The Planning Act 2008

East Anglia One North (EA1N) and East Anglia Two (EA2) Offshore Wind Farms

Planning Inspectorate Reference: EA1N – EN010077 & EA2 – EN010078

Deadline 4 - 13 January 2021

East Suffolk Council's Response to Additional Information Submitted by Applicants at Deadline 3

Review of Additional Information Submitted by Applicants at Deadline 3

1. Introduction

1.1. East Suffolk Council (ESC) has noted that the following additional documents were submitted by the Applicants at Deadline 3 which are of relevance to the Council's responsibilities:

- EA1N and EA2 Deadline 3 Project Update Note (REP3-052)
- EA1N and EA2 Onshore Substations Update Clarification Note (REP3-057)
- EA1N and EA2 Applicants' Responses to Hearings Action Points (ISH1, CAH1, ISH2) (REP3-083)
- EA1N and EA2 Sizewell Mitigation Land Clarification Note (REP3-076)
- EA1N and EA2 Deadline 3 Air Quality Clarification Note (REP3-061)
- Outline Port Construction Traffic Management and Travel Plan (EA1N and EA2) (REP3-047)
- Outline Construction Traffic Management Plan (OCTMP) (EA1N and EA2 – REP3-032)
- EA1N and EA2 Deadline 3 Onshore Ecology Clarification Note (REP3-060)
- EA1N and EA2 Applicants' Response to Appendix 4 of the Local Impact Report (REP3-071
- Outline Code of Construction Practice (OCoCP – EA1N and EA2) (REP3-022 & REP3-023)
- EA1N and EA2 Construction in Proximity to Properties (REP3-058)
- Cumulative Project Description (EA1N and EA2 - REP3-020)
- EA1N and EA2 Onshore Cable Route Works Programme Clarification Note (REP3-056)
- Outline Landscape and Ecological Management Strategy (EA1N and EA2 - REP3-030)
- Outline Watercourse Crossing Method Statement (EA1N and EA2 - REP3-048)
- Important Hedgerow and Tree Preservation Order Plan (EA1N and EA2 - REP3-010)
- EA1N and EA2 Updated Photomontages Clarification Note (REP3-062)
- EA1N and EA2 Updated Photomontages Clarification Note Appendix 3 – Viewpoint 1 (REP3-063)
- EA1N and EA2 Updated Photomontages Clarification Note Appendix 3 – Viewpoint 2 - Friston, Church Road (Figure 29.14-Update) (REP3-064)
- EA1N and EA2 Updated Photomontages Clarification Note Appendix 3 – Viewpoint 9 - B1121 Aldeburgh Road, south of Friston (Figure 29.21-Update) (REP3-065)
- EA1N and EA2 Updated Photomontages Clarification Note Appendix 3 - CHVP3 PRoW Between Moor Farm and Little Moor Farm (Appendix 24.7, Figure 8-Update) (REP3-066)

- EA1N and EA2 Updated Photomontages Clarification Note Appendix 3 - CHVP4 PRoW to East of Little Moor Farm (Appendix 24.7, Figure 8-Update) (REP3-067)
- EA1N and EA2 Updated Photomontages Clarification Note Appendix 3 - CHVP5 PRoW at Woodside Farm (Appendix 24.7, Figure 10-Update) (REP3-068)
- Works Plans (Onshore EA1N and EA2) (REP3-006)
- Schedule of Changes to the draft Development Consent Order (EA1N and EA2 - REP3-013)
- EA1N and EA2 Relationship of Onshore Plans Secured by DCO (REP3-018)
- EA1N and EA2 Development Consent Orders (DCOs) (REP3-011)

1.2. ESC has also provided updated comments in relation to a document previously submitted by the Applicants at Deadline 2 - Clarification Note for Sizewell Projects Cumulative Impact Assessment (Traffic and Transport) – REP2-009.

1.3. The Council has reviewed these documents and provided comments where relevant in the table on page 5. The comments relate to both East Anglia One North (EA1N) and East Anglia Two (EA2) projects.

1.4. The comments contained within this document are from ESC. The Council continues to work closely with SCC on these projects but to avoid repetition, each Council will lead on specific topic areas as set out in the Councils joint Local Impact Report.

1.5. The Council notes that a number of documents have been submitted which are directly relevant to Suffolk County Council's (SCC) responsibilities as Lead Local Flood Authority, Local Highway Authority and in respect of the Archaeological Service and therefore we will defer the SCC on these matters.

- Traffic and Transport Clarification Note (REP3-055)
- Outline Access Management Plan (REP3-034)
- Outline Construction Traffic Management Plan (where not applicable to air quality) (REP3-032)
- Outline Port Construction Traffic Management Plan and Travel Plan (where not applicable to air quality) (REP3-047)
- Outline Travel Plan (REP3-036)
- Outline Public Rights of Way Strategy (REP3-024)
- Permanent Stopping Up of Public Rights of Way Plan (REP3-009)
- Temporary Stooping Up of Public Rights of Way Plan (REP3-008)
- Outline Operational Drainage Management Plan (REP3-046)
- Outline Written Scheme of Investigation (REP3-026)

1.6. ESC will also defer to SCC in relation to matters within the draft DCOs which are relevant to their responsibilities.

2. ESC Cabinet Resolution – 5 January 2021

2.1. ESC would like to advise the Examining Authority that on 5 January 2021, the Council's Cabinet met to consider its position in relation to the EA1N and EA2 projects. A link to the Cabinet paper has been provided (Document.ashx (cmis.uk.com)). The relevant report is set out under agenda item 6. Cabinet resolved to agree the recommendation which revised the Council's position of objection to the overall impact of the onshore substations as set out in ESC's Relevant Representation, to one of moving towards a neutral position, given the positive improvements/enhancements to the proposals and details. The report however highlights areas of the projects which the Council still remain concerned about and advises that we will continue to positively engage with the Applicants and the examination to seek to reduce and improve the impacts of the developments.

The table below details ESC's comments in relation to additional information submitted by the Applicants at Deadline 3 and the Clarification Note for Sizewell Projects Cumulative Impact Assessment (Traffic and Transport) (REP2-009).

Document submitted		**East Suffolk Council's Comments**
EA1N and EA2 Deadline 3 Project Update Note (REP-052)		
Section 2.1.2 Onshore Substation Height Reductions – paragraph 7 – *"Further review of the project design envelope and early supply chain engagement has allowed the Applicants to reduce the height of the buildings and external equipment within the onshore substations. It has not been possible at this stage to reduce the heights of buildings or external equipment within the National Grid substation as National Grid has not yet progressed their design from that submitted with the Applications*."		The Council welcomes this improvement and the early supply chain engagement the Applicants have undertaken in relation to the onshore substations. The Council requests that the Applicants in conjunction with National Grid undertake similar engagement in relation to the National Grid substation to enable similar reductions in the height of the buildings and external equipment within the National Grid substation to occur.
Paragraph 8, Table 2.1 Revised Building and External Equipment Heights and paragraph 9.		The Council welcomes the reduction in the building and external equipment heights proposed. We reiterate our request that the Applicants commit to make every reasonable effort to seek to further reduce the footprint and height of the infrastructure at the detailed design stage. This commitment should be set out within the Outline Onshore Substation Design Principles Statement (APP-585) and also the Outline National Grid Design Principles Statement (REP1-046).
Paragraph 12, Table 2.2 Revised Finished Ground Levels.		The Council welcomes the reductions in finished floor levels compared to levels used within the Environmental Statements. We reiterate our request for the inclusion within the Outline Onshore Substation Design Principles Statement (APP-585) and also the Outline National Grid Design Principles Statement (REP1-046), a commitment to achieving the lowest practical finished ground levels to minimise visual impact.

