



# East Anglia ONE North and East Anglia TWO Offshore Windfarms

# Applicants' Responses to Examining Authority's Written Questions 3

**Volume 9 – 3.14 Other Projects and Proposals** 

Applicants: East Anglia ONE North Limited and East Anglia TWO Limited

Document Reference: ExA.WQ-3.D10.V1 09

SPR Reference: EA1N\_EA2-DWF-ENV-REP-IBR-001102\_09

Date: 7<sup>th</sup> June 2021 Revision: Version 01

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Applicable to East Anglia ONE North and East Anglia TWO







	Revision Summary					
Rev	Rev Date Prepared by Checked by Approved by					
001	07/06/2021	Paolo Pizzolla	lan Mackay / Brian McGrellis	Rich Morris		

	Description of Revisions					
Rev	Page	Section	Description			
001	n/a	n/a	Final for Submission			





#### Glossary of Acronyms

CIA	Cumulative Impact Assessment			
EIA	Environmental Impact Assessment			
ES	Environmental Statement			
ExA	xA Examination Authority			
NGV	National Grid Ventures			





#### Glossary of Terminology

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Applicants	East Anglia TWO Limited / East Anglia ONE North Limited
East Anglia ONE North project	The proposed project consisting of up to 67 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
East Anglia TWO project	The proposed project consisting of up to 75 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
National Grid substation	The substation (including all of the electrical equipment within it) necessary to connect the electricity generated by the proposed East Anglia TWO / East Anglia ONE North project to the national electricity grid which will be owned by National Grid but is being consented as part of the proposed East Anglia TWO / East Anglia ONE North project Development Consent Order.
National Grid substation location	The proposed location of the National Grid substation.

# **Applicants' Response to ExA WQ3 Volume 9** 7<sup>th</sup> June 2021





ExA. Question Ref.	Question addressed to		ExA. Question	Applicants' Response
3.14 Other	Projects and Pro	oposals		
3.14.1	National Grid Ventures		Extension of National Grid Substation Appraisal  The ExAs note that, in addition to substation extension bays, the Nautilus and EuroLink interconnector projects would require a converter station "in proximity" to any substation and that this equates to some 5km radius (maximum) from the NGET substation for size and efficiency reasons [REP9-062]	No response required.
			<ul> <li>a) Is it most efficient to provide a converter station as close as possible to the substation extension bays?</li> <li>b) A 5km radius equates to roughly 3.1miles from the proposed Friston substations. Outline the process by which the proposed converter stations sites will be chosen. Would the presence of a permitted NGET substation at Friston weigh in favour of a site being chosen adjacent to the same site?</li> </ul>	
			Appendix 1 to [REP9-062] contains a Nautilus Project Update document (April 2021). This document contains details of "The vision for MultiPurpose Interconnectors" which it is stated will help to reduce impacts on coastal communities with fewer individual connections and less construction works needed.	
			c) While reducing the number of individual connections could reduce overall impacts on coastal communities, could conversely this also lead to larger impacts on the area chosen for the single, presumably larger, connection?	





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		d) Is Friston being considered as a Multi-Purpose Interconnector?	
3.14.2	The Applicants	Extension of National Grid Substation Appraisal [REP8-074]  Your comments on those of East Suffolk Council relating to the above document [REP10-007] provide figures for additional storage capacity required for drainage purposes which may be required on the site for infiltration only, hybrid, and attenuation only schemes.  Given the work you have carried out on the site, including detailed layout options, how much impact do you consider the approximate drainage areas outlined would have on the landscaping proposed for the East Anglia ONE North and East Anglia TWO substation sites?	The Applicants are not designing the Projects' landscaping mitigation to accommodate any potential future extension of the National Grid substation.  Any future extension of the National Grid substation must take the Projects infrastructure (including landscaping and surface water drainage) into account within its design and consent application. Any modification of the landscaping proposed by any National Grid extension project must therefore be justified, assessed and mitigated at the time of the National Grid extension project consent application.  Assuming the onshore substations for both Projects are constructed it is likely that there would be insufficient land within the current order limits to manage the surface water drainage associated with any National Grid extensions. There is significant flexibility in moving surface water drainage features but the Applicants cannot prejudge how any potential future extension to the National Grid substation will deal with surface water — for instance, the resultant surface water from any extension can be conveyed to an adjacent field, thereby removing the surface water from the Projects' onshore development area.
3.14.3	The Applicants	Extension of National Grid Substation Appraisal [REP8-074]  The ExAs note the production of the above appraisal. The current layout plan for the projects has significant areas of	No The Applicants are not designing the Projects' landscaping mitigation to accommodate any potential future extension of the National Grid substation.





