Written Representation of Richard Cooper in respect of Scottish Power Renewables DCO Application for East Anglia 1 North and East Anglia 2

1. Summary

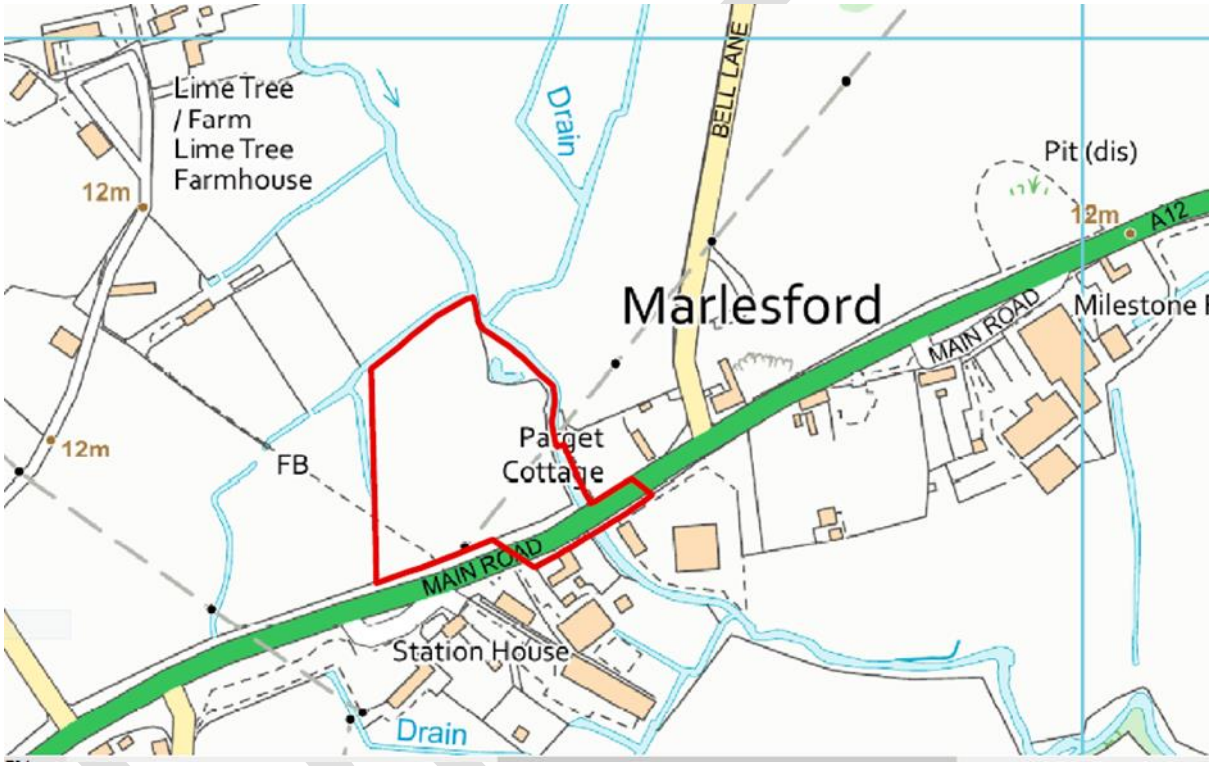
- **I support the principle of developing further offshore energy generation and the plans for the Applicant's East Anglia 1-North (EA1-N) and East Anglia 2 (EA2) windfarms are welcomed. However, I cannot support the proposals for the onshore elements, particularly those for the substations at Friston.**
- **The A12 is already heavily congested in the stretch north of Ipswich to the junction with the A1094 at Friday Street. The A12 at Marlesford is identified by the Applicant as an area of "high sensitivity" and without major mitigation the quality of life for those living along the A12 in Marlesford and Little Glemham will be significantly impaired. I use this opportunity to call again on central and local government to deliver a Four Village Bypass in order to relieve the congestion that will be created by traffic from the Applicant's project and by the traffic generated by Sizewell C (SZC) if it goes ahead.**
- **The Applicant has indicated that it might need to widen and strengthen Marlesford Bridge. It has provided no detail on this aspect of the project and the Examining Authority (ExA) must instruct the Applicant to reveal its full and detailed plans for any works to Marlesford Bridge.**
- **There are fears that the EA1-N and EA2 substations are being used as a "stalking horse" for further substation development of the currently proposed site and on land adjacent to it.**
- **The cumulative impact of the Applicant's traffic on the A12 at Marlesford, coming at a time when potentially the SZC project will be in construction has been underplayed. The lived experience of local residents suggests that the cumulative impact will be intolerable.**
- **The Landscape and Visual Impact Assessment underestimates the impact that industrial scale substation buildings will have on the village of Friston and on a farmed landscape in an intrinsically rural location.**
- **I believe that noise impacts from the operation of the substations have been underestimated and I call on the ExA to give particular scrutiny to this aspect of the development.**
- **I call on the ExA to pause the DCO Examination to allow the BEIS instigated review of Offshore Transmission Networks to take place.**

