

CABINET

Committee Date: (11 March 2019)

EAST ANGLIA ONE NORTH AND EAST ANGLIA TWO OFFSHORE WINDFARMS PHASE 4 CONSULTATION FROM SCOTTISH POWER RENEWABLES

EXECUTIVE SUMMARY

- Scottish Power Renewables (SPR) is proposing to construct two offshore wind farm projects; East Anglia One North (EA1N) and East Anglia Two (EA2). The wind turbines will be constructed off the Suffolk coast with cables making landfall north of Thorpeness and running underground for 9km terminating at a site immediately north of Friston village where the onshore substations are to be located. This Phase 4 public consultation is the last stage of the consultation proposed prior to the submission of both projects under the Nationally Significant Infrastructure Project regime proposed for Quarter 4 2019.
- 2. At the previous phase of consultation (3.5), this Council submitted a joint response with Suffolk County Council (SCC) where we did not support Friston as the preferred substation location and offered greater support for the use of EDF Energy land at Broom Covert, Sizewell for the onshore infrastructure.
- 3. The current consultation provides a significant amount of Preliminary Environmental Information. The documents are continuing to be assessed by technical experts within both Councils. Due to the recent publication of the consultation material and the limited timeframe for the consultation (6 weeks), this report has been drafted with limited input from the technical experts at this stage, although their feedback will be fully incorporated into the Councils final EA1N and EA2 responses.
- 4. This report has been drafted to set out the key high level comments coming out of each of the topic areas, highlighting the main concerns the Councils have in relation to the projects. The recommendation at the end of this report is that the Council objects to EA2 in relation to the significant effects predicted by SPR on seascape, coastal landscapes, character and qualities of the AONB, users of the Suffolk Coast Path and cumulatively with EA1N. It is also recommended that the Council objects to the overall impact of the onshore substations of EA1N and EA2 individually and cumulatively on the village and environs of Friston, including adverse impacts on archaeological and heritage assets, landscape character, visual effects, noise and residential amenity. It is recommended that the Council also identifies concerns in relation to the loss of good quality agricultural land and the impact of the cable route works on the setting of Aldringham Court (Grade II listed) in addition to setting out the areas where further information is necessary.

Is the report Open or Exempt?	Open
Category of Exempt Information and reason why it is NOT in the public interest to disclose the exempt	This report is to be considered during the CLOSED part of the Agenda because it contains exempt information as defined in Paragraph (insert paragraph number) of Schedule 12A to the Local Government Act 1972.
information.	It is considered that the public interest in not disclosing the exempt information outweighs the public interest in disclosing the information because (insert text)
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1 INTRODUCTION

- 1.1 The East Anglia One North (EA1N) and East Anglia Two (EA2) offshore wind farms are being developed by East Anglia One North Limited and East Anglia Two Limited, which are wholly owned subsidiaries of Scottish Power Renewables (SPR) which itself is owned by Iberdrola, a Spanish based company. EA1N and EA2 are both defined as Nationally Significant Infrastructure Projects (NSIPs) under the 2008 Planning Act. Both projects are at the pre-application stage in the process expected to be submitted for Development Consent Orders (DCO) in the last quarter of this year. The DCO will be determined by the Secretary of State for Business, Energy and Industrial Strategy (BEIS).
- 1.2 Suffolk Coastal District Council and Suffolk County Council (hereafter referred to as The Councils) are supportive of the principle of offshore wind development, both in terms of seeking to reduce carbon emissions and creating sustainable economic growth in Suffolk, including providing for long term employment for some of our coastal communities, provided this can be achieved without significant damage to the environment, residents and tourist economy of Suffolk.
- 1.3 SPR's Phase 4 consultation commenced on both EA1N and EA2 on 11th February 2019 and runs until 26th March 2019. The purpose of the consultation is to provide Preliminary Environmental Information (a draft Environmental Statement) which sets out the proposals in detail and their potential impacts. Appendices A to D attached to this report provide details of the offshore and onshore development areas and substation locations for the projects. SPR has made it clear that the two projects are completely independent of one another and although the consultations are occurring simultaneously, SPR will be submitting two DCO applications, one for each project and it is understood two separate examinations will be held to consider the proposals. Our responses will need to be submitted for each site.
- 1.4 The table below identifies the key parameters for each of the EA1N and EA2 offshore wind farms:

Parameter	Specification EA1N	Specification EA2
Max no. of wind turbines	67 (800mw)	75 (900mw)
Distance to shore	36km	31km
Max wind turbine tip height	300m	300m
No. of offshore platforms	Up to 5	Up to 5
Landfall location	North of Thorpeness	North of Thorpeness
Onshore cable length and max onshore cable route width	9km, 32m (max width)	9km, 32m (max width)
Substation location	Friston	Friston
Substation size, max building height and max equipment height	190m x 190m, 15m (max building height), 18m (max equipment height)	190m x 190m, 15m (max building height), 18m (max equipment height)

1.5 In addition to the development associated with the wind farms, connection infrastructure is also required which involves a new National Grid substation. This

substation could be an Air Insulated Substation (AIS) — open air, or Gas Insulated Substation (GIS) - much of the equipment would be enclosed within a building. An AIS which would have a maximum footprint of 140m by 325m with the tallest building 13m and the tallest structure 16m. A GIS would have a maximum footprint of 140m by 120m with the tallest building and structures being 16m. In addition to the substation up to four sealing end compounds will be required to allow connection of the National Grid substation to the overhead lines and it will be necessary to divert one of the existing pylon lines, probably requiring an additional pylon.

- 1.6 The Councils have been working jointly in relation to both projects. A joint response was provided to SPR during the previous round of consultation; Phase 3.5. At this stage SPR were consulting on two different site options for the onshore substation infrastructure; Grove Wood, Friston or Broom Covert, Sizewell. Although the Councils offered greater support for Broom Covert, Sizewell as it was considered this site offered greater opportunity to minimise and mitigate the harm caused (taking into account its location within the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB)); SPR announced before Christmas 2018 the site to be taken forward is Grove Wood, Friston.
- 1.7 The key areas of concern which were raised during SPR's Phase 3.5 consultation related to the impact of the proposals on heritage assets both by the permanent infrastructure at Grove Wood and by virtue of the works related to the cable route, and the impact of the permanent development on landscape, visual amenity, background noise and potentially flooding risk and socio economic issues.
- 1.8 SPR's Phase 4 consultation has provided further details in the form of a Preliminary Environmental Information Report (PEIR) and a Habitat Regulations Assessment (HRA) report for each project.
- 1.9 East Anglia One (EA1) and East Anglia Three (EA3) have already been consented through the NSIP regime with EA1 currently under construction. These projects make landfall at Bawdsey with a 37km cable route through the to a substation location at Bramford, north-west of Ipswich. A connection offer was made for EA1, EA2 and EA3 at Bramford. In 2010 National Grid stated that there was no available capacity in the Sizewell/Leiston area at that time. When EA1 was consented it was envisaged that future projects would be able to utilise this cable corridor and connection point. Following the Government funding process (Contract for Difference), EA1 received funding for a smaller capacity scheme. As a consequence of this a non material amendment to the EA1 project was sought by SPR which permitted a reduction in the generation capacity of the windfarm and a change to its transmission from Direct Current to Alternating Current. As a result of the amendments, the ability for the Bawdsey to Bramford cable corridor to accommodate future projects was removed. The onshore cables due to the nature of their transmission and installation required more space within the cable corridor. In 2017 SPR engaged National Grid to determine a connection option following changes to their projects identified as EA1N and EA2. This resulted in the Connection and Infrastructure Options Note (CION) review process which confirmed a connection in the Sizewell/Leiston area. The Councils are continuing to engage with SPR to understand the background and justification for the connection offers by National Grid.
- 1.10 In addition to working with SPR and responding to statutory and non statutory rounds of consultation the Councils have also expressed serious concerns in relation to the impact of onshore infrastructure associated with offshore wind on some of our most sensitive and valued countryside. We consider that the process by which decisions are made without wider consultation on identifying points of connection by National Grid is flawed. It is the Councils view that the Government needs a more strategic approach to manage the bringing forward of offshore windfarms and their associated onshore infrastructure.