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		land close to the proposals allocated for landscaping and drainage provision. Has any assessment been made of the potential 'knock on' effects that the possible extension of the National Grid substation would have on the proposed mitigation measures for the projects?	Any future extension of the National Grid substation (if any) must take the Projects infrastructure (including landscaping and surface water drainage) into account within its design and consent application. Any modification of the landscaping proposed by any National Grid extension project must therefore be justified, assessed and mitigated at the time of the National Grid extension project consent application.
			The Applicants cannot prejudge how any potential future extension to the National Grid substation will interact with the Projects' strategic landscaping or surface water drainage.  Considering the range of options, it would be wholly inappropriate to conclude that National Grid Ventures (NGVs) projects will interact with the Projects' strategic landscaping.
3.14.4	The Applicants	Extension of National Grid Substation Appraisal – Photomontages  a) The proposed viewpoint 2 [REP8-071] for the above appraisal (Friston, Church Road) indicates that the National Grid substation with extension bays, when combined with the two SPR substations would fill much of the viewpoint horizon, with the western extension bay remaining fairly visible after 15 years. Given this do you maintain that this level of change would not result in any cumulative impact on the significance of the Church of St Mary?  b) b) Viewpoint 5 (Public Right of Way, near Moor Farm) [REP8-072] demonstrates that at year 15 the western half of the view would have a clear aspect of a substantial	The Applicants have previously addressed this point in the <i>Extension of National Grid Substation Appraisal</i> (REP8-074, paras 45 and 47) and still rely on the cumulative impact assessment presented there.  Viewpoint 2 illustrates how the National Grid Substation extensions could be visible when standing on the north side of Church Road, beyond Friston churchyard. It is agreed that the upper parts of the western extension bay would be visible beyond existing hedgerows and that the highest parts would still be visible after 15 years growth of mitigation planting.  It is important, at this point, to remember that cultural heritage impact assessment involving change in setting is based on an understanding of the significance of an asset and on how setting contributes to that significance in the round. It is not a viewpoint-based assessment of visual change and therefore





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		amount of electrical equipment. Given this and the proximity of this viewpoint to the southern boundary of High House Farm (and given recent reductions to woodland cover of this property) do you still consider that adverse impact for this heritage asset would remain of a low magnitude?	the degree of change (including cumulative change) does not directly lead to conclusions regarding impact on significance. It is necessary to consider both the extent to which views looking north from Church Road are part of the positive contribution that setting makes to the significance of the church, and then also factor in the degree to which the significance of the church as a whole resides in its setting.  Considering the case of the Church of St Mary, Friston, the significance of this asset has been described in Environmental Statement (ES) Appendix 24.7 (REP-519, paras 91-94). There, it is noted that "The significance of this asset (and the reason for its designation as a Grade II* Listed Building) primarily lies in the medieval fabric of the church". The analysis goes on to note that "Setting contributes to the significance of this church on three different scales" and then provides further details.  The view north from Church Road, illustrated as Viewpoint 2, is an example of a view in the immediate setting of the church but, it should be noted, it is not a view of the church nor a view from within the churchyard.  It is acknowledged that t the predicted additional visual change at Viewpoint 2 would lead to some further erosion of the rural character of the setting, this would not materially affect the assessment of impact on the significance of the church; there would therefore be no material change to the cumulative impact.  Turning to Viewpoint 5 and its relevance to an assessment of
			impacts on High House Farm, the Applicants have always





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			recognised that the substations collectively would result in considerable change to landscape character in the setting of this Listed Building. Quoting from ES Appendix 24.7 (para 63) with reference to CHVP3 and Viewpoint 5:
			"Together, these two photomontages illustrate how views looking southeast in the setting of High House Farm would be changed from a predominantly rural agricultural character (albeit with existing pylons) to a mix of industrial infrastructure and rural agriculture. In all three scenarios the highest structural elements are in the National Grid Substation and cable sealing end compounds; these would be seen in front of the two other onshore substations, but both would be clearly visible beyond them. Therefore, although there are differences in the precise nature of the visual change, the overall level of change in the setting of High House Farm would be essentially the same for all three operational arrangements."
			Subsequently, in the <i>Extension of National Grid Substation Appraisal</i> (REP8-074), it was recognised that there would be a limited increase in impact on the significance of High House Farm as a result of extensions to the National Grid Substation:
			"Cumulative change in the settings of Little Moor Farm, High House Farm and Woodside Farmhouse would marginally increase the change in landscape character and therefore the resulting impact on significance of these assets. However, this would not be sufficient to change the assessment findings which would remain adverse impacts of medium