2. Introduction

I support the development of renewable energy resources and accept the role that offshore wind will play. However, I oppose the plans for Scottish Power Renewables' (SPR's) proposed onshore infrastructure associated with East Anglia One North (EA1-N) and East Anglia Two (EA2) windfarms.

I am a resident of Marlesford on the A12, 7½ miles to the west of Friston. Marlesford will suffer in two main ways if the SPR two substation scheme goes ahead. The village already suffers from community severance and I argue that it will be made worse by the cumulative impact of traffic associated with the SPR and Sizewell C (SZC) projects. In addition, there is the potential for disruption to traffic and delays on the A12 through Marlesford if the Applicant's proposals for bridge strengthening and widening go ahead.

Location Plan for Marlesford Bridge and Associated Lay-down Area



Source: Section 6.2, Figures (Volume 2) 6.2.6.2 EA1N Figure 6.2 Sheet 5

There are various cumulative impacts which will be referred to below, but in general, my belief is that the Applicant has provided inadequate information on how a variety of cumulative impacts (including traffic) will be addressed.

The Applicant is under legal obligations to ensure that its development weighs local impacts against national needs and these applications will be subject to "good design principles" set out in the National Policy Statements for Energy. I believe the Applicant has failed to demonstrate that it has taken these obligations sufficiently into account.

I am concerned about the noise impacts from the substations when they are in operation. I believe that the effect, in what is currently a rural and quiet environment, will be significant – particularly at night when background noise is very low.

To reiterate my position, I am opposed to the principle of the onshore development associated with the Applicants proposals for EA1-N and EA2 and of course, the comments below will be superfluous if the project does not go ahead. However, in the event that the scheme is approved in

whatever form, there will need to be substantial mitigation provided by the Applicant and I detail below under various topic headings, the issues and potential mitigation required.

3. The A12 Through Marlesford and Marlesford Bridge.

a) **A12 Traffic Impacts**

Table 26.13 "Link Based Sensitive Receptors" is at Section 26.5.3 para. 134 of the Environmental Statement and contains the following statement: "*Link 3c. A12 through Little Glemham /Marlesford – **High Sensitivity".*** It goes on to describe the A12 at Marlesford as "*The link is a main 'A' Road and forms part of the SCC Strategic Lorry Route. The A12 through Little Glemham /Marlesford is fronted by residential properties with little separation from the road*".

The following paragraphs describe the current nature and state of the A12:

Para 236. "*Within Little Glemham there are a number of residential properties located off the A12 and also a public house. The footway continues south to Marlesford although is in a poor state of repair and has narrowed significantly. There is however the potential to walk between Marlesford and Little Glemham*".

Para 237. "*Within Marlesford there is a farm shop with café and antiques centre located off the A12 along with a small number of residential dwellings. Footways are also provided within Marlesford*".

Para 238. *"Footways are currently provided along the A12 at Marlesford and Little Glemham to link residents with the local amenities, these footways are however of substandard width (below 1.8m) and no facilities are provided to assist residents crossing the road. This section of the A12 (link 3c) is therefore assessed as a high sensitive receptor*".

I would agree with this assessment. Marlesford village is already severed by the A12. The village has a number of vulnerable people and some young families who regularly cross the A12, either to reach bus-stops or the Farm Café and Shop and without a safe crossing area it is a highly dangerous stretch of Road at present and with the additional 200+ HGV movements and over 300 LGV movements the current dangerous situation will be exacerbated. In combination with the SZC traffic which is expected to be 1,000 HGV movements per day at peak, I would argue that this stretch of road needs significant improvement. Whilst the Applicant recognises that the A12 through Marlesford is a High Sensitive Receptor, there appears to be no analysis of pedestrian and cyclist fear and intimidation, although a methodology is explained. This is a major omission and should be rectified by the Applicant.

