



SCOTTISHPOWER
RENEWABLES

East Anglia ONE North and East Anglia TWO Offshore Windfarms

Applicants' Comments on East Suffolk Council's Deadline 5 Submissions

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Applicable to **East Anglia ONE North** and **East Anglia TWO**



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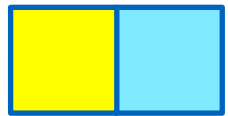


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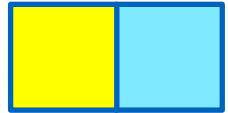
Glossary of Acronyms

AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
CoCP	Code of Construction Practice
DCO	Development Consent Order
EcIA	Ecological Impact Assessments
EMP	Ecological Management Plan
ES	Environmental Statement
ESC	East Suffolk Council
kW	Kilowatt
LCA	Landscape Character Assessment
LCT	Landscape Character Type
LMP	Landscape Management Plan
NGET	National Grid Electricity Transmission
NO ₂	Nitrogen dioxide
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NRMM	Non-Road Mobile Machinery
OLEMS	Outline Landscape and Ecological Management Strategy
PMoW	Precautionary Method Statement
PRoW	Public Right of Way
SEAS	Suffolk Energy Action Solutions
SPA	Special Protected Area



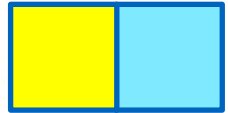
Glossary of Terminology

Applicants	East Anglia TWO Limited / East Anglia ONE North Limited
Cable sealing end compound	A compound which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
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 electricity grid	The high voltage electricity transmission network in England and Wales owned and maintained by National Grid Electricity Transmission
National Grid infrastructure	A National Grid substation, cable sealing end compounds, cable sealing end (with circuit breaker) compound, underground cabling and National Grid overhead line realignment works to facilitate connection to the national electricity grid, all of which will be consented as part of the proposed East Anglia TWO / East Anglia ONE North project Development Consent Order but will be National Grid owned assets.
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.
Onshore cable route	This is the construction swathe within the onshore cable corridor which would contain onshore cables as well as temporary ground required for construction which includes cable trenches, haul road and spoil storage areas.
Onshore substation	The East Anglia TWO / East Anglia ONE North substation and all of the electrical equipment within the onshore substation and connecting to the National Grid infrastructure.
Onshore substation location	The proposed location of the onshore substation for the proposed East Anglia TWO / East Anglia ONE North project.

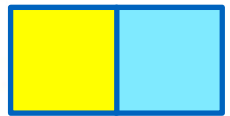


1 Introduction

1. This document provides the comments of East Anglia TWO Limited and East Anglia ONE North Limited (the Applicants) on submissions made by East Suffolk Council (ESC) regarding the East Anglia TWO project and the East Anglia ONE North project (the Projects).
2. ESC's Written Representations submitted at Deadline 5 relate to various materials submitted by the Applicants at or before Deadline 4, including:
 - EA1N and EA2 **Deadline 4 Project Update Note** (REP4-026).
 - EA1N and EA2 **Substations Design Principles Statement** (REP4-029).
 - EA1N and EA2 **Deadline 4 Onshore Ecology Clarification Note** (REP4-005).
 - EA1N and EA2 **Noise Modelling Clarification Note** (REP4-043).
 - EA1N and EA2 **Applicant's Comments on Councils' Deadline 3 Submission** (REP4-025).
 - EA1N and EA2 **Traffic and Transport Deadline 4 Clarification Note** (REP4-027).
 - EA1N and EA2 **Outline Landscape Mitigation Plan** (REP4-015).
 - EA1N and EA2 **Landscape and Visual Impact Assessment Addendum** (REP4-031):
 - Appendix 1 Viewpoint 1 (REP4-032);
 - Appendix 2 Viewpoint 2 (REP4-033);
 - Appendix 3 Viewpoint 3 (REP4-034);
 - Appendix 4 Viewpoint 4 (REP4-035);
 - Appendix 5 Viewpoint 5 (REP4-036);
 - Appendix 6 Viewpoint 6 (REP4-037);
 - Appendix 7 Viewpoint 8 (REP4-038); and
 - Appendix 8 Viewpoint 9 (REP4-039);
 - EA1N and EA2 **Heritage Assessment Addendum** (REP4-006):
 - Appendix 1 CHBP2 (REP4-007);
 - Appendix 2 CHVP3 (REP4-008);
 - Appendix 3 CHVP4 (REP4-009);
 - Appendix 4 CHVP5 (REP4-010);
 - Appendix 5 CHVP7 (REP4-011); and
 - Appendix 6 CHVP8 (REP4-012).

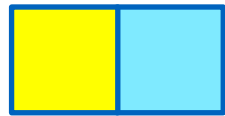


3. The Applicants' response to ESC's Deadline 5 representations are provided in **Section 2**.
4. At Deadline 5 ESC also submitted a Summary of Oral Case for Issue Specific Hearing (ISH) 6 (REP5-047), for matters pertaining to the **draft DCO** (REP5-003). The Applicants have provided a response to ESC's Summary of Oral Case for ISH6 within **Section 3** of this document.
5. This document is applicable to both the East Anglia ONE North and East Anglia TWO applications, and therefore is endorsed with the yellow and blue icon used to identify materially identical documentation in accordance with the Examining Authority's procedural decisions on document management of 23rd December 2019. Whilst for completeness of the record this document has been submitted to both Examinations, if it is read for one project submission there is no need to read it again for the other project.



2 Applicants' Comments on ESC's Deadline 5 Representations

6. **Section 2.1** to **Section 2.10** provide the Applicants' comments on ESC's Written Representations submitted at Deadline 5.



2.1 Deadline 4 Project Update Note (REP4-026)

ID	ESC's Deadline 5 Comment	Applicants' Response
1	<p><i>In relation to section 1.2.1 (REP4-026)</i></p> <p>ESC welcomes the inclusion of an additional noise monitoring location within Requirements 26 and 27 of the draft DCOs at SSR3. This ensures that there is a monitoring location to the north of the substations.</p>	Noted.
2	<p><i>In relation to section 1.2.2 (REP4-026)</i></p> <p>ESC welcomes the reduction in the proposed operational noise limits and considers this a step in right direction but maintains that the operational noise limits should be set at the rating level equal to a truly representative background noise level as discussed in Appendix 4 of the Council's Local Impact Report (REP1-132).</p> <p>ESC has provided further detailed comments in this table (page 10 onwards) on noise matters in response to the Noise Modelling Clarification Note (REP4-043).</p>	The Applicants strongly believe that the representative background noise level established for the substation locations is underpinned by extensive baseline noise measurement data and robust, repeatable statistical analysis. Further information regarding this matter has been provided in response to ESC's comments on the Noise Modelling Clarification Note (REP4-043) within section 2.4 .
3	<p><i>In relation to section 1.3 (REP4-026)</i></p> <p>ESC welcomes the alterations proposed to the A12/A1094 junction during the projects' construction periods and will defer to SCC as the local highway authority for more detailed comments on this matter. ESC has raised a question in relation to the implications of the these works for air quality in the table below (page 29) in response to the Traffic and Transport Deadline 4 Clarification Note (REP4-027) where the works proposed to the Friday Street junction are set out in further detail.</p>	Noted. The Applicants have provided a response to ESC's comments on the Deadline 4 Traffic and Transport Clarification Note (REP4-027) within section 2.6 .

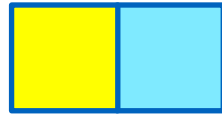


ID	ESC's Deadline 5 Comment	Applicants' Response
4	<p><i>In relation to section 1.4 (REP4-026)</i></p> <p>The additional planting to the north of the National Grid substation is noted and provides more effective screening of the eastern section of the developments. Further consideration of the effect of this planting is provided in this table below in connection with ESC's comments on the Heritage Assessment Addendum (REP4-006) and discussion of Little Moor Farm and CHVP3 (REP-008) in the table on page 30 onwards.</p>	<p>Noted. The Applicants have provided a response to ESC's comments on the Heritage Assessment Addendum (REP4-006) within section 2.9.</p>
5	<p><i>In relation to section 1.5 (REP4-026)</i></p> <p>ESC notes the new grid connection dates for EA2 and submission to National Grid by the Applicants of an application to amend the Connection Agreement for EA1N.</p>	<p>Noted.</p>



2.2 Substations Design Principles Statement (REP4-029)

ID	ESC's Deadline 5 Comment	Applicants' Response
1	<p><i>In relation to paragraph 3 (REP4-029)</i></p> <p>It is considered that this paragraph should include reference to the Design and Access Statement (DAS) (APP-580) in addition to the OLEMS unless the document is updated to include the matters contained in the DAS.</p>	<p>Compliance with the OLEMS (updated and submitted at Deadline 6 document reference 8.7) is secured by Requirements 14 and 21 of the draft DCO (REP5-003). The elements of the Design and Access Statement which are relevant to and useful for design decisions under Requirement 12 have been incorporated into the Substations Design Principle Statement (REP4-029).</p> <p>Other aspects of the Design and Access Statement (APP-580) are secured in the draft DCO (REP5-003) under Requirement 16 (Outline Access Management Plan (REP3-034)), Requirement 28 (Outline Construction Traffic Management Plan (REP3-032) and Outline Travel Plan (REP3-036)), and Requirement 32 (Outline Public Rights of Way Strategy (REP3-024)), all of which require approval by the relevant planning authority or local highway authority. The Applicants therefore consider it unnecessary for the design and access statement to be incorporated specifically within the Substations Design Principle Statement (REP4-029) and consider that its inclusion will introduce unnecessary duplication to the Requirement discharge process.</p>
2	<p><i>In relation to Paragraph 5 and section 1.2 (REP4-029)</i></p> <p>ESC notes that this document will supersede the outline design principle statements and the draft DCOs will be updated to reflect this. The Council fully support the holistic approach to the design of the substations site.</p>	<p>Noted.</p>



ID	ESC's Deadline 5 Comment	Applicants' Response
3	<p><i>In relation to paragraph 27 (REP4-029)</i></p> <p>The choice of tree and hedgerow species remains under discussion. The issue of appropriate plant association needs to be more fully considered before woodland mixes in particular can be approved.</p> <p>The summary of the issues that the OLEMS address is noted and accepted, but it also needs to be considered that the mitigation planting proposals in their own right have the potential to alter the visual receptors experience of the local landscape in certain views.</p>	<p>The Applicants note their response at ID3, Section 2.9 of the Applicants' Comments on East Suffolk Council's Deadline 4 Submissions (REP5-010), in which they state:</p> <p><i>"The Applicants agree that the species mixes for planting should remain open for discussion until the discharge of requirements process. The agreed planting mix specifications will be presented within the Landscape Management Plan (LMP) that must be submitted to and approved by the relevant planning authority post-consent to discharge Requirement 14 of the draft DCO (an updated version has been submitted at Deadline 5, document reference 3.1)".</i></p>
4	<p><i>In relation to paragraph 29 (REP4-029)</i></p> <p>It is noted and accepted that the latest versions of the substations design have the potential to reduce adverse landscape and visual effects of the projects.</p>	<p>Noted.</p>
5	<p><i>In relation to section 5, Table 5.1 (REP4-029)</i></p> <p>ESC considers that the Applicants should make a clear commitment within the design principles to make every reasonable effort during the design refinement process, to further reduce the dimensions of the onshore substations. It is accepted that the draft DCOs provide maximum dimensions for the projects, but these are based on Rochdale envelope/worst case scenario assessments. The Applicants should, as far as reasonably possible, be seeking to achieve best case design outcomes in order to minimise the impacts of the projects. It is essential this commitment is made in relation to both the EA1N and EA2 substations but also the National Grid substation. It is not considered that such a commitment would impede the discharge of requirement process. ESC is disappointed that National Grid have not</p>	<p>As stated within the Substations Design Principles Statement (REP4-029), the design criteria for the substation layouts are relatively rigid, in order to comply with safety, maintainability and quality of supply obligations. The Architectural Framework will ensure that the treatment proposed for the substations is sensitive to place, with visual impacts minimised as far as practical by the use of appropriate design, building materials, shape, layout, coloration and finishes, whilst considering the functional constraints of the substations themselves.</p> <p>The DCO for the Projects will set the maximum visual envelope of the onshore substations and National Grid substation, thereby establishing the acceptability of the Rochdale envelope on which the Applications are based. Post consent, the Applicants will refine the design of the onshore substations and National Grid substation within the consented</p>



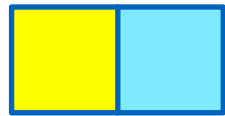
Applicants' Comments on ESC's D5 Submissions

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ID	ESC's Deadline 5 Comment	Applicants' Response
	taken the opportunity to engage with their supply chain and secure reductions in the maximum envelope of their development.	envelope dependent upon the limits of what is available on the market and what can be delivered efficiently and in compliance with the DCO.
6	ESC support SCC in their recommendation that an additional design principle be included within the document to reflect the need for the design of the projects to have regard to policy changes and technological advancements which may occur in between consent and detailed design work. It is understood that SCC has provided some suggested wording within their Deadline 5 submission.	The Applicants have noted this request within Suffolk County Council's (SCC) Deadline 5 submissions (REP5-056) and refer to their response at ID7, Section 2.4 with the Applicants' Comments on Suffolk County Council's Deadline 5 Submissions (document reference ExA.AS-18.D6.V1). In summary, the Applicants consider that the wording proposed by SCC is inappropriate and does not recognise that the authorised project can only be developed within the physical parameters stated within the DCO, and within the authorised Order limits.
7	<i>In relation to section 5.2 (REP4-029)</i> ESC welcomes the commitment to provide a design champion who will ensure effective design coordination between the developments. It is important that the design champion is appointed as a priority post-consent (if the DCOs are granted).	Noted. The Applicants will seek to appoint a design champion prior to or early in the detailed design stage.
8	<i>In relation to section 6.1 to 6.3 (REP4-029)</i> ESC welcomes the reductions in the finished floor levels and heights of the infrastructure associated with EA1N and EA2 substations. It is noted that the Applicants wish to retain a degree of flexibility in relation to the finished ground level and therefore have provided a maximum visual envelope expressed in AOD for the substations. This does provide a greater level of certainty regarding the maximum visual envelope however ESC still considers that providing a maximum finished ground level would be beneficial to help minimise the impacts of the projects.	Noted. The Substations Design Principles Statement (REP4-029) contains updated information to reflect the commitments to revised finished floor levels made at Deadline 3 (REP3- 052). Whilst the Applicants note that the final design must accord with the information within the respective Substations Design Principles Statement (REP4-029), the Applicants have clearly stated the reasons that they are not able to commit to a maximum finished floor level until the detailed design stage when final details of the operational drainage management scheme and required earthworks are available.