2.1.4 Maximum Visual Envelope			The Council notes and welcomes the reductions in the maximum visual envelope and acknowledges the Applicants commitment to update the Outline Onshore Substation Design Principles Statement (APP-585) and the Outline National Grid Substation Design Principles Statement (REP1-046) to include a maximum datum height in respect of the buildings, external equipment and lightning protection masts (expressed in m AOD). It is however still considered that a maximum finished floor level could be provided. This would ensure that consideration is given post consent to achieving the lowest practical building and equipment heights in addition to the lowest practical finished ground level.
			The Council considers that further consideration should be given to any reductions which could be secured in relation to the National Grid substation but also the associated connection infrastructure, specifically the cable sealing end compounds.
Section 2.2 – Aldeburgh Road and Hundred River			The Council welcomes the Applicants' commitment to reduce the working widths in relation to the projects alone or in combination. As stated previously, the Council seeks clarification as to whether any further reductions in the working widths could be achieved at the river crossing itself (as opposed to the 70m width proposed).
EA1N and EA2 Onshore Substation Update Clarification Note (REP3-057)			
Paragraph 4 – outline of design refinements			ESC welcomes the amendments to the design of the onshore substations proposed at Deadline 2 and 3. ESC requests that the Applicants in conjunction with National Grid seek similar design refinements to the National Grid substation.
Paragraph 5 - "*The reasoning behind these changes and a high-level review of their potential environmental benefits is also provided. More detailed information, including any updated assessment conclusions will be submitted at Deadline 4*."			ESC will review the further detail upon its submission at Deadline 4.

Section 2.1 – Environmental Considerations			ESC notes the potential benefits the reduction in the footprint of the substations may facilitate.
Paragraphs 21 to 23 and Table 3.2 – Implications of Lowering Finished Ground Levels up to 3m in 0.5m Increments			ESC understands that further reductions in the finished ground levels could have implications for drainage and surface water runoff, the Council will defer to SCC on this matter but wish for the potential of further reductions in the ground levels of the substations to be fully explored. It is clear such reductions would provide greater landscape and visual benefits. The detail provided in Table 3.2 is useful and illustrates the balance to be struck between the lowering of finished ground levels and the potential HGV movements associated with the works.
Section 4 – Building and Equipment Parameters			ESC welcomes the reduction in the maximum building and equipment height. As indicated previously, ESC requests that similar supply chain engagement is undertaken in relation to the National Grid substation.
EA1N and EA2 Sizewell Mitigation Land Clarification Note (REP3-076)			
Paragraph 5 - "*August 2018: The Councils' non-statutory responses to the Applicants' phase 3 consultation requested further consideration of land at the EDF Energy estate*."			It should be noted that the Council expressed in their Phase 2 consultation response to the Applicants dated April 2018 and also during pre-applications discussions prior to this response, concerns regarding the identified search area and requested the consideration of the Broom Covert, Sizewell site.
Section 2.2 – Why Broom Covert was constrained or not available/what factors were taken into account in reaching the conclusion to cease consideration of this site.			The Council provided its view on the Broom Covert, Sizewell site within our Phase 3.5 consultation to the Applicants. Microsoft Word - 2018-11-08 Response to s3.5 final draft (2) (eastsuffolk.gov.uk)
EA1N and EA2 Clarification Note for Sizewell Projects Cumulative Impact Assessment (Traffic and Transport) – REP2-009			
Section 4 paragraphs 110 and 111			These two paragraphs describe the assessment of cumulative impacts due to traffic and transport on air quality. This document summarises that EA1N and EA2 projects' traffic flows are included in the baseline flows in the Sizewell C

			assessment, to estimate overall NO2, PM10 and PM2.5 concentration. This short evaluation concludes that EDF's cumulative concentration estimates in Appendix 12B of the Sizewell C Environmental Statement are within air quality objectives (AQO) and significant impacts are unlikely. It is correct that the cumulative results presented by EDF are within AQOs, although these are presented within Volume 10, Chapter 4, Appendix 4B. The Council does not agree that the risk of cumulative significant impacts can be ruled out, given that: 1. The assessment assumes a high proportion of Euro VI vehicles, whereas no commitment has been made to a minimum proportion of Euro VI vehicles; and 2. The future baseline of air quality assumes governmental projections in air quality improvements will come to fruition. However, there is significant uncertainty associated with these projections. ESC is in discussion with the ScottishPower Renewables (SPR) and EDF regarding risk of significant impacts in light of these factors, and additional analysis has been provided by the Applicants. This shows that without any controls on the proportion of Euro VI vehicles and no improvements in future air quality there is a risk upon air quality from EA1N and EA2 in combination with Sizewell C. ESC concludes that there is a risk of significant impacts on air quality in the Stratford St Andrew Air Quality Management Area (AQMA), which could arise in the event that a significant proportion of the vehicles used for construction activities do not comply with the latest Euro VI emissions standards. In its response to this document ("East Suffolk Council's Response to Additional Information Submitted by Applicants at Deadline 2" - REP3-093), the Council noted the importance of the Applicants guaranteeing a minimum level of vehicles conforming to Euro VI

		standards. However, more recent discussions indicate that the Applicants are not in a position to provide such a guarantee. In order to fully understand the potential for cumulative impacts in the Stratford St Andrew AQMA, and to assist in evaluating and mitigating any impacts that could arise during the operational phase, ESC considers that a clear understanding of the contribution to air pollution from the EA1N/EA2 and Sizewell C projects in the AQMA is needed. ESC has therefore carefully considered the potential for cumulative impacts in this area and is currently engaged in discussions with all the Applicants to understand the contribution from each scheme. ESC will provide the Examining Authority with an update on these discussions within a future submission.
Outline Construction Traffic Management Plan (EA1N and EA2 – REP3-032)		
Paragraph 59 - "*To ensure that the emissions of HGVs are minimised so far as reasonably practicable, the CTMPCo will ensure that all HGVs are of a Euro VI standard (where possible and where specific specialised operations will allow). Where possible means where a vehicle required for a particular task complies with Euro VI-standards, subject to availability this will be used in place of vehicles not compliant with this standard."*		ESC considers that an undertaking for a minimum proportion of HGVs complying with the Euro VI emissions standard is required to provide confidence that no significant in-combination impacts would arise in the Stratford St Andrew AQMA. Our current understanding is that heavy goods vehicles used for the construction of each scheme should comprise at least 70% Euro VI HGVs, with the balance of no more than 30% being Euro V HGVs. These figures are currently provisional and are based on ongoing discussions with the Applicants for the EA1N and EA2 projects, and for the Sizewell C project. No such undertaking is provided in the OCTMP, and our understanding is that the Applicants do not intend to make any such undertaking.