Marlesford Parish Council is working closely with Suffolk County Council (Highways Authority) to achieve appropriate mitigation by EDF and SPR of the traffic impacts caused by SZC traffic. I would urge the Applicant to work with the Council to find ways of contributing to the mitigation of traffic impacts on the Marlesford stretch of the A12. I know that those involved with the campaign for the Four Village Bypass of Marlesford, Little Glemham, Stratford St Andrew and Farnham will continue to put pressure on central and local government to deliver a full Four Village Bypass. The additional traffic generated by SZC and the Applicant's works together with the potential congestion at Marlesford Bridge all add weight to the argument for this long overdue infrastructure project.

b) **Marlesford Bridge**

Chapter 26 of the Environmental Statement (Volume 1) contains the section on Traffic and Transport. Table 26.2 appears at page 7 and refers to Offsite Highways Improvements. However, as is the case elsewhere, there is scant detail on the nature of the works to Marlesford Bridge.

Table 26.2 Offsite Highway Improvements

Location	Description of temporary alterations	Where addressed in this chapter
A12 / A1094 junction	Road safety improvements including a reduction in the posted speed limit and the provision of enhanced warning signage and 'rumble strips'.	***Section 26.6.1.10*** includes further details and the rationale for these measures.
A1094 / B1069 junction	Localised vegetation clearance and creation of temporary overrun areas to facilitate the movement of abnormal load vehicles through this junction.	***Section 26.4.3.1.5*** provides details of the abnormal load assessment and proposed highway alterations.
Marlesford Bridge (A12)	Potential structural alternations to the existing bridge to facilitate the movement of abnormal load vehicles over this bridge.	

The Applicant, using the same wording each time, states at various points in the DCO Documents (e.g. at EA1-N, Chapter 27, Human Health, Environmental Statement, Volume 1, 6.1.27 Human Health, Page 5 at Sub-section 27.3.1.1.1 Offsite Highway Improvements para 21 : "*Offsite highway improvements may take place at three locations; the A1094 / B1069 junction, the A12 / A1094 junction and Marlesford Bridge. These works are part of the onshore preparation works which may take place prior to the commencement of main construction. Therefore, detailed assessment of these works does not form part of the assessment of construction impacts presented in section 27.6*". The Applicant goes on to say that further detail of the proposed works is shown at Chapter 6, Project Description, Environmental Statement, Volume 1 pg. 79., however at para 343 on that page, the only description is:

"*Marlesford Bridge –*

o Structural works to accommodate Abnormal Indivisible Loads;
o Temporary laydown area to facilitate structural works;
o Temporary alternative routeing of PRoW (reference: E-387/009/0)
o Temporary moving or socketing of street signs; and
o Temporary moving of street furniture".

For potentially major road works on the important A12 this seems to be a woefully inadequate level of detail and at no point in the DCO Document is it clear whether these works are to proceed or not. If the works were to proceed as outlined, there is likely to be a compulsory purchase of the land required for lay-down. To date no approach has been made to the landowner concerning such a purchase.

The need to widen and strengthen Marlesford Bridge only arises if AILs cannot be brought into Belvedere Yard, Lowestoft. If this facility were available, then AILs would approach Friston from the north, thus avoiding Marlesford Bridge. I would urge the Examining Authority to closely asses whether this alternative has been properly evaluated before the Marlesford site is chosen, as the traffic disruption to the A12, at a time when SZC traffic may also be using this stretch of road, will be considerable. There is no indication of whether the A12 would have to be closed in order for the Marlesford Bridge works to be carried out, but this would lead to huge congestion

as the only way to bypass the bridge is a circuitous diversion through narrow country lanes. This option would not be acceptable to either local residents or other users of the A12.

It is not clear from the DCO Documents how many AILs will potentially use the A12 at Marlesford over the construction life of the Friston project. Two transformers are likely to be imported to the Friston site and will be classed as AILs, but it is unclear whether other deliveries to site will be AILs.

