of the associated off-site development are listed below. These include:
- marine historic environment;
 - coastal geomorphology and hydrodynamics;
 - marine water quality and sediments;
 - marine ecology;
 - navigation; and
 - radiological.
- 3.8 The ES will need to justify the removal of these topics from the ES and confirm that there are no potential effect pathways between the off-site associated development and marine resources, based on the off-site development carried forward within the DCO application.
- 3.9 It is noted that radiological impacts are also scoped out of the assessment of off-site associated development for the reason that radiological impacts are not associated with the off-site associated development sites. The SoS agrees that it may be possible to scope out radiological impacts on these areas; however, further information will need to be provided in the ES to support this conclusion and confirm that there are no linkages between these sites and radiological material, such as through the transportation of radioactive material.
- 3.10 Matters are not scoped out unless specifically addressed and justified by the applicant, and confirmed as being scoped out by the SoS. However, if the applicant subsequently agrees with the relevant consultees to scope matters out of the ES, which may be on the basis that further evidence has been provided to justify this approach, this approach should be explained fully in the ES.
- 3.11 In order to demonstrate that topics have not simply been overlooked, where topics are scoped out prior to submission of the DCO application, the ES should still explain the reasoning and justify the approach taken.

National Policy Statements (NPSs)

- 3.12 Sector specific NPSs are produced by the relevant Government Departments and set out national policy for nationally significant

infrastructure projects (NSIPs). They provide the framework within which the Examining Authority will make their recommendations to the SoS and include the Government's objectives for the development of NSIPs.

- 3.13 The relevant NPSs for the proposed development, i.e. EN-1 and EN-6, set out both the generic and technology-specific impacts that should be considered in the EIA for the proposed development. When undertaking the EIA, the applicant must have regard to both the generic and technology-specific impacts and identify how these impacts have been assessed in the ES.

Environmental Statement - Structure

- 3.14 The SoS notes that an indicative structure for the ES is provided in Section 9.2 of the ES. The ES is proposed to comprise nine volumes as follows:

- Volume 1: Introduction;
- Volume 2: Project-wide Considerations;
- Volume 3: Sizewell C Main Development Site;
- Volumes 4 to 8: Off-site Associated Development;
- Volume 9: Cumulative Assessment.

- 3.15 Section 6 of the Scoping Report identifies two topics: socio-economics and transport, which will be considered on a project-wide basis within the ES, rather than being assessed separately under both the Main Development Site and associated off-site development. The SoS notes that these two chapters will form Volume 2 of the ES.

- 3.16 Section 7 of the Scoping Report sets out the proposed ES environmental topics associated with the Main Development Site on which the applicant seeks the opinion of the SoS. The topics listed include:

- Terrestrial ecology and ornithology;
- Landscape and visual;
- Amenity and recreation;
- Terrestrial historic environment;
- Marine historic environment;
- Noise and vibration;
- Air quality;
- Soils and agriculture;
- Geology and land quality;
- Groundwater;

- Surface water;
- Coastal geomorphology and hydrodynamics;
- Marine water quality and sediments;
- Marine ecology;
- Navigation; and
- Radiological.

3.17 Section 8 of the Scoping Report identifies each element of the off-site associated development and the topics currently proposed to be considered for each element. At present, the SoS notes that the following topic areas will be assessed for all off-site associated development:

- Terrestrial ecology and ornithology;
- Landscape and visual;
- Amenity and recreation;
- Terrestrial historic environment;
- Noise and vibration;
- Air quality;
- Soils and agriculture;
- Geology and land quality;
- Groundwater; and
- Surface water.

3.18 The Scoping Report refers to a high-level assessment to be undertaken for the decommissioning of Sizewell C power station; however, it is unclear how and where this information will be presented within the ES. No reference to decommissioning has been made within the individual topic chapters. The SoS recommends that the ES structure include for the high-level assessment of decommissioning.

3.19 The SoS considers that the ES should not be a series of disparate reports and stresses the importance of considering inter-relationships and cumulative effects throughout the ES.

Environmental Statement - General Comments

3.20 The SoS notes that the eastern boundary of the proposed 'area for cooling water and associated infrastructure' is not entirely included on a number of figures provided with the Scoping Report (for example Figures 1.1.1 and 3.2.1). The SoS advises that the figures presented within the ES include a greater mapped area to clearly show the considered boundary of the cooling water and associated infrastructure.

- 3.21 A list of abbreviations and glossary has been provided with the Scoping Report; however, it is noted that this is incomplete. Examples include EPRs and BERR. The ES will need to ensure that all abbreviation/acronyms are included within the ES and first occurrences are stated.
- 3.22 Where the applicant has identified mitigation relied upon in the ES, the SoS reminds the applicant to ensure that such mitigation is adequately secured via requirements within the draft DCO. The SoS recommends that the applicant provides a table appended to the ES setting out how the mitigation identified and relied upon within each topic chapter in the ES has been secured through the draft DCO. This should be by reference to the draft requirement number in the DCO and identifying any plans or strategies that would be relied upon to deliver such mitigation.
- 3.23 The scope of cumulative projects is described within the Scoping Report; however, only the Galloper offshore windfarm has been specifically referenced in the report. The applicant's attention is drawn to the comments of the MMO in respect of cumulative projects, which recommends the cumulative assessment also take into consideration wider developments such as port developments in the region, including Harwich and Felixstowe.

Topic Areas

Project-wide considerations

Socio-economics (see Scoping Report Section 6.2)

- 3.24 Consideration should be given to whether the baseline for this topic assessment should also include agricultural interests and businesses in the area, bearing in mind that agricultural land may be affected, particularly during construction. No specific mention is given to agricultural interests in Section 6.2, although Section 7.9 refers to the consideration of socio-economic effects on agricultural businesses, which is stated to be included in Section 6.2.
- 3.25 The SoS welcomes the development of a Gravity Model with Suffolk County Council, Suffolk Coastal District Council, and Waveney District Council. The SoS would expect on-going discussions and agreement, where possible, with such bodies. The SoS also welcomes the use of updated baseline information as this becomes available, as stated within the Scoping Report. The applicant should ensure that the baseline data relied upon for the assessment is up-to-date and robust within the ES. The applicant is directed to the comments of Suffolk County Council in Appendix 2 of this Opinion, regarding the proposed modelling.
- 3.26 The SoS recommends that the socio-economic ES chapter assess the impacts of the proposed development on potential tourism

receptors beyond the consideration of tourist accommodation, for example, visitors to the Heritage Coast. The applicant's attention is drawn to the comments of Theberton and Eastbridge Council and Suffolk County Council in Appendix 2 of this Opinion.

- 3.27 Details of the construction methods, working hours, and duration of works should be provided in the ES. Cross-reference should be made to the transport assessment and any impacts the construction and operational development may have on the local network, including consideration of potential works to existing and new access roads.
- 3.28 The ES should assess the socio-economic impacts of the proposed campus accommodation on the local community. The applicant's attention is drawn to the comments of Swefling Parish Council and Theberton and Eastbridge Parish Council in Appendix 2 of this Opinion, in this regard.
- 3.29 The Scoping Report states that the cumulative effects assessment would use broader 'macro' projections of cumulative influences relevant to potential effects, rather than focusing on the cumulative potential effects of other specific developments. The SoS recommends that the applicant confirms that the applied 'macro' projections do take account of any cumulative effects of specific developments.

Transport and Access (see Scoping Report Section 6.3)

- 3.30 The SoS welcomes the development of the assessment of transport impacts in association with the local highways authority, Suffolk County Council. The SoS would expect on-going discussions and agreement of the scope of the assessment and modelling approach, where possible. The applicant's attention is drawn to the detailed comments provided by Suffolk County Council regarding the scope of the transport assessment (see Appendix 2 of this Opinion).
- 3.31 The SoS notes the proposed limited number of further count surveys in 2014, to establish whether there has been any material change since the initial surveys in 2011/2012. The applicant should ensure that the baseline data relied upon for the assessment is up-to-date and robust within the ES and should be agreed with the local highways authority.
- 3.32 The Scoping Report currently identifies a number of off-site associated developments that may be taken forward to mitigate potential impacts of construction associated with movement of freight and the number of traffic movements associated with the construction workforce. These are described as embedded mitigation, although the decision to proceed with any or a number of these options is not yet determined. The SoS expects the applicant to present the embedded mitigation relied upon within

the ES and that any traffic assessment would need to take account of the chosen mitigation options.

- 3.33 It is noted that the focus of the transport chapter is the assessment of impacts on the road network; however, the transport study should also include an assessment of impacts on the rail network and vessel movements, if these additional modes of transport are to be used by the development.
- 3.34 The Transport Assessment should consider the movements of any waste/spoil off-site during construction and following completion of construction works, where a requirement for this is identified. For example, Section 3.4 of the Scoping Report identifies the potential for exportation of extra material for use at an off-site nature reserve such as Wallasea Island. The assessment would need to address the form of transport and possible routing, if required.
- 3.35 The Scoping Report states a number of Traffic Management Plans (TMP) will be implemented. Any mitigation measures should be detailed in the ES and draft TMPs provided.
- 3.36 The SoS recommends that the ES should take account of the location of footpaths and any PRow including bridleways and byways and existing permissive paths. The ES should clearly set out impacts on them including within the wider area. It is important to minimise hindrance to them where possible.
- 3.37 The applicant's attention is drawn to a number of responses in respect of traffic and transport, including the responses of Suffolk County Council, Essex County Council, Farnham with Stratford St Andrew Parish Council, Middleton-cum-Fordley Parish Council, Swefling Parish Council, and Theberton and Eastbridge Parish Council in Appendix 2 of this Opinion.

Main Development Site

Terrestrial ecology and ornithology (see Scoping Report Section 7.2)

- 3.38 The SoS notes that further ecological work and surveys are proposed to inform the EIA. The ES should detail the methodology, including the timing, of the surveys which have been used to inform the baseline. It is noted that the timing of surveys are not included within the Scoping Report and therefore, it is not currently possible to ascertain whether the surveys are proposed within the optimum time period. Survey data to inform the EIA should be undertaken at an appropriate time of year, including the minimum number of survey visits, in agreement with the relevant statutory nature conservation bodies. Surveys should be undertaken in accordance with recognised best practice guidance.
- 3.39 The applicant's attention is drawn to the comments of the Environment Agency in respect of the scope of potential ecological

receptors in Appendix 2 of this Opinion. It is noted that the Scoping Report makes no reference to potential fish and eel receptors. The applicant is also referred to the comments of the MMO in Appendix 2 regarding the marine and coastal birds to be considered within the ES. The Scoping Report does not make clear whether the ES will assess impacts on bird species beyond red-throated diver, little tern, and sandwich tern. It is recommended that these species groups are considered and the scope of any further studies required agreed with the relevant statutory bodies, including Natural England, the MMO, and the Environment Agency.

- 3.40 The SoS notes that only receptors of medium value (i.e. County/Regional importance) are to be considered within the detailed assessment of Key Ecological Receptors (KERs). The SoS reminds the applicant to ensure that sufficient information is included within the ES to allow the SoS to fulfil their duty under the NERC Act 2006 (as amended) to have regard to biodiversity. The applicant's attention is also drawn to the requirements of NPS EN-1 and EN-6.
- 3.41 The ES chapter will need to define the spatial boundaries of the ecological assessment in respect of the intertidal environment and designated sites within the marine and coastal environment, to ensure designated sites, habitats, and species of the intertidal environment are fully assessed either within the terrestrial ecology and ornithology ES chapter or the marine ecology chapter. The SoS notes from Paragraph 7.2.5 of the Scoping Report that the geographical study area has been defined by defined the potential influence of the scheme (noted to be up to a distance of 20km); however, the SoS reminds the applicant to provide evidence within the ES to define how the ecological zone of influence has been determined. The applicant's attention is drawn to the comments of Kelsale cum Carlton Parish Council in Appendix 2. The applicant's attention is also directed to the comments of Natural England and Suffolk County Council regarding the proposed study area of 5km for bats. The SoS recommends that the scope of the further surveys and study areas for ecological receptors be agreed with the relevant statutory bodies, including Natural England.
- 3.42 The SoS notes that a number of internationally and nationally designated sites for nature conservation lie within 20km of the proposed development, as presented on Figures 7.2.2 and 7.2.3 to the Scoping Report, and Table 7.2.2 of the Scoping Report only discusses the most relevant/Key designated sites. Following on from the SoS comments above, the applicant is reminded to consider the potential ecological zone of influence when assessing ecological receptors, including designated sites. The SoS considers that it may not be possible at this stage to identify the Key designated sites carried forward in the assessment. The applicant is directed to the comments of the Environment Agency in Appendix 2 of this Opinion, which recommend that Dew's Pond

Special Area of Conservation (SAC) is considered, and also the comments of Suffolk County Council, which recommend that the Deben Estuary Special Protection Area (SPA) be considered.

- 3.43 The Scoping Report makes reference to consideration of impacts associated with noise, lighting, visual disturbance, emissions and pollutants. The SoS recommends that cross-reference is made to other specialist reports on these topic areas to be produced for the application in support of the ecological impact assessment.
- 3.44 Reference is made to proposals to restore and create habitats as part of embedded mitigation for the proposed development. The SoS reminds the applicant to ensure that all mitigation relied on in the ES is adequately secured via requirements within the draft DCO.

Landscape and visual (see Scoping Report Section 7.3)

- 3.45 The SoS welcomes the approach to involve local planning authorities, Natural England and Suffolk Coast and Heaths AONB Partnership in agreeing the methodology, study area and appropriate viewpoints for the Landscape and Visual Impact Assessment (LVIA).
- 3.46 The LVIA section in the Scoping Report refers to an indicative Zone of Theoretical Visibility (ZTV) that has been produced. The SoS advises that the ES should describe the model used, provide information on the area covered and the timing of any survey work and methodology used.
- 3.47 The SoS notes the reference to professional judgement in the assessment process. The SoS expects that the ES makes it clear where and how professional judgement has been applied in relation to the assessment.
- 3.48 The proposals will be for a large structure in respect of the power station. The SoS requests that careful consideration should be given to the form, siting, and use of materials and colours in terms of minimising the adverse visual impact of the operational power station (for those elements where alternative design approaches are feasible).
- 3.49 The Scoping Report describes potential impacts at night due to lighting; however, no methodology for the assessment of lighting and night time effects is described. The SoS recommends that the ES include an assessment of night time views and lighting impact assessment, including an assessment of light spill to local residents where this has the potential to lead to disturbance during the construction or operational periods. The ES should assess potential lighting effects associated with all aspects of the development, including the power station site, roads, campus accommodation, and any off-site associated development. The

applicant's attention is drawn to the comments of Suffolk County Council, Middleton-cum-Fordley Parish Council and Theberton and Eastbridge Parish Council in Appendix 2 of this Opinion, regarding lighting.

- 3.50 The Scoping Report refers to the preparation of two landscape strategies, for the construction and operational stages of the proposed development, both of which would incorporate mitigation measures to offset potential impacts. The SoS welcomes the inclusion of landscape strategies within the ES and reminds the applicant to ensure that all mitigation relied on in the ES is adequately secured via requirements within the draft DCO. The applicant is also reminded of the need to tailor these plans to accommodate ecology and other mitigation measures which may be required.
- 3.51 The applicant is referred to the comments made by Natural England in respect of designated landscapes and landscape character, as included in Appendix 2 of this Opinion.

Amenity and recreation (see Scoping Report Section 7.4)

- 3.52 The SoS notes the current study area of 2km, although reference is made to the potential inclusion of routes and recreational interests beyond this distance. The ES should include the reasoning behind, and justification of, the selection of the study area for the assessment. The study area should be agreed in consultation with the relevant consultees.
- 3.53 The Scoping Report provides very little information regarding the methodology and scope of the proposed further collection of field survey data and desk study information. The SoS recommends that the methodology for data collection and sources of desk study information be agreed with Suffolk County Council, Suffolk Coastal District Council and other relevant consultees.
- 3.54 The amenity and recreation studies may be required to inform the Habitats Regulations Assessment (HRA). Should this be required, the applicant should ensure that sufficient and appropriate information is collated to inform recreational effects on European sites. This may include the need to provide quantitative baseline data on numbers of users of existing PRow, permissive paths and open access land (including coastline). The applicant is referred to the SoS's comments on the HRA process in Section 4 of this Opinion.
- 3.55 The Scoping Report refers to the use of primary mitigation measures/embedded mitigation to mitigate the effects of the proposed development on amenity and recreation, where possible (such as through the project design, standard management practices, and the use of a landscape strategy), and secondary mitigation measures not secured through design. The SoS

reminds the applicant to ensure that all mitigation relied on in the ES is adequately secured via requirements within the draft DCO.

- 3.56 The applicant is directed to the advice provided and comments made by Natural England in relation to access and recreation and also comments provided by Suffolk County Council (see Appendix 2 in this Opinion).

Terrestrial historic environment (see Scoping Report Section 7.5)

- 3.57 The SoS welcomes the agreement of the proposed trial trenching programme, site visits to identify off-site heritage assets, the need for site-specific heritage viewpoints as part of the LVIA assessment, and the scope of cumulative assessment with English Heritage and the Suffolk County Council's Archaeological Service. The applicant's attention is drawn to the comments provided by English heritage in Appendix 2 of this Opinion, with regard to updated techniques that could be applied to the further surveys.
- 3.58 The SoS notes that the proposed assessment methodology makes use of matrices, in line with Chapter 5 of the Scoping Report. The applicant's attention is drawn to the comments of English Heritage and Suffolk County Council regarding the application of an alternative/additional approach to the assessment methodology (see Appendix 2 of this Opinion). The SoS recommends that the approach to the assessment methodology be discussed further and an approach agreed with English Heritage and Suffolk County Council's Archaeological Service.
- 3.59 The SoS notes that the setting of cultural heritage resources could be affected; this includes SAM, listed buildings, conservation areas, and archaeological sites. The SoS considers that these should be addressed in the ES. Cross-reference should be made to the Landscape and Visual chapter of the ES. The applicant is directed to the comments made by English Heritage (see Appendix 2 of this Opinion).
- 3.60 The SoS recommends that mitigation works are agreed with English Heritage in addition to the relevant local authority archaeological advisors.
- 3.61 The applicant's attention is drawn to the comments of Suffolk County Council in Appendix 2, including information regarding recently designated heritage assets and guidance documents.

Marine historic environment (see Scoping Report Section 7.6)

- 3.62 The SoS welcomes the agreement of the scope of the marine historic environment assessment with the English Heritage. The applicant's attention is directed to the comments of English Heritage in Appendix 2 of this Opinion, regarding the appropriate contact within English Heritage.

- 3.63 The Scoping Report identifies 162 wrecks within the marine study area but concludes the proposed development is not expected to directly impact on these sites. The SoS reminds the applicant that the ES will need to present the reasoning and evidence to support the scoping out of impacts on historic environment assets and to support the conclusions of the assessment. The applicant is also directed to the comments of the MMO and English Nature in this regard (see Appendix 2 of this Opinion).
- 3.64 The Scoping Report paragraph 7.6.3 refers to new geophysical and geomorphological data of the offshore region and the adjacent coastline; however, no detail has been provided regarding the sources and scope of the data. The SoS recommends that the scope and methodology for further marine historic environment surveys be agreed with the relevant statutory bodies, including English Heritage. The applicant is directed to the comments and advice of English Heritage in Appendix 2 of this Opinion, with regard to the requirements of any Written Scheme of Investigation prepared for the proposed development and the information required for the ES.
- 3.65 The SoS notes reference is made to an assessment of Historic Seascape Character within the discussion of proposed inter-relationships; however, no reference is made to the proposed undertaking of a Historic Seascape Character assessment prior to this reference. The SoS advises that the ES should describe the methodology used and provide information on the area covered. The assessment should follow established best practice guidance for Historic Seascape Character assessment. The Historic Seascape Character assessment should be cross-referenced with the LVIA in the landscape and visual ES chapter. The applicant is directed to the comments and advice of English Heritage in Appendix 2 of this Opinion, with regard to historic seascape assessment and assessment of cumulative impacts.

Noise and vibration (see Scoping Report Section 7.7)

- 3.66 The SoS notes the proposed collection of further comprehensive noise surveys in 2014 and recommends that the methodology and choice of noise receptors should be agreed with the relevant Environmental Health Department of the relevant Council and the Environment Agency.
- 3.67 The SoS notes that data was collected during the Sizewell B outage in June 2013 to establish noise levels in the absence of the operating Sizewell B power station. The SoS considers it important to establish an appropriate and agreed baseline for the proposed development, in view of the decommissioning of the existing power station. Noise levels will change throughout the operation of both stations and the cessation of operation and decommissioning of Sizewell B.

- 3.68 The Scoping Report states that the assessment will take place for a number of different scenarios associated with the construction and operational phases of the development, and will use a number of 'reasonable worst case scenarios' in each case. Information should be provided in the ES regarding the parameters used in the assessment of worst case, such as types of vehicles and plant to be used during the construction phase.
- 3.69 The ES should state the proposed working hours and shift arrangements for the construction and operation of the proposed development. Noise impacts on different receptor groups should be specifically addressed and in particular any potential noise disturbance at night and other unsocial hours such as weekends and public holidays.
- 3.70 The noise and vibration data and assessment should also be suitable to assess potential impacts on both human and wildlife receptors, such as birds and fish. Noise and vibration levels along the foreshore potentially affecting birds and aquatic organisms, such as fish, should be addressed, together with noise and vibration on marine ecology that could potential arise from the offshore construction works and vessel movements. It is unclear from the Scoping Report how underwater noise levels would be calculated and any potential impacts on marine ecology assessed. This should be clarified within the ES.
- 3.71 With regard to mitigation, consideration should also be given to monitoring noise complaints during construction and when the development is operational.
- 3.72 The applicant's attention is drawn to additional comments made by Suffolk County Council in Appendix 2 of this Opinion, in respect of the noise and vibration assessment.

Air quality (see Scoping Report Section 7.8)

- 3.73 The SoS notes that the need for the collection of further data and the details of any monitoring will be agreed in consultation with relevant stakeholders through the preparation of an air quality monitoring strategy. The SoS welcomes the proposed consultation and recommends that the adequacy of the baseline data and any further data collection required be agreed with both the Environmental Health Department of the relevant Council and the Environment Agency.
- 3.74 The SoS recommends that receptor locations identified in the quantitative assessments of air quality (both the road traffic and point source modelling) are agreed with the Environmental Health Department of the relevant Council and also with the Environment Agency.

- 3.75 The SoS recommends that within the ES attempts are made to quantify the overall impact of the proposed development both on the nearby Air Quality Management Areas (AQMA's) (including the potential AQMA under consultation) and at agreed receptor locations. The applicant's attention is drawn to the comments of Suffolk County Council in respect of an AQMA at Stratford St Andrew (see Appendix 2 of this Opinion).
- 3.76 The SoS considers that the site lies within a sensitive area, which includes Sizewell Marshes SSSI. The impacts on Sizewell Marshes and other nearby designated sites should be carefully assessed. There is a need to consider potential related effects due to an increase in airborne pollution including fugitive dust especially during site preparation and construction. The SoS recommends that cross-reference is provided to the terrestrial ecology and ornithology ES chapter and HRA report.
- 3.77 The SoS welcomes that the applicant has noted, that should it not prove possible to demonstrate insignificance in relation to deposition on ecological receptors, further assessment will be undertaken with reference to the Critical Loads of the receptor concerned.
- 3.78 Air quality and dust levels should be considered not only on site but also off-site, including along access roads, local footpaths and other PRoW.
- 3.79 The SoS welcomes that potential mitigation measures beyond the embedded mitigation have been considered and that the air quality assessment will be used to identify the need for such measures.
- 3.80 The SoS recommends that consideration should be given to the monitoring of dust complaints.
- 3.81 The SoS recommends that the applicant gains agreement from both the Environmental Health Department of the relevant Council and the Environment Agency over the developments to be included in the cumulative assessment.
- 3.82 The applicant is directed to the comments of the Environment Agency and Suffolk County Council in Appendix 2 of this Opinion, in respect of the air quality assessment.

Soils and agriculture (see Scoping Report Section 7.9)

- 3.83 It is unclear whether Table 5.3 of the Scoping Report would be used to calculate significance, as the SoS notes that a table or text to define the significance of the impact is absent from the soils and agriculture section, although a major/moderate/minor/negligible scale appears to be applied. The ES should detail how the significance of impacts is proposed to be assessed.

- 3.84 The Scoping Report acknowledges that not all areas of the Main Development Site have been studied to date. The SoS therefore welcomes the proposals to update the Agricultural Land Classification study to include all areas of the Main Development Site.
- 3.85 The SoS welcomes the preparation of the Soils Management Plan, a draft of which should be provided within the ES.
- 3.86 The SoS advises that this section should consider the inter-relationship with ecology, in particular the impacts from the removal of grassland, trees and hedgerows that provide ecological habitat. Appropriate reference should also be made to the socio-economic assessment in the ES.
- 3.87 The applicant is also directed to the advice provided by Natural England in relation to soils and agricultural land quality (see Appendix 2 of this Opinion).

Geology and land quality (see Scoping Report Section 7.10)

- 3.88 The Geology and Land Quality section of the Scoping Report presents tables of sensitivity and magnitude for the assessment of designated geological sites; however, no definition of significance is provided within this section. The ES should detail how the significance of impacts is proposed to be assessed.
- 3.89 This Scoping Report only considers geological designated sites within the coast line study area. It is unclear whether there are any geological sites beyond the coast line, within the Main Development Site study area that would be affected by the proposed development. The ES should make reference to any geological sites within the study area and/or which could be affected by the proposed development.
- 3.90 The Scoping Report refers to the use of embedded mitigation to mitigate the risk of impacts on geology and land quality. The SoS reminds the applicant that embedded mitigation should be secured within the design and presented within the DCO application.
- 3.91 The applicant's attention is directed to the comments provided by Suffolk County Council in respect of material importation, storage and disposal in Appendix 2 of this Opinion.

Groundwater (see Scoping Report Section 7.11)

- 3.92 The SoS welcomes the use of a multi-layered groundwater and surface water model. The model should be agreed with the Environment Agency. The applicant is directed to the comments of Natural England in Appendix 2 of this Opinion, which confirm that Natural England would be happy to provide technical

expertise into the modelling of impacts within Sizewell Marshes SSSI.

- 3.93 The SoS notes that groundwater level monitoring will continue through 2014 and additional site investigations have been initiated. It is unclear from the text whether the additional site investigation locations are currently shown on Figure 7.11.1 or whether these additional locations are not yet shown.
- 3.94 Table 7.11.2 of the Scoping Report lists 'Principal Aquifers with public water supply abstractions' under both categories of High and Medium value/sensitivity. The ES should clarify the assignment of value/sensitivity and where a resource is intended to be assigned to more than one category, an explanation should be provided as to how a judgement will be made (such as through professional judgement).
- 3.95 The Scoping Report provides no clear details regarding the source of water for the proposed development, both during construction and operation, and for the variety of sources for which it will be required, such as the campus accommodation, main power station site, for the concrete batching plant etc. The applicant's attention is drawn to the comments of the Environment Agency in respect of water resources. The requirement for and the effects associated with water resources will need to be assessed in the ES and cross-reference made to the surface water chapter and the suggested Utilities and Infrastructure Assets chapter (see Paragraph 3.156 to 3.159 of this Opinion in respect of the latter). The water supply strategy for the proposed development will need to be agreed with the Environment Agency.
- 3.96 The Scoping Report identifies a number of potential groundwater impacts that are correlated to surface water impacts and vice versa. The SoS advises that the inter-relationship between groundwater and surface water be presented clearly within the two proposed chapters, with appropriate cross-referencing.
- 3.97 Mitigation measures should be addressed and the SoS advises that reference should be made to other regimes (such as pollution prevention from the EA). On-going monitoring should also be addressed and agreed with the relevant authorities to ensure that any mitigation measures are effective. The applicant is directed to the comments of Suffolk County Council in Appendix 2 of this Opinion, with regard to monitoring.
- 3.98 The SoS notes that a Flood Risk Assessment (FRA) will be provided outside of the ES but as a separate document to the DCO Application. The SoS advises that the results of the FRA, in respect of groundwater as a potential pathway for discharge to surface and coastal waters, be taken into account within the groundwater chapter of the ES.

Surface water (see Scoping Report Section 7.12)

- 3.99 The SoS welcomes the provision of a FRA and the on-going consultation with the Environment Agency and other relevant stakeholders. The SoS also welcomes the consultation with the Environment Agency, Natural England and Suffolk Wildlife Trust regarding the water quality monitoring stations.
- 3.100 The Scoping Report refers to the Freshwater Fish Directive; however, this directive has been revoked. The ES will need to refer to the Water Framework Directive. The applicant's attention is directed to the comments of the Environment Agency in Appendix 2 of this Opinion, regarding the approach and methodology and potential impacts and effects.
- 3.101 The Scoping Report identifies that the construction period, following site preparation, is envisaged to last between seven and nine years. Section 7.12 of the Scoping Report classifies temporary impacts (long-term) if the effects are experienced over a period of no more than five years. The SoS queries how impacts that may occur beyond five years (in the event that they are identified) would be classified.
- 3.102 The Scoping Report contains no information regarding sewage disposal for the proposed development, although it is noted that the design of foul water management features is yet to be developed. The ES will need to detail the proposed foul water management strategy and agree this with the Environment Agency. The applicant's attention is drawn to the comments of the Environment Agency in Appendix 2 of this Opinion.
- 3.103 Reference is made to control measures to mitigate for potential impacts on water quality and hydrology. The SoS reminds the applicant that any control measures as embedded mitigation should be secured within the project design and presented within the DCO application. All other mitigation relied on in the ES will need to be adequately secured via requirements within the draft DCO.
- 3.104 The SoS recommends that the study area for the assessment of other projects and plans as part of the cumulative assessment be defined within the ES and agreed with the Environment Agency.
- 3.105 The applicant's is directed to the comments of Natural England in respect of surface water modelling and monitoring of effects during operation (see Appendix 2).

Coastal geomorphology and hydrodynamics (see Scoping Report Section 7.13)

- 3.106 It is unclear from this section whether thermal plumes will be assessed in this ES chapter, in addition to the marine quality and

sediment chapter. The SoS recommends that full consideration will need to be given to the potential effects of the cooling water system, including scour, increase temperature, and the introduction of any chemicals, as required. Cross-reference should be made between the assessments undertaken for coastal morphology and hydrodynamics and those within the marine water quality and sediments chapter.

- 3.107 It will be important to justify the physical study area for this section and ensure that impacts are considered over a sufficiently wide area. The applicant is also directed to the comments of Suffolk County Council regarding the study area (see Appendix 2).
- 3.108 The SoS notes that the inter-relationship between coastal geomorphology and hydrodynamics and the marine historic environment is not discussed within the Scoping Report. The applicant is directed to the detailed comments within the response of English Heritage in Appendix 2 of this Opinion, with regard to the inter-relationship with the marine historic environment and potential effects.
- 3.109 This section should draw on the FRA to include consideration of tidal flood risk and the potential for breaching/overtopping of the proposed flood defences under present and projected sea level scenarios. The potential impacts of flood defences and coastal protection measures will need to be fully assessed. The SoS considers that the implications of climate change, in respect of increased surface water run-off, higher sea levels, and proposed/existing coastal defences, should also be carefully considered in the ES. The applicant is directed to the detailed comments of the MMO and Suffolk County Council in Appendix 2 of this Opinion, in respect of the assessment of coastal geomorphology and hydrodynamics.
- 3.110 Information will need to be provided within the ES to detail the construction methodology for the permanent and temporary coastal and off-shore infrastructure associated with the proposed development, including the treatment of any waste arisings (such as from the proposed tunnel boring techniques). The applicant's attention is drawn to the comments of the MMO regarding dredging activities (see Appendix 2) and also Natural England in regard to potential impacts associated with the beach landing facility.
- 3.111 The potential impacts and approach to cumulative impact sub-sections draw conclusions on the likelihood of impacts in the absence of supporting evidence. The SoS reminds the applicant that conclusions drawn within the ES need to be robustly supported by evidence and justified. The applicant is directed to the comments of English Heritage in respect of cumulative projects (see Appendix 2).

- 3.112 The applicant's attention is directed to the Environment Agency response in Appendix 2 of this Opinion and the recommendation to include Policy Development Zone 5 (Thorpeness to Orfordness) of the Suffolk Shoreline Management Plan 2 within the key national policy and legislation considered for the ES.
- 3.113 The applicant is also directed to the comments of Galloper Windfarm Ltd in Appendix 2 of this Opinion, in relation to a need to assess impacts of the proposed development on the infrastructure associated with Galloper windfarm. Cross-reference should be made to the suggested Utilities and Infrastructure Assets chapter of the ES (see Paragraph 3.156 to 3.159 below).

Marine water quality and sediments (see Scoping Report Section 7.14)

- 3.114 The SoS welcomes the proposed further monitoring in 2014 to supplement the water quality data obtained to date, together with sediment sampling for the offshore structures, and the proposals to agree modelling with the Environment Agency. The SoS recommends that the scope of the assessment and modelling also be agreed with the MMO. The applicant's attention is directed to the MMO's response in Appendix 2 of this Opinion, which includes reference to the expected sampling requirements. The applicant is also directed to the comments of Suffolk County Council regarding the sampling (see Appendix 2).
- 3.115 The Scoping Report Section 7.14 identifies the modelled baseline for the cooling water model is the situation without Sizewell B. The applicant's attention is drawn to the comments of the Environment Agency in Appendix 2 of this Opinion. The Environment Agency disagrees with this modelled baseline, due to the likely overlap between the two operational power stations. The SoS recommends that the modelling be agreed with the Environment Agency.
- 3.116 Cross-reference should be made to the information contained within and the assessments undertaken for coastal morphology and hydrodynamics chapter. Inter-relationships should also be considered for socio-economic and navigation that could be affected by changes to marine water quality or sedimentation.
- 3.117 Reference is made to process chemicals and discharges/effluent via the cooling water system. The SoS would expect the information regarding discharges to be included within the ES.
- 3.118 The cumulative assessment should define all projects and plans that have been considered within the assessment, which may include other projects in addition to the Galloper Wind Farm.

Marine ecology (see Scoping Report Section 7.15)

- 3.119 The SoS recommends that the selected study areas for the marine ecology impact assessment be discussed and agreed with relevant statutory bodies including the MMO, Cefas, Natural England, and the Environment Agency. The SoS also encourages consultation with local fishing organisations and fishermen throughout the EIA process. The applicant is directed to the comments of the Environment Agency regarding the spatial scope for the study area (see Appendix 2).
- 3.120 The Scoping Report does not specifically identify the marine ecology receptors likely to be assessed in the ES. The SoS recommends that appropriate ecological receptors be identified within the ES, for example benthic ecology, commercial fisheries. The applicant is also directed to the comments of the MMO and Natural England in this regard (see Appendix 2).
- 3.121 The Scoping Report does not contain sufficient information regarding the surveys undertaken to date (including methodology) and the methodology of proposed further studies to ascertain whether these are appropriate and adequate. The ES will need to provide detailed information regarding the surveys including methodology, timing, and detail of the equipment used. It is recommended that the scope of the surveys/studies be agreed with the relevant statutory bodies including the MMO, Cefas, Natural England, and the Environment Agency. The applicant's attention is directed to the detailed comments of the MMO within Appendix 2 of this Opinion, regarding the scope of the surveys, study area, ecological receptors and potential impacts.
- 3.122 The legislation to be considered in the assessment should also include the Conservation of Habitats and Species Regulations 2010 (as amended) and the Wildlife and Countryside Act 1981 (as amended).
- 3.123 Reference is made to the assessment of underwater noise as part of the marine ecology ES chapter; however, no detail regarding the proposed methodology and approach to the assessment of underwater noise has been provided within the Scoping Report. The scope of the underwater noise assessment and potential receptors should be discussed and agreed with the relevant organisations, including the MMO, Natural England and the Environment Agency.
- 3.124 The assessment should also address any impacts associated with the removal of temporary structures from the marine environment, including the temporary jetty. The Scoping Report provides limited information regarding any maintenance measures associated with the offshore structures. Information regarding construction, operational, and decommissioning works and an assessment of these works on the marine environment will need to

be included in the ES. The applicant is also directed to the comments of the Environment Agency and MMO in Appendix 2.