			In this circumstance, ESC considers that air quality monitoring should be carried out in the AQMA, with active evaluation of the monitoring data so that action can be taken to mitigate any impacts which could arise. ESC has established an outline approach for such a monitoring, evaluation and mitigation programme. This is set out in Appendix 1 to this document.
Section 4.1.5 HGV Emissions, paragraph 86 – "*The CTMPCo will maintain a record of the types of HGVs delivering to site to allow reporting of the proportion of deliveries that meet Euro VI standards. This is will form part of the monitoring reports as described in section 4.2*."			The OCTMP does not make any reference to monitoring of ambient air quality in the AQMA, with evaluation of monitoring data and mitigation of any impacts identified. ESC's reasons for considering that such measures are needed are set out in the previous comment. ESC's outline approach for such a monitoring, evaluation and mitigation programme is set out in Appendix 1 to this document.
Air Quality Clarification Note (REP3-061)			
Graph 2.1 Paragraph 43 Graph 2.4 Graph 2.5 Paragraph 51 Graph 2.6 Graph 2.8			The assessment demonstrates that there is a risk of significant contributions to air pollution levels at designated habitat sites with Stage IV non-road mobile machinery being utilised. This occurs in an area where Horizontal Direction Drilling (HDD) drilling is essential. In view of this, ESC requests that all Non Road Mobile Machinery (NRMM) used in locations where HDD is unavoidable should be the less polluting Stage V plant. Stage V introduces an emission standard for plant >560kW. In addition, Stage V plant will be newer, with less potential for plant deterioration, which would tend to result in increasing emission rates. These conclusions, together with any further relevant findings from the review of the Applicants' Deadline 4 submissions, should be taken into account when developing the OCoCP, OCTMP and AQMP, to ensure that no significant impacts occur in practice.
Paragraph 44 Paragraph 52 Paragraph 62			The assessment shows that impacts at the Sandlings SPA would be lower using open trenching techniques than if trenchless techniques (e.g. HDD) are used. This is because of the higher numbers and capacity of plant and equipment needed for

		HDD. This serves to reinforce ESC's view that suitably controlled open trenching (Scenario A) would be the preferable option.
Outline Port Construction Traffic Management and Travel Plan (EA1N and EA2) (REP3-047)		
Paragraph 21 Paragraph 26		Currently there is insufficient commitment within the Outline Port Construction Traffic Management and Travel Plans to undertake any necessary mitigation. ESC would like the following wording inserting into paragraphs 21 and 26; *'Should the assessments identify any significant impacts on human or ecological receptors, appropriate mitigation should be specified and agreed in writing with the relevant local planning authority*.'
EA1N and EA2 Deadline 3 Onshore Ecology Clarification Note (REP3-060)		
Paragraph 11 final bullet point – "*A mitigation plan will be produced and agreed with Natural England and included as part of the EMP, as secured under the requirements of the draft DCO (an updated version has been submitted at Deadline 3, document reference 3.1)*."		Any mitigation plan should also be agreed with ESC, in addition to Natural England. This wording should be amended to reflect this.
Paragraph 12 final bullet point – "*Implementing a joint annual inspection of all replacement planting by the Applicants and the relevant planning authority at the end of each growing season for each year of the aftercare period, with one to one replanting of failed plants to be undertaken for the first five years.*"		The Council requests that replacement woodland mitigation planting should be maintained for a period of 10 years not 5 years and therefore the one to one replacement of failed plants should be undertaken for the first ten years also.
Paragraph 14		The Council seeks clarification in relation to the ownership and long term management responsibility of the replacement woodland mitigation planting

			(Work no.24). It is unclear at present how this will be secured for the life of the project and who will maintain this planting beyond the initial maintenance period.
			The Council also seeks clarification in relation to the long term management of the substations site.
Chapter 3 – NRMM Impacts			The Council notes that further assessment of air quality impacts arising from NRMM has identified that there is a risk of significant contributions to air pollution levels at designated habitat sites with Stage IV non-road mobile machinery being utilised. In particular this occurs at the landfall location where HDD drilling is essential. It is also noted that the Applicants consider that, due to the relatively short time period over which the emissions will occur, the ecological impact will not be significant (paragraph 32). In view of the impacts presented, the Council requests that all NRMM used in locations where HDD is unavoidable should be the less polluting Stage V plant. The assessment also shows that impacts at the Sandlings SPA crossing would be lower using open trenching techniques compared to if trenchless techniques (e.g. HDD) are used. With a "not significant" ecological conclusion also reached for air quality impacts in this location. This is because of the higher numbers and capacity of plant and equipment needed for HDD. This supports the Council's preference for the use of a trenching technique at the SPA crossing.
Outline Landscape and Ecological Management Strategy (EA1N and EA2 - OLEMS) (REP3-030)			
Paragraph 16 bullet point 3 – "*To provide the basis for the agreement of a detailed LMP for the onshore substation and National Grid substation. This scheme will detail how ecological landscape will be integrated at the substation location, considering (as appropriate) the Design and Access*			This paragraph needs revising as the second sentence of this bullet point does not make sense.

Statement (document reference 8.3) and the final Operational Drainage Management Plan."			
Paragraph 45			The Council notes the key changes to the Outline Landscape Mitigation Plan (OLMP) outlined which are in part a result of the committed reductions in the EA1N and EA2 substation footprints. These amendments are welcomed, the Council will continue to engage with the Applicants in relation to the OLMP.
Paragraphs 95 & 96, Tables 3.2, 3.3, 3.4, 3.5			There remain issues concerning plant associations within the proposed planting mixes that will need to be resolved before final agreement can be achieved. The Council notes the comments of the Applicants in paragraph 96 and agrees that the species mix should remain open for discussion until approval of the LMP during the discharge of requirements process.
Paragraph 104			The Council maintains its position that the growth rates remain optimistic at 39-48cm growth increment per year for 15 years for core native woodland, and 39-48cm for native screening woodland. These may be achievable in 15 consistently favourable consecutive growing years, but that is highly unlikely to occur. These rates cannot be assured, and they are more than likely not achievable in the specifically limiting growing conditions of eastern Suffolk.
Paragraph 107			The comparison of growth rates to other NSIP projects is not considered relevant, comparisons can only usefully be made with other east Suffolk planting.
Paragraph 115 – "*A selection of individual trees in field boundaries to the north of Friston and to the south of the onshore substation will be planted as extra heavy standards, assumed to be approximately 4m in height at the time of planting. All other individual trees to the north of the onshore substation will be planted as light standards, assumed to be approximately 2.5m height at planting*."			The planting of extra heavy standards is noted, the Council would however like to highlight that trees will need to be planted to a very exacting specification to have any chance of success.

Paragraph 163 – "*The Applicant can commit to the replacement of failed woodland planting at the onshore substation location for a period of ten-years in line with the draft DCO (document reference 3.1).*"			The replacement planting period for failures would need to be reset in line with the provisions of the adaptive landscape management, rather than a fixed ten year period.
			The provision of arboricultural and hedgerow impact assessment and mitigation method statements should be in a standalone section and should not form part of the habitats and ecological provision.
Section 5.10.3.2, paragraph 263.			The additional construction mitigation measures for foraging bats are welcomed. However, further clarification is required in relation to the final bullet point which refers to the infill structure being of a similar vegetation type to the existing, retained hedgerow. If there is the possibility that temporary planting in some form will be used as infill, further details of this should be provided in the OLEMS.
Section 5.10.3.3, paragraph 264 – "*Where hedgerows are temporarily lost during construction, there will be a replanting regime (or use of hazel hurdles) and restoration of adjacent habitat where possible for bats. Replanting and restoration will occur as soon as is practicably possible*."			Clarification as to why this paragraph refers to the use of hazel hurdles post construction. It is our understanding that any use of hurdles would be during construction and that all removed hedgerow will be replanted post construction. If it is intended that hazel hurdles will be used post construction, alongside replanting (to provide additional structure for foraging bats whilst the new planting matures) then this should be clarified in this paragraph.
Section 5.12.1, paragraph 282.			The most recent OLEMS now includes reference to a reptile Precautionary Method Statement (PMoW), however it is not clear whether this document will form part of an Ecological Management Plan (EMP) or whether it will be a standalone document? If it is not part of a relevant EMP, then further information should be included in the OLEMS detailing when the PMoW will be prepared and who will be consulted on its content prior to implementation.
Section 7.1, paragraph 382.			The Applicants have committed in the OLEMS to a pre-construction walkover survey of the whole construction area to identify if any conditions have changed and