This point has been strenuously expressed by the Councils during recent engagement with BEIS and it is proposed that this lobbying continues.

2 PLANNING POLICY CONTEXT

- 2.1 The Planning Act 2008 makes provision for National Policy Statements, which set out the policy framework for determination of NSIP applications. The three NPSs of relevance are EN-1 (Overarching NPS for Energy), EN-3 (NPS for Renewable Energy Infrastructure) and EN-5 (NPS for Electricity Networks Infrastructure).
- 2.2 The revised NPPF published in 2019 does not contain any specific policies for NSIPs but remains a material consideration.
- 2.3 The 2013 Suffolk Coastal District Local Plan Core Strategy and Development Management Policies Development Plan Document contains policies of relevance. Policy SP12 'Climate Change' is of particular relevance which encourages schemes which create renewable energy where consistent with the need to safeguard residential amenity, the environment and the landscape.
- 2.4 The final draft Local Plan is currently out to its final stage of public consultation (ending 25 February 2019) and includes policy SCLP3.5 'Proposals for Major Energy Infrastructure Projects'. This policy identifies the need to mitigate the impacts arising from such developments and will be used to guide Suffolk Coastal District Council. The Plan is in its final round of public consultation but has not yet been examined so only limited weight can be given to it. It is expected to be adopted planning policy shortly after the DCOs are submitted to the Planning Inspectorate, which is expected the last quarter of 2019. SPRs Stage 4 documents include a chapter on relevant planning policy which provides further detail on the planning policy context. NPS's will usually over-ride local planning policy.

3 HOW DOES THIS RELATE TO THE EAST SUFFOLK BUSINESS PLAN?

3.1 The East Suffolk Business Plan (2015-2023) identifies the District through wind, wave, gas and nuclear energy as a significant energy supplier to the whole of Britain with the offshore energy sector as one of the distinctive economic strengths of East Suffolk.

4 FINANCIAL AND GOVERNANCE IMPLICATIONS

4.1 SPR are funding the District Council's officers through an agreed financial arrangement which involves the charging of SPR for officer time on an hourly basis. We also work closely with other partners including Suffolk County Council and engage with other statutory bodies to ensure we fully address all aspects of the development.

5 OTHER KEY ISSUES

5.1 By virtue of the timings of this Phase 4 consultation (beginning on 11th February 2019) this report has been prepared without full detailed input from the experts in each of the topic areas. This is unfortunate but necessary due to the limited six week timescale of the consultation. Full and detailed responses to EA1N and EA2 will be submitted to SPR within the consultation timeframe which will include comprehensive comments from all relevant officers. This report sets out the framework for the detailed responses highlighting key areas of concern. These have been developed through previous rounds of public consultation and pre-application engagement.

6 NATURE OF CONSULTATION DOCUMENTS

6.1.1 SPR has produced a Preliminary Environmental Information Report (PEIR) for each project which describes the initial findings of the potential environmental impacts associated with

the construction, operation and decommissioning of EA1N and EA2 onshore and offshore infrastructure. The assessments also consider the cumulative impacts of the projects (EA1N and EA2 built in parallel or sequentially) and also with other projects including Sizewell C New Nuclear Power Station (Sizewell C). The consultation documents have been divided into chapters on specific topic areas; this report broadly follows this pattern where the topic areas are relevant to the Councils and their responsibilities.

6.2 Site Selection and Assessment of Alternatives

- 6.2.1 In the Phase 3.5 consultation, SPR consulted on two alternative sites for sub-stations; Grove Wood, Friston and Broom Covert, Sizewell. The conclusion of the Councils in responding to that consultation was that the Grove Wood, Friston site would be hugely detrimental resulting in significant impacts which would be difficult to mitigate. The Councils however stated that prior to SPR making a final decision on the substation site selection they should:
 - a) Undertake a Landscape and Visual Impact Assessment (LVIA) on the Grove Wood, Friston site and Broom Covert, Sizewell site to allow the landscape and visual impacts of the development on both sites to be fully understood.
 - b) Undertake further work to fully understand the impact of Aldeburgh Road crossing on Grade II listed Aldringham Court and its setting and in terms of the ensuring the projects and potential future projects (wind farms and interconnectors) will be able to be accommodated.
 - c) Undertake further work in relation to the connection works and infrastructure layout involved to connect the substation at Broom Covert, Sizewell to the electricity network.
- 6.2.2 SPR however following the Phase 3.5 consultation selected Friston as their preferred substation site. Although an LVIA has been provided with the consultation documents, one was not undertaken in relation to the Broom Covert, Sizewell site and points b) and c) have not been adequately addressed by the information published with Phase 4.
- 6.2.3 During Phase 3.5 the Councils stated that no detailed landscape, ecological, archaeological, heritage asset, transport, flood risk, noise, air quality, ground contamination or socioeconomic assessments of the projects have been provided which at the time limited the ability to provide comprehensive comments. The PEIRs provide varying degrees of information in relation to these topics.

6.3 Coastal Processes

- 6.3.1 The export cables from the offshore wind turbines for both projects will make landfall just north of Thorpeness. SPR has undertaken assessments of coastal erosion as it is essential that the cable ducts and the transition bays associated with the joining of the onshore and offshore cables are installed with a suitable setback distance to allow for natural coastal erosion.
- 6.3.2 SPR has confirmed in their documents that the cables will be installed in between the transition bay and point of connection with the seabed trenching process by Horizontal Directional Drilling techniques (HDD). This will help to reduce impacts on the intertidal zone. SPR has also confirmed that the offshore cable route will be installed to the south of the Coralline Crag outcrop (geological formation) that is a key control feature for coastal processes.
- 6.3.3 Although the principle of the utilisation of HDD techniques and the undersea breakout point has been discussed, these will be subject to further survey work. SPR need to demonstrate that it is possible to install the ducts and cables by HDD in the target area beyond the Coralline Crag. SPR must also demonstrate that the HDD process does not destabilise (by

vibration) the cliff face under which it passes and that the drill level is controlled to ensure it remains far enough below ground to avoid a surface break out.

6.3.4 It is recommended that the Councils continue to work closely with SPR to ensure the impact on coastal processes is minimised and highlight the areas where further work is necessary.

6.4 Ground Conditions and Contamination

- 6.4.1 The ground conditions assessment provided includes a contaminated land Phase 1 desk-based review and consultation regarding the current conditions found within the proposed onshore development area. The majority of the onshore cable route is located in agricultural land where SPR has stated that significant sources of contamination are not expected. The construction activities associated with the development however have the potential to disturb potential contaminants of concern in soil and groundwater and create preferential pollutant pathways. SPR has identified several features (agricultural land, historic clay, sand and gravel pits, dismantled railways and tramways, roads and waste management facilities) which could be associated with sources of contamination with migration pathways to the proposed onshore development.
- 6.4.2 SPR has assessed the potential for contamination leaks and spills during construction, potential for existing contaminant release during any works and impacts on ground water quality and mineral resources availability. Subject to the implementation of mitigation measures (secured through a Code of Construction Practice (CoCP)) the projects are predicted to have no greater than minor impacts in relation to ground conditions and contamination during construction. No potential effects were identified for the operational phase and the decommissioning impacts are expected to be no greater than the construction impacts identified. The cumulative impacts were also considered no greater than minor.
- 6.4.3 It is recommended that the Councils continue to work closely with SPR to ensure that the appropriate mitigation is secured within the CoCP to ensure that risks to ground conditions/contamination are minimised.