ID	ESC's Deadline 5 Comment	Applicants' Response
		This is an entirely reasonable and appropriate approach for the national significant infrastructure projects.
9	<p><i>In relation to Appendix 1 (REP4-029)</i></p> <p>The integrated approach to the design of the substations site is supported. The coordination between the design of the substations is of vital importance and therefore the design refinement and engagement process need to be undertaken jointly.</p>	<p>Noted. The Substations Design Principles Statement (REP4-029) makes provision for an independent review of the Architectural Framework by a nationally recognised impartial body in consultation with ESC, the response to which will inform and guide the final design. The Substations Design Principles Statement sets out stages of engagement with local communities via workshops, which affords opportunities for local residents and the parish councils to provide feedback on the draft and updated design of the onshore substations prior to finalisation and submission of the design details to the relevant planning authority for approval in accordance with Requirement 12 of the draft DCO (REP5-003). The Applicants consider this to be a joined-up approach between engagement and design refinement.</p>
10	<p><i>In relation to Appendix 1, paragraph 23 (REP4-029)</i></p> <p>There is insufficient commitment from the Applicants to take all reasonable steps to explore opportunities to reduce the parameters of the substations post consent. Reference here to the maximum heights set out in the DCOs which have been drafted based on a 'worst case' scenario is of concern. This concern is reinforced as National Grid are yet to undertake any design refinement work. It is essential that the 'outline of the rationale for the heights of key buildings and external equipment heights' includes detailed explanation as to how the final parameters have been reached.</p>	<p>As stated within the Substations Design Principles Statement (REP4-029), the design criteria for the substation layouts are relatively rigid, in order to comply with safety, maintainability and quality of supply obligations. The Architectural Framework will ensure that the treatment proposed for the substations is sensitive to place, with visual impacts minimised as far as practical by the use of appropriate design, building materials, shape, layout, coloration and finishes, whilst considering the functional constraints of the substations themselves.</p> <p>The DCO for the Projects will set the maximum visual envelope of the onshore substations and National Grid substation, thereby establishing the acceptability of the Rochdale envelope on which the Applications are based. Post consent, the Applicants will refine the design of the onshore substations and National Grid substation within the consented envelope dependent upon the limits of what is available on the market</p>



ID	ESC's Deadline 5 Comment	Applicants' Response
		and what can be delivered efficiently and in compliance with the DCO. To ensure transparency throughout this process, the Applicants will engage with ESC and explain how the design principles have been applied.
11	<p><i>In relation to Appendix 1, paragraph 26 (REP4-029)</i></p> <p>It is recommended that the community engagement events are run by a neutral chair/facilitator.</p>	The Applicants consider it to be inappropriate at this stage to constrain the selection of the Chair, rather it is of fundamental importance to ensure that the Chair is suitably qualified and is in a position to influence the design evolution of the substations rather than simply chair an event. ESC will be consulted on the appointment of the external chair.
12	<p><i>In relation to Appendix 1, paragraph 34 (REP4-029)</i></p> <p>It is important that the Landscape Masterplan and Architectural Framework should remain in an early drafting form prior to the granting of the DCOs to enable the community to have the ability to genuinely influence aspects of the design.</p>	Noted. The Applicants note that ESC support the Applicants approach that the design details will be outline and effectively in draft form until the relevant planning authority (ESC) authorise the final Landscape Management Plan and design details in accordance with Requirement 14 and Requirement 12 of the draft DCO (REP5-003) respectively.



2.3 Deadline 4 Onshore Ecology Clarification Note (REP4-005)

ID	ESC's Deadline 5 Comment	Applicants' Response
1	<p><i>In relation to section 2.2 (REP4-005)</i></p> <p>In relation to onshore ecology, the Deadline 4 Clarification Note concludes that it is “highly unlikely that operational noise will interfere with the behaviour of any sensitive receptors which utilise Laurel Covert or other surrounding habitats” (paragraph 13). This is based on the ecological receptors recorded in the area during pre-application surveys and the noise levels predicted to occur during the operation of the substations. We have a number of comments to make on this conclusion:</p> <p><i>Ecological Receptors Recorded</i></p> <p>Whilst the Clarification Note correctly identifies that no bat species considered to be particularly vulnerable to increased noise levels (particularly brown long-eared bat (<i>Plecotus auritus</i>) and Natterer's bat (<i>Myotis nattereri</i>)) were recorded in the vicinity of the substations (Environmental Statement (ES) Appendix 22.6 Bat Survey Report - APP-507), it appears that no brown long-eared bats were recorded at any survey point (either static detector or transect) in the entire red line boundary.</p> <p>We consider that this is highly likely to be an under recording, rather than a complete absence, as this species is one of the more common in the UK (Bat Conservation Trust BCT Brown long-eared pdf (accessed 26/01/2021)) and is considered to be common and widespread in Suffolk (Suffolk Bat Group Bats in Suffolk Distribution Atlas (accessed 26/01/2021)). Historic records for this species also exist from Sternfield church approximately 2.2km to the west of the substation site. It is known that brown long-eared bats echolocate very</p>	<p>A desk-based exercise and field survey effort was undertaken in relation to bats, the findings of which were used to inform the Ecological Impact Assessment (EclA) presented in Chapter 22 Onshore Ecology (APP-070). Biological records (including bat records) were obtained from the Suffolk Biodiversity Information Service (SBIS).</p> <p>The findings from the desk-based and field survey effort were used to subsequently inform the Deadline 4 Ecology Clarification Note (REP4-005).</p> <p>The Applicants' acknowledge that the brown long-eared bat is a common and widespread species distributed across Suffolk. However, the suite of bat surveys (emergence/re-entry, monthly activity transects and monthly static bat detector) did not record this species. Therefore, it was concluded this species was absent in this particular study area.</p> <p>Although the static bat detector deployed at survey point 1B (on the edge of Laurel Covert) failed on two of the four surveying occasions, the static bat detector survey effort was supplemented by walked monthly transect surveys. Additionally, the second bat detector (at survey point 1A), which was located at the southern edge of the copse of trees west of the western substation footprint, was operational for the duration of the survey. The findings from both survey efforts have been used to draw the conclusions presented in both Chapter 22 Onshore Ecology (APP-070) and the Deadline 4 Ecology Clarification Note (REP4-005).</p> <p>The Applicants have committed to undertaking pre-construction bat activity and roost surveys prior to construction, as stated in Section 5.7</p>



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	<p>quietly (or not at all in certain situations) and therefore are often not recorded by electronic bat detecting equipment even when present. We therefore do not consider that it is correct to conclude that this species is completely absent from the substations area.</p> <p>In addition to the above, it is also noted that the static bat detector at survey point 1B (on the edge of Laurel Covert) failed on two out of four of its deployments. This further reduces the confidence in the conclusion that vulnerable bat species are absent from the substation location.</p>	<p>of the OLEMS. The findings of these will be used to inform the requirement for mitigation measures and/or licensing requirements.</p>
2	<p><i>Predicted Noise Levels</i></p> <p>Whilst the Clarification Note considers noise levels to be generated during substation operation in relation to published evidence on the impacts of these on certain ecological receptors, it does not appear to consider whether there will be any ultrasonic component to the noise generated. Bats in particular are potentially disproportionately impacted by ultrasonic noise and therefore this must be assessed before it can be concluded that operational noise will not result in a significant adverse impact on all ecological receptors.</p> <p>Also, whilst the Clarification Note considers the impact arising from the operation of the EA1N and EA2 substations, it does not include the National Grid substation which also forms part of the DCOs. It is therefore unknown whether this substation will exert a similar level of impact, therefore pushing the zone of impact further north, or whether it may even have a greater impact therefore affecting ecological receptors over a wider area.</p>	<p>The Applicants note that partial and corona discharge can be detected at ultrasonic levels, producing a broad band spectrum of signals when present. In practice detection of such noise is recorded between 20kHz and 500kHz (detailed in IEEE C57.127 guidance as example), but energy levels are low and sound attenuation increases with distance as the frequency of the noise source increases.</p> <p>Substation manufacturers design the physical geometry of the system components to minimise sources of partial and corona discharge through research and development. Whilst the detectable frequency range for bats is known to be between 15-80kHz, the frequency of noise emitted from the substation is not within this range. Considering that the parent company of the Applicants (ScottishPower Renewables) have onshore substations comparable to those proposed for the Projects with nursery bat roosts, noise interference to bats is deemed highly unlikely. Nursery bat roosts have previously been recorded within substations with good foraging habitats available nearby, suggesting that there is no noticeable effect of ultrasonic noise from the substations and that ideal conditions for nursery bat roosts is sometimes provided by the assemblage of structures.</p>



ID	ESC's Deadline 5 Comment	Applicants' Response
		<p>Given the distance between the National Grid substation and the Projects' onshore substations, as well as the attenuation properties of noise sources at high frequencies highlighted above, it is considered unlikely that a cumulative effect would arise and therefore would not affect ecological receptors over the wider area.</p> <p>It is worth noting that there is currently no guidance from the Bats Conservation Trust (BCT) on ultrasonic noise emanating from substations. Rather, the focus has been on microwaves and radio frequencies that are utilised for mobile telecommunication systems such as wireless internet and mobile telephony. Published guidance by the BCT shows that species which echolocate at lower frequencies (~20 kHz) such as noctules may hear these frequencies. In addition, many other species produce social calls below these frequencies (<20 kHz). However, bats exhibit an ability to habituate to their environment and tune out the calls of other bats. This suggests they may also be able to filter out additional noises, unless the sound is extremely loud (i.e. if a noise source completely dominates over bat calls, or if the structure of the signal is similar to those shown to elicit a response in bats (rapid broadband signal, gradually rising narrow bandwidth pulses)).</p> <p>As presented in Section 4.3.1 of the Deadline 4 Noise Modelling Clarification Note (REP4-043), various components of the National Grid Infrastructure were included within the updated noise modelling exercise. As advised by NGET to the Applicants, there will be minimal reactive (winding) plant at the National Grid substation. As a consequence, minimal noise sources are considered to be present at the site. The items of National Grid substation equipment considered to be noise emitting and considered within the modelling exercise were the Air Insulated Switchgear (AIS) / Gas Insulated Switchgear (GIS),</p>



ID	ESC's Deadline 5 Comment	Applicants' Response
		<p>the emergency generator and the realignment of overhead lines. However, it was demonstrated that these sources were:</p> <ul style="list-style-type: none"> • Below both the prevailing background and the maximum noise levels currently experienced at the agreed noise sensitive locations, • Anticipated to operate relatively infrequently; or • Presenting a negligible change in the predicted noise level at the agreed noise sensitive receptor locations <p>Therefore, these items of the National Grid infrastructure were scoped out of further modelling and assessment (including ecological).</p>
3	<p><i>Conclusion</i></p> <p>Given the importance of bats as an ecological receptor (an ecological receptor of "High" importance under the EIA definition – ES Chapter 22 Onshore Ecology APP-070) we consider that the precautionary principal must be applied when considering likely impacts on them. Considering the uncertainties with the submitted assessment set out above, we consider it likely that the operation of the substations will have an adverse impact on certain bat species where habitats suitable for them are in the vicinity of the substations (within at least 60m as identified in the research quoted in the Clarification Note (REP4-005). This is likely to cause these species to either avoid these areas or to suffer increased foraging times, therefore expending more energy to forage for the same amount of prey when compared to the absence of the substations. This in turn will result in an adverse impact on populations of these species in this location.</p>	<p>As stated in Section 22.5.3.3 of Chapter 22 Onshore Ecology (APP-070) bats as a receptor are assigned a high importance under the EIA guidelines. Furthermore, potential impacts to commuting/foraging bats as a result of vegetation clearance and construction within the onshore development area have been identified and subsequently assessed in Chapter 22 Onshore Ecology (APP-070). Consequently, the reduction in available foraging habitat, would in turn reduce the insect biomass of the area and therefore reduce the foraging habitat available to bats within the working width.</p> <p>As presented in the OLEMS (an updated version has been submitted at Deadline 6, document reference 8.7), the Applicants have committed to the use of hazel hurdles or similar structures within sections of hedgerows that are temporarily lost during construction works and the restoration of adjacent habitat for bats. In addition, improvement of hedgerows (through increased species diversity) immediately adjacent to the removed sections will be undertaken with the aim of ensuring bat populations and the use of these foraging / commuting routes will</p>

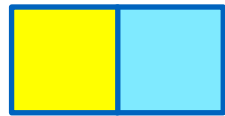


ID	ESC's Deadline 5 Comment	Applicants' Response
		<p>remain available to those species of bat known to use the area for foraging/commuting purposes. Furthermore, monitoring of the foraging/commuting bat populations will be undertaken post construction to assess the success of any mitigation measures, as detailed in the OLEMS (an updated version has been submitted at Deadline 6, document reference 8.7).</p> <p>The Applicants have also committed to undertaking pre-construction bat activity and roost surveys prior to construction, as stated in Section 5.7 of the OLEMS. The findings of which will be used to inform the requirement for mitigation measures and/or licensing requirements.</p>
4	<p><i>In relation to section 2.3 (REP4-005)</i></p> <p>Whilst we agree that barn owl (<i>Tyto alba</i>) is the ornithological receptor most likely to be impacted by substation operational noise, we do not consider that the evidence presented in the Clarification Note fully supports the conclusion that the noise generated will not “give rise to any change in activity within the local barn owl population”. The research quoted relates to distances at which human activity disturbed barn owls, not distances at which barn owls continued to behave as before when a permanent, new, increased noise source was introduced. Although the research indicates that barn owls may habituate, or at least tolerate, increased levels of disturbance from anthropogenic sources, nevertheless given that a large part of their hunting strategy relies on hearing their prey we consider it likely that</p>	<p>Based on the results of baseline surveys, the substation is likely to overlap with the foraging range of one pair of breeding barn owl. Shawyer (2011¹) states that breeding barn owls typically occupy a home range of 3-7 km², with those in arable areas, such as the case here, likely requiring comparably larger ranges. The vicinity of the proposed substation location contains a mix of arable and some woodland which is rated by Shawyer (2011) as being generally unsuitable as a foraging resource. It is possible that some field margins and woodland edge beside the substation would become suboptimal or unavailable for foraging due to increased noise levels associated with the substation, but when considered within the overall requirements of barn owls in arable areas (15-25 km of rough grassland margin, according to Shawyer, 2011) this is unlikely to significantly affect breeding success or productivity of the pair and affect the regional barn owl population. As stated in ES Chapter 23:</p>

¹ Shawyer, C. R. 2011. Barn Owl *Tyto alba* Survey Methodology and Techniques for use in Ecological Assessment: Developing Best Practice in Survey and Reporting. IEEM, Winchester.



