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Norwich to Tilbury

Volume 8: Examination Documents

**Document: 8.4.6 Applicant's comments on submissions received at
Procedural Deadline A**

Final Issue A

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1. Introduction

1.1 Purpose of the Document

- 1.1.1 This document provides National Grid Electricity Transmission plc's (the Applicant's) comments on various Interested Parties' responses at Procedural Deadline A (PDA) [PDA-007], [PDA-015], [PDA-016] and [PDA-020] to the Planning Inspectorate's Rule 6 Letter in respect of the application for development consent for the Norwich to Tilbury Project ('the Project'). This document should be read alongside the suite of other documents submitted to the Examining Authority for Deadline 1, such as **8.4.1 Applicant's Comments on Relevant Representations [Revision A]**.
- 1.1.2 The Applicant notes that almost all of the letters related to procedural matters to be discussed at the Preliminary Meeting including examination timetabling, the Initial Assessment of Principal Issues, or hearing venues. As the Preliminary Meeting has taken place and the Rule 8 letter **[PD-011]** has been issued, the Applicant has no further comments in respect of those points.
- 1.1.3 The submission from Holton St Mary Parish Council **[PDA-005]** is asking that the examination process be expanded to address various points and the Applicant has no comments to make on those.
- 1.1.4 The Applicant is not proposing in this document to respond to Fieldfisher LLP on behalf of British Pipeline Agency Limited (PBA) as agent for United Kingdom Oil Pipelines Limited (UKOP) other than to note: Fieldfisher LLP submitted a summary agenda **[PDA-011]** and their written notes **[AS-086]** for their attendance and participation at Compulsory Acquisition Hearing 1. The Applicant has reviewed these submissions and understands the issues raised, noting that the Relevant Representation submitted by Fieldfisher LLP on behalf of BPA/UKOP, sets out their points in more comprehensive detail. The parties continue to engage productively on addressing these points and the Applicant responds to the detailed matters in full in response to BPA/UKOP's Relevant Representation.
- 1.1.5 Therefore, this document focuses on the responses received from the following organisations where the Examining Authority requested feedback in writing:
- Ardleigh Parish Council and Little Bromley Parish Council **[PDA-007]**
 - Richard Buxton Solicitors on behalf of Pylons East Anglia Ltd **[PDA-015]**
 - Pylons East Anglia Ltd **[PDA-016]**
 - Michael Senior Steel **[PDA-020]**.

2. Applicant’s Comments on the Ardleigh Parish Council and Little Bromley Parish Council Response

2.1 Introduction

2.1.1 Table 2.1 summarises the Applicant’s comments on Item 3 of the Response to the Rule 6 Letter by Simon Bell on behalf of Ardleigh Parish Council and Little Bromley Parish Council [PDA-007], submitted at PDA. The Applicant has no comments on the other points raised.

Table 2.1 Title Applicant’s comments on the Ardleigh Parish Council and Little Bromley Parish Council PDA submissions [PDA-007]

Ref	Matter Raised	Applicant’s Comments
3	An additional submission has been prepared clarifying the Parish Council’s concerns surrounding loss of BMV, safety, emergency-response capacity and resilience risks arising from the risk of “clustering” of infrastructure developments (particularly BESS sites) around this proposed nationally significant infrastructure, with particular regard to the Ardleigh/ Little Bromley area (“the ALBA”). The Examining Authority is invited to accept this additional representation (appended to this letter) now, as it is important to consider the points raised in the context of the preliminary meeting and the following points that the Parish Councils wish to raise at that meeting	<p>The Applicant notes The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 require the environmental assessment to identify, describe and assess, where relevant, the expected significant effects arising from the vulnerability of the proposed development to ‘major accidents and disasters’ (MAD).</p> <p>The EIA Scoping Report (see 6.19 Scoping Report [APP-296]) therefore identified and described the following potential MAD which could occur as a result of the Project, or arise from the surrounding environment and affect the Project:</p> <ul style="list-style-type: none"> • Physical accident • Electrical accident • Fire/explosion • Security threat • External interference. <p>Whilst the Applicant recognises that these potential MAD could occur, the likelihood is so low that the risks are considered to be not significant.</p> <p>All potential effects were scoped out from further assessment as there are no likely significant effects as described in 6.19 Scoping Report [APP-296]. A standalone MAD chapter is therefore not included within Volume 6 Environmental Statement [APP-123 to APP-298].</p>

Ref	Matter Raised	Applicant's Comments
		<p>The Project is designed to comply with design safety standards including the National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS) and the suite of National Grid policies and processes which contains details on design standards required to be met when designing, constructing, and operating its projects. These design safety standards constitute an embedded mitigation measure as reported in 6.4 Environmental Statement Chapter 4 - Project Description [APP-130].</p> <p>Existing National Grid processes are designed to identify potential security and safety risks during construction and operation (and maintenance) (including risks from MAD) and to design these out at each stage of project development. This informs a suite of National Grid policies and processes, which contain details on design standards required to be met when designing, constructing, and operating assets such as proposed on the Project.</p> <p>The Applicant notes the developer of the BESS site is required to submit a Fire Prevention Plan incorporating full details of fire suppression mechanisms for approval prior to operational use.</p>

3. Applicant's Comments on the Richard Buxton Solicitors on behalf of Pylons East Anglia Ltd Response

3.1 Introduction

3.1.1 Table 3.1 summarises the Applicant's comments on the response by Richard Buxton to the Rule 6 Letter on behalf of Pylons East Anglia Ltd [PDA-015] submitted at PDA.

Table 3.1 Title Applicant’s comments on the Richard Buxton Solicitors on behalf of Pylons East Anglia Ltd PDA submissions [PDA-015]

Topic	Comment	National Grid’s response
Alternatives	<p>1. Thank you for the Rule 6 letter which we have been forwarded by our clients Pylons East Anglia Ltd. We (by that we mean them and/or with us and/or counsel representing) take a keen interest in the matter and will be registering to appear at least at the 10.2.26 PH and the ISH on 13.2.26.</p> <p>2. It would help greatly in preparation if you would, please, clarify what the ExA has in mind to be considered at the ISH on 13.2.26 and how it intends to approach this. On one reading of your letter, this is the only intended opportunity for the ExA to consider alternatives and one at which our clients would have no opportunity to input into. We seek your urgent clarification as to whether this is indeed the case, which would be a matter of profound concern if so.</p> <p>3. As you should be aware, this issue (alternatives) is a matter of acute concern to our clients and indeed others, including the local authorities involved. There is the issue as to whether this was done properly in the consultation process, which is legal background we may bring to the ExA's attention again, but substantively, based on the application as made, does need to be explored by the ExA in depth.</p>	<p>The Applicant has no comments to make on this part of the letter, which is directed at the ExA.</p>
Alternatives	<p>4. Put shortly, it is impossible to be satisfied that NG has chosen the most appropriate method for proceeding with what all accept is a necessary requirement to transmit electricity from the East</p>	<p>7.17 Strategic Options Backcheck and Review [APP-355] Section 3 ‘Need case’ states:</p>

Topic	Comment	National Grid's response
	<p>Anglia region to the London region. NG might justified or at least clarified this had the consultation process proceeded as it should have, but it did not. Instead, it has proceeded with what we (and many others) perceive to be a fundamentally flawed premise, namely that the proposed pylons are the most effective way of securing the accepted objective in terms of cost, environmental considerations, and speed of delivery. The application as made would have very substantial environmental impact, take a long time, and be very costly. The ExA should not recommend it unless it is satisfied that it is indeed the optimum way forward.</p>	<p><i>'3.3.7 The wider Southeast area, is made up of the 400kV and 275kV network which connects generation and demand in the major towns and cities of the wider Southeast and Midlands regions'.</i></p> <p>For many transmission faults power flows across the network differently and connection to Bramford ensures, for all fault types the demand centres across the South-East and Midlands are supplied with the energy they need.</p> <p>National Policy Statement for Electricity Networks Infrastructure (EN-5) (2024) requires the Applicant to operate in an efficient, coordinated and economical way¹. To meet the duty to build efficient and economic networks, an overhead line is the strong starting presumption for electricity network developments in general. Having regard to this duty, the strong starting position is only reversed for nationally designated landscapes.</p> <p>In response to the relevant EN-5 paragraphs 2.9.14 and 2.9.23 to 2.9.25, the strong starting presumption in favour of overhead lines is not displaced, even where there is a high potential for widespread and significant adverse effects. In those circumstances, the Secretary of State should only prefer underground or subsea, where the benefits clearly outweigh any extra economic, social or environmental impacts.</p> <p>In accordance with Overarching National Policy Statement for Energy (EN-1) and EN-5 policy, the Applicant has applied the strong presumption of overhead lines in the correct places, and reversed that presumption in the circumstances of a designated National Landscape. The Project has included undergrounding in particular locations outside the National Landscape, having applied the EN-5 policies. Details are set out in 5.15 Design Development Report [APP-122] and 5.6 Planning Statement [APP-085]. The Project has therefore complied with the relevant EN-5 policies on undergrounding.</p> <p>The Applicant considers its consultation has been sufficient. A detailed response with regard to our application of the Gunning Principles can be</p>