6.5 **Air Quality**

- 6.5.1 SPR has undertaken a desk based assessment using air quality monitoring data collected by the local authority in addition to pollution maps provided by the Department of Environment, Food and Rural Affairs to establish existing pollution levels. The air quality assessment undertaken only considers the potential impacts of onshore construction phase dust and road traffic emissions.
- 6.5.2 SPR concluded that subject to a number of best practice mitigation measures, dust impacts will not be significant. Road traffic emissions during the construction phase were also similarly considered to be not significant. The assessment therefore concludes that the construction activities are highly unlikely to cause noticeable short term or lasting impacts on air quality. The decommissioning impacts were considered the same as the construction impacts. The cumulative impacts of the developments were also considered to not be significant.
- 6.5.3 In relation to dust, although SPR has concluded dust impacts will not be significant, the construction works will result in a very long stretch of stockpiled top soil running along the length of the cable route. This light top soil will be subject to wind entrainment as commonly seen in the 'Suffolk Sandlings' area and presents a risk to both residential and ecological receptors. The only practical measure suitable in this instance to mitigate wind whipping is to seed or re-vegetate the stockpile. The Councils will engage with SPR on this matter as the documents currently appear non committal in relation to the specific nature of the mitigation.
- 6.5.4 SPR conclude the impacts from traffic emissions overall will not be significant, the assessment however shows a moderate adverse impact is predicted at the Stratford St Andrew Air Quality

Management Area (AQMA). It could however be argued that the impact on the AQMA is a significant effect which should be adequately mitigated. This is particularly important as a conservative assessment that assumes 2017 background and vehicle emissions has been considered for all model years. Therefore the model is likely to under predict. Due to the assumptions and uncertainty in the modelling, it is recommended that a sensitivity analysis is undertaken to consider impacts modelled within the AQMA.

6.5.5 The Councils also have some questions in relation to the decision taken to scope out operational impacts from this chapter, the limited assessment of the decommissioning impacts, the decision to exclude Sizewell Marshes SSSI (Site of Special Scientific Interest) as an ecological receptor and the modelling utilised. Further justification is required from SPR in relation to these matters. The cumulative impacts with Sizewell C will also need to be carefully assessed. It is recommended that the Councils highlight these areas of concern within the detailed responses.

6.6 Water Resources and Flood Risk

- 6.6.1 SPR has undertaken a desk based review in addition to a walkover survey of the three main watercourses (Hundred River, Leiston Drain and Friston watercourse) that could potentially be affected by the proposals to inform their assessment. The impact assessment considered potential direct disturbance of surface water bodies, increased flood risk, soils entering watercourses and accidental spills of pollutants during construction. Subject to the implementation of mitigation measures (sediment management, construction drainage and implementation of best practice measures set out in the CoCP), the assessment concludes the construction and decommissioning impacts would not be greater than minor including no increased flood risk on the village of Friston. The cumulative impacts with other projects were also considered no greater than minor.
- 6.6.2 The landfall location has low surface water flood risk, based on the mitigation set out by SPR it is clear that they intend to sustainably manage surface water during construction. Full details of this will be provided as part of the Construction Method Statement (CMS) and Surface Water Drainage Plan (SWDP). The Councils will seek to engage with SPR to ensure the principles outlined in the PEIRs are applied to the CMS and SWDP and that the documents adequately detail measures to be taken in the event ground water is encountered during excavations.
- 6.6.3 There is generally low surface water flood risk along the cable route but further assessment may be required for specific Construction Consolidation Sites (CCS) to ensure no increase in flood risk is experienced in nearby settlements. The PEIRs identify a potential risk to cable excavations from groundwater flooding in the area of Coldfair Green and Aldringham, the CMS and SWDP will need to take this into consideration and design appropriate mitigation measures.
- 6.6.4 No assessment so far has been made of the impact to local ordinary watercourses during the construction phase, this could potentially increase flood risk. The Councils will need to seek further information in relation to this aspect.
- 6.6.5 Flood risk is a key local concern especially in relation to Friston where the substations are proposed. The surface water flood path from north of Friston down through the village centre is clear to see on publicly available flood mapping. Any increase in surface water flood risk to Friston will not be accepted. The National Grid substation is located on the line of the surface water flow. No assessment has been made of the on-site or off-site impacts of the proposed developments interaction with the flow path. The identified CCSs are also located on the line of the surface water flow path; this could include stored materials which would increase the sediment load of the flood water. This has not been assessed within the documents.
- 6.6.6 Sustainable Drainage Systems (SuDS) are proposed to mitigate the risk of the increased impermeable area at the substation sites in the form of ponds which may also provide

environmental mitigation which is encouraged. SPR however has not adequately assessed the existing surface water flood risk in Friston in the PEIR documentation or the accompanying Flood Risk Assessment. The potential increase in flood risk in Friston, both during construction and operation of the proposed substations has also not been adequately assessed despite SPR's conclusions within the chapters. The Flood Risk Assessment provided by SPR is insufficient and does not meet the minimum criteria specified within NPS-EN1.

- 6.6.7 The Councils would like SPR to aim to reduce the surface water flood risk in Friston where possible and not just provide mitigation for the projects. The risk of flooding to the village could be reduced further by preventing the water from getting to the village so quickly. There is currently no evidence of this aspiration within the consultation information.
- 6.6.8 It is recommended that the Councils identify their concerns in relation to the gaps in the information provided and seek to engage with SPR to ensure flood risk is adequately addressed. It is also recommended that the Councils seek to encourage SPR to fully explore the opportunity to provide betterment for the community of Friston by reducing the surface water flood risk.

6.7 Land Use

- 6.7.1 SPR undertook a desk based literature review of existing reports and survey data to inform the land use impact assessment and provide indicative baseline conditions for land use. To supplement this, SPR consulted with landowners and occupiers within the onshore development area to obtain information on agricultural practices.
- 6.7.2 The assessment considered the potential impacts of the projects on drainage, agricultural land, soil quality, Environmental Stewardship Schemes and utilities. Subject to the implementation of mitigation measures, SPR concluded the projects have no greater than minor impacts in relation to land use and agriculture. The mitigation measures include the use of an Agricultural Liaison Officer, ensuring agricultural field drains are maintained and a soil management plan. The cumulative impacts were also considered to be no greater than minor.
- 6.7.3 The land use within the onshore development area is predominantly agricultural, with the majority comprising arable land with a small amount of grazing pastures. Within the development there are also some non-agricultural areas which comprise woodland and minor waterbodies etc. The Agricultural Land Classification is used to classify agricultural land in England and Wales according to the quality and versatility of the soil, Grade 1 representing the best quality through to Grade 5 which is of the poorest quality. Although the proposed onshore development area covers a combination of Grade 2, Grade 3 and Grade 4 agricultural land, the onshore substations for EA1N and EA2 sit almost entirely on Grade 2 with the National Grid substation sitting across Grade 2 and 3. Although only a small percentage of land within the onshore development area falls within Grade 2, the land which does fall within this classification will be utilised to accommodate the permanent substation infrastructure and therefore comprises the only areas which would not be reinstated after construction. The necessity for extensive planting by virtue of the site selection will also involve the utilisation of greater areas of Grade 2 land.
- 6.7.4 NPS EN-1 states that applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grade 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5) except where this would be inconsistent with other sustainability considerations.
- 6.7.5 It is recommended that the Councils register concerns in relation to the loss and sterilisation of good quality agricultural land in order to accommodate the substations for the projects at Friston.

6.8 Onshore Ecology

- 6.8.1 SPR undertook surveys during 2017 and 2018 in order to provide an ecological baseline. SPR has stated the onshore development site area seeks to avoid statutory and non statutory sites designated for their nature conservation value where possible. The proposed cable corridor however requires the crossing of the Sandlings Special Protection Area (SPA) and Leiston-Aldeburgh SSSI. At this crossing point, SPR has committed to a reduction in the cable width (minimum 16.1m for one project). The construction techniques for the crossing have not been specified with options remaining for both trenching and the utilisation for HDD. SPR has also stated that there is the option available to reduce the cable width at important hedgerows.
- 6.8.2 The projects will result in temporary habitat loss and fragmentation. The key species identified for potential impacts are badgers, bats, water voles, great crested newts and reptiles. Species specific mitigation has been identified which includes pre-construction surveys, reinstatement of lost habitats and precautionary methods of working. The assessment identifies that significant residual impacts will remain after mitigation for bats although SPR stated that this will be short term and temporary. The assessment highlights the potential impacts during operation which may arise by virtue of lighting at the substations. The cumulative impacts of the projects were not assessed as being significant in respect of ecology.
- 6.8.3 The Councils will be carefully considering the advantages and disadvantages of each of the SPA crossing techniques in order to minimise harm. It is recommended that the Councils continue to engage with SPR to seek further details in relation to the mitigation strategies which will be fundamental to the acceptability of the works and their impacts.