- 3.125 Reference is made to proposals to deliver embedded mitigation to reduce fish mortality. The SoS reminds the applicant to ensure that all mitigation relied on in the ES is adequately contained within the design of the proposed development and where not embedded in the design, secured via requirements within the draft DCO.
- 3.126 The SoS advises that inter-relationships between the marine ecology ES chapter and other relevant chapters are adequately discussed. Relevant ES chapters would include (but not be limited to) terrestrial ecology and ornithology, marine water quality and sedimentation, coastal geomorphology and hydrodynamics, surface water, socio-economics, and navigation. The applicant is also directed to the comments of the Environment Agency in Appendix 2 of this Opinion, regarding the consideration of potential additive impacts (cumulative and interdependent impacts on fish populations) and also the comments of the MMO and Natural England.
- 3.127 The cumulative assessment should define all projects and plans that have been considered within the assessment, which may include other projects in addition to the Galloper Wind Farm.

Navigation (see Scoping Report Section 7.16)

- 3.128 The SoS welcomes the proposed further consultations with the Maritime and Coastguard Agency, Trinity House, and Royal Yachting Association and encourages this to continue throughout the EIA process in order to identify potential impacts and appropriate mitigation. The applicant's attention is drawn to the comments of Trinity House in Appendix 2 of this Opinion.
- 3.129 The ES should identify the anticipated type and number of vessel movements generated by the development during the construction and operation phases and assess the potential impact to other existing vessel movements in the area. Cross-reference also should be made to the Transport section of the ES. The applicant is directed to comments of the MMO in Appendix 2 of this Opinion, with regard to navigation.

Radiological (see Scoping Report Section 7.17)

- 3.130 Sampling locations and the study area are not identified in plan form within the Scoping Report. The ES should include detailed information regarding the sampling sites, including sample type and location, ideally shown on a plan.
- 3.131 Limited information is provided within the Scoping Report regarding transportation of radioactive waste during the operation

of the development (as identified in Paragraph 7.17.11 of the Scoping Report) and how this will be assessed. The ES will need to include information regarding proposed transport methods, including frequency, modes and routes, and an assessment of potential impacts.

- 3.132 The applicant's attention is directed to the comments of the Environment Agency and Suffolk County Council in Appendix 2.

Off-site Associated Development (see Scoping Report Section 8)

General Comments

- 3.133 The SoS notes that the study areas for each individual topic area included within the assessment of each off-site associated development site are not clearly defined within the Scoping Report. The ES will need to include a description of the study area for each topic area, as assessed for each off-site associated development site (for example, all statutory designated sites for nature conservation have been considered within 5km of the boundary of each site).
- 3.134 Section 8 of the Scoping Report does not include timings for the proposed further surveys nor does it specify the proposed methodologies/best practice standards to be followed for the majority of the topic areas. The SoS notes that more detailed information was included in Section 7 of the Scoping Report and therefore, the information provided within Section 7 may also apply to Section 8; however, this is not made clear within the text. The ES should provide clear justification for the baseline surveys undertaken/not undertaken in respect of each off-site associated development site.
- 3.135 Proposed consultations are specified for some topic areas within each off-site associated development (such as landscape and visual and terrestrial historic environment); however, the consultation organisation is not always specified. The SoS recommends that the scope of the study area, further surveys/monitoring locations, and methodologies be agreed with the relevant stakeholders, including those topics where consultation has not been identified, such as noise and vibration.
- 3.136 The SoS reminds the applicant to ensure that all mitigation relied on in the ES is adequately secured via requirements within the draft DCO.

Northern Park and Ride site

- 3.137 Potential impacts on terrestrial ecology and ornithology identified within this chapter include potential construction impacts on birds; however, no bird surveys are identified within Table 8.1. The need or otherwise for bird surveys (or other further ecological surveys)

should be identified following the initial Extended Phase 1 habitat survey. Surveys should be undertaken at an appropriate time of year, following established best practice guidance, and reported within the ES.

- 3.138 The Scoping Report does not make clear whether the park and ride site will be removed and if so, at what phase of the power station development. If the park and ride site is to be temporary, the EIA will need to consider the impact of decommissioning the park and ride site.
- 3.139 The Scoping Report identifies soil damage/loss of fertility; however, it is not clear if there would be loss of agricultural soils associated with the proposed development. This should be made clear within the ES.
- 3.140 Table 8.2 of the Scoping Report refers to a risk assessment in respect of geology and land quality; however, it is not made clear how this risk assessment is undertaken.
- 3.141 The SoS notes that Table 8.2 (potential impacts and effects of the Northern park and ride site) also scopes out a detailed assessment of surface water; however, the terrestrial ecology and ornithology topic area considers potential diffuse pollution on the Minsmere River and Darsham Marshes as a result of surface water run-off in both the construction and operation phase. The ES will need to identify whether there is a potential effect pathway to the river and marshes and if so, an assessment made regarding any potential impacts and mitigation. The applicant's attention is drawn to the comments of the Environment Agency regarding potential impacts on water resources, FRA, and protected species in Appendix 2 of this Opinion.

Southern Park and Ride site

- 3.142 The Scoping Report refers to the Roman settlement of Hacheston; however, the location of this site is not identified within the report. The ES will need to include information regarding the location of this site in relation to the proposed development.
- 3.143 The SoS notes reference to potential impacts on ground nesting birds; however, bird surveys are not identified within Table 8.4 planned further studies/surveys. The need or otherwise for bird surveys (or other further ecological surveys) should be identified following the initial Extended Phase 1 habitat survey. Surveys should be undertaken at an appropriate time of year, following established best practice guidance, and reported within the ES.
- 3.144 The Scoping Report identifies soil damage/loss of fertility; however, it is not clear if there would be loss of agricultural soils associated with the proposed development. This should be made clear within the ES.

- 3.145 The SoS notes that Table 8.3 scopes out a detailed assessment of surface water; however, the terrestrial ecology and ornithology topic area considers potential diffuse pollution on the River Deben as a result of surface water run-off in both the construction and operation phase. The ES will need to identify whether there is a potential effect pathway to the river and marshes and if so, an assessment made regarding any potential impacts and mitigation. The applicant's attention is drawn to the comments of the Environment Agency regarding potential impacts on water resources and FRA in Appendix 2 of this Opinion.

Rail line extension

- 3.146 The ES will need to present the working width for the preferred rail line options, including land required for any engineering works such as changes to ground levels and road/PRoW crossings, and any additional land required for soil storage.
- 3.147 The EIA will need to consider the number and frequency of train trips associated with the proposed development (in the event that the new rail lines are taken forward), to assess potential impacts in respect of noise and air quality in particular. If rail crossings are to be at grade, the impact to local traffic movements will also need to be considered. Cross-reference should be made to the Transport assessment of the ES and the suggested Utilities and Infrastructure Assets chapter (see Paragraphs 3.156 to 3.159 of the Scoping Opinion, below).
- 3.148 The Scoping Report identifies the rail options as temporary development; however, it is not clear when the rail option would be removed in relation to the development of the power station. The removal of the temporary rail option, depending on the selected design and required engineering works, could require significant construction activity. The EIA will need to consider the decommissioning of the rail option.
- 3.149 The applicant's attention is directed to the comments of Network Rail and the Environment Agency in respect of the railway options in Appendix 2 of this Opinion.

A12 improvement – Farnham Bend

- 3.150 The ES will need to present the working width for the preferred options, in particular should the bypass option be carried forward. This will need to include land required for any engineering works such as changes to ground levels, land for new road junctions, and any additional land for soil storage or storage of surface water run-off.
- 3.151 The applicant is referred to the comments of Farnham with Stratford St Andrew Parish Council regarding the potential off-site associated development at Farnham (see Appendix 2). The Parish

Council identifies a number of potential impacts associated with protected species (water voles, which are identified as present in the local area), landscape and visual impacts on the local landscape, impacts on amenity and recreation including amenity land within the footprint of the bypass and also local facilities, impacts of noise/vibration and air quality on receptors in Stratford St Andrew in addition to Farnham, and impacts on surface water (presence of floodplain and regular flooding events recorded).

- 3.152 The applicant's attention is also directed to the comments of the Environment Agency in Appendix 2 of this Opinion, in respect of the A12 road improvements. The Environment Agency identify that the River Alde is a European eel migratory route.

Visitor Centre (temporary options)

- 3.153 The ES will need to include detail regarding the parking area and access. An assessment of the anticipated number of visitors should be considered to establish an appropriate size of car park and any potential environmental effects, as this may result in impacts on the local road network and local residents.
- 3.154 Consideration should be given to background noise levels, type of building, construction method, and proximity to residential properties and other sensitive receptors in respect of potential noise impacts. It may be too early to scope out noise-related impacts associated with the temporary visitor centre and these should be considered further in the ES.

Water Framework Directive

- 3.155 The SoS welcomes the submission of a Water Framework Directive (WFD) Compliance Assessment for the proposed development, which the SoS understands will be prepared in consultation with the Environment Agency and appended to the ES.

Other ES Topic Areas to be Included

Utilities and Infrastructure Assets

- 3.156 The SoS recommends that the ES include an additional chapter entitled Utilities and Infrastructure Assets (or similar), to assess any potential impacts of the proposed development on other utility receptors/ infrastructure assets, such as (but not limited to) existing gas and water pipelines, overhead/underground electrical cables, sewer network, potable water supply, and railway network. This should include consideration of both onshore and offshore receptors and assess impacts during construction and operation of the proposed development. The applicant is referred to the comments of Galloper Windfarm Ltd and Network Rail in Appendix 2 to this Opinion, in respect of potential impacts on their infrastructure assets.

- 3.157 The SoS also recommends that this chapter includes a description of any utilities that may be required to service the development, together with an assessment of any direct and indirect impacts that may result from the construction and operation of associated utilities and services. The applicant's attention is drawn to the comments of Norfolk County Council and Suffolk County Council in Appendix 2 of this Opinion, regarding the need to assess the impacts of the proposed development on the electricity network. Limited information is provided within the Scoping Report regarding the required upgrade to the electricity network to facilitate the project. Further detailed information should be provided in the ES.
- 3.158 The ES should include an assessment of inter-relationships and cumulative impacts, including cross-reference to other relevant ES chapters.
- 3.159 The applicant's attention is also directed to comments of The Coal Authority in Appendix 2 of this Opinion, which confirm that the current proposals lie outside of the defined coalfield.

4.0 OTHER INFORMATION

- 4.1 This section does not form part of the SoS's Opinion as to the information to be provided in the ES. However, it does respond to other issues that the SoS has identified which may help to inform the preparation of the application for the DCO.

Habitats Regulations Assessment (HRA)

- 4.2 The SoS notes that European sites may be located close to the proposed development. It is the applicant's responsibility to provide sufficient information to the Competent Authority (CA) to enable them to carry out a HRA if required. The applicant should note that the CA is the SoS.
- 4.3 The applicant's attention is drawn to The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) (The APFP Regulations) and the need to include information identifying European sites to which the Habitats Regulations applies or any Ramsar site or potential SPA which may be affected by a proposal. The submitted information should be sufficient for the Competent Authority (CA) to make an appropriate assessment (AA) of the implications for the site if required by Regulation 61(1) of the Habitats Regulations.
- 4.4 The report to be submitted under Regulation 5(2)(g) of the APFP Regulations with the DCO application must deal with two issues: the first is to enable a formal assessment by the CA of whether there is a likely significant effect; and the second, should it be required, is to enable the carrying out of an AA by the CA. European sites identified in the Scoping Report include: The Outer Thames Estuary Special Protection Area (SPA); Sandings SPA; Minsmere to Walberswick SPA and Ramsar sites; Minsmere to Walberswick Heaths and Marshes Special Area of Conservation (SAC); Alde-Ore and Butley Estuaries SPA; Alde-Ore Estuary SPA, Ramsar; Staverton Park and The Thicks, Wantisden SAC, Dew's Pond SAC; Orfordness Shingle Street SAC; Deben Estuary SPA and Ramsar sites; Stour and Orwell Estuaries SPA and Ramsar sites; and Benacre to Easton Bavents Lagoons SAC and SPA sites.
- 4.5 When considering aspects of the environment likely to be affected by the proposed development; including flora, fauna, soil, water, air and the inter-relationship between these, consideration should be given to the designated sites in the vicinity of the proposed development.

Evidence Plans

- 4.6 An evidence plan is a formal mechanism to agree upfront what information the applicant needs to supply to the Planning Inspectorate as part of a DCO application. An evidence plan will

help to ensure compliance with the Habitats Regulations. It will be particularly relevant to NSIPs where impacts may be complex, large amounts of evidence may be needed or there are a number of uncertainties. It will also help applicants meet the requirement to provide sufficient information (as explained in the Planning Inspectorate's Advice Note 10 on HRA) in their application, so the Examining Authority can recommend to the SoS whether or not to accept the application for examination and whether an AA is required.

- 4.7 It is noted that the applicant is already engaged with the evidence plan process. The applicant's attention is drawn to the response from the MMO in Appendix 2 in this Opinion, requesting their involvement with discussions and reviewing documentation.

Sites of Special Scientific Interest (SSSIs)

- 4.8 The Secretary of State notes that a number of SSSIs are located close to or within the proposed development, including:

- Sizewell Marshes SSSI;
- Minsmere to Walberswick Heaths and Marshes SSSI;
- Leiston to Aldeburgh SSSI;
- Pakefield to Easton Bavents SSSI;
- Holton Pit SSSI;
- Potton Hall Fields, Westleton SSSI;
- Alde-Ore Estuary SSSI;
- Aldeburgh Hall Pit SSSI;
- Red House Farm Pit, Sudbourne SSSI;
- Valley Pit Farm, Sudbourne SSSI;
- Sudbourne Park Pit SSSI;
- Richmond Park Pit, Gedgrave SSSI;
- Gedgrave Hall Pit SSSI;
- Sandlings Forest SSSI;
- Staverton Park and The Thicks, Wantisden SSSI;
- Chillesford Church Pit SSSI;
- Crag Farm Pit, Sudbourne SSSI;
- Tunstall Common SSSI;
- Blaxhall Heath SSSI;
- Snape Warren SSSI; and
- Gromford Meadows SSSI.

- 4.9 Where there may be potential impacts on the SSSIs, the SoS has duties under sections 28(G) and 28(I) of the Wildlife and Countryside Act 1981 (as amended). These are set out below for information.
- 4.10 Under s28(G), the SoS has a general duty ‘...to take reasonable steps, consistent with the proper exercise of the authority’s functions, to further the conservation and enhancement of the flora, fauna or geological or physiographical features by reason of which the site is of special scientific interest’.
- 4.11 Under s28(I), the SoS must notify the relevant nature conservation body (NCB), Natural England in this case, before authorising the carrying out of operations likely to damage the special interest features of a SSSI. Under these circumstances 28 days must elapse before deciding whether to grant consent, and the SoS must take account of any advice received from Natural England, including advice on attaching conditions to the consent. Natural England will be notified during the examination period.
- 4.12 If applicants consider it likely that notification may be necessary under s28(I), they are advised to resolve any issues with the NCB before the DCO application is submitted to the SoS. If, following assessment by applicants, it is considered that operations affecting the SSSI will not lead to damage of the special interest features, applicants should make this clear in the ES. The application documents submitted in accordance with Regulation 5(2)(I) could also provide this information. Applicants should seek to agree with the NCB the DCO requirements which will provide protection for the SSSI before the DCO application is submitted.

European Protected Species (EPS)

- 4.13 Applicants should be aware that the decision maker under the Planning Act 2008 (PA 2008) has, as the CA, a duty to engage with the Habitats Directive. Where a potential risk to an EPS is identified, and before making a decision to grant development consent, the CA must, amongst other things, address the derogation tests² in Regulation 53 of the Habitats Regulations. Therefore the applicant may wish to provide information which will assist the decision maker to meet this duty.
- 4.14 If an applicant has concluded that an EPS licence is required the ExA will need to understand whether there is any impediment to the licence being granted. The decision to apply for a licence or not, will rest with the applicant as the person responsible for commissioning the proposed activity, by taking into account the advice of their consultant ecologist.

² Key case law on Article 16 of the Habitats Directive should be considered, for example, Woolley vs East Cheshire County Council 2009 and Morge v Hampshire County Council 2010

- 4.15 Applicants are encouraged to consult with Natural England and, where required, to agree appropriate requirements to secure necessary mitigation. It would assist the examination if applicants could provide, with the application documents, confirmation from Natural England whether any issues have been identified which would prevent the EPS licence being granted.
- 4.16 Generally, Natural England are unable to grant an EPS licence in respect of any development until all the necessary consents required have been secured in order to proceed. For NSIPs, Natural England will assess a draft licence application in order to ensure that all the relevant issues have been addressed. Within 30 working days of receipt, Natural England will either issue 'a letter of no impediment' stating that it is satisfied, insofar as it can make a judgement, that the proposals presented comply with the regulations or will issue a letter outlining why Natural England consider the proposals do not meet licensing requirements and what further information is required before a 'letter of no impediment' can be issued. The applicant is responsible for ensure draft licence applications are satisfactory for the purposes of informing formal pre-application assessment by Natural England.
- 4.17 Ecological conditions on the site may change over time. It will be the applicant's responsibility to ensure information is satisfactory for the purposes of informing the assessment of no detriment to the maintenance of favourable conservation status (FCS) of the population of EPS affected by the proposals³. Applicants are advised that current conservation status of populations may or may not be favourable. Demonstration of no detriment to favourable populations may require further survey and/or submission of revised short or long term mitigation or compensation proposals. In England the focus concerns the provision of up to date survey information which is then made available to Natural England (along with any resulting amendments to the draft licence application). This approach will help to ensure no delay in issuing the licence should the DCO application be successful. Applicants with projects in England or English waters can find further information on Natural England's protected species licensing procedures in relation to NSIP's by clicking on the following link:

http://www.naturalengland.org.uk/Images/wml-g36_tcm6-28566.pdf

- 4.18 In England or English Waters, assistance may be obtained from the Consents Service Unit (CSU). The CSU works with applicants

³ Key case law in respect of the application of the FCS test at a site level: Hafod Quarry Land Tribunal (Mersey Waste (Holdings) Limited v Wrexham County Borough Council) 2012, and Court of Appeal 2012

to coordinate key non-planning consents associated with nationally significant infrastructure projects. The CSU's remit includes EPS licences. The service is free of charge and entirely voluntary. Further information is available from the following link:

<http://infrastructure.planningportal.gov.uk/legislation-and-advice/consents-service-unit/>

Flood Risk Assessment

- 4.19 The SoS notes that a separate FRA will be submitted with the DCO application. The Scoping Report confirms that, in accordance with the National Planning Policy Framework (NPPF), the FRA will assess the flood risk both to and from the proposed development and demonstrate how that flood risk (from all sources) will be managed over the lifetime of the site, taking into account the effects of climate change, including sea-level rise. The SoS welcomes the consideration of potential sources of flooding from: fluvial; coastal; groundwater; surface water resulting from intense rainfall (pluvial) events; sewers (also resulting from intense pluvial events); and non-natural water bodies (i.e. canals and reservoirs), either from individual or multiple sources, in accordance with the NPPF. The Scoping Report confirms that the FRA will also take account of any future geomorphological change, including the potential for increased flooding risk due to coastal erosion. The applicant's attention is drawn to the comments of the Environment Agency in respect of the FRA (see Appendix 2 of this Opinion).
- 4.20 The SoS notes that decommissioning would be the subject of a separate FRA.

Transport Assessment

- 4.21 The SoS notes the proposed inclusion of a separate Transport Assessment (TA) with the DCO application. The SoS understands that the TA will include assessments of both the construction and operational phases and will assess the impact of the Sizewell C proposed development on road and network capacity, the operation of junctions and journey times both locally and in the wider context (where necessary), taking account of the transport strategy adopted for the Sizewell C proposed development and proposed mitigation. The applicant is referred to the SoS' comments in paragraph 3.33 of this Opinion, in regard to extending the scope of the TA to include consideration of potential impacts on the rail network and navigation.

Sustainability Appraisal

- 4.22 The SoS notes the inclusion of a Sustainability Appraisal with the DCO application. The SoS understands that the appraisal will be informed by a sustainability strategy and will have regard to: the

Government's Appraisal of Sustainability (AoS) of the NPS for Nuclear Power Generation (EN-6) and the AoS Site Report for Sizewell; relevant legislation and planning policy; EDF Energy's own corporate sustainability policy; best practices set by other major infrastructure projects in the UK; and the views and interests of stakeholders.

Health Impact Assessment

- 4.23 The SoS considers that it is a matter for the applicant to decide whether or not to submit a stand-alone Health Impact Assessment (HIA) and notes that the applicant has decided to include an HIA with the DCO application. The applicant should have regard to the responses received from the relevant consultees regarding health, and in particular to the comments from Public Health England, Suffolk County Council, Swefling Parish Council, and Theberton and Eastbridge Parish Council in relation to the need to assess all potential impacts on human health (see Appendix 2 of this Opinion).
- 4.24 The methodology for the HIA should be agreed with the relevant statutory consultees and take into account mitigation measures for acute risks.

Other regulatory regimes

- 4.25 The SoS recommends that the applicant should state clearly what regulatory areas are addressed in the ES and that the applicant should ensure that all relevant authorisations, licences, permits and consents that are necessary to enable operations to proceed are described in the ES. Also it should be clear that any likely significant effects of the proposed development which may be regulated by other statutory regimes have been properly taken into account in the ES.
- 4.26 The applicant's attention is drawn to the comments of the Environment Agency in Appendix 2 of this Opinion, regarding consenting requirements.
- 4.27 It will not necessarily follow that the granting of consent under one regime will ensure consent under another regime. For those consents not capable of being included in an application for consent under the PA 2008, the SoS will require a level of assurance or comfort from the relevant regulatory authorities that the proposal is acceptable and likely to be approved, before they make a recommendation or decision on an application. The applicant is encouraged to make early contact with other regulators. Information from the applicant about progress in obtaining other permits, licences or consents, including any confirmation that there is no obvious reason why these will not

subsequently be granted, will be helpful in supporting an application for development consent to the SoS.

Transboundary Impacts

- 4.28 The SoS has noted that the applicant has not at this stage indicated whether the proposed development is likely to have significant impacts on another European Economic Area (EEA) State.
- 4.29 Regulation 24 of the EIA Regulations, which *inter alia* require the SoS to publicise a DCO application if the SoS is of the view that the proposal is likely to have significant effects on the environment of another EEA state and where relevant to consult with the EEA state affected. The SoS considers that where Regulation 24 applies, this is likely to have implications for the examination of a DCO application.
- 4.30 The SoS recommends that the ES should identify whether the proposed development has the potential for significant transboundary impacts and if so, what these are and which EEA States would be affected.

APPENDIX 1

List of Consultees

APPENDIX 1

LIST OF BODIES FORMALLY CONSULTED DURING THE SCOPING EXERCISE

CONSULTEE	ORGANISATION
SCHEDULE 1	
The Welsh Ministers	Welsh Government
The Welsh Ministers	Welsh Government
The Scottish Executive	Scottish Government
The Scottish Executive	Scottish Government
The Relevant Northern Ireland Department	Northern Ireland Assembly
The Health and Safety Executive	Health and Safety Executive
The Relevant Strategic Health Authority (post 1 April 2013)	NHS England Ipswich and East Suffolk Clinical Commissioning Group Great Yarmouth and Waveney Clinical Commissioning Group
Natural England	Natural England
The Historic Buildings and Monuments Commission for England	English Heritage
The Relevant Fire and Rescue Authority	Suffolk Fire and Rescue Service
The Relevant Police and Crime Commissioner	Suffolk Police and Crime Commissioner
The Relevant Parish Council(s) or Relevant Community Council	Aldringham cum Thorpe Parish Council Benhall and Sternfield Parish Council Blaxhall Parish Council Blythburgh Parish Council Bramfield and Thorington Parish Council Campsea Ashe Parish Council Darsham Parish Council Dunwich Parish Meeting Easton Parish Council Farnham with Stratford St Andrew Parish Council Great Glemham Parish Council Hacheston Parish Council Kelsale cum Carlton Parish Council Knodishall Parish Council Leiston cum Sizewell Town Council Letheringham Parish Council Little Glemham Parish Council Marlesford Parish Council

CONSULTEE	ORGANISATION
	Middleton Parish Council Parham Parish Council Rendham Parish Council Saxmundham Town Council Snape Parish Council Sweffling Parish Council Theberton and Eastbridge Parish Council Westleton Parish Council Wickham Market Parish Council Yoxford Parish Council
The Environment Agency	The Environment Agency
The Commission for Architecture and The Built Environment	CABE at Design Council
The Equality and Human Rights Commission	Equality and Human Rights Commission
The Homes and Communities Agency	Homes and Communities Agency
The Joint Nature Conservation Committee	Joint Nature Conservation Committee
The Maritime and Coastguard Agency	The Maritime and Coastguard Agency
The Marine and Fisheries Agency	Marine Management Organisation (MMO)
The Scottish Fisheries Protection Agency	Marine Scotland Conservation
The Highways Agency	The Highways Agency
The Relevant Highways Authority	Suffolk County Council
The Passengers Council	Passenger Focus
The Disabled Persons Transport Advisory Committee	Disabled Persons Transport Advisory Committee
The Coal Authority	The Coal Authority
The Office Of Rail Regulation	Office of Rail Regulation (Customer Correspondence Team Manager)
Approved Operator	Network Rail Infrastructure Ltd Network Rail (CTRL) Ltd
The Gas and Electricity Markets Authority	OFGEM
The Water Services Regulation Authority	OFWAT
The Relevant Waste Regulation Authority	Environment Agency
The Relevant Internal Drainage Board	East Suffolk Internal Drainage Board
The Canal and River Trust	The Canal and River Trust
Trinity House	Trinity House
The Health Protection Agency (post 1 April 2013)	Public Health England
The Relevant Local Resilience	Suffolk Local Resilience Forum

CONSULTEE	ORGANISATION
forum	
The Crown Estate Commissioners	The Crown Estate
The Office for Nuclear Regulation (from 1 April 2014)	The Office for Nuclear Regulation
RELEVANT STATUTORY UNDERTAKERS	
Health Bodies (s.16 of the Acquisition of Land Act (ALA) 1981)	
The Relevant Strategic Health Authority (England only) (post 1 April 2013)	NHS England Ipswich and East Suffolk Clinical Commissioning Group Great Yarmouth and Waveney Clinical Commissioning Group
Primary Care Trusts (England only) (post 1 April 2013)	NHS England Ipswich and East Suffolk Clinical Commissioning Group Great Yarmouth and Waveney Clinical Commissioning Group East Anglia Area Team
NHS Trust (England only)	Ipswich Hospital NHS Trust
Ambulance Trusts	East of England Ambulance Trust
Relevant Statutory Undertakers (s.8 ALA 1981)	
Railway	Network Rail Infrastructure Ltd Highways Agency Historical Railways Estate Network Rail (CTRL) Ltd
Universal Service Provider	Royal Mail Group
Relevant Homes and Communities Agency	Homes and Communities Agency
Relevant Environment Agency	The Environment Agency
Water and Sewage Undertakers	Anglian Water Essex and Suffolk Water
Public Gas Transporter	British Gas Pipelines Limited Energetics Gas Limited ES Pipelines Ltd ESP Connections Ltd ESP Networks Ltd ESP Pipelines Ltd Fulcrum Pipelines Limited GTC Pipelines Limited Independent Pipelines Limited LNG Portable Pipeline Services Limited National Grid Gas Plc National Grid Plc Quadrant Pipelines Limited SSE Pipelines Ltd The Gas Transportation Company

CONSULTEE	ORGANISATION
	Limited Utility Grid Installations Limited Scotland Gas Networks Plc Southern Gas Networks Plc
Electricity Generators With CPO Powers	EDF Energy Nuclear Generation Limited NNB Generation Company Limited Galloper Wind Farm Limited Greater Gabbard Offshore Winds Limited RWE Npower Renewables SSE Generation Ltd Energetics Electricity Limited ESP Electricity Limited Independent Power Networks Limited The Electricity Network Company Limited UK Power Networks Limited
Electricity Transmitters With CPO Powers	National Grid Electricity Transmission Plc National Grid Plc Greater Gabbard OFTO Plc
LOCAL AUTHORITIES (SECTION 43)	
Marine Management Organisation (MMO) The Broads Authority Suffolk Coastal District Council Waveney District Council Mid Suffolk District Council Babergh District Council Ipswich Borough Council Suffolk County Council Norfolk County Council Cambridgeshire County Council Essex County Council	
NON-PRESCRIBED CONSULTATION BODIES	
Ministry of Defence Royal National Lifeboat Institution	

APPENDIX 2

Respondents to Consultation and Copies of Replies

APPENDIX 2

LIST OF BODIES WHO REPLIED BY THE STATUTORY DEADLINE

Blythburgh Parish Council
The Broads Authority
The Coal Authority
The Crown Estate
Department of Environment, Northern Ireland
English Heritage
Environment Agency
Essex County Council
The Equality and Human Rights Commission
Farnham with Stratford St Andrew Parish Council
Fulcrum Pipelines Ltd
Galloper Wind Farm Ltd
GTC on behalf of: <ul style="list-style-type: none">• Independent Power Networks• Utility Grid Installations• Independent Pipelines• The Electricity Network Company• GTC Pipelines• Quadrant Pipelines
Health and Safety Executive
Kelsale cum Carlton Parish Council
Middleton-cum-Fordley Parish Council
Marine Management Organisation (MMO)
Natural England
Network Rail
Norfolk County Council
Office for Nuclear Regulation
Public Health England
Saxmundham Parish Council
Suffolk County Council
Swefling Parish Council
Theberton and Eastbridge Parish Council
Trinity House

From: Blythburgh Parish Council [mailto:blythburgh.pc@gmail.com]
Sent: 14 May 2014 13:37
To: Environmental Services
Subject: Application by EDF Energy - Sizewell C proposed Nuclear Development

Dear Sir / Madam

Blythburgh Parish Council have reviewed the documentation and wish at this point to make no comment

--

regards

J Boggis

Clerk to Blythburgh with Bulcamp & Hinton Parish Council

telephone; [REDACTED]

post; [REDACTED]

e-mail; blythburgh.pc@gmail.com

web site; <http://blythburgh.onesuffolk.net/>

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From: Mark King [mailto:Mark.King@broads-authority.gov.uk]

Sent: 19 May 2014 15:07

To: Environmental Services

Subject: EN010012 - Sizewell C

Dear Madam,

Application No : BA/2014/0172/NEIGHS
Description : Scoping Opinion regarding Sizewell C Nuclear Plant
Address : Sizewell C Nuclear Plant, Sizewell, ,
Applicant : EDF Energy

I write with reference to the above Scoping Opinion that was sent to the Broads Authority last month.

As the location of the site is some way outside the Broads Executive Area we have no comments to make.

I hope this is satisfactory to you.

Kind Regards

Mark King

Planning Technical Support Officer

Broads Authority

Tel: 01603 756028

Email: mark.king@broads-authority.gov.uk



Broads Authority
Yare House
62-64 Thorpe Road
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NR1 1RY

Tel: 01603 610734

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200 Lichfield Lane
Berry Hill
Mansfield
Nottinghamshire
NG18 4RG

Tel: 01623 637 119 (Planning Enquiries)

Email: planningconsultation@coal.gov.uk

Web: www.coal.decc.gov.uk/services/planning

Ms Laura Allen – Senior EIA and Land Rights Advisor
The Planning Inspectorate

[By Email: environmentalservices@infrastructure.gsi.gov.uk]

Your Ref: EN010012

15 May 2014

Dear Ms Allen

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended) – Regulations 8 and 9

Application by EDF Energy for an Order Granting Development Consent for the Sizewell C Proposed Nuclear Development

Thank you for your consultation letter of 24 April 2014 seeking the views of The Coal Authority on the EIA Scoping Opinion for the above proposal.

The Coal Authority is a non-departmental public body sponsored by the Department of Energy and Climate Change. As a statutory consultee, The Coal Authority has a duty to respond to planning applications and development plans in order to protect the public and the environment in mining areas.

The Coal Authority Response:

I have reviewed the proposals and confirm that the proposed EIA development is located outside of the defined coalfield. Accordingly, The Coal Authority has **no comments** to make regarding the information to be contained in the Environmental Statement that will accompany this proposal.

As this proposal lies outside of the defined coalfield, in accordance with Regulation 3 and Schedule 1 of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 it will not be necessary for any further consultations to be undertaken with The Coal Authority on this Nationally Significant Infrastructure Project. This letter can

be used by the applicant as evidence for the legal and procedural consultation requirements.

Please do not hesitate to contact me if you would like to discuss this matter further.

Yours sincerely

Mark Harrison

Mark E. N. Harrison *B.A.(Hons), DipTP, LL.M, MInstLM, MRTPI*
Planning Liaison Manager

Disclaimer

The above consultation response is provided by The Coal Authority as a Statutory Consultee and is based upon the latest available data and records held by The Coal Authority on the date of the response. The comments made are also based upon only the information provided to The Coal Authority by the Local Planning Authority and/or has been published on the Council's website for consultation purposes in relation to this specific planning application. The views and conclusions contained in this response may be subject to review and amendment by The Coal Authority if additional or new data/information (such as a revised Coal Mining Risk Assessment) is provided by the Local Planning Authority or the applicant for consultation purposes.

The Planning Inspectorate
Attention: Laura Allen
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol, BS1 6PN

Dr David Tudor
Senior Marine Policy & Planning Manager
Tel: 020 7851 5071
Fax: 020 7851 5125
E-mail: david.tudor@thecrownestate.co.uk

22 May 2014

Dear Ms Allen

Scoping consultation for the Sizewell C Proposed Nuclear Development

Reference is made to your letter dated 24 April 2014 inviting The Crown Estate to comment on the request for a scoping opinion submitted for the above proposal by EDF Energy.

The Crown Estate manages property and rights which are owned by Her Majesty in right of the Crown. This portfolio includes around half of the foreshore and almost the entire seabed out to 12 nautical miles around the UK. Under the Energy Act 2004 and the Energy Act 2008, The Crown Estate also manages the rights over the continental shelf to offshore energy generation and the rights to carbon dioxide and natural gas storage and transportation (respectively). We note that EDF Energy's proposal will impact on The Crown Estate's portfolio, given its nature and location.

To date no agreement has been reached between The Crown Estate and EDF Energy in relation to the grant of lease/licence rights that EDF Energy will require to carry out the scheme described in the Sizewell C Scoping Report, namely in relation to the development's cooling water outfall and intake. Discussions are ongoing between The Crown Estate and EDF Energy in relation to such rights being granted; any comment by The Crown Estate is therefore without prejudice to these discussions.

We note in addition that two offshore wind transmission interests to the south of the proposed Sizewell C development are potentially affected by the proposals; the nearest is the Galloper Offshore Wind Farm export cable corridor, and south of that the Greater Gabbard Offshore Wind Farm export cable corridor.

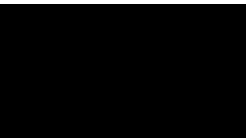
An agreement for lease (Afl) is in place between The Crown Estate and Galloper Wind Farm Ltd for the Galloper Offshore Wind Farm export cable corridor; the cable corridor is covered by the Development Consent Order (DCO) and Deemed Marine Licence which was made by the Secretary of State on the 24 May 2013. We understand that discussions between EDF Energy and Galloper Wind Farm Ltd in 2012/13 resolved issues regarding seabed requirements and the proposed cooling water intake and outfall locations for the Sizewell C development and that these were reflected in the final DCO for the Galloper Offshore Wind Farm. We would therefore expect the current proposals for the Sizewell C development to align with the previously agreed position.

The Greater Gabbard Offshore Wind Farm export cable corridor is leased to an offshore transmission operator (OFTO), and contains 3 x 132kV subsea electricity cables held within a lease of easement from The Crown Estate to Greater Gabbard OFTO Plc. The Crown Estate has given covenants not to

permit certain works within proximity of the cables. As such we recommend continuing engagement between EDF Energy and Greater Gabbard OFTO Plc and ourselves in this respect; in particular, discussions between the applicant and Gabbard OFTO Plc should be held over what proximity is needed in the event that a cable repair is required and further cable needs to be laid down.

Should you have any queries or require any additional information with regard to this matter, please do not hesitate to contact me on 0207 851 5071.

Yours sincerely,

p.p. 