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			magnitude for Little Moor Farm and low magnitude for High House Farm and Woodside Farmhouse. "
			This conclusion reflects the fact that the substation infrastructure was already highly visible in this part of the setting and therefore the additional impact of the extensions would be more limited.
			Recent reductions in woodland cover in the garden of High House Farm do not affect this assessment as the reduction does not materially change the way that this Listed Building relates to its setting in the round. It is acknowledged that this factor would be relevant to a visual impact assessment.
3.14.5	The Applicants, Suffolk County Council, East Suffolk Council and all other interested parties	Future uncertainty  Bearing in mind any implications of the Norfolk Vanguard judgement, how would the parties propose the ExAs advise the Secretary of State in relation to the uncertainty about possible future development at Friston and in the wider area created by the precedent case, in the event that either one or both projects is approved, and by the clear evidence submitted to the examinations that (a) the potential to extend the proposed National Grid substation has been demonstrated and (b) the proposed Eurolink and Nautilus inter-connectors are exploring a landfall location between Thorpeness and Sizewell and the possibility of making a National Grid connection in the Leiston area, via	The key word posed in the question is 'exploring'. As set out previously by the Applicants (in the response to ExA Q 2.0.14 in <i>Applicants' Responses to Written Questions 2 Volume 2 2.0 Overarching, general and cross-topic questions</i> (REP6-059)) the information provided to date in the Nautilus 'Initial Site Appraisal' map (produced as part of the Nautilus Briefing Pack¹) shows four potential landfall sites and nine potential converter station locations with multiple cable routeing options going both north and south of Leiston. Leaving aside the fact that Eurolink and Nautilus have yet to commence the planning process proper (i.e. undertake scoping scheduled for early 2022) there is therefore no certainty over where any of the infrastructure for the proposed projects would be located. Cumulative Impact Assessment (CIA) requires an understanding of different projects' potential

<sup>&</sup>lt;sup>1</sup> https://www.nationalgrid.com/document/125601/download Note that the latest briefing pack (dated April 2021, https://www.nationalgrid.com/document/141526/download) does not include this map (

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Ref.		onshore substations located within 5k of a National Grid substation?	impacts and how their zones of influence may interact; detailed knowledge on location is crucial to this. This makes it impossible to undertake a CIA for Eurolink and Nautilus without first undertaking what would effectively be a site selection process another developer's project with so many assumptions and inaccuracies to make any output unusable.  This uncertainty was critical to the assumptions upon which the Applicants' appraisal of the potential extensions to the National Grid substation (in the <i>Extension of National Grid Substation Appraisal</i> (REP8-074)) was based. The Applicants concluded that the only information available that could be used in a credible appraisal of cumulative impacts with Eurolink and Nautilus was that, on the assumption that Eurolink and Nautilus connected into the National Grid substation proposed by the Applicants (which is not confirmed by NGV), this would require the extensions shown in REP8-074 (which were based on the Applicants assumptions on the nature of the extension as no information is available from NGV or NGET on this matter).  REP8-074 therefore provides certain information to understand the potential cumulative impacts of the potential extensions to the National Grid substation. Impacts screened in covered the operational impacts on the topics of ecology, ornithology, landscape and heritage.
			The Applicants highlight that this situation is wholly different from that of Norfolk Vanguard / Norfolk Boreas and the 'precedent case' referred is not applicable to the Projects:

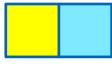




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			The Norfolk Vanguard application contained detailed information on the Norfolk Boreas project, which although not final included crucial detail such as the exact landfall and cable route (as these were shared with Norfolk Vanguard) and substation location, construction programme assumptions etc.
			The Norfolk Boreas application had been made well before the Norfolk Vanguard determination, therefore any detail not included in time for the Norfolk Vanguard application was by then in the public domain in a full and final form.
			In the case of Norfolk Vanguard / Norfolk Boreas there was none of the uncertainty that surrounds the question of cumulative impact between the Projects and Eurolink and Nautilus. As a result of this Norfolk Vanguard Environmental Impact Assessment (EIA) rightly included Norfolk Boreas within its CIA.
			Advice note seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects (AN17) sets out a cumulative assessment process with the stages of longlisting and shortlisting projects, information gathering and assessment.
			Information gathering "requires the applicant to gather information on each of the 'other existing development and/or approved development' shortlisted at Stage 2. As part of the Stage 3 process the applicant is expected to compile detailed information, to inform the Stage 4 assessment. The information captured should include but not be limited to:

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			<ul> <li>Proposed design and location information;</li> <li>Proposed programme of construction, operation and decommissioning; and</li> <li>Environmental assessments that set out baseline data and effects arising from the 'other existing development and/or approved development".</li> <li>The Applicants therefore maintain the position that, in the absence of detailed locational information on the Eurolink</li> </ul>
			and Nautilus projects listed above <b>no meaningful CIA can be undertaken</b> . This position would therefore be their advice to the Secretary of State.
3.14.6	The Applicants	National Grid Ventures submission [REP9-062]  The ExAs note the contents of the above National Grid Ventures (NGV) submission as well as your response to this [REP10-016]. The NGV submission provides information which could assist in an assessment of cumulative impacts and ExQ3.14.1 raises questions for NGV based on this submission and future potential proposals for the Friston sites.	The Applicants' state of knowledge is unchanged from that set out in REP10-016. NGV state in their submission <i>Comments on the Extension of National Grid Substation Appraisal</i> (REP9-062) that the locational information is not available, therefore no CIA can be undertaken by the Applicants.
		Should you wish to do so, make any further representations on this matter	