6.9 **Onshore Ornithology**

- 6.9.1 SPR gathered information through a combination of desk based assessment and field surveys undertaken between 2017 and 2018. The consultation documentation assesses the potential for temporary habitat loss and disturbance of birds during construction in addition to the potential noise and light disturbance during operation of the onshore substations.
- 6.9.2 The onshore cable corridor boundaries border the Sandlings SPA, which is an important area of habitat for several species of protected bird. Potential significant effects could occur in relation to habitat loss and disturbance during construction. SPR are proposing mitigation specific to the SPA and the component Leiston-Aldeburgh SSSI. The mitigation includes the production of a Breeding Bird Protection Plan which will require pre-construction surveys to check for nesting birds and if present, will require additional measures where it is necessary to undertake works. Subject to the mitigation, the assessment concludes the projects will have no greater than minor impacts. The in-combination effects with Sizewell C were also assessed as no greater than minor.
- 6.9.3 The PEIRs state that migrating wildfowl and waders have been scoped out of this consultation; the Councils need to understand the justification for this before agreeing with it being scoped out.
- 6.9.4 It is recommended that the Councils continue to engage with SPR and highlight within the detailed consultation responses the importance of appropriately designed and detailed mitigation strategies.

6.10 Archaeology and Cultural Heritage

6.10.1 SPR established the existing onshore archaeology and cultural heritage baseline via a desk based exercise supplemented by a programme of non-intrusive surveys to identify potential archaeological features underground. The baseline included both designated and non designated heritage assets and includes both below ground archaeological remains and above ground heritage assets. The historic landscape character of the proposed onshore development area has also been considered.

- 6.10.2 The settings assessment undertaken as part of the desk based assessment identified above ground heritage assets where there is potential for heritage significance to be materially affected by change in their settings due to the proposed development:
 - Church of St Mary, Friston (Grade II*)
 - Little Moor Farm (Grade II)
 - Woodside Farmhouse (Grade II)
 - High House Farm (Grade II)
 - Friston House (Grade II)
 - Aldringham Court (Grade II)
- 6.10.3 The consultation documents state that further work is required to determine the potential indirect significant impacts on the setting of the designated assets but no direct physical significant impacts would occur.
- 6.10.4 SPR has scoped out and not included Friston Mill, a Grade II* listed building which is one of the tallest buildings in the village within their assessment. By virtue of the significance of this building and its landmark status within the village it is considered that Friston Mill should be included on the list of assets for further consideration.
- 6.10.5 The assessment that has been undertaken so far has covered Step 1 of Historic England's guidance (The Setting of Heritage Assets, 2017) and has mostly addressed Step 2, which require the identification of the heritage assets and their settings which are affected and an assessment to the degree in which the settings and views make a contribution to the significance of the asset. SPR has not yet fully addressed Stage 3 (assess the effects of the proposed development on the significance or on the ability to appreciate it) or beyond at this stage. While it is recognised that the preferred design and layout is not yet fixed there are firm ideas about the footprint and maximum heights involved at the substation site and the section of the proposed route near Aldringham Court is very narrow so there are limited options of where the route could go. It would therefore be possible to make an assessment of harm based on the worst case scenario of each project which would allow a more detailed discussion about mitigation to be had at an earlier stage. Without a full assessment of harm there is a limit to the detail of comments the Councils can provide.
- 6.10.6 The impacts arising during construction/decommissioning would be temporary and of sufficiently short duration that they would be unlikely to give rise to significant harm to above ground heritage assets. The harmful impacts would primarily occur during the operational phases and these impacts would be very long term if not permanent. While a full assessment of the level of harm has not yet been provided it has been established that the proposals, while not requiring any demolitions, would very likely result in significant harm to Aldringham Court, Church of St Mary, Little Moor Farm, Woodside Farmhouse, High House Farm and Friston House. Both the NPPF and NPS EN-1 have presumptions in favour of the conservation of designated heritage assets.
- 6.10.7 The approach to mitigation should keep the impact on the setting of heritage assets in mind amongst the other competing priorities. The indicative landscape mitigation plan for the substations shows significant amounts of new woodland screening that appears to have been designed with no regard to the setting of the heritage assets or the impact or the historic landscape features. Such 'mitigation' risks adding to the harm of the heritage assets by further changing their relationship with the surrounding landscape.
- 6.10.8 The cable route will require the removal of a section of woodland which forms part of the setting of Aldringham Court in the vicinity of the crossing of Aldeburgh Road. SPR has stated that the cable width could be reduced (minimum 16.1m for one project) through the section, the grounds are part of the architect's original designs for the house and therefore the formal

garden setting is important to the understanding of the architect's design. The loss of part of this design would fundamentally alter this setting as part of the original design would be lost resulting in harm to the significance of the listed building. There is very limited scope to mitigate this harm. During the Phase 3.5 consultation the impact of the cable route on the setting of Aldringham Court was highlighted and a full assessment was required, SPR has still not undertaken this.

- 6.10.9 In addition to the aforementioned heritage assets, the Suffolk coast has a number of coastal heritage assets which not only have individual value but also group value. The assessment has not included these assets and considering the offshore seascape, landscape and visual amenity impacts of the proposals especially EA2, this is a significant omission.
- 6.10.10 In relation to archaeology, the desk based assessment undertaken by SPR did not fully assess all the areas within the onshore site boundary for archaeological potential. This assessment was supplemented by a geophysical survey however this also did not cover all of the onshore areas.
- 6.10.11 SPR has stated that a Written Scheme of Investigation (WSI) will be submitted with the DCO alongside the Environmental Statement, which outlines the stages of mitigation to be undertaken post consent. SPR consider that with this commitment in place any impacts on archaeology are not significant. The cumulative impacts of the projects with Sizewell C were also considered not significant. The Councils do not agree with this conclusion.
- 6.10.12 SPR's approach to archaeology is of significant concern. SCC's Archaeological Service advised that a full systematic earthwork assessment was necessary in line with an approved WSI undertaken pre-determination was required. This would allow the results to be factored into design refinement considerations. Up front trenching is usually important to identify any remains of high significance which should be preserved in situ. The leaving of evaluation to post-consent after further refinement has taken place may remove this option which would not meet national planning guidance. In this case, the nature of the applications for DCO is likely to leave considerable flexibility for the exact location of the trenching until later in the process. Therefore it would be acceptable for up front trenching where there is this flexibility but there are parts of the development where siting will be fixed and it will be important for early trenching to take place here. This could include the substation sites, the area around Aldeburgh Road crossing in Aldringham and where drilling will take place.
- 6.10.13 A systematic earthwork survey is also required for an area where known military remains are recorded; this is yet to be undertaken and is a priority piece of work which will inform mitigation strategies. Similarly full archaeological assessment is required on the site of a potential medieval church at Friston which has the potential for human remains. The Councils are concerned that proposals are being refined without full understanding of the archaeological implications.
- 6.10.14 It is recommended that the Councils express concerns that a full assessment in relation to archaeology and heritage assets including coastal heritage assets has not occurred at this stage in the projects. At present there are significant concerns in relation to the impact of the developments on archaeology and in relation to the ability to successfully mitigate the harm to the heritage assets caused by the projects. From the information provided so far there appears no clear way of successfully mitigating the harmful impact that the substations will have on the setting of a number of the surrounding designated assets. The site is too constrained to allow effective screening without the screening itself having a harmful impact.

6.11 Noise and Vibrations

6.11.1 SPR undertook a baseline noise survey in order to establish the existing background noise environment in the vicinity of the onshore development area. Noise modelling was then undertaken in order to inform subsequent assessments to determine any potential impacts relating to construction and operation of the projects. SPR has concluded that subject to the

imposition of mitigation measures, the projects are predicted to have no greater than minor impacts in relation to noise.