¹ Electricity Act 1989, Section 9

Topic	Comment	National Grid's response
		<p>found in 5.1 Consultation Report - Appendix N5: Legal Opinions [APP-080]. 5.1 Consultation Report [APP-066] also provides a response to the document entitled 'Deficiencies' referenced in Appendix 6 which was submitted as part of Pylons East Anglia Ltd's feedback to the 2024 statutory consultation.</p> <p>In April 2025 the Applicant submitted an Adequacy of Consultation Milestone to the Planning Inspectorate to allow for early consideration of the adequacy of consultation carried out by the Applicant. This milestone was accepted by the Planning Inspectorate. In the Section 55 Checklist [PD-002], the Planning Inspectorate also stated that it is satisfied that the Applicant has complied with its statutory obligations.</p>
Alternatives	<p>5. So if justice is to be done to this issue, there is much detailed material to cover. The ExA will need to understand fully issues relating to the use of existing infrastructure, including capacity constraints, opportunities for upgrading it and, for example, making use of the existing but soon-to-be-dismantled sub-station at Bradwell-on-Sea and route onwards to Tilbury. Related to that, and that route, a recurring issue and one which we believe could save a vast amount of difficulty with this project is undergrounding (and possibly sub-sea to that point) using HVDC. NG has conspicuously failed to provide properly articulated information about the scope and cost for undergrounding.</p>	<p>The relative costs for underground connections are set out in 7.17 Strategic Options Backcheck and Review [APP-355]. The Applicant has also set out the inappropriateness of re-using the 400 kV infrastructure from Bradwell. This has been operating at 132 kV for several years and would need to be rebuilt (including re-routeing) in various locations. Progressing this route to Rayleigh and on to Tilbury also presents further difficulties given constraints to routeing from homes, environmental features and other constraints. Different means to route via Bradwell have been considered by the Applicant. For example, continuing from the EACN to Bradwell was considered but would not meet programme requirements due to the need for a tunnel to cross the Blackwater Estuary and would increase effects on qualifying features of the Special Protection Areas through which the route would pass, as well as being at greater cost. Given the relative cost of High Voltage Direct Current (HVDC) compared with overhead line, the alternative to connect between Norwich Main and Bradwell by HVDC is also less preferred and similarly presents difficulties to move power on from Bradwell for the reasons stated above.</p>
Alternatives	<p>6. Further related is that this method would save unnecessary damage (due to a much narrower cable path required) in the Dedham Vale National</p>	<p>In 7.17 Strategic Options Backcheck and Review [APP-355] the Applicant has set out its reasons for a Norwich to Tilbury entirely HVDC alternative not being preferred. Whilst noting the potential for the route</p>

Topic	Comment	National Grid's response
	<p>Landscape and thus be consistent with CROW Act duties. Close to that area, we are aware how such an approach would likely avoid difficulties at Ardleigh. Similarly, the ExA cannot be satisfied on current information that offshore alternatives (possible combined with on-shore as mentioned from Bradwell) have been properly explored.</p>	<p>through the National Landscape to be installed as HVDC, this would require three large convertor stations to either side of the National Landscape. The Applicant does not consider that the cost or effects justify the change from AC cable. Other options via Bradwell are less preferred as discussed above.</p>
<p>Alternatives</p>	<p>7. As for capacity, the ExA will need to probe – and objectors given the opportunity properly to consider – NG's responses to, which should all have been part of the consultation – other related issues such as how capacity constraints could be improved (for example by use of TS Conductor, LineVision Dynamic Line Rating (DLR) sensors (used elsewhere in the UK, but not in East Anglia), dynamic line ratings, advanced power flow controls, transmission switching, and EC5 Constraint Management Intertrip Service (CMIS). These are essential in the light of requirements of policy EN-5 (2.10.5 and related statements concerning alternatives)</p>	<p>7.17 Strategic Options Backcheck and Review [APP-355] Section 3 'Need case' (Table 3.3 page 31) sets out requirements in East Anglia boundaries EC5 and EC5N.</p> <p>Worldwide, 400 kV systems are limited to International Electrotechnical Commission (IEC) rating of 5,000 Amperes (A), continuous (for example as identified in Circuit Breaker Ratings (IEC 62271-100)).</p> <p>This means that all electrical equipment installed at substations is rated to this current level. This 5,000 A equates to:</p> <ul style="list-style-type: none"> • aximum Single circuit rating of 3,465 megavolt-ampere (MVA) per circuit • (EC5N post fault) equates to Maximum Double Circuit rating of 6,930 MVA per double circuit (i.e., circuits either side of pylons) • (EC5 post fault) Four circuits, Maximum Circuit rating of 13,860 MVA two sets of double circuit post fault. <p>Therefore, with both boundaries operating to about 300 MVA of their maximum, further uprating does not resolve the need without additional circuit infrastructure set out below:</p> <ul style="list-style-type: none"> • EC5N – 2031 post fault capability 6,652 MVA, leaves a deficit of -7,520 MW • EC5 – 2031 post fault capability 13,552 MVA, leaves a deficit of -9,928 MW. <p>Dynamic line rating (DLR) equipment is used by the Applicant. Our circuits have different ratings according to ambient temperature, which is such that</p>

Topic	Comment	National Grid's response
		<p>in summer, lines can be rated 60-80% lower than in winter (in worst-case conditions) which severely limits the system's capability. DLR allows us to observe that the ambient temperature is actually 20° rather than a worst case 35-40°. Then the line rating can be adjusted to match actual local ambient conditions and transmit more power based on actual conditions versus worst case. It still does not change the Maximum Continuous IEC 5000 A equipment rating but would allow a circuit restricted to 3,000 A in summer (worst case) to operate at 4,000 A on a 20°C day, for example.</p> <p>TS conductor is a brand of High Temperature Low Sag technology which is deployed in very specific case – when trading off less efficient higher operating temperatures versus the need to increase the capacity of an overhead line that cannot be rebuilt. In such cases this conductor can be utilised to achieve 5,000 A continuous rating and 3,465 MVA per circuit rating, where otherwise this rating would not be achievable. Such technology is therefore deployed on pylon designs that are not capable of carrying the normal conductor bundles required to achieve 5,000 A continuous rating and 3,465 MVA per circuit rating. East Anglia in general has pylon infrastructure capable of carrying conductor bundles that can achieve 5,000 A ratings, which is the limitation to circuits. Therefore TS conductor would not provide further capacity as the circuits already can achieve the IEC 5,000 A rating.</p> <p>The Applicant uses all the technologies listed. Both power flow control and transmission switching are used to redirect power flows to less utilised circuits. The Need Case set out in 7.17 Strategic Options Backcheck and Review [APP-355] shows a 9,928 MW capacity deficit across East Anglia EC5 Boundary and a 7,520 MW capacity deficit across EC5N Boundary. These deficits occur in spite of maximum transmission capacity, equivalent to the IEC 5,000 A rating, already being met on all boundary circuits in East Anglia. Therefore these technologies would not resolve the need for additional circuit infrastructure.</p> <p>EC5 Constraint Management Intertrip Service (CMIS) is a National Energy System Operator (NESO) scheme. The Applicant and NESO have lots of such area-wide Intertrip Schemes which are used when constraints,</p>

Topic	Comment	National Grid's response
		<p>caused by system outages, occur. These services are only allowed under maintenance outage conditions, to cover for faults that are not covered in intact conditions. The intact system for which the Need Case in 7.17 Strategic Options Backcheck and Review [APP-355] is set out, cannot use intertrips for faults without maintenance outages. CMIS is therefore not relevant to the need for the Project, but for operational use during maintenance of the network only.</p>
Alternatives	<p>8. We believe that NG has indicted that there is a problem with supply of HVDC cables which could lead to delayed delivery. But this and related supply issues require serious probing, given NG's position in the marketplace.</p>	<p>As already stated in this examination (ISH1), the global HVDC supply chain for both cable and converter are heavily constrained and the pipeline of HVDC projects globally is extensive. The Project will operate at three times the capacity of the best available technology and therefore would require three times the capacity in the market of a typical HVDC project. Notwithstanding other factors considered, it is highly unlikely that the Applicant could secure this volume of market capacity in a timescale to meet the Project need case and comply with the Applicant's Licence Obligations.</p>
Alternatives	<p>9. There are other broad issues which may impact on the issues of alternatives: biology, ecology, nature conservation, landscape, health and well-being, landscape, land-use and agriculture, safety and security, socio-economic, transport and traffic impacts.</p>	<p>This is noted. At each stage of the Project a consistent level of information has been used to support decision making between alternatives leading to the selection of the preferred option. The Applicant has endeavoured to respond to specific queries on the listed topics as raised in feedback received to date.</p>
Alternatives	<p>10. And closely related to the above points we highlight again that NG has failed to follow Treasury Green Book Guidance in the formulation of this project. The ExA must pay close attention to this.</p>	<p>The Applicant is confident that the process we follow to identify and then assess potential strategic options is robust and the most appropriate. This has been tried and tested through numerous previous projects, the formal examination process and ultimately decided by the relevant Secretary of State. The Treasury Green Book² provides guidance on the interpretation by public servants of public spending, assets and resources for projects, policies and spend from the public purse. That is not relevant for National</p>