Dr David Tudor

Senior Marine Policy & Planning Manager

Strategic Planning Division

**FOR THE ATTENTION OF
LAURA ALLEN**

The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
BRISTOL
BS1 6PN

4th Floor
Causeway Exchange
1-7 Bedford Street
Town Parks
BELFAST
BT2 7EG

Telephone: (028) 90823324
Facsimile:
Email: simon.kirk@doeni.gov.uk
Martha.linton@doeni.gov.uk
Your Ref: EN010012
Our Ref:
Date: 6 May 2014

Dear Laura

**APPLICATION BY EDF ENERGY FOR THE SIZEWELL C PROPOSED NUCLEAR
DEVELOPMENT – SCOPING CONSULTATION**

Thank you for your correspondence of 24 April regarding the above.

I can confirm on behalf of the Department of the Environment for Northern Ireland that we have no comments to make on the information to be provided in an environmental statement.

Yours sincerely



SIMON KIRK
Director, Strategic Planning Division



ENGLISH HERITAGE

EAST OF ENGLAND OFFICE

The Planning Inspectorate
3/18 Eagle Wing
2 The Square
Bristol
BS1 6PN

Direct dial: 01223-582710
Direct Fax: 01223 582701

Your Ref: **EN010012**

19th May 2014

Dear Sir or Madam,

**INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT
ASSESSMENT) REGULATIONS 2009 SI 2263 (as amended) (the EIA
Regulations)
PROPOSED Sizewell C Nuclear Development (the project)
PROPOSAL BY EDF Energy Limited (the applicant)**

Thank you for consulting English Heritage on the Environmental Impact Assessment Scoping Report for the Sizewell C Project (development at Sizewell, Suffolk). English Heritage is the Government's independent advisor on all aspects of the historic environment in England; we operate as an Executive Non-departmental Public Body and report to Parliament through the Secretary of State for Culture, Media and Sport. Our remit extends to both the terrestrial and marine environments, where our general powers under the National Heritage Act 1983 were extended (via the National Heritage Act 2002) to modify our functions to include securing the preservation of monuments in, on, or under the seabed within the seaward limits of the UK Territorial Sea adjacent to England i.e. the area of sea extending up to 12 nautical miles from the coastal 'baseline' adjacent to England.

We consider that this project has the potential to impact upon the historic environment both directly, through permanent physical changes, and indirectly through changes to the setting of heritage assets. We are also aware that impacts would vary throughout the life of the project. Some impacts during the construction phase will be temporary, but elements of the project would bring permanent change. Changes and impacts are also not confined to the main development area at Sizewell and elements of the project include the northern and southern park and ride, the rail extension, improvements to the A12, and a potential visitor centre. Other indirect changes, such as those to local infrastructure (e.g. roads, signage and lighting), are also anticipated. As is the potential for impacts in the marine zone. The historic environment assessment for all these separate elements of the project will need to be undertaken to the

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same high level and with the same consistency across all sections of the Environmental Statement.

All aspects of the historic environment, designated and undesignated, should be considered; however the particular remit of English Heritage in relation to this project would be the impact on Scheduled Monuments (SM's), grade I and II* listed buildings and conservation areas. We have an additional remit in relation to the intertidal and fully marine environments.

Undesignated archaeological remains would more properly be the province of the County Council, so we recommend the applicant consult with Suffolk County Council Archaeological Service. Similarly, the conservation officers at Suffolk Coastal District Council should be consulted regarding listed buildings, including those listed at grade II, as well as conservation areas and undesignated assets

The Scoping Report

The Scoping Report sets out the applicant's approach to assessing the impact of the proposed development on the Terrestrial and Marine historic environments (sections 7.5, 7.6 and 7.13). Section 7.3, Landscape and Visual Assessment, is also of relevance in considering the historic environment. Section 8, which represents EIA – Off-site Associated development, also has Terrestrial historic environment components.

We are broadly content with the approach and layout of the document but we have specific observations to make on heritage assessment, particularly for the marine historic environment (please see below). As regards the Landscape Assessment we would make the general observation that this assessment should be mindful of the historic development of landscape and the role it plays in the wider setting of heritage assets. A methodology for landscape assessment should therefore be flexible enough to consider the historic environment and inform the assessment. All sections of the report where there are elements that affect the historic environment should be cross-referenced. This is particularly important at critical interfaces such as those between the terrestrial and marine environments.

Section 2 of the Scoping Report identifies and describes the consent regimes and environmental assessment required for Nationally Significant Infrastructure Projects and the necessary licensing which is specific to nuclear establishments under the Nuclear Installations Act 1965. In addition to the national guidance and principles established by the NSIP process and for energy generation it is worth noting that the process for the assessment of the impact for the historic environment is through the National Planning Policy

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Framework. We would also recommend the Practice Guide to PPS5, which sits alongside the NPPF, is consulted as it provides useful guidance on the setting of heritage assets. English Heritage's guidance on *The Setting of Heritage Assets* and *Seeing History in the View* would also be useful to the applicant's consultants as they establish the range of ways in which setting can contribute to heritage assets' significance and a framework for assessing individual sites. Guidance detailing the assessment of the marine historic environment is also available and additional references are provided below where relevant.

It is worth noting at this stage that at the appropriate point in the planning process, we would anticipate that the applicant would be seeking establish a separate Statement of Common Ground which specifically relates to the Historic Environment, between English Heritage and the applicant.

Section 7.5 Terrestrial Historic Environment

This section of the report is relatively coherent and English Heritage has been involved in considerable pre-application discussions (see 7.5.4) and would be happy to continue to liaise with the applicant through-out the production of the draft EIA chapter. We offer the following comments on the Scoping Report:

We accept and agree with the chosen the study areas for the main development site and for the setting of heritage assets (see 7.5.8 and 7.5.9). Our primary concerns are the direct and indirect impacts upon the sites of Leiston Abbey (which is an English Heritage guardianship property) and Leiston Old Abbey, which is situated to the north of the development within the RSPB's Minsmere estate. Both sites are scheduled monuments and are of national importance. Likewise they are both publically accessible to visitors at all reasonable times and are highly valued. Their rural setting is a significant part of their value and attractiveness. Because Leiston Abbey is a part of English Heritage's public estate it has added significance. In addition the applicant should also consider the setting of a number of heritage assets within the area surrounding the development, including long distance views up and down the coast, as well as assets within the setting of off-site associated development. English Heritage would be providing further advice and comment on the archaeological strategy and any Written Scheme of Investigation produced as part of the Development Consent Order.

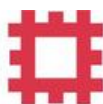
We recognise that the use of geophysical survey (7.5.5) is an important tool but we are also aware that techniques have developed considerably in the last 10 years. In conjunction with Suffolk County Council, Archaeology Service the applicant may like to consider particular techniques for specific historic environment site, in particular the use of ground penetrating radar (GPR).

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We note that the assessment methodology (see 7.5.29) for the historic environment proposed the use of assessment matrices. We do not consider that this form of assessment on its own is sufficient to fully understand the impact upon the historic environment. The approach is overly formulaic and the results of assessment can be particularly problematic for assessing the setting of heritage assets. Further advice on is given in our setting guidance, however, the use of an alternative method of assessment should be considered; in particular the use of a non-technical narrative argument based on good professional judgement to support the assessment and set out the effect of the proposed development in terms significance, benefit, harm and loss; as used in the NPPF.

Section 7.6 Marine Historic Environment

In historic environment terms the marine section is one of the weaker parts of the report, and we therefore wish to offer a number of comments.

No explanation is provided in this section regarding the proposed works within the Main Development Site (as described in section 3.2) either permanent or temporary developments. We feel this may compromise the overall attention given to the marine historic environment, how it will be assessed, and any impacts identified within the ES.

Paragraph 7.6.2 mentions the preparation of a Desk-Based Assessment (DBA) which alludes to interpretation of “new” geophysics data (7.6.3). However, we have not been supplied with a copy of the referenced DBA, so we are unable to provide a comment on the information sources utilised to complete this DBA. Similarly, in paragraph 7.6.4 it was noted that archaeological contractors were given access to borehole data taken on the route of the proposed seabed cooling water infrastructure. It states that no archaeological interests were encountered at these locations, but no further information is provided to enable us to provide advice about appropriate mitigation measures.

Paragraph 7.6.8, identified 162 wrecks within the 20km x 20km square marine study area, with the Dunwich bank designated historic shipwreck site located 4.5km to north. We recommend that this information is addressed in detail in the ES, to ensure corroboration between national and local desk-based sources and known or potential sites of historic or archaeological interest, which are identified through commissioned marine survey.

In paragraph 7.6.10 we note that geotechnical analysis is to be completed (i.e. production of a sedimentary deposit model) and that any new sub-bottom

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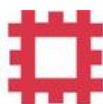
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survey data will also be subject to archaeological interpretation. We also noted the statement regarding the potential to encounter archaeological material within the proposed development area. It is important any objectives for any further offshore survey programmes are agreed beforehand, and that English Heritage and marine archaeologists are involved at the earliest stage of the planning, to ensure that data obtained are of sufficient quality/quantity to support archaeological interpretation.

In paragraphs 7.6.12, 7.6.26 and 7.6.30 we note that the incorrect job titles are stated. We feel this demonstrates the lack of engagement with English Heritage in relation to the marine historic environment in the preparation of this Report. It is therefore essential that effective communication is established with English Heritage staff to support the preparation the ES. Paragraphs 7.6.22, 7.6.26 and 7.6.27 all mention mitigation and that mitigation would be proposed, but no further details are provided. This is in contrast to the other historic environment sections of the Scoping Report. We therefore encourage the applicant to discuss such matters with English Heritage's Head of Marine Planning without delay. In particular we consider the information presented in this report to be insufficient, given that the most likely mitigation measures are not described; for example the preparation of an archaeological Written Scheme of Investigation (WSI) and a Reporting Protocol for Archaeological Discoveries.

In addition to the above, paragraph 7.6.3 mentions new geophysical and geomorphological data, but no specific attention is given to how such survey work will be conducted in the context of a project-specific Archaeological Written Scheme of Investigation. We therefore take this opportunity to highlight the matters which should be addressed within any archaeological WSI prepared for this proposed project and which should be included in any ES prepared in support of this proposed development:

- Suitable techniques and methodologies for data capture and archaeological interpretation of geophysical and geotechnical survey data commissioned in support of the proposed project;
- Methodological explanation of the interpretation of any video (ROV or drop down camera) and diver investigation of anomalies of known or possible archaeological interest;
- Spatial identification of any Archaeological Exclusion Zones (AEZs) which must be differentiated from other required exclusion zones (e.g. for cables, UXO etc);



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- The Protocol for Archaeological Discoveries should be clearly identified as a stand alone document and prepared in agreement with English Heritage and any relevant local authority (vis-à-vis any foreshore components of the proposed development); and
- Any archaeological reports produced as a result of this project will be deposited through the English Heritage OASIS (Online AccesS to the Index of archaeological investigations') system with a digital copy of any agreed report(s).

Paragraph 7.6.24 includes the comment “The nature and extent of submerged remains / deposits offshore has not yet been determined.” In consideration of the detail provided in this section regarding the work completed to date by the archaeological contractors and other analysis to follow, it is our view that that full reporting should be produced to inform any ES prepared for this proposed project.

Under Paragraph 7.6.27, the matter regarding the option for “preservation by record” requires consideration in the context of UKMPS and the relevant National Policy Statement. Likewise under Paragraph 7.6.29 we consider that insufficient explanation was provided about how Historic Seascape Character will cross reference with “LVIA”.

Paragraph 7.6.31 regards the determination of any cumulative Impacts and we look forward to reviewing the detail of this aspect of the assessment within the ES and offer the following as a useful reference:

Oxford Archaeology Ltd & George Lambrick(2008) *Guidance for the assessment of cumulative impacts on the historic environment from offshore renewable energy* (Published by COWRIE).

Please also note that the date given to the publication in the final bullet point of Paragraph 7.6.13, should read 2012, and under Paragraph 7.6.15, the correct reference should read ‘A Maritime Archaeological Research Agenda for England’ (published 2013), Eds. J. Ransley, F. Sturt, J. Dix, J Adams and L. Blue (Council for British Archaeology – Research Report 171).

The EIA scoping proposes the use of tables and matrices in order to assess the impact upon the marine historic environment. As with the terrestrial assessment (see above) we would recommended the use of a non-technical narrative argument to support the assessment and set out the effect of the proposed development in the language, terms and definitions given in UK Marine Policy Statement and relevant National Policy Statement.

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Section 7.13 Coastal geomorphology and hydrodynamics

Under Paragraph 7.13.2, we noted the detail provided regarding “*high resolution bathymetric surveys of Sizewell-Dunwich Bank (2008/9) with further surveys in 2010, 2011 and 2012...*” and “*a comprehensive analysis of all available modern and historical datasets in order to examine the behaviour of shoreline change at Sizewell...*” However, it is not made clear in either this section of the EIA Scoping Report, or section 7.6, that this data was subject to archaeological examination and interpretation. We therefore stress the importance that any ES prepared for this proposed project utilises marine geophysical data (multi-beam, single beam, side-scan sonar and magnetometer etc.) to corroborate other desk-based sources of information about the historic environment held by national and local curators.

Paragraphs 7.13.3 and 7.13.19 also includes the mention of a “jetty” which is not mentioned in Section 7.6. We therefore require that any and all geophysical and geotechnical data acquired to support this proposed development is also subject to archaeological analysis. This matter is particularly relevant in reference to determination of long-shore sedimentary dynamics and the identification of known sites of archaeological interest and potential sites of archaeological interest. This paragraph also makes reference to “*...the designated site at Shingle Street*”. We were unsure under what legislative regime the site was designated. We also noted that this paragraph details the following: “*The location of the cooling water infrastructure is subject to current engineering studies and the seaward extent of the study area was set at approximately 4km in order to allow flexibility in those studies.*” We therefore require any ES prepared for this proposed project ensures that all archaeological studies are also completed as relevant to any area of foreshore or seabed as might be impacted (directly or indirectly) by this proposed development (permanent and temporary) as detailed in section 3.2.

An important statement is made in Paragraph 7.13.4, regarding the “*...assessment of shore line variability and offshore sand banks requires much longer term scales of years to decades.*” We therefore require that the ES directs attention at determining any historic environment interests as might be affected by the proposed development given the sedimentary dynamics encountered in this area with particular reference to the Sizewell-Dunwich Bank (as mentioned in paragraph 7.13.7).

A particular point is made in Paragraph 7.13.14 regarding “*...the heat sink capacity for the Sizewell power stations...*” this seems to be a technical matter which, if relevant to the determination of impact within an EIA, will need to be fully explained. Similarly, paragraph 7.13.16 includes reference to the Coast



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Protection Act 1949, but offers no explanation to what, if any, extant legal matters are still addressed by this act. It also appears that the UK Marine Policy Statement (cf. section 2.6.8) has been omitted from the section on “national policy and legislation”.

In table 7.13.2, any reference in this table to “conservation value” must also be considered applicable to historic and archaeological sites (designated or non-designated and in accordance with the UK Marine Policy Statement cf. section 2.6.6). Likewise in table 7.13.3, the definitions of effects detailed in this table require close attention in any ES prepared for this proposed project. It was noted that in “major” and “moderate” reference is made to “Very large or large changes to the coastal or sea bed geological features” and “Intermediate change in the coastal or sea bed geological features” respectively, but for “minor” and “negligible” reference is made to “Small change in coastal or sea bed features” and “No discernible change in the coastline or sediment processes” respectively. However, the receptors identified in this table appear to be too dissimilar to enable effective determination of impact.

In Paragraph 7.13.29 we note the attention that is given to dredging activities for the proposed jetty. This not addressed in Section 7.6, and it is therefore essential that any and all data commissioned in support of any dredging programme is done so in reference to agreed archaeological objectives for data capture and analysis.

Paragraph 7.13.30 mentions the cooling water outfall and intake structure connected to the station by horizontal tunnels below the “sea bed”. We would require any ES prepared for this proposed development to provide detailed assessment of seabed sedimentary structures as might be impacted by any tunnelling and any associated historic environment interests that might be impacted. Likewise in Paragraph 7.13.31, the same matter is applicable to any operation to drill vertical shafts through the seabed to connect to cooling water tunnels.

Paragraph 7.13.35 makes mention of dredging and maintenance activities during operation and possible change in bathymetry. We would suggest that that this assessment must also be inclusive of any identified anomalies of archaeological interest as might be affected.

Under Paragraph 7.13.37, we recommend that it would be appropriate for any mitigation measures identified to consider impacts to heritage assets (see definition given in UK Marine Policy Statement) and ensure that these are reported within the relevant chapter of the ES. It is apparent that inter-

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relationships identified in paragraph 7.13.38 are presently inadequate to support the completion of any EIA.

In our view, the mention in Paragraphs 7.13.39 and 7.13.40 of cumulative effects is too limited in scope. We recommend for example that attention is given to the cumulative effects of seabed infrastructure associated with previous phases of development at Sizewell Nuclear power station.

Recommendations

We recognise that there are significant and detailed historic environment advice and comments contained within this letter. English Heritage would therefore welcome the opportunity to engage in further discussions in relation to the assessment of the terrestrial historic environment. We recommend however that detailed discussion on the marine historic environment are undertaken with English Heritage Marine Team at the earliest opportunity, and the assessments needed to support this part of the draft ES are discussed before the work progresses any further.

In the meantime, if further clarification is needed in relation to the above comments then please do not hesitate to contact us.

Yours sincerely

Dr William Fletcher
Inspector of Ancient Monuments
will.fletcher@english-heritage.org.uk

Our reference: AE/2014/117690/01
Your reference: EN010012



Ms Laura Allen
Senior EIA and Land Rights Advisor
The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol, BS1 6PN

22 May 2014

Dear Ms Allen,

**Sizewell C Nuclear New Build Project
Scoping Opinion – Planning Act 2008 (as amended) and The Infrastructure Planning
(Environmental Impact Assessment) Regulations 2009 (as amended) – Regulations 8 and 9**

We refer to your letter of 24 April 2014 which requests our views on the Sizewell C Environmental Impact Assessment (EIA) Scoping Opinion (dated April 2014) related to the proposal for a new nuclear power station and associated development sites.

Environment Agency Position

After reviewing the EIA Scoping Report we are pleased to see, from our perspective, that the majority of topic areas we would expect to see have been included. However there are some additional items which will need to be scoped into the process and some items which need to be expanded to ensure the EIA can be considered fit for purpose, in particular water resources and water quality. We look forward to continued engagement with NNB GenCo in the production of their Environmental Statement.

General Comments

Water Resources

There is no clear indication of how water will be sourced - either for construction, or operation. The availability of water resources is an important consideration for the proposed development. We will have to agree to the water supply strategy. The infrastructure associated with construction (for example concrete batching plants) will require significant volumes of water. Furthermore, there is no indication of how water will be sourced for the large number of workers who would be resident on the accommodation campus. There will presumably also be a potable water supply requirement for the operational power station. Given the local environmental setting, and the scarcity of water resources in Eastern England, this is an important consideration and may directly effect design proposals. It is therefore our view that the issue of water resources must be scoped into the EIA.

Further information can also be found in the East Suffolk Abstraction Management Strategy, which is available at the following link: <https://www.gov.uk/government/publications/cams-east-suffolk-abstraction-licensing-strategy>

Water Quality

The issue of sewage disposal is an important aspect that needs careful consideration to ensure there is no adverse environmental impact (particularly given the downstream location of the Sizewell Marshes SSSI). NNB GenCo's foul drainage strategy should address the construction and operational phases of development for the main site and where applicable associated development sites. We will need to agree the sewage disposal strategy. There are a number of potential options for disposing of foul water which will require detailed consideration and consultation with relevant organisations. The potential impacts associated with each option will need to be assessed and therefore it is our view that this needs to be scoped into the EIA.

It must be ensured that any risk to the water environment is minimised both during construction and operation of the site. Adequate controls and measures need to be fully considered and incorporated into the design of the site to minimise any risk of pollution to the water environment. It is our view that this needs to be highlighted in the EIA.

Detailed Comments

Please see our detailed comments on NNB GenCo's EIA scoping below. For ease of reference we have followed the same order of the headings presented in the EIA Scoping Opinion report.

2. Consenting Regimes and Environmental Assessment

2.2 Other Relevant Consents

2.2.6 – This section provides a useful context regarding the permits that will be required from the Environment Agency under the Environmental Permitting Regulations (England and Wales) 2010. It could go further to explain the interaction with the EIA regulations.

Consenting Requirements

Any works in, under or over the channel of a main river or within 9 metres of the top of the bank will require Flood Defence Consent from us under Sections 109 and 210 of the Water Resources Act 1991 and associated land drainage and sea defence byelaws. This is to ensure that flood risk is not increased, as well as to ensure our ability to carry out our permissive powers is not adversely affected by the works.

Flood Defence Consent is also likely to be required under our land drainage and sea defence byelaws for the works taking place along the coastal frontage due to the proximity to the sea defences for example the flood defence modification works.

2.3 Related Assessments

(a) Habitat Regulations Assessment

The EIA and HRA process is interlinked this needs to be reflected in NNB GenCo's approach. Evidence which forms the foundation of the EIA process is also required for the HRA and permitting process.

(b) Flood Risk Assessment

2.3.4 – 2.3.5 – The FRA must include and take full account of a number of issues that are identified for inclusion in the EIA Scoping Report which have a bearing on flood risk. This includes coastal geomorphology and hydrodynamics (including the potential for increased risk from coastal erosion) surface water and groundwater flood risk.

Whilst a separate FRA is to be produced and will address flood risk issues this will need to be cross-referenced and any impacts highlighted in the EIA.

3. Description of the Proposed Development

3.2 Main Development Site

The description of the project seems to be high level. However it is unclear if this section is intended to be an exhaustive list of infrastructure or just intended to identify key infrastructure. There is for example, no mention of standby generators, which will require an environmental permit from us to operate.

3.2.4 – It is stated that the permanent development is to be built at approximately 6.4mAOD. The final level is to be determined through the FRA process.

3.7 Conventional Waste Management

3.7.4 – The first bullet point confirms that the main waste streams and predicted volumes likely to arise from the construction, operation and post-operation phases will be identified. The waste assessment should identify all possible options and routes for all waste arisings, and provide full justifications of why

any will not be pursued. The waste assessment needs to apply to both the main site and associated development sites.

3.8 Spent Fuel and Radioactive Waste Management

This section refers to storage of spent fuel but makes no reference to other alternatives for dealing with spent fuel (e.g. reprocessing). This is not covered in the section on alternatives. The EIA should include this topic area.

There is no reference in the report to the application of Best Available Technology (BAT) or the waste hierarchy to minimise volumes and activity of radioactive wastes. This needs to be incorporated into the EIA.

5. Approach to the EIA

5.3 Assessment of Effects and Determining Significance

Table 5.1 – For each of the ‘value/ sensitivity’ categories there is a generic guideline for the assessment of sensitivity. The guidelines centre round environmentally important and designated areas and features. Whilst the purpose of the table appears to be to provide more generic guidelines, it is not clear which category other features, such as watercourses or ditches, would fit into. Whilst these features may not be located within a designated site (although some are) they are nevertheless important features, often upstream of designated sites, which support and sustain aquatic ecology. As such, any impacts or effects to such features not listed need to be given appropriate consideration in the EIA.

7. EIA – Main Development Site

7.2 Terrestrial Ecology and Ornithology

Table 7.2.1 – There is no reference to fish and eels in this table which sets out the proposed study areas for potential ecological resources. There are potential impacts to fish and eels associated with the main development site, including from the possible re-routing of the Sizewell Ditch. For this reason fish and eels need to be scoped into the EIA.

Table 7.2.2 – We consider that reference also needs to be made to Dew’s Ponds SAC which has been identified through Habitat Regulation Assessment work to date.

7.7 Noise and Vibration

Impacts from the periodic testing of the back-up, emergency diesel generators should be incorporated into this section.

7.8 Air Quality

(c) Approach and methodology

7.8.14 – Reference is made to the Environment Agency (2010) Horizontal Guidance Note H1. This should be 2011.

(iv) Assessment methodology – Construction methodology

7.8.46 – It is suggested that the modelling will only be undertaken for short-term averaging periods because combustion emissions sources are expected to only be used as back-up on a short term basis. The worst case scenario needs to be considered and the likely impacts assessed. Further information about what the likely period of operation of the diesel generators and the justification/ evidence for the period selected is required.

(v) Assumptions and limitations

7.8.48 – This paragraph suggests the operator may need to duplicate work. We recommend that the potential worst case scenarios are considered (e.g. prolonged operation due to breakdown/maintenance etc). This assessment may then be suitable for both planning and permitting regimes.

7.8.54 – Point sources emissions from diesel generators must include total particulates, PM10 and PM2.5, CO, NO_x and SO₂. Potential receptors include ecological sites up to 15km from the point source emission points.

7.11 Groundwater and 7.12 Surface Water

Water Resources

There is no clear indication of how water will be sourced - either for construction, or operation. The availability of water resources is an important consideration for the proposed development. We will have to agree to the water supply strategy. We refer you back to our earlier general comments on water resources.

Any effect of a proposed abstraction on local features needs to be undertaken. We recommend NNB GenCo contact us at an early stage to discuss this issue given the scarcity of water resources discussed and potential restriction which may occur.

Foul Water

The issue of sewage disposal is an important aspect that needs careful consideration to ensure there is no adverse environmental impact. We will have to agree to the sewage disposal strategy. We refer you back to our earlier general comments on water quality.

(c) Approach and methodology

7.12.13 – The results of the monitoring detailed in this paragraph is as expected.

7.12.14 – Reference should no longer be made to the Freshwater Fish Directive as this has now been revoked. Sole reference should be made to the WFD standards.

7.12.21-23 – It is important that opportunities to improve watercourses should be considered in addition to just protecting them.

7.12.26 (fifth bullet point) – Water Framework Directive (WFD) Environmental Quality Standards apply to all water bodies.

(d) Potential Impacts and Effects

7.12.27 – We refer you back to our earlier general comments on foul water disposal.

7.12.29 – Eroded sediment has the potential to lead to the blanketing of channels which could cause negative impacts to habitat. Windblown soil also needs to be considered as a significant issue as the soils are generally very light and tend to be blown when dry.

7.12.40 – Land quality should also be included as an inter-relationship as there is a potential inter-relationship between surface water impacts and land quality.

7.13 Coastal Geomorphology & Hydrodynamics

7.13.16 – It is recognised in the Scoping Report that there is a possible risk of coastal geomorphology South of Thorpeness being affected by the construction. We therefore consider that Policy Development Zone 5 – Thorpeness to Orfordness – of the Suffolk Shoreline Management Plan 2 is also included in the list of national policy and legislation.

7.13.39 – The potential impacts on coastal geomorphology and hydrodynamics resulting from the decommissioning of Sizewell B need to be assessed as part of the cumulative effects.

7.14 Marine Water Quality & Sediments

7.14.3 – We note that modelling work has been undertaken in accordance with Environment Agency modelling guidelines. We will need to review and agree the modelling work.

7.14.7 – We do not consider this can be the baseline; the impacts from Sizewell C also need to be assessed with Sizewell B in operation as the overlap in operation is potentially significant.

7.14.9 – To determine whether this approach is appropriate we will need to review and agree these models.

7.15 Marine Ecology

Table 7.15.1 - Work in relation to Entrainment Mimic Unit has been completed. We will need to review and agree this work as part of the British Energy Estuarine and Marine Studies (BEEMS) reports.

7.15.4 – We consider the zone of effect to extend to the wider fisheries ecology rather than just the area impacted by the plumes.

7.15.5 – The EIA needs to include fish populations more generally and not just commercial fisheries.

7.15.21 – We refer to the fifth bullet point which reads “*the maintenance of any maritime exclusion zones around beach landing and offshore structures, during construction or operation*”; it is unclear what this relates to. Further information will be required in the EIA on the nature of these exclusion zones and what “maintenance” actually means.

7.15.37 – There is no mention of key impacts – both interdependent and cumulative on fish populations. The adverse impacts of impingement /entrainment and the impacts of chemical and thermal discharges on the fish populations is a key consideration which needs to be addressed in the EIA.

7.17 Radiological

7.17.4 – It is unclear what the justification is for bounding the radiological impacts of decommissioning to those for routine operational activities. Discharges during operations will be different from those during decommissioning.

The impacts associated with the decommissioning of a reactor will be addressed under a separate EIA as required under the Nuclear Reactors (Environmental Impact for Decommissioning) Regulations 1999 (as detailed in paragraph 7.17.9).

7.17.10 – For completeness, we draw your attention to a new habits survey that is due to take place around Sizewell in early 2015. This may conclude that the critical group in the area is different to that currently postulated. Furthermore, the impact assessment needs to be flexible enough to accommodate changes to future pathways over time.

7.17.14 – Further baseline data will also be available through the Sizewell environmental monitoring programme (which is a permit requirement placed on both Sizewell A and Sizewell B). Sizewell A currently co-ordinate the programme so will hold the relevant data.

7.17.27 – We note that an assessment of discharges will be included in the EIA which we support. A point to consider will be whether discharges will be modelled on a continuous discharge or on a more realistic model (e.g. Pressurised Water Reactor peak discharges during re-fuelling outages).

7.17.40 – It should be noted that assessment of impacts to non-human species forms part of the environmental permitting process.

7.17.53 – The application of BAT is required through our permit rather than through OSPAR (OSPAR is an international treaty that places certain obligations on the UK Government). The application of BAT does not “ensure” compliance.

7.17.58 – It is important that the cumulative impact assessment includes worst case scenarios, such as a refuelling outage at Sizewell B and C at the same time resulting in peak discharges to the environment.

8. EIA – Associated Development Site

8.1.4 – The final sentence of the second bullet point states that “*flooding has been addressed within the surface water sections*”. We note that flood risk has not been considered in section 7.12 (surface water) so this reference to flooding must be under the environmental topic of ‘surface water’ for each associated development site.

8.2 Northern park and ride

Table 8.1 includes protected species surveys. We are aware that otters are in this general location and should be recognised in table 8.4.

Table 8.2 identifies potential impacts and effects to water quantity and quality in the Minsmere River and Darsham Marshes both during construction and operation of the site. We refer you back to our earlier general comments on water quality at the start of our response. Of particular concern is the disposal of foul water and preventing pollution from surface water run-off to the identified receptors – the site is to include a welfare building, including toilets, with capacity for approximately 1,000 cars and bus terminus.

We refer you back to our earlier general comments on water resources. Of particular concern is how water will be sourced both during construction and operation to ensure there is no significant harm to the environment.

The site is located within Flood Zone 1. The site is approximately 28 hectares and so the management of surface water will be important to ensure flood risk is not increased off-site. Flood risk is to be addressed in the FRA however any impacts need to be highlighted in the EIA.

8.3 Southern park and ride

We refer you back to our general comments on water quality. Of particular concern is the disposal of foul water and preventing pollution from surface water run-off – the site is to include a welfare building, including toilets, with capacity for approximately 1,000 cars and bus terminus.

We refer you back to our earlier comments on water resources. Of particular concern is how water will be sourced both during construction and operation to ensure there is no significant harm to the environment.

The site is located within Flood Zone 1. The site is approximately 43 hectares and so the management of surface water will be important to ensure flood risk is not increased off-site. Flood risk is to be addressed in the FRA however any impacts need to be highlighted in the EIA.

8.4 Rail line extension

Three rail extension options are included – a new rail terminal and freight laydown area, a green route, and a blue route.

There are no rivers located within or adjacent to the options for a new rail terminal and freight laydown area or the green route. Considering this we concur that this particular issue can be scoped out of this section of the EIA. We refer you back to our earlier general comments on water quality. Of particular relevance is minimising any risk of pollution to the water environment.

The proposed blue route is however located close to, and crosses, the Thorpeness Hundred River. We agree that the potential impact to the water environment through pollution, both during construction and operation, needs to be assessed in the EIA. The blue route is located within Flood Zone 1; the management of surface water will be important. In addition, we will need to agree the design of the culvert, where the rail route crosses the river, to ensure this does not negatively impact on the

conveyance of the river. Flood risk is to be addressed in the FRA however any impacts need to be highlighted in the EIA.

8.5 A12 improvement – Farnham Bend

It is recognised that Option 1 (bypass option) represents the most substantial in terms of potential environmental impacts. As such section 8.5 focuses on the bypass option.

The proposed route crosses the River Alde, which is a European Eel migratory route, and an area of woodland/grassland which contains a number of interconnecting ditches and ponds. It is likely that this area provides suitable habitat for water vole, otter and brook lamprey. The ponds in the area may well be suitable for amphibians. We support the further surveys and studies identified in table 8.10.

The proposed bypass option would cross the River Alde (Main River) floodplain - Flood Zone 3, an area of high flood risk. A separate FRA is to be produced. Flood risk is referred to within the surface water section of tables 8.11 and 8.12; the FRA must consider all relevant sources of flooding including fluvial flood risk as well as surface water flood risk. Whilst flood risk is to be addressed in the FRA any impacts need to be highlighted in the EIA.

We have a flow gauging station just downstream, adjacent to the A12 road bridge, which might be adversely affected from the bypass option. Any potential impacts to the function of this station must be assessed and considered at an early stage. It is crucial that our ability to measure flows and use this station for operational purposes is not compromised.

8.6 Visitor Centre

We refer you back to our earlier general comments on water quality under the Environment Agency's position at the start of our response. Of particular relevance is minimising any risk of pollution to the water environment.

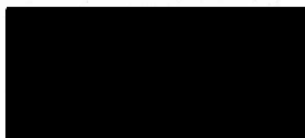
9. Summary

9.2 Indicative Proposed ES Structure

9.2.1 – The ES will need to assess any cumulative effects associated with the proposed development. As such we support the inclusion of a cumulative assessment (proposed as volume 9). There are four distinct phases to the proposed development; these include site preparation, construction, commissioning and operation, and decommissioning. It is important that the ES is structured in such a way that assists in defining and assessing the environmental issues relevant to each of the phases, but also the cumulative effects where there are overlaps. This should help define the potential impacts (alone and in combination), and establish whether the proposed mitigation is sufficient.

Should you have any questions then please do contact me on the details below.

Yours sincerely,



Neil Dinwiddie
Project Co-ordinator – Sizewell C Nuclear New Build
01473 706 819
Neil.Dinwiddie@environment-agency.gov.uk

From: Correspondence [mailto:Correspondence@equalityhumanrights.com]
Sent: 14 May 2014 15:13
To: Environmental Services
Subject: EHRC-CU01535 Allen 20140514 Acknowledgement of letter dated 24 April 2014



Laura Allen
Senior EIA and Land Rights Adviser
The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol
BS1 6PN

Email: environmentalservices@infrastructure.gsi.gov.uk

Your Ref: EN010012

Our Ref: EHRC-CU01535

14 May 2014

Dear Ms Allen

Subject: Application by EDF Energy for an Order Granting Development Consent for the Sizewell C Proposed Nuclear Development

Thank you for your letter dated 24 April 2014, the contents of which have been raised with the relevant team in the Commission.

The Commission does not have the resources to respond to all consultations, but will respond to consultations where it considers they raise issues of strategic importance.

Yours sincerely

Philippa Bullen
Corporate Communications Officer

Correspondence Unit
Equality and Human Rights Commission
Arndale House
The Arndale Centre
Manchester
M4 3AQ

Email: correspondence@equalityhumanrights.com

We have teamed up with AbilityNet and BCS to develop a new e-learning course that will equip individuals and businesses with the right skills to create accessible websites. Visit:

www.equalityhumanrights.com/webaccessibilityessentials

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SIZEWELL C PROPOSED NUCLEAR DEVELOPMENT – SCOPING REPORT, APRIL 2014

The County Council would like to make the following comments concerning the Scoping Report.

Paragraph 3.4.5

This paragraph refers to the construction of the power station involving the excavation of large amounts of spoil comprising soil, made ground, peat, alluvium and Crag sand. ECC welcomes reference to the preparation of a Materials Management Plan (MMP) , which seeks to re-use as much spoil on site. It is noted that the excavated peat and alluvium may either be retained on-site to help balance the earthworks, or could be used within a new nature reserve currently being created at Wallasea Island in Essex, in which case it would be transported there by barge via the jetty.