ID	ESC's Deadline 5 Comment	Applicants' Response
	<p>the increased noise levels generated by the substations will mean that this species avoids the area.</p> <p>Barn owl were recorded nesting in relatively close proximity to the substations area (ES - Figure 23.8 - Other Scheduled 1 Target Species Records - APP-291). The noise generated by the substations may result in the abandonment of this nesting area or may result in the avoidance of the area around the substations, including the new landscaping proposed as part of it, which will result in the loss of foraging area from the territory. Whilst this impact is undesirable, we accept that it is assessed in the ES (Chapter 23 Onshore Ornithology - APP071).</p>	<p>Onshore Ornithology, para. 224, any potential losses of territories will aim to be mitigated for by the erection of new barn owl nest boxes in suitable locations within the local area, where possible. Although no territories are predicted to be lost on the basis of information available to date, this would be confirmed by pre-construction surveys.</p>



2.4 Noise Modelling Clarification Note (REP4-043)

ID	ESC's Deadline 5 Comment	Applicants' Response
1	<p><i>In relation to paragraph 3 (REP4-043)</i></p> <p>ESC welcome inclusion of SSR3 into the monitoring locations as requested and the downward direction of travel for the noise rating limit, but as discussed elsewhere, 31 dB LAr is not accepted as an appropriate limit for operational noise to prevent adverse impact at this or the other assessment locations.</p>	<p>The Applicants note that ESC welcomes the additional noise monitoring location at SSR3 and the downward direction of travel for the maximum operational noise rating levels at the nearest noise sensitive locations to the onshore substations.</p> <p>The Applicants maintain that a maximum operational noise rating level of 31dB at a free field location immediately adjacent to noise sensitive receptor SSR3 is fully justified in light of the representative background noise level established through repeatable statistical analysis of the extensive measured baseline noise data. It is recognised that the representative background noise level for the onshore substation locations remains a point of disagreement between ESC and the Applicants.</p> <p>The Applicants note that evidence of background noise levels established by ESC have not been submitted to the Examination.</p>
2	<p><i>In relation to paragraph 15 (REP4-043)</i></p> <p>The Applicants' background noise surveys are clearly affected by one of more local noise sources which were not present when ESC officers and the Council's consultants visited the site on 7/8 November 2019.</p> <p>The Applicants identify noise from existing overhead transmission lines as a potential noise source in the ES (see Paragraph 30, Appendix 25.3 – APP-524). ESC's consultant's experience of surveys in and around National Grid transmission equipment is that overhead lines can generate significant levels of noise under some environmental conditions but not others. Noise from the existing overhead lines is therefore a likely candidate for the unexplained variations in noise levels within noise survey data. If this is not the</p>	<p>As per their response in the Applicants' Response to Appendix 4 of the Local Impact Report (REP3-071), the Applicants have received advice from National Grid that corona discharge noise from overhead transmission lines occurs only under very specific meteorological conditions, including (but not limited to) periods of high humidity or damp or drizzly weather. The Applicants note that damp and drizzly weather would have been recorded by the in-situ weather station. Any baseline noise survey measurements recorded during such periods would have fallen outside the scope of suitable weather conditions (as described in BS4142:2014 +A1:2019 and BS7445:2003) and been omitted from analysis of the baseline noise data to derive the background noise level. Further review of the weather data collected during the baseline noise survey indicates a wide variation in humidity.</p>



ID	ESC's Deadline 5 Comment	Applicants' Response
	<p>case, it remains that the Applicants' survey data is affected by an unknown and unexplained noise source or sources. It is not possible to determine whether the measured levels are representative without understanding what caused these variations or under what conditions they occur.</p> <p>The reference to local roads as potential causes of these variations in measured background noise levels is not accepted. Given the short duration of any vehicle passes in comparison to the 15-minute assessment period, there would have to be a very large number of vehicle movements on the surrounding roads in a night-time survey period (23:00 – 07:00) to generate constant traffic noise and have an effect on the overall LAF90 figure. This is not considered likely and is not consistent with our visits to the site.</p>	<p>However, there is no set range of humidity levels over which the corona discharge occurs so increased humidity is not an indication that the corona noise would occur.</p> <p>The Applicants accept an inherent limitation of any unattended noise survey is that individual noise contributions detected by the monitoring equipment cannot reliably be attributed to specific sources but recognise the inherent benefits of such monitoring providing long term background monitoring data. However, the Applicants consider the individual noise contributions to be a moot point because all individual noise source contributions provide the as-measured noise levels at each monitoring location, which in turn have informed the establishment of the representative background noise level.</p> <p>Regarding noise from passing traffic being detected by the baseline noise measuring equipment, the Applicants note that the assessment undertaken is based on a 5-minute integration period (not 15-minutes). Whilst, noise associated with a passing vehicle will be detected over a short period, the noise measurement equipment would detect the increasing noise levels as the vehicle approaches the nearest point of the highway to the baseline noise monitoring equipment, followed by the decreasing noise level as the passing vehicle increases its distance from the baseline noise monitoring equipment.</p>
3	<p><i>In reference to paragraph 18 (REP4-043)</i></p> <p>ESC welcomes a reduction in the proposed operational noise limits as a step in the right direction but does not accept that at an industrial noise generating a noise rating level of 31 or 32 dB L_Ar throughout the day and night in an extremely quiet rural area would not have an adverse impact. ESC maintains that operational noise limits should be set at the rating level equal to a truly representative background noise</p>	<p>The Applicants note that ESC welcomes the downward direction of travel for the maximum operational noise rating levels at the nearest noise sensitive locations to the onshore substations.</p> <p>The Applicants maintain that a maximum operational noise rating level of 31dB at a free field location immediately adjacent to noise sensitive receptor SSR3 is fully justified in light of the representative</p>



Applicants' Comments on ESC's D5 Submissions

24th February 2021

ID	ESC's Deadline 5 Comment	Applicants' Response
	<p>level as discussed in Appendix 4 of the Council's Local Impact Report (REP1-132).</p>	<p>background noise level established through repeatable statistical analysis of the extensive measured baseline noise data.</p> <p>It is recognised that the representative background noise level for the onshore substation site remains a point of disagreement between ESC and the Applicants.</p>
4	<p><i>In reference to Paragraph 23 (REP4-043)</i></p> <p>The use of lower ground absorption coefficient for the substation site within the operational model (G=0.5 as opposed 1.0) is welcomed. However, the Applicants are directed toward the guidance in ISO 9613-2 ISO 9613-2:1996 Acoustics — Attenuation of sound during propagation outdoors — Part 2: General method of calculation which states that a coefficient of G =0 should be used for "Hard Ground, which includes paving, water, ice, concrete and all other ground surfaces having a low porosity. Tamped ground, for example as often occurs around industrial sites, can be considered hard." For this reason, it is considered that the Applicants use a ground absorption coefficient of G=0 within the substation compounds in their revised model.</p> <p>The use of G=0.5 as opposed to G=0 is expected to under-report the predicted noise levels by approximately 1dB at the receptor locations.</p>	<p>The Applicants anticipate that the finished ground surface of the onshore substations will be finished with stone chippings.</p> <p>The Applicants are aware of the guidance within ISO 9613-2:1996 but note that the anticipated surface of the area surrounding the substations comprises neither of paving, water, ice, concrete or other low porosity substrate.</p> <p>The Applicants reviewed available literature including Architectural Acoustics Illustrated (Ermann, 2015) and consider that a ground attenuation coefficient of 0.5 more appropriately represents the porosity level of the ground surface within the onshore substation footprint.</p>
5	<p><i>In reference to paragraph 24 (REP4-043)</i></p> <p>ESC welcomes the inclusion of the transmission lines within the revised operation noise models but note that cumulative noise models do not include any contribution from equipment on the National Grid substation site (work item 31) as requested by ESC.</p>	<p>As stated within the Noise Modelling Clarification Note submitted at Deadline 4 (REP4-043), the design of the National Grid substation does not include reactive or winding plant (which noise emissions are associated with). Within the REP4-043, the Applicants have further considered the possible noise sources of the National Grid substation, including AIS circuit breakers, emergency generator use and overhead transmission lines. Based upon information provided by National Grid,</p>



ID	ESC's Deadline 5 Comment	Applicants' Response
		<p>these items of plant were screened out of further modelling on the following basis:</p> <ul style="list-style-type: none"> • The predicted noise contribution at noise monitoring locations from the operation of the overhead transmission lines were lower than the existing measured background noise level at each monitoring location; • The use of emergency generators does not form part of the day-to-day operation of the National Grid substation and the received noise levels at the three nearest noise monitoring locations with the generator operating were no greater than the modelled noise levels without the generator operating; and • AIS circuit breakers are considered to be activated infrequently, only in the case of an emergency and the predicted noise contribution at noise monitoring locations from the operation of circuit breakers were lower than the prevailing measured background noise levels.
6	<p><i>In reference to paragraph 26 (REP4-043)</i></p> <p>The Council's consultants have previously highlighted the inconsistencies between the pre-weighted Octave Band levels in Table in 5 and the A-weighted levels in Table 4. It remains unclear which set of data is correct and which is used in the model. In practice, this could mean that the predicted noise levels are substantially lower than those which will occur in practice at the assessment locations.</p>	<p>The Applicants assume ESC's comment refers to Table 3 of the Noise Modelling Clarification Note (REP4-043) and not Table 4.</p> <p>The Applicants confirm that the linear (unweighted) spectral data presented within Table 5 of the Noise Modelling Clarification Note (REP4-043) were input into the noise model software before applying an A-weighting prior to modelling being undertaken.</p>
7	<p><i>In reference to paragraph 33 (REP4-043)</i></p> <p>ESC maintains that any noise from the National Grid substation site should be included in the noise limits imposed under Requirement 27. If the Applicants believe that that there are no significant sources of noise on the substation site, it is not clear what practical issue the</p>	<p>Whilst the Applicants consider that it is unnecessary to include a noise limit for the National Grid substation, discussions are continuing with ESC on this matter.</p>



ID	ESC's Deadline 5 Comment	Applicants' Response
	inclusion of the site within the cumulative limits presents to the Applicants.	
8	<p><i>In reference to paragraph 35 (REP4-043)</i></p> <p>The information provided does not state at what distance the level of 124.6 dB LAFmax was measured and therefore how this figure was used to calculate the noise levels at the receptor locations. It is accepted that a total of 26 events within an 18-month period is not considered a regular event in terms of the formal operational noise assessment. However, very loud events (however infrequent) could have a significant impact on residents if they occur in the night. Can the Applicants confirm whether routine switchgear activations associated with maintenance can be scheduled for daytime hours, when the potential for impact is lower?</p>	<p>The Applicants confirm that 124.6dB LAFmax has been derived from a sound power level and not a sound pressure level. Therefore, 124.6dB LAFmax is taken to be the noise emitted at source, rather than emitted at a distance from the source. This was confirmed by National Grid to the Applicants.</p> <p>The Applicants will endeavour to schedule routine maintenance during daytime hours where practicable.</p>
9	<p><i>In reference to paragraph 49 (REP4-043)</i></p> <p>ESC disagrees with conclusions that the predicted levels will not have an adverse impact at the receptor locations.</p>	<p>The Applicants consider that the revised assessment is robust. The methodology that has led to the conclusions ranging from minor adverse significance to no impact follows standard industry guidance and is appropriate for the purposes of assessing the potential operational noise impacts of the Projects.</p>
10	<p><i>In reference to paragraph 52 (REP4-043)</i></p> <p>The impact of the introduction of a new noise source is entirely dependent on the noise climate to which it is being introduced. None of the examples raised as precedent are in a similarly quiet rural locations and are therefore not relevant to the assessment area in and around Friston:</p>	<p>The Applicants note that the introduction of a new noise source is dependent on the noise climate. However, the Applicants included these nationally significant infrastructure projects as examples to demonstrate the efforts taken to commit to maximum operational noise rating levels several orders of logarithmic magnitude below that of similar projects.</p> <p>The results of the updated modelling demonstrate that the predicted operational phase noise levels from the Projects (either singularly or cumulatively) are below the revised maximum operational noise rating</p>