² HM Treasury (2026) The Green Book

Topic	Comment	National Grid's response
		<p>Grid Electricity Transmission (NGET). There is no requirement in the Planning Act 2008 for developers to have to submit a Treasury Green Book assessment as part of a Development Consent Order (DCO) application. NGET is an Ofgem regulated business, with obligations to consider customer, environmental and other considerations as outlined in the Electricity Act 1989 and in its licence commitments. Consideration of the costs of a project and the funding it should receive via the regulatory settlement is the subject of a separate regulatory process, and it is not appropriate for the Planning Inspectorate, Examining Authority or the Secretary of State in their remit under the Planning Act 2008 to seek to duplicate other regimes.</p>
<p>Alternatives</p>	<p>11. So: for the purposes of this letter, we do wish to point out that there is a huge amount of material potentially to cover at the ISH fixed for 13.2.26 and in the interest of fairness raise these points in outline now so that the ExA can be sure it will make adequate time, then and/or at some future date, for their consideration.</p> <p>12. We also seek guidance please on how the ExA would consider itself best assisted by us (and many others with similar concerns) in dealing with this. Does it want written material in advance of the ISH, for example? And what oral input will it permit at the ISH? If the answer is none, will the ExA commit to holding a further ISH on alternatives later in the examination at which our clients can make submissions, give evidence, and ask questions?</p> <p>13. We also note a reference in your Rule 6 letter to a transcript – that is on page A1 (p.7 of the .pdf) – does that just relate to that hearing, or are all the hearings going to be videoed and an official</p>	<p>The Applicant has no comments to make on this part of the letter, which is directed at the ExA.</p>

Topic	Comment	National Grid's response
	<p>transcript made? We would expect the latter given the matter, but please confirm.</p> <p>14. Please can we have your urgent response so we can prepare efficiently for the upcoming hearings.</p>	

4. Applicant's Comments on the Pylons East Anglia Ltd Response

4.1 Introduction

- 4.1.1 Table 4.1 summarises the Applicant's comments on the Pylons East Anglia Responses to the Rule 6 Letter **[PDA-016]** submitted at PDA.

Table 4.1 Title Applicant’s comments on the Pylons East Anglia PDA submissions [PDA-016]

Topic	Comment	National Grid’s response
N/A	<p>Sections 1-3 and 5-6 of PDA-016:</p> <ul style="list-style-type: none"> • About Pylons East Anglia Ltd • Request to participate in Issue Specific Hearing 1, 13th February. • Agenda Item 4 - Draft examination timetable. • Compliance with Procedural Decision on AI Use 	<p>These sections relate to introductory information and direct requests/ confirmations to the ExA, and the Applicant therefore makes no further comment at this stage.</p>
Air Quality	<p>4.1. Air quality and emissions 4.1.1. We would like to see the carbon emissions of the proposal versus alternatives examined</p>	<p>The Project has been developed to be consistent with National Policy Statement for Electricity Networks Infrastructure (EN-5) which is clear that the use of overhead lines is the strong starting presumption for electricity networks development. At each stage of the Project a consistent level of information has been used to support decision making between alternatives leading to the selection of the preferred option. There is no requirement for all design variants or alternatives to be studied to the same level of detail captured within the Preliminary Environmental Information Report or Environmental Statement (including air quality and emissions and carbon emissions) supported by a similar degree of detail from associated surveys. The Applicant therefore has not and is not required to produce a detailed carbon or air quality assessment of the alternatives examined, nor is it considered proportionate to do so.</p> <p>An assessment of carbon emissions has not been undertaken for alternative options. However, it is unlikely that there would be significant differences in operational carbon such as transmission losses between alternative options. Whilst there may be differences in carbon emissions during construction, in relation to alternatives given the Project extent, the overall difference in carbon emissions is unlikely to be significant. Given the carbon emissions for the Project have been assessed to be not</p>

Topic	Comment	National Grid's response
		<p>significant against the carbon budgets, there would be no material difference in relation to an option that potentially has lower construction carbon emissions. The Project has been designed considering different constraints and carbon emissions, while important, would not influence the option taken forward. The greenhouse gas reduction strategy sets out the process that would be followed during the development and construction of the Project to reduce greenhouse gas emissions where practicable.</p>
Air Quality	<p>4.1.2. Dust 4.1.2.1. We believe that it is essential to examine the airborne risks to human health associated with drying of acidified sediments that may release dust containing harmful particles (see 4.3.5 to 4.3.7 below).</p>	<p>6.7 Environmental Statement Chapter 7 – Air Quality [APP-147] includes an assessment of construction dust (which includes dried sediments). When mitigation measures are applied appropriately, the assessment concludes no significant effect at receptors within 250 m of the Order Limits. The mitigation measures specified in 6.7 Environmental Statement Chapter 7 – Air Quality [APP-147] are aligned with industry standard good practice Institute of Air Quality Management construction dust guidance³ and are considered appropriate for the level of dust risk impact anticipated from the Project.</p>
Need Case	<p>4.2. Alternatives. We are pleased to see broad consideration of the alternatives to overhead lines by the Inspectors and would like the Applicant to explain the below: 4.2.1. Use of existing transmission infrastructure. We seek to understand (as we been unable to establish this to date) the exact extent to which the existing grid's capacity has been increased through technological means already. For example: 4.2.1.1. What is the precise capacity of the grid in East Anglia today?</p>	<p>7.17 Strategic Options Backcheck and Review [APP-355] Section 3 'Need case' (Table 3.3 page 31) sets out requirements in East Anglia boundaries EC5 and EC5N.</p> <p>Worldwide, 400 kV systems are limited to International Electrotechnical Commission (IEC) rating of 5,000 Amperes (A), continuous (for example as identified in Circuit Breaker Ratings (IEC 62271-100)).</p> <p>This means that all electrical equipment installed at substations is rated to this current level. This 5,000 A equates to:</p> <ul style="list-style-type: none"> • Maximum Single circuit rating of 3,465 megavolt-ampere (MVA) per circuit • (EC5N post fault) Equates Maximum Double Circuit rating of 6,930 MVA per double circuit (i.e. circuits either side of pylons)

³ Institute of Air Quality Management (2024) Guidance on the Assessment on Dust from Demolition and Construction V2.2

Topic	Comment	National Grid's response
	<p>4.2.1.2. What is the precise grid capacity sought?</p> <p>4.2.1.3. Where are there further opportunities to upgrade existing infrastructure that could have a bearing on the need case for this project?</p> <p>4.2.1.4. To what extent could technological increases to the grid be achieved, and have been considered, by the Applicant?</p> <p>4.2.1.5. For example: TS Conductor, LineVision Dynamic Line Rating (DLR) sensors (used elsewhere in the UK, but not in East Anglia), dynamic line ratings, advanced power flow controls, transmission switching, EC5 Constraint Management Intertrip Service (CMIS).</p>	<ul style="list-style-type: none"> • (EC5 post fault) four circuits Maximum Circuit rating of 13,860 MVA two sets of double circuit post fault. <p>Therefore, with both boundaries operating to about 300 MVA of their maximum, further uprating does not resolve the need without additional circuit infrastructure set out below:</p> <ul style="list-style-type: none"> • EC5N – 2031 post fault capability 6,652 MVA, leaves a deficit of -7,520 MW • EC5 – 2031 post fault capability 13,552 MVA, leaves a deficit of -9,928 MW. <p>Dynamic line rating (DLR) equipment is used by the Applicant. Our circuits have different ratings according to ambient temperature, which is such that in summer, lines can be rated 60-80% lower than in winter (in worst case conditions) which severely limits the system's capability. DLR allows us to observe that the ambient temperature is actually 20° rather than a worst case 35-40°. Then the line rating can be adjusted to match actual local ambient conditions and transmit more power based on actual conditions versus worst case. It still does not change the Maximum Continuous IEC 5,000 A equipment rating but would allow a circuit restricted to 3,000 A in summer (worst case) to operate at 4,000 A on a 20°C day, for example.</p> <p>TS conductor is a brand of High Temperature Low Sag technology which is deployed in very specific case - when trading off less efficient higher operating temperatures versus the need to increase the capacity of an overhead line that cannot be rebuilt. In such cases this conductor can be utilised to achieve 5,000 A continuous rating and 3,465 MVA per circuit rating, where otherwise this rating would not be achievable. Such technology is therefore deployed on pylon designs that are not capable of carrying the normal conductor bundles required to achieve 5,000 A continuous rating and 3,465 MVA per circuit rating. East Anglia in general has pylon infrastructure capable of carrying conductor bundles that can achieve 5,000 A ratings, which is the limitation to circuits. Therefore TS</p>

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		<p>conductor would not provide further capacity as the circuits already can achieve the IEC 5,000 rating.</p> <p>The Applicant uses all the technologies listed. Both power flow control and transmission switching are used to redirect power flows to less utilised circuits. The Need Case set out in 7.17 Strategic Options Backcheck and Review [APP-355] shows a 9,928 MW capacity deficit across East Anglia EC5 Boundary and a 7,520 MW capacity deficit across EC5N Boundary. These deficits occur in spite of maximum transmission capacity, equivalent to the IEC 5,000 A rating, already being met on all boundary circuits in East Anglia. Therefore these technologies would not resolve the need for additional circuit infrastructure.</p> <p>EC5 Constraint Management Intertrip Service (CMIS) is a National Energy System Operator (NESO) Scheme. The Applicant and NESO have lots of such area-wide Intertrip Schemes which are used when constraints, caused by system outages, occur. These services are only allowed under maintenance outage conditions, to cover for faults that are not covered in intact conditions. The intact system for which the Need Case in 7.17 Strategic Options Backcheck and Review [APP-355] is set out, cannot use intertrips for faults without maintenance outages. CMIS is therefore not relevant to the need for the Project, but for operational use during maintenance of the network only.</p>
Alternatives	4.2.2. We dispute the Applicant's assertion that it is not possible to make use of the disused substation site at Bradwell-on-Sea and the route of the soon-to-be dismantled 132kv transmission lines for an HVDC underground cable onwards to Tilbury and this needs to be probed. There seems to be no technical reason why an HVDC cable could not make landfall at Bradwell-on-Sea and continue onwards to a converter station near Tilbury.	Decision making on the Project has encompassed technical, environmental, socio-economic, programme and cost factors. Various factors and various combinations of factors have therefore formed the differentiators between alternatives and there will be examples where cost is a clear differentiator when considered within the context of the Applicant's duties under the Electricity Act 1989. At the stage a decision was made not to progress with an HVDC option via Bradwell, it was clear that there would be challenges to successful routing to Tilbury but that none could conclusively rule the option out. Combined with the additional requirements to achieve connection of the customers (necessitating either converter station costs at Bradwell or alternative means of connecting to