- 6.11.2 Although SPR has rated the impact of construction noise as minor, some noise sensitive receptors will be impacted, particularly along the cable route on Saturday afternoons between 13:00 and 19:00. The Councils need to engage with SPR to look at potential mitigation which may include limiting the working hours. Greater detail in relation to the noise mitigation measures in respect to the landfall, cable corridor and substation construction is necessary.
- 6.11.3 The only sources of noise identified during operation of the projects would stem from the onshore substations. SPR has stated that the applicant will provide final design of the projects which will not exceed the noise limits to be agreed with the local planning authority. No impacts from vibration effects were identified in the assessment. SPR has also concluded that the cumulative impacts of the projects will be no greater than the impacts of the projects alone.
- 6.11.4 The background noise level recorded by SPR in the vicinity of the substation sites is variable but generally very low, representative of the site's quiet rural setting. A noise limit of 35dB has been utilised by SPR as an upper noise limit, which the projects are predicted to only exceed in one location. This limit has not however been agreed with the Councils. Insufficient justification for the selection of the 35dB noise limit has been provided given the existing low background noise level. It is understood that SPR has taken this figure from the noise limit applied to the East Anglia One (EA1) and East Anglia Three (EA3) substations at Bramford. The background noise levels at Bramford would be different and imposing the same noise limit arbitrarily would not be appropriate.
- 6.11.5 The noise assessment focuses on the substations associated with EA1N and EA2, and does not take into consideration the National Grid substation or the impact of the overhead line realignment work or connection infrastructure. The technology utilised for the National Grid substation has also not been confirmed (GIS or AIS), the different technologies will have differing impacts and therefore SPR should provide full details of both options.
- 6.11.6 It is recommended that the Councils identify concerns in relation to the use of 35dB as a noise limit which would adversely affect the tranquillity of the local area, residential amenity and result in noise creep. It is also recommended that further information is sought from SPR in relation to the noise sources on site including the National Grid infrastructure and works.

6.12 Traffic and Transport

- 6.12.1 The cable corridor is approximately 9km long; during construction a temporary haul road will be provided for use by construction traffic along its length. In order to access the haul road new temporary access points will potentially be created in the following locations:
 - a) Access off B1353 Thorpeness Road
 - b) Accesses off Sizewell Gap Road
 - c) Accesses off B1122 Aldeburgh Road (near to Aldringham Court)
 - d) Accesses off B1069 (south of Coldfair Green)
- 6.12.2 In addition to these access points, two crossing points are proposed where the haul road will need to cross existing highways (B1353 Thorpeness Road and Grove Road). Vehicles will not be able to join the haul road in these locations. The documents also identify pre-construction access points.
- 6.12.3 To avoid travelling via Friston or Sternfield, all HGV traffic to the onshore substations will travel along a temporary haul road crossing over Grove Road, accessed from the B1069 (south of Knodishall/Coldfair Green). SPR has also identified HGV routes to different parts of the site. SPR is predicting a maximum daily peak of 254 two way movements for one project

during the fifth month of construction. This figure would be distributed across the onshore development area. There is no information provided by SPR to detail how the HGVs will be restricted to the agreed routes and how this can be enforced.

- 6.12.4 SPR is predicting a maximum daily peak of 269 two way movements (for one project) in relation to workers which would occur during the sixteenth month of construction. This is based on a car share ratio of 1.5; the Councils would need to see this figure evidenced. No details have been provided regarding how pedestrians and cyclists would access the sites including any details on segregated facilities and cycle parking. No details of staff parking have been shown.
- 6.12.5 SPR has stated that Abnormal Indivisible Loads (AILs) could come from either Lowestoft or Felixstowe ports travelling via the A12. The AILs would either exit onto the B1122 passing through Leiston along the B1069 to the junction with the A1094, then travel along the A1094 and B1121 through Friston to access the substation sites. Alternatively, AILs would exit the A12 at the A1094 and then join the B1121 through Friston to access the site.
- 6.12.6 To avoid the requirement for significant road widening, during periods when access to the landfall is not available via a temporary haul road from Sizewell Gap Road, a pilot vehicle would be used to escort vehicles along the B1353 from a holding area to the landfall location access. The strategy would also be utilised for vehicles departing the landfall. Once the section of haul road north of the landfall to Sizewell Gap Road is complete, construction traffic will access the haul road and landfall site from Sizewell Gap Road. The Councils need to understand the timings and length of this work, as this has the potential to disrupt residents of Thorpeness and tourists.
- 6.12.7 The developer's assessment considered the effects on roads of pedestrian severance, pedestrian amenity, road safety and driver delay during construction. The assessment concluded that subject to appropriate mitigation measures (e.g. agreeing delivery routes for lorries avoiding key sensitive areas, use of the haul road to reduce trips on local roads, speed control measures and sensitive timing of works) the residual impacts for all roads was considered no greater than minor. SPR has stated that a draft Construction Traffic Management Plan will be developed which will include measures for managing the HGV movements on sensitive highway links, will be submitted with the DCO applications.
- 6.12.8 SPR is proposing limited mitigation measures; at the A12/A1094 it is proposed that there be a temporary reduction in the speed limit, provision of enhanced warning signage and rumble strips. The Councils doubt that this level of mitigation will be sufficient particularly due to the accident record at this junction. The Councils are likely to expect a similar solution to that proposed by EDF Energy with a new roundabout provided. The projects could also result in a significant increase in HGV movements on the A12, both north and south of Saxmundham. The Councils believe the majority of movements from the A12, especially HGV movements would travel via the A14, and this would exacerbate pre-existing issues along the route. It is also recognised that the A12 at Woodbridge would see some congestion. The Councils will need to engage with SPR to highlight the additional mitigation requirements and seek a proportionate contribution to improvements along the A12.
- 6.12.9 SPR has not identified any significant impacts for the operational phase of the proposed projects. The substations would not normally be staffed and therefore vehicle movements during the operation phase would be limited to occasional repair, maintenance and inspection visits and annual routine integrity tests of the onshore cable route. Access to the substations would be via the permanent access proposed off the B1121.
- 6.12.10 SPR conclude the cumulative impacts with Sizewell C were assessed as being no greater than the minor impacts. The Councils are not convinced at present that the interaction between the projects has been fully considered. It is recommended that the Councils seek further clarification from SPR is relation to the claims within the PEIRs. It is also

recommended that the Councils challenge SPR in relation to the current level of mitigation proposed.

6.13 Offshore Seascape, Landscape and Visual Amenity (SLVIA)

- 6.13.1 SPR has undertaken a SLVIA for each project which considers the impact of the offshore infrastructure of the projects on seascape character, landscape character, visual effects on coastal receptors and settlements, effects on the character and special qualities of the AONB, impacts on users of Suffolk/England Coast Path and the cumulative effects. Although EA1N and EA2 projects have similar onshore impacts, the location of the site area for the offshore development results in the projects having different impacts on the character and visual amenity of Suffolk's coastline and the setting, character and purpose of the AONB.
- 6.13.2 The Councils continue to maintain serious concerns over the degree of visual impact that the proposed EA2 windfarm in particular will have; in addition to and in combination with the turbines of EA1N as well as with the Galloper/Greater Gabbard array from certain viewpoints; on the character of the east Suffolk shore, the AONB and its immediate seascape areas.
- 6.13.3 The Councils consider that the fundamental change arising from the proposed combined windfarm developments and especially of EA2 on sea views from key coastal viewpoints is significantly harmful. Specifically in relation to EA2, it is noted that significant impacts arising from the offshore elements have been identified by the applicant as follows:
 - a) On seascape;
 - b) On coastal landscapes;
 - c) On the character and special qualities of the AONB specifically scenic quality and landscape quality;
 - d) Significant impacts on the users of the Suffolk/England Coast Path; and
 - e) That non-significant impacts on users of the coast path may become significant for long distance walkers, but the distance threshold is not defined.
- 6.13.4 The significant effects set out above have been identified by SPR, however the values assigned to receptor sensitivity and magnitude of change will need to be reviewed to ensure that all significant effects have been properly identified. This work will be undertaken and any areas of disagreement highlighted to SPR within the detailed responses.
- 6.13.5 The Councils note and agree with the concluding paragraphs of the PEIR chapters that EA1N will have some significant seascape, landscape and visual effects, and EA2 will have significant seascape, landscape and visual effects on the character of some inshore seascape and coastal edge landscape at the local and regional scale. It is the fact that these areas are part of a nationally designated landscape (AONB), much valued by local residents and visitors who make a key contribution in the local economy, that give the Councils such cause for concern. These concerns encompass impacts on scenic quality and character as far as it affects a clear and recognisable sense of place, as well as a sense of remoteness or wildness on key sections of the coast, the relative lack of human intervention in existing views of the sea and consequent adverse effects on the sense of tranquility.
- 6.13.6 The conclusions of the SLVIAs are not considered robust. Although significant impacts on the AONB and the Suffolk Coast Path are identified as part of the EA2 assessment and cumulatively with EA1N, these are not carried through to, or recognised in, the conclusions of the chapter. Also, the significant impacts identified on landscape seascape and visual amenity are not satisfactorily made clear in the conclusions. The non-technical summaries do not adequately reflect the findings of the SLVIAs or LVIAs.
- 6.13.7 It is recommended that the Councils object to EA2 in relation to the significant effects predicted by SPR on seascape, coastal landscapes, character and qualities of the AONB, users of the Suffolk Coast Path and cumulatively with EA1N. It is also recommended that the

Councils express concerns in relation to the effects of EA1 on seascape, landscape and visual effects and object in relation to the cumulative impacts with EA2.