The Wallasea Island Project currently has planning permission (ESS/54/08/ROC.) and is now included within the Nature Improvement Area (April 2012). The planning permission contains some restrictions which need to be considered in relation to the option proposed by EDF in paragraph 3.4.5. These include:

- Condition 2 references the proposal for the imported material to be inert
- Condition 39 requires the development, including restoration, to be complete by 31 December 2019
- Condition 40 requires all associated infrastructure to be removed by 31 December 2019 and the unloading facility to be removed within 12 months of the completion of the final phase

On 25 April 2014, ECC Development and Regulation Committee resolved to approve application ESS/09/14/ROC for 'continuation of the importation of waste to develop a coastal nature reserve without compliance with conditions 2 (compliance with submitted details); 39 (cessation of operations and restoration by 31 December 2019); and 40 (removal of construction infrastructure) attached to planning permission ref ESS/54/08/ROC to allow the importation of suitable natural material and to require cessation of site operations and restoration by 31 December 2025, together with the inclusion of previously agreed non-material amendments to permission ref ESS/54/08/ROC'.

The resolution is subject to the Secretary of State not calling in the application for his own determination; the completion within 12 months of a S106a legal agreement relating to the removal of the existing obligation for imported material to be clean, inert and uncontaminated; and conditions.

The Secretary of State has confirmed receipt of the referral and ECC, as Waste Planning Authority, is currently awaiting his decision.

In the event that planning application ESS/09/14/ROC is granted, the proposed use of excavated peat and alluvium from the Sizewell site would be allowable, subject to its importation by sea only. Currently, planning permission ref ESS/54/08/ROC does not allow the importation of such material since it is not considered to be 'inert'.

Initial Proposals and Options, Transport Strategy

Essex County Council notes the following points in relation to the emerging transport strategy:

- home based and non home based workers travelling from Essex is likely to be minimal, and hence minimal impact on the County's highway network; the Construction Daily Commuting Zone (90 minutes) covers North Essex
- significant measures are being undertaken to reduce the impact of Sizewell C construction traffic on the local sections of the A12 (Ipswich to Lowestoft), and potentially beyond, through the use of sea and rail freight delivery options, and park and ride;

Whilst it presently appears that impact of the proposal on the County Highway Network is minimal, the County Council would wish to be kept informed of any change to the Transport Strategy, which may impact upon the County Highway network.

Farnham with Stratford St Andrew Parish Council
Brereton House
Great Glemham Road
Stratford St Andrew
Suffolk
IP17 1LL

19 May 2014

Dear Sir/Madam

Your ref: EN010012

I am writing on behalf of the parish council in response to your letter dated 24 April 2014. This response identifies the information the parish council considers should be provided in the environmental statement to be provided by EDF Energy.

The parish council has limited its response to section 8.5 of the Scoping Report, main text, as this is the main issue affecting the villages of the parish. We understand that the environmental statement relates to the three options put forward by EDF Energy for proposed improvements to the A12 and not to their merits. However, the parish council wishes to put on record that it does not believe any of the three options will provide reasonable mitigation against the impact of the additional traffic that will be caused by the proposed construction of the Sizewell C Proposed Nuclear Development.

Terrestrial ecology and ornithology

The report states there will be surveys to determine the presence or absence of water voles on the River Alde and the network of ditches. Water voles have been sighted in this area as recently as last week and photographs obtained. The water vole is a fully protected species under Schedule 5 of the Wildlife and Countryside Act 1981.

Landscape and visual

As the land proposed to be taken for the short bypass, EDF Energy's preferred option, is flood plain we presume the new road will need to be raised up. It is our view that no form of landscaping can mask the effect this road will have visually on the local landscape. We will just end up with two roads instead of the current one. The new road will be closer to more houses than the current one.

Amenity and recreation

Nowhere in the report does it mention that the land proposed to be used for the short bypass is amenity land owned by a charitable trust that also owns the Riverside Community Centre. The charitable trust is totally against selling the land and losing this important resource. This is the only local amenity land and is used by many people from both local and outlying areas. It is used for dog walking, fortnightly car boot sales and local sports. Next to the amenity land is a children's playground which is used daily by local families. The presence of a main road next to the playground would make it unusable due to noise and pollution.

The proposed new road would also effectively cut the parish and two villages in half.

Noise and vibration

The report states a baseline survey will be carried out in various areas of Farnham. The proposed new bypass will start in Stratford St Andrew but this is never mentioned. Full surveys for noise and vibration must be carried out in Stratford St Andrew as well as in Farnham, particularly for those properties in Great Glemham Road which will be close to the new road.

An up to date traffic impact assessment is still awaited from EDF Energy.

Air quality

Suffolk Coastal District Council has just issued a Detailed Assessment Report for air quality in the parish. This identified that NO2 levels in a location in Stratford St Andrew are above national limits. Again the report only mentions not conducting further surveys for the village of Farnham when there is a serious problem in Stratford St Andrew that must be considered particularly if a new bypass is proposed that starts in the village.

Surface water

The land proposed for the new bypass is a flood plain and subject to regular flooding. Photographs are available to evidence the extent of this.

Hannah Nelson

From: Penlington, Graham <Graham.Penlington@fulcrum.co.uk> on behalf of &box_FPLplantprotection_conx, <FPLplantprotection@fulcrum.co.uk>
Sent: 02 May 2014 11:42
To: Environmental Services
Subject: RE: Sizewell C New Nuclear Power Station - EIA Scoping Request

Thank you for asking Fulcrum Pipelines Limited to examine your consultation document for the above project.

We can confirm that Fulcrum Pipelines Limited have no comments to make on this scoping report. Please note that we are constantly adding to our underground assets and would strongly advise that you consult us again prior to undertaking any excavations.

Please note that other gas transporters may have plant in this locality which could be affected.

We will always make every effort to help you where we can, but Fulcrum Pipelines Limited will not be held responsible for any incident or accident arising from the use of the information associated with this search. The details provided are given in good faith, but no liability whatsoever can be accepted in respect thereof.

GRAHAM PENLINGTON
Process Assistant



Tel: 0845 641 3060
Direct Dial:
Email: Graham.Penlington@fulcrum.co.uk
Web: www.fulcrum.co.uk



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From: Environmental Services [mailto:EnvironmentalServices@infrastructure.gsi.gov.uk]
Sent: 24 April 2014 11:05

To: nsip.applications@hse.gsi.gov.uk

Subject: Sizewell C New Nuclear Power Station - EIA Scoping Request

Dear Sir/Madam

Please see the attached letter in relation to the EIA Scoping Request for the proposed Sizewell C New Nuclear Power Station.

Kind regards,

Hannah Nelson
EIA & Land Rights Advisor
Major Applications and Plans
The Planning Inspectorate
Temple Quay House
Temple Quay
Bristol
BS1 6PN

Direct Line: 0303 444 5061

Helpline: 0303 444 5000

Email: hannah.nelson@infrastructure.gsi.gov.uk

Web: www.planningportal.gov.uk/planninginspectorate (Planning Inspectorate casework and appeals)

Web: www.planningportal.gov.uk/infrastructure (Planning Inspectorate's National Infrastructure Planning portal)

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Laura Allen
Planning Inspectorate
3/18 Eagle Wing
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2 The Square
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Your Ref ENO10012
Our Ref 001693421-01
Name Colin McAllister
Telephone 01793 474113
Email colin.mcallister@rwe.com

Via email to environmentalservices@infrastructure.gsi.gov.uk

22 May 2014

Sizewell C Proposed Nuclear Development – Scoping Consultation

Dear Laura

Thank you for your letter of 24 April 2014 addressed to RWE npower renewables. Please note that RWE npower renewables has recently changed name to RWE Innogy UK (based at the same address) and I would appreciate it if you could amend your records accordingly.

With regard the Sizewell C proposed nuclear development DCO application I can confirm that RWE Innogy is a consultation body to the DCO application and, more specifically, Galloper Wind Farm Ltd (GWFL) is located in close proximity to elements of the proposed Sizewell C site onshore and offshore. GWFL will therefore respond to all DCO consultation requests on behalf of RWE Innogy. Please direct all correspondence relating to such to the Development Department, Galloper Wind Farm Ltd at the address below.

GWFL and EDFE (Sizewell C and Sizewell B) maintain regular communication on a strategic basis to ensure that activities which may affect the other party are communicated. GWFL has commenced pre-construction for the onshore infrastructure. Detailed discussions around method statements with regard to this activity has taken place and is ongoing and in so doing ensures that we manage our respective activities and protection of assets to mutual satisfaction. GWFL welcomes this dialogue and hope such cooperative engagement is maintained to allow any potential impacts on the Galloper Wind Farm (GWF) infrastructure and operations to be properly considered and potential mitigation measures included in the Sizewell C ES.

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Registered office:
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Company No. 07320597

Previous Consultation

GWFL has previously commented on an EDF Energy (EDFE) led Stage 1 Pre-Application Consultation. A copy of the GWFL response to that consultation is enclosed with this letter. GWFL consider that many of the points raised in that response remain valid and have not been adequately addressed in the Sizewell C Scoping Consultation documents. Further, there is no reassurance within the report that these concerns will be adequately addressed in the Environmental Impact Assessment (EIA) and documented in the subsequent Environmental Statement (ES).

The GWFL response to the Stage 1 consultation recommended five ways in which the potential for conflict between the Sizewell C nuclear power station NSIP and Galloper Wind Farm NSIP could be reduced as follows:

- *Completion of a proximity agreement between EDFE and GWFL with respect to satisfactory coexistence of GWFL's proposed export cables and EDFE's proposed cooling water intakes and connecting tunnels;*
- *Confirmation that EDFE's draft DCO will contain the Protective Provisions declared jointly by EDFE and GWFL in their statement to the Planning Inspectorate's Examination of Galloper Wind Farm, attached as [Appendix A] to this submission;*
- *Confirmation that Option 2 is not to be progressed, or will be significantly amended, so as to avoid any conflict with the Order Limits of the proposed GWF DCO;*
- *Confirmation that the planting proposed in Pill Box field in GWFL's DCO will be unaffected by proposals brought forward as part of Sizewell C;*
- *Confirmation of the spatial separation of all other proposals where sufficient information is not available at the current time for GWFL to provide an informed Section 47 response, or confirmation that GWFL's consultation and agreement will be sought to any proposals where a spatial separation has not yet been identified.*

The current status of the above are discussed in turn below.

Proximity agreement

GWFL is disappointed at the lack of progress made on finalising a Proximity Agreement between EDFE and GWFL and is awaiting a response from EDFE from proposals submitted by GWFL in July 2013. A Proximity Agreement acceptable to both GWFL and EDFE which offers protection and surety with regard the Sizewell C intakes and GWF export cables would allow many of the potential impacts of the Sizewell C proposals on the GWF NSIP to be mitigated.

DCO protective provisions

GWFL notes that the Scoping Report contains no reference to the Protective Provisions declared jointly by EDFE and GWFL in their statement to the Planning Inspectorate's Examination of Galloper Wind Farm. GWFL anticipate that the Planning Inspectorate will advise EDFE to address this as part of the next consultation stage.

Workers campus Option 2

GWFL is pleased to note that the Option 2 proposal for a workers campus adjacent to Sizewell Gap Road that had potential to impact on the GWF onshore works is no longer being considered by EDFE.

Pill box field proposals

GWFL expects EDFE to address the potential impact of proposals in Pill Box field on GWF infrastructure (specifically the landscape planting to the east of Sandy Lane) as part of the next consultation stage.

Spatial separation of Sizewell C and GWF infrastructure

The Scoping Report does not clearly set out infrastructure assets onshore and offshore which could be impacted by Sizewell C. GWFL considers that the ES which accompanies the Sizewell C DCO application must address these potential impacts. In GWFL's response to the Stage 1 consultation we recommended that EDFE included an 'other human activities' chapter in an environmental statement which the effects on GWF and other infrastructure (e.g. Greater Gabbard Offshore Wind Farm, inshore fisheries, etc) can be considered. Such a chapter should include clear plans which show the location of known (existing and proposed) infrastructure.

Scoping Report consultation

The Scoping Report is generally lacking in the detail necessary for GWFL to consider the potential impacts of the proposed Sizewell C development. GWFL acknowledges, however, that this detail may be forthcoming in future consultations on preliminary environmental information and the ES.

Of fundamental concern to GWFL, regarding the Scoping Report, is that although GWF is mentioned on a number of occasions as having potential for cumulative impacts on other receptors it is not acknowledged that the proposed Sizewell C development could itself have an impact on GWF. It is GWFL's opinion that any environmental statement which does not acknowledge infrastructure such as the GWF as a receptor and to then assess potential impacts on it does not therefore give proper consideration to *The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 Schedule 4 Part 1* which requires that information to be included in an ES to include 'a description of the aspects of the environment likely to be significantly affected by the development, including...material assets.'

In considering the potential impacts on GWF, proper consideration must also be made regarding the timing of the impacts as impacts will differ if the construction phase of Sizewell C overlaps with the GWF construction, operations or decommissioning phase (as will the Sizewell cumulative impacts with GWF, on other receptors such as construction traffic). GWFL request that EDF provide further clarity as to the timing of the development in the ES.

GWFL acknowledges that EDFE has included further detail relating to the proposed offshore infrastructure in the Scoping Report. GWFL expects EDFE to provide a detailed assessment of potential effects of the Sizewell C development on GWFL's assets in the area, including the export cable corridor and onshore infrastructure. A future ES should consider potential effects on GWF during the developments construction, operation and decommissioning phases. Details of the GWFL assets are available on the

PINS website or GWFL can provide such on request.

An ES must clarify the timing and locations of any restrictions to access to the beach as it may affect GWF assets, in particular if beach access is to potentially be prohibited for construction or maintenance activities. As mentioned above, GWFL requests that the statements specifically includes a chapter on 'other human activities' in which the assessed effects on GWF and other infrastructure are presented.

As noted above, GWFL requires the Sizewell C – GWF Proximity Agreement to be finalised to have confidence that the EDFE works associated with the outfalls will not have a significant adverse effect on GWFL assets, in particular the export cables which will be located in close proximity to the proposed Sizewell C intakes. Protective Provisions should be included in the Sizewell C DCO reciprocal to those that are included in the GWF DCO. It is also essential that GWFL is made constantly aware of any factors that could affect the previously agreed (in the GWF DCO) proposed centre points of the water intakes, either arising from EDFE's further studies or through representations from other parties.

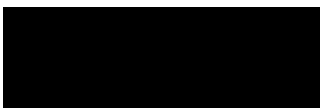
GWF should be considered as a key receptor with regard coastal geomorphology and hydrodynamics, in particular regarding the potential effects on the GWF export cables (as located offshore and on the foreshore). GWFL acknowledges that the GWF is referred to in paragraph 7.13.39 but this only refers to construction and not to GWF's value as a receptor. Given GWF status as a NSIP, it should be acknowledged and assessed as a high value receptor as defined in Table 7.13.2.

GWF should be considered as a key receptor with regard traffic and transport, in particular when considering the effects of Sizewell C construction traffic and any road closures which may occur during construction and operation (e.g. associated with the railway extension proposals).

GWF should also be considered as a key receptor with regard navigation, in particular when considering the effects of Sizewell C construction of the water intakes on construction and maintenance of GWF export cables in their vicinity.

In conclusion, GWFL has a number of concerns with regarding the Sizewell C Scoping Report, particularly in relation to its failure to acknowledge GWF as a high value receptor against which potential impacts from Sizewell C development should be assessed. GWFL does however welcome the ongoing dialogue that is taking place with EDFE in relation to Sizewell C and trust that this will allow mitigation measures for potential impacts on GWF to be identified and agreed at an early stage in the DCO application process.

Note that the above comments are without prejudice to any other future comments that GWFL may identify from further information received from these comments or through future consultation opportunities afforded by EDFE.



Colin McAllister

Galloper Wind Farm Ltd

Enclosures

GWFL response EDF Energy led Stage 1 Pre-Application Consultation

Sizewell Nuclear New Build
FREEPOST LON20574
London, W1E 3EZ

**BY EMAIL TO (sizewell@edfconsultation.info)
AND POST**

Galloper Wind Farm

Our ref: 001425774
Name: Robert Gully
Phone : 01793 474100
E-Mail: rob.gully@rwe.com

06 February 2013

Dear Sir or Madam

Re: Galloper Wind Farm Limited response to Sizewell C Proposed Nuclear Development Stage 1 Pre-Application Consultation

The following is the Galloper Wind Farm Ltd (GWFL) response to the EDF Energy (EDFE) Sizewell C Stage 1 Pre-Application Consultation. GWFL understands that this consultation is being carried out under Section 47 of the Planning Act 2008 and therefore in accordance with EDFE's published Statement of Community Consultation.

The published Statement of Community Consultation identifies that the Consultation Document and Environmental Report comprise Preliminary Environmental Information (PEI).

The documents comprising this consultation were as follows:

- Initial Proposals and Options: Consultation Document;
- Sizewell C Stage 1 Environmental Report;
- Transport Strategy;
- Environmental Report Appendices.

At this time GWFL does not have any specific comments to raise on the Transport Strategy or Environmental Report Appendices beyond the comments made on the other main consultation documents.

Consultation Document

Section 1.3: We would recommend that the high-level project description in future consultation stages / documents should more clearly bring to the reader's attention the marine components of the scheme as they are of material interest and concern to GWFL and may be to other stakeholders.

Para 1.4.12: The proposal for any beach access restrictions should not inhibit any of the necessary construction or operational (including maintenance) work areas or access points associated with the Galloper Wind Farm (GWF) export

RWE npower renewables

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SSE Renewables Holdings (UK)
Ltd

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83-85 Great Victoria Street
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cable landfalls. At present the consultation does not provide detail of the precise location where such restricted access may occur, the timing of any such restrictions, or how these may affect GWFL's interests, hence GWFL is currently unable to make informed comment on whether such restrictions would be of concern.

Paragraph 2.2.38: GWFL welcome the distinct recognition by EDFE of the importance of the GWF Development Consent Order (DCO) application and acknowledge the significant progress that has already been made by the parties in agreeing a final form of the GWF draft DCO and other legal agreements on many matters. Whilst significant agreement has been reached, GWFL and EDFE continue to seek the conclusion of a proximity agreement in relation to GWFL's export cables and EDFE's water intakes and connecting tunnels, on which Heads of Terms have been reached previously. Furthermore GWFL raises particular concern in relation to Option 2 for the construction campus on which this is GWFL's first opportunity to comment.

Paragraphs 3.1.2: GWFL are aware of the cooling water infrastructure requirements for Sizewell C through discussions held between both parties during the GWF DCO examination process. Agreement of proposed Protective Provisions for both Sizewell C and GWF, and Heads of Terms for a legal agreement, was reached on the basis of headworks centre points provided by EDFE at that time. The content of the Protective Provisions for both projects was submitted to the Planning Inspectorate (at the GWF Examination) in a joint statement included at Appendix A to this response (Note that Appendix B to this submission provides the final version of Appendix 15.1 to that Joint Statement). To bring matters between the two parties to a satisfactory conclusion, and in line with the joint statement in Appendix A, GWFL and EDFE will be required to reach conclusion of the full proximity agreement, ensure that reciprocal Protective Provisions are included in the EDFE draft DCO, and that they are pursued for inclusion by the Secretary of State in their final granted DCO.

Following conclusion of the proximity agreement, GWFL will continue to retain a significant interest in any factors that could affect the proposed centre points of the water intake headworks that are governed by the Protective Provisions or other agreements.

Paragraph 3.1.2: "Sea protection" is referenced as being an element of the permanent works. GWFL requires further information before it can make informed comment on these matters in relation to potential effects on GWF construction and operational activity, although GWFL notes that the extent of foreshore included in the indicative site boundary would only appear to give rise to potential conflict between offshore vessels.

Paragraph 3.1.3: The full potential zone where jetty works could occur is not shown on Figure 3.1, it is shown in full in Figure 3.4. GWFL notes that the extent of the zone would only appear to give rise to potential conflict between offshore vessels, on which it would request further information from EDFE.

Paragraph 3.1.3: Work areas on the foreshore "for the installation of cooling water infrastructure and sea protection" is referenced as being an element of the temporary works. GWFL requires further information before it can make

informed comment on these matters in relation to potential effects on GWF construction and operational activity, although GWFL notes that the extent of foreshore included in the indicative site boundary would only appear to give rise to potential conflict between offshore vessels.

Figures 3.1 and 3.4: These figures identify the area within which the cooling water and associated infrastructure are proposed. The zone identifies an area that is broader than the detailed figures that define Protective Provisions in favour of GWFL (to be included in the Sizewell C DCO) and on which reciprocal Protective Provisions in the GWF DCO were agreed. It is essential that GWFL are made constantly aware of any factors that could affect the proposed centre points of the water intakes, either arising from EDFE's further studies or through representations from other parties.

GWFL and EDFE issued a joint statement (Appendix A) to the GWF Examination setting out the above and confirming that both parties had reached Head of Terms agreement. GWFL seeks the finalisation of the full Proximity Agreement deriving from these Heads of Terms to bring the successful coexistence of each NSIP's respective water intake and export cable assets to a conclusion.

GWFL notes that EDFE and itself are in active and regular discussions to conclude the above.

Paragraph 3.1.4 and Figure 3.1: GWFL considers that it would assist in future consultation if all other spatially focussed associated development could be shown in the Introductory section so that they are brought to the attention of readers more prominently. In this document the potential for conflict between Sizewell C's associated development and GWFL's Order Limits is not apparent within Chapter 3, instead being referenced in Chapters 5 and 6.

Figure 3.2 (Indicative onshore landscape plan): GWF considers that it would be helpful in future consultations to show the proposed GWF onshore substation, associated infrastructure and landscaping proposals on an alternative version of Figure 3.2. Such an inclusion would allow other consultees to understand the different landscaping arrangements that would be in place in the event that the GWF DCO is granted, and the extensive landscaping agreed with SCC, SCDC and EDFE for that scheme is implemented to accord with the wider Sizewell Vision.

Paragraph 3.2.31: GWFL should also be considered as a key stakeholder with regard to the effect of Sizewell C development on coastal processes. Furthermore any potential effect on the export cables for both wind farms should be considered as part of the Sizewell C DCO Environmental Impact Assessment.

Paragraph 3.3.22: The location of Option 2 and its access may conflict with the GWF DCO Order Limits which include for designated access routes to the beach for construction and maintenance of assets at the landfall from and near the Sizewell Beach Café car park. GWFL requires further information before it can make informed comment on these matters in relation to potential effects on GWF construction and operational activity..

Section 5.3: At present GWF has no comment to make on Options 1 or 3 for

the campus accommodation and has not, in light of the information available at present, identified any reason why either option would prove unsuitable to it, save for subsequent detailed information and in particular identifying that GWFL's access to its works would not be affected.

However GWFL note with significant concern the direct spatial conflict between the footprint for Option 2 and the Order Limits of the GWF DCO application. No agreement has been sought or reached between GWFL and EDFE in relation to this proposal. Given the national importance of both the GWF and Sizewell C projects, GWFL does not consider it appropriate to seek only a temporal separation between the overlapping works.

Whilst the Option 2 proposals respect some of the GWF works, the Sizewell C car parking area and associated landscaping for the campus is located on the essential construction compound for the GWF substation. It would be unacceptable to GWFL for the Sizewell C and GWF DCO Order Limits to overlap in this way and therefore GWFL would strongly resist any such proposals, which EDFE acknowledges are a secondary proposal to its preferred Option 1.

Paragraph 6.3.14: All three options to temporarily extend the rail line have the potential to significantly affect the designated HGV route for the GWF onshore development. GWFL would need to be satisfied that extending the rail line would not adversely affect GWF access for construction and operation activities.

Sizewell C Stage 1 Environmental Report:

Section 2.4.2: GWFL note the potential for the Sizewell C development to make temporary use of Pill Box field and acknowledge that the area contained within GWFL's DCO has been shown outside the current 'Indicative site boundary' (whilst not discernable from the printed consultation document, it is assumed that the EDFE boundary is coincident with the GWFL boundary and that no works are proposed outside this as part of associated development). GWFL would require that this spatial separation is maintained and that the proposed tree planting in Pill Box Field, which is part of the GWF DCO application (and which has been agreed with EDFE), is fully taken into account in any adjacent proposals for this field.

Section 4.12: GWFL note that EDFE identify potential effects on coastal geomorphology and hydrogeology as a result of construction and operational effect from the outlet, intake and jetty infrastructure. GWFL seeks assurances from EDFE that the effects of offshore works on geomorphology and hydrogeology fully consider the potential effect on GWF infrastructure, including an assessment of the effects on the GWF buried export cables (once installed).

Section 4.16 Whilst it is acknowledged that effects on GWFL vessel movements are captured in this section, GWFL notes that there is no wider consideration of potential effects on its interests in this document. GWFL would wish to see an '*other human activity*' or similar chapter in future consultation and submission documents (as is common many EIAs) which specifically addresses the impacts

on relevant operators such as Galloper, given the proximity of the developments. In particular, save for matters covered by agreements reached between GWFL and EDFE, GWFL would wish to see specific discussion of any impacts arising from any of the offshore (below Mean High Water Springs) construction works with regard to its proposed export cable and landfall locations.

The production of such a chapter will require regular and ongoing dialogue with the relevant human operators.

Paragraph 4.16.20: GWFL welcomes the recognition as a potentially affected party with regard to vessel movements associated with the GWF project and looks forward to constructive dialogue with EDFE as part of their iterative pre-application EIA process.

Paragraph 5.3.17-5.3.24: GWFL is not aware of any previous consultation on EDFE's process of identifying and assessing potential sites and therefore cannot comment on the robustness or otherwise of this process used to arrive at the proposed Option 2 in a shortlist of 3. Whilst the consultation document identifies the avoidance of landscaping works by Galloper Wind Farm at paragraph 5.3.17, the document does not address the direct spatial conflict between the proposals and other activities within the GWF Order Limits. GWFL would strongly oppose any impact upon its ability to deliver its scheme, which also represents a NSIP under the 2008 Planning Act..

In conclusion, GWFL has set out in this response its primary comments arising from the Sizewell C consultation documents. In a number of areas further information is required by GWFL before it can provide an informed response to the Section 42 Sizewell C consultation. At the current time GWFL cannot conclude that the GWF NSIP will not be significantly affected by any future Sizewell C DCO application.

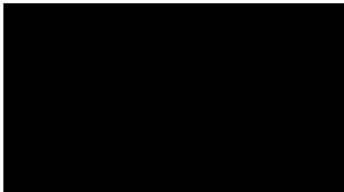
However GWFL welcomes the instigation of a regular meeting with EDFE, as an extension of the existing relationship between the two parties, to discuss the proposed Sizewell C application. GWFL hopes that such ongoing dialogue and information exchange, underpinned by resolution of the following key matters, will satisfactorily resolve the following:

- Completion of a proximity agreement between EDFE and GWFL with respect to satisfactory coexistence of GWFL's proposed export cables and EDFE's proposed cooling water intakes and connecting tunnels;
- Confirmation that EDFE's draft DCO will contain the Protective Provisions declared jointly by EDFE and GWFL in their statement to the Planning Inspectorate's Examination of Galloper Wind Farm, attached as [Appendix A] to this submission;
- Confirmation that Option 2 is not to be progressed, or will be significantly amended, so as to avoid any conflict with the Order Limits of the proposed GWF DCO;
- Confirmation that the planting proposed in Pill Box field in GWFL's DCO will be unaffected by proposals brought forward as part of Sizewell C;

- Confirmation of the spatial separation of all other proposals where sufficient information is not available at the current time for GWFL to provide an informed Section 47 response, or confirmation that GWFL's consultation and agreement will be sought to any proposals where a spatial separation has not yet been identified.

Note that the above comments are without prejudice to any other future comments that GWFL may identify from further information received from these comments or through future consultation opportunities afforded by EDFE.

Yours faithfully



Robert Gully
Development Manager
Gallopers Wind Farm Limited

Tel : 01793 474100
Address : Auckland House
Lydiard Fields
Great Western Way
Swindon
Wiltshire SN5 8ZT
Web : www.galloperswindfarm.com

From: Margaret.Ketteridge@gtc-uk.co.uk [mailto:Margaret.Ketteridge@gtc-uk.co.uk]
Sent: 08 May 2014 12:13
To: Environmental Services
Subject: EN010012

Dear Sirs

With regards to the reference above, I can confirm that the following have no comments to make at this moment in time.

Independent Power Networks
Utility Grid Installations
Independent Pipelines
The Electricity Network Company
GTC Pipelines
Quadrant Pipelines

Kind Regards

Maggie

Maggie Ketteridge
Engineering Support Officer
GTC
Energy House
Woolpit Business Park
Woolpit
Bury St Edmunds
Suffolk, IP30 9UP
Tel: 01359 245406
Fax: 01359 243377
E-mail: margaret.ketteridge@gtc-uk.co.uk
Web: www.gtc-uk.co.uk

NOTE:

This E-Mail originates from GTC, Energy House, Woolpit Business Park, Woolpit, Bury St Edmunds, Suffolk, IP30 9UP
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Hannah Nelson

From: Dave.MHPD.Adams@hse.gsi.gov.uk on behalf of NSIP.Applications@hse.gsi.gov.uk
Sent: 24 April 2014 11:40
To: Environmental Services
Subject: RE: Sizewell C New Nuclear Power Station - EIA Scoping Request

Dear Planning Inspectorate,

HSE acknowledges receipt of this EIA Scoping Request.

Kind regards,

Dave..

Dave.MHPD.Adams

Land Use Planning Policy, Major Hazards Policy Division, Hazardous Installations Directorate, Health and Safety Executive.

Desk 20, 5.S.2, Redgrave Court, Merton Road, Bootle, Merseyside L20 7HS

0151 951 3408 dave.mhpd.adams@hse.gsi.gov.uk

www.hse.gov.uk | <http://hse.gov.uk/landuseplanning>

From: Environmental Services [mailto:EnvironmentalServices@infrastructure.gsi.gov.uk]
Sent: 24 April 2014 11:05
To: NSIP Applications
Subject: Sizewell C New Nuclear Power Station - EIA Scoping Request

Dear Sir/Madam

Please see the attached letter in relation to the EIA Scoping Request for the proposed Sizewell C New Nuclear Power Station.

Kind regards,

Hannah Nelson
EIA & Land Rights Advisor
Major Applications and Plans
The Planning Inspectorate
Temple Quay House
Temple Quay
Bristol
BS1 6PN

Direct Line: 0303 444 5061

Helpline: 0303 444 5000

Email: hannah.nelson@infrastructure.gsi.gov.uk

Web: www.planningportal.gov.uk/planninginspectorate (Planning Inspectorate casework and appeals)

Web: www.planningportal.gov.uk/infrastructure (Planning Inspectorate's National Infrastructure Planning portal)

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From: Edwina [REDACTED]
Sent: 21 May 2014 21:39
To: Environmental Services
Subject: Sizewell Scoping Consultation attn Laura Allen

Dear Laura

Re 7.2.2

I believe that the environmental impact review should be broadened beyond the major sites referred to (within the 20 mile radius) to include Simpson's Fromus Reserve and consideration also given to the point that some sites that are not currently protected should be as they may be of no lesser value. A wider review of potential impact should take place.

Yours sincerely

Edwina Galloway
Kelsale Cum Carlton Parish Council

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Hannah Nelson

From: John Rayner <townclerk@leistontowncouncil.gov.uk>
Sent: 28 April 2014 14:10
To: Environmental Services
Subject: For Laura Allen - Sizewell C Scoping request

Dear Laura,

With regard to the scoping report submitted by EDF for Sizewell C.
It would be much appreciated if Leiston-cum-Sizewell Town Council could be included as a named consultee in Paragraph 7.4.4 with regards to RoW etc.

Many thanks
Regards
John

--

John Rayner
Town Clerk
Leiston-cum-Sizewell Town Council
Council Chambers
Main Street
LEISTON
IP16 4ER
01728 830388
townclerk@leistontowncouncil.gov.uk

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**MIDDLETON – cum – FORDLEY
PARISH COUNCIL**

Chairman:- Mr John Morris

Parish Clerk:-

Douglas Colyer,

Telephone

FAO Laura Allen
Senior ETA & Land Right Advisor
The Planning Inspectorate
3/18 Eagle Wing
Temple House Quay
2The Square
Bristol
BS1 6PN

Dear Madam

Sizewell C Environmental Impact Assessment Scoping Report

Referring to your letter dated the 24th April 2014, I am instructed by the Chairman and the Councillors of Middleton-cum-Fordley Parish Council that we wish to comment on two particular issues, namely the impact of traffic (particularly on the B1122) from the A12 to the site, and the absence of any reference to light pollution. We also have general reservations about the applicants' whole approach to consultation and their general disregard of matters of public concern.

(i) Artificial light

As far as we are aware, artificial light has not yet been raised as a major issue. Nevertheless we are concerned about its impact on the night sky, particularly during construction of the power station – from the construction and fabrication areas as well as the worker campus. There is no reference to the problem at all in the scoping report. One of the pleasures of living in this part of Suffolk, and a major factor for tourism in this coastal area, is the lack of light pollution. We know that with proper planning and the use of appropriate lighting the impact on the night sky can be much reduced

(ii) Traffic from the A12

We know that many people have expressed concern about traffic and access from the A12. Yet the proposed EIA Scope is fundamentally flawed in that it fails to address the issue at all. The existing road providing the link between the A12 and the current Sizewell sites, the B1122, experienced considerable traffic, environment and safety problems during the much smaller Sizewell B build. Yet the Scoping Report makes no mention of any study of the impact of the proposed far larger development on this route, or any proposal for the creation of a new route.

Validated and agreed traffic impact analysis has to be obtained not just for the A12/B1122 junction and the B1122 itself, but also the other routes that could be affected by any enforced

closure of the B1122 due to repair, breakdown or accident. These would include but not necessarily restricted to:

- the B1125 and its junctions with the A12 and B1122;
- the A1120 and its junction with the A12 at Yoxford; and
- the B1119.

The most serious, indeed fatal, omission in the Scoping Report is any consideration of the impact upon future emergency evacuation movements, on the B1122 or any realignment of it, or a new route.

Until it can be otherwise justified, it is our considered view that as a very minimum major strengthening, widening, alignment and junction alterations will be required. But more likely - and far less environmentally damaging - a new wide single two-lane road should be provided to provide uncongested, safe, shorter and more convenient access to all four power stations. These options must be recognised in the report to make it credible and, arguably, lawful.

(iii) The applicant's general approach to consultation

The lack of any real in-depth consideration of the problems of access from the A12 to the site is indicative of the developer's whole approach to consultation with the public and statutory consultees.

Contrary to the advice given to them by PINS at their meeting on 31 October 2013, EDFE have failed to comment upon, or inform of ongoing development to their proposals arising from, the responses to the Stage 1 Consultation.

We urge PINS to press the developer to take an active and inclusive approach to expanding the range of agreed matters. If not, local interests will focus on objecting to, rather than co-operating with, the developer's proposals.

Yours faithfully

Douglas Colyer

Clerk to Middleton –cum-Fordley Parish Council



Marine
Management
Organisation

Marine Management
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Hampshire Court
Newcastle Upon Tyne
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The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol, BS1 6PN

Our reference:
DCO/2014/00014
Your reference: EN030002

BY EMAIL ONLY

22 May 2014

Dear Ms Allen,

**Sizewell C Proposed Nuclear Development – Scoping Report
comments**

Thank you for your letter dated 24 April 2014 requesting the Marine Management Organisation's comments on the Sizewell C Proposed Nuclear Development Environmental Scoping Report, dated April 2014. Enclosed with this letter are the Marine Management Organisation's comments on that report.

If you have any queries or require clarification on any of the above, then please do not hesitate to contact me.

Yours sincerely,

Joanna Wooles
Inshore Licensing Team

D 0191 376 2637

E joanna.wooles@marinemanagement.org.uk



INVESTORS
IN PEOPLE



Our reference: DCO/2013/00021
Your reference: EN010012

Sizewell C Proposed Nuclear Development

Comments on the Environmental Scoping Report, dated April 2014

1. The proposal

- 1.1. EDF Energy proposes to build, operate and decommission a new nuclear power station comprising two UK European Pressurized Reactors with an expected electrical capacity of approximately 3,260 megawatts at Sizewell in Suffolk, known as Sizewell C (the “Project”).
- 1.2. The Project will consist of:
 - a main development site, located mainly to the north of the existing Sizewell B power station, which will include the nuclear power station, access road and temporary development required for construction; and
 - off-site associated development including temporary park and ride sites, the temporary extension of an existing railway line/new rail terminal and freight laydown area, possible works to road networks, and a visitor centre.
- 1.3. An Environmental Scoping Report ‘Sizewell C EIA Scoping Report’ dated April 2014 (the “Report”) has been prepared by EDF Energy as part of the Environmental Impact Assessment (“EIA”) process.