ID	ESC's Deadline 5 Comment	Applicants' Response
	<ul style="list-style-type: none"> Norfolk Vanguard onshore substation is located at Necton in Norfolk on land adjoining the A47, the main arterial route out the county to the west. Onshore substations for Dogger Bank A, B and C are to be located on land adjoining existing National Grid substation sites where the existing climate is expected to be dominated by noise from transformers on the existing equipment on the sites, nearby main roads or the nearby urban sources in Hull (A&B) and Middlesbrough (C). 	<p>limits (32dBA at SSR2 and SSR5 NEW, and 31dBA at SSR3) and are below those assessed for other projects of a similar scale. The Applicants therefore consider that the noise levels anticipated to be emitted (which result in, at worst, minor adverse impacts) are acceptable for this location and mitigation has been applied appropriately.</p> <p>Table 4 of BS8233:2014 and the Guidelines for Community Noise (WHO, 1999) state that a night-time noise level of 30dB inside a bedroom is 'desirable'. The Applicants note that the revised maximum operational noise rating levels specified within the Noise Modelling Clarification Note submitted at Deadline 4 (REP4- 043) and within the draft DCO (REP5-003), apply a maximum operational noise rating level in a free field location adjacent to the specified noise sensitive receptors (i.e. outside). Given that a building envelope provides a degree of noise attenuation from external noise sources, the Applicants consider that, even with partially opened windows, the internal noise levels received from the operation of the substations will be substantially lower than the desirable night-time noise level set by BS8233:2014 and WHO (1999).</p>
11	<p><i>In reference to paragraph 68 (REP4-043)</i></p> <p>An assessment of the impact of noise on public rights of way around the substation site is welcomed.</p>	Noted.
12	<p><i>In reference to paragraph 75 (REP4-043)</i></p> <p>The comments in paragraph 75 appear to identify the existing overhead power lines as a noise source which contradicts the comments in Paragraph 15 (see previous comments). Note the infrequency of traffic on these rural roads means that individual</p>	<p>The Applicants wish to clarify that paragraph 75 of the Noise Modelling Clarification Note (REP4-043) doesn't specifically identify the overhead transmission lines as a noise source, rather identifies the overhead transmission lines as a feature within the landscape comprising the onshore substation location.</p>



ID	ESC's Deadline 5 Comment	Applicants' Response
	<p>vehicles passing close to the receptor positions are not expected have a significant impact on the measured background noise levels, which are unaffected by transient events.</p>	<p>Paragraph 15 notes that noise emissions associated with overhead lines are not continuous but are limited to specific meteorological conditions.</p> <p>Regarding traffic noise, the Applicants refer to their response at ID2 in which they consider traffic noise would have an effect when conducting analysis of the as-measured baseline noise data using a 5-minute integration period.</p>
13	<p><i>In reference to paragraph 77 (REP4-043)</i></p> <p>The graphs provided by the Applicants show that the noise climate at the site consists of a very quiet noise environment apparently affected by one of more unknown local noise sources which are not identified or discussed in the noise assessment. Unless these sources are identified, it is impossible to determine whether the measured levels are representative of typical conditions at the assessment locations.</p>	<p>The Applicants would note the long term duration of the baseline noise monitoring survey and the fact that the meteorological conditions experienced during the survey period were conducive to collecting high quality data. Due to this, the Applicants are confident their representative background noise level is based upon a robust and extensive dataset.</p> <p>Regardless of whether the specific source of a noise measurement reflected within the baseline noise measurement dataset has been identified, without proof that this source would cease to exist in the future the Applicants maintain that such noise is an intrinsic characteristic of the exiting noise climate.</p>
14	<p>In reference to paragraph 81 (REP4-043)</p> <p>The statement that "Applicants do not consider it appropriate to have differing noise limit levels at different receptors..." is contradicted by differing noise limit levels set by the Applicants at different receptors. ESC maintains that the operational levels should be set according to a Lowest Observed Adverse Effect Level (LOAEL) of the rating level equal to a truly representative background.</p>	<p>The Applicants note that the predicted noise levels for the cumulative operation of the Projects' onshore substations in parallel with the National Grid substation are no greater than 3dB above the as-measured background noise levels (see REP4-043). As per Table 25.19 of the ES (APP-073), the Planning Practice Guidance (PPG) / Noise Policy Statement for England (NPSE) category for a Lowest Observed Adverse Effect Level (LOAEL) is an increase of 3-5dB above background (L_{A90}). As such, the Applicants note that the maximum operational noise rating levels specified within the draft</p>



ID	ESC's Deadline 5 Comment	Applicants' Response
	<p>Analysis of the Applicants' survey data, ignoring the unidentified noise sources which the Applicants claim were present at the time of their surveys, suggest that the following figure should be used at each monitoring location:</p> <ul style="list-style-type: none"> • SSR2 – 27 dB LAF90,5mins • SSR3 - 24 dB LAF90,5mins • SSR5 (NEW) - 29 dB LAF90,5mins <p>If it is not practical to set differing noise limits at different receptors these should be set according to the lowest of the above figures in line with the methodology used previously.</p> <p>In the event that noise limits based on these background levels are not achievable in practice, ESC maintains that the Applicants should use the above figures to assess the impact of operational noise at the receptors to allow the Examining Authority to make an informed decision on the true impact of the proposed development.</p>	<p>DCO (REP5-003) fall within the LOAEL category, based upon the background noise levels established through analysis of the baseline noise monitoring data.</p> <p>The Applicants do not accept the approach taken by ESC to omit data in their analysis on the basis that its source cannot be identified. When recorded over a long term survey period, recurring and observable patterns within the baseline noise measurement dataset are an inherent characteristic of the existing noise climate whether identifiable or not.</p> <p>It is considered that, given received noise levels decrease with increasing propagation distances, the current maximum operational noise rating limits set within the draft DCO (REP5-003) for a free field location adjacent to SSR2 and SSR5 NEW are sufficient to limit noise to no greater than 32dBA at the locations closest to the footprints of the Projects' onshore substations.</p> <p>The Applicants do not accept ESC's assertion of the baseline noise levels for each monitoring location specified in the absence of a sufficient robust survey being undertaken.</p> <p>The Applicants maintain that the assessment of operational noise presented within the Noise Modelling Clarification Note (REP4-043), which supersedes that presented within Chapter 25 of the ES (APP-073), is robust and accurate given that the representative background noise level has been established from repeatable statistical analysis on a wealth of measured baseline noise data.</p>
15	<p><i>In reference to Table 20 (REP4-043)</i></p> <p>Table 20 shows that the noise levels modelled at receptors SSR2 and SSR5New are expected to be dominated by the Harmonic Filter</p>	<p>The Applicants note that caption of Table 20 within the Noise Modelling Clarification Note (REP4-043) is incorrectly phrased. The caption of Table 20 would be better phrase '<i>Greatest noise</i></p>



ID	ESC's Deadline 5 Comment	Applicants' Response
	<p>banks. The octave band levels supplied by the Applicants show that that the highest levels generated by these items are in the 125 Hz Octave band. This corresponds with the 100 Hz tones generated by magnetostriction effects commonly generated by mains power transmission equipment providing a 50 Hz supply. This "hum" would normally be subject to an acoustic feature correction when assessed in accordance with BS4142.</p> <p>The Applicants have supplied details of the analysis used to conclude that the rating level should not be subject to penalty for tonality. The Councils do not accept this analysis and maintain that the rating level of operational noise should be subject to acoustic feature corrections in accordance with BS4142. There is precedent for this in other DCO applications for similar developments submitted by the Applicant and their consultants where adequate data was not available at the time of assessment.</p>	<p><i>contributions from operation phase noise sources of the onshore substations'</i>. To clarify, if dominance is defined as one noise source being at least 10dB greater than the next contributing noise source, this does not apply to the harmonic filters in this case at either SSR2 or SSR5 NEW. The same is true of auto transformers at SSR3. For the cumulative scenario (Scenario C), none of the quieter noise sources presented within Table 20 of the Noise Modelling Clarification Note (REP4-043) provide a contribution greater than 2.4dB above the next highest contributing noise source.</p> <p>The Applicants note that 1/3 Octave Band data is required for a thorough assessment of audible tones in sounds according to Annex C of BS4142:2014+A1:2019, which will only be available during the detailed design stage. Irrespective of whether tonality or other such acoustic corrections are identified or not, as per the wording of Requirement 26 and Requirement 27 of the draft DCO (REP5-003), the Applicants must ensure that the operation of the onshore substations does not exceed the maximum operational noise rating limits at the specified receptors (i.e. the maximum operational noise rating limit is inclusive of any acoustic corrections such as tonal elements).</p> <p>The Applicants contest ESC's reference to 'hum' and note that this is unsubstantiated by ESC, and indeed that the Operational Noise Assessment for East Anglia ONE did not conclude tonality arising from the operation of this substation (see REP5-022).</p>
16	<p><i>In reference to paragraph 84 (REP4-043)</i></p> <p>Section 10 of BS4142 states that the assessment should "Report the level and potential effects of uncertainty". ISO9613-2, the calculation</p>	<p>The Applicants position remains unchanged on this matter from previous submissions and reiterate their previous response to this matter (see REP2-011):</p>



ID	ESC's Deadline 5 Comment	Applicants' Response
	<p>methodology used by SoundPLAN, states an inherent results uncertainty of ± 3dB.</p> <p>In this case levels 3dB below those reported by Applicants would not affect the reported outcomes. However, if the reported levels were 3 dBA higher, they would exceed the operational limits at SSR2 (32.9 dBA) and SSR3 (32.2 dBA). Ignoring the inherent uncertainty in the calculation methodology is not in accordance with the Rochdale envelope approach which requires an assessment of the worst case where there is not sufficient information at the time of the assessment.</p>	<p><i>"The Applicants note that uncertainty 'budget' is not a requirement of BS4142:2014+A1:2019 and is not a standard inclusion within noise assessments undertaken for NSIPs.</i></p> <p><i>In the event a ± 3dB uncertainty budget is applied to the model results as suggested by the Councils, it is considered that there is an equal possibility of the results being overestimated as they are underestimated. As such, the Applicants consider that the operational noise predictions presented within the ES and assessment conclusions are robust irrespective of the application of this uncertainty budget. This position applies to all noise predictions presented within the ES that have been calculated by the noise model generated using SoundPLAN".</i></p>



2.5 Applicants' Comments on Council's Deadline 3 Submission (REP4-025)

ID	ESC's Deadline 5 Comment	Applicants' Response
1	<p><i>In reference to paragraph 9 (REP4-025)</i></p> <p>The figures quoted from Table 25.19, Chapter 25 of the ES (APP-073) agree with ESC's position that that the lowest level at which an adverse effect is observed (LOAEL) is where the rating level is equal to the background noise level and not +5dB above the background noise level as stated elsewhere by the Applicants.</p>	<p>The Applicants note that, as per Chapter 25 of the ES (APP-073), 'a 3dBA change in environmental noise level is accepted to be the lowest perceptible level'. An increase of >3dB is considered to be the lowest observed adverse effect level (LOAEL), which corresponds with the threshold of the onset of a minor adverse impact as per Table 25.19, Chapter 25 of the ES (APP-073).</p> <p>For wider context and as referenced within the Applicants' Comments on East Suffolk Council's Deadline 4 Submissions (REP5-010), the Night Noise Guidelines for Europe (WHO, 2009) state: 'There is no sufficient evidence that biological effects observed at the level below 40 dB $L_{night, outside}$ are harmful to health.....40 dB $L_{night, outside}$ is equivalent to the lowest observed adverse effect level (LOAEL) for night noise'.</p>
2	<p><i>In reference to ID12 (REP4-025)</i></p> <p>We note that at ISH4 the Applicants' agreed to provide third octave data measurements at the EA1 substation site at Bramford to allow tonality to be assessed. ESC welcomes this commitment and will review the information once published.</p>	<p>The Applicants submitted the East Anglia ONE Onshore Substation Operational Noise Assessment to the Examinations at Deadline 5 (REP5-022).</p>
3	<p><i>In reference to ID13 (REP4-025)</i></p> <p>There is no contradiction between the responses at ID13 and ID12. For example, the octave band data provided for harmonic filters (which are one of the main sources of noise on the site) shows that highest levels are in the 125 Hz octave band which is entirely consistent with the 100 Hz tonal "hum" generated by magnetostriction effects in equipment operating at 50 Hz.</p>	<p>Regarding the dominance of the harmonic filter noise contributions to each of the noise monitoring locations, the Applicants refer to their response at ID15 of Section 2.4 above.</p> <p>The Applicants note that 1/3 Octave Band data is required for a thorough assessment of audible tones in sounds according to Annex C of BS4142:2014+A1:2019, which will only be available during the detailed design stage. Irrespective of whether tonality or other such</p>