			therefore if further specific surveys or mitigation measures are required for species not listed in paragraph 382 (e.g. reptiles). This should be recognised in the list in this paragraph.
Table 7.1.			The post-construction bat activity survey timings need to match the pre-construction bat activity timings, activity surveys cannot be undertaken in the winter months.
Table 7.1.			Great crested newts appear to have an extra row (Pre-construction displacement/translocation), it is queried whether this should actually relate to reptiles (which appear to have been deleted from the table)?
Annex 1 (Hedgerow Schedule) and Important Hedgerows and TPO Plan			Clarification is required in relation to important hedgerows 61, 62, 63, 64 and 66 and why they are marked for full or partial removal given that they are further west than the proposed substations and beyond the cable corridor?
			Clarification is also requested as to why Annex 1 which identifies the hedgerows to be crossed with a reduced working width and those which are to be fully or partially removed, does not appear to fully correlate with the hedgerows identified in Schedule 11 of the draft DCOs. There are a number of hedgerows identified in the draft DCOs for removal which are identified as being crossed with a reduced working width in Annex 1.
Outline Watercourse Crossing Method Statement – (OWCMS) (EA1N and EA2 - REP3-048)			
Section 3.2, paragraph 38 bullet point 2 – "*To dam the watercourse, large sandbags will be placed within the watercourse either side of the proposed trench location approximately 35m apart for one project (or approximately 70m apart where onshore cable ducts for both East Anglia TWO and East Anglia ONE North are installed in parallel),*			The Deadline 3 Onshore Ecology Clarification Note states that the working width in the woodland adjacent to the Hundred River crossing will be restricted to 27.1m where cable ducts for both projects are installed together and we query whether a similar width could be achieved at the river crossing itself (as opposed to the 70m width stated in the document), even if it is not possible to maintain this narrowed width throughout the 40m river crossing buffer zone.

starting with the dam upstream. Smaller sandbags will be placed in front to close any potential gaps. The top of both dams will be kept lower than banktop to prevent overland flooding in the event of pump failure."			
Section 4.8.			The working widths quoted in this section appear to differ slightly to those set out in section 3.2 of the document. It should be confirmed which widths are correct.
Outline Code of Construction Practice (EA1N and EA2 - REP3-023)			
Section 3.1 Working Hours and Timing of Works, paragraph 33 - "*Where works are undertaken out with consented hours in response to emergency situations, the relevant planning authority will be advised as soon as practical, outlining the circumstances for the works, the likely duration and the management and mitigation measures implemented*."			The Council accepts that in a genuine emergency there would not necessarily be the opportunity to notify the local planning authority and seek agreement for the works in advance of action needing to be taken. This provision is reflected in Requirement 23(e) of the draft DCOs. The Council would however like this section of the OCoCP updated to clarify that with the exception of emergency works, that the Applicants commit to notify and seek agreement from the local planning authority for any other work undertaken outside the consented working hours, this commitment would also reflect Requirement 23(3) of the draft DCOs and also reflect the wording contained within the Construction in Proximity to Properties document (REP3-058). The Council also seeks confirmation that any emergencies will be reported to ESC as soon as practically possible.
Section 9 Noise and Vibration Management			The Council welcomes the additional text which has been inserted into the OCoCP in this section of the document.
Section 9.1 Control Measures			
Paragraph 85 "*<u>Standard noise and vibration mitigation techniques will be considered</u>, such as specified working times and use of low noise emitting plant and equipment, detail of these measures shall be presented in the final CoCP*".			The Council is concerned that the wording used in the paragraph will not be sufficient to ensure appropriate noise and vibration mitigation techniques are employed and therefore request that the underlined text is "Standard noise and vibration mitigation will be implemented wherever possible/practical".

Paragraph 86 lists the measures best practice mitigation will typically include.			The Council consider that the adoption of most if not all of these measures would be considered 'best practice'. If these measures are not collectively adopted the Council is concerned that the use of the 5dB reduction assumed in the Environmental Statements would be unreasonable and that the construction impacts could be greater than identified.
Section 9.2 – Monitoring, paragraph 88 – "*If it is deemed by the relevant planning authority that during construction monitoring of construction noise is necessary, then the locations for such monitoring will be agreed in advance with the relevant planning authority.*"			The Council would like to highlight at this early stage that it is essential that the local planning authority has sufficient notice and information in order to have the opportunity to make such requests in good time.
10.1.7 HGV Emissions - paragraph 100 – "*Where possible and where specific specialised operations will allow, HGVs will adhere to Euro VI standards to ensure that the emissions of HGVs are minimised so far as reasonably practicable. Where possible means where a vehicle required for a particular task complies with Euro VI-standards, subject to availability this will be used in place of vehicles not compliant with this standard.*"			ESC considers that an undertaking for a minimum proportion of HGVs complying with the Euro VI emissions standard is required to provide confidence that no significant in-combination impacts would arise in the Stratford St Andrew AQMA. Our current understanding is that heavy goods vehicles used for the construction of each scheme should comprise at least 70% Euro VI HGVs, with the balance of no more than 30% being Euro V HGVs. These figures are currently provisional and are based on ongoing discussions with the applicants for the EA1N and EA2 projects, and for the Sizewell C project. No such undertaking is provided in the OCTMP, and our understanding is that the Applicants do not intend to make any such undertaking. In this circumstance, ESC considers that air quality monitoring should be carried out in the AQMA, with active evaluation of the monitoring data so that action can be taken to mitigate any impacts which could arise. ESC has established an outline approach for such a monitoring, evaluation and mitigation programme. This is set out in Appendix 1 to this document.

EA1N and EA2 Construction in Proximity to Properties (REP3-058)		
Section 1.2 – Approach to Construction, paragraph 4 – "*East Anglia ONE North Limited and East Anglia TWO Limited ('the Applicants') have confirmed that should both the Projects be consented and then built sequentially, when the first project goes into construction, the ducting for the second project will be installed along the whole of the onshore cable route in parallel with the installation of the onshore cables for the first project*."		The Council welcomes this commitment from the Applicants.
Section 1.3 – Construction Timings, paragraph 7 – "*Construction works may occur outside the above times in relation to essential activities such as drilling during the operation of a trenchless technique and concrete pouring. However, the timing and duration of such works must be approved by the relevant planning authority in advance, as specified within the draft DCO (document reference 3.1)*."		The Council agrees that the timing and duration of any essential works required to be undertaken outside the consented working hours must be approved by ESC in advance, as set out in the draft DCOs. The Council considers that this commitment should also be set out in the OCoCP for clarity.
Section 1.4 - Mitigation		
Paragraph 13 – "*These control measures are detailed in section 9.1 of the Outline CoCP, and a Construction Phase Noise and Vibration Management Plan, forming part of the final CoCP, will be submitted to and approved by the relevant planning authority prior to the commencement of any stage of the onshore works."*		A set of 'typical' measures has been set out in Section 9.1 of the OCoCP, the Council would reiterate that the adoption of most if not all these measures would be considered to represent best practice. It is however acknowledged that the final management plan documents will be submitted to and approved by ESC prior to commencement.