The review of construction material and AIL delivery via the Beach Landing Facility (BLF) for SZC ought to provide an opportunity for the Applicant to make use of the BLF for its own AIL deliveries. I therefore ask the ExA to strongly urge the Applicant to examine this option in light of EDF's emerging plans.

c) Flood Risk

The land edged red to the north of the A12 in the plan above, (known as Station Meadow) is low lying, is adjacent to the River Ore and floods. At Chapter 20, Water Resources and Flood Risk, Environmental Statement, Volume 1 pg. 4 the Applicant states at Para 14: "*The offsite highway improvements will not require a large quantity of plant and equipment and the works will have a small footprint, mostly within the existing highway boundary. The potential exception is works at Marlesford Bridge which would be in proximity to the River Ore. If improvements are needed, further detail of the work required at Marlesford bridge will be developed and the precise working methodology will be agreed post consent through an application for an environmental permit from the Environment Agency (e.g. a Flood Risk Activities Permit for works directly affecting a main river and its floodplain, if required)*".

In their Relevant Representation, the Environment Agency made the following comments:

"*Document 6.1.6 Environmental Statement Volume 1 Chapter 6 Project Description*

1.1 Regarding onshore works and road modifications, section 6.7.3.3.2 outlines the offsite highway improvements required as part of the scheme. These are stated to include structural works to Marlesford bridge, where the A12 crosses the River Ore, to accommodate Abnormal Indivisible Loads; and an associated temporary laydown area on the north side of the A12/west or the River Ore.

1.2 The River Ore is a statutory main river at this location. Therefore a flood risk activity permit under the Environmental Permitting (England & Wales) Regulations 2016 will be required from the Environment Agency prior to any works being carried out in, on, over, under or within 8m of the top of the bank. Permit conditions are likely to include registering with the Environment Agency's flood warning service.

1.3 The associated temporary laydown area as indicated in figure 6.6k, is in an area shown by the Flood Map for Planning to be Flood Zone 3 (high risk). Furthermore, the Suffolk Coastal and Waveney District Council Level 1 Strategic Flood Risk Assessment (SFRA) (April 2018) shows the majority of the area to be within the functional floodplain (Flood Zone 3b). This is land classified as having a 5% Annual Exceedance Probability (AEP) of flooding (also known as a 1 in 20 year return period).

1.4 This site has not been considered within the Environmental Statement Volume 3 Appendix 20.3 Flood Risk Assessment.

1.5 Document 6.1.20 Environmental Statement Volume 1 Chapter 20 Water Resources and Flood Risk discusses the proposed offsite highway improvements, including the works to Marlesford bridge, at Section 20.3.1.1. It is highlighted that these onshore preparation works are not considered as part of the assessment of construction impacts in section 20.6; but that due to the small scale and temporary nature, along with adherence to best practice measures in Table 20.3, there will be no adverse impacts on surface water bodies (including through increased sediment supply or accidental release of contaminants) or changes to surface water run-off.

1.6 No further detail on how the temporary laydown area will be used is provided within the application. We are generally satisfied with the measures proposed to protect water quality during the works (see also section 5 of this response), but further detail is required due to the flood risk at the site. The use of the site as a laydown area will only be acceptable if it can be confirmed that there will be no land raising or built development on site. The nature and duration of use should also be confirmed."