6.14 Landscape and Visual Amenity (LVIA)

- 6.14.1 SPR has undertaken a LVIA for each project which assesses the impact of the projects on landscape character, visual effects, visual effects on settlements and cumulative effects.
- 6.14.2 As highlighted previously in section 6.10 (Archaeology and Cultural Heritage), the provision of the onshore cables adjacent to Aldeburgh Road, south of Aldringham Court (Grade II listed) will require the removal of up to 0.9 hectares of woodland. This will result in significant, long term permanent effects as the area above the cable route cannot be replanted with woodland during the operational period of the wind farm. The Councils need to seek further details in relation to the minimum offset distance from the cable corridors. The felling of the woodland in the setting of the listed building is a key concern.
- 6.14.3 The LVIAs identify that the residents of Friston would receive significant permanent adverse cumulative effects from a combination of EA2, EA1N and National Grid substation, there would be significant permanent adverse effects on specific viewpoints and within the locality there would be permanent adverse impact on the character of the landscape. According to the assessments, the mitigation of visual impacts is dependent on the effective and timely delivery of mitigation planting. No more than an initial outline scheme of mitigation has been presented to date. Furthermore, the congested nature of the site (buildings and cable wayleaves) with the potentially competing interests of visual amenity, historic landscape/assets and the need for SuDS suggest that delivering an effective scheme of mitigation will be extremely challenging and may not be possible.
- 6.14.4 Although visualisation of the GIS option for the National Grid substation is shown within the documents, the implications of this option for the design of the mitigation and consequent impacts of the scheme should be explored. The utilisation of GIS technology could allow greater space to be made available for mitigation. The Councils consider there are significant visual benefits in relation to the delivery of a GIS option when compared to an AIS option.
- 6.14.5 The Councils note the conclusions of the LVIA chapters and agrees that the presence of the onshore windfarm infrastructure will have significant visual effects on views experienced by people in the local area near Friston, but does not necessarily agree that these will become not significant 15 years post planting, as this will very much depend on the rate of establishment and growth of new planting. The PEIRs state that landscape mitigation planting will be coming into maturity at 15 years post planting. The Councils consider that this claim is unreliable because newly planted trees at 15 years post planting cannot be considered to be mature. At best they can only be regarded as maturing.
- 6.14.6 East Suffolk can suffer notably dry summers and growth rates of new tree planting that can reliably predicted in wetter parts of the country cannot necessarily be relied on in east Suffolk. The Councils consider that the conclusion of 'not significant' in this respect cannot be assured. The Councils are further concerned that the various competing interests for the mitigation of the wider range of adverse effects (noise, landscape harm, visual impact, drainage, heritage) could potentially be in conflict with each other and therefore at risk of being compromised in their effectiveness.
- 6.14.7 In order to connect the National Grid substation to the overhead lines, sealing end compounds will be necessary. Full details of this infrastructure have not been provided. The Councils raised this as a concern during the Phase 3.5 consultation. In order to make space for the sealing end compounds between the two lines of pylons, it will be necessary to divert one of them. This may require an additional pylon. This infrastructure will add to the visual effects in the locality adding further clutter to the landscape.

- 6.14.8 It is acknowledged that there will be some significant but temporary landscape and visual impacts arising from the construction phases of both projects, where these pass through the landscape between landfall and substation sites. The developer will be expected to put forward a comprehensive programme of landscape restoration to ensure that harm to the fabric of the landscape is restored in the most effective way such that there are no long term residual adverse effects arising.
- 6.14.9 It is recommended that the Councils express concerns in relation to the impact of the onshore infrastructure and the resultant landscape and visual effects of the cable route south of Aldringham Court and the permanent substations at Friston. It is also recommended that the Councils seek to challenge SPR on the adequacy of their mitigation proposals and continue to advocate full consideration of GIS technology for the National Grid substation and further details of the connection works necessary.

6.15 Socio-Economics, Recreation and Tourism

- 6.15.1 The assessment provided within SPR's consultation documents looks at the impact of the projects on onshore and offshore construction employment, tourism employment, tourism and recreational disturbance, long term employment and long term tourism.
- 6.15.2 Local partners share the same high level ambition to develop a sustainable regional and national supply chain, providing educational and training benefits to the New Anglia Local Enterprise Partnership (NALEP) area. We welcome SPR's recognition of the significant opportunities to maximise and support the uptake of local socio-economic benefits through targeted enhancement, initiatives and support offered by this project, learning from what worked from EA1 and EA3 and utilising proven mitigation strategies.
- 6.15.3 In terms of employment SPR predict that one project alone will create on average 389 FTE (full time equivalent) jobs per year during onshore construction, yet make no commitment to local, regional or national employment targets. We would urge SPR that the labour assumptions made for the purpose of assessment (Traffic & Transport) should become agreed targets. We would also expect deliverable and enforceable mitigation proposals for any increase in workforce numbers. This will help avoid and mitigate impacts on the local housing market and local workforce.
- 6.15.4 Using the assumptions adopted for the purpose of assessment, 36% of direct employment would be locally procured. This would create an average local FTE jobs per year of 106 during onshore construction, with a further 187 job opportunities created regionally (within NALEP).
- 6.15.5 In terms of long term employment, the assessment identifies the impact of the projects as 'moderately beneficial' regionally with 300-700 FTE for at least 25 years. The Councils will need to call for greater clarity and understanding of the basis for these estimates. The Councils ask SPR to enhance their current, existing strategies to maximise the skilled labour available in the local labour force.
- 6.15.6 The Councils need to carefully consider the existing Skills Strategy for EA1 and EA3 which included a Memorandum of Understanding (MoU) in relation to skills and education and continue to engage with SPR to ensure that current strategies are enhanced for EA1N and EA3. The MoU is an agreement between SCC and SPR, if SPR did not proceed to build out these projects and they were built out by another developer, mechanisms would need to be put in place to secure the skills and education commitments.
- 6.15.7 SPR has stated that onshore construction could be facilitated by UK based companies; this however needs to be backed up with a supply chain plan and agreed approaches ensuring local, regional and national companies are adequately supported to secure this work.
- 6.15.8 SPR has made no commitment in relation to which port will act as the 'load out' port or where the Operations and Maintenance (O&M) facilities will be located. The Councils need to encourage SPR to utilise a port and O&M site from the within the NALEP area, ideally in east