Paragraph 14 – "*This fencing may also assist in reducing noise impacts arising from construction activities, acting as an acoustic barrier, maintaining suspended particles to suitable levels (the provision of solid screens or barriers around dusty activities, or at the site boundary, that are at least as high as any stockpiles on site acting as a dust management measure), whilst also providing visual screening for local properties*."		The Council would like to see a firmer more specific commitment made in relation to the fencing. For example, a commitment that the placement and design of such fencing would also consider potential noise screening benefits as far as reasonably practical.
Paragraph 15 – "*As embedded mitigation, jointing bays will not be constructed within 55m of a residential dwelling (as secured by Requirement 12(15) of the draft DCO (document reference 3.1))*"		The Council would like the jointing bays constructed as far as practical from residential receptors. It is likely that this commitment from the Applicants will be beneficial, however the extent of any mitigating benefits arising from this commitment is unclear due to the way in which the construction noise predictions and scenarios are described, combined and presented in the Environmental Statements.
Section 1.7 – Consultation and Communication during Construction		The Council welcomes the commitments made within this section which replicates the provisions set out in the OCoCP.
EA1N and EA2 Applicants' Response to Appendix 4 of the Local Impact Report (REP3-071)		
		ESC has reviewed the Applicants response to Appendix 4 of the Local Impact Report and provided comments on operational noise in Appendix 2 of this document.
EA1N and EA2 Revised Photomontages and Clarification Note (REP3-062, REP3-063, REP3-064, REP3-065, REP3-066, REP3-067 & REP3-068		
		ESC's comments provided from a landscape perspective. The changes to the depiction of 15 year planting are noted and it is generally accepted that it is a more realistic portrayal of such planting. That said, there remain some issues with the depiction of hedgerow standard trees, but these are minor

		and make little to no difference to the overall representation of the Applicants' claimed screening effects. The removal of advanced planting from the photomontages and the clarification note in this regard is noted and welcomed. The clarification of concerns regarding the depiction of Year 15 planting in close up views such as VP1 is noted and the revised depictions are accepted as being more realistic than previously shown. In addition, in respect of VP1 plus VP3 and VP14, it is accepted that the proposed planting has the potential to achieve substantial screening of the proposed development after 15 years (noting also the recently proposed reduced structure heights), but a cautionary note must still be added given the previously advised risks to the claimed growth rates from prolonged spells of extreme drought as recently experienced in East Suffolk. The Council notes the various ongoing stated anticipated growth rates from the Applicants and their various associated published references, plus references to other NSIPs. However, we continue to state that these rates are regarded as optimistic in an East Suffolk context given the recent pattern of prolonged Spring drought periods. One of the cited academic references is 33 years old and cannot have anticipated contemporary weather patterns. We accept that they may be achievable, but they will require a very high standard of planting, plant quality and appropriate management to achieve them, and even then, extreme weather patterns may still have a limiting impact. The Council welcomes the programme of adaptive maintenance put forward in the OLEMS which will help to provide greater confidence in the deliverability of the mitigation planting.

			The proposed reductions in substation footprints and overall heights of structures, and eastward adjustments of substation positions are noted and recognised as being beneficial in respect of reducing the visual impact of the development, including in so far as they allow additional planting areas.
			ESC's comments from a heritage perspective. In CHVP3, the reduction in height of the substations does not appear notable. The reduction in the scale of the substations is most noticeable from CHVP4, due to the low height of the proposed vegetation. In this viewpoint the overall height of the infrastructure is lower, and the eastern substation is a less continuous mass, broken up at the centre. Notwithstanding this, the combined visual impact of the substations and the National Grid substation is still substantial. The reduction in the scale of the substations is also noticeable in CHVP5, however this updated visualisation highlights the concern the Council had with this viewpoint previously, in that it is taken from behind the building. In the original viewpoint, the largest elements of the western substation were clearly visible to the left of the weatherboarded outbuilding above the treeline after 15 years. In the updated visualisation, the reduction of the substations means that the western substation is just covered by the weatherboarded outbuilding, and the proposed vegetation covers the National Grid Substation. From this viewpoint it therefore seems that the revisions have made a significant visual change, however this could be misleading, as it is unclear how visible the substations would still be from further along the footpath or from within Woodside Farm's curtilage to the north. 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 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. Both the reduction in scale of the infrastructure and the changes this allows to the locations of the substations are notable in Viewpoint 1. This viewpoint is most relevant in landscape terms, as it does not form part of a significant heritage viewpoint. As a part of the setting of Woodside Farm, however, it appears that the proposed landscape mitigation would have a similar visual impact as before the revisions. Viewpoint 2 is relevant as a view toward the development from north of the church and Viewpoint 9 is a wider view which shows the church in the background. In the updated visualisation of Viewpoint 2 there is a visible reduction in the scale of the infrastructure for the western substation. Viewpoint 9 still shows the tops of the substation infrastructure above the treetops in the backdrop of the church, although lower than in the previous visualisation. Notwithstanding this, the proposed developments would still be of a notably large scale and it would interrupt important views and the relationship between the church and the historic properties to the north and would diminish the open rural character of its wider setting. The reduction in scale has made a difference in the visual impact of the development, in particular from medium-range viewpoints. However, the scale of the development is still so great that these revisions would not be enough to lower the overall levels of harm that have been identified to heritage assets. The revisions which have been made and the updated visualisations are therefore welcomed, however the Council's previous comments and concerns still stand in relation to the harm caused to the setting of heritage assets.

		The Council has been engaging with the Applicants to secure the provision of appropriate compensation to offset the impacts on heritage assets.
Additional land for EA1N and EA2		
Expansion of Order Limits at Work No.7		ESC has no objections to the expansion of the Order Limits to facilitate the construction, use and then removal of a temporary water supply which will reduce the number of HGVs travelling to Work No.8.
Expansion of Order Limits at Work No.15		ESC has no objection to the expansion of the Order Limits to facilitate a temporary diversion of the public right of way.
Expansion of Order Limits at Work No.33 (High House Farm)		ESC has no objection to the expansion of the Order Limits to facilitate the permanent diversion of a public right of way and associated landscape works. This will allow the reintroduction of a historic footpath and field boundary.
Expansion of Order Limits at Work No.33 (Woodside Barn Cottages)		ESC has no objection to the expansion of the Order Limits to facilitate an alternative surface water outfall connection from the onshore substations to the Friston watercourse. The land in question is however very close to residential properties. The Council seeks clarification that the implications of the works in terms of noise is covered by the existing modelling undertaken. The Council also notes that SCC require the prioritisation of infiltration with a connection to the Friston Main River only being utilised if infiltration is proven not to be achievable or viable.
Important Hedgerows and Tree Preservation Order Plan (REP3-010)		
		Hedgerows 1 and 2 are identified within the Important Hedgerows and Tree Preservation Order Plan as being crossed with a reduced width but are identified within Schedule 11 as being removed. Clarification on this is required.
Draft Development Consent Orders (dDCOs) (EA1N and EA2 – REP3-011)		

Part 1 - Preliminary			
Onshore preparation works			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 some requirements being triggered. 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 how ESC would ensure that details of the planting are agreed prior to the works taking place. 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.
			The 'onshore preparation works' are not controlled by the CoCP or the requirements in the draft DCOs and therefore there are no control measures in place in relation to these works.
Part 3 - Requirements			
Requirement 1 – Time limits			The DCOs provide a seven year period for implementation. As the panel have indicated within this period there could be significant policy change or technological advancement. ESC would welcome any flexibility which could be incorporated into the DCOs which allowed such future developments to be exploited.
Requirement 12 – Detailed			12(3) ESC welcomes the reductions to the maximum height of the buildings and external equipment.
			12(6) The inclusion of the need for the National Grid design details to comply with the Outline National Grid Substation Design Principles Statement is welcomed. ESC considers that this element of the requirement should also include the cable sealing end compounds, so that details of this infrastructure are submitted with the details of the National Grid substation. The Outline National Grid Substation Design