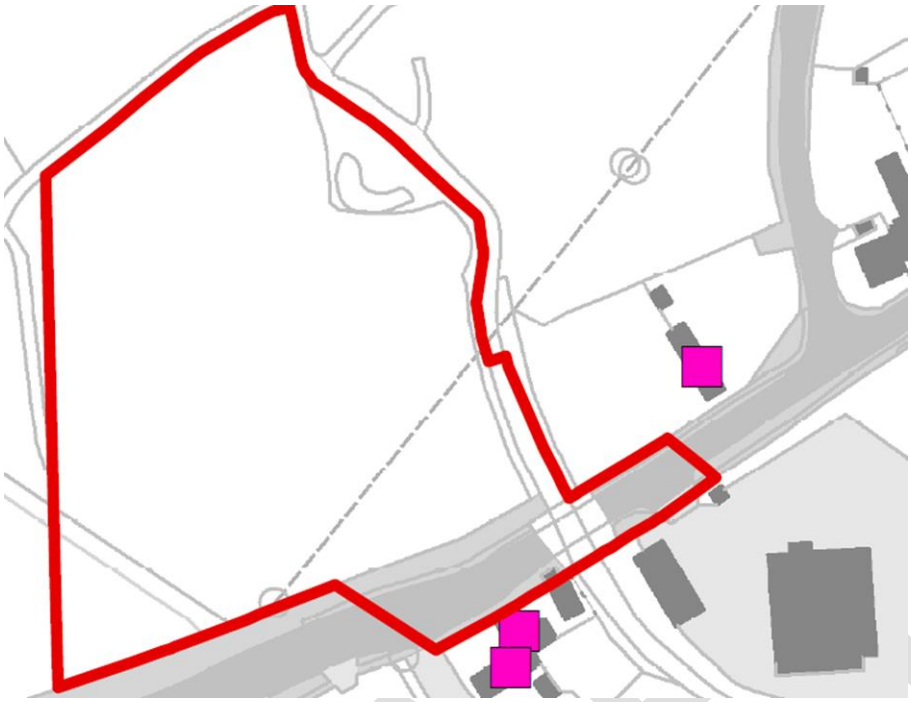
I would agree with the concluding comment by the Environment Agency. Nothing should be done to impede the flow of flood water through the site and any works should not be elevated above current ground level. I also agree that much greater detail is required on the scale, form and duration of the works.

The Applicant should also state what process it has used to identify alternative sites for the lay-down area and if identified, why they have been excluded.

d) Archaeology and Historic Monuments

There appears to be no mention in Document 8.5 "Outline Written Scheme of Investigation: Onshore" of the Grade II listed properties (shown purple on the plan below). All three of the properties illustrated are in close proximity to the possible works and further detail is expected on how these heritage assets will be protected in the event that the works go ahead.

Plan of Area taken from DCO Applications, EA 1-N, 2.7.2 Non Statutory Historic or Scheduled Monument Sites Features onshore



The possible laydown area is within the general area of a Roman/Romano British settlement at Hacheston. It seems likely that this settlement's influence may have extended to the River Ore at Marlesford. Station Meadow (the site of the possible lay-down area) has been largely undisturbed (certainly in living memory) and I would expect, if the development went ahead, that a full archaeological investigation of the site should take place.

e) Ecology

The Applicant fails to make specific reference to protected species at the Marlesford Bridge site. There are known to be otters and water voles in the River Ore. Both are protected and should the works go ahead, the Applicant must demonstrate how the works will be carried out without disturbance to these two species and any others that may be identified in ecological surveys.

Station Meadow is a flower rich water meadow containing a number of species of orchid. In Document 6.7, Onshore Schedule of Mitigation, 1.2 Schedule, at 5.12 Section 22.6.1, "Ecological features of reinstatement" the Applicant states, "*Following the construction phase, habitats will be fully reinstated as far as reasonably practicable. Reinstatement will be conducted in accordance with the EMP and LMP*". If Station Meadow were to be used, it is almost impossible to conceive of how an established wildflower meadow with orchids could be reinstated within a reasonable period of time. The Applicant is therefore asked to identify and strive to use an alternative and less sensitive site for the lay-down area.

I ask the ExA to urgently request further and better detail from the Applicant on its intentions for all aspects of its possible works to Marlesford Bridge.

4. Cumulative Impact

a) Friston Site

The Planning Act 2008 provides a process for examining Nationally Significant Infrastructure Projects and the purpose of the process is to weigh local impacts against national needs. I argue that the SPR Environmental Statements for the EA1-N and EA2 substations give insufficient weight to local impacts. In particular this is true when considering the impacts of rumoured additional substations on the Friston site such as National Grid Ventures Nautilus & Eurolink Interconnectors and substations, and the potential expansion of Greater Gabbard & Galloper windfarms.

As it stands, the complex is wholly inappropriate for a development in a rural, non-industrial setting, adjacent to a small village with notable historic buildings and I therefore oppose the current proposals. When combined with other potential substation development on, or adjacent to the site, the cumulative impact is not sustainable in this location.

b) Roads

The Applicant's Cumulative Impact Assessment recognises the fact that SZC construction could be taking place at the same time as the EA1-N and EA2 projects, however, I believe that they completely underestimate the cumulative impacts on East Suffolk's roads.