2. The MMO’s role in Nationally Significant Infrastructure Projects

- 2.1. The Marine Management Organisation (the “MMO”) was established by the Marine and Coastal Access Act 2009 (the “2009 Act”) to make a contribution to sustainable development in the marine area and to promote clean, healthy, safe, productive and biologically diverse oceans and seas.
- 2.2. The responsibilities of the MMO include the licensing of construction works, deposits and removals in the marine area by way of a marine licence¹. Marine licences are required for deposits or removals of articles or substances below the level of mean high water springs (“MHWS”), unless a relevant exemption applies.
- 2.3. In the case of Nationally Significant Infrastructure Projects (“NSIPs”), the Planning Act 2008 (the “2008 Act”) enables Development Consent Order’s (“DCO”) for projects which affect the marine environment to include provisions which deem

¹ Under Part 4 of the 2009 Act

marine licences². Alternatively, applicants may wish to separately seek consent for a marine licence directly from the MMO rather than having it deemed by a DCO.

- 2.4. For NSIPs where applicants choose to have a marine licence deemed by a DCO, during pre-application the MMO will advise developers on the aspects of a project that may have an impact on the marine area or those who use it. In addition to considering the impacts of any construction within the marine area, this would also include assessing any risks to human health, other legitimate uses of the sea and any potential impacts on the marine environment from terrestrial works.
- 2.5. Whether a marine licence is deemed within a DCO or consented independently by the MMO, the MMO is the delivery body responsible for post-consent monitoring, variation, enforcement and revocation of provisions relating to the marine environment. As such, the MMO has a keen interest in ensuring that provisions drafted in a deemed marine licence enable the MMO to fulfil these obligations. This includes ensuring that there has been a thorough assessment of the impact of the works on the marine environment (both direct and indirect), that it is clear within the DCO which works are consented within the deemed marine licence, that conditions or provisions imposed are proportionate, robust and enforceable and that there is clear and sufficient detail to allow for monitoring and enforcement. To achieve this, the MMO would seek to agree the deemed marine licence with the developer for inclusion with their application to the Planning Inspectorate (“PINS”).
- 2.6. Further information on licensable activities can be found on the MMOs website³. Further information on the interaction between PINS and the MMO can be found in our joint advice note⁴.
- 2.7. The MMO recognises there is some overlap between the geographical jurisdiction of the MMO and the local planning authorities (i.e. between MHWS and mean low water springs).
- 2.8. The MMO has considered this and is of the view that matters which fall within the scope of the marine licensing provisions of the 2009 Act (i.e. anything below MHWS) are generally best regulated by conditions on marine licences. This should minimize the risk of inconsistency between different schemes of regulation, or of a duplication of controls.
- 2.9. In considering applications for marine licences to be consented independently by the MMO, the MMO regularly consults with bodies including, but not limited, to:
 - the Environment Agency
 - Natural England
 - Natural Resources Wales (for works in or affecting Wales)
 - the Maritime and Coastguard Agency
 - English Heritage
 - local planning authorities
 - local harbour authorities

² Section 149A of the 2008 Act

³ <http://www.marinemanagement.org.uk/licensing/marine.htm>

⁴ <http://infrastructure.planningportal.gov.uk/wp-content/uploads/2013/04/Advice-note-11-v2.pdf>

- local inshore fisheries and conservation authorities
- the Royal Yachting Association
- the Royal Society for the Protection of Birds
- the corporation of the Trinity House of Deptford Strond.

Where a marine licence is to be deemed within a DCO, the MMO would expect that comments provided by the above list of bodies and any other relevant bodies are taken into consideration.

3. Activities for this project which would be licensable under the 2009 Act

3.1. At this stage of the development the MMO have identified the following licensable activities as stated in the Report:

- Cooling water infrastructure (including cooling water tunnels extending out to sea, intake and outfall headworks on the sea bed, and associated fish recovery and return system);
- Beach landing facility to receive deliveries of Abnormal Indivisible Loads (“AILs”) by sea throughout the power station’s operational life;
- Temporary jetty for the transport of bulk construction materials, equipment and AILs by sea;
- Temporary works areas on the foreshore for the installation of flood defence and coastal protection measures;
- Construction of flood defence and coastal protection measures;
- Dredging.

3.2. It should be noted that the Report includes limited detail regarding work activities and methodologies. Specifically, the requirement for dredging is unclear and how any dredge arisings will be dealt with. Should dredge arisings be disposed of at sea, this is also a licensable activity under the 2009 Act. The MMO would expect to see each activity clearly described and assessed during the EIA process. This should also include ongoing activities which may be necessary, such as maintenance dredging. Paragraphs 4.9 & 4.19 of this document provide further information on this.

3.3. The Report mentions a number of mitigation measures which may constitute licensable activities under the 2009 Act. This includes such things as beach recycling, beach recharge and scour protection. Further information should be provided regarding these during the EIA process.

3.4. Any additional works or activities in the marine area which may require a marine licence under the 2009 Act should be notified to the MMO at the earliest opportunity and the impacts of such works considered in the EIA process.

4. Comments on the Report

General comments

- 4.1. The comments expressed in this document are made in respect of the MMOs jurisdiction which is outlined in paragraph 2.8 of this document.
- 4.2. The Report is well written and provides a broad overview of the Project. However, due to the high level nature of the document and lack of Project detail, confidence in the assessments made is limited. For example, as stated in section 3 of this document, only a broad overview of the works to be undertaken has been provided. This limits the confidence that all relevant elements of the project have been scoped with regards to impact pathways and receptors. This is detailed in the relevant sections of this document.
- 4.3. In general, the methodology for scoping impact pathways and receptors appears to be appropriate. The Report provides a high level overview of impact pathways and receptors, with nothing explicitly being scoped in or out of the assessment at this stage. Where impact pathways and receptors are scoped out, the Environmental Statement ("ES") will need to clearly justify the rationale for the approach taken and decisions made.
- 4.4. References are made throughout the report to baseline studies undertaken, though details of methodologies used and results obtained are only provided in summary. The description of the baseline and survey work is often vague, for example in relation to ornithology and marine ecology. It is therefore difficult to confirm whether all relevant baseline material has been accessed, or whether the surveys undertaken or proposed are adequate. The MMO would welcome sight of any relevant baseline studies during the pre-application phases of the project to ensure their suitability. Specific examples of this are included in the relevant sections of this document.
- 4.5. Where there is overlap in subject matters, cross referencing to other relevant chapters should be provided.
- 4.6. The Project is within the East Marine Plan Area. Marine planning provides guidance for sustainable development within the plan area. Any decision made must have regard to the marine plan. As such, the EIA should demonstrate how the project meets the requirements of the marine plan and should include how the plan policies support the Project, the case for going ahead with the Project if it differs from plan policies and any evidence for this. The MMO will also have regard to the marine plan when providing advice to PINS.

Chapter 2 – Consenting regimes and environmental assessment

- 4.7. Section 2.3 of the Report recognises the need for an Appropriate Assessment for the Project. There is no reference to the scope of a Habitats Regulation Assessment (HRA) which is likely to be required to address the potential impact on the Outer Thames Special Protection Area (SPA). The Report refers to the development and agreement of an Evidence Plan with Natural England. Given that the information will also be relevant to the consideration of ornithology within the ES, it will be important that other statutory bodies such as the MMO are involved in those discussions and in reviewing documentation associated with this.

Chapter 3 – Description of the proposed development

- 4.8. Paragraph 3.2 of the Report outlines the main development activities, providing a high level overview of the Project. Whilst it is appreciated that at this stage of the project final designs are yet to be agreed, and the applicant is seeking to work to the Rochdale Envelope approach, the lack of detail lowers confidence in the identification of impact pathways and receptors and assessments made. A detailed design of the project, and any variations thereof, must be presented and assessed within the EIA process, as is outlined in the Planning Inspectorates *Advice Note 9: Using the Rochdale Envelope*.
- 4.9. Dredging and the disposal of dredged material is referred to elsewhere in the Report, for example, in sections 7.13 (Coastal geomorphology and hydrodynamic) and 7.14 (Marine water quality and sediments), however, not when describing the proposed development and work activities within Chapter 3. Dredging and the disposal of dredged material at sea are licensable activities under the 2009 Act. These activities will need to be described in full, assessed thoroughly in the EIA process and included in any marine licence. Should disposal of dredged material at sea be required, the MMO would expect the EIA process to include sampling of sediments to the same standard as would be required for an application made to the MMO. Further guidance can be found on the MMO's website⁵.

Chapter 4 – Consideration of alternatives

- 4.10. The scoping report confirms that the consideration of alternatives will focus on the principal site-specific and design alternatives and goes on to detail some of the on-site associated infrastructure (section 4.3) for which alternative design solutions will be explored. The MMO welcome this approach and request that relevant environmental impact pathways which have been screened in are considered in the design alternatives and that this is documented in the ES.

Section 7.3 – Terrestrial Ecology and Ornithology

- 4.11. The MMOs comments on this section of the report relate to seabirds and marine ornithology. Within this section there is no reference to the need for, and scope of, a Habitats Regulation Assessment (HRA) which is likely to be required to address the potential impact on the Outer Thames SPA. The ornithology section and HRA should be cross referenced to ensure appropriate details are included in each section.
- 4.12. It is unclear whether all relevant marine and coastal bird species will be included in the assessment. Red-throated Diver, Little Tern and Sandwich Tern are mentioned but other species, such as gulls and coastal waterbirds that could be impacted by changes to the marine environment will be included should also be scoped and assessed accordingly. Consideration to changes in fish populations and impacts of

⁵ <http://www.marinemanagement.org.uk/licensing/index.htm>

prey structures should be considered. Cross references should be provided where appropriate for example in relation to impacts of fish mortality on seabirds.

- 4.13. The suggested survey types (breeding bird, wintering bird and seabird surveys) are considered to be appropriate, as are the study areas and the key statutory designated sites highlighted within the Report. However it is not possible to assess whether the studies will be adequate, due to a lack of detail regarding the timing, duration and number of surveys, and a lack of detail regarding the methodology both for the surveys and data analysis. The report indicates that surveys began in 2007, but no further detail is provided as to the study periods or the frequency of surveys. The Report outlines the methodology that will be used to assess impacts in the EIA in more detail, referencing IEEM guidance (IEEM 2006). Reference should be made to the more up-to-date IEEM (2010) guidance for marine EIAs.

Section 7.6 – Marine historic environment

- 4.14. Paragraph 7.6.8 of the Report states that, while there are 162 wrecks within the marine study area, 'the proposed development is not expected to directly impact any of these'. No further information or justification for this comment is provided. The EIA should fully assess possible impacts and justify any comments made regarding effects. If impacts are to be scoped out, clear justification should be provided for this.

Section 7.13 – Coastal geomorphology and hydrodynamics

- 4.15. The Report provides good detail on the approach for the ES and the modelling appears to cover the appropriate scale of change (temporal and spatial). However, there is a lack of transparency in the scoping of issues and no issues have been clearly scoped out. Issues should be clearly scoped in and out of the ES with clear justifications and assessed appropriately to ensure all potential impacts and impact pathways have been identified and assessed appropriately.
- 4.16. Specifically, the Report is missing the impact pathways and implications of climate change over the life time of the project such as changing patterns of offshore banks and flood and coastal erosion risk, including the potential for changing beach profiles reducing effectiveness of the beach. Therefore, it is unclear whether all potential impacts and impact pathways have been linked due to the limited project description. More detailed information, specifically on construction and operation, is required to ensure all impacts and impact pathways are identified.
- 4.17. Consideration needs to be given to modelling extreme events and climate change. Modelling should cover the cooling water discharges, contaminant concentrations, sediment disturbance (e.g. long term dredging) and provide sensitivity analysis to cover inherent variability and uncertainty in calibration and input parameters.
- 4.18. No modelling results have been presented in the report, although there is indication that this has been undertaken. More detailed modelling is proposed and this will need to be documented in the ES. New wave, flow and localised erosion data are being collected to hindcast information. The consideration of the interrelationship

between wind, wave, and coastal erosion is required within ES. Data are indicated as being available but has not been summarised within the Report.

- 4.19. Paragraph 7.13.29 of the Report refers to 'dredging activities for the jetty and its navigation approach, should this prove necessary'. Paragraph 7.13.35 also indicates a possible requirement for ongoing dredging to maintain navigational access. As stated in paragraphs 3.2 and 4.9 of this document, information should be provided to detail this dredging activity. Information provided to the MMO to support such applications includes, but may not be limited to, dredging locations, the volume of material to be dredged, the type of dredger to be used, working hours, duration of the dredge, how disposing the material will be managed, a pre-dredge survey and any details regarding dredging history. Should disposal of dredged material to sea be required analysis of sediment for potential contamination will also be required prior to consent being granted. If a new marine disposal site is required, characterisation of the site would be required. These factors should be considered in the EIA process and documented in the ES.
- 4.20. Paragraph 7.13.23 of the Report details elements of the Project that could have impacts on coastal geomorphology and hydrodynamics. This should also include capital and maintenance dredge and disposal requirements. Should the berthing pocket require hard standing, this would also need to be included in the assessment. The impacts of the decommissioning of Sizewell B on the baseline coastal geomorphology and hydrodynamics should be considered within the ES.
- 4.21. All information for the purposes of EIA should result from the analysis of the data already collected, the range of modelling said to have been carried out and the proposed further modelling. A Modelling Technical Appendix should be included in the ES.

Section 7.14 – Marine water quality and sediments

- 4.22. The assessment is based upon Water Framework Directive/Environmental Quality Standards (EQS Water) and sediment contamination guideline information. The baseline information and modelling approach to inform assessment of water column EQS compliance is robust, to the extent that it is applied to all relevant substances potentially discharged from the site.
- 4.23. However, the project description is not sufficiently clear to identify whether all potential water quality impacts and impact pathways have been identified. Mobilisation of contaminants within sediments (or biota) is not identified as an impact pathway in the Report and no methodology is therefore presented for assessing such risks. This also has implications for potential impacts to other receptors, particularly marine ecology. These impacts should be scoped and assessed in the ES and cross referenced accordingly. A Modelling Technical Appendix should be included in the ES.
- 4.24. Section 7.14.24 states that sediment core samples will be taken around likely navigation channels. As discussed previously in paragraph 4.19, the MMO would expect the EIA process to include sampling of sediments to the same standard as

would be required for an application made to the MMO⁶. Should disposal of dredged material to sea be required, OSPAR will need to be considered in section 7.14.25 under European legislation.

Section 7.15 – Marine ecology

- 4.25. The marine ecology chapter currently merges a range of receptors into one chapter (commercial fisheries, pelagic ecology, benthic ecology, marine mammals and fish and shellfish). Consideration should be given to splitting these receptors into different sections to make specific pathways clearer or clarify the use of judgement where necessary.
- 4.26. Section 7.15.21 lists construction activities but does not identify the impact pathways and receptors and link back to other relevant chapters as required. This section should also include capital and maintenance dredge and disposal requirements. Details of what is required in the “maintenance of the maritime exclusion zone” should be included and what impacts this could have on marine ecology should be identified. Should the berthing pocket require hard standing, this would also need to be included in the assessment. This should include an in-combination assessment with other activities that may increase the re-suspension of sediments. The impact of the increase in vessel movements should also be considered during the EIA process. It is not currently considered in section 7.16 on Navigation but should be cross referenced where appropriate.
- 4.27. The Report currently makes broad references to elements of the proposed development that could have effects on marine ecology and therefore it is unclear whether all possible pathways and receptors have been identified and considered. Impacts that have not been identified include: the possible effect of climate change in relation to direct and indirect impacts on fish stocks; the impact on protected species, including twaite shad; the impact on eels and consideration of the eels regulations; impacts from bioaccumulation or dispersal of radionuclides in the marine environment; impacts of the cooling water infrastructure, including biofouling and biocides, thermal plume; and, in-combination effects with Sizewell B. These should be scoped and assessed in the EIA process and documented be clearly justified in the ES. However, there is not enough information in the report to identify all information gaps
- 4.28. The types of data being collected are considered to be appropriate however more detail on the survey methods and survey design is required. The descriptions of the methods used to collect the data are very brief and, in the absence of detailed information, it is not possible to determine whether the surveys are appropriate. The approach to the assessment of impacts (including cumulative impacts) is unclear; for example, section iv does not provide any detail concerning how the magnitude of change in relation specific impacts will be quantified.
- 4.29. The marine ecology baseline information is brief, often vague and incomplete with no clear references made to whether the statements are based on judgement or

⁶ Further information is available at
http://www.marinemanagement.org.uk/licensing/how/sample_analysis.htm

references. The detail of the surveys is missing and references are not provided in the report and should be clearly documented in the ES where necessary. It is noted that habitat mapping studies have been completed and are not planned as part of future studies. Detail on the habitat mapping undertaken and reasons that no further surveys are required must be provided in the ES.

- 4.30. The fish and habitat surveys do not appear to cover all of the anticipated area for the cooling water and associated infrastructure (Figure 7.15.1). Adequate information is required for the area in the immediate vicinity of the structures to inform the assessment (particularly the habitat, beam trawl and commercial otter trawls do not extend to the seaward extent of the potential development area).
- 4.31. Some broad information on the planned marine ecology studies is provided (in relation to intertidal, subtidal, impingement and entrainment and fishing activity), however as stated previously the information it is not sufficiently detailed to confirm if the surveys proposed are adequate.
- 4.32. The majority of habitats and species contained in the BAP priority lists are now considered as habitats or species of principal importance for the conservation of biodiversity in England under the 2006 Natural Environment and Rural Communities (NERC) Act.
- 4.33. There is little consideration of the impacts on fish and fish populations. The impacts described in section 7.3 of the Report identify long term effects on bird populations but not on the fish themselves which is considered to be a significant omission.
- 4.34. The magnitudes of the populations of the fish under consideration are not considered which makes it difficult to accurately consider the level of impact. Paragraph 7.15.8 notes that herring eggs and or larvae are found in the vicinity however it is unclear to which population this relates. If the herring are from the Blackwater population on the Eagle Bank then the impacts on the population would be much greater than if they were from the general North Sea stock.
- 4.35. Paragraph 7.15.9 lists the species of conservation concern. Several species that are known to occur at this site and are impinged on the B station screens are missing from discussion. These include mackerel (*Scomber scombrus*), sea lamprey (*Petromyzon marinus*) and scad (*Trachurus trachurus*) which are all in the BAP species list. These should be considered in the ES and if scoped out, clear justification should be provided.
- 4.36. The Report covers many of the issues related to the impacts of cooling water abstractions on fish but lacks details of the design concept. It is not clear if alternatives to the plan have been considered and why they were dismissed. Different cooling technologies can differ markedly in the volume of water extracted and therefore differ in their potential impacts. If the technologies to be used have been decided, justification and evidence should be provided to support these decisions. There is reference to fish deterrent and fish return systems but no discussion or reference as to their effectiveness. This should be explored and discussed in the ES.

- 4.37. Some potential mitigation of the impacts on fish is proposed such as the use of low velocity side entry (LVSE) intakes and both acoustic fish deterrent (AFD) and fish recovery and return (FRR) system. The benefits and limitations should be considered of these measures and if other alternatives have been scoped out, the justification for these should be explained. Consideration should be given to the effectiveness of any proposed mitigation over the lifetime of the Project.
- 4.38. The Report makes little reference to the local fishing industry however the information that is included appears to be an accurate assessment of the local fleet composition and size. The report does not detail the possible effects of the development upon the fishing industry and the works have the potential to have significant disruption in terms of lost ground during the construction phase to the fishing industry. Furthermore, from the information supplied, the loss of available fishing ground may have a long term impact. Public engagement with the local fishing industry is strongly recommended to fully appreciate the impact these works will have on local fishermen. This should be documented in the ES.

Section 7.16 - Navigation

- 4.39. The MMO consider that this is a well written and comprehensive chapter. The Report provides a commentary on the navigational aspects within the defined study area. This information is qualitative in nature and as such cannot be directly evaluated.
- 4.40. All plausible pathways have been considered in Section 7.16.21 through to 7.16.23, split into Construction and Operation however nothing is scoped out. The Report identifies that a Navigational Risk Assessments ("NRA") is required, which will form part of the EIA chapter. Given the size and scale of the proposed project in relation to navigation considerations, this is considered appropriate. The EIA chapter on navigation will consider recreation and commercial navigation, plus any cumulative effects. These cumulative effects should relate to the cumulative effects section as discussed in paragraph 4.44.
- 4.41. Information sources that are identified as part of the NRA and EIA process are appropriate. It would be beneficial to characterise vessel traffic to and from ports and harbours within the study area, including Southwold, Walberswick and Slaughden Quay, and large ports and harbours adjacent to the study area, including Felixstowe, Harwich, Ipswich and Lowestoft. In addition, effects and interaction with marine traffic using the Southwold Ship-to-Ship transfer area should also be considered within the context of the NRA and EIA.
- 4.42. In the report section entitled 'Work undertaken to date' the document states all the sources of information considered have looked at (RYA, AIS, MMO, Fisheries etc), but the supporting figure shows an OS outline with a semi-circle to denote the area they will more fully consider in the EIA. Figure 17.16.1 should be updated to show information compiled for the baseline (for example, RYA routes, indicative vessel transit routes, AIS data from the MMO, RYA racing areas, etc).
- 4.43. The coastline adjacent to the proposed location of the Project is frequented by recreational vessels from marinas at Orford, Aldeburgh and Southwold. Commercial

angling boats also operate in the inshore area around Sizewell. The effect upon these sea-users would be dependent upon the extent of any exclusion zone imposed during and after the works and should be assessed within the ES.

Chapter 9 – Summary

- 4.44. Section 9.2.1 provides an indicative outline structure for the proposed ES. The MMO welcome the addition of an overarching chapter Cumulative Assessment as Volume 9. The Report identifies Galloper offshore wind farm as the only other project that has been scoped in for consideration in an in-combination effects assessment. This should be widened to incorporate other projects such as port developments in the region including Felixstowe and Harwich. This should include, but not limited to, the operation and decommissioning of Sizewell B. Consideration of methods to be used during construction and timing of works should also be considered in this overarching volume and in other volumes as required.

5. Consultation process and next steps

- 5.1. The items highlighted in this letter should be considered in the EIA process, and evidenced in the ES. However, this should not be seen as a definitive list of all EIA/ES requirements and other work may prove necessary, particularly as it is made clear what works will be undertaken in, or have an impact on, the marine area.
- 5.2. The MMO welcomes the ongoing consultation with EDF Energy and recommends that this continues.

Date: 22 May 2014
Our ref: 119244
Your ref: EN010012



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Dear Laura

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended) – Regulations 8 and 9

Application by EDF Energy for an Order Granting Development Consent for the Sizewell C Proposed Nuclear Development

Scoping consultation and notification of the applicant's contact details and duty to make available information to the applicant if requested

Thank you for seeking our advice on the scope of the Environmental Statement (ES) in your consultation dated 24 April 2014 which we received on 24 April 2014.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Case law¹ and guidance² has stressed the need for a full set of environmental information to be available for consideration prior to a decision being taken on whether or not to grant planning permission. Annex A to this letter provides Natural England's advice on the scope of the Environmental Impact Assessment (EIA) for this development. More detailed comment on the content of the report entitled *Sizewell C EIA Scoping Report* (EDF Energy, April 2014) is given in Annex B to this letter.

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us. For any queries relating to the specific advice in this letter only please contact Alison Collins on 01284 735236. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

¹ Harrison, J in *R. v. Cornwall County Council ex parte Hardy* (2001)

² *Note on Environmental Impact Assessment Directive for Local Planning Authorities* Office of the Deputy Prime Minister (April 2004) available from <http://webarchive.nationalarchives.gov.uk/+http://www.communities.gov.uk/planningandbuilding/planning/sustainability/environmental/environmentalimpactassessment/noteenvironmental/>

We really value your feedback to help us improve the service we offer. We have attached a feedback form to this letter and welcome any comments you might have about our service.

Yours sincerely

AJ Collins

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Annex A – Advice related to EIA Scoping Requirements

1. General Principles

Schedule 4 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2011, sets out the necessary information to assess impacts on the natural environment to be included in an ES, specifically:

- A description of the development – including physical characteristics and the full land use requirements of the site during construction and operational phases.
- Expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the proposed development.
- An assessment of alternatives and clear reasoning as to why the preferred option has been chosen.
- A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the interrelationship between the above factors.
- A description of the likely significant effects of the development on the environment – this should cover direct effects but also any indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative effects. Effects should relate to the existence of the development, the use of natural resources and the emissions from pollutants. This should also include a description of the forecasting methods to predict the likely effects on the environment.
- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.
- A non-technical summary of the information.
- An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.

It will be important for any assessment to consider the potential cumulative effects of this proposal, including all supporting infrastructure, with other similar proposals and a thorough assessment of the 'in combination' effects of the proposed development with any existing developments and current applications. A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

2. Biodiversity and Geology

2.1 Ecological Aspects of an Environmental Statement

Natural England advises that the potential impact of the proposal upon features of nature conservation interest and opportunities for habitat creation/enhancement should be included within this assessment in accordance with appropriate guidance on such matters. Guidelines for Ecological Impact Assessment (EclA) have been developed by the Chartered Institute of Ecology and Environmental Management (CIEEM) and are available on their website.

EclA is the process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components. EclA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal.

The National Planning Policy Framework sets out guidance in S.118 on how to take account of biodiversity interests in planning decisions and the framework that local authorities should provide to assist developers.

2.2 Internationally and Nationally Designated Sites

The ES should thoroughly assess the potential for the proposal to affect designated sites. European sites (e.g. designated Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)) fall within the scope of the Conservation of Habitats and Species Regulations 2010. In addition, paragraph 118 of the National Planning Policy Framework requires that potential SPAs, possible SACs, listed or proposed Ramsar sites, and any site identified as being necessary to compensate for adverse impacts on classified, potential or possible SPAs, SACs and Ramsar sites be treated in the same way as classified sites.

Under Regulation 61 of the Conservation of Habitats and Species Regulations 2010 an appropriate assessment needs to be undertaken in respect of any plan or project which is (a) likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site.

Should a Likely Significant Effect on a European/Internationally designated site be identified or be uncertain, the competent authority (in this case the Planning Inspectorate) may need to prepare an Appropriate Assessment, in addition to consideration of impacts through the EIA process.

2.2.1 Sites of Special Scientific Interest (SSSIs) and sites of European or international importance (Special Areas of Conservation, Special Protection Areas and Ramsar sites)

The development site is within Sizewell Marshes SSSI and Outer Thames Estuary Special Protection Area (SPA) and is immediately adjacent to the following designated nature conservation sites:

- Minsmere-Walberswick Heaths and Marshes SSSI
- Minsmere-Walberswick SPA
- Minsmere-Walberswick Ramsar site
- Minsmere to Walberswick Heaths & Marshes SAC

The development site is in the near vicinity of the following designated nature conservation sites:

- Leiston-Aldeburgh SSSI
- Sandlings SPA
- Alde-Ore Estuary SSSI
- Alde-Ore Estuary SPA
- Alde-Ore Estuary Ramsar site
- Alde-Ore & Butley Estuaries SAC
- Orfordness-Shingle Street SAC
- Westleton Heath National Nature Reserve (NNR)
- Suffolk Coast NNR
- Orfordness-Havergate NNR.

In addition, there are a number of nationally and internationally designated sites within a 20km radius from the proposed development site (shown in Figures 7.2.2 and 7.2.3) which will need to be considered as part of the EIA where indirect impacts may be predicted to occur over a wider area, such as might arise from changes to coastal processes and marine water quality.

Further information on the designated sites and their special interest features can be found at www.natureonthemap.naturalengland.org.uk. The Environmental Statement should include a full assessment of the direct and indirect effects of the development on the features of special interest within these sites and should identify such mitigation measures as may be required in order to avoid, minimise or reduce any adverse significant effects. Natura 2000 network site conservation objectives are available on our internet site [here](#).

In this case the proposal is not directly connected with, or necessary to, the management of a European site. In our view it is likely that it will have a significant effect on internationally designated sites and therefore will require assessment under the Habitats Regulations. We recommend that there should be a separate section of the Environmental Statement to address impacts upon

European and Ramsar sites entitled 'Information for Habitats Regulations Assessment'.

Natural England is currently in the process of agreeing an Evidence Plan with EDF, which will set out the evidence requirements for a Habitats Regulations Assessment (HRA). In this case, as the Evidence Plan process is still underway, we are not in a position to comment further on the information required for a HRA at this stage (see section 2.3.3).

2.3 Regionally and Locally Important Sites

The EIA will need to consider any impacts upon local wildlife and geological sites. Local Sites are identified by the local wildlife trust, geoconservation group or a local forum established for the purposes of identifying and selecting local sites. They are of county importance for wildlife or geodiversity. The Environmental Statement should therefore include an assessment of the likely impacts on the wildlife and geodiversity interests of such sites. The assessment should include proposals for mitigation of any impacts and if appropriate, compensation measures. Contact Suffolk Wildlife Trust, GeoSuffolk or Suffolk Biological Records Centre for further information.

2.4 Protected Species - Species protected by the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2010

The ES should assess the impact of all phases of the proposal on protected species (including, for example, great crested newts, reptiles, birds, water voles, badgers and bats). Natural England does not hold comprehensive information regarding the locations of species protected by law, but advises on the procedures and legislation relevant to such species. Records of protected species should be sought from appropriate local biological record centres, nature conservation organisations, groups and individuals; and consideration should be given to the wider context of the site for example in terms of habitat linkages and protected species populations in the wider area, to assist in the impact assessment.

The conservation of species protected by law is explained in Part IV and Annex A of Government Circular 06/2005 *Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System*. The area likely to be affected by the proposal should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES.

In order to provide this information there may be a requirement for a survey at a particular time of year. Surveys should always be carried out in optimal survey time periods and to current guidance by suitably qualified and where necessary, licensed, consultants. Natural England has adopted [standing advice](#) for protected species which includes links to guidance on survey and mitigation.

2.5 Habitats and Species of Principal Importance

The ES should thoroughly assess the impact of the proposals on habitats and/or species listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List, published under the requirements of S41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act 2006 places a general duty on all public authorities, including local planning authorities, to conserve and enhance biodiversity. Further information on this duty is available in the Defra publication '[Guidance for Local Authorities on Implementing the Biodiversity Duty](#)'.

Government Circular 06/2005 states that Biodiversity Action Plan (BAP) species and habitats, 'are capable of being a material consideration...in the making of planning decisions'. Natural England therefore advises that survey, impact assessment and mitigation proposals for Habitats and Species of Principal Importance should be included in the ES. Consideration should also be given to those species and habitats included in the relevant Local BAP.

Natural England advises that a habitat survey (equivalent to Phase 2) is carried out on the site, in order to identify any important habitats present. In addition, ornithological, botanical and invertebrate surveys should be carried out at appropriate times in the year, to establish whether any scarce or priority species are present. The Environmental Statement should include details of:

- Any historical data for the site affected by the proposal (e.g. from previous surveys);
- Additional surveys carried out as part of this proposal;
- The habitats and species present;
- The status of these habitats and species (eg whether priority species or habitat);
- The direct and indirect effects of the development upon those habitats and species;
- Full details of any mitigation or compensation that might be required.

The development should seek if possible to avoid adverse impact on sensitive areas for wildlife within the site, and if possible provide opportunities for overall wildlife gain.

The record centre for the relevant Local Authorities should be able to provide the relevant information on the location and type of priority habitat for the area under consideration.

2.6 Contacts for Local Records

Natural England does not hold local information on local sites, local landscape character and local or national biodiversity priority habitats and species. We recommend that you seek further information from the appropriate bodies (which may include the Suffolk Biological Records Centre, Suffolk Wildlife Trust, GeoSuffolk or other recording society and a local landscape characterisation document).

- Local Record Centre (LRC) in Suffolk please contact: <http://www.suffolkbrc.org.uk/>
- County Wildlife Sites in Suffolk please contact: <http://www.suffolkbrc.org.uk/> or <http://www.suffolkwildlifetrust.org/>
- Geological sites in Suffolk please contact: <http://www.geosuffolk.co.uk/>

3. **Designated Landscapes and Landscape Character**

3.1 Nationally Designated Landscapes

As the development site is within Suffolk Coast & Heaths Area of Outstanding Natural Beauty (AONB), consideration should be given to the direct and indirect effects upon this designated landscape and in particular the effect upon its purpose for designation within the environmental impact assessment, as well as the content of the relevant management plan for Suffolk Coast & Heaths Area of Outstanding Natural Beauty (AONB). The development site is also within Suffolk Heritage Coast which is a non-statutory designation and in the vicinity of several locally designated Special Landscape Areas (see Figure 7.3.2).

3.2 Landscape and visual impacts

Natural England would wish to see details of local landscape and seascape character areas mapped at a scale appropriate to the development site as well as any relevant management plans or strategies pertaining to the area. The EIA should include assessments of visual effects on the surrounding area and landscape together with any physical effects of the development, such as changes in topography. The European Landscape Convention places a duty on Local Planning Authorities to consider the impacts of landscape when exercising their functions.

The EIA should include a full assessment of the potential impacts of the development on local landscape and seascape character using landscape and seascape assessment methodologies. We encourage the use of Landscape Character Assessment (LCA), based on the good practice guidelines produced jointly by the Landscape Institute and Institute of Environmental Assessment in 2013. LCA provides a sound basis for guiding, informing and understanding the ability of any

location to accommodate change and to make positive proposals for conserving, enhancing or regenerating character, as detailed proposals are developed.

Natural England supports the publication *Guidelines for Landscape and Visual Impact Assessment*, produced by the Landscape Institute and the Institute of Environmental Assessment and Management in 2013 (3rd edition). The methodology set out is almost universally used for landscape and visual impact assessment.

In order to foster high quality development that respects, maintains, or enhances, local landscape character and distinctiveness, Natural England encourages all new development to consider the character and distinctiveness of the area, with the siting and design of the proposed development reflecting local design characteristics and, wherever possible, using local materials. The EIA process should detail the measures to be taken to ensure the building design will be of a high standard, as well as detail of layout alternatives together with justification of the selected option in terms of landscape impact and benefit.

The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. In this context Natural England advises that the cumulative impact assessment should include other proposals currently at Scoping stage. Due to the overlapping timescale of their progress through the planning system, cumulative impact of the proposed development with those proposals currently at Scoping stage would be likely to be a material consideration at the time of determination of the planning application.

The assessment should refer to the relevant [National Character Areas](#) which can be found on our website. Links for Landscape Character Assessment at a local level are also available on the same page.

3.3 Heritage Landscapes

You should consider whether there is land in the area affected by the development which qualifies for conditional exemption from capital taxes on the grounds of outstanding scenic, scientific or historic interest. An up-to-date list may be obtained at www.hmrc.gov.uk/heritage/lbsearch.htm and further information can be found on Natural England's landscape pages [here](#).

4. **Access and Recreation**

Natural England encourages any proposal to incorporate measures to help encourage people to access the countryside for quiet enjoyment. Measures such as reinstating existing footpaths together with the creation of new footpaths and bridleways are to be encouraged. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure. Relevant aspects of local authority green infrastructure strategies should be incorporated where appropriate.

4.1 Rights of Way, Access land and coastal access

The EIA should consider potential impacts on access land, public open land, rights of way and coastal access routes in the vicinity of the development. Appropriate mitigation measures should be incorporated for any adverse impacts. We also recommend reference to the relevant Right of Way Improvement Plans (ROWIP) to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.

5. **Soil and Agricultural Land Quality**

Impacts from the development should be considered in light of the Government's policy for the protection of the best and most versatile (BMV) agricultural land as set out in paragraph 112 of the NPPF. We also recommend that soils should be considered under a more general heading of

sustainable use of land and the ecosystem services they provide as a natural resource in line with paragraph 109 of the NPPF.

Soil is a finite resource that fulfils many important functions and services (ecosystem services) for society, for example as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution. It is therefore important that the soil resources are protected and used sustainably.