Topic	Comment	National Grid's response
		<p>the NTSC) and cost expected to be of a similar order of magnitude to the offshore HVDC alternative, this provided a clear differentiator to an NPS EN-1 and EN-5 policy-compliant onshore predominantly overhead line alternative.</p>
Alternatives	<p>4.2.3. To minimise harm to the environment and communities, it is key to use existing infrastructure before building new and the NPS's give support for the use of existing infrastructure. Withdrawn and New EN-5 say: 4.2.4. <i>"consideration of network reinforcement options (where alternatives exist) which may allow improvements and/or extensions to an existing line rather than the building of an entirely new line"</i> (2.10.5)</p>	<p>The Applicant had already sought to maximise the capacity of the existing system through uprating of conductors and installation of other power control systems. This was incorporated into the assessment of the shortfall in capability identified in the need case and was also referenced within the consultation material for in-person and for online briefing events.</p>
Need Case	<p>4.2.5. Coordination of infrastructure. 4.2.6. The NESO Offshore Report 2020 summarised the benefits of coordination versus the piecemeal approach [in this diagram]. 4.2.8. Withdrawn and New NPS EN-1 set out the benefits of coordination, <i>"For regions with multiple windfarms or offshore transmission projects it is expected that a more coordinated approach will be delivered. For these areas, this approach has the potential to reduce the network infrastructure costs as well as the cumulative environmental impacts and impacts on coastal communities by installing a smaller number of larger connections, each taking power from multiple windfarms instead of</i></p>	<p>NPS EN-1 (2024) 3.3.71 and NPS EN-5 (2024) 2.71 in the context of offshore coordination, seek to maximise the coordination of offshore windfarms such that a single connection could be utilised by a number of projects, gaining economies of scale.</p> <p>Overarching NPS EN-1 also states: <i>'3.3.81 The importance of accelerating coordination does not, however, militate against the need for standalone electricity networks projects, and these projects are supported by this NPS and should continue to be assessed on their own merits'</i>.</p> <p>Objections to HVDC alternatives include the lack of commercially available HVDC circuit breakers⁴. This restricts offshore HVDC networks to generation infeed of 1,800 MW. Without HVDC Circuit Breakers, Integrated HVDC network with generation above 1,800 MW would shut down under fault. This would lead to widespread and significant transmission system issues.</p>

⁴ As outlined in the DNV Network Topology Report commissioned by the System Operator Page 66 Section 9.3.1

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	<p><i>individual point to point connections for each windfarm.”(3.3.71)</i></p> <p>4.2.9. Withdrawn and New NPS EN-5 highlight the benefits of coordination which have also been set out in several reports¹, paragraph 2.7.1: <i>“Co-ordinated applications typically bring economic efficiencies and reduced environmental impact.”</i></p>	
Alternatives	<p>4.2.10. We note that the Withdrawn and New NPS EN-5 give support for alternatives including coordination of infrastructure offshore:</p> <p>4.2.11. <i>“2.15.1 Coordinated approaches to delivering offshore and onshore transmission to minimise overall environmental, community, and other impacts, as set out above, must be considered⁴¹. The Secretary of State must be satisfied that Applicants have explained the steps they have taken to do this, the options that have been considered and the approach they have taken to coordination as set out in above at section 2.13.”</i></p> <p>4.2.12. And <i>“...This evidence is expected to draw substantially on the work under the Offshore Transmission Network Review and relevant strategic network design exercises, together with any additional supporting evidence Applicants consider relevant. The Secretary of State should also be satisfied that options for coordination have been considered and evaluated appropriately.”</i></p> <p>4.2.13. The Offshore Network Transmission Review included the NESO East Anglia</p>	<p>In April 2024, National Grid Electricity Transmission provided a response to the Electricity System Operator’s (ESO) East Anglian network study, which was part of the Offshore Network Transmission Review (ONTR) initiative to explore coordinated offshore infrastructure. This response indicates NGET’s engagement with the ONTR findings and its consideration of these insights in planning and developing transmission projects. By integrating the ONTR recommendations and collaborating with relevant stakeholders, National Grid aims to ensure that its projects contribute effectively to a coordinated and efficient electricity transmission network, facilitating the UK’s transition to net zero emissions.</p> <p>One consequence of these studies is continued co-ordination between North Falls and Five Estuaries Offshore windfarms over the onshore cable installation that has reduced the working width requirement of their onshore connections. This was identified by National Grid to potentially have implications for decision making regarding EACN Substation siting and has been reviewed with the findings set out in chapter four of the 5.15 Design Development Report [APP-122]. North Falls and Five Estuaries submitted their applications for development consent in advance of National Grid’s Norwich to Tilbury Project. Due to the differing timelines, these projects are proceeding separately. The Project has assessed the cumulative impacts arising from the three individual projects and this assessment is report in 6.17 ES Chapter 17: Cumulative Effects [APP-281].</p>

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	<p>Network Study 2024. This report is therefore a material consideration. It sets out the feasibility of an HVDC underground transmission line between Norwich and Tilbury, which residents support.</p>	
<p>Alternatives</p>	<p>4.2.14. We wish to see the Applicant probed about the availability of HVDC cables. NESO was told by the Applicant that a shortage of HVDC cables would lead to a delayed delivery of an HVDC option (until 2034). However, National Grid's national business plan submitted to Ofgem in 2024 for the RIIO-T3 funding determination set out that:</p> <p>4.2.14.1. National Grid has access to one-third of the world's HVDC cables (and more than required for specific projects). 4.2.14.2. National Grid is working with suppliers who are increasing their capacity.</p> <p>4.2.15. There are supply chain and engineer issues across the transmission industry – it is not clear that Direct Current cabling is worse affected than other technologies.</p> <p>4.2.16. We would be keen to understand whether, given the Government's desire to see grid infrastructure, particularly Norwich to Tilbury, built-out quickly, the Applicant considered that HVDC underground could in fact be delivered more quickly than overhead lines because the Planning Act 2008 does not require a DCO for underground cables?</p>	<p>As already stated in this examination (ISH1), the global HVDC supply chain for both cable and converters is heavily constrained and the pipeline of HVDC projects globally is extensive. The Project will operate at three times the capacity of the best available technology and therefore would require three times the capacity in the market of a typical HVDC project. Notwithstanding other factors considered, it is highly unlikely that the Applicant could secure this volume of market capacity in a timescale to meet the Project need case and comply with the Applicant's Licence Obligations.</p> <p>Other consenting regimes, environmental and land assembly requirements will still apply and are unlikely to provide the certainty of a single, unified consenting process and fixed timescales, as is the case of progressing development through the Planning Act 2008.</p>

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Alternatives	4.2.17. As per our many representations to National Grid, including a legal opinion, we seek to understand why the Applicant has not followed the Treasury Green Book guidance for consideration of alternatives.	The Applicant is confident that the process we follow to identify and then assess potential strategic options is robust and the most appropriate. This has been tried and tested through numerous previous projects, the formal examination process and ultimately decided by the relevant Secretary of State. The Treasury Green Book ⁵ provides guidance on the interpretation by public servants of public spending, assets and resources for projects, policies and spend from the public purse. That is not relevant for National Grid Electricity Transmission (NGET). There is no requirement in the Planning Act 2008 for developers to have to submit a Treasury Green Book assessment as part of a Development Consent Order (DCO) application. NGET is an Ofgem regulated business, with obligations to consider customer, environmental and other considerations as outlined in the Electricity Act 1989 and in its licence commitments. Consideration of the costs of a project and the funding it should receive via the regulatory settlement is the subject of a separate regulatory process, and it is not appropriate for the Planning Inspectorate, Examining Authority or the Secretary of State in their remit under the Planning Act 2008 to seek to duplicate other regimes.
Ecology	<p>4.3. Biodiversity, ecology and nature conservation</p> <p>4.3.1. An omission of the broad Examination agenda is a specific focus on bird collisions with overhead lines.</p> <p>4.3.2. Withdrawn and New NPS EN-5 state, <i>“2.9.3. Electricity networks infrastructure pose a particular potential risk to birdlife including large birds, such as swans and geese, and perching birds. These may collide with overhead lines and risk being electrocuted. Large birds may also be electrocuted when</i></p>	Collision risk has been assessed in 6.8.A8 Environmental Statement Appendix 8.8 - Wintering and Passage Bird Report [APP-167 to APP-170] , 6.8 Environmental Statement Chapter 8 - Ecology and Biodiversity [AS-026] and 5.3 Habitats Regulations Assessment Report [APP-082] . This includes a comprehensive desk study of bird records with data obtained from the BTO, RSPB and local records centres, resulting in over 26,000 bird records, across a lengthy species list. NatureScot guidance was used to determine Target Species and Secondary Species with regards to collision risk that are susceptible to collision), and the distribution of these records have been mapped to determine hotspots and assess risk. Wintering / passage bird surveys have been undertaken to determine whether the proposed overhead lines could fragment movement corridors that are used by Target and