Chapter 26 of the Environmental Statement "Summary of Projects considered for the CIA in Relation to Traffic and Transport" relating to EA1-N at Table 26.28 states that:

"*The construction traffic associated with Sizewell C New Nuclear Power Station will travel on some of the same road links as the proposed East Anglia ONE North project. Therefore, cumulative impacts are possible.*" I would argue that cumulative impacts are not just "possible", they are inevitable.

Whilst the Applicant does not expect "temporal overlap" at the peak of the EA1-N, EA2 projects and SZC, this is entirely dependant on the trajectories for each of the projects. The Applicant must therefore plan for a worst-case scenario where all projects are at peak. If this were to happen and the peak traffic predictions for each project occurred at the same time, the fragile East Suffolk road network would not be able to cope and it would make life intolerable for local residents.

There appears to be no Cumulative Impact Assessment to take account of traffic impacts of the proposed Nautilus and Eurolink projects.

5. Landscape and Visual Impact Assessment

a) SPR and National Grid have a duty under Schedule 9 of the Electricity Act 1989 to consider landscape and other features including historic buildings and to do what they can to mitigate any adverse impacts. I believe that SPR has failed to demonstrate that they have applied such consideration.

b) Plans for the substation complex lack detail and visualisations are poor. SPR are relying on the Rochdale Envelope principle but in such a sensitive location I believe that more and better detail of a "worst case" scenario should have been provided prior to Examination in order to allow local residents to make more relevant submissions to the ExA.

c) Good design is a core principle within Overarching National Policy Statements for Energy EN-1 and EN-3. Only limited reference is made to design in in the Applicant's document "Outline Onshore Substation Design Principles Statement" and there is insufficient evidence on how SPR will achieve "good design".

National Policy Statement for Renewable Energy Infrastructure (EN-3) at pg. 9, Section 2.4 "Criteria for "good design" for energy infrastructure" states "*Section 10(3)(b) of the Planning Act 2008 requires the Secretary of State to have regard, in designating an NPS, to the desirability of good design. Section 4.5 of EN-1 sets out the principles of good design that should be applied to all energy infrastructure. Proposals for renewable energy infrastructure should demonstrate good design in respect of landscape and visual amenity, and in the design of the project to mitigate impacts such as noise and effects on ecology".*

The detail provided by the applicant is insufficient to know whether its plans will meet the "good design" criteria set out in NPS EN-3 and the fact that it is using the Rochdale Envelope principle gives little chance for the public to assess the substations' design pre-examination.

In Document 8.3, the Design and Access Statement for EA1-N, at Section 4.2 Onshore Substation and National Grid Infrastructure, para 23, the Applicant states "*The final design of the onshore substation and National Grid infrastructure are subject to detailed design post-consent. In order to minimise visual impacts as far as possible, the appropriate building design and materials will be considered, to ensure blending with the local environment and minimisation of impacts as far as possible".*

Whilst this may be the Applicant's aspiration, the approving authorities will have a high level of responsibility in holding the Applicant to account to achieve an acceptable design in such a sensitive setting. It is difficult to see how even the best design can make such inappropriate buildings acceptable.

Overarching National Policy Statement for Energy (EN-1) at Section 4.5 "Criteria for "good design" for energy infrastructure" recognises this problem when it says, *"Applying "good design" to energy projects should produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible. It is acknowledged, however that the nature of much energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area".*

It is hard to see how this project can possibly be seen as being "sensitive to place" and notwithstanding the apparent acceptance in NPS EN-1 that this may be difficult to achieve, it is my contention that this development should not go ahead as it is wholly <u>insensitive</u> to place.

d) In Chapter 29, Landscape and Visual Impact Assessment at Section 29.3.3.1 "Outline Landscape and Ecological Management Strategy (OLEMS) - Onshore Substation and National Grid Infrastructure" Para 39 the Applicant states, "*In the early years of growth, young trees will be establishing, and are assumed to have good vigour, but likely to have limited screening effects in the landscape. Woodland planted areas are assumed to be well established between 5 to 10 years post-planting, with young trees growing in height, having increasing landscape significance and providing some screening of the onshore substations. Between 10 to 15 years post-planting, fully established trees are assumed to be generally retaining good vigour and*

starting to achieve good height with tree crowns spreading and are assumed to provide notable screening of the onshore substation and National Grid infrastructure".