The applicant should consider the following issues as part of the Environmental Statement:

- The degree to which soils are going to be disturbed/harmed as part of this development and whether 'best and most versatile' agricultural land is involved. This may require a detailed survey if one is not already available. For further information on the availability of existing agricultural land classification (ALC) information see www.magic.gov.uk. Natural England Technical Information Note 049 - [Agricultural Land Classification: protecting the best and most versatile agricultural land](#) also contains useful background information.
- If required, an agricultural land classification and soil survey of the land should be undertaken. This should normally be at a detailed level, e.g. one auger boring per hectare, (or more detailed for a small site) supported by pits dug in each main soil type to confirm the physical characteristics of the full depth of the soil resource, i.e. 1.2 metres.
- Proposals for handling different types of topsoil and subsoil and the storage of soils and their management whilst in store. Reference could usefully be made to [MAFF's Good Practice Guide for Handling Soils](#) which comprises separate sections, describing the typical choice of machinery and method of their use for handling soils at various phases. The techniques described by Sheets 1-4 are recommended for the successful reinstatement of higher quality soils.
- The method of assessing whether soils are in a suitably dry condition to be handled (i.e. dry and friable), and the avoidance of soil handling, trafficking and cultivation during the wetter winter period.
- A description of the proposed depths and soil types of the restored soil profiles; normally to an overall depth of 1.2 m over an evenly graded overburden layer.
- The effects on land drainage, agricultural access and water supplies, including other agricultural land in the vicinity.
- The impacts of the development on farm structure and viability, and on other established rural land use and interests, both during the site working period and following its reclamation.
- A detailed Restoration Plan illustrating the restored landform and the proposed afteruses, together with details of surface features, water bodies and the availability of outfalls to accommodate future drainage requirements.

The Environmental Statement should provide details of how any adverse impacts on soils can be minimised. Further guidance is contained in the [Defra Construction Code of Practice for the Sustainable Use of Soil on Development Sites](#).

6. Air Quality

Air quality in the UK has improved over recent decades but air pollution remains a significant issue; for example over 97% of sensitive habitat area in England is predicted to exceed the critical loads for ecosystem protection from atmospheric nitrogen deposition ([England Biodiversity Strategy](#), Defra 2011). A priority action in the England Biodiversity Strategy is to reduce air pollution impacts on

biodiversity. The planning system plays a key role in determining the location of developments which may give rise to pollution, either directly or from traffic generation, and hence planning decisions can have a significant impact on the quality of air, water and land. The assessment should take account of the risks of air pollution and how these can be managed or reduced. Further information on air pollution impacts and the sensitivity of different habitats/designated sites can be found on the Air Pollution Information System (www.apis.ac.uk). Further information on air pollution modelling and assessment can be found on the Environment Agency website.

7. Climate Change Adaptation

The [England Biodiversity Strategy](#) published by Defra establishes principles for the consideration of biodiversity and the effects of climate change. The ES should reflect these principles and identify how the development's effects on the natural environment will be influenced by climate change, and how ecological networks will be maintained. The NPPF requires that the planning system should contribute to the enhancement of the natural environment 'by establishing coherent ecological networks that are more resilient to current and future pressures' ([NPPF](#) Para 109), which should be demonstrated through the ES.

8. Contribution to local environmental initiatives and priorities

The applicant should consider how this development can contribute to local initiatives and priorities, such as any green infrastructure strategies and any environmental enhancement schemes proposed within Suffolk Coast & Heaths AONB.

9. Cumulative and in-combination effects

A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

The ES should include an impact assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment, (subject to available information):

- a. existing completed projects;
- b. approved but uncompleted projects;
- c. ongoing activities;
- d. plans or projects for which an application has been made and which are under consideration by the consenting authorities; and
- e. plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.

Annex B: Specific comments on Sizewell C EIA Scoping Report

General

In general, the Sizewell C EIA Scoping Report is well constructed and addresses the key environmental effects to be covered by the Environmental Impact Assessment (EIA). However, Natural England has some general comments to make.

A major omission from the scoping exercise is a consideration of the water supply and treatment of wastewater that will be needed for the construction phase, both for the physical construction of buildings and structures using concrete and also to supply the campus site for the workforce that would be required on site. Also, the EIA should consider the impacts of the removal of temporary constructions, including campus site, rail lines, bridge, construction compounds etc. and should identify the effects of the decommissioning of Sizewell B during the operational life of Sizewell C.

We would like to ensure that the EIA process and the HRA process are joined-up, such that the EIA captures those impacts that are not covered by the HRA. EDF needs to ensure that they have sufficient communication and other mechanisms in place to address this.

2. Consenting Regimes and Environmental Assessment

2.2.a Licensing

Please note that it is likely that licences from Natural England will be required to address any offences which the proposed development may otherwise have on European Protected Species, including bats and otter, and nationally protected species, such as badger.

7. EIA – Main Development Site

7.2 Terrestrial ecology and ornithology

Table 7.2.1 'Proposed study areas for potential ecological resources' states that a study area of 5km from the application boundary will be considered for bats, however, we suggest that surveys may need to extend beyond 5km depending on species, connectivity of bat habitat in the wider landscape etc. We would be happy to advise further on this matter. (Note that section 7.2.5 states that study area for bats may extend up to 20km away).

7.2.11 note that the proposed landtake of the SSSI is to the north-east and east of the SSSI, not the south-west corner as stated.

7.2.38 The list of key construction impacts should include:

- habitat loss due to requirement to re-align Sizewell Ditch (IDB drain) and associated ditches within Sizewell Marshes SSSI
- impacts on vegetation within Sizewell Marshes SSSI due to tracking vehicles across wetland habitats in order to insert sheet-piling, dig replacement ditches, construct bridges etc.
- impacts on nearby designated sites from displacement of recreational users from Sizewell Estate

7.2.39 The list of key operational impacts should include:

- the impact of impingement and entrainment of fish species within the cooling water intake which may be prey items for red-throated diver, little tern and Sandwich tern
- any impacts which arise from changes to human behaviour in terms of recreational use of nearby designated sites, i.e. habituation to patterns of use formed during construction phase.

7.3 Landscape and visual

7.3.2 We welcome the refresh and use of the analysis of special qualities and natural beauty study to inform the LVIA baseline.

Table 7.3.2 Landscape Value – this includes Heritage Coasts in a list of nationally and internationally designated landscapes, but Heritage Coasts are not a statutory designation. Most do coincide with National Parks or AONBs which helps to provide for their protection and National Planning Policy does seek to protect the undeveloped coast which HCs help to define.

7.3.9 We welcome the commitment to an LVIA which conforms to the Guidelines for Landscape and Visual Impact Assessment Third Edition.

7.3.10 We note that the study area for the construction phase may need to be extended beyond 15km agreed for the operational phase.

7.3.17 Note that Natural England would not normally agree the location of LVIA viewpoints.

7.3.44 – 48 Effects on landscape during construction and operation should also include effects on seascape.

7.3.49 We emphasise the importance of ongoing work to finalise a Landscape Strategy for the EDF Energy Estate, the need to work with NE and others to ensure that its potential to mitigate the effects of the development is fully realised, and for the LVIA to be based on a fully developed Strategy and the mitigation measures it will provide.

7.4 Amenity and recreation

7.4.9 Natural England has an over-arching statutory duty to promote access to the countryside and more specific statutory responsibilities in relation to Open Access Land, National Trails and access to the coast (for more information, please see <http://www.naturalengland.org.uk/ourwork/access/default.aspx>).

7.4.10 Natural England would like to see provision for a continuous signed and managed coastal footpath incorporated into masterplanning for Sizewell C with minimum disruption to existing coastal access during the construction phase.

7.4.35 the list of potential impacts and effects arising during construction should include:

- the impact of the potential displacement of recreational users of amenities within Sizewell Estate to other sites

7.4.36 the potential impacts during operation should include:

- any impacts which are likely to arise from long term changes to human behaviour in terms of recreational use i.e. habituation to patterns of use formed during construction phase.

7.4.39 We welcome the proposal to mitigate the impact on amenity and recreational resources within the Landscape Strategy.

7.9 Soils and agriculture

7.9.33 We welcome measures to reduce impacts on soil quality during construction, including the

production of a Soil Management Plan.

7.10 Geology and land quality

7.10.23 We welcome the assessment of impact on statutory and non-statutory geological and geomorphological features of designated sites.

7.11 Groundwater

7.11.3 Natural England would be happy to provide technical expertise into the development of a predictive model to provide a tool to assess the impacts of the groundwater environment and closely related surface water environment within Sizewell Marshes SSSI.

7.11.29 the list of potential activities that would potentially impact groundwater should include:

- supply of water for construction activities, such as concrete batching, and supply of water to the campus site. This is a key consideration and needs to be addressed accordingly in the ES. Any impacts of water supply for designated sites needs to be included, even if the source of water is remote from the application site.

7.11.45 we welcome the cumulative assessment of the impact on ecologically sensitive receptors and designated sites, e.g. Sizewell Marshes SSSI and Minsmere-Walberswick Heaths and Marshes SSSI.

7.12 Surface water

7.12.3 3 Natural England would be happy to provide technical expertise into the development of a predictive model to simulate the flows through the River Minsmere and Leiston Beck in order to assess the impact of the development on the surface water environment within Sizewell Marshes SSSI and Minsmere-Walberswick Heaths and Marshes SSSI.

7.12.28 We would appreciate more information about what the preferred option is for the watercourses under the bridges; are they to be joined or kept separate?

7.12.33 We welcome the production of an Incident Control Plan during construction to control and reduce pollution of surface waters and would advise that a monitoring strategy also needs to be provided in order to ensure that action can be taken if water quality and water flows are likely to cause an adverse effect on the designated wetlands.

7.12.38 We advise that a monitoring strategy is agreed at the operational phase in order to ensure that action can be taken to remedy any identified adverse effects.

7.13 Coastal geomorphology and hydrodynamics

7.13.24 The receptors and resources that are of potential concern need to include:

- an assessment of the system in the absence of Sizewell C
- designated sites with coastal geomorphological interest features, both north and south of the application site. Such features include vegetated shingle, saline lagoons etc.

7.13.36 The impact of the beach landing facility on coastal processes needs to be included in the assessment.

7.13.39 An assessment of the impact on coastal geomorphology and hydrodynamics due to the decommissioning of Sizewell B should be included in the assessment of inter-relationships.

7.15 Marine ecology

7.15.3 the study area for marine ecology should be extended beyond the potential zone of effect to ensure that any likely effects can be placed within the wider marine ecological context.

7.15.21 in assessing the potential impacts and effects of the proposed Main Development Site on marine ecology, the potential impact pathways need to be clearly defined; it may be helpful to consider categories of receptors, such as commercial fisheries, benthic ecology and pelagic ecology.

7.15.23 the list of construction activities potentially affecting marine ecology needs to include the impacts of dredging and disposal of dredged material.

7.15.29 The impact of the operation of the cooling water system needs to consider the impacts on all fish species including prey species of SPA birds.

7.15.25 Construction noise may also impact on SPA seabirds in the marine environment, such as red-throated diver, little tern and Sandwich tern.

7.15.37 The possible inter-relationships of effects in the marine environment need to be carefully considered, for example the effect of the development on the food web of marine organisms in relation to combined thermal and chemical effects, sediment re-suspension, noise and other disturbance effects, local effects on plankton, fish populations, mammals etc.

7.16 Navigation

Information from the movements of shipping traffic and other vessels in the area should be incorporated into the assessment of impact on red-throated diver which may be adversely affected by disturbance from increased boat movements in Outer Thames Estuary SPA, particularly during the construction phase when the jetty is in use.

8. EIA – Offsite Associated Development

8.2 Northern park and ride

No specific comments but please refer to our general principles for EIA in Annex A.

8.3 Southern park and ride

As above.

8.4 Rail line extension

Table 8.8 'Rail line extension options - potential impacts and effects' should include an assessment of the impacts on the notified features of statutory designated sites and the purpose of designation of protected landscapes. An assessment of the impacts of removing the rail line should also be included.

8.5 A12 improvement – Farnham Bend

No specific comments but please refer to our general principles for EIA in Annex A.

8.6 Visitor Centre

Table 8.14 'Visitor Centre options – potential impacts and effects' should include an assessment of the impacts on the notified features of statutory designated sites and the purpose of designation of protected landscapes.

From: Stamp Elliot [mailto:Elliot.Stamp@networkrail.co.uk]

Sent: 21 May 2014 17:27

To: Environmental Services

Subject: Network Rail Consultation - Sizewell C Proposed Nuclear Development - FAO Laura Allen

Dear Laura,

Thank you very much for consulting with Network Rail in regards to proposed Sizewell C Proposed Nuclear Development – Scoping Report.

The safety of the operational railway and of those crossing it is of the highest importance to Network Rail. Level crossings are of a particular interest in relation to safety.

It is anticipated that the proposed development will have an impact on a number of level crossings which are located in the surrounding area. As a result the applicant should fully investigate the potential impact that the proposed development will have on the level crossings within the EIA and in further planning applications. This will enable Network Rail to fully assess the impact of the proposal on the crossings and help to determine what mitigation measures will need to be introduced at the crossings. Network Rail will contact the applicant directly to arrange a meeting to discuss this matter.

I understand that the applicant has been in contact and met with representatives of Network Rail's Route Freight team in relation to the proposed development and the associated railway related developments. The applicant should continue to liaise with the appropriate Network Rail teams as the proposal progresses.

If you have any questions please contact me

Thank you

Kind Regards



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From: Faulkner, Stephen [mailto:stephen.faulkner@norfolk.gov.uk]
Sent: 14 May 2014 09:04
To: Environmental Services
Cc: Eastaugh, Sandra
Subject: Sizewell C - Scoping Consultation

FAO Laura Allen

The Planning Inspectorate

Thank you for consulting Norfolk County Council on the above Scoping Opinion.

As the proposed development is in Suffolk there is unlikely to be any significant environmental impact on Norfolk.

However, it is felt that the EIA will need to address the wider impacts of the proposed development on the electricity distribution network i.e. relating to the national (400kv) and regional (132kv) networks. In particular the EIA should consider the cross-boundary impacts of the proposed Sizewell C Nuclear Development in relation to the potential need for either (a) new over-head power lines; and/or (b) reinforcement of existing power lines.

Should you have any queries with the above comments please call or email me.

Regards

Stephen

Stephen Faulkner BA(Hons) MSc DipTP MRTPI

Principal Planner

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<http://www.norfolk.gov.uk/emaildisclaimer>



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Our Reference: 2014/186956
Unique Number: SZC50146N

19 May 2014

Dear Ms Allen

Planning Act 2008 - Application by EDF Energy for Development Consent for the Sizewell C Nuclear Development: Request for a Scoping Opinion

Your letter of 24th April 2014, seeking views on EDF Energy's request for an environmental scoping opinion for Sizewell C, was passed on to me by colleagues in the Health & Safety Executive (HSE). I understand that you have been informed that from April 1st, the Office for Nuclear Regulation (ONR) ceased to be an Agency of HSE to become a separate independent statutory body, responsible for the regulation of the UK's nuclear industry. The relevant Planning Act related legislation has been amended via the Energy Act 2013, which created the statutory ONR, to ensure that we are now named as an interested party/statutory consultee for nuclear developments.

For proposed new nuclear power stations, I am the head of the Licensing sub-programme, and I would be grateful if PINS could amend its records to ensure that future correspondence relating to nuclear developments is addressed to me. Although ONR will be the health and safety regulator for the Sizewell C main development site, my colleagues in HSE will retain regulatory responsibilities in relation to off-site associated developments and they should therefore continue to be consulted as appropriate.

Turning to the Sizewell C Scoping Report, as is usual with such documents there is little in it that relates to matters which fall within our regulatory interest. We have reviewed the document and have not identified any significant inaccuracies in its description of the regulatory regime which ONR enforces, or our enforcement role in relation to the proposed development at Sizewell C. The document's proposals for the parts of the Environmental Statement that will deal with potential radiological accidents are not detailed, but we assume that the details will be developed to be similar to the equivalent ES for Hinkley Point C, which we found to be sufficient in scope, approach and accuracy. We look forward to having the opportunity to provide comments on the Sizewell C ES in due course.

Yours sincerely

Dr Craig Reiersen
ONR Superintending Inspector – Nuclear Safety
Head of New Reactor Licensing



Office for
Nuclear Regulation

cc:

Tim Randles

Stephen Kinghorn-Perry

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F.A.O Laura Allen

Your Ref : EN010012

Our Ref : En NU 140425 311

22nd May 2014

Dear Sirs

Re: Scoping Consultation

Application by EDF Energy for an Order Granting Development Consent for the Sizewell C Proposed Nuclear Development.

Thank you for including Public Health England (PHE) in the scoping consultation phase of the above application. Our response focuses on health protection issues relating to chemicals and radiation. Advice offered by PHE is impartial and independent.

In order to ensure that health is fully and comprehensively considered the Environmental Statement (ES) should provide sufficient information to allow the potential impact of the development on public health to be fully assessed.

We understand that the promoter will wish to avoid unnecessary duplication and that many issues including air quality, emissions to water, waste, contaminated land etc. will be covered elsewhere in the ES. PHE however believes the summation of relevant issues into a specific section of the report provides a focus which ensures that public health is given adequate consideration. The section should summarise key information, risk assessments, proposed mitigation measures, conclusions and residual impacts, relating to human health. Compliance with the requirements of National Policy Statements and relevant guidance and standards should also be highlighted.

In terms of the level of detail to be included in an ES, we recognise that the differing nature of projects is such that their impacts will vary. Any assessments undertaken to inform the ES should be proportionate to the potential impacts of the proposal, therefore we accept that, in some circumstances particular assessments may not be relevant to an application, or that an assessment may be adequately completed using a qualitative rather than quantitative methodology. In cases where this

decision is made the promoters should fully explain and justify their rationale in the submitted documentation.

PHE is pleased to note that the scoping report addresses many of the areas highlighted in our previous response to Sizewell C Proposed Nuclear Development (provided to them in January 2013). We are particularly pleased to see that a section on human health will be included in the subsequent submissions. We note that the proposals for the assessment of the impacts on air quality, land and water all require additional monitoring and assessment and that the final reports will be provided later. We will provide further comments once the final reports are available.

PHE can confirm that we are happy with the general approach proposed for the EIA but wish to highlight the following areas for the proposer's consideration:

- 1) There is currently no reference made to electric or magnetic fields. We appreciate that the development is adjacent to existing power generation and distribution facilities and would expect the human health impacts associated with electromagnetic fields exposure to be fully considered in the final documentation.
- 2) When assessing the impacts on ground and surface waters the reports should fully consider any source / pathway/ receptor linkages that may have an impact on human health. This would include recreational use of the coastal and surface waters.
- 3) The final documentation should include a detailed Construction Environmental Management Plan and Decommissioning Environmental Management Plan outlining how the environmental and health impacts of the construction process will be adequately mitigated or managed during the construction process.
- 4) The report does not currently consider any community anxiety or stress that may arise from the development. These impacts should be addressed in the next stage of document submission.
- 5) Section 7.17.4 of the scoping report states that the radiological impacts of the decommissioning are bounded by the routine operational activities and therefore not detailed further. Further explanation in support of this statement could usefully be provided. Given that the Applicant is required to satisfy the Environment Agency that discharges and disposal made into the environment are minimised and their effects are acceptable, such that people and the environment will be properly protected throughout the whole lifecycle of the plant, including decommissioning, as part of the Generic Design Assessment it would be useful to provide information from this assessment.
- 6) Section 7.17.31 it states 'the National Radiological Protection Board (now known as Public Health England)'. This is a minor point but it would be more accurate to state 'Public Health England (formerly the Health Protection Agency and previous to that NRPB)'.

Should the proposer wish to discuss or clarify any of the issues raised above PHE will of course be pleased to assist.

Yours faithfully



Antony Bexon
Head of Environmental Assessments Department

nsipconsultations@phe.gov.uk

Please mark any correspondence for the attention of National Infrastructure Planning Administration.

From: Saxmundham Town Clerk [mailto:towncouncil@btinternet.com]
Sent: 16 May 2014 15:17
To: Environmental Services
Subject: EN010012 24 April 2014

For the attention of Laura Allen

Good afternoon Laura

Saxmundham Town Council are unable to respond to your Scoping consultation within the time scale permitted.

Kind regards

Maddie (Gallop)

Town Clerk

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Your Ref: EN010012
Our Ref:
Date: 22nd May 2014
Enquiries to: Michael Wilks / Philip Ridley
Tel: 01473 264064 / 01394 444432
Email: michael.wilks@suffolk.gov.uk /
philip.ridley@suffolkcoastal.gov.uk



Laura Allen
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol,
BS1 6PN

Dear Ms Allen

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended) – Regulations 8 and 9

Application by EDF Energy for an Order Granting Development Consent for the Sizewell C Proposed Nuclear Development

Scoping consultation and notification of the applicant's contact details and duty to make available information to the applicant if requested

Further to your letter dated 24th April 2014, please find below a joint response of both Suffolk County Council and Suffolk Coastal District Council to this request.

EXECUTIVE SUMMARY

The approach set out to the Environmental Statement (ES) is generally satisfactory and we are pleased that it reflects the nature of, and progress in, discussions the local authorities have had with EDF Energy on the undertaking of assessments to date.

However, we draw particular attention to the following matters:

- Further discussions are required with EDF in describing the magnitude of impacts, in particular the spatial extent and duration of effect that are used to derive the corresponding magnitude. As currently described, the ES is likely to underreport localised impacts of significant duration. A better acknowledgement of the longevity of the temporary, but long-term construction period is required.
- We are concerned that alternatives are being scoped out of the process at an early stage, without a full appreciation of the effects of EDF's preferred option. Alternatives should be appraised having regard to the respective socio-economic and environmental effects alongside consideration of operational requirements. The ES should clearly articulate how alternatives have been evaluated in a balanced way.
- The ES should clearly articulate the cumulative effects of all individual elements of the project as many receptors will be impacted by separate developments. This needs to be fully acknowledged.
- The phasing of the construction programme needs to be provided and sensitivity testing in the timing of the delivery of mitigation proposals, such as the MOLF, accommodation, campus, park and rides and rail extension undertaken so that they are delivered at the

optimum time having regards to the impacts associated with their construction, and their ability to reduce impacts on local communities and the environment.

Some general, introductory comments are made immediately below, followed by some more detailed comments relating to the specific sections in the Scoping Report.

1. GENERAL COMMENTS

1.1. Structure of the Environmental Statement

1.1.1. It is proposed that Volume 2 of the ES focuses on 'Project-wide considerations', namely socio-economics and transport, whereas environmental matters are to be considered on a site-specific basis.

1.1.2. The ES should acknowledge the scale and the geographic extent of the development is such that it will have very wide ranging environmental effects over a large area, particularly when one considers:

- The environmental effects of the offsite associated development sites
- The environmental effects of transport movements, terrestrially and at sea
- The environmental effects associated with the deflection or displacement of recreational users to wider/alternative areas.

1.1.3. Consequently, we would not wish the environmental impacts to be presented in such a way that the full scale of effects is not readily appreciable. In addition to interactions with other projects or programmes Volume 9 (Cumulative assessment) therefore needs to consider the cumulative effect of all the individual elements of the project, particularly where they impact on the same receptor (for example the rail line extension, site entrance works and the campus will all separately impact on Leiston Abbey). It would also, in this vein, be useful for the ES to explain the interrelationship with the Habitats Regulation Assessment.

1.1.4. Conversely, we would not wish the *localised* transport and socio-economic impacts to be underplayed. For example, the campus will have localised impacts by virtue of its proximity to other communities which may be presented in such a way that other socio-economic impacts on the labour market or accommodation availability take dominance.

1.1.5. There is a particular case to consider whether the impacts of the campus development (currently wrapped in to the 'Main Development Site') need to be specifically isolated within the ES, because of the particular sensitivities, environmentally and socio-economically, associated with EDF's preferred site, and the existence of alternative site locations. While the campus offers mitigation in some respects (6.3.59), it will give rise to others of its own making. In particular, the ES should assess the impact on nearby residential properties and mitigation measures included as necessary.

1.2. Magnitude of impacts – Temporary and permanent

1.2.1. The ES should clearly distinguish between temporary impacts and permanent impacts and also be consistent with how the duration of impact relates to significance of effect.

1.2.2. Table 5.2 sets out the generic guidelines for the assessment of magnitude. We have some concerns with the definitions used here. With a construction project of such magnitude, duration and geographic spread, terms such as "permanent/irreversible" and "whole development area" need to be carefully defined. A literal interpretation of this table would suggest it is not possible for a temporary

(albeit of 10 year lifespan) associated development site to result in a high magnitude effect. The table also implies a degree of rigidity in structure and conflation of the terms 'scale', 'duration' and 'certainty'. For example, wider-scale effects of temporary duration within any one of the red line areas should still be able to derive a high magnitude effect.

1.2.3. Clarity on the interpretation of likely/unlikely would be helpful. It is noted the Ecology chapter is more quantitative in this respect (7.2.28), but it is debatable that something with a 49% probability of occurring could be described as 'unlikely'.

1.2.4. So, while Table 5.2 is described as generic guidelines it could better reflect the specific circumstances of the project. It is noted that in some chapters, some of these definitions are refined – for example in Ecology and Surface Water chapters 'temporary' is further subdivided (short term <2 yrs; medium term 3-5yrs; long-term >5 years), though the Landscape chapter uses a different scale for duration of effect (short term <2 years; medium term 2-10 years; long term >10 years).

1.2.5. Above all, the ES should be consistent on how these terms are used or explain very clearly why any inconsistencies do arise.

1.3. Value and sensitivity

1.3.1. The ES, for example Table 5.1 uses these terms synonymously, whereas this may not be the case. It is possible for sites to be designated for their landscape or ecological value, i.e. be of high value, but nevertheless have capacity to accommodate change (i.e. low sensitivity). The ES should recognise this – in particular because, as written, the ES will not focus on impacts on receptors of low value, for example local nature reserves – which may nonetheless be very sensitive.

1.4. Significance of effect

1.4.1. As a result of the issues outlined above, we are concerned that impacts may be defined as of less than moderate/major significance and therefore not significant, when that is not the case. This table should continue to reflect the precautionary principle so that the burden of proof remains on EDF demonstrating robustly that impacts will be not significant.

1.5. In-combination effects ("interrelationships")

1.5.1. Consistency in terminology is particularly important to facilitate the measurement of in-combination effects. We are concerned that the ES could underreport these effects if it does not acknowledge the potential for accumulation of effects of minor significance. The ES should explain how the significance of an in-combination effect will be determined – for example, for a given receptor, is the significance of a moderate noise impact plus a moderate air quality impact moderate or major?

1.5.2. We would also expect the ES not to overlook opportunities to mitigate effects of minor significance so that they rather become 'negligible'.

1.6. Cumulative impacts

1.6.1. Paragraph 5.5.1 suggests that only cumulative effects with projects in the *vicinity* of the development site will be considered. The geographic scope will need to be considered on a case by case basis. In the case of socio-economics the approach in paragraph 6.2.42 is acknowledged, though this could overlook localised cumulative effects, for example decommissioning of Sizewell A.

1.6.2. The ES should recognise that as a consequence of the Sizewell C development, the impact of existing development may change. For example if Coronation Wood is used (3.3.6/3.4.1), this may affect the mitigation it offers for the existing Sizewell A and B developments. Consequently the assessment of the

cumulative impacts should reflect any changes in the future baseline that would heighten the impact of existing development. The onshore elements of the consented Galloper Offshore Windfarm are also relevant in this respect.

1.6.3. Paragraph 2.1.9 confirms that while Sizewell is connected to the National Grid's high voltage network, local modifications and wider network reinforcement is required – the local authorities understand this to be reconductoring of the Sizewell to Bramford line, and additionally a new line between Bramford and Twinstead – registered with PINS as the 'Bramford to Twinstead Overhead Line project'. The most up to date Need Case for that project, confirms that, based on the currently contracted connection dates, Sizewell C, alongside the East Anglia Array, is a significant contributor to that need – however it is the Sizewell C project that currently triggers the need for the Bramford to Twinstead project¹.

1.6.4. The Environmental Statement should address the wider environmental implications of development elsewhere necessitated in whole or in part by the Sizewell C project.

1.6.5. Furthermore, paragraph 6.3.58 states EDF will provide “support to Network Rail to deliver a new passing loop on the East Suffolk Line near Wickham Market station. This is not discussed further in the Scoping Report (for example as offsite associated development). The impacts of this should be presented in the ES. The location of this development is adjacent to a new housing development and consideration should therefore be given to minimising train waiting times during passing manoeuvres, or exploring other engineering options (such as lengthening the loop) to minimise impacts on those residents.

1.7. Future baseline

1.7.1. With regard to the future environmental baseline, it should be noted that all non-agricultural land within the Main Development Site is managed by Suffolk Wildlife Trust on behalf of EDF Energy (7.9.15). Consequently, the ES should not underestimate the environmental quality of the future baseline without development, and thus underestimate the impacts of the development.

1.7.2. Furthermore, the ES should recognise that the projected future baseline case includes consideration of how the Sizewell A and B sites will change under decommissioning over the construction life of SZC.

1.8. Construction Programme

1.8.1. The ES should provide a phasing programme for construction so it is clear which activities are occurring when, and when mitigation will be delivered – for example the park and ride sites, rail routes, jetty and accommodation campus. The timing of these will have a significant bearing on the impacts of the development and the local authorities suggest very careful thought will be needed to ensure that they are delivered at the optimum time in the construction programme.

1.8.2. We note (3.4.7) that the main construction could take seven to nine years following site preparation – which would include main site earthworks construction of a new access road, new bridges, and a jetty (3.4.2). The ES should ensure that the full duration of activity is reported accurately.

¹ http://nationalgrid.opendebate.co.uk/files/20131114_Need_Case_2013_FINAL.PDF Figure 4.1

1.8.3. Along with the phasing, the ES will need also need to detail the location of all major engineering tasks to be carried out (for example excavation work, dredging, dewatering, piling, stockpiling of soil/peat, road building, demolition of existing buildings, use of explosives, construction of new buildings, borrow pit workings *et cetera*). It should be clear where engineering works are contingent on offsite constraints, such as the receiving capacity of Wallasea Island to accommodate any peat winnings (3.4.5). A worst case in terms of the need for stockpiling should be assumed.

1.8.4. ES will need to detail the hours of working both onsite and at any offsite 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.

1.9. Alternatives

1.9.1. We welcome the intention (paragraph 4.2.1) to review alternatives for land required during construction (taken to mean not just the laydown land, but also all the associated development) – this consideration should of course not just include layout, but overall scale and location. With particular regard to sea defences (4.3.2), consideration also needs to be given to the north and south of the site, if coastal erosion and flooding affect these areas as may be predicted. The ILWS is taken to be included on this list under Main Development Site.

1.9.2. With reference to the construction laydown land adjacent to the main site, particular regard should be had to alternative options which reduce the impact on the AONB, for example using existing employment land in the vicinity. Similarly, the alternative of siting the Visitor Centre outside the AONB will need to be considered.

1.9.3. The local authorities are concerned that in some cases EDF has not sufficiently justified its preferred option and is therefore prematurely curtailing more detailed assessment of alternatives. Of particular relevance are the proposals for freight management. Paragraph 4.4.6 indicates that EDF does not propose to consider Freight Management Site further, given it ‘anticipates’ HGV movements could ‘potentially’ be managed through electronic/camera based systems which ‘could’ reduce the need for further associated development sites.

1.9.4. Given the evident uncertainty and lack of discussions/agreement with the local authorities on this matter, we do suggest it is premature to scope out the potential need for such a facility. Consequently, we suggest the ES should report should report on alternative measures to manage freight and their comparative effects. Other alternatives should include rationalising the use of land across all three nuclear sites, sharing facilities, for example parking wherever possible.

1.9.5. In presenting how EDF has come to its preferred alternative it should be clear how it has weighted the various determining factors – for example environmental impact, transport impact, cost.

1.10. Health Impact Assessment

1.10.1. The production of an HIA is welcome, however it should aim to *maximise the potential positive* health and wellbeing impacts of the proposed development’, rather than solely *reduce or remove potential adverse* impacts on health and wellbeing (2.3.10). It will also need to identify *all* significant impacts on health (2.3.12).

1.10.2. The HIA should follow a similar format to that set out in Section 5.3. In terms of mitigating the adverse effects of development, the hierarchy set out in Section 5.4, namely: 1. Prevention; 2. Reduce or abate effects, is appropriate for HIA, though repair and compensation are less relevant. The plan to seek identification of

mitigation opportunities throughout the evolution of the proposed development is also applicable to health impacts. Prevention of course remains the priority for significant health impacts.

1.10.3. The sections in the ES on air quality and noise and vibration will be particularly relevant to the HIA.

1.10.4. Monitoring and evaluation of possible health impacts should be conducted to inform ongoing assessment of the health impact.

1.11. Life span of the development/decommissioning

1.11.1. The ES should be clear on the duration of effects for which it is assessing – does the ‘lifetime of the site’ (for example 2.1.9) include the decommissioning phase? How does this also relate to the ISFS and ILW, and their respective design lives (section 3.8)? The design life for the ILW and LLW stores should also be clarified.

1.11.2. The ES should, as far as is possible detail a programme for the decommissioning of the site. This should include;

- The types of works that will be undertaken,
- The removal of existing structures,
- The disposal of all remaining waste material,
- The suitability of the site for restoration or future use.

1.12. It is noted that a separate Flood Risk Assessment (FRA) will be produced for the decommissioning phase (2.3.4); any mitigation actions arising from this FRA may have implications for the design of the Sizewell C site – so thought needs to be given at this stage to the decommissioning FRA.

2. TOPIC SPECIFIC COMMENTS

2.1. Transport

2.1.1. The transport assessment (TA) will need to be prepared in line with the DfT’s Guidance on Transport Assessments (2007). The TA, like the rest of the ES (as discussed above) should also pull together the cumulative impacts of the individual elements of the development, both the construction of the main development site, the associated development sites and any mitigation schemes.

2.1.2. The TA will also need to recognise that the benefits of highway mitigation will not apply to all stages of the development (due to the timing of their delivery) and consequently there will be phases of the development where impacts on the highway network will need to be reported in the absence of such mitigation being in place. For example, the construction of the rail line extension and MOLF will ostensibly require all HGV movements arriving by road, as opposed to later phases of the development where materials will be delivered by a combination of road, rail and sea.

Approach & Methodology

2.1.3. The scenarios assessed within the TA should include construction, operation, decommissioning and the impact of outages, of both Sizewell C and B reactors. Tourism is an important part of the Suffolk economy and the impact of construction vehicle movements on the summertime traffic movements should be assessed. A method of assessing seasonal impacts needs to be agreed. The impact on significant local events, for example the Latitude Festival also need to be considered and measures put in place to accommodate the impact that these events have on the network.

2.1.4. The report refers to the use of Visum modelling to determine impacts on the highway network, SCC considers that the use of modelling is only one way of assessing impacts and other methods should be considered. Modelling should not be relied upon as the only method of assessment.

2.1.5. The report suggests that the impacts of construction traffic are 'temporary'; the ES needs to fully acknowledge the likely duration of the construction period and report the effects accordingly.

2.1.6. The report should state the years of assessment.

2.1.7. The baseline information makes no reference to the collection of data for non-motorised users (NMU's), i.e. pedestrians, cyclists and equestrians using the highway network, this should include the Public Rights of Way network.

2.1.8. The report refers to using shift patterns to assess the timings of commuter travel. However, no information was provided on how HGV/OGV movements would be managed to inform an assessment of impact.

Types of Impact

2.1.9. The report sets out the types of impact that will be examined with respect to the traffic generated. These include severance, pedestrian amenity, driver delay and accidents and safety.

2.1.10. The assessment should consider the effect the increase in traffic will have on cyclists and equestrian road users and consider the anxiety and intimidation the increase in traffic will impose. It should be noted that equestrians are sensitive to smaller increases in traffic and this group may cease to use parts of the network affected by significant increases in traffic and make established horse-riding routes untenable.

2.1.11. The types of impact should include the effects that vehicles and in particular HGV's will have on pedestrians and residents (see below).

2.1.12. The report makes no reference to the transportation of hazardous materials. The ES should clarify whether hazardous materials will be transported on the highway network to and from the site either/and during construction and operation. If hazardous material will/may be used then details need to be provided on how the impact will be assessed and mitigated.

Sensitivity of receptors

2.1.13. A classification of possible receptors and their likely sensitivity is set out in Table 6.3.1. It is unclear where these categories are derived from. This table does not refer to equestrians and cyclists, focussing on pedestrians as the only NMU's. Cyclists need to be considered either as local road users or recreational tourist based users. The latter group are likely to include family groups that would be considered more vulnerable road users with respect to increased traffic flows. It is not unreasonable to assume a higher level of recreational activity in the area considering its location to the coast and the AONB.