⁵ HM Treasury (2026) The Green Book

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	<p><i>landing or taking off by completing an electric circuit between live and ground wires. Even perching birds can be killed as soon as their wings touch energised parts of the infrastructure.</i>" (and following paragraphs).</p> <p>4.3.3. As set out in our initial submissions at registration, we do not believe that the Applicant has taken into account the risk to farmland birds or wetland birds which are known to inhabit, visit or cross the route of the pylons. This needs in-depth probing.</p>	<p>Secondary species of birds when moving between habitat along the estuaries / coast and inland habitat, or cause mortality along such routes.</p> <p>Outside of these key movement corridors the Order Limit is made up of predominantly farmland and would therefore support farmland passerines. Industry best practice guidance (NatureScot, 2016) guidance states passerine species are not generally considered to be significantly impacted by windfarms or overhead cables. The risk of collision to passerine species is considered low as passerines are manoeuvrable in flight, fly at low heights in general, while migratory flights are often well above pylon height.</p> <p>The collision risk assessment did not identify locations which pose notable collision concern. On a precautionary basis mitigation in the form of orange spacers and bird diverters on the earth wire are proposed at the River Waveney and Ardleigh Reservoir as detailed in 7.4 Outline Landscape and Ecological Management Plan [AS-046].</p>
Agricultural and Soils	<p>4.3.4. Risk to environment and human health.</p> <p>4.3.4.1. The risk of acidic sulphate soils to the environment and human health must be considered at some stage of the Examination.</p> <p>4.3.4.2. We set out this risk in our initial submission (Soils, by David Dent):</p> <p>4.3.4.3. <i>"In addition, these soils pose a risk to human health via the following mechanisms:</i></p> <p>4.3.4.4. <i>Contaminated drinking water: Acidic water can corrode infrastructure and leach toxic metals into supplies, posing risks if untreated;</i></p> <p>4.3.4.5. <i>Recreational exposure: Contact with acidified or metal-rich water during swimming or</i></p>	<p>As stated in 6.6.A1 Environmental Statement Appendix 6.1 - Agricultural Land Classification Report [APP-139], the detailed Agricultural Land Classification (ALC) surveys were undertaken in line with the revised ALC guidelines⁶ by competent soil scientists with the competencies as set out by the British Society of Soil Science (BSSS) Professional Competency in Soil Science No.2 - Agricultural Land Classification - England and Wales.</p> <p>The detailed ALC surveys did not identify the presence of jarosite in the soil, and in locations where desk-based information suggested a potential for acid sulphate soils, some of the soils were found to be moderately calcareous. There is no evidence to indicate the presence of actual or potential acid sulphate soils within the surveyed areas. Should any evidence of acid sulphate soils arise during construction, appropriate investigation and mitigation measures would be implemented in</p>

⁶ Ministry of Agriculture Fisheries and Food (1988) *Agricultural Land Classification of England and Wales*

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	<p><i>fishing may cause skin irritation or other health effects.</i></p> <p><i>4.3.4.6. Airborne risks: In rare cases, drying of acidified sediments may release dust containing harmful particles.”</i></p> <p>4.3.4.7. With relation to the above risk to human health from acidic soils, we note that Withdrawn and New NPS EN-1 state, of CNP infrastructure:</p> <p><i>4.3.4.8. “4.1.7. For projects which qualify as CNP Infrastructure, it is likely that the need case will outweigh the residual effects in all but the most exceptional cases. This presumption, however, does not apply to residual impacts which present an unacceptable risk to, or interference with, human health”</i></p>	<p>accordance with good practice as required by 7.2 Outline Code of Construction Practice [APP-300] (measures GH02 and GH08).</p> <p>Organic-rich peaty soils were identified in the Waveney Valley during the ALC survey and a further, more detailed, survey was undertaken in the area to identify more information on these soils. 7.2 Outline Code of Construction Practice Appendix C - Outline Soil Resource Plan [AP-303] details measures for handling organic-rich soils during construction to prevent any disturbance leading to its degradation with consequential environmental effects.</p> <p>While desk-based information suggested acid-generating soils could have been present in the Waveney Valley, our surveys did not identify any such soils down to 1.2 m bgl. The survey density at 1 auger per hectare (which is in accordance with guidance) has been criticised, but a more detailed survey in this area to assess distribution of peat, provided more granular data. If the materials are not present then there is no risk to human health.</p> <p>There is the potential for these materials to be encountered at greater depths where excavations are required. Any occurrences would be managed as required by 7.2 Outline Code of Construction Practice [APP-300] (measures GH02 and GH08) to include activities such as toolbox talks, isolation of areas and treatment/off-site disposal of acidic materials.</p>
Ecology	<p>4.3.5. We wish to see an exploration of the following:</p> <p>4.3.5.1. how the Applicant has followed the Mitigation Hierarchy, as required by Withdrawn and New NPS EN-1, paragraph 4.1.5 and paragraph 2.14.2 of Withdrawn and New NPS EN-5.</p>	<p>6.5 Environmental Statement Chapter 5 - EIA Approach and Method [APP-135] outlines the Project has applied the mitigation hierarchy throughout the iterative design process. The application of the mitigation hierarchy in the context of NPS EN-1 and EN-5 (2024) is set out in 5.6 Planning Statement [APP-085].</p>
Ecology	<p>4.3.5.2. Ecosystem services - Requires thorough examination/probing because it is mentioned frequently in NG documentation but</p>	<p>Natural capital and ecosystem services are not currently mandatory for Nationally Significant Infrastructure Project applications. The Applicant has committed to the delivery of 10% Biodiversity Net Gain (BNG) with wider</p>

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	there is no analysis or evidence to back it up. Services are not named. There's no quantification of harms.	environmental and societal benefits. The Applicant complies with NPS EN-1 on environmental net gain and BNG, and this is confirmed in 5.6 Planning Statement [APP-085] .
Ecology	4.3.5.3. Habitat fragmentation. Requires thorough examination/probing because it is mentioned frequently in NG documentation but there is no analysis to quantify the impact of the project.	Potential habitat fragmentation impacts have been assessed for each relevant ecological receptor, within 6.8 Environmental Statement Chapter 8 - Ecology and Biodiversity [AS-026] . Fragmentation effects on ecological receptors are inherently difficult to quantify and not standard practice, due to a combination of ecological complexity and limitations to standard survey methodologies. Habitat fragmentation influences species and ecological processes through changes in habitat configuration, connectivity, disturbance patterns, and population dynamics. However, these effects are indirect, multi-scale, and highly location and context-dependent, which means they do not lend themselves to simple numerical predictions. A qualitative assessment of potential fragmentation impacts per ecological receptor has therefore been used for most ecological receptors within the Applicant's assessment, as is standard practice. Where potential fragmentation effects have been identified as a result of the Project, mitigation measures have been identified within 7.4 Outline Landscape and Ecological Management Plan [AS-046] .
Cumulative Effects	4.4. Cumulative Impact. Particular consideration must be given to Ardeleigh and Bramford, both of which are at the receiving end of significant numbers of NSIPs: 4.4.1. Cumulative impacts include best and most versatile land take, traffic, heritage, habitat and wildlife impact and national security/defence. 4.4.2. The security implications of concentrating so much nationally significant infrastructure in one place must be probed. Paragraph 4.1.7 of withdrawn/new EN-1 goes onto say, "and public safety, defence"	Cumulative effects including those resulting from development around Ardeleigh and Bramford are assessed in 6.17 Environmental Statement Chapter 17 – Cumulative Effects [APP-281] . The assessment includes a cumulative assessment of best and most versatile land take, heritage and habitat and wildlife impacts. Traffic from committed developments is assessed within 6.16 Environmental Statement Chapter 16 – Traffic and Transport [APP-271] . The Tarchon Interconnector project was not included in the cumulative assessment as the cumulative assessment for the Project applied a cut-off date of 1 April 2025 to confirm the long list of cumulative developments to be assessed. The s35 Direction was not issued for the Tarchon project until 7 April 2025; however, since the 1 April the Applicant has been undertaking monthly reviews of planning registers and will continue to do

Topic	Comment	National Grid's response
	<p>4.4.3. At Bramford Substation up to 30% of the nation's electricity set to pass through this single site, it is being surrounded by large-scale renewable and battery storage developments without any joined-up security oversight or risk assessment.</p> <p>4.4.4. Little Bromley, Essex - Little Bromley Parish Council has also highlighted the cumulative risk from the potential colocation of the National Grid EACN, the North Falls and Five Estuaries windfarm substations, the Tarchon Interconnector substation and a BESS</p> <p>4.4.5. While we are aware that your role is not to challenge the NPS's, it is not correct that, as stated in EN-5, "Through this work [the HND] steps have already been taken to reduce avoidable cumulative impacts."</p> <p>4.4.6. We note that New and Withdrawn NPS EN-1 state, in paragraph 4.1.5, that the Secretary of State must take into account cumulative adverse impacts.</p>	<p>so during the Examination period, to check whether there are any new relevant developments. Where this review identifies the potential for new or different significant effects or changes to the conclusions presented in the Environmental Statement these would be published into the Examination as updates to the relevant inter-project cumulative effects documents (as appropriate).</p> <p>The Applicant provides an assessment against CNP Infrastructure policy requirements in Chapter 7 of 5.6 Planning Statement [APP-085] that includes consideration towards human health, public safety and defence. The Applicant also notes The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 require the environmental assessment to identify, describe and assess, where relevant, the expected significant effects arising from the vulnerability of the proposed development to 'major accidents and disasters' (MAD). All potential effects were scoped out from further assessment as there are no likely significant effects, as described in 6.19 Scoping Report [APP-296]. A standalone MAD chapter is therefore not included within Volume 6 Environmental Statement [APP-123 to APP-298].</p> <p>The Project is designed to comply with design safety standards including the National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS) and the suite of National Grid policies and processes which contains details on design standards required to be met when designing, constructing, and operating its projects. These design safety standards constitute an embedded mitigation measure as reported in the Environmental Statement (see 6.4 Environmental Statement Chapter 4 - Project Description [APP-130]).</p> <p>Existing National Grid processes are designed to identify potential security and safety risks during construction and operation (and maintenance) (including risks from major accidents and disasters) and to design these out at each stage of project development. This informs a suite of National Grid policies and processes, which contain details on design standards</p>