ID	ESC's Deadline 5 Comment	Applicants' Response
	<p>ESC maintains that it is not appropriate to determine that there is no tonality on the basis that there is no data available to test for it, and welcomes the Applicants' offer to provide 1/3 Octave data measured on site at the EA1 substation in Bramford.</p>	<p>acoustic corrections are identified or not, as per the wording of Requirement 26 and Requirement 27 of the draft DCO (REP5-003), the Applicants must ensure that the operation of the onshore substations does not exceed the maximum operational noise rating limits at the specified receptors (i.e. the maximum operational noise rating limit is inclusive of any acoustic corrections such as tonal elements).The Applicants contest ESC's reference to 'hum' and note that the Operational Noise Assessment for East Anglia ONE did not conclude tonality arising from the operation of this substation (see REP5-022).</p>
4	<p><i>In reference to ID14 (REP4-025)</i></p> <p>ESC maintains that a +3dB correction should be applied to the rating level in the case where no other feature corrections are applied. This is because the continuous noise generated by the substations will be industrial in nature and therefore fundamentally different in character to existing noise environment which is entirely rural. The fundamental differences between the proposed and the existing noise sources should be considered at the design and assessment stage rather than after the equipment has been installed, when it will be too late or impractical to mitigate operational noise without turning the equipment off altogether</p>	<p>The Applicants position remains unchanged on this matter from previous submissions and reiterate their previous response to this matter (see REP2-011):</p> <p><i>"The Applicants note that uncertainty 'budget' is not a requirement of BS4142:2014+A1:2019 and is not a standard inclusion within noise assessments undertaken for NSIPs.</i></p> <p><i>In the event a ±3dB uncertainty budget is applied to the model results as suggested by the Councils, it is considered that there is an equal possibility of the results being overestimated as they are underestimated. As such, the Applicants consider that the operational noise predictions presented within the ES and assessment conclusions are robust irrespective of the application of this uncertainty budget. This position applies to all noise predictions presented within the ES that have been calculated by the noise model generated using SoundPLAN".</i></p>



2.6 Deadline 4 Traffic and Transport Clarification Note (REP4-027)

ID	ESC's Deadline 5 Comment	Applicants' Response
1	<p><i>In reference to paragraph 4 (REP4-027)</i></p> <p>The Applicants should clarify whether the temporary speed changes meet air quality assessment criteria for speed band change, as set out within section 2.1 of Highways England's LA105 guidance. If required, an air quality assessment should be carried out.</p>	<p>The speed limit on the A12 at Friday Street would temporarily change from 50mph to 40mph (80kph to 64kph). The speed bands set out in Highways England's Design Manual for Roads and Bridges (DMRB) document 'LA 105 Air Quality' for urban roads categorise 'free flow' conditions at speeds of 45 – 80kph.</p> <p>As such, the reduction in speed on the A12 falls within the 'free flow' range and would not change the speed band. Therefore, there is no requirement to undertake further air quality assessment.</p>



2.7 Outline Landscape Mitigation Plan (REP4-015)

ID	ESC's Deadline 5 Comment	Applicants' Response
1	<p>The various new planting layout proposals are noted and accepted as an improvement on previous versions. The retention of existing tree cover to the west of the substations site is welcomed as is the newly proposed planting around the sealing end compounds and to the south of Little Moor Farm (as also noted in Paragraph 23 of Deadline 4 Project Update Note – REP4-026).</p> <p>ESC remains disappointed that National Grid have not engaged with their supply chains to see if the footprints and heights of their substation infrastructure could be reduced.</p> <p>ESC welcomes the inclusion of the sealing end compounds within the scope of Requirement 12 of the DCOs. It is considered that relatively minor modifications to the siting of the infrastructure would allow the retention of existing field boundaries which would be beneficial.</p>	<p>The Applicants note that ESC welcomes the updated planting arrangements within the Outline Landscape Mitigation Plan (OLMP) (REP4-013) and the inclusion of sealing end compounds within the scope of Requirement 12 of the draft DCO (REP5-003).</p>



2.8 Landscape and Visual Impact Assessment Addendum (REP4-031) and Appendices 1-8 (REP4-032 to REP4-039)

ID	ESC's Deadline 5 Comment	Applicants' Response
1	<p><i>In reference to paragraph 12 (REP4-031)</i></p> <p>The changes to the Outline Landscape Mitigation Plan (OLMP) are noted and welcomed. (matters relating to PRoWs are noted but may be subject to further comment by SCC).</p>	<p>Noted. The Applicants have reviewed and responded to SCC's Deadline 5 submissions separately (document reference ExA.AS-18.D6.V1).</p>
2	<p><i>In reference to Tables 3.1 to 3.5 (REP4-031)</i></p> <p>The findings show reductions of significance of landscape and visual effects arising from reductions in substation footprints, changes to substation positioning, reduction in heights of structures and reductions in floor levels. The findings are noted, and the Council accepts that these changes to design parameters would appear to be beneficial in moderating the adversity of landscape and visual effects compared to as previously described. As the Council has previously recorded, these conclusions remain dependent on the successful implementation and establishment of the proposed planting measures. Unless the problems associated with establishing trees and hedgerows in eastern East Anglia are fully and adequately addressed, the potential for these amended Landscape and Visual Impact Assessment findings to be unreliable remains. The reliance on the use of Extra Heavy Standard nursery stock in certain views remains a risky strategy.</p>	<p>The Applicants updated and submitted the OLEMS at Deadline 3 (REP3-030) and Deadline 6 (document reference 8.7), which provides for an adaptive management period and further measures to maximise the chances of successful establishment of the planting scheme.</p> <p>The OLEMS (document reference 8.7) clearly stipulates that the Applicants 'will ensure that the final LMP includes provision for the implementation of adequate watering of newly planted and established trees during the aftercare period'.</p> <p>Regarding the use of Extra Heavy Standard nursery stock, the Applicants would highlight that the use of these plants is limited and their planting will be managed in line with the measures set out within the final LMP which shall be approved by the relevant planning authority and prepared in consultation with the relevant statutory nature conservation bodies (SNCBs) including Natural England.</p>
3	<p><i>In reference to section 3.5 (REP4-031)</i></p> <p>The contents of these conclusions are noted and accepted.</p>	<p>Noted.</p>



2.9 Heritage Assessment Addendum (REP4-006) and Appendices 1-6 (REP4-007 to REP4-012)

ID	ESC's Deadline 5 Comment	Applicants' Response
1	<p><i>General comments</i></p> <p>The reduction in scale of the substations and revisions to the OLMP have made a positive difference in the visual impact of the development, in particular from medium-range viewpoints. The revisions and the updated visualisations are therefore welcomed.</p> <p>However, visual impact is only one of the factors that would lead to harm to the significance of the listed building, and therefore these revisions would not be sufficient to lower the overall levels of harm that have been identified.</p>	Noted.
2	<p><i>In reference to Table 3 – 1.2 High House Farm (REP4-006)</i></p> <p>We remain of the view that the magnitude of adverse impact would be medium, giving rise to an effect of moderate significance.</p>	The Applicants disagree with ESC's view and maintain the conclusions reached within REP4-006 are robust and justified.
3	<p><i>In reference to Table 3 – 1.4 Woodside Farm (REP4-006)</i></p> <p>We remain of the view that regardless of whether only EA1N, only EA2 or both substations were to be built, the magnitude of adverse impact would be medium, giving rise to an effect of moderate significance.</p>	
4	<p><i>In reference to Table 3 – 1.5 Church of St Mary (REP4-006)</i></p> <p>We remain of the view that the magnitude of adverse impact would be medium, giving rise to an effect of major significance.</p>	
5	<p><i>In reference to Table 3 – 2.1 Little Moor Farm (REP4-006)</i></p> <p>The additional planting to the north of the National Grid Substation provides more effective screening of the eastern section of the</p>	The Applicants welcome ESCs view that the additional planting would provide further mitigation, however, disagree with ESC's conclusion of



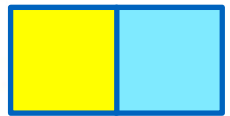
Applicants' Comments on ESC's D5 Submissions

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ID	ESC's Deadline 5 Comment	Applicants' Response
	<p>development as illustrated in CHVP3 (REP4-008). This additional planting would therefore be an improvement from this viewpoint. Nonetheless, the impact of the loss of the open setting, as well as the remaining visual impact of the rest of the development means that this improvement would not be sufficient to lower the overall level of harm which has previously been identified.</p> <p>The magnitude of adverse impact would still be medium, giving rise to an effect of moderate significance.</p>	<p>impact significance and maintain the conclusions reached within REP4-006 are robust and justified.</p>
6	<p>We remain of the view that the magnitude of adverse impact would be medium, giving rise to an effect of moderate significance.</p>	<p>The Applicants disagree with ESC's view and maintain the conclusions reached within REP4-006 are robust and justified.</p>
7	<p><i>In reference to Table 3 – 2.4 Woodside Farm (REP4-006)</i></p> <p>As stated in ESC's at Deadline 4 (REP4-059), it is difficult to assess the remaining impact on the setting of Woodside Farm due to the limitations of the viewpoint. The reduction in scale means that the visual impact of the western substation would be reduced, however based on the other updated visualisations, it is likely that the top of the substations would still be visible above the treeline at 15 years, and that the massive scale of the substations would still be notable. Additionally, as noted previously, the proposed vegetation would still be a barrier in itself, which detracts from the open agricultural setting of the listed buildings.</p> <p>The magnitude of adverse impact would still be medium, giving rise to an effect of moderate significance.</p>	<p>The Applicants note that in Cultural Heritage Viewpoint (CHVP) 5 the western onshore substation remains visible until such time that the mitigation planting has established to sufficient height to provide screening of the infrastructure (as seen in the 15th year of operational phase photomontage (Figure 10h) (REP4-010)). The Applicants accept that moving the viewing location would lead to different, perhaps less interrupted, views of the onshore substations. However, by their nature photomontages are a tool to inform the assessment of potential landscapes and visual impacts and potential impacts upon heritage setting and represent a static visualisation which takes account of existing structures which provide screening.</p>
8	<p><i>In reference to Table 3 – 2.5 Church of St Mary (REP4-006)</i></p> <p>In the updated visualisation of LVIA Viewpoint 2 (REP4-033) there is a visible reduction in the scale of the infrastructure for the Western</p>	<p>The Applicants disagree with ESC's impact conclusion and maintain the conclusions reached within REP4-006 are robust and justified.</p>



ID	ESC's Deadline 5 Comment	Applicants' Response
	<p>Substation. LVIA Viewpoint 9 (REP4-039) shows the tops of the substation infrastructure above the treetops in the backdrop of the church, although lower than in the previous visualisation. There has therefore been a positive change in the visual impact of the development.</p> <p>Notwithstanding this, visual impact is only one of the factors leading to harm to the significance of the church; others being the interruption of important views and of the relationship between the church and the historic properties to the north and the reduction of the open rural character of its wider setting. The reduction in harmful visual impact would not be sufficient to lower the level of harm which has been previously identified.</p> <p>The magnitude of adverse impact would still be medium, giving rise to an effect of major significance</p>	



3 Applicants' Comments on ESC's Summary of Oral Case for ISH6

7. The Applicants' responses to ESC's Summary of Oral Case for ISH6 (REP5-047) for matters pertaining to the **draft DCO** (REP5-003) are presented within the table below.



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
The Approach to dDCO drafting and changes to the draft in progress			
1	The ExAs will ask the Applicants to present and justify the dDCO, taking any active proposals for changes into account. The ExAs will invite submissions from IPs who wish to raise matters in relation to this item. The Applicants will be provided with a right of reply.	<p>During discussion on this agenda item, it was highlighted by Interested Parties that the current drafting of the DCOs permitted the National Grid connection infrastructure to be constructed even if the EA1N and EA2 projects did not proceed. The Applicants confirmed that they would consider this matter and respond at Deadline 5. ESC considers that Requirement 38 should be amended to prevent the possibility of this situation occurring. The National Grid infrastructure should only be permitted to be constructed for either EA1N, EA2 or both projects together. ESC notes and welcomes the following new commitments within the draft DCOs which the Applicants outlined:</p> <ul style="list-style-type: none"> • Reduction in the period for implementation set out in Requirement 1 from seven years to five years. • Inclusion of additional monitoring location (SSR3) in Requirements 26 and 27. • Inclusion of sealing end compounds into Requirements 12, 25 and 41 (design, artificial lighting and drainage requirements) including the provision of a maximum footprint. • Specification of the number of cable ducts. 	Noted.
Provisions for Projects Definitions and Elements			
2.01	The ExA will review: a) The provisions for the proposed	Part 1 – Preliminary - Interpretation “Onshore Preparation Works” means operations consisting of site clearance, demolition work, pre-planting of landscaping works, archaeological investigations, environmental surveys,	The Applicants intend to include a new requirement in the draft DCO at Deadline 7 which requires the approval of an onshore



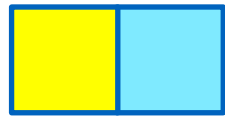
ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
	<p>developments and works;</p>	<p>ecological mitigation, investigations for the purpose of assessing ground conditions, remedial work in respect of any contamination or other adverse ground conditions, diversion and laying of services, erection of temporary means of enclosure, creation of site accesses, footpath creation, erection of welfare facilities and the temporary display of site notices or advertisements;</p> <p>The definition of 'onshore preparation works' provided in the draft DCOs is wide and the definition of 'commence' states that this excludes 'onshore preparation works'. Some requirements must be discharged prior to commencement of a certain stage of works, the concern is that this excludes the onshore preparation works which could take place ahead of the need to discharge the relevant requirements being triggered.</p> <p>The onshore preparation works can occur ahead of the need to discharge the Code of Construction Practice (CoCP). Therefore, these works can occur without the relevant controls which are stipulated within the CoCP or imposed by the DCOs. Some of the works have the potential to cause noise and disruption as well as potentially cause drainage concerns and therefore relevant controls should be imposed.</p> <p>Pre-planting of landscaping works – it is assumed that this relates to planting but further clarification on this matter is required as to whether this relates to the creation of bunds etc. It is unclear at present how ESC would ensure that details of the planting are agreed prior to the works taking place.</p> <p>Similarly, there are a number of other works allowed under the definition of onshore preparation works which are not covered by wording within</p>	<p>preparation works management plan which will ensure that relevant onshore preparation works are subject to approval. An outline of the information that will be included within the onshore preparation works management plan has been included in Appendix 1 of the updated Outline Code of Construction Practice submitted at Deadline 6 (document reference 8.1).</p>