			Principles statement should also be updated to include reference to sealing end compounds.
Requirement 13 – Landfall construction method statement			ESC welcomes the update to this requirement which identifies the need for the method statement to accord with the Outline Landfall Construction Method Statement.
Requirement 14 – Provision of landscaping			If the definition of 'onshore preparation works' remains as set out in the DCOs the Council 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.
Requirement 15 – Implementation and maintenance of landscaping			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 maintenance and aftercare. If the maintenance period is suspended so should the requirement for replacement planting.
			Replacement woodland planting (Work No.24) should also be subject to a ten year replacement planting period rather than five years as currently stated.
Requirement 17 – Fencing and others means of enclosure			If the definition of 'onshore preparation works' remains as detailed in the DCOs the Council considers that the wording of this requirement should be amended to prevent the erection of means of enclosure in relation to the projects being undertaken without prior approval from ESC.
Requirement 21 (EMP)			The Council would like the words 'pre-commencement' added before "survey results" in 21(1).
			The Council welcomes the inclusion of the wording to ensure the SPA crossing method statement reflects the Outline SPA Crossing Method Statement.
Requirement 22 – Code of Construction Practice			The new wording to reflect the additional method statement is noted.
Requirement 23 – Construction house for the transmission works (2)(b) "*fitting out works associated with the onshore substation*".			This part of the requirement sets out the activities which, subject to advanced approval from ESC, can occur outside the working hours set out in Requirement 23(1). The Council is concerned that the wording of 23(2)(b) 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. Further clarification on this matter should be provided by the Applicants.
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. This level would exceed what ESC considers to be a more typical background sound level at night by 10dB (see Appendix 2). The Council considers a lower limit should be set.
			The Council maintains 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).
Requirement 27 - Control of noise during operational phase cumulatively with (East Anglia TWO/East Anglia ONE North) onshore substation			The comments provided in relation to Requirement 26 also apply to Requirement 27. The Council do not agree with the noise limit set and maintains that a lower limit should be imposed.
			The Council also considers that the National Grid infrastructure should be included within the final agreed cumulative operational noise rating level and therefore subject to Requirement 27.
Requirement 31 – Aviation Lighting			ESC welcomes the additional text inserted requiring the lighting to be operated at the lowest permissible lighting intensity level.
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.
Requirement 38 – Restriction on carrying out grid connection works consented in (East Anglia ONE North/East Anglia) TWO Order			ESC notes and welcomes this requirement.
Requirement 42 – Installation of cable ducts 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*			A definition of the term 'constructed' would be helpful so it is clear what this would constitute. ESC would like to ask the Applicants whether there is sufficient scope within the draft DCOs to allow for the repair and replacement of any ducts found to be needed at a later date?

forms part of the (EA1N/EA2) cable works are installed in parallel with the construction of the (EA1N/EA2) cable works".			
Schedule 11 Hedgerows			
Part 1 – Removal of Important Hedgerows			Hedgerows 1 and 2 are identified within Schedule 11 as being removed but on the Important Hedgerows and Tree Preservation Order Plan they are identified as being crossed with a reduced width. Clarification on this is required.
Schedule 16 – Procedure for discharge of requirements			
1 – Applications made for certain approvals			This is a new provision within the draft DCOs, the Council seeks clarification as to why this is considered necessary? Such provisions were not part of the EA1 or EA3 DCOs.
			The schedule does not include any details in relation to the information the Applicant should provide. For example, the Norfolk Vanguard DCO included the wording: *"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."* The Council considers that this would be useful additional wording.
1(2)(a)			ESC considers that 42 days is insufficient time and a period of at least 56 days should be provided.
1(3)			The Council does not agree with the deemed consent provision that in the event the discharging authority does not determine an application within the decision period, consent is deemed to have been given. This should be removed.
2 – Further information 2(2) & 2(3)			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.
2(4)			It is not considered appropriate that all further requests for information should be required to be made within this 10 day period. This would not give sufficient time for the authority to consider and assess the additional information received to decide whether further information and requests are necessary. It would also not provide sufficient time for a consultee to advise the Council that further information is required and for ESC to make this request.

Appendix 1: Outline of Proposed Air Quality Monitoring, Evaluation and Mitigation Programme

1. Introduction

1.1 The measures described here are considered by ESC to be needed in the event that the Applicants for the EA1N/EA2 and Sizewell C projects are not able to confirm that the heavy goods vehicles used for the construction of each scheme should comprise at least 70% Euro VI HGVs, with the balance of no more than 30% being Euro V HGVs [specific figures subject to confirmation]. If such confirmation can be provided, the monitoring, evaluation and mitigation programme would not be required.

1.2 This programme would be needed if permission is granted for the EA1N, EA2 and Sizewell C projects. If the Sizewell C project does not go ahead, the monitoring, evaluation and mitigation programme would not be required.

1.3 The Outline Code of Construction Practice (OCoCP) for EA1N and EA2 paragraph 91 provides for the development and implementation of an air quality management plan (AQMP). The measures described in this Appendix could form part of this AQMP.

2 Programme Management

2.1 It is proposed that a management group should be formed to oversee the monitoring, evaluation and mitigation programme. This could be formed as a stand-alone body or could be part of the wider liaison programme during the construction programmes. This group will only be convened if monitoring results indicate that either of the Air Quality Objectives for NO_2 are likely to be exceeded. The remit of the group would be limited to management of the air quality impacts of construction traffic passing through Stratford St Andrew.

2.2 The group should include representatives from SPR and EDF, together with ESC and SCC.

2.3 The management group activities would be as follows:

- Planned outbound and inbound construction traffic deliveries should be forecast a month in advance and shared with the local authority. This should provide the forecasted number of construction vehicles per hour of working day.
- Records on the peak hour and daily actual outbound and inbound construction traffic deliveries by hour, and the Euro standards of each vehicle's emission control system, should be submitted to the local authorities on a weekly basis and any exceedance above the Environment Statement construction vehicle threshold reported.
- Construction traffic management will attend management group meetings (if any are required), normally at minimum 5 working days' notice, but in the event of

severe pollution events, exceptionally meetings may need to be held with 1 days' notice.

- The management group will include representatives from EA1N/EA2's construction traffic management and environmental management team, SCC and ESC traffic and air quality teams, and other major schemes' construction traffic and environmental management teams.
- In the event that construction traffic is identified as a significant risk, the management group will consider and agree measures to mitigate air quality impacts. These measures will be implemented by the operators of each construction programme. Measures will be proportionate to the identified impact of each construction programme.

3. Air Quality Monitoring

3.1 Diffusion tubes are currently used to monitor NO_2 concentrations within the AQMA on a monthly basis. However, such monthly measurements do not have necessary time resolution to identify NO_2 impacts arising from short-term peaks in construction traffic which could potentially be associated with the construction programmes.

3.2 It is proposed to install a continuous analyser to measure NO_2 at 1 hour or better resolution. This data can be analysed in the context of previous baseline measurements at Stratford St Andrew, and contemporaneous measurements elsewhere in East Anglia to establish if daily construction traffic movements pose a risk to achieving the NO_2 annual mean objective. This will be determined by comparing measured NO_2 concentrations from prior years and at other locations, to concentrations measured at Stratford St Andrew with construction traffic. Investigative data analysis and presentation tools such as the OpenAir package will be applied to investigate the sources of measured levels of air pollutants, and the influence of factors such as pre-existing and regional sources of pollution, meteorological conditions, and conversion between NO_x and NO_2 in the atmosphere.