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	<p>4.5. Good design</p> <p>4.5.1. In particular, we would like to see the extent to which acid sulphate soils have been avoided, the extent to which a proximity to villages could have been avoided, and the extent to which sites of archaeological or heritage importance could have been avoided examined. The design of the route requiring a complex detour to a substation at Ardleigh will require specific investigation, due to the extra costs and substantial extra harm caused by this deviation.</p> <p>4.5.2. As above, we wish to understand how the Applicant has followed the Mitigation Hierarchy, as per paragraph 2.14.2 of Withdrawn and New NPS EN-5: "i.e. avoidance, reduction and mitigation of adverse impacts through good design"</p>	<p>required to be met when designing, constructing, and operating assets such as proposed on the Project.</p> <p>For information regarding the justification for the siting of the EACN Substation, please refer to Section 5 Review of the Consultation Corridor of the 7.20 2023 - Design Development Report [APP-358] – EACN Substation siting and connection technology.</p> <p>6.5 Environmental Statement Chapter 5 - EIA Approach and Method [APP-135] outlines the Project has applied the mitigation hierarchy throughout the iterative design process. The application of the mitigation hierarchy in the context of NPS EN-1 and EN-5 is set out in 5.6 Planning Statement [APP-085].</p> <p>Regarding soils, specifically, as stated in 6.6.A1 Environmental Statement Appendix 6.1 - Agricultural Land Classification Report [APP-139], the detailed Agricultural Land Classification (ALC) surveys were undertaken in line with the revised ALC guidelines⁷ by competent soil scientists with the competencies as set out by the British Society of Soil Science⁸.</p> <p>The detailed ALC surveys did not identify the presence of jarosite in the soil, and in locations where desk-based information suggested a potential for acid sulphate soils, some of the soils were found to be moderately calcareous. There is no evidence to indicate the presence of actual or potential acid sulphate soils within the surveyed areas. Should any evidence of acid sulphate soils arise during construction, appropriate investigation and mitigation measures would be implemented in accordance with best practice.</p> <p>Organic-rich peaty soils were identified in the Waveney Valley during the ALC survey and a further, more detailed, survey was undertaken in the area to identify more information on these soils. 7.2 Outline Code of</p>

⁷ Ministry of Agriculture, Fisheries and Food (1988) *Agricultural Land Classification of England and Wales*

⁸ British Society of Soil Science (2018) *Agricultural Land Classification (England and Wales) - Working with Soil – Professional Competency in Soil Science*

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		<p>Construction Practice Appendix C - Outline Soil Resource Plan [AP-303] details measures for handling organic-rich soils during construction to prevent any disturbance leading to its degradation with consequential environmental effects.</p> <p>In relation to landscape and heritage matters, the Applicant highlights that transmission infrastructure (including overhead lines) is found throughout rural landscapes across England. This includes existing overhead lines which fall within the Landscape and Visual Impact Assessment (LVIA) study area, as illustrated on 6.13.F4 Environmental Statement Figure 13.4 - Settlements and Infrastructure [APP-240]. There are also a high number of nationally designated landscapes, valued for their natural beauty, which have historically been designated despite the presence of transmission infrastructure.</p> <p>The rural landscape will remain in place beneath and around the proposed overhead line, albeit there will be some significant effects on landscape character and visual amenity as reported in the LVIA in 6.13 Environmental Statement Chapter 13 - Landscape and Visual [APP-226].</p> <p>6.11 Environmental Statement Chapter 11- Historic Environment [AS-068] has been prepared to meet the requirements of relevant legislation and policy, including the National Policy Statements and National Planning Policy Framework⁹, with regard to heritage assets, including conservation areas and historic landscapes. All heritage assets were assessed in accordance with 6.19 Scoping Report [APP-288 – APP-296], 6.20 Scoping Opinion [APP-297] and the methodology set out in 6.11 Environmental Statement Chapter 11- Historic Environment [AS-068]. The assessment process included desk-based research, site walkovers, setting surveys, field evaluation with both geophysical survey and archaeological trial trenching (6.11.A1 Environmental Statement Appendix 11.1 - Historic Environment</p>

⁹ Ministry of Housing, Communities and Local Government (2024) *National Planning Policy Framework*

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		<p>Baseline Report [APP-209], 6.11.A4 Environmental Statement Appendix 11.4 - Geophysical Survey (Priority Areas) Results Report [AS-072], 6.11.A5 Environmental Statement Appendix 11.5 - Trial Trenching Results Report [AS-078]) and geoarchaeological and archaeological monitoring and assessment of the Geotechnical Investigation works (6.11.A6 Environmental Statement Appendix 11.6 - Geoarchaeological Monitoring of Ground Investigation Works Report [APP-214]) to identify and understand the significance of potential affected heritage assets. Consultation with Local Planning Authorities, Historic England, and other stakeholders to inform both the methodology of the assessment, baseline and mitigation has been undertaken as set out in relevant Statements of Common Ground (5.9 Draft Statement of Common Ground [APP-089 to APP-100 and APP-102]).</p> <p>Through routeing and siting, the Applicant has sought to reduce as far as practicable potential impacts on the historic environment and heritage assets. The impacts of the Project on the historic environment are assessed in 6.11 Environmental Statement Chapter 11- Historic Environment [AS-068]. The assessment considers the potential impact on heritage assets and includes assessment of potential for physical impact, impact through change to setting that affects the value of a heritage asset, and impact through indirect factors such as vibration or change in hydromorphology.</p> <p>The proposals in 7.2 Outline Code of Construction Practice [APP-300] and 7.4 Outline Landscape and Ecological Management Plan [AS-046] set out proposed mitigation for historic buildings and historic landscapes. 7.5 Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation [APP-328] sets out appropriate mitigation for archaeology.</p>
Historic Environment	4.6. Historic Environment 4.6.1. We particularly urge in-depth questioning of the Applicant about the adequacy of assessment of the heritage impacts as well as	The methodology for assessment of the historic environment has been discussed and agreed with the Historic Environment Advisors to the host Local Planning Authorities and Historic England, as well as following the

Topic	Comment	National Grid's response
	<p>the archaeological assessment as we have significant concerns about the process which we can set out in detail at a later stage of the Examination.</p> <p>4.6.2. It would appear that perhaps the Applicant has not forwarded to you the paper submitted by our group to the Statutory Consultation written by heritage expert Virginia Brewer, now head of Heritage at Bidwells. We attach it with this letter to assist with your examination of the Norwich to Tilbury pylons.</p> <p>4.6.3. It should be noted that Withdrawn and New NPS EN-1 state, (4.2.17):" <i>This means that the Secretary of State will take as a starting point that CNP Infrastructure will meet the following, non-exhaustive, list of tests</i>"..."<i>where substantial harm to or loss of significance to heritage assets should be exceptional or wholly exceptional</i>".</p> <p>4.6.4. Given the exceptional harm to the historic environment posed by a 112-mile pylon proposal through the heart of heritage-rich East Anglia, with around 2,000 assets affected, the Applicant's approach to the Historic Environment requires particularly robust testing.</p>	<p>methodology proposed and agreed in 6.19 Scoping Report [APP-288 – APP-296] and 6.20 Scoping Opinion [APP-297].</p> <p>The historic environment information presented in the Preliminary Environmental Information Report (PEIR) was a preliminary assessment of baseline and impacts, developed for the Project proposed at that time. Since the PEIR was produced the Project has gone through change control to consider feedback from various stakeholders, including the statutory consultation responses from Norfolk, Suffolk, Essex Pylons (Pylons East Anglia Ltd) and to respond to the results of ongoing archaeological fieldwork. As a result of this the Project design has been updated in some locations to avoid and minimise impacts to the historic environment. The preliminary assessment presented in the PEIR is now superseded by the baseline and assessment presented in the Environmental Statement, both at submission and as supplementary environment information submitted and accepted as additional submissions. There is no requirement for the Applicant to submit the paper produced by Virginia Brewer with the application for Development Consent.</p> <p>6.11 Environmental Statement Chapter 11- Historic Environment [AS-068] provides an assessment of the Project's likely significant effects on designated and non-designated heritage assets. The Project will not result in any substantial harm to designated heritage assets.</p> <p>Paragraph 7.2.57 of 5.6 Planning Statement [APP-085] addresses the policy consideration of heritage impacts. The Project has been carefully designed to avoid, reduce or mitigate potentially significant effects on heritage assets. Pursuant to the statutory requirement outlined in The Infrastructure Planning (Decisions) Regulations 2010, the Secretary of State, when making a decision, is duty-bound to have regard to whether a scheme preserves or affects heritage assets, with this being afforded great weight against the Project due to this statutory duty and the NPSs. Given that 6.11.A7 Environmental Statement Appendix 11.7 - Assessment of Harm to Designated Heritage Assets [APP-215] demonstrates that the Project results in less than substantial harm, this is</p>