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
		<p>the requirements. This includes erection of temporary means of enclosure – how would ESC ensure that details of the fencing are submitted and approved prior to the works taking place?</p> <p>ESC considers that the wording of Requirements 14 and 17 could be amended to prevent landscaping or fencing works being undertaken without agreement from ESC. In addition, ESC considers there should be a 'mini' CoCP for the onshore preparation works. The Norfolk Vanguard DCO included the following wording as part of Requirement 20(4) (CoCP):</p> <p>Pre-commencement screening, fencing and site security works must only take place in accordance with a specific plan for such pre-commencement works which must accord with the relevant details for screening, fencing and site security set out in the outline Code of construction practice, and which has been submitted to and approved by the relevant planning authority.</p> <p>ESC notes that wording has been included within Requirement 19 in relation to precommencement archaeological works and Requirement 21 in relation to ecology which is welcomed. ESC however considers that further controls are necessary as set above.</p>	
2.02		<p><i>Part 7, Article 33 – Operational Land for the Purposes of the 1990 Act</i></p> <p>ESC is concerned in relation to the extent of the land, which is considered operational land, as this is directly relevant to whether extensions and alterations under Part 15, Class B of the Town and Country (General Permitted Development) Order 2015 would be applicable.</p>	<p>The Applicants do not agree that permitted development rights should be removed. The rights under Class B are given to electricity undertakers to enable them to discharge their obligations and functions. The rights</p>



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
		<p>ESC recommends that permitted development rights should be removed to prevent modification, extension or alteration of the substations under Schedule 2, Part 15, Class B of the Town and Country Planning (General Permitted Development) Order 2015 without prior consent from ESC. An example of draft wording has been provided below as requested by the Examining Authority:</p> <p><i>Notwithstanding the provisions of the Town and Country Planning (General Permitted Development) Order 2015 (or any Order revoking or re-enacting that Order), no development shall be carried out under Schedule 2, Part 15, Class B (a), (d) or (f) without the submission of a formal planning application and the granting of planning permission by the local planning authority.</i></p> <p>The Applicants comments regarding the operational land for the substations being confined to their footprints is noted however further clarification is required in relation to this matter in the form of a plan. It is also unclear how the operational land definition, if it is to be confined to the footprints of the substations, would be secured.</p> <p>ESC also notes that the Applicants consider that extensions to the substations would comprise EIA development. This would however be a matter of judgement subject to a screening process. It is not considered appropriate that any further modifications, extensions or alterations are undertaken to the substations without robust consideration through the planning process.</p>	<p>include a range of activities which are relevant to the holders of a transmission licence.</p> <p>These are deemed necessary to enable the safe and efficient operation of the transmission system. It includes elements of further works and replacement. The extent of the rights is restricted by development that is not permitted (B.1) and also by conditions (B.2). Further restrictions also potentially apply under Article 3(10) and (11) of the Town and Country Planning (General Permitted Development) Order 2015. This removes the permitted development rights in circumstances that it would involve EIA development.</p> <p>Amendments to works constructed under the DCO would be considered as an alteration to an EIA development that had already been authorised, executed or in the process of being executed and would have to be screened. The Applicants do not accept the argument advanced by ESC.</p> <p>In addition, a number of the permitted development rights are restricted to "operational land" which is defined by reference to Section 263 of the Town and Country Planning Act 1990.</p>



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
			<p>It is not appropriate for the permitted development rights to be removed. It would impair the ability of a statutory undertaker to maintain and operate electrical lines and associated plant and equipment.</p> <p>The Applicants are not aware of any other DCOs for nationally significant infrastructure projects containing such a restriction.</p>
2.03		<p><i>Article 36 – Certification of Plans etc.</i></p> <p>ESC notes the comments and suggestion that the article should refer to a more detailed schedule of plans containing a greater amount of detail and note the Applicants are considering this request. The Council would support any modifications to the article which provide greater clarity to the list of certified documents.</p>	<p>The Applicants have considered the comments raised at Issue Specific Hearing 6 and in Deadline 5 submissions requesting a separate Schedule listing the documents to be certified and will incorporate this into the draft DCO at Deadline 7.</p>
2.04		<p><i>Article 38 – Requirements, appeals etc.</i></p> <p>ESC has significant concerns in relation to the wording of Schedule 16 which this article refers to. These concerns have been outlined on pages 21-23 of this table.</p>	<p>See row 11 below.</p>
2.05		<p><i>Schedule 1, Part 1 – Authorised Project</i></p> <p>Work No.1 - ESC would support the request that the draft DCOs include a commitment to a minimum generating capacity for each project.</p>	<p>It is not necessary, or appropriate to specify the capacity of the Projects on the face of the draft DCO. All relevant parameters are specified within the draft DCO and are linked to what has been assessed within the environmental statement. Output capacity is not a relevant</p>



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
			parameter and does not require to be specified on the face of the DCO. The approach taken in the draft DCO (REP5-003) reflects that in the very recent Hornsea Three Offshore Wind Farm Order 2020.
3	The proposed wind turbine generator (WTG) array areas and provisions regulating WTG siting, height and generation capacity:	ESC notes the reduction in the maximum height of the turbines to 282 metres which is welcomed. ESC will defer to the Marine Management Organisation (MMO) and Natural England (NE) for further comments.	Noted.
4	The relationship between the two proposed developments, other existing offshore wind farms and maritime uses:	ESC has no comments in relation to offshore matters and will defer to the MMO and NE in relation to offshore matters.	Noted.
5	Cables at sea	ESC has no comments in relation to offshore matters and will defer to the MMO and NE in relation to offshore matters.	Noted.
6	The landfall and onshore cables	<i>Requirement 13 – Landfall Construction Method Statement</i> ESC welcomes the update to this requirement which identifies the need for the method statement to accord with the Outline Landfall Construction	The Applicants confirm that Requirement 15 of the draft DCO (REP5-003) was updated at



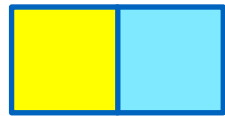
ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
		<p>Method Statement (OLCMS). The Applicants also confirmed that the wording of Requirement 13 would be further updated to include a commitment to the use of HDD which is also supported.</p> <p>ESC considers that the Applicants should set up a monitoring programme to compare actual shoreline change trends with as-built records to ensure that design assumptions on resilience are not compromised. If monitoring suggests there is a risk of duct or exposure of breakout connection point damage then ESC recommends the Applicants submit proposals for remediation to the planning authority, and all other relevant approval bodies, at least 12 months in advance (if possible) of action being needed.</p> <p>Monitoring could be secured by an update to the OLCMS to ensure that a monitoring provision is set out in the final LCMS and secured by Requirement 13, along the lines of Requirement 37. ESC recommends that the Applicants use data currently collected, and made publicly available, under the Anglia Coastal Monitoring Programme (ACMP) to undertake these reviews. Only if the ACMP is stopped or modified would the Applicants be required to undertake their own surveys. Annual surveys (with a report of findings to ESC) are recommended for at least 3 years following installation with a review at end of year 3 to consider a reduction in frequency.</p> <p>ESC is currently discussing this matter with the Applicants.</p>	<p>Deadline 5 to include a commitment to the use of HDD at landfall.</p> <p>The Applicants have committed to undertake periodic monitoring and/or reporting at the landfall. This commitment will be secured within updated text in Requirement 13 of the draft DCO which has been agreed with ESC. This will be reflected in the draft DCO submitted at Deadline 7.</p> <p>The Applicants have also provided details of the proposed monitoring within the Outline Landfall Monitoring Plan which has been included as an Appendix to the Outline Landfall Construction Method Statement submitted at Deadline 6.</p>
7.01	The substations	Requirement 12(1) requires the Applicants to submit details of the layout, scale and external appearance of the onshore substation to ESC for approval and 12(2) requires the details to be in accordance with the outline onshore design principles statements (APP-585). This statement	The Applicants confirm that they have updated the wording of Requirement 12 of the draft



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
		<p>has now been superseded by the Substations Design Principles Statement (REP4-029) and the Applicants have committed to amending the wording of 12(2) to reflect this at Deadline 5 and update the certified documents list.</p> <p>12(3) - ESC welcomes the reductions to the maximum height of the buildings and external equipment.</p> <p>12(6) – ESC understands that the wording will be updated to reflect that the Outline National Grid Design Principles Statement (REP1-046) has been superseded by the Substations Design Principles Statement (REP4-029). The inclusion of the sealing end compounds within the scope of the requirement and Design Principles Statement is welcomed.</p> <p>ESC remains of the view that National Grid should seek to engage with their supply chain as the Applicants have for the EA1N and EA2 substations to see if the parameters set out in the DCOs in 12(7), (8), (9) and (10) can be reduced.</p> <p>12(14)(b) - the DCOs state that the working width where cables cross the Hundred River will be 40m for each project. The Outline Water Crossings Method Statement (OWCMS) states that this would be 80m for both projects (REP3-048, paragraph 62). ESC requests that the Applicants consider whether further reductions in the cable width are possible to minimise the impacts in this locality and on the banks of the Hundred River.</p> <p>ESC will be providing comments on the Substations Design Principles Statements at Deadline 5 but welcomes the additional information this provides in relation to the engagement with the local community post-consent. It is considered that the Substations Design Principles</p>	<p>DCO (REP5-003) to refer to the Substations Design Principles Statement (REP4-029).</p> <p>The Applicants note that the National Grid substation must be designed and engineered to certain specifications to ensure its efficient and safe operation. In the National Grid Electricity Transmission PLC (NGET) response to ExA's Actions from the Compulsory Acquisition and Issue Specific Hearing 2 (REP3-111) NGET confirm that the dimensions provided are based on maximum (reasonable worst case) anticipated requirements and that based on the conceptual design undertaken and NGET's experience of previous projects, NGET consider it unlikely that the detailed design will significantly change the required sub-station footprint and therefore the land take required. Construction of the National Grid substation must not commence until the design details (which must accord with Substations Design Principles Statement (REP4-029)) have been submitted to and approved by the relevant planning authority.</p> <p>The Applicants have continued to engage with their engineering design team to further optimise the area required for the Hundred River crossing and can now commit to a</p>



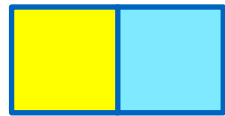
ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
		<p>Statement should be an all-encompassing document and include the relevant aspects of the Design and Access Statement and Outline Landscape and Ecological Management Strategy (OLEMS). If this is not the case, then ESC would support the referencing of these documents within this requirement to ensure a consistent approach.</p> <p>It is understood following the hearing that the Applicants will be looking at Requirement 12 to consider whether any modifications could be made to provide greater clarity and considering potential subdivision into additional requirements. Although ESC can see on one hand a benefit from subdividing the requirement, we support the current drafting which is consistent with the integrated approach adopted by the Applicants. It is important that the site is designed holistically, and this drafting approach reflects this aim.</p>	<p>reduction in the width of the crossing from 40m to 34m. This reduction will be reflected in the draft DCO at Deadline 7.</p> <p>Compliance with the OLEMS (an updated version has been submitted at Deadline 6, document reference 8.7) is secured by Requirements 14 and 21 however principles relevant to landscaping have also been captured within the Substations Design Principle Statement (REP4-029). The elements of the Design and Access Statement which are relevant to and useful for design decisions under Requirement 12 have been incorporated into the Substations Design Principle Statement (REP4-029).</p> <p>Other aspects of the Design and Access Statement (APP-580) are secured in the dDCO under Requirement 16 (outline access management plan (updated at Deadline 6, document reference 8.10)), Requirement 28 (outline construction traffic management plan (updated at Deadline 6, document reference 8.9) and outline travel plan (updated at Deadline 6, document reference 8.11)), and Requirement 32 (outline public rights of way strategy (REP3-024)), all of which require approval by the relevant planning authority or</p>



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
			<p>the relevant highway authority. The Applicants therefore consider it unnecessary for the design and access statement to be incorporated specifically within the Substations Design Principle Statement and consider that its inclusion will introduce unnecessary duplication in the discharge process.</p> <p>The Applicants agree that Requirement 12 should not be split into multiple requirements but intend to restructure the requirement in the draft DCO at Deadline 7 so that is in a more logical order and is therefore easier to follow.</p>
7.02		<p>Requirement 26 – Control of Noise during Operational Phase The Council does not accept the proposed operational noise rating level (LAR) of 34 dB as set out in Requirement 26 or the proposed revised noise rating level of 31/32dB set out at Deadline 4 by the Applicants (REP4-026, REP4-043). This level would considerably exceed what ESC considers to be a more typical background sound level at night (24dB). The Council considers a lower limit should be set. ESC however does welcome the downward direction that this amendment to the noise rating level represents.</p> <p>The Council has maintained that a third monitoring location (SSR3) should be added to the two proposed monitoring locations (1 Woodside Cottages, Grove Road and Woodside Barn Cottages, Church Road). Based on the Applicants Deadline 4 submission (REP4-026, REP4-043)</p>	<p>The Applicants note that ESC welcomes the additional noise monitoring location at SSR3 and the downward direction of travel for the maximum operational noise rating levels at the nearest noise sensitive locations to the onshore substations.</p> <p>The Applicants strongly believe that the representative background noise level established for the substation locations is underpinned by extensive baseline noise measurement data and robust, repeatable statistical analysis. Further information regarding this matter has been provided in</p>