At a range of receptors at 15 years post construction, (operational phase) the Applicant has assessed the visual impact as "not significant". This conclusion has presumably been arrived at using the assumption above, i.e. that between 10-15 years, notable screening of the substations and National Grid infrastructure will be achieved. This is a highly dubious assumption. This part of Suffolk is one of the lowest rainfall areas in the country and tree establishment and subsequent growth are often compromised by lack of rain and the porous nature of the soils. The Applicant cannot rely on these assumptions to provide the screening it expects.

e) Historic England echoes the views of many people when it says in its Relevant Representation that, *"the Grade II* listed St Mary's church has a special situation in the village with views to and from it across open farmland – some of the most significant of these views will be obliterated by the substation development".* And as Revd. Mark Lowther pointed out in his OFH3 Session 1 submission, the Applicant's development boundary comes to within 100 meters of the churchyard. If this development goes ahead, it will blight for generations, this beautiful church.

f) This development is proposed on the edge of a small village, in a rural landscape and close to an Area of Outstanding Natural Beauty. This is a wholly inappropriate location for an industrial scale development of this nature.

6. Noise

I have grave concerns about the methodology used to predict noise impacts from the substation complex when in operation. It is believed that the approach taken by SPR underestimates the operational noise generated by the complex.

Impacts from night-time noise are assessed by the Applicant as being "Negligible" or of "No impact". I believe the Applicant may well have underestimated the true impact of noise from the substations at night. British Standards say, "*Where background sound levels, and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background*". They go on to say that "*This is especially true at night*." I believe this might be the case at Friston and would urge the ExA to dig deeply into the assumptions made by the Applicant.

7. BEIS - Offshore Transmission Network Review

Belatedly, the Department of Business, Energy and Industrial Strategy has implemented a review of the offshore transmission network. In their terms of reference, BEIS states, "*We will publish an update by the end of the year [2020], with a view to providing clarity for an enduring approach in 2021"*. I argue that the DCO process currently embarked upon for EA1-N and EA2, should now be paused until that "clarity for an enduring approach" is available. To proceed with the process when a more comprehensive solution to bringing offshore windfarm energy to the coast is likely to be proposed is not only wasteful of the ExA resources, but to proceed with the Applicant's plans before the review is available runs the risk of doing untold, unnecessary damage to Friston and the surrounding area.

The technology to deliver integrated offshore networks already exists and is being used in the rest of Europe and as National Grid states in their 2020 report, "Unlocking Offshore Wind - Why

a New Generation of Interconnectors Holds the Key, *"Combined assets make economic and environmental sense. They have the power to connect offshore wind more quickly and cheaply, and they place a lower burden on communities".*

That principle of placing a lower burden on communities is nowhere more true than in the case of Friston. BEIS itself recognises that what it terms as its "medium-term workstream" will be capable of identifying changes to the existing regime to facilitate coordination in the short-medium term and it recognises the opportunity to "*explore early opportunities for coordination through pathfinder projects, considering regulatory flexibility to allow developers to test innovative approaches*". With that in mind, the Examination must be paused in order to create the opportunity for the EA1-N and EA2 onshore works to be reconsidered - if it isn't, then the potential burden on the Friston community, if this project goes ahead, will be immense.

8. Conclusion

As stated previously, I am in favour of maximising the UK's generation of low carbon electricity and offshore wind will clearly be a major contributor to that.

The problems we now face with individual companies carrying out their own point-to-point connections to shore is the result of a complete lack of a comprehensive, post fossil fuel energy policy. This allows (or even encourages) the operators of offshore windfarms to "do their own thing" which is not right when the technology is available to provide much smarter solutions that would reduce the impact on communities in the hinterland of these ad hoc substation developments.

I welcome the huge advances that have happened over recent years and my view of the Applicant's project objectives as a whole is that they are laudable, but I simply cannot support their onshore element. That said, I recognise that if (and I hope this doesn't happen) the on-shore project goes ahead, there must be the very best mitigation put in place which is not just "window dressing" on the part of the Applicant, but a genuine effort to address the concerns of East Suffolk residents.

Richard Cooper (IP Nos. 20024395 & 20024397)

2nd November 2020