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Health	<p>4.7. Health and well-being</p> <p>4.7.1. We refer you to our Soils submission and our references at 4.3.5 to 4.3.7 above about the risks to human health of acidic sulphate soils.</p>	<p>afforded moderate negative weight in the planning balance. Whilst the Project will not result in substantial harm to designated heritage assets it will result in the loss of significance to heritage assets due to the introduction of temporary and / or permanent plant, machinery and infrastructure into the setting. However, this harm is necessary to achieve the substantial public benefit of delivering CNP infrastructure that outweighs the heritage impact.</p> <p>This is supported by paragraphs 4.2.16 and 4.2.17 of NPS EN-1 (2024) which provides that the Secretary of State will take as a starting point that CNP infrastructure meet any tests which are set out within the NPSs, or any other planning policy, which requires a clear outweighing of harm, exceptionality or very special circumstances. Paragraph 4.2.17 provides that this includes a test where substantial harm to or loss of significance to heritage assets should be exceptional or wholly exceptional.</p> <p>As stated in 6.6.A1 Environmental Statement Appendix 6.1 - Agricultural Land Classification Report [APP-139], the detailed Agricultural Land Classification (ALC) surveys were undertaken in line with the revised ALC guidelines¹⁰ by competent soil scientists with the competencies as set out by the British Society of Soil Science (BSSS) Professional Competency in Soil Science No.2 - Agricultural Land Classification - England and Wales¹¹.</p> <p>The detailed ALC surveys did not identify the presence of jarosite in the soil, and in locations where desk-based information suggested a potential for acid sulphate soils, some of the soils were found to be moderately calcareous. There is no evidence to indicate the presence of actual or potential acid sulphate soils within the surveyed areas. Should any evidence of acid sulphate soils arise during construction, appropriate investigation and mitigation measures would be implemented in</p>

¹⁰ Ministry of Agriculture Fisheries and Food (1988) *Agricultural Land Classification of England and Wales*

¹¹ British Society of Soil Science (2018) *Professional Competency in Soil Science No.2 - Agricultural Land Classification - England and Wales*

Topic	Comment	National Grid's response
Health	4.7.2. Mental health of residents impacted by the project should be given due consideration in the Examination process.	<p>accordance with good practice as required by 7.2 Outline Code of Construction Practice [APP-300] (measures GH02 and GH08).</p> <p>The Applicant recognises people may have concerns about the cumulative effects arising from overlapping Nationally Significant Infrastructure Projects and other schemes in the local area. 6.10 Environmental Statement Chapter 10 – Health and Wellbeing [APP-192] includes a specific assessment of the impacts of the Project on mental health and wellbeing during both construction and operation. In relation to the mental health of residents, the chapter includes an assessment of the potential impacts of the Project in relation to the four protective factors for mental health and wellbeing set out in the National Mental Health Development Unit toolkit¹².</p> <p>A cumulative assessment is provided in 6.17 Environmental Statement Chapter 17 - Cumulative Effects [APP-281]. Paragraph 17.5.47 identifies that, in a number of instances, adverse effects on mental health and wellbeing may be particularly relevant as a result of the scale of other development (for example significant residential or infrastructure development) and associated perceived effects on neighbourhood quality / sense of place / uncertainty during the construction phases.</p> <p>The Applicant recognises that uncertainty while the Project is developed may cause anxiety. The Applicant has sought to reduce potential effects on communities and residents through routeing and design. The Applicant has also sought to reduce concern or uncertainty about the Project through making timely design decisions and engaging with residents and stakeholders throughout the development of the Project. The Project team will continue to engage with people potentially affected during progress of the Project, through regular communication including letters, phone calls and meetings. This would enable concerns to be raised and discussed at an early opportunity and provide a regular point of contact to respond to queries and concerns.</p>

¹² Cooke et al. (2011) *Mental Well-being Impact Assessment*

Topic	Comment	National Grid's response
Landscape and visual	<p>4.8. Landscapes.</p> <p>4.8.1. We would like to see specific focus on the landscape viewpoints considered of importance to residents, and submitted to National Grid by Pylons East Anglia.</p> <p>4.8.2. We would like to add the failure by the Applicant to provide visualisations when requested after a route change.</p>	<p>The approach to the selection of viewpoints for the Landscape and Visual Impact Assessment (LVIA) is set out in paragraph 13.4.11 of 6.13.A1 Environmental Statement Appendix 13.1 - Landscape and Visual Methodology [APP-227]. Potential assessment viewpoints were selected, as advocated by GLVIA3¹³ to represent a range of different receptors and views, in consultation with stakeholders including Local Planning Authorities as set out in 6.13 Environmental Statement Chapter 13 - Landscape and Visual [APP-226]. Viewpoint locations are shown on 6.13.F7 Environmental Statement Figure 13.7 - Visual Receptors and Viewpoints [APP-243].</p> <p>Representative viewpoints are selected to inform the LVIA, recognising the fact that assessment cannot be undertaken from each and every receptor that could be affected by the Project. Whilst an unlimited number of individual assessment locations could be identified, the assessment needs to be proportionate in relation to the scale and nature of the Project (as noted in GLVIA3), and scoped so that a decision maker has sufficient information to understand the nature and extent of effects. As such the LVIA uses sufficient viewpoints to inform the assessment of visual effects – which was undertaken both for each viewpoint and in relation to the Visual Receptor Areas they lie within, such that the nature and extent of likely effects is well understood and illustrated.</p> <p>Each of the locations suggested was considered, and used to inform the selection of a rationalised and representative list of assessment locations, that avoids duplication. Adding further to the list of viewpoint assessment locations will not change or further inform the findings of the LVIA. The publicly accessible additional locations were explored as part of field work and desk studies and it is considered that the effects upon them are captured in the assessments that are already made and reported upon. The addition of further reporting or visual illustrations would not alter the findings or require updating of the LVIA.</p>

¹³ Landscape Institute and Institute of Environmental Management and Assessment (2013) *Guidelines for Landscape and Visual Impact Assessment, 3rd Edition*

Topic	Comment	National Grid's response
Agricultural and Soils	<p>4.9. Land use and Agriculture.</p> <p>4.9.1. The Applicant should be examined on how: 4.9.1.1. they attempted to avoid Grade 1 land as well as Grades 2 and 3a/b, and 4.9.1.2. how alternatives such as upgrading the existing grid, coordinating infrastructure or HVDC undergrounding would compare from a land loss/food security perspective.</p> <p>4.9.2. Note that Current NPPF says, <i>“187b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland”</i> and footnote 65 states, <i>“Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.”</i></p> <p>4.9.3. New NPPF (under consultation) says, <i>“N1c) This should include limiting the scale and extent of development within protected landscapes, avoiding the use of higher quality agricultural land where land of poorer quality is available”</i> and <i>“N2b). Use areas of poorer quality agricultural land in preference to that of higher quality”</i></p> <p>4.9.5. The NESO Offshore Report 2020 set out the reduce land take through coordination of infrastructure and the Applicant should be</p>	<p>4.9.1.1 - As set out in 5.6 Planning Statement [APP-085], the Project notes the direction given in relevant policy regarding avoiding siting a scheme on Best and Most Versatile (BMV) land. The Project has sought to minimise impacts on BMV agricultural land as far as practicable and includes mitigation measures to reduce impacts on the soil resource. Given the predominance of BMV agricultural land within East Anglia, it has not been possible to avoid both temporary and permanent effects on this resource. The permanent loss of BMV land is considered necessary on the basis that there is urgent need for CNP Infrastructure such as the Project. The routeing and siting selection process confirms that there are no other suitable sites of poorer agricultural quality that can accommodate the Project. It is acknowledged that the Project will result in a loss of BMV land and is therefore contrary to the NPPF¹⁴ and relevant local planning policy. The extent of BMV land across Norfolk, Suffolk and Essex significantly constrains the ability to avoid this particular resource. However, we consider that the significant benefits arising from this CNP Infrastructure justify the permanent loss of 172.7 hectares of BMV agricultural land.</p>

¹⁴ Ministry of Housing, Communities and Local Government (2025) *National Planning Policy Framework*

Topic	Comment	National Grid's response
	asked to explain why it is acceptable for the radial model to be perpetuated and to take up so much best arable land:	
Open Space	4.9.4. We request that in addition to considering "inappropriate development in the Green Belt" consideration is also given to Local Green Spaces and local character areas such as the Colne Valley, Essex.	The Applicant has sought to avoid impact on open space where possible. The Applicant has reported on the impact of open space set within the Colne Valley in the Open Space Assessment appended to 5.6 Planning Statement [APP-085] . We have also given due consideration of sites designated as Local Green Space within 5.7 Policy Compliance Document [APP-086] .
Safety	4.10. Safety & Security 4.11. We refer to our concerns about national security/defence above in the section relating to Cumulative Impacts, and we would like to see these issues examined.	The Applicant takes safety and security very seriously working closely with the police and security services when designing equipment and the security measures needed to protect them. The Project is designed to comply with design safety standards including the National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS) and the suite of National Grid policies and processes which contains details on design standards required to be met when designing, constructing, and operating its projects. These design safety standards constitute an embedded mitigation measure (see 6.4 Environmental Statement Chapter 4 - Project Description [APP-130]). Existing National Grid processes are designed to identify potential security and safety risks during construction and operation (and maintenance) (including risks from major accidents and disasters) and to design these out at each stage of project development. This informs a suite of National Grid policies and processes, which contain details on design standards required to be met when designing, constructing, and operating assets such as proposed on the Project. A response on major accidents such as security threats can be found at 4.4.2 to 4.4.4 of this table.
Socioeconomics	4.12. Socio-economic 4.12.1. Without using the tools in the Treasury Green Book, the Applicant has not adequately analysed the socio-economic impact of the	The construction local economy assessment has been undertaken in line with other National Grid schemes, including Yorkshire GREEN and Bramford to Twinstead, where quantitative assessment has been undertaken for the direct impacts on local economy; qualitative