3.3 The hourly data will also be analysed to identify the risk of exceeding the 1-hour NO_2 objective.

3.4 This analysis will be developed further to forecast the expected outturn from a full year of NO_2 monitoring. This will give an indication of whether an exceedance of the NO_2 annual mean or hourly mean air quality objective is likely.

3.5 The scope of the air quality monitoring programme will be as follows:

- The measurement study will focus on nitrogen dioxide concentrations (together with nitric oxide and total oxides of nitrogen) as the AQMA was declared on the basis of the risk of exceeding the air quality objective for nitrogen dioxide.
- The measurements will be carried out using a continuous analyser operated in accordance with the standards specified for Local Air Quality Management.

- A meteorological station recording as a minimum hourly mean wind speed, wind direction, air temperature and relative humidity will also be provided.
- Measurements will be carried out for one year prior to the start of construction activities, or for as long as possible and a minimum period of six months prior to the start of construction activities if a full year of monitoring is not possible (excluding any preparatory works which are confirmed as having no significant adverse air quality impacts). If this period is completed, but construction has not commenced, it may be acceptable to pause the monitoring work for a limited period of up to 2 years, and to recommence when construction work starts. Monitoring will finish when the construction phases of all potentially relevant developments are complete. Alternatively, if the "Two Villages" bypass is constructed, monitoring should continue for a year after construction to confirm effectiveness of the bypass at improving NO_2 concentrations.

4. Supporting Data

4.1 The Applicants will provide the following data for vehicles which will pass through Stratford St Andrew:

- Inbound and outbound construction deliveries scheduled for each hour of the day. Data to be provided monthly in advance.
- A record of actual inbound and outbound construction deliveries, the routes taken (i.e. north or south origin/destination and route taken to trunk road network), and Euro standards of vehicles used.

4.2 In addition to this the following data will also be included within analysis undertaken by or on behalf of the local authority:

- Continuous analyser NO_2, NO and NO_x concentrations at the Stratford St Andrew AQMA.
- Continuous analyser measurements at other locations in Suffolk
- Meteorological conditions to include at least wind speed, wind direction and temperature measurements taken at the site. This will ideally be undertaken through a weather station co-located with the continuous analysers.

5. Proposed Data Analysis

Hourly NO_2 Objective

5.1 An alert system can be developed to respond to instances when NO_2 concentrations exceed the hourly air quality objective. Each breach of the hourly NO_2 objective should be investigated to determine the extent to which this was caused by construction traffic. For example, were similar exceedances observed at other sites? Were similar exceedances observed under similar conditions during the baseline period? What contribution to traffic in the AQMA during the exceedance period was due to

construction activities? Would the recorded exceedance have occurred in the absence of construction traffic?

5.2 Based on this analysis, the management group will discuss and agree appropriate and proportionate measures to reduce the impact of the construction programme on air quality, if required.

Annual Mean NO_2 Objective

5.3 The risk of an annual mean NO_2 breach will be determined by comparing daily/monthly mean NO_2 concentrations from prior years to concentrations measured with construction traffic, in combination with forecasting the remainder of the years' NO_2 concentrations. NO_2 concentrations will be forecasted by a historical analysis of concentrations levels for remaining months of the year to be measured. This will give an indication of whether an NO_2 annual mean objective exceedance is likely.

5.4 If an exceedance of the annual mean objective appears likely to occur, measures to mitigate the impact of road traffic associated with the construction activities will be implemented pending further analysis of the data. The management group will discuss and agree measures to reduce the impact of the construction programme on air quality.

5.5 Further investigation will take place to determine the extent to which construction traffic is contributing to this impact. For example, how do measured concentrations compare to those measured during the baseline period? Have similar changes compared to the baseline period been observed at other sites? What contribution to traffic in the AQMA during the year to date was due to construction activities? Would the projected exceedance occur in the absence of construction traffic?

5.6 Based on this analysis, the management group will discuss and agree whether the measures to reduce the impact of the construction programme on air quality are appropriate and proportionate and will confirm whether the measures adopted should be removed, retained or adapted.

Hourly and Annual Mean NO_2 Objective

<u>Start of early years of construction traffic from EA1N/EA2 and Sizewell C</u>

5.7 To minimise the risks, construction schedules from all construction projects should be reviewed to ensure that cumulative construction movements do not exceed the maximum number within the Environmental Statements for each development. Each project shall provide the required details of traffic movements to support this analysis.

<u>After first month of early years construction traffic</u>

5.8 A separate review process will be carried out each month for the annual mean NO_2 objective, until it can be confirmed that the measurement data indicates no significant risk of exceedance.

6. Funding

6.1 The developers will be asked to financially contribute to implementing the proposed air quality monitoring instrumentation and associated data analysis and management of impacts, in accordance with the programme set out above.

Appendix 2 – Operational Noise

1. ESC has reviewed the Applicants' response to our review of the background noise data (which the Council provided as Appendix 4 of our Local Impact Report – REP1-132).

2. We note that the Applicants have revised their position with respect to the typical, or a representative background sound level at the receptor assessment position SSR3. The Applicants now would appear to accept that the night-time background sound level is typically below 30 dB LA90 at this location. (The Applicants' analysis of the modal and mean background sound levels at this location indicate levels of 24 dB and 26 dB LA90 respectively). We note however that the Applicants have not yet revised its proposed operational rating noise level downwards accordingly.

3. With respect to Requirement 26 of the draft DCOs, ESC maintain that it is important for a third monitoring location (SSR3, Grid Ref 641231, 261673) to be added to the two proposed in the draft DCO documents. It may indeed be preferable that the final agreed operational noise levels apply to any residential receptor location given cumulative impacts.

4. ESC continues to disagree with the approach the Applicants have taken to determine a typical or representative background sound level. We therefore maintain that typical background sound levels are lower than those adopted by the Applicants to date. Our review of the Applicants' background sound survey data would lead us to conclude a typical background sound level of 24 dB LA90.

5. The typical background sound level is a key factor in establishing a target rating noise level (LAr) that is considered sufficiently protective of relevant noise sensitive receptors by avoiding significant adverse impacts. ESC therefore maintain that the target rating noise level (inclusive of acoustic feature corrections) must be established from a lower typical background sound level than the Applicants have set out to date. We have sought to illustrate this point in Figures 1 and 2 provided at the end of this Appendix.

6. Figures 1 and 2 present the Applicants' raw survey data from across the study area and between the dates of 26 June and 12 July 2018 (note that the survey locations may differ). Overlaid on these graphs are three horizontal lines. The blue line represents the typical background sound level currently adopted by the Applicants (LA90 of 29 dB). The red line illustrates where the Applicants, in Requirement 26 of the draft DCOs, have proposed a target operational rating noise level (LAr) of 34 dB. The final line (green) illustrates what ESC believe to be a more typical background sound level (at night) for the noise sensitive receptors, LA90 of 24 dB.

7. The graphed survey data from the Applicants demonstrate just how regularly night-time background sound levels fall to low levels. On many nights, the level falls below 20 dB LA90 for short periods. ESC is therefore of the opinion that the Applicants have not

adequately considered the low night-time background sound levels that characterise this area and the permanent nature of the onshore infrastructure when establishing their proposed operational noise levels in the draft DCOs (Requirement 26).

8. In addition, there remains some uncertainty about the acoustic features (e.g. tones) that the substations may emit, and therefore the acoustic feature correction that would be applied to the source noise to derive an operational noise rating level limit.