2.1.14. It should also be noted that the National Cycle Network regional routes 31, 41 and 42 intersect the B1119 to the west and the B1122 to the north of Leiston - in addition to intersecting the A12 at a number of locations within the study area. Impacts on users of these routes need to be assessed. More generally, rights of way crossing points should be identified as sensitive receptors and the effects of severance thereon assessed.

2.1.15. There is a further category of receptors to be considered. These are residents of dwellings likely to be affected by anxiety and intimidation from traffic passing close to their homes. This will be an issue in areas additional to the

Farnham bend. The ES should identify residential dwellings that are located close to the edge of the carriageway and categorise these as a separate category of receptor. Estimates should be made of the population of communities affected by severance due to traffic, taking into consideration the location of community facilities, including schools, relative to the road causing severance.

Magnitude of impact

2.1.16. The magnitudes of impact are set out under “Types of Impact” within the report, where the impacts are allocated to one of four categories: Negligible, Minor, Moderate and Substantial. These categories relate to those suggested in the IEMA guidelines and the DMRB, where the impact referred to here as “Minor” is termed “Slight”.

2.1.17. There is some concern over the large proportion of effects that will rely on the application of “Professional Judgement” within Table 6.3.2 of the report. To inform this judgement and assist in reaching agreement, it is proposed that the assessment is informed and supported by quantifiable (evidence-based) analysis as detailed below.

Severance

2.1.18. In addition to the IEMA Guidelines, a more detailed scale of impacts is set out in DMRB 11.3.8.7 Table 1, distinguishing between Built-Up and Rural areas and providing more detail as to their application. It is recommended that reference is made to this table.

2.1.19. Furthermore, areas where a 10% increase in flows is considered significant should be identified and agreed.

2.1.20. It is noted that the categories adopted relate to changes in traffic flows along existing roads and are not related to any absolute measure of existing levels of severance. DMRB 11.3.8.6 defines three categories of severance; Slight, Moderate and Severe. Although technically these relate to new severance, i.e. new highway schemes, they provide one possible way of quantifying severance in absolute rather than relative terms. To quantify existing levels of severance, it is suggested that reference is made to these categories.

Pedestrian delay

2.1.21. The use of a threshold of 1,400 vehicles per hour is supported by IEMA guidelines, though unilaterally applying these guidelines should be avoided – regard should be had to the health impacts on reducing pedestrian amenity or increasing delays in travel. We expect the figure of 1,400 vehicles per hour to relate to an exceedance in any hour, not to represent an average.

2.1.22. To assist in some quantification of impacts above this threshold, DMRB 11.3.8.7 figure 1 should be referred to where mean pedestrian delays associated with different road crossing situations are presented in graphical form.

Pedestrian amenity

2.1.23. It is proposed that this will be assessed using professional judgment on links where there is an increase of more than 100% in either total or HGV flows. The use of a threshold of 100% does not appear consistent with the other thresholds. Using this criterion for assessing impact and risks will result in almost all of the impacts being dismissed as “Negligible”.

2.1.24. It is proposed that the percentage criteria adopted for “Severance” should be used to inform the assessment of pedestrian amenity. This would mean adopting a threshold of 30% above which impacts would be assessed as Minor/Slight, Moderate

or Substantial. The 10% threshold should also be used for specifically sensitive areas.

2.1.25. The existing levels of pedestrian amenity on the network should be assessed using DMRB 11.3.8.4

Driver delay and accidents & safety

2.1.26. - The driver stress section of the DMRB 11.3.9 should be consulted as the use of the DMRB Driver Stress methodology would allow a more detailed assessment with respect to driver delay and road safety. DMRB 11.3.9.4 should inform the process of professional judgement.

Specifically sensitive areas

2.1.27. This should include areas where there is an increase of 10% or more in HGV flows, not just total flows.

Injury and death

2.1.28. In addition to the above, the TA should include an assessment of the impact of different transport options on the incidence of transport related injury and death. This should inform the Health Impact Assessment.

Construction

2.1.29. As mentioned, the impact of Sizewell outages and other local events, for example the Latitude festival, need to be assessed/accommodated within the assessment of impacts.

Assumptions and limitations

2.1.30. The ES will need to detail the assumptions it has made on the approximate quantities of all incoming materials to be stored on site or at offsite facilities, including how this material will be transported to the site and, proportionately, by which mode.

2.1.31. The assessment of impact of construction related traffic should also consider contingency measures, for example the implication of extended bad weather preventing the use of the MOLF.

2.1.32. Sensitivity testing should also be undertaken to reflect an uncertainty of delivery of materials by rail and sea. This should include alternative plans for the delivery of Abnormal Indivisible Loads (AILs).

Potential impacts and effects

Construction

2.1.33. Clear distinctions needs to be made on the longevity and reversibility of impacts.

2.1.34. The TA will need to include an assessment of recreational trips made by residents of the campus accommodation.

2.1.35. The report refers to impacts on the A12 down to Ipswich; this should refer to the A12 down to its junction with the A14 (Copdock Interchange, Junction 55). The Highways Agency may have concerns around the management of HGV traffic on the A14, in particular at the Seven Hills (Junction 58) and Copdock junctions and over the Orwell Bridge. In the case of the closure of the Orwell Bridge, methods to manage additional HGV traffic on the diversion route through Ipswich will need to be considered.

2.1.36. In response to the Stage 1 consultation, concerns were raised about the impact of construction and commuter traffic on the B1122. This needs to be assessed.

2.1.37. Furthermore, information is required on how HGV deliveries and departures to/from the main site will be managed, together with the volumes and timing of movements associated with the accommodation campus and on-site car park. These issues should be considered within the TA.

Operation

2.1.38. This section of the report refers to the impact of the outage work for each reactor. Clarification is needed on whether this should also refer to Sizewell B and how the outages will be coordinated (if it is possible to do so). The ES will also need to describe how the outage staff will be accommodated and transported to/from the site –for example the level of additional parking.

2.1.39. Consideration should be given to assessing the traffic related to the outage works as a permanent increase on the road network during the operation phased due to their frequency and duration of its occurrence.

2.1.40. The decommissioning phase should also be assessed, as far as is possible, as it will result in an impact over an extended period of time. It may also overlap with the elements of the decommissioning programme of Sizewell B - more information is required.

Potential mitigation

2.1.41. The detail of mitigation provided in the report is considered an early estimate and is not considered exhaustive. An assessment using the criteria set out in Section 6.3, with the additional assessment requirements detailed in this response is likely to identify the need for additional mitigation measures, which will require environmental assessment. In particular reference should be made to the active transport options for the workforce, for example cycle routes to/from park and ride sites. We have also at Stage 1 indicated broad parameters for a Travel Plan, which will need to be provided within the ES.

2.1.42. An effective method of managing the timing of HGV and OGV movements will be required to manage the impact on the network during peak times and any maximum flow quota for key routes. We are yet to be presented with evidence of the efficiency of managing HGV traffic using electronic/camera based systems.

2.1.43. The park and rides will result in a reduction of commuter traffic originating from the north, south or west of the A12 on the local road network and to local villages east of the A12. However, the proposed provision of a 1,000 space car park to accommodate commuters from destinations east of the A12 will result in an increase in traffic on the local network and villages/towns east of the A12 and this will need to be assessed thoroughly and mitigation provided as necessary.

2.1.44. The report does not refer to mitigation of impacts on the B1122 from its junction with the A12 to the site entrance and then to Leiston. This was a concern raised at the Stage 1 consultation. This route should also be assessed against the sensitivity criteria discussed above to ensure the full range of possible effects are examined, as the B1122 has been identified as the primary delivery route.

2.1.45. The current mitigation measures reflect the outcome of assumptions relating to the gravity model, transport model and construction programme and delivery assumptions. There are likely to be cumulative inaccuracies within this process and sensitivity testing should be undertaken to ensure that variability in these assumptions is fully considered.

2.2. Socio-economics

Gravity model

2.2.1. As acknowledged in 6.2.31, the socio-economic environment is of a dynamic nature, underlining the need for sensitivity testing of the gravity model to different economic circumstances. This should then provide a better understanding of the likely need for/nature of appropriate triggers for contingency measures as part of the mitigation proposals.

2.2.2. The sensitivity testing should be informed by appropriate data refreshing to ensure the most up to date information will inform the application at the point of submission.

2.2.3. The ES should also explain all the assumptions used in the Gravity Model – for example around the rates of pay, length of contracts and terms and conditions that will prevail and thus contribute to the attractiveness to prospective employees. Such factors will have a significant bearing on the potential for displacement of the labour force.

Supply chain

2.2.4. The ES should set out how EDF Energy proposes to engage with the supply chain locally and increase its capacity to respond to the demands of the project. This will increase the proportion of labour sourced locally with significant socio-economic benefits. Leakage of benefits outside the area is a major concern of the local authorities.

2.2.5. The development of the Economic Strategy is welcomed, though consideration should be given to the opportunity to engage with other relevant stakeholders.

Skills/employment

2.2.6. The ES should recognise the barriers to employment faced by unemployed/under-employed people in the region. Early identification of these needs can lead to a more effective package of mitigation developed with relevant stakeholders.

2.2.7. The report uses the level of JSA claimants as a measure of unemployment but it would also be useful to recognise that the pool of people who are economically inactive, but wanting to work, is often significantly greater than the numbers who are registered as unemployment benefit claimants.

2.2.8. With reference to paragraph 6.2.35 and Table 6.2.4, whilst there will be a positive impact from direct and indirect job creation, there is a risk that this will create displacement elsewhere in the economy as the construction competes for the same local workforce and skills alongside other sectors, for example construction, manufacturing, engineering. This could make it more difficult for local companies to recruit and retain their workforce and this should be considered in the ES in the terms EN-1 requires.

2.2.9. With respect to mitigation, measures should be put in place for the operational and construction phases. For example, the skills and training strategy should aim to maximise the opportunities for local residents at all stages – in particular enabling local people to secure the long-term operational employment opportunities.

Other effects

2.2.10. Consideration should be given to a public attitudes survey aimed at understanding in particular the less tangible social effects such as local anxiety associated with a major development prior, during and following construction. EN-1 (5.12.3) identifies the potential for impacts on social cohesion. Such concerns warrant analysis and mitigation as necessary.

Accommodation provision

2.2.11. The ES needs to consider the impacts of temporary as well as permanent staff on accommodation provision in the local area during the *operational* phase of development (6.2.38). Paragraph 3.5.1 indicates approximately 1,000 additional staff would be employed during outage work, which, for each reactor, occurs for up to three months every 18 months.

2.2.12. Consideration should be given to the likely cumulative impacts where there are coincident outages on reactors, either both the Sizewell C reactors or Sizewell B, or indeed all three. While it is understood that this would not be planned – unplanned outages do occur and are indeed part of EDF's justification for being unable to rationalise some infrastructure (for example parking) across the A, B and C sites.

Tourism

2.2.13. The ES should recognise the potential for wider impacts on the tourism sector than just the take up of tourist accommodation. The spending patterns of, and use of local facilities by, incoming workers will be different to that of tourists, so that should be assessed. There will also be wider perceptions over the attractiveness of the area during the construction, and potentially operational, period which may have an impact on tourism. Equally, however, it is acknowledged that major construction programmes can be an attraction in themselves.

2.2.14. The discussion on study areas in (6.2.5) should recognise the existence of the Suffolk Coast Destination Management Organisation (DMO) area² as a relevant unit for the purposes of assessment. The Suffolk Coast Tourism Strategy³ describes this area.

2.3. Terrestrial ecology & ornithology

2.3.1. The issue of definition of permanent and temporary impacts has been discussed earlier, though with particular reference to this chapter, while paragraph 7.2.29 subdivides temporary impacts in to further phases, it is not clear how that is then reflected in an assessment of the magnitude of impact (Table 7.2.6).

2.3.2. It is important that the study area reflects the actual extent of the impacts – and that includes those impacts associated with the displacement of recreational activity which may intensify activity on other SSSIs and County Wildlife Sites (Table 7.2.1). For the same reasons the Deben Estuary SPA should be included in Table 7.2.2.

2.3.3. Additionally, we have concerns that the proposed 5km study area for bats (Table 7.2.1) may be insufficient to fully understand the significance of development area for bats – this will need to be justified through further survey.

2.3.4. As indicated earlier, we have some concerns that the ES could underplay impacts on features/resources classified as being of local value (7.2.25). As National Policy Statement EN-1 states, the ES must set out clearly any effects on locally designated sites of ecological importance, and on habitats and species identified as being of importance to the conservation of biodiversity. We would expect therefore to see a thorough assessment of the impacts of the development on local Biodiversity Action Plan (BAP) priority habitats and species. Table 7.2.5 omits reference to the latter.

2.3.5. Consequently, while we welcome the commitment to making full use of the mitigation hierarchy (5.4), in order to do this a comprehensive and robust assessment

² www.thesuffolkcoast.co.uk – with area described

³ Page 10 <http://www.suffolkcoastandheaths.org/assets/Projects--Partnerships/BALANCE/TourismStrategy.pdf>

of the impacts, including on BAP species will be required. With reference to the proposed loss of the SSSI, we suggest that the Defra biodiversity offsetting pilot metrics are applied⁴.

2.3.6. In terms of impacts during construction and operation, those listed (7.2.38/39) do not explicitly identify ecological impacts associated with transport movements. The ecological consequences of the displacement of maritime activity, for example recreational sailing, should also be considered.

2.3.7. It is important that the proposed mitigation strategies across the environmental disciplines are closely aligned to ensure the mitigation proposals are complementary, for example for landscape, ecology and recreation. There will be a particular need for them to make provision for ongoing monitoring with associated trigger points for a review of the mitigation as necessary.

Errors/omissions

2.3.8. Southern Minsmere Levels CWS is incorrectly labelled on Figure 7.2.4 (Number "1" is positioned on Goose Hill which is part of Sizewell Levels and Associated Areas – listed as CWS Reference "2" in key).

2.3.9. In Table 7.2.3 Southern Minsmere Levels CWS text is incorrect as this is mainly grazing marsh - this could be due to mislabelling of this site on Figure 7.2.4.

2.3.10. The Annex II status of Barbestelle (*Barbastella barbastellus*) should be noted in Table 7.2.4. Also missing is reference to BAP habitats and species - except for breeding birds.

2.3.11. Paragraph 7.2.11 and Fig 7.2.5 should refer to the north east corner of Sizewell Marshes.

2.3.12. Shingle habitat is missing from identified habitats in Figure 7.2.1.

2.4. Landscape & visual

2.4.1. The proposed scope of the LVIA and the methodology is broadly acceptable, though we again emphasise the need to address terminology with respect to the duration of impact as discussed above. In particular, we welcome the three pieces of work that are ongoing - that is a) a review of the landscape seascape baseline; b) ZTV and LVIA/SVIA viewpoints and c) the development of the Landscape Strategy. We also note that discussions on the 'special qualities' of the AONB⁵ remain ongoing (7.3.2).

2.4.2. It is however important to clarify that at this stage, viewpoints have been agreed for the operational platform only (7.3.3) and not for the whole of the "main development site" as defined on Figure 3.2.1. Further viewpoints will need to be agreed for example for the rail routes taking account of the proposal to store materials adjacent to the line (3.3.3).

2.4.3. We note the recognition of the risks to the purpose of the designation of the AONB identified in EN-6, Volume 2. This statement (7.3.8) and section 7.3.49 should consequently acknowledge that the need for offsetting residual impacts is highly likely, a precedent for which exists with the Sizewell B Dry Fuel Store⁶.

2.4.4. We note and welcome that landscape should be taken also as seascape as set out in EN-1 (7.3.6) and that it is recognised that there will be offshore visual receptors (7.3.17 should therefore refer to LVIA and SVIA). An LVIA and SVIA

⁴ <https://www.gov.uk/biodiversity-offsetting>

⁵ The glossary reference to AONBs should refer the reader to <http://www.landscapesforlife.org.uk/>

⁶ <http://www.suffolkcoastandheaths.org/assets/Grants--Funding/AAF/AAF-leaflet.pdf>

assessment to reflect the seasonal changes, and a night time assessment in both cases, will also be needed (lighting from the Operational Service Centre is a particular concern). The ES should therefore provide an indication of the locations, height, design, sensors and luminance of all construction site floodlighting (including the jetty) and all permanent site lighting, together with details of any mitigation measures used to;

- Limit obtrusive glare to nearby residential properties including the extent of light reduction achieved,
- Minimise sky-glow.

2.4.5. Regional seascape units were used for the assessment of the Galloper wind farm, and suggest that these may also inform discussion of the seascape character of the study area.

2.4.6. The ES will need to consider seascape and visual impacts associated with shipping and rail *activity* (i.e. not just the existence of the jetty and the rail line, but the associated transport movements), respectively, during construction. The impacts of the stacks associated with the fuel store and reactor domes along with those related to the permanent beach landing facility need to be reported.

2.4.7. With reference to cumulative effects (7.3.51) Galloper Wind Farm substation *will* need to be included in this assessment. The existing Gabbard onshore infrastructure forms part of the baseline.

2.5. Amenity & recreation

2.5.1. The ES should present a fuller understanding of the likely impacts on recreational activity as a consequence of the development than the Scoping Report suggests. In particular, there needs to be a better appreciation of impacts of the incoming construction workers associated with the campus and, furthermore, the indirect effects arising from changing habits of existing recreational users in response to the development.

2.5.2. While it is understood that high quality leisure facilities would be provided within the campus accommodation, with up to 3,000 bed spaces, some workers will undoubtedly make use of the high quality environment during their residency at the campus.

2.5.3. While the Scoping Report touches on deflection (7.4.22), the study area of 2km (7.4.12) does not have a clear logic and will not be sufficient to address this – it does not even include the entirety of the blue rail route – omission of Aldeburgh/Thorpeness is also particularly noticeable.

2.5.4. The ES will need to present a thorough understanding of how people are using the area at the moment and how those habits are likely to change during the construction and operational phases of development.

2.5.5. In particular, it needs to examine where people may be deflected to and the sensitivity of those sites to increased recreational pressure – for example increased dog walking on SSSIs. It will also need to look at how workers, both in the construction and operational phases may access the site using the rights of way network and how this access may be affected and enhanced to offset this. For example, Bridleway 19 is currently used by commuting workers as well as for recreation. Its temporary closure could deflect cyclists on to busier roads (or indeed participation in cycling/walking may decrease) so this will need to be assessed and mitigated for to ensure a similar standard of recreational opportunities remain available during and post-construction. The findings of this work should also inform the HIA.

2.5.6. These are key construction impacts that are not adequately captured (7.4.35). It should also be recognised any changes to patterns of recreational use could have wider economic consequences, given that high quality recreational opportunities are a significant driver of the local tourist economy (with trails promoted nationally). So, with displacement of recreation is potentially displacement of income. The surveys planned (7.4.16), in addition to capturing quantitative and qualitative data on the use of public rights of way, should attempt to capture information on local spending. Additionally, there may be actual physical damage to rights of way including that caused direct by the construction work itself and by possible increased level of use by construction workers.

2.5.7. The ES should assess impacts on open access land – this is omitted from further baseline research (7.4.18) and as a possible impact of the development (7.4.35). Paragraph 7.4.13 should also refer to *restricted* byways in its description of a right of way, and carriage driving should be included within list of extra rights. Figure 7.4.1 also has a number of errors that need to be addressed - Roads Used As Public Paths should be shown as Restricted Byways, for example.

2.5.8. In terms of mitigation (7.4.40), it is especially important that long distance routes are kept open during the construction phase. We would also suggest that, in line with the EN-1, the ES should set out opportunities to enhance green infrastructure in the locality by, for example, creating new public access, be it a right of way or open access land, having regard to other constraints, such as ecology.

2.5.9. Re-establishment of rights of way should be to a level commensurate with expected increased use – for example by staff accessing the site during operation.

2.6. Terrestrial historic environment

2.6.1. The impact on Leiston Conservation will need to be assessed – Sizewell B is clearly visible from within and adjacent to it (7.5.20).

2.6.2. It should be noted that English Heritage has now listed at Grade II several WWI, WWII and Cold War military structures at Orford Ness (7.5.22).

2.6.3. An assessment in association with Conservation Officers is welcome, though should include non-designated heritage assets in addition to designated ones (7.5.26).

2.6.4. Table 7.5.1 relies heavily on criteria drawn from the DMRB and its appropriateness beyond road schemes is questionable – reference should be made to English Heritage's Conservation Principles and the new British Standard. In respect of paragraph 7.5.29, reference to '*Standards for Field Archaeology in the East of England*' (Gurney 2003, East Anglian Archaeology Occasional Paper 14)⁷ and the Suffolk County Council Archaeology Service Conservation Team documents '*Requirements for Trenched Archaeological Evaluation 2012 Ver 1.3*' and '*Requirements for Archaeological Excavation 2012 Ver 1.1*'⁸ should also be made

2.6.5. While Table 7.5.1 refers to historic buildings (which clearly could include non-designated as well as designated heritage assets) and historic landscapes, Table 7.5.2 refers exclusively to impacts on designated heritage assets. As mentioned above, non-designated heritage assets should not be excluded from an assessment of the magnitude of change and should therefore be reflected in paragraphs 7.5.45/47/52/53.

2.6.6. The proposed terminology used in assessing significance (7.5.39) could usefully reflect that used in the Section 12 of the NPPF, i.e. 'substantial' and 'less

⁷ <http://www.eaareports.org.uk/Regional%20Standards.pdf>

⁸ <http://www.suffolk.gov.uk/libraries-and-culture/culture-and-heritage/archaeology/>

than substantial'. These are the tests that are applied on a daily basis to heritage assets and are terms in widespread use. 'Less than substantial' could be graded into differing kinds of effects that are not substantial. It is noted that there is some mapping of terms in the Ecology section (Table 7.2.8) to maintain consistency with industry-standard terminology and this could equally be applied here.

2.6.7. In addition to the assessment of inter-relationships and cumulative effects, which is welcome, it may be that individual heritage assessments are required to be undertaken of those designated heritage assets of the greatest importance (and, therefore, sensitivity) within the Historic Environment Study Area - such as Scheduled Monuments and Grade I and Grade II* listed buildings, in order that impacts arising from the proposal can be most fully understood.

2.7. Marine historic environment

2.7.1. No comment

2.8. Noise and vibration

Traffic – related impacts

2.8.1. It is important that the Noise & vibration and Air Quality Assessments are based on the information contained within the Transport Assessment (TA). Data in the TA should therefore be presented in the format that it will be used in the noise and air quality assessments for example 18 hour, 8 hour, hourly, 24 hourly flows, together with proportions of heavy goods vehicles and average speeds to allow transparency and cross checking.

2.8.2. The noise level monitoring locations look to be comprehensive, though consideration should be given to the need for additional points on routes likely to be used by construction workers, such as the A1120. Any short term monitoring of road traffic noise should be carried out strictly in accordance with the “Shortened measurement procedure” as set down in the Calculation of Road Traffic Noise methodology, and be carried out over a full three hour period within the stated hours and not over shorter snapshot periods.

2.8.3. It is acknowledged that road traffic noise monitoring is useful for any noise model calibration and verification work, but that noise level changes during the construction period and once the site becomes operational would be established by calculation and direct comparison of the relevant scenarios.

2.8.4. The number of noise sensitive properties affected in each scenario should be included, so that the overall impact and scale of effects can be assessed. Rather than following the Design Manual for Roads and Bridges to the letter, which may result in the worst affected façade subject to change being counted which is not always the façade facing and closest to the route, the ES should provide a simple assessment of noise level changes for the façade that is closest to the route to allow residents the opportunity of gauging the potential direct effect.

2.8.5. Inclusion of a preliminary programme of construction activities and plant use, to identify impacts and variability throughout the construction period, would clarify impacts. Also, whether night-time traffic movements would be necessary, either for workers or construction vehicles, and any shift working and changeover times, if significant.

2.8.6. It is noted that the currently proposed length of the construction period is estimated to be seven to nine years (plus time for site preparation). The definition of “long term” and criteria for the assessment of magnitude should follow recommendations in the most up to date versions of BS5228 with respect to noise and also vibration, and any other relevant documents. As mentioned earlier, the ES

should generally maintain consistency in the definition of terms (temporary, long, medium short et cetera) unless there is a clear reason to depart from this.

2.8.7. It is noted that the NPPF and specifically the associated Guidance relating to Noise is not referred to and the validity of Table 7.7.3 is queried. Also, whether separate assessment of magnitude criteria should be applied to road traffic noise increases on the construction traffic routes, in accordance with the guidance for short term impacts contained in DMRB. The content of Table 7.7.5 is agreed.

2.8.8. The NPPF Guidance⁹ refers to the Noise Policy Statement for England (NPSE), which includes the types of noise which are within its scope, which include:

- “environmental noise” which includes noise from transportation sources;
.....
- “neighbourhood noise” which includes noise arising from within the community such as industrial and entertainment premises, trade and business premises, construction sites and noise in the street.”

2.8.9. Consideration should be given to the appropriateness of referring to this Guidance (given its status in the NSIP regime) and the description of “Effect Levels” within the assessment. As mentioned above, it is noted that there is some mapping of terms in the Ecology section (Table 7.2.8) to maintain consistency with industry-standard terminology and this could equally be applied here.

2.8.10. The assessment of vibration from road traffic is welcomed. In accordance with guidance, cumulative effects are to be addressed, which is also welcomed.

2.8.11. Generally, the proposed methodologies are acceptable, however, since drafting of the Scoping Report, BS5228 has been updated to BS5228-1:2009+A1:2014 and as mentioned previously, the most up to date guidance available at time of assessment should be used. Furthermore, we note that where professional judgement is relied upon (7.7.9), this should be in the form of evidence-based judgements, rather than reasoning alone.

2.8.12. With respect to road traffic noise impacts, an indication of whether any dwellings adjacent to new or altered lengths of carriageway and also the construction traffic routes would qualify for noise insulation under the Noise Insulation Regulations 1975(as amended), with appropriate explanations, should be included. Any other mitigation measures or mitigation schemes identified for further consideration should be outlined.

2.8.13. With respect to the effects of noise and vibration on people and wildlife, the evidence of different noise levels on human physical and mental health, both of acute and chronic noise exposure has a robust evidence base. This potentially includes comparative studies with non-human species exposed to different noise levels. For example there is a large evidence base on the physiological and behavioural effects of different noise exposure levels on rodents (7.7.15).

Construction-related impacts

2.8.14. The 33 measurement locations and measurement protocol described in the Scoping Report has been agreed with the Environmental Protection Team at Suffolk Coastal District Council. The ES should present the noise monitoring data together with an assessment of magnitude of impact and sensitivity of receptor.

⁹ <http://planningguidance.planningportal.gov.uk/blog/guidance/noise/noise-guidance/>

2.8.15. Where noise or vibration from site construction working is anticipated to have adverse effects on occupiers of nearby residential properties, based on the prevailing background noise levels, utilising BS:5228:09 and BS:4142:90; the ES should detail all such construction and demolition works (for example diggers, excavators, piling, riveters, mixers, explosives, pneumatic breakers, drills, dewatering pumps, boring equipment, compressors, generators etc.) and indicate the mitigation measures to be taken either;

- At source,
- By way of barrier or shielding,
- Any other form of mitigation.

2.8.16. The ES should also detail the degree of noise reduction likely to be achieved by the mitigation measures by way of comparison with the existing background and ambient noise levels, measured as part of the scoping process. Methods of noise or vibration attenuation should be specified for each specific construction activity so as to achieve 'Best Environmental Practice' within the ES. Any other acoustic or vibration data in respect of confined tones or low frequency noise propagation should also be made available within the ES.

2.8.17. All site transportation movements or essential construction works (e.g. dewatering, dredging, marine landing operations etc.) which may be adversely affect nearby noise sensitive properties during the evening or at night should be particularly highlighted as these may cause sleep loss. Mitigation will be particularly important in these circumstances.

2.8.18. It is noted and agreed that BS:8233 will be used as design criteria for the new campus accommodation.

Noise & vibration – operational impacts

2.8.19. Projected levels for general site noise from the newly constructed Sizewell C power station should be calculated and represented as a $L_{Aeq(1hour)}$ value during daytime hours and $L_{Aeq(5\text{ minute})}$ value during night time hours at all nearby noise sensitive properties. If noise from the site is anticipated to adversely affect occupiers of any nearby residential properties based on the prevailing background noise levels, then proposed methods of noise attenuation should be specified to achieve 'Best Environmental Practice'.

2.8.20. Projected noise levels for grid reconnections following reactor trips and outages shall be calculated and represented as a $L_{Aeq(5\text{ minute})}$ value at all nearby noise sensitive properties. If this noise is anticipated to adversely affect occupiers of any nearby residential properties based on the prevailing background noise levels, then proposed methods of noise attenuation or time limitations on reconnection should be specified to achieve 'Best Environmental Practice'.

2.8.21. Projected noise levels for the proposed 'Stand-by Diesel Generators' shall be calculated and represented as a $L_{Aeq(5\text{ minute})}$ value at all nearby noise sensitive properties. If this noise is anticipated to adversely affect occupiers of any nearby residential properties based on the prevailing background noise levels, then proposed methods of noise attenuation or time limitation's on testing times should be specified to achieve 'Best Environmental Practice'.

2.8.22. 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 should be provided.

2.9. Air quality

Traffic-related impacts

2.9.1. No reference has been made to the National Planning Practice Guidance relating to Air Quality. Consideration should be given as to whether this is relevant.

2.9.2. The air quality monitoring regime is acceptable. The Scoping Report advises that Suffolk Coastal District Council is in the process of consulting with the Department of Environment, Food and Rural affairs (DEFRA) on the need to declare an Air Quality Management Area (AQMA) in Stratford St Andrew (7.8.12). DEFRA has now confirmed the need for an AQMA to be declared at this location and, following a Public Consultation currently underway, the AQMA Order will be made in June 2014.

2.9.3. Impacts at locations such as Yoxford, and along the B1122, such as Theberton and Middleton Moor where there are a relatively high number of properties in a rural location, should be specifically quantified. Numbers of properties affected should be included, as well as timescales and durations, which would be relevant to the National Objective Limit levels for the significant pollutants (including nitrogen dioxide and particulate matter (PM₁₀), as set out in the Local Air Quality Management Regime'). The road traffic assessment pollutants of nitrogen dioxide and particulate matter are agreed.

2.9.4. It is noted that traffic datasets derived from the Transport Assessment will be used.

2.9.5. The most up to date guidance available at the time of assessment should be used. A number of the relevant documents are under review at the present time. Reference could be made to the Suffolk Local Authorities Air Quality Management and New Development 2011 Planning Guidance¹⁰.

Construction – related impacts

2.9.6. The ES should detail all potential construction site operations which may give rise to atmospheric concentrations of particulate matter (PM₁₀) or dust (e.g. excavation, demolition, use of explosives, movement of vehicles, loading operations, stockpiling of soil and rubble, crushing of material etc.). These should be specified together with the point source location and the particular methods of dust suppression to be used for each specific activity. The study area described in 7.8.19 should reflect that dust emissions may arise from transport modes other than road – i.e. by rail too and these may arise further than 500m from the site entrance.

2.9.7. The predicted concentrations of particulate matter (PM₁₀) and dust for each receptor should be formatted for comparison with the Local Air Quality Management Regime and the objectives included in the Air Quality (England) Regulations 2000 and Air Quality (England) Amendment Regulations 2002. The methodology as laid out in the Scoping Report for evaluating the magnitude and significance of air quality effects from construction is agreed.

2.9.8. If any of the above Air Quality Standards or Objectives is predicted to be exceeded by the above mentioned activities, further assessment will be required. This may include monitoring at relevant receptor locations, detailed computer modelling and investigations of solutions to reduce pollutant concentrations.

Operational impact

¹⁰ <http://www.suffolk.gov.uk/business/planning-and-design-advice/supplementary-guidance-air-quality-management-and-new-development-2011/>

2.9.9. The ES should detail the atmospheric concentration of the seven pollutants included in the 'Local Air Quality Management Regime' namely; carbon monoxide; nitrogen dioxide; benzene; 1,3-butadiene; Lead; sulphur dioxide; and particulate matter (PM₁₀) 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 objectives included in the Air Quality (England) Regulations 2000 and Air Quality (England) Amendment Regulations 2002. Again, Sizewell Beach should be included as a relevant receptor location for the pollutant objectives with averaging times of 15 minutes and 1 hour.

2.9.10. Predictions should also include the combined emissions arising from Sizewell B and C power stations at the nearest relevant receptor locations. It is important to also include emissions from standby equipment. The methodology for evaluating the magnitude and significance of air quality effects from site operation as laid out in the Scoping Report is also agreed.

2.9.11. Full details shall be submitted regarding the type, location, chimney height requirements and emissions from the Standby Diesel Generators. If any of the above Air Quality Standards or Objectives are predicted to be exceeded by the site related Combustion Processes, including stand-by equipment, further assessment will be required. This may include monitoring at relevant receptor locations, detailed computer modelling and investigations of solutions to reduce pollutant concentrations.

2.10. Soils & agriculture

2.10.1. Reference is made to returning land to agriculture (7.9.33); we would prefer, as part of the 'Estate Vision' to see the whole of the estate returned to semi-natural habitats with gradation of public access south to north.

2.11. Geology & land quality

2.11.1. A site survey including samples from 150 locations across the Sizewell C site has been undertaken for the presence of Contaminated Material. This survey has not indicated any significant forms of contamination and as such the site remains in a low to very low category of potential risk for contamination. Additional sampling will need to be undertaken during site excavation and any identified contamination will need to be safely removed or encapsulation on site. The assumption that there is no anthropogenic contamination beyond the normal application of fertilisers and pesticides should however be validated (7.10.24).

2.11.2. Details of any material (e.g. soil, peat, contaminated material *et cetera*) removed from site for disposal purposes or safely encapsulated on site shall be notified to both the Environmental Protection Team at Suffolk Coastal District Council and the Environment Agency. Validation shall be required following this remediation action to indicate the site is suitable for its new specified use.

2.11.3. 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.

2.11.4. With reference to the samples undertaken (7.10.5/13) it is not clear for which radionuclides they were tested or against what they were compared.

2.12. Ground water

2.12.1. The ES should identify the magnitude and any potential impact on hydraulic continuity caused by: dewatering, coffer dam construction, spoil heap/stockpile leachate, runoff or infiltration, which may adversely affect private water supply quality in the area, and specify proposed measures to protect the aquifer source.

2.12.2. We are particularly concerned that the potential impacts of the construction of the bridges and their ongoing impact on groundwater processes are assessed and managed.

2.12.3. Groundwater monitoring (including for radiochemicals) should be included within the mitigation plan and this should cover flows outside the cut-off wall in the SSSI. There should not be a complete reliance on modelling – this will need to be ground-truthed (7.11.40).

2.13. Surface water

2.13.1. With reference to Table 7.12.3, we suggest that watercourses in, and feeding into/adjacent to, protected sites should be assigned as being of high value.

2.13.2. During construction the cut off wall adjacent to Sizewell drain could impact on surface water hydrology.

2.13.3. As with groundwater, the ES should include provision for monitoring, during and post construction, which links to appropriate mitigation as necessary (7.12.38).

2.13.4. The ES should assess all temporary (for example for the campus) and permanent foul water drainage arrangements, with any sea water disposal discharge designed to;

- Minimise any harmful effect on sea life diversity,
- Control temperature and turbidity which may encourage algae blooms.

2.14. Coastal geomorphology and hydrodynamics

2.14.1. It is important that the study area is clearly defined – which is not the case in Figure 7.13.1. The study area must include the potential impact of interrupted 'natural' sediment flow on the coastline from the Blyth Estuary to at least Orford Ness. However, if the observed net sediment transfer is southwards (7.13.3), the southern boundary of the Telemac study needs to be moved further south to include Shingle Street to correct the current northern bias.

2.14.2. The ES should recognise that during the lifetime of the Sizewell C project rates of erosion could be significantly different to the current era. 7.13.6 notes that there has been high periods of erosion in the past but since 1925 it has been relatively low. However, 1925 is just 90 years ago and this development will last more than 100 years into the future and therefore the implication that erosion will stay low may be misleading. In this context, full consideration should be given to the predicted impacts of climate change including the potential for acidification / chemical change to the sea over the coming decades and its impact on the protective crag rock that the site depends upon for its protection.