- Suffolk, to ensure the maximum economic benefit and indirect and induced employment opportunities are gained.
- 6.15.9 SPR has made assumptions based on their data collected, for example that there is a growing aging population and a shrinking working population and therefore these projects would as a positive, attract more people of working age to Suffolk. The Councils agree with this statement, but, only if these people then stay within the locality. We expect SPR to work with the Councils to maximise this opportunity.
- 6.15.10 SPR also conclude that as the local baseline shows a lower skills level than that of the UK we would only have a local population that could access lower skills job opportunities. The Councils will seek to challenge this assumption; targeted skills intervention would enable more local people to have the opportunity to access higher skills roles. We also have clear evidence that skill levels in Suffolk and the NALEP area are growing faster than comparative regions and we will expect SPR to enhance their current commitments to continue working with local stakeholders to ensure this trend is maintained.
- 6.15.11 SPR's assessment has not taken account of the fact that labour is currently employed, signified by the low unemployment rates, and therefore the projects are likely to result in displacement effects in the labour market. SPR has also not undertaken any analysis of the current skills shortages that are reported by employers in the construction, engineering and agricultural sectors, all of which draw on the same pool of workers with connected competence skills sets. The Councils will need to ensure that SPR assesses the current skills shortages and displacement effects and brings forward suitable mitigation.
- 6.15.12 It should be noted that the employment generated during construction will be short term and only a proportion of this being associated with the cable corridor and substation construction. A larger share of the employment is likely to be based in ports such as Lowestoft or Great Yarmouth for the offshore construction with the longer term opportunities often created in areas a considerable distance from the communities experiencing the permanent effects of the onshore substations and infrastructure.
- 6.15.13 Cumulative Impacts have looked at Sizewell C and Vattenfall projects but do not appear to have considered any of the other significant infrastructure projects, third crossings, housing projects etc that will greatly increase the demand for similarly skilled people in the NALEP geography. It is recommended that the Councils work with SPR to ensure a full understanding is reached and suitable interventions are in place to mitigate any risks. The Councils urge SPR to reassess in combination effects taking into account that offshore construction personnel will have many of the connected competencies needed to work on many of the planned infrastructure projects that are likely to be built within the same time period, including Sizewell C, so although there is no offshore build element to many of these projects it is the skill set that is in scope for consideration not the location of the work.
- 6.15.14 In relation to tourism employment, SPR assume that non-residential workers will stay in local tourist accommodation with the expenditure by non-residential staff leading to between 11 to 22 FTE jobs on average during the construction period. The assessment also concludes that if peak employment for one project coincides with the high tourist season, the workers would not displace tourists but provide additional income to local businesses. It is not considered that SPR have adequately addressed the issue of peak season accommodation shortages and the cumulative impacts with other energy projects including Sizewell C. The Councils need to challenge SPR on this issue to ensure it is adequately addressed.
- 6.15.15 In relation to tourism and recreational disturbance, the assessment concludes the impact of the projects will be of negligible significance. The assessment does not however consider the impact on the perception of visitors during the construction phase of the development especially when considered cumulatively with other energy projects and how this will influence their behaviour and consequently impact on local tourism.

- 6.15.16 The assessment considers the long term impacts on tourism in the locality both in respect of the onshore and offshore infrastructure and concludes the impacts will be negligible. This prediction is based on a literature review and an analysis of Trip Advisor comments, SPR has not undertaken a visitor survey. The reliance on a literature review and Trip Advisor reviews and comments about offshore windfarms as visitor impact evidence is inadequate. It is not considered that the conclusions in the assessment in relation to the long term impacts on tourism are sufficiently justified especially given the fact the projects will have significant effects on the east Suffolk coastline and its immediate seascape areas. The offshore elements of EA2 have also been identified as having a significant effect on the coastal landscapes, character and qualities of the AONB and users of the Suffolk Coast Path (part of the national coastal path network), features which attract tourists to the Suffolk coast.
- 6.15.17 SPR concluded in the cumulative assessment there would be significant beneficial cumulative impacts to short term, long term and tourism employment. The assessment considered Sizewell C and Vattenfall projects; there are however other significant projects which will create a demand for similarly skills people (Lowestoft Third Crossing, various housing projects etc). It should also be noted that the assessment in relation to Sizewell C were based on consideration of EDF Energy's Stage 2 consultation material which does not take into account the new maximum employment figures being sensitivity tested by EDF Energy. The cumulative assessment is currently inadequate and the Councils need to work with SPR to ensure a more robust assessment is provided. The availability of workers and accommodation will potentially have a knock on impact on the availability of accommodation for tourists.
- 6.15.1 It is recommended that the Councils work with SPR to ensure sufficient strategies are put in place to ensure that employment benefits are maximised locally. SPR has predicted certain employment levels locally and regionally but it is not clear how these would be achieved. These figures are also estimates as oppose to targets. SPR have also not sufficiently justified their data assumptions, the Councils will need to challenge these. It is recommended that the Councils seek further information in relation to the cumulative impacts of the projects in combination with Sizewell C and other projects specifically with regard to the availability of appropriately skills labour and overnight accommodation. Further information should also be sought in relation to the in-combination impact of the construction phase of the projects with Sizewell C on visitor perceptions and consequential impact on visitor perception and tourism and the longer term impacts on tourism given the significant visual coastal effects anticipated. Notwithstanding the recommended objection to the current disposition of the turbines on EA2, if these schemes do take place, then further assessment of the consequences of the long term impact of the developments on the tourist industry should be continued in association with the local Suffolk Coast Destination Management Organisation and compensation sought for any impacts.

6.16 Method of Working

- 6.16.1 SPR is bringing forward the two schemes EA1N and EA2 as separate projects that can be implemented simultaneously or in sequence, one following the other. In the latter circumstance, the first scheme may well have been completed and the land restored before the second scheme comes in disrupting the same communities and environment again. This is in contrast with the approach at SPR's development of the Bawdsey to Bramford cable corridors where ducts for the second scheme are being laid at the same time as the first scheme, leaving the second scheme merely to pull cables through the ducts when it is implemented without having to dig up the entire area for a further time.
- 6.16.2 This complete separation of schemes appears to be driven in part by the Government's insistence on the necessity to treat the projects as separate entities and in part by the commercial expediency of the developer. Whatever the rationale for this approach, it creates

the risk of effectively doubling the disruption caused to this area of Suffolk during the construction of the cable corridor.

6.16.3 It is recommended that the Councils continue to engage with SPR in order to promote the need for a coordinated approach between the two projects.

6.17 **Cumulative Impacts**

- 6.17.1 Several of the sections above have referred to the cumulative impact of these schemes with Sizewell C, if it is taken forward. The PEIRs for EA1N and EA2 were not able to take into account that for Sizewell C as both were being developed at the same time. Further work will be needed by both developers to ensure that their respective assessments of cumulative impact are undertaken on the most up to date information.
- 6.17.2 The Councils have also been made aware of the offer for two interconnectors (Eurolink and Nautilus) proposed by National Grid Ventures to be connected to the National Grid at Sizewell. The location of the National Grid substation as part of the SPR proposals is likely to be a strong determinant for the location of subsequent schemes which will need to connect through to the same National Grid substation. Some of these have already been given a connection offer at the same point (National Grid Ventures interconnectors to Europe), while others may follow. This will clearly have an impact on the environment of the wider area, if not on the immediate locality, yet the cumulative impact of such schemes is not included within the current assessment. These should be included even if the level of detail available is less complete at this time.
- 6.17.3 It should be noted that the combined pressures created by these offshore wind schemes, Sizewell C and other energy projects elsewhere in East Anglia may bring forward the need to add a further pylon line to the Bramford to Twinstead (in Essex, close to Sudbury) link. This has been the subject of consultation previously but had been put on hold.
- 6.17.4 It is recommended that the Councils continue to advocate a full cumulative assessment of the existing and future projects.

6.18 National Energy Policy

- 6.18.1 The proposals brought forward at this time by SPR are a response to being told by National Grid that they should connect to the power grid lines in the Leiston area. This locational decision by National Grid was made without any wider consultation and seemingly without taking into account the significant national and international landscape and ecological constraints in the area. In setting out the proposals for the substation at Friston and in their earlier work looking at other sites in the corridor, SPR has demonstrated that no site can be developed that is without a significant adverse impact on the local environment or communities. Accordingly, it is clear that the methodology by which connection offers are identified and made by National Grid is flawed.
- 6.18.2 On a wider basis, many of the issues raised by this consultation are a consequence of the Government's lack of overall vision and strategy for the effective planning of the strategy and sequencing of the way in which offshore wind is developed and brought ashore, relying purely on establishing the lowest price for individual schemes at auctions while failing to consider whether a different approach could make economies of scale for the consumer's benefit and at the same time develop an approach that takes greater account of the impact on the environment. The Councils are recommended to continue to lobby Government to make these points and to seek a better approach.