9. ESC remains concerned that the onshore infrastructure will irreversibly change the sound character and climate in the vicinity of the substations. The proposals would introduce a constant man-made noise to an environment that is likely comprised of natural sounds for much of the time. The substations are likely to emit low frequency sounds that would not be readily masked by sounds within the existing sound climate. If this has not already taken place, then ESC would invite the panel to undertake a short night-time visit to the study area (i.e. after 2300 hours) to listen to, and experience for themselves the existing sound climate in this area against which these proposals must be judged.

10. In summary, at this time ESC do not accept the proposed operational noise rating level (LAr) of 34 dB as set out in Requirement 26 of the draft DCOs.

11. This level (as shown in Figures 1 and 2) would exceed what we consider to be a more typical background sound level at night by 10 dB and introduce a permanent man-made sound to the existing sound climate. ESC considers therefore that the proposed operational noise level as set out in the draft DCOs would not avoid a significant adverse impact from noise at some receptors for some parts of the day.

12. At this time, ESC has not been presented with enough/any detail on noise emissions from the National Grid infrastructure that is required to operate alongside the EA1N and EA2 substations. We therefore have concerns that the National Grid infrastructure could contribute to both noise levels and acoustic character of noise as received at noise sensitive receptors. Our opinion therefore is that the final agreed operational noise rating level (LAr) should apply cumulatively to the EA1N and EA2 substations, and to the required National Grid infrastructure for the protection of noise sensitive receptors.

13. ESC understands that the Applicants have indicated the National Grid infrastructure would not contribute to cumulative noise levels or introduce any additional tonal or other sound characteristics at receptor locations. This however has not been assessed and presented for the Council to review. Should this assumption be true however, then including the National Grid infrastructure in the cumulative operational noise rating levels would not be any burden to the developers but would benefit residents and visitors by ensuring more complete protection from noise to any noise sensitive receptors.

14. In conclusion therefore with respect to the draft DCOs and Requirement 27, the Council considers that receptor location SSR3 should be included in the positions where the

operational noise limit should be applied. It may be preferable that this Requirement is worded to include for any noise sensitive receptor in order to capture the variability in dominant source, and noise propagation to receptors. The Council also considers that the National Grid infrastructure should also be included within the final agreed cumulative operational noise rating level.

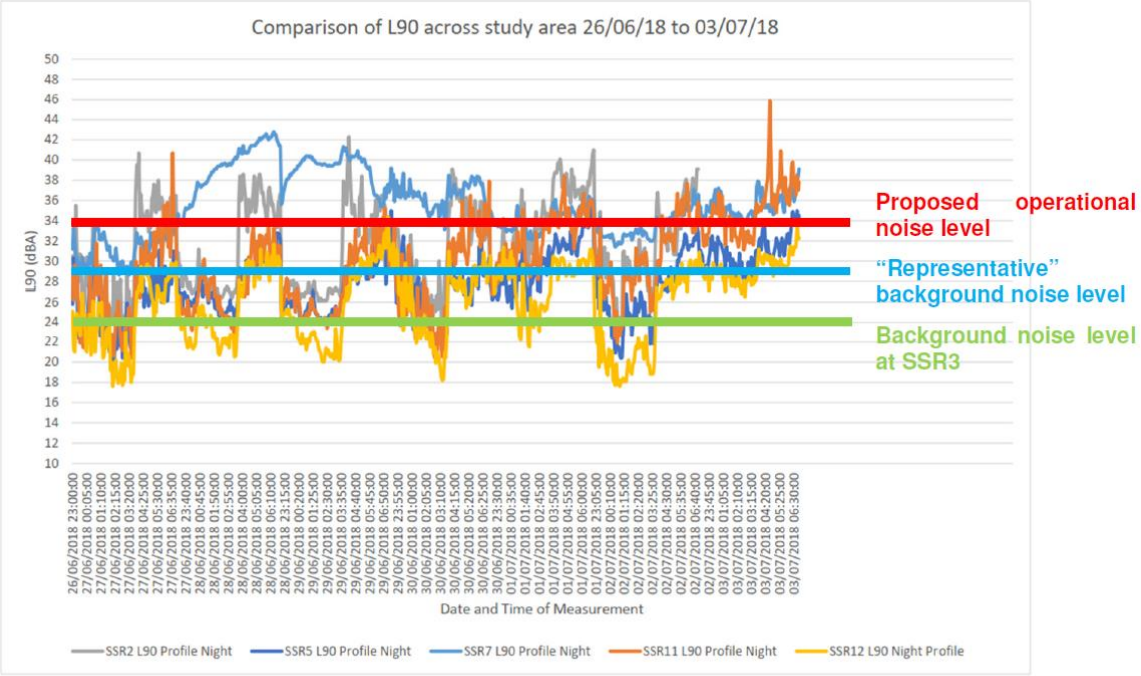

Figure 1 – Applicant's graph of background levels with annotations added, 26/6/2018 to 3/7/2018

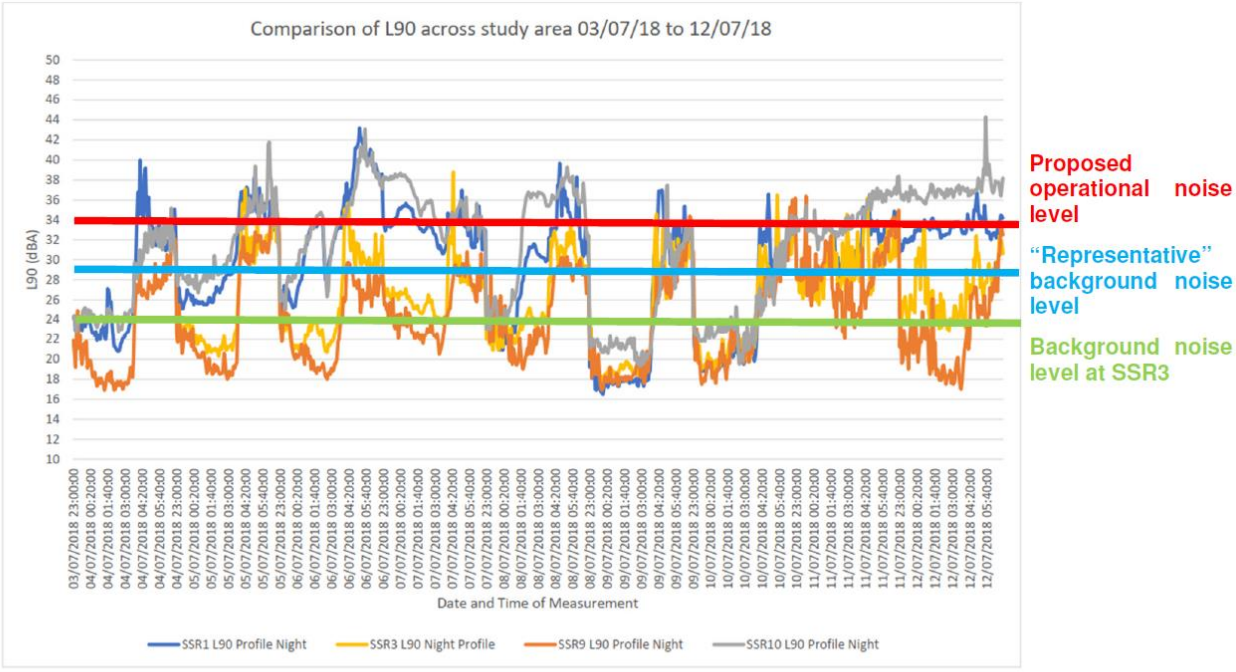

Figure 2 – Applicant's graph of background levels with annotations added, 3/7/2018 to 12/7/2018