2.14.3. The ES should ensure that it considers the impacts arising on a worst-case basis – for example, while the jetty is described as temporary, the ES should ensure that it assesses its maximum possible lifespan.

2.14.4. In the Marine Ecology section outfall structures are identified as potentially affecting sediment transport (7.15.32). This is not recognised in the corresponding section of the Coastal Geomorphology chapter.

2.14.5. As detailed in other sections of this report, we have concerns with the guidelines to be used to determine descriptions of magnitude, particularly so given the predominantly soft nature of the Suffolk coastline. In these circumstances impacts of the development may well be quite localised within the study area, but nonetheless have very material consequences if those impacts affect property frontages. Table 7.13 is constructed in such a way that, for example an effect of a ten year duration, affecting half the study area would be described as low magnitude.

2.14.6. With respect to assumptions and limitations (7.13.21), the ES should acknowledge that the baseline scenario and also the potential impacts of the new build and operation of the site will be difficult to predict with high confidence and so a range of potential outcomes need to be forecast and which will require ongoing monitoring to review and respond to in either a proactive or reactive fashion. The monitoring plan and associated interpretation / response liabilities are a critical issue for the local authorities.

2.14.7. The section on mitigation (7.13.27) should acknowledge the potential for the need for the protection of the Sizewell C site (possibly A and B sites too) prior to full / final removal, requiring interventions that disrupt 'natural' sediment movement across the frontage, which produces a negative impact on adjacent shorelines i.e. Thorpeness, Aldeburgh, Orford and (less likely) Minsmere and Dunwich. These impacts may cause significant effects and require mitigation, albeit decades hence. The ES should recognise this and create a process under which this risk is assessed and appropriate mitigation planned and delivered.

2.14.8. It is absolutely critical that the ES sets out how the impacts of the development will be monitored for the lifetime of the development and how that monitoring will inform any remedial action required.

2.15. Marine water quality and sediments

2.15.1. The ES should clarify which radionuclides have been measured (7.14.17). Furthermore, evidence has shown that radionuclides, through the process of adsorption, will concentrate in fine sediment area, for example in mud flats and salt marshes. Therefore, in terms of sediment analysis, further studies should be undertaken within the Alde and Ore estuary to establish the monitoring baseline on contaminate build-up.

2.16. Marine ecology

2.16.1. Underwater vibration should be identified as a potential impact (7.15.25), the mitigation for which should include monitoring.

2.16.2. It is reported that Sizewell B 'impinged' Sprat, herring band whiting 'in large numbers'; it is not clear how this would score against the degrees of magnitude in 7.15.16. The ES should report on the cumulative impacts on commercial fisheries through direct fish mortality and through loss of fishing grounds associated with Sizewell B, C (including jetty/outfall construction) and laying of offshore wind farm cables (and/or placement of turbines) for both Galloper and other windfarms within recognised commercial fishing areas.

2.16.3. Consideration should be given to aligning this study area with that related to the HRA process – as mentioned above the interrelationship between the EIA and HRA process should be clear.

2.17. Navigation

2.17.1. The ES should assess the potential for ecological effects to arise from rerouting of shipping traffic (7.16.22).

2.17.2. Recognition should be made of the opportunities on the Alde-Ore estuary (7.16.9).

2.18. Radiological

2.18.1. The ES should assess the need for monitoring (during appropriate conditions) of airborne radiological pollution through either aerosol (very fine spray) or sea spray dispersal – reference should be made to the research undertaken at North Uist.

2.18.2. The Scoping Report does not specifically rule out the future use of Mixed Oxide Fuels (MOX) at Sizewell C. The ES should either rule out the use of MOX fuel or comment on the radiological significance and justification for this fuel if it is intended to be used.

2.18.3. The ES should identify and compare baseline/existing terrestrial and marine radiological data with any projected data for the new Sizewell C site.

2.18.4. 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 'lifetime' of the site.

2.18.5. Any intended off-site storage of radioactive waste, whether interim or permanent, should be detailed in full, including location and capacity, together with the radiological significance and justification for storing this type of fuel off-site.

2.18.6. The issues surrounding the utilisation Sizewell C for the storing of radioactive waste derived from other sources, together with any impact of increased radioactive discharges that may arise in such circumstances, should be considered within the ES.

2.18.7. We would ask PINS to confirm through which process would the potential environmental effects of an incident involving radioactive material be assessed - for example impacts on ground water/surface water features should emergency cooling be required. The Scoping Report gives little attention to the potential environmental implications associated with the storage of spent fuel (section 3.8).

2.19. EMFs

2.19.1. The ES should identify any pylon or overhead power-line/cabling alterations to be undertaken in connection with this development, together with any likely increases of the Electro-magnetic radiation fields, which may adversely affect occupiers of nearby residential properties.

2.20. Health and Safety

2.20.1. The ES should detail a health and safety risk analysis for site workers and any members of the public which may be adversely affected by the constructional phase of the works. A further health and safety risk assessment should be provided to cover public safety for all access along the shore line and public areas surrounding the site once Sizewell C is operational.

2.21. Conventional waste

2.21.1. The ES should detail all non-radioactive wastes stored or disposed of on site, identifying and categorising material so as to indicate 'Best Environmental Practice' is being taken, for example storing fuel oil stored in double-bunded tanks etc.

3. ASSOCIATED DEVELOPMENT

3.1. For all sites:

3.1.1. the **amenity and recreation** studies should gather information on the extent to which local roads are used by all non-motorised users, particularly pedestrians. Generally, it should be noted that mitigation could also be achieved by *enhancing* local non-motorised access.

3.1.2. **Ecological studies** should have regard to Biodiversity habitats and species. The study area for bats in particular will need to be agreed.

3.1.3. Viewpoints will need to be agreed for the **LVIA**. Mitigation for landscape and visual effects should include advance planting and/or 'instant' hedging – else

mitigation is not likely to be effective during the lifetime of the associated development.

3.1.4. It is agreed that **noise and vibration** impacts should be assessed using the same methodologies as discussed above. Care however needs to be taken with the description of potential mitigation measures – there is reference in Tables 8.3 and 8.6 to “screening or planting” for noise and vibration mitigation. Planting would not necessarily provide adequate noise mitigation unless very dense and further explanation of this would be helpful.

3.1.5. environmental impacts on nearby residential properties (e.g. construction works, noise, dust, lighting, foul drainage etc) should be assessed and mitigation measures provided where necessary.

3.1.6. An Air Quality Assessment and calculated Traffic Predictions should be provided within the ES for the chosen park and ride sites and should any of the Air Quality Objectives (AQO) be predicted to be exceeded, then mitigation measures should be recommended.

3.2. Northern Park and Ride

3.2.1. The access details will need to be agreed with the Highways Authority. A solution is required to provide a layby area for long vehicles to pull in once they have crossed the East Suffolk railway line. There have been discussions with Network Rail but no proposals have been presented to date.

3.2.2. The impact of the new car park to the south of the rail station will need to be considered in any assessment.

3.3. Southern Park & Ride

3.3.1. The access details will need to be agreed with the Highways Authority. There are concerns about the safe egress of traffic from the existing slip road onto the A12 which will need to be assessed and appropriate mitigation proposed

3.3.2. In view of the likely need to close the existing bridleway through the site, local rights of way enhancements are particularly important for this site.

3.3.3. Reference is made to potential ecological impacts on the River Deben – this will need to be picked up through the HRA process.

3.4. Rail Line Extension

3.4.1. The proposed new rail routes into the site cross a number of Public Rights of Way. There appears to be an assumption within the report that these routes will be closed or diverted. Although this may be considered for temporary works, more sustainable mitigation will be required for the proposed construction period. Mitigation should include the potential for grade separation or combining with safe and convenient road crossings (Table 8.9).

3.4.2. Further information will be needed with respect to the impact of the proposed rail routes on the existing highway network, especially with respect to any proposals for new rail crossings.

3.4.3. The amenity and recreation study assess the use of open access sites in the area that may be affected.

3.4.4. The selection of viewpoints will need to have regard to the potential for soil storage alongside the rail line. Mitigation should therefore consider a means of minimising this storage.

3.4.5. Noise disturbance from unloading of materials may be a source of concern should the potential option of a terminal north of King George's Avenue, Leiston be used at unsociable hours.

3.5. A12 Improvement – Farnham Bend

3.5.1. The options presented in the report will need to be assessed in line with Section 6.3 of the report together with the additional assessment criteria identified in this response.

3.5.2. The options presented in the report remain as presented in the Stage 1 Consultation. Based on the evidence presented to date, these are not considered likely to be sufficiently extensive or acceptable and the local authorities maintain their support for a bypass of the four A12 villages of Marlesford, Little Glemham, Stratford St Andrew and Farnham. The ES will need to ensure that adequate mitigation is provided to address impacts arising in all of these locations.

3.5.3. The ES will need to assess the construction method and layout including timing of works and piling for example. Consideration should be given to noise and dust from construction works and noise from the new road layout. Mitigation measures such as screening, quiet road surfacing, speed limits that can reduce these impacts on local residents should be discussed within the ES. Air Quality modelling should also be included for this purpose and should any of the Air Quality Objectives (AQO) be predicted to be exceeded, then mitigation measures should be recommended.

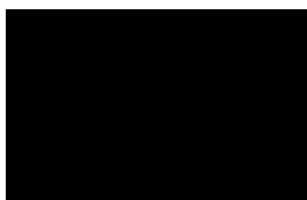
3.5.4. Similar assessments would likely be needed for any other highway improvements.

3.6. Visitor Centre

3.6.1. The ES will need to detail at what point the Visitor Centre will be constructed and then become operational –cumulative impacts will arise with the other associated development sites as well as the main site development. It is likely that this facility will attract more pedestrians and cyclists to the area and sufficient mitigation will be required to accommodate this increase in vulnerable road users.

We trust that these comments are useful. If they require further clarification, please do not hesitate to contact us on the details above.

Yours sincerely



Michael Wilks
Planning Projects Manager
Suffolk County Council



Philip Ridley
Head of Planning & Coastal
Management
Suffolk Coastal District Council

Sweffling Parish Council

c/o 

F.a.o Laura Allen
The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol
BS1 6PN

Your Ref: EN010012
21st May 2014

Dear Madam,

Re. response to application by EDF Energy for an Order Granting Development Consent for Sizewell C Proposed Nuclear Development - Scoping Consultation.

Sweffling Parish Council has been identified as a consultation body which must be consulted by the Secretary of State before adopting its scoping opinion. As Clerk to Sweffling Parish Council I am writing on their behalf to inform the Secretary of State of information this Council considers should be provided in the environmental statement.

Sweffling Parish Council has two areas of concern that particularly affect the parishioners of Sweffling:

1) Transport Assessment (2.3.8)

Sweffling village is 3 miles from the A12 and most south-bound journeys from the village require a right hand turn onto the A12 either at Farnham or Marlesford. We are informed that during the constructional phase there could be extra traffic on the A12 of lorries at the rate of one every 45 seconds. We are concerned for the safety of vehicles turning right to make their daily routine journeys and the long delays which such right turns might incur.

Because of the increased heavy traffic on the A12 we are concerned that other vehicles may start to use the smaller, quieter routes through

villages such as ours. This would be inappropriate as these routes are narrow and often single-track.

2) Health Assessment

Nowhere in the main text of the scoping report can we see any reference to increased health services for the 3,600 non home-based workers.

Swefling Parish Council is concerned that local doctor's surgeries, ambulance services, hospitals, dentists; indeed any related branch of the already pressurised health service will be compromised for the permanent population of this area.

Thank you for seeking our comments. We hope this information can be acted upon for the benefit of parishioners.

Yours faithfully

Mrs Jill Abbott
Clerk to Swefling Parish Council

This Parish Council would like to register its disappointment that only 4 weeks were allowed in which to respond to such a weighty document, little enough time to properly assess the report let alone share responses with colleagues.

Theberton and Eastbridge Parish Council [TEPC] represents a very small rural community of 240 residents, who will suffer the biggest adverse impact from EDFE's plans for their proposed twin reactor nuclear power station at Sizewell. This includes a campus for up to 3000 workers on the edge of Eastbridge, and the use of the B1122 as the only access to what will be 4 nuclear power stations.

There is widespread concern in this parish and beyond that the developer's plans relating to the siting of the campus, and the reliance on the B1122, will fundamentally change, indeed destroy, the character of this small tranquil area, for many years and probably for ever. It is therefore very disappointing that future consultations seek only to "inform and refine the development proposals", which suggests to us that there is little willingness to consider making any critical changes, whatever arguments are put forward by the host communities and others.

Indeed there is little or no evidence in the Scoping Report that concerns raised by this parish council, individuals and interested bodies at Stage 1 about key issues affecting this community have been seriously addressed by the developer. There has been little or no change in their preferred direction (eg regarding the siting of the campus and the use of the B1122), and very little information about studies, eg on transport, carried out over the last 18 months. Until more information is provided, those consulted have to make assumptions, which is not conducive to constructive engagement with the developer.

The following comments have reference numbers from the document where relevant.

1.5.3 Regarding EDFE's preferred accommodation site, there is no evidence that ongoing consultation "continues to inform and refine" development proposals. Concerns have been expressed at and since Stage 1 Consultation but EDF's Option 1 for the campus remains in place. Also see 1.5.6

2.1.9 We question whether in reality 'there is sufficient land area within the nominated boundary' – we believe Sizewell C is only 32ha whereas Hinkley C is 58ha. If EDF need more land this would mean eating into even more AONB land. We also question assurances that the site is safe from flooding and coastal erosion, bearing in mind major historical coastal damage and erosion caused by very recent tidal surges on this fragile, unpredictable coast. Many experts agree that there is no certainty on this issue.

2.1.12 It is hard to see how, given the very particular and special environmental features of this area, this site is entirely suitable for the proposed build and at least as viable as other potential sites. This Parish Council would appreciate access to more information regarding the Habitats Assessment of other potential sites and an understanding of the nature of, and significance in planning terms of 'potential adverse impacts on European Sites'. We note 4.1.4

2.3.8, and 2.3.9 EDFE's use of the B1122 country road as the only route in and out of the site, and only emergency evacuation route to the A12 must be challenged, and it does not satisfy the requirement for two separate access roads. It would seem that a full TA might only be available at the DCO application. However,

we would like to stress how important it is that full information on transport assessment is shared with interested bodies by the interim Stage 2 consultation to allow informed response by those affected.

2.3.10 Health Impact Assessment – this is a key issue and must be given due weight. Ever since the Stage 1 Consultation, EDFE’s proposals have had an adverse impact on local people - including the many older and retired people - through mental stress. The prospect of living next door to 3000 workers for years, instead of (for Eastbridge) barely 100 neighbours – this alone has already caused untold stress. Add to this the physical harm that can be caused by noise, air and light pollution, and fears about crime and anti-social behaviour, and security. It is vital that the Scoping Report recognises the adverse effects that have been felt for nearly two years already, and will continue. There will be a cumulative effect of course if the build goes ahead.

2.3.13 Community and Equalities: The footprint of the proposed campus option 1, plus social facilities for workers, and the adjacent laydown area, is clearly out of scale with the footprint of the closest village (Eastbridge, 300m away) and completely out of sympathy with the environment. It is hard to see how a socio-economic assessment can satisfy common sense. Much of the impact on human receptors cannot be measured. It is to be hoped, indeed it is essential, that any assessment takes due regard of the less tangible impacts.

3.3.4 The B1122 should be included here and investigated as not fit for purpose. Like the A12, it has at the very least the ‘potential for congestions and exacerbate safety concerns’ at a number of places along it. A new Sizewell Relief Road is required.

3.8 Spent Fuel: increased storage of spent nuclear waste at Sizewell is of great concern to local people, particularly as no permanent solution is likely to be available for many, many years to come.

Table 5.1 Given that the area occupied by the proposed campus is surely of **“high value/sensitivity”** why is it still being considered, when alternatives are available? It has often been suggested to EDFE that smaller dispersed sites in centres where the size of population and local infrastructure could better absorb the impact of up to 3000 workers, would be a better way to mitigate the impact of the build. There is no evidence that this suggestion or similar has been seriously researched by EDFE, including the possibility of designing off-site accommodation so that one or more, with a change of use application, could become legacy housing. If it has, the research results should be made available. It is hard to avoid the impression that the campus location is one driven by commercial considerations, with no genuine thought given to the enormous negative impact on the local community. The Scoping Report should cover this question fully.

5.4 Mitigation: more information is needed on noise, light and air pollution, and vibration from increased traffic on the B1122 likely to cause physical damage to buildings. There appears to be no information on how EDFE intend to calculate the expected light pollution, or how they will deal with it.

6.2.21, 6.2.22, 6.2.27, 6.2.28 “Some impacts cannot be quantitatively assessed...so a qualitative assessment will be used”. Many aspects of the quality of life in this beautiful rural countryside will be destroyed by EDFE’s proposals. Who will arbitrate on EDFE’s criteria assessment? How can the Parish Council and others engage constructively on the impact effects on our local community?

6.3.54 Transport: it is noted that, as well as construction traffic including HGVs, home based workers cars, workers buses from the park and ride locations at Wickham Market and Darsham using the B1122 from Yoxford, there will also be dedicated bus services from Ipswich and Lowestoft and buses picking up workers

from Darsham and Saxmundham stations using this road. The transport study should clearly include all of this traffic and the impact it will have, including the junction of the A12 with the B1122 at Yoxford.

7.3.42 It is to be hoped that **“tranquillity”** will be recognised as a particular and highly valued feature of this parish, as well as of adjacent recreational areas.

7.3.50 The cumulative effects of all these aspects should be carefully considered.

7.4.36 Light pollution at night will be experienced all along the B1122 from Yoxford through Middleton Moor and Theberton from construction vehicles, HGVs, workers’ buses and cars. Also from the campus accommodation and floodlit sports facilities, and from the new road through the construction lay down areas. This all requires detailed studies to show current levels of light pollution, and what it will be like if Sizewell C and D are built.

Table 7.7.1 Monitoring locations should include more around Eastbridge and Theberton, in addition to what is proposed. Location codes MS3, MS8 and MS9 refer to considering the **“local impact on quiet character of area”**. The same should be applied to the neighbouring villages, including Eastbridge and Theberton, where a key feature is **“the quiet character of the area”**.

7.7.2 Monitoring locations for traffic should include at least one for Eastbridge South.

Tourism along the Heritage Coast is one of the highest sources of employment and income. Visitors from all over the country return every year, sometimes several times a year. They appreciate the tranquillity, the unspoilt landscapes, the night skies, the wildlife. The Scoping Report appears not to devote much, if any space to a study of the adverse impacts on this industry. Sensitive independent surveys are essential to establish visitors’ views and likely reactions once construction starts, if Sizewell C goes ahead. Indeed, experience locally would tell us that the vast majority have no knowledge of the Sizewell C proposals and are shocked by the same issues that concern this parish. We believe their interest in this area will be lost, for at least the construction period, and may lose the habit of coming to Suffolk for ever. Studies of high-end accommodation providers and catering facilities should also be part of the Scoping Report. Any interest generated by the Visitor’s Centre is irrelevant.

From: Navigation Directorate [mailto:Navigation.Directorate@thls.org]
Sent: 21 May 2014 12:57
To: Environmental Services
Cc: Nick Dodson
Subject: RE: Sizewell C New Nuclear Power Station - EIA Scoping Request

Good morning Hannah,

Please be advised that Trinity House has no comments to make concerning the above.

However, in order to address specific mitigation measures concerning the works below the high water mark, we would suggest that, upon completion of the Navigation Risk Assessment, the applicant contacts Trinity House to discuss any marine risk mitigation measures that may be required.

Kind regards,

Steve Vanstone

Navigation Services Officer

APPENDIX 3

Presentation of the Environmental Statement

APPENDIX 3

PRESENTATION OF THE ENVIRONMENTAL STATEMENT

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (SI 2264) (as amended) sets out the information which must be provided for an application for a development consent order (DCO) for nationally significant infrastructure under the Planning Act 2008. Where required, this includes an environmental statement. Applicants may also provide any other documents considered necessary to support the application. Information which is not environmental information need not be replicated or included in the ES.

An environmental statement (ES) is described under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (SI 2263) (as amended) (the EIA Regulations) as a statement:

- a) 'that includes such of the information referred to in Part 1 of Schedule 4 as is reasonably required to assess the environmental effects of the development and of any associated development and which the applicant can, having regard in particular to current knowledge and methods of assessment, reasonably be required to compile; but
- b) that includes at least the information required in Part 2 of Schedule 4'.

(EIA Regulations Regulation 2)

The purpose of an ES is to ensure that the environmental effects of a proposed development are fully considered, together with the economic or social benefits of the development, before the development consent application under the Planning Act 2008 is determined. The ES should be an aid to decision making.

The SoS advises that the ES should be laid out clearly with a minimum amount of technical terms and should provide a clear objective and realistic description of the likely significant impacts of the proposed development. The information should be presented so as to be comprehensible to the specialist and non-specialist alike. The SoS recommends that the ES be concise with technical information placed in appendices.

ES Indicative Contents

The SoS emphasises that the ES should be a 'stand alone' document in line with best practice and case law. The EIA Regulations Schedule 4, Parts 1 and 2, set out the information for inclusion in environmental statements.

Schedule 4 Part 1 of the EIA Regulations states this information includes:

- '17. *Description of the development, including in particular—*

- (a) *a description of the physical characteristics of the whole development and the land-use requirements during the construction and operational phases;*
 - (b) *a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used;*
 - (c) *an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc) resulting from the operation of the proposed development.*
18. *An outline of the main alternatives studied by the applicant and an indication of the main reasons for the applicant's choice, taking into account the environmental effects.*
19. *A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the interrelationship between the above factors.*
20. *A description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development, resulting from:*
- (a) *the existence of the development;*
 - (b) *the use of natural resources;*
 - (c) *the emission of pollutants, the creation of nuisances and the elimination of waste,*
- and the description by the applicant of the forecasting methods used to assess the effects on the environment.*
21. *A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.*
22. *A non-technical summary of the information provided under paragraphs 1 to 5 of this Part.*
23. *An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information'.*

EIA Regulations Schedule 4 Part 1

The content of the ES must include as a minimum those matters set out in Schedule 4 Part 2 of the EIA Regulations. This includes the consideration of 'the main alternatives studied by the applicant' which the SoS recommends could be addressed as a separate chapter in the ES. Part 2 is included below for reference:

Schedule 4 Part 2

- A description of the development comprising information on the site, design and size of the development
- A description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects
- The data required to identify and assess the main effects which the development is likely to have on the environment
- An outline of the main alternatives studied by the applicant and an indication of the main reasons for the applicant's choice, taking into account the environmental effects, and
- A non-technical summary of the information provided *[under the four paragraphs above]*.

Traffic and transport is not specified as a topic for assessment under Schedule 4; although in line with good practice the SoS considers it is an important consideration *per se*, as well as being the source of further impacts in terms of air quality and noise and vibration.

Balance

The SoS recommends that the ES should be balanced, with matters which give rise to a greater number or more significant impacts being given greater prominence. Where few or no impacts are identified, the technical section may be much shorter, with greater use of information in appendices as appropriate.

The SoS considers that the ES should not be a series of disparate reports and stresses the importance of considering inter-relationships between factors and cumulative impacts.

Scheme Proposals

The scheme parameters will need to be clearly defined in the draft DCO and therefore in the accompanying ES which should support the application as described. The SoS is not able to entertain material changes to a project once an application is submitted. The SoS draws the attention of the applicant to the DCLG and the Planning Inspectorate's published advice on the preparation of a draft DCO and accompanying application documents.

Flexibility

The SoS acknowledges that the EIA process is iterative, and therefore the proposals may change and evolve. For example, there may be changes to the scheme design in response to consultation. Such changes should be addressed in the ES. However, at the time of the application for a DCO, any proposed scheme parameters should not be so wide ranging as to represent effectively different schemes.

It is a matter for the applicant, in preparing an ES, to consider whether it is possible to assess robustly a range of impacts resulting from a large number of undecided parameters. The description of the proposed development in the ES must not be so wide that it is insufficiently certain to comply with requirements of paragraph 17 of Schedule 4 Part 1 of the EIA Regulations.

The Rochdale Envelope principle (see *R v Rochdale MBC ex parte Tew (1999)* and *R v Rochdale MBC ex parte Milne (2000)*) is an accepted way of dealing with uncertainty in preparing development applications. The applicant's attention is drawn to the Planning Inspectorate's Advice Note 9 'Rochdale Envelope' which is available on the Advice Note's page of the National Infrastructure Planning website.

The applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the scheme have yet to be finalised and provide the reasons. Where some flexibility is sought and the precise details are not known, the applicant should assess the maximum potential adverse impacts the project could have to ensure that the project as it may be constructed has been properly assessed.

The ES should be able to confirm that any changes to the development within any proposed parameters would not result in significant impacts not previously identified and assessed. The maximum and other dimensions of the proposed development should be clearly described in the ES, with appropriate justification. It will also be important to consider choice of materials, colour and the form of the structures and of any buildings. Lighting proposals should also be described.

Scope

The SoS recommends that the physical scope of the study areas should be identified under all the environmental topics and should be sufficiently robust in order to undertake the assessment. The extent of the study areas should be on the basis of recognised professional guidance, whenever such guidance is available. The study areas should also be agreed with the relevant consultees and local authorities and, where this is not possible, this should be stated clearly in the ES and a reasoned justification given. The scope should also cover the breadth of the topic area and the temporal scope, and these aspects should be described and justified.

Physical Scope

In general the SoS recommends that the physical scope for the EIA should be determined in the light of:

- the nature of the proposal being considered
- the relevance in terms of the specialist topic
- the breadth of the topic
- the physical extent of any surveys or the study area, and

- the potential significant impacts.

The SoS recommends that the physical scope of the study areas should be identified for each of the environmental topics and should be sufficiently robust in order to undertake the assessment. This should include at least the whole of the application site, and include all offsite works. For certain topics, such as landscape and transport, the study area will need to be wider. The extent of the study areas should be on the basis of recognised professional guidance and best practice, whenever this is available, and determined by establishing the physical extent of the likely impacts. The study areas should also be agreed with the relevant consultees and, where this is not possible, this should be stated clearly in the ES and a reasoned justification given.

Breadth of the Topic Area

The ES should explain the range of matters to be considered under each topic and this may respond partly to the type of project being considered. If the range considered is drawn narrowly then a justification for the approach should be provided.

Temporal Scope

The assessment should consider:

- environmental impacts during construction works
- environmental impacts on completion/operation of the proposed development
- where appropriate, environmental impacts a suitable number of years after completion of the proposed development (for example, in order to allow for traffic growth or maturing of any landscape proposals), and
- environmental impacts during decommissioning.

In terms of decommissioning, the SoS acknowledges that the further into the future any assessment is made, the less reliance may be placed on the outcome. However, the purpose of such a long term assessment, as well as to enable the decommissioning of the works to be taken into account, is to encourage early consideration as to how structures can be taken down. The purpose of this is to seek to minimise disruption, to re-use materials and to restore the site or put it to a suitable new use. The SoS encourages consideration of such matters in the ES.

The SoS recommends that these matters should be set out clearly in the ES and that the suitable time period for the assessment should be agreed with the relevant statutory consultees.

The SoS recommends that throughout the ES a standard terminology for time periods should be defined, such that for example, 'short term' always refers to the same period of time.

Baseline

The SoS recommends that the baseline should describe the position from which the impacts of the proposed development are measured. The baseline should be chosen carefully and, whenever possible, be consistent between topics. The identification of a single baseline is to be welcomed in terms of the approach to the assessment, although it is recognised that this may not always be possible.

The SoS recommends that the baseline environment should be clearly explained in the ES, including any dates of surveys, and care should be taken to ensure that all the baseline data remains relevant and up to date.

For each of the environmental topics, the data source(s) for the baseline should be set out together with any survey work undertaken with the dates. The timing and scope of all surveys should be agreed with the relevant statutory bodies and appropriate consultees, wherever possible.

The baseline situation and the proposed development should be described within the context of the site and any other proposals in the vicinity.

Identification of Impacts and Method Statement

Legislation and Guidelines

In terms of the EIA methodology, the SoS recommends that reference should be made to best practice and any standards, guidelines and legislation that have been used to inform the assessment. This should include guidelines prepared by relevant professional bodies.

In terms of other regulatory regimes, the SoS recommends that relevant legislation and all permit and licences required should be listed in the ES where relevant to each topic. This information should also be submitted with the application in accordance with the APFP Regulations.

In terms of assessing the impacts, the ES should approach all relevant planning and environmental policy – local, regional and national (and where appropriate international) – in a consistent manner.

Assessment of Effects and Impact Significance

The EIA Regulations require the identification of the 'likely significant effects of the development on the environment' (Schedule 4 Part 1 paragraph 20).

As a matter of principle, the SoS applies the precautionary approach to follow the Court's⁴ reasoning in judging 'significant effects'. In other words

⁴ See Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris van Landbouw (Waddenzee Case No C 127/02/2004)

'likely to affect' will be taken as meaning that there is a probability or risk that the proposed development will have an effect, and not that a development will definitely have an effect.

The SoS considers it is imperative for the ES to define the meaning of 'significant' in the context of each of the specialist topics and for significant impacts to be clearly identified. The SoS recommends that the criteria should be set out fully and that the ES should set out clearly the interpretation of 'significant' in terms of each of the EIA topics. Quantitative criteria should be used where available. The SoS considers that this should also apply to the consideration of cumulative impacts and impact inter-relationships.

The SoS recognises that the way in which each element of the environment may be affected by the proposed development can be approached in a number of ways. However it considers that it would be helpful, in terms of ease of understanding and in terms of clarity of presentation, to consider the impact assessment in a similar manner for each of the specialist topic areas. The SoS recommends that a common format should be applied where possible.

Inter-relationships between environmental factors

The inter-relationship between aspects of the environments likely to be significantly affected is a requirement of the EIA Regulations (see Schedule 4 Part 1 of the EIA Regulations). These occur where a number of separate impacts, e.g. noise and air quality, affect a single receptor such as fauna.

The SoS considers that the inter-relationships between factors must be assessed in order to address the environmental impacts of the proposal as a whole. This will help to ensure that the ES is not a series of separate reports collated into one document, but rather a comprehensive assessment drawing together the environmental impacts of the proposed development. This is particularly important when considering impacts in terms of any permutations or parameters to the proposed development.

Cumulative Impacts

The potential cumulative impacts with other major developments will need to be identified, as required by the Directive. The significance of such impacts should be shown to have been assessed against the baseline position (which would include built and operational development). In assessing cumulative impacts, other major development should be identified through consultation with the local planning authorities and other relevant authorities on the basis of those that are:

- projects that are under construction
 - permitted application(s) not yet implemented
 - submitted application(s) not yet determined
 - all refusals subject to appeal procedures not yet determined
-

- projects on the National Infrastructure's programme of projects, and
- projects identified in the relevant development plan (and emerging development plans - with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited.

Details should be provided in the ES, including the types of development, location and key aspects that may affect the EIA and how these have been taken into account as part of the assessment.

The SoS recommends that offshore wind farms should also take account of any offshore licensed and consented activities in the area, for the purposes of assessing cumulative effects, through consultation with the relevant licensing/consenting bodies.

For the purposes of identifying any cumulative effects with other developments in the area, applicants should also consult consenting bodies in other EU states to assist in identifying those developments (see commentary on Transboundary Effects below).

Related Development

The ES should give equal prominence to any development which is related with the proposed development to ensure that all the impacts of the proposal are assessed.

The SoS recommends that the applicant should distinguish between the proposed development for which development consent will be sought and any other development. This distinction should be clear in the ES.

Alternatives

The ES must set out an outline of the main alternatives studied by the applicant and provide an indication of the main reasons for the applicant's choice, taking account of the environmental effect (Schedule 4 Part 1 paragraph 18).

Matters should be included, such as *inter alia* alternative design options and alternative mitigation measures. The justification for the final choice and evolution of the scheme development should be made clear. Where other sites have been considered, the reasons for the final choice should be addressed.

The SoS advises that the ES should give sufficient attention to the alternative forms and locations for the off-site proposals, where appropriate, and justify the needs and choices made in terms of the form of the development proposed and the sites chosen.

Mitigation Measures

Mitigation measures may fall into certain categories namely: avoid; reduce; compensate or enhance (see Schedule 4 Part 1 paragraph 21); and should be identified as such in the specialist topics. Mitigation measures should not be developed in isolation as they may relate to more than one topic area. For each topic, the ES should set out any mitigation measures required to prevent, reduce and where possible offset any significant adverse effects, and to identify any residual effects with mitigation in place. Any proposed mitigation should be discussed and agreed with the relevant consultees.

The effectiveness of mitigation should be apparent. Only mitigation measures which are a firm commitment and can be shown to be deliverable should be taken into account as part of the assessment.

It would be helpful if the mitigation measures proposed could be cross referred to specific provisions and/or requirements proposed within the draft development consent order. This could be achieved by means of describing the mitigation measures proposed either in each of the specialist reports or collating these within a summary section on mitigation.

The SoS advises that it is considered best practice to outline in the ES, the structure of the environmental management and monitoring plan and safety procedures which will be adopted during construction and operation and may be adopted during decommissioning.

Cross References and Interactions

The SoS recommends that all the specialist topics in the ES should cross reference their text to other relevant disciplines. Interactions between the specialist topics is essential to the production of a robust assessment, as the ES should not be a collection of separate specialist topics, but a comprehensive assessment of the environmental impacts of the proposal and how these impacts can be mitigated.

As set out in EIA Regulations Schedule 4 Part 1 paragraph 23, the ES should include an indication of any technical difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.

Consultation

The SoS recommends that any changes to the scheme design in response to consultation should be addressed in the ES.

It is recommended that the applicant provides preliminary environmental information (PEI) (this term is defined in the EIA Regulations under regulation 2 'Interpretation') to the local authorities.

Consultation with the local community should be carried out in accordance with the SoCC which will state how the applicant intends to consult on the

preliminary environmental information (PEI). This PEI could include results of detailed surveys and recommended mitigation actions. Where effective consultation is carried out in accordance with Section 47 of the Planning Act, this could usefully assist the applicant in the EIA process – for example the local community may be able to identify possible mitigation measures to address the impacts identified in the PEI. Attention is drawn to the duty upon applicants under Section 50 of the Planning Act to have regard to the guidance on pre-application consultation.

Transboundary Effects

The SoS recommends that consideration should be given in the ES to any likely significant effects on the environment of another Member State of the European Economic Area. In particular, the SoS recommends consideration should be given to discharges to the air and water and to potential impacts on migratory species and to impacts on shipping and fishing areas.

The Applicant's attention is also drawn to the Planning Inspectorate's Advice Note 12 'Development with significant transboundary impacts consultation' which is available on the Advice Notes Page of the National Infrastructure Planning website

Summary Tables

The SoS recommends that in order to assist the decision making process, the applicant may wish to consider the use of tables:

Table X to identify and collate the residual impacts after mitigation on the basis of specialist topics, inter-relationships and cumulative impacts.

Table XX to demonstrate how the assessment has taken account of this Opinion and other responses to consultation.

Table XXX to set out the mitigation measures proposed, as well as assisting the reader, the SoS considers that this would also enable the applicant to cross refer mitigation to specific provisions proposed to be included within the draft Development Consent Order.

Table XXXX to cross reference where details in the HRA (where one is provided) such as descriptions of sites and their locations, together with any mitigation or compensation measures, are to be found in the ES.

Terminology and Glossary of Technical Terms

The SoS recommends that a common terminology should be adopted. This will help to ensure consistency and ease of understanding for the decision making process. For example, 'the site' should be defined and used only in

terms of this definition so as to avoid confusion with, for example, the wider site area or the surrounding site.

A glossary of technical terms should be included in the ES.

Presentation

The ES should have all of its paragraphs numbered, as this makes referencing easier as well as accurate.

Appendices must be clearly referenced, again with all paragraphs numbered.

All figures and drawings, photographs and photomontages should be clearly referenced. Figures should clearly show the proposed site application boundary.

Bibliography

A bibliography should be included in the ES. The author, date and publication title should be included for all references. All publications referred to within the technical reports should be included.

Non Technical Summary

The EIA Regulations require a Non Technical Summary (EIA Regulations Schedule 4 Part 1 paragraph 22). This should be a summary of the assessment in simple language. It should be supported by appropriate figures, photographs and photomontages.