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
		<p>ESC welcomes this addition and understands the Draft DCOs will be updated at Deadline 5 to reflect this commitment.</p>	<p>response to ESC's comments on the Noise Modelling Clarification Note (REP4-043).</p> <p>The Applicants do not accept ESC's assertion of the baseline noise levels for each monitoring location specified. No evidence has been submitted to the Examination to justify the ESC's position on background noise levels.</p>
7.03		<p>Requirement 27 - Control of noise during operational phase cumulatively with (East Anglia TWO/East Anglia ONE North) onshore substation</p> <p>The comments provided by ESC in relation to Requirement 26 also apply to Requirement 27. The Council does not agree with the noise limit set and maintains that a lower limit should be imposed. There is no noise limit set for the National Grid infrastructure. The Council considers that the National Grid infrastructure should be included within the final agreed cumulative operational noise rating level and therefore subject to Requirement 27. The wording of this requirement should be revised accordingly.</p>	<p>As above.</p> <p>The Noise Modelling Clarification Note (REP4-043) submitted at Deadline 4 demonstrated that the predicted noise levels generated by the operation of National Grid equipment (including overhead lines) is below the prevailing background noise levels and / or presents a negligible change in the predicted noise level at the agreed noise sensitive receptor locations and therefore have been scoped out of the noise assessment.</p> <p>Whilst the Applicants consider that it is unnecessary to include a noise limit for the National Grid substation, discussions are continuing with ESC on this matter.</p>
8.01	The grid connections at Friston	<p>ESC's comments above in relation to Requirement 27 are relevant. There is no noise limit set for the National Grid infrastructure. The Council considers that the National Grid infrastructure should be included</p>	<p>As above.</p>



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
		within the final agreed cumulative operational noise rating level and therefore subject to Requirement 27. The wording of this requirement should be revised accordingly.	
8.02		<p>ESC's comments in relation to Article 33 on pages 4 and 5 are relevant. ESC recommends that permitted development rights should be removed to prevent modification, extension or alteration of the substations under Schedule 2, Part 15, Class B of the Town and Country Planning (General Permitted Development) Order 2015 without prior consent from ESC (LIR, paragraph 6.55-6.57 - REP1-132). An example of draft wording has been provided below as requested by the Examining Authority:</p> <p><i>Notwithstanding the provisions of the Town and Country Planning (General Permitted Development) Order 2015 (or any Order revoking or re-enacting that Order), no development shall be carried out under Schedule 2, Part 15, Class B (a), (d) or (f) without the submission of a formal planning application and the granting of planning permission by the local planning authority.</i></p>	See response at ID2.02 above.
9.01	Requirements generally	Requirement 11 – ESC notes this requirement provides the ability to agree stages of the onshore development which is welcomed.	Noted.
9.02		Requirement 14 – Provision of Landscaping If the definition of 'onshore preparation works' remains as set out in the draft DCOs; ESC considers that the wording of this requirement should be amended to prevent planting in relation to the projects being undertaken without prior approval from ESC.	As noted above, the Applicants intend to include a new requirement in the draft DCO at Deadline 7 which requires the approval of an onshore preparation works management plan which will ensure that relevant onshore preparation works are subject to approval.



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
		<p>The OLEMS (paragraph 41 and Section 4.1, REP3-030) makes brief reference to Landscape Management Plan (LMP) providing details of ongoing management of landscaping beyond the maintenance period but this does not include how areas of replacement woodland not forming part of Work No.33 will be managed after the maintenance period or how their long term provision will be secured.</p> <p>The long term management of the substations site is an important consideration, the OLEMS currently provides insufficient information in relation to this.</p>	<p>Management and maintenance of landscaping is secured through requirements 14 and 15 of the draft DCO. Provision has been included within requirement 14(2) for the Landscape Management Plan to be implemented as approved and details of the adaptive management and subsequent maintenance are set out within the Outline Landscape and Ecological Management Strategy (OLEMS) (updated at Deadline 6, document reference 8.7) in respect of which, the final Landscape Management Plan must accord. In addition, a requirement for landscaping works to be maintained in accordance with the Landscape Management Plan has been included in requirement 15(1).</p>
9.03		<p>Requirement 15 – Implementation and Maintenance of Landscaping</p> <p>15(2) This should be amended to revise the ten year period set for Work No.33. The Council considers that the requirement for replacement planting should reflect the time period for the adaptive/dynamic maintenance and aftercare period set out in the OLEMS (REP3-030, Section 4.2). If the maintenance period is suspended so should the requirement for replacement planting.</p> <p>ESC considers the replacement period for failed woodland planting (Work Numbers 24 and 29) should be ten years not five years as detailed in the requirement. This would reflect the maintenance period set out in</p>	<p>The Applicants do not consider it necessary to make reference to adaptive management within the requirement or to amend the timescales specified. Details of the adaptive management and subsequent maintenance are set out within the OLEMS (updated at Deadline 6, document reference 8.7) and the final Landscape Management Plan must accord with the OLEMS. The approved Landscape Management Plan must be implemented as approved and so any longer period for</p>



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
		the OLEMS Table 5.1 (REP3-030) and this should be reflected in this requirement.	<p>replacement planting or adaptive management commitments set out within the OLEMS are secured.</p> <p>The Applicants updated the draft DCO (REP5-003) at Deadline 5 to make provision for a ten year replacement period in respect of Work No. 24. The Applicants do not consider it necessary for the ten year period to apply to Work No. 29 as the nature of mitigation in this area is yet to be established. It is likely for instance that this area will be a mix of grassland and scrub with the incorporation of species specific ecological mitigation. It is therefore inappropriate to include this area as part of the ten year replacement period.</p> <p>The Applicants can however commit that woodland planted within Work No. 19 associated with the crossing of the Hundred River will be subject to the ten year replacement period.</p>
9.04		Requirement 16 - Highway Accesses – ESC defer to SCC on this matter.	Noted.
9.05		<p>Requirement 17 – Fencing and Other Means of Enclosure</p> <p>If the definition of 'onshore preparation works' remains as detailed in the draft DCOs ESC considers that the wording of this requirement should</p>	See response at ID2.01.

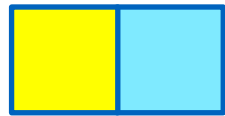


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		<p>be amended to prevent the erection of means of enclosure in relation to the projects being undertaken without prior approval from ESC.</p> <p>The requirement should state that "No fencing or other means of enclosure shall be erected until for that stage written details" And remove the wording "no stage of the onshore works may commence".</p>	
9.06		Requirement 18 – Contaminated Land and Groundwater – ESC has no comments.	Noted.
9.07		Requirement 19 – Pre-commencement archaeology execution plan - ESC will defer to SCC Archaeological Service on this matter.	Noted.
9.08		Requirement 20 – Archaeology - ESC will defer to SCC Archaeological Service on this matter.	Noted.
9.09		<p>Requirement 21 – Ecological Management Plan</p> <p>The Council would like the words 'pre-commencement' added before "survey results" in 21(1). This provides additional clarity that the Ecological Management Plan (EMP) should reflect pre-commencement survey results and not necessarily the survey results in the Environmental Statement (ES) as a significant period of time could have passed between approval of the projects and their implementation.</p> <p>ESC welcomes 21(2) which prevents the onshore preparation works being carried out until a written ecological management plan has been submitted for those works. This wording however also refers to the ecological management plan reflect the survey results and ecological</p>	<p>The Applicants amended Requirement 21(1) of the draft DCO (REP5-003) as per ESC's request at Deadline 5.</p> <p>The Applicants do not consider any amendments are required to Requirement 21(2). This requirement must be discharged prior to onshore preparation works being undertaken and the definition of onshore preparation works includes environmental surveys and so it would be counter-intuitive to refer to pre-construction surveys here and a general reference to surveys is considered appropriate. The Applicants will however make</p>



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
		<p>mitigation measures included in the ES rather than referring to pre-construction surveys.</p> <p>ESC however considers that the OLEMS is the correct place to identify the type and specification for the pre-commencement surveys which are likely to be required.</p> <p>The Council welcomes the inclusion of the wording to ensure the SPA crossing method statement reflects the Outline SPA Crossing Method Statement.</p>	<p>a minor amendment to paragraph (2) in the next version of the draft DCO so that the reference to survey results is more general and not necessarily limited to the survey results included in the environmental statement.</p>
9.10		<p>Requirement 22 – Code of Construction Practice</p> <p>ESC notes the additional wording added to this requirement to reflect the new outline management plans submitted.</p> <p>The CoCP is required prior to commencement and this contains a number of the construction activity controls. The onshore preparation works can proceed prior to the submission of the CoCP and therefore the measures outlined in this document are not applicable to this activity.</p> <p>ESC is concerned there are no controls in place in relation to many of the onshore preparation works and it is therefore recommended that there should be a 'mini' CoCP secured in relation to these pre-commencement works.</p>	<p>See response at ID2.01.</p>
9.11		<p>Requirements 23 – Construction hours for the transmission works and 24 - Construction hours for grid connection works.</p> <p>23(2) & 24(2) - This part of the requirements sets out the activities which, subject to advanced approval from ESC, can occur outside the working hours set out in Requirement 23(1) and 24(1). The Council considers</p>	<p>The term 'essential activities' relates to such works that, if not completed within a particular sequence or within a particular time frame, would be of detriment to the safety or construction of the authorised projects. The</p>



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
		<p>there is potential for adverse noise effects occurring outside consented onshore working hours. The current drafting of the requirements identifies some activities a) to e) which are considered to meet the definition of essential but then states that the activities are not limited to those specified. This would imply that any works could be considered essential which is not acceptable.</p> <p>In addition to this the Council is concerned that the wording of 23(2)(b) and 24(2)(b) "fitting out works associated with the onshore substation" and "fitting out works associated with the national grid substation" is too vague and could incorporate many activities some of which could cause noise disturbance. It is also not clear why it is necessary to undertake these works outside the specified working hours. It is therefore considered that this activity should be removed from the requirements.</p> <p>ESC considers that it is important in addition to seeking agreement from the Council in relation to the duration and timing of the works, the Applicants should also be required to seek agreement from ESC as to whether the works are essential and therefore take place out of hours, with the exception of the works identified on the face of the DCOs. As indicated above however, ESC considers that (2)(b) should be removed from both requirements.</p>	<p>Applicants have provided some additional text within the Outline CoCP submitted at Deadline 6 to provide more clarity on what would be considered essential activities. In addition, in light of ESC's concern regarding the inclusion of "fitting out works", the Applicants intend to amend this to refer to "internal fitting out works" in the draft DCO at Deadline 7.</p> <p>The Applicants would however emphasise that other than in an emergency, any works which the Applicants seek to undertake outside the normal construction hours must be approved in advance by the relevant planning authority.</p> <p>In seeking approval, the Applicants will describe the nature of the works, the timing and any additional mitigation measures that will be in place in order to ensure the acceptability of the out of hours works. ESC therefore has sufficient control over the activities that can be undertaken outwith the standard construction hours.</p>
9.12		Requirement 25 – Control of artificial light emissions during construction phase	Noted.



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		<p>ESC is satisfied that the requirement 25(1) and (2) secures the submission, agreement and implementation of an operational artificial light emissions management plan.</p> <p>Requirement 25(3) and (4) secured the submission, agreement and implementation of an operational artificial light emissions management plan in relation to the National Grid substation.</p> <p>ESC welcomes that the requirement includes the provision of measures to minimise light pollution</p>	
9.13		Requirement 28 – Traffic – ESC will defer to SCC on this matter.	Noted.
9.14		Requirement 29 – Restoration of land used temporarily for construction. ESC supports the current wording of the requirement which allows coordination and flexibility between the projects.	Noted.
9.15		Requirement 30 – Onshore Decommissioning - ESC has no comments.	Noted.
9.16		<p>Requirement 31 – Aviation Lighting</p> <p>ESC welcomes the additional text inserted requiring the lighting to be operated at the lowest permissible lighting intensity level.</p>	Noted.
9.17		Requirement 32 – Public Rights of Way – ESC will defer to SCC on this matter.	Noted.
9.18		Requirement 33 – Emergency Incident Response Plan	Noted.



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
		ESC has discussed this matter with the Applicants and SCC and understands that there will be amendments made to the wording of this requirement. These discussions are ongoing.	
9.19		Requirement 34 – Ministry of Defence Surveillance Operations - ESC will defer to the MOD of this matter.	Noted.
9.20		Requirement 35 – Cromer Primary Surveillance Radar - ESC has no comments.	Noted.
9.21		Requirement 36 – Port Traffic – ESC has no comments.	Noted.
9.22		Requirement 37 – Decommissioning of Work No.8 ESC considers the requirement should be updated to include infrastructure associated with Work No.6 up to the point of the mean low water mark (LIR REP1- 132, paragraph 10.14 & 10.20).	The Applicants amended Requirement 37 of the draft DCO (REP5-003) at Deadline 5 to address ESC's comment.
9.23		Requirement 38 – Restriction on carrying out grid connection works consented in (EA1N/EA2) Order ESC notes and welcomes this additional requirement, we however support the request that the wording should be amended to prevent the possibility that the National Grid infrastructure could be constructed and the EA1N and EA2 projects not.	Noted.
9.24		Requirement 40 – Amendments to Approved Details - ESC has no comments.	Noted.