6.19 **Summary**

6.19.1 The Councils are supportive of the principle of offshore wind development, both in terms of seeking to reduce carbon emissions and creating sustainable economic growth in Suffolk, including providing for long term employment for some of our coastal communities, provided

- this can be achieved without significant damage to the environment, residents and tourist economy of Suffolk.
- 6.19.2 SPR has however identified through the SLVIA that the offshore infrastructure associated with EA2 will have a significant impacts on seascape, coastal landscapes, the special qualities of the AONB, users of the Coast Path and cumulatively, the Councils therefore object to this project.
- 6.19.3 Based on the information available the Councils also have concerns in relation to the onshore proposals for EA1N and EA2 regarding their impacts on flood risk, land use, above and below ground heritage assets, background noise levels and therefore residential amenity, seascape, landscape and visual amenity. Collectively, when these areas of concern are taken together they have a significant adverse impact.
- 6.19.4 Notwithstanding the identified concerns, the Councils wish to work with SPR to seek mitigate these impacts where possible and where mitigation is not possible and residual impacts remain, seek compensation.
- 6.19.5 The Councils believe it is however unlikely that the adverse impacts of the proposals will be overcome or adequately mitigated and until adequate mitigation and compensation is proposed by SPR, the Councils object to:
 - a) The offshore infrastructure associated with EA2
 - b) The cumulative impact of offshore infrastructure associated with EA1N and EA2
 - c) The onshore infrastructure associated with both EA1N and EA2 alone and cumulatively
- 6.19.6 The Councils will seek to lobby Government to develop a more effective way to manage and coordinate the exploitation of offshore wind and its associated onshore infrastructure in a way that gives greater economies of scale and better protects the environment and local communities.

7 OTHER OPTIONS CONSIDERED

7.1 The Cabinet could vary the response proposed in the recommendations by taking a different view on the individual components of the recommendations section.

8 REASON FOR RECOMMENDATION

As statutory consultees, Suffolk County Council and Suffolk Coastal District Council (the Councils) have scrutinised the information on the projects submitted by SPR. They conclude that the proposals which are subject to consultation would have a significant impact on the village of Friston, the cable corridor (during construction) and the wider coastal environment. In addition, there are a wider set of concerns which relate to Government policy on the onshore elements of offshore windfarms.

RECOMMENDATIONS

- 1. That the Cabinet is recommended to inform Scottish Power Renewables (SPR) that Suffolk Coastal District Council continues to support the principle of offshore wind as a significant contributor to the reduction in carbon emissions and for the economic opportunities that they may bring to ports in the NALEP geography that could support the construction and maintenance of the windfarms. Notwithstanding this position, the Council:
 - a) Objects to EA2 in relation to the significant effects predicted offshore by SPR on seascape, coastal landscapes, character and qualities of the AONB and cumulatively with EA1N. The

EA2 project will result in a significant change to the sea views from key viewpoints on the AONB coast with the horizon cluttered with turbines. An impact which will be continuously experienced along the coastline further exacerbated when viewed in combination with EA1N and other existing wind farm arrays. It is also recommended that the Council expresses concerns in relation to the effects of EA1N on seascape, landscape and visual effects and objects in relation to the cumulative impacts with EA2;

- b) Objects to the overall impact of the onshore substations of EA1N and EA2 individually and cumulatively on the village and environs of Friston, including on archaeological and heritage assets, landscape character, visual effects, noise and residential amenity. The development of the substation site will permanently change the character of the landscape and have significant visual effects with the setting of the village and the relationship between the historic buildings and their farmland setting permanently changed. The development will also introduce a noise source within an existing tranquil location which at the present noise limit set (35dB) would unacceptably increase the background noise levels;
- c) Is of the view the impacts on the cable route are predominantly capable of being mitigated in the long term but the Council needs to discuss with SPR the measures necessary to mitigate impacts during the construction period including the transport impacts.
- d) Registers concern about both EA1N and EA2 projects in relation to the following matters:
 - i) Loss and sterilisation of good quality agricultural land at Friston in order to accommodate the substations for the projects;
 - ii) Impact on the Grade II listed building at Aldringham Court and its landscape setting from the cable route.
- e) Seeks further information from SPR on both EA1N and EA2 projects in relation to the following matters:
 - i) Impacts on air quality during the operational and construction phases of the projects, justifications for assessment scope and modelling results and cumulative impacts with Sizewell C;
 - ii) Gaps in the information available on flood risk impacts and flood alleviation;
 - iii) Noise sources on site including National Grid infrastructure and mitigation;
 - iv) Highways modelling assessments and assumptions utilised, highways mitigation proposed and how this would be implemented and secured;
 - v) Coastal processes associated with the cable landing point;
 - vi) Ground contamination mitigation,
 - vii) Ecology mitigation and justification for scope of assessments;
 - viii) Archaeological surveys and results;
 - ix) Impact of projects on heritage assets including assessment of coastal heritage assets;
 - x) Socio-economic assessment assumptions and employment predictions, labour displacement effects, current skills shortages and mitigation strategies proposed;
 - xi) Impact on tourism and recreation during the construction and operation phases and mitigation strategies;
 - xii) National Grid connection infrastructure

- xiii) Cumulative impacts of the projects with other projects;
- f) Will impress upon the Planning Inspectorate that during examination of the impacts of EA1N and EA2 schemes, it should consider carefully the in-combination impacts with other energy projects in the area, including Sizewell C and the National Grid Venture projects;
- g) Agrees to work with SPR to identify the means by which the impact of the proposals can be mitigated and/or compensated if the developments do take place including the opportunity to achieve betterment in flood alleviation in Friston;
- h) Requires SPR to work closely with other developers including EDF Energy and National Grid Ventures to consider how mitigation across the schemes can be combined to minimise the impact of the totality of developments in the local area;
- i) Seeks a wider compensation package from developers and the Government that deals with the broader impacts on community, environment and businesses of this and other energy projects in the area.
- 2. That the Cabinet is recommended to raise with Government that the process by which decisions are made by National Grid without wider consultation on identifying points of connection to pylon lines is flawed. Furthermore, the Cabinet has a broader concern that Government needs to take a leadership role to develop a more strategic view on all energy projects, including managing the bringing forward of offshore windfarms and their associated onshore infrastructure, Sizewell C, interconnectors and extensions to and future new windfarms. The Council should lobby Government to take a clearer role in managing the energy projects in a way that would reduce the environmental impact and be more effective for the consumer.
- 3. That the Head of Planning and Coastal Management at Suffolk Coastal District Council in consultation with the Deputy Leader for Suffolk Coastal District Council/Cabinet Member for Economic Development be authorised to make any amendments to the EA1N and EA2 responses prior to submission.

APPENDICES (List the title of each separate Appendix below)		
Appendix A	EA1N Offshore Development Area taken from SPR's Chapter 6 of the PEIR	
Appendix B	EA2 Offshore Development Area taken from SPR's Chapter 6 of the PEIR	
Appendix C	EA1N and EA2 Onshore Development Area taken from SPR's Chapter 6 of the PEIR	
Appendix D	EA1N and EA2 Onshore Substations and National Grid Substations taken from SPR's Chapter 6 of the PEIR	

BACKGROUND PAPERS

Please note that copies of background papers have not been published on the Council's website but copies of the background papers listed below are available for public inspection free of charge by contacting the relevant Council Department.

Date	Туре	Available From
11.02.19 to 25.03.19	EA1N Phase 4 Consultation Material	https://www.scottishpowerrenewables.com/pages/ea one north phase 4 consultation.aspx
11.01.19 to 25.03.19	EA2 Phase 4 Consultation Material	https://www.scottishpowerrenewables.com/pages/ea two phase 4 consultation.aspx
10.11.18	The Councils EA1N and EA2 Phase 3.5 Response	https://www.eastsuffolk.gov.uk/assets/Planning/Offshore- Windfarms/Joint-Local-Authorities-Response-to-SPR-Phase-3.5.pdf
24.08.18	The Councils EA1N and EA2 Phase 3 Response	https://www.eastsuffolk.gov.uk/assets/Planning/Offshore- Windfarms/Response-on-Stage-2-SP-2018-08-23.pdf
17.04.18	The Councils EA1N and EA2 Phase 2 Response	https://www.eastsuffolk.gov.uk/assets/Planning/Offshore- Windfarms/SPR-Formal-Stage-1-response.pdf
2018/19	The Councils written exchange with Rt Hon Claire Perry MP and Rt Hon Greg Clark MP	https://www.eastsuffolk.gov.uk/planning/offshore-windfarms/