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9.25		<p>Requirement 41 – Operational Drainage Management Plan – ESC supports the current drafting of the requirement which provides the relevant planning authority with responsibility for discharging in consultation with SCC.</p> <p>ESC fully recognises the importance of designing an appropriate and functional drainage scheme, this is a vital element of this design process and fundamental for the operation of the site. The design of the substations and their environs will be coordinated through the development of a Landscape Masterplan which will include land which is required for landscaping and drainage features including SuDS ponds (REP4-029, paragraph 3). The drainage management plan is a key component feeding into the overall design of the site.</p> <p>It is clear that these factors all interlink and to disaggregate these matters by providing differing lead authorities for the responsibility of discharging is not considered appropriate. Any amendments to the drainage scheme would have a consequence for the landscaping scheme which would affect the overall masterplan. Similarly, drainage measures could influence the finished ground levels and therefore affect the overall design of the site. Alternatively, revisions to the design of the site through modifications to the landscaping could directly affect the operational drainage scheme, the matters are all interrelated and need to be considered holistically.</p> <p>ESC recognises SCC's role as the lead local flood authority and the requirement identifies that they will be consulted, ESC will therefore seek SCC's agreement to the details when submitted. The Environment Agency is also a consultee in relation to this matter, as in addition to</p>	<p>Noted. In the absence of agreement between ESC and SCC as to which authority should discharge the requirement, the Applicants consider that the default position should be the relevant planning authority.</p>



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
		<p>surface water drainage the requirement also includes foul drainage. It is however considered essential that the factors which contribute to the overall design of the site and which will be subject of the design refinement process and engagement should ultimately be determined by the same organisation to ensure continuity. ESC considers this holistic approach to the site design is essential.</p>	
9.26		<p>Requirement 42 – Installation of Cable Ducts</p> <p>42(1) “In the event that the (EA1N/EA2) cable works are constructed prior to the (EA1N/EA2) cable works, the (EA1N/EA2) cable works may not subsequently be constructed unless the ducts forms part of the (EA1N/EA2) cable works are installed in parallel with the construction of the (EA1N/EA2) cable works”.</p> <p>ESC welcomes this requirement and supports its aim but is of the view that the terms utilised need further consideration and precision. A definition of the term ‘constructed’ would be helpful so it is clear what this would constitute. ESC will be required to determine when the first project had been constructed, and we seek clarity regarding what this term would mean. The definition of this term will directly affect the point at which this requirement would engage.</p> <p>ESC would also seek clarity regarding the term ‘installed in parallel’ – it is assumed this refers to timeframe but could also relate to a geographical location. It may provide more clarity to use a term such as ‘simultaneously’ or something similar, but a definition of this term would also need to be provided.</p>	<p>The Applicants amended the wording of Requirement 42 of the draft DCO (REP5-003) at Deadline 5 to address ESC's comments.</p>

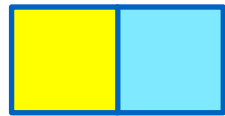


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9.27		<p>ESC welcomes the Applicants commitment to consider the wording used in the requirement further.</p> <p>Skills, education and economic development Memorandum of Understanding (MoU)</p> <p>ESC supports SCC and the Applicants submissions in relation to the MoU. It is considered that a requirement is not necessary and could restrict the flexibility and dynamism which the MoU in its current form allows.</p>	<p>The Applicants agree with ESC on this and refers to the Applicants' submissions at section 3.5.2.13 of their Written Summary of Oral Case (ISH6) (REP5-030).</p>
10	Schedule 11 – Hedgerows Part 1 – Removal of Important Hedgerows	<p>ESC seeks clarity regarding the hedgerows identified within Schedule 11 of the draft DCOs.</p> <p>Hedgerows marked 1 and 2 are identified within Schedule 11 (REP3-011) as being removed but on the Important Hedgerows and Tree Preservation Order Plan (REP3-010) they are identified as being crossed with a reduced width. Annex 1 of the OLEMS document (REP3-030) identifies hedgerows 1 and 2 as being subject to full or partial removal. Clarification on this is required.</p> <p>Clarification is also required in relation to hedgerow marked 28 which is identified on the Important Hedgerows and Tree Preservation Order Plan (REP3-010) as being removed but is not identified within Schedule 11 as being removed and identified in Annex 1 of the OLEMS (REP3-030) as not subject to interaction.</p> <p>The interaction identified within Annex 1 of the OLEMS (REP3-030) in relation to a number of hedgerows does not appear to correspond to the interaction identified within Schedule 11 of the draft DCOs (REP3-011)</p>	<p>The Applicants confirm this was an error and Schedule 11 of the draft DCO (REP5-003) was amended at Deadline 5 so that the hedgerows marked 1 and 2 are identified as being crossed using a reduced working width.</p> <p>Annex 1 of the OLEMS has been reviewed and updated to address the inconsistencies identified by ESC. An updated version of the OLEMS has been submitted at Deadline 6 (document reference 8.7).</p> <p>Hedgerow 28 requires removal or partial removal. The OLEMS and Schedule 11 of the dDCO shall be updated accordingly.</p> <p>The Applicants have reviewed the draft DCO submitted at Deadline 3 (REP3-011), the OLEMS submitted at Deadline 3 (REP3-030)</p>

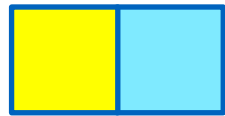


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		<p>and the interaction identified on the Important Hedgerows and Tree Preservation Order Plan (REP3-010). Further clarification as to the reasons for this is required. Does Annex 1 identify a greater number of important hedgerows to be crossed with a reduced width as some of these will be crossed with a width less than 32m but greater than the draft DCOs definition of reduced width which is 16.1m?</p>	<p>and the <i>Important Hedgerows and Tree Preservation Order Plan</i> (REP3-010) and can confirm that there is an error within the <i>OLEMS</i> (REP3-030). This error has been corrected in the updated <i>OLEMS</i> submitted at Deadline 6 (document reference 8.7). However, the Applicants can confirm that Schedule 11 is correct and that no further amendments are needed at this stage.</p>
11	<p>Schedule 16 – Procedure for discharge of requirements 1 – Applications made for certain approvals 2 – Further information</p>	<p>ESC understands that this procedure is set out in Appendix 1 of The Planning Inspectorate's 15: Drafting Development Consent Orders but there have been a number of recent DCOs which have been granted with wording which varies from that set out. ESC is particularly referring to the two latest decisions on offshore windfarms published relating to Hornsea Project Three and Norfolk Vanguard Offshore Wind Farms.</p> <p>Schedule 16 does not include any details in relation to the information the Applicant should provide. For example, the Norfolk Vanguard DCO included the wording: "<i>a) the undertaker must give the discharging authority sufficient information to identify the requirement(s) to which the application relates; b) the undertaker must provide such particulars, and the request be accompanied by such plans and drawings, as are reasonably considered necessary to deal with the application.</i>"</p> <p>The Council considers that this would be useful additional wording.</p> <p>1(2)(a) ESC considers that 42 days provides an insufficient standard time period in which to discharge requirements. It is noted that this is the timescale set out in Appendix 1, however a longer period of 56 days is</p>	<p>The Applicants will include some additional text in Schedule 16 to clarify the information to be provided by the undertaker in order to address ESC's comment in this regard.</p> <p>The 42 day time period specified in the appendix reflects the standard wording in PINS Advice Note 15. Whilst the Applicants consider the time periods to be appropriate and justified given that these are nationally significant infrastructure projects, the Applicants will amend the period specified in Paragraph 1(2)(a) to 56 days, as requested by ESC.</p> <p>The Applicants would however highlight that in practice (as per the process adopted successfully for the East Anglia ONE offshore windfarm project), the Applicants would consult with ESC in the preparation of the draft</p>



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		<p>provided when discharging planning application conditions and therefore a shorter period is not considered appropriate. The DCOs and requirements relate to multiple large scale complex developments which will require significant resource from ESC and consultation with multiple other stakeholders, particularly in circumstances where the discharge applications for the two DCOs may be made simultaneously. It is considered a period of 56 days would be more appropriate.</p> <p>The recent Norfolk Vanguard DCO provided a period of 8 weeks. This provision was not included within the recently consented Hornsea Project Three DCO or the other SPR projects EA1 and EA3 DCOs.</p> <p>1(3) ESC considers that the deemed consent provision in the event that the discharging authority does not determine an application with the set period is not appropriate. This is not a provision in the standard text provided in Appendix 1, it is also not a provision which has been included within the two recently consented DCOs referred to above. Importantly, it should be noted that this was not a feature of the EA1 or EA3 DCOs and ESC does not consider that the lack of this mechanism has been detrimental to the discharge process. The Council has developed a good working relationship with the Applicants, and it is not considered that such a provision is necessary.</p> <p>The Council does not agree with the provision that if information is not requested within the first 10 business days that the information submitted is deemed to be sufficient. It is considered that the wording 'as soon as reasonably practicable' is sufficient. It is noted that this is part of the wording in the standard text set out in Appendix 1, however 10 business days is not considered sufficient time for the discharging authority to</p>	<p>documents prior to submitting the final versions for approval and therefore it is not considered that the timescales specified are unreasonable. Furthermore, the process makes provision for longer periods to be agreed between the parties.</p> <p>Deemed approval mechanisms are regularly found within DCOs given the nationally significant status of such projects, and the Applicants consider it necessary and appropriate to include this to ensure a decision is made within the specified period. As with the decision period, there is provision for the undertaker and the discharging authority to agree something different to that set out within the text.</p> <p>Following consideration of ESC's comments in relation to the period for requesting further information, the Applicants intend to amend this period from ten business days to 20 business days which the Applicants consider would provide the discharging authority with sufficient time to consider the information submitted with the application and make any further information requests.</p>



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		<p>consider, assess and undertake appropriate internal and external consultations in relation to the additional information received and decide whether further information and requests are necessary. A consultee is typically provided 21 days to provide their comments, if a request for further information was provided by a consultee, under the current wording the authority would not be able to make such a request to the Applicant. It is also not considered appropriate that all further requests for information should be required to be made within this initial 10 day period.</p> <p>The recent Hornsea Project Three DCO did not include such provisions, neither did EA1 and EA3 DCOs. In the Norfolk Vanguard DCO if no consultations were required the discharging authority was provided with 20 business days to notify the Applicants that further information was required. In the event consultation on the requirement was necessary, the discharging authority had to notify the Applicants within 10 business days of receiving the request for information or in any event within 42 day of receipt of the application.</p> <p>advice_note_15_version_1.pdf (planninginspectorate.gov.uk)</p> <p>The Norfolk Vanguard Offshore Wind Farm Order 2020 (planninginspectorate.gov.uk)</p> <p>SI/SR Template (planninginspectorate.gov.uk)</p>	
The Changing Policy Environment			
12	The ExAs will review the need and	Agenda item was deferred.	The Applicants confirm that the commencement period has been reduced to



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	<p>possible drafting approaches to provisions enabling responses to emerging policy including: Agenda item was deferred. ESC Ref: EA1N 20023870 & EA2 20023871 – Deadline 5 a) Flexible adaptation of transmission connection alignments; and b) Consequential adjustments to Compulsory Acquisition (CA) and Temporary Possession (TP) provisions if necessary. The ExA will invite submissions from IPs who wish to raise matters in relation to this item. The</p>	<p>ESC did however provide some brief comments on this matter during the hearing which have been outlined below.</p> <p>ESC notes the reduction in the commencement period which the Applicants will detail in an update to the draft DCOs at Deadline 5.</p> <p>ESC has given further thought to the incorporation of additional flexibility within the draft DCOs in response to policy change or technological advancements. We are of the view that this would need to be achieved through the Substations Design Principle Statement and the inclusion of an additional design principle.</p>	<p>five years in the draft DCO (REP5-003) submitted at Deadline 5.</p> <p>See Applicants' response at ID 1.1 of the Applicants' Comments on the ExA's Commentary on the dDCO (document reference ExA.dDCO.D6.V1).</p>



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
	Applicants will be provided with a right of reply.		
Security for Technical Processes			
13	<p>The ExAs will review the need and possible drafting approaches to provisions securing the provision of such HRA compensation measures as may be advanced without prejudice. (ISH3 Agenda Item 2 refers).</p> <p>The ExA will invite submissions from IPs who wish to raise matters in relation to this item.</p> <p>The Applicants will be provided with a right of reply.</p>	Agenda item was deferred.	Noted.



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Consents of Parties			
14	<p>The ExAs will consider the need for and progress on the grant of Crown consents and any other consents required from IPs.</p> <p>The ExAs will invite submissions from IPs who wish to raise matters in relation to this item. The Applicants will be provided with a right of reply.</p>	Agenda item was deferred.	Noted.
Other Consents			
15	<p>The ExAs will consider the need for, coordination with and progress on any consents beyond the NSIP regime and not provided for in the dDCOs, but</p>	Agenda item was deferred.	Noted.



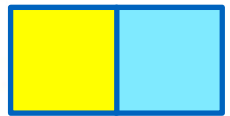
ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
	<p>necessary for delivery.</p> <p>The ExAs will invite submissions from IPs who wish to raise matters in relation to this item.</p> <p>The Applicants will be provided with a right of reply.</p>		
Any other business relevant to the Agenda			
16	<p>The ExAs may raise any other topics bearing on dDCO matters as is expedient, having regard to the readiness of the persons present to address such matters.</p> <p>The ExAs may extend an opportunity for participants to raise matters relevant</p>	ESC has no further comments.	Noted.



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
	<p>to the topic of these hearings that they consider should be examined by the ExAs.</p> <p>If necessary, the Applicants will be provided with a right of reply.</p>		
Procedural decisions, review of actions and next steps			
17	<p>The ExAs will review whether there is any need for procedural decisions about additional information or any other matter arising from Agenda items 2 to 9.</p> <p>To the extent that matters arise that are not addressed in any procedural decisions, the ExAs will address how any actions placed on the</p>	<p>ESC will review any actions upon them as a consequence of the hearing once they have been published by the ExA and respond in writing by the appropriate deadline.</p>	Noted.



ID	Examining Authority's Question	ESC's Deadline 5 Comment	Applicants' Response
	Applicants, Interested Parties or Other Persons are to be met and consider the approaches to be taken in further hearings, in the light of issues raised in these hearings. A written action list will be published if required.		



4 References

Ermann, M (2015) Architectural Acoustics Illustrated. Wiley & Sons Inc, New Jersey.

WHO (1999) Guidelines for Community Noise. Available at
<file:///C:/Users/304876/Downloads/a68672.pdf>