Topic	Comment	National Grid's response
	<p>proposed overhead lines. Any analysis provided is purely subjective and should be assessed using Green Book tools, including those that are quantitative. We remind the Inspectors of our own Green Book analysis (submitted), which we prepared in the absence of National Grid's work. There has been no analysis of the socio-economic impact of alternatives.</p>	<p>assessment for the indirect impacts on local economy due to material supply and demand would vary significantly and it was not possible to specify sources at the time of DCO submission; and a quantitative assessment has been undertaken for the induced impact on local economy based on non-local construction worker spent data from other National Grid projects. Regarding the Treasury Green Book, refer to previous responses in 8.4.1 Applicant's Comments on Relevant Representations [Revision A].</p>
<p>Traffic and Transport</p>	<p>4.13. Transport & Traffic 4.13.1. In addition to the topics set out, we seek to understand the traffic impacts of different alternatives to the proposed overhead lines, including upgrading the existing grid, coordination of infrastructure, and HVDC undergrounding.</p>	<p>Strategic alternatives for the Project, including increasing operational voltages on the existing network to above 400 kV, onshore underground cables (AC underground cables and High Voltage Direct Current (HVDC) cables) and offshore cables, have been considered and are set out in 7.17 Strategic Options Backcheck and Review [APP-355] and 7.19 2023 - Strategic Options Backcheck and Review [APP-357].</p> <p>The strategic alternatives were assessed against multiple criteria including cost, technical feasibility, environmental factors (including traffic and transport), and the ability to be delivered within the required timeframes. Traffic and transport factors were not major differentiators in selecting between the alternatives, noting that traffic impacts can generally be effectively mitigated.</p> <p>The assessment of strategic alternatives does not generally include an in-depth comparison of traffic impacts as the level of information available on each alternative is still relatively high level. General principles for comparing the traffic impacts of different alternatives to the proposed overhead lines are outlined below. These general principles align with the high-level qualitative assessments that some recent energy projects have undertaken.</p> <p>Overhead lines generally create lower intensity but more spatially dispersed traffic over a longer construction period. By contrast, AC underground cables require continuous open-cut trenching and excavation works which generate concentrated and intense construction traffic</p>

Topic	Comment	National Grid's response
		<p>activities. These works often require temporary road closures or lane restrictions and Public Rights of Way (PRoWs) diversions, particularly where the cable route intersects with existing roads or PRoWs, leading to localised but significant traffic disruption. AC underground cables also generate more abnormal load movements compared to overhead lines, due to the transport of cable drums.</p> <p>HVDC cable corridors tend to be narrower and generally require a lower number of construction traffic movements compared to AC underground cables. HVDC cables are generally better suited to Horizontal Directional Drilling under roads and PRoWs, which can help to lessen traffic impacts. Conversely, HVDC underground cables require converter stations, which generate their own traffic impacts.</p> <p>Traffic impacts from constructing access points and routes for an onshore AC or HVDC underground cable corridor through largely rural areas with narrow roads would likely be comparable to those for an overhead line, as all three would require the transport of materials, plant and workers to build a largely continuous temporary haul road.</p>
	<p>4.13.2. We believe that it would be beneficial to include the cumulative impact of concurrent developments.</p>	<p>The Applicant has undertaken an assessment of the cumulative effects of concurrent developments in accordance with 6.19 Scoping Report [APP-288 to APP-296] and 6.20 Scoping Opinion [APP-297]. 6.17 Environmental Statement Chapter 17 - Cumulative Effects [APP-281] presents the findings of the assessment.</p>
<p>Flood Risk</p>	<p>4.14. Water Environment</p> <p>4.14.1. We refer again to the need to examine the impact of acid sulphate soils on the water environment, and on WFD status.</p> <p>4.14.2. We have particular concerns about flooding and the methodology employed by the Applicant, as set out in our registration submission.</p>	<p>In terms of the potential impacts on Water Framework Directive waterbodies due to the Project interacting with acid sulphate soils, detailed ALC surveys did not identify the presence of jarosite in the soil, and in locations where desk-based information suggested a potential for acid sulphate soils, some of the soils were found to be moderately calcareous. There is no evidence to indicate the presence of actual or potential acid sulphate soils within the surveyed areas. Should any evidence of acid sulphate soils arise during construction, appropriate investigation and</p>

Topic	Comment	National Grid's response
	<p>4.14.3. This is particularly important given Withdrawn and New NPS EN-1 state in paragraph 4.1.7 that the presumption in favour of CNP is disapplied with unacceptable flood risk:</p> <p>4.14.4. <i>“Further, the same exception applies to this presumption for residual impacts which present an unacceptable risk to, or unacceptable interference offshore to navigation, or onshore to flood and coastal erosion risk.”</i></p>	<p>mitigation measures would be implemented in accordance with best practice.</p> <p>The Project has been subject to a robust Flood Risk Assessment (7.9 Flood Risk Assessment [APP-331]). The methodology for the assessment was agreed in consultation with the Environment Agency and Lead Local Flood Authorities and has been prepared, engaging closely with these flood risk management authorities. The Flood Risk Assessment assesses risks to the Project from a range of relevant sources, as well as the potential for the Project to increase flood risk to land outside the Order Limits. Flood risk management and control measures are secured through inclusion of a range of commitments within 7.2 Outline Code of Construction Practice [APP-300] and through measures embedded within the Project's design. The assessment concludes there would be no residual impacts on flood risk or land drainage that are unacceptable during construction or operation of the Project. 7.9 Flood Risk Assessment [APP-331] has been prepared in line with the latest Overarching National Policy Statement (NPS) for Energy (EN-1) and NPS for Electricity Networks Infrastructure (EN-5). The following have also been considered: the Flood and Water Management Act 2010, and the National Planning Policy Framework and its accompanying Planning Practice Guidance.</p>

5. Applicant's Comments on the Michael Senior Steel Response

5.1 Introduction

- 5.1.1 Table 5.1 summarises the Applicant's comments on the Michael Senior Steel Response to the Rule 6 Letter **[PDA-020]** submitted at PDA.

Table 5.1 Title Applicant’s comments on the Michael Senior Steel PDA submissions [PDA-020]

Ref	Matter Raised	Applicant’s Comments
N/A	<p>I do wish to promote a proposal made by NGET in AENC-ARC-ENV-REP-0031 Norwich to Tilbury Volume 6: Environmental Statement Document: 6.4 Environmental Statement Chapter 4 - Project Description Final Issue A Page 36. This pertains to a change that was made before the submission to lower pylon heights in the region of The Walthams (the gap between Great Waltham and Little Waltham, which is in the conservation area. The design submission changed TB136 to TB142 to lower lattice height pylons up to 40 metres in height (but widening by 10m) instead of the 50m standard pylons, The negative impact of this was to add an extra pylon, but more importantly, position a lower height pylon TB141 right next to Chelmsford Road. This road is the main highway/footway between Great and little Waltham, and would be significantly affected by the presence of such an overbearing feature right next to the road. From my involvement with the local community, I have experienced much concern over this position of TB141. Whilst lower height pylons may reduce the extent of visibility from Grade I listed Langley’s house and its immediate gardens, the wider stance and heavier frame of the lower height pylons would have a greater visual presence in the context of the southern part of Great Waltham Conservation Area and the designated and non-designated heritage assets in this area. AENC-ARC-ENV-REP-0031 Page 36 (see attached file) requests consideration of flexibility to revert to standard lattice pylons following</p>	<p>Section 4.6 of 6.4 Environmental Statement Chapter 4 - Project Description [APP-130] summarises 19 elements of the Project design where different design options are under consideration. These are referred to as ‘Scenarios’. Each scenario contains two or more options.</p> <p>The scenario being raised here is Scenario 19. There are low height pylons proposed in this area and in Scenario A this includes pylons TB140 to TB142 whilst Scenario B has standard pylons with one pylon removed.</p> <p>A tracker (‘the scenarios tracker’) is appended to the Applicant’s Deadline 1 cover letter which covers all of the 19 design scenarios that exist within the Project design. For each scenario, the tracker records the following information:</p> <ul style="list-style-type: none"> • The type or nature of the options in the scenario • A description of the options • The relevant stakeholders • The current status of the scenario and options in the scenario (e.g. progress of negotiations to resolve the preferred option in the scenario) • The legal securing mechanism for the preferred option • The decision in respect of the scenario. <p>The Applicant intends to keep the tracker updated on an ongoing basis and will submit updates to the ExA at key intervals during the Examination to report on progress with respect to each scenario.</p> <p>For Scenario 19 the tracker records a Project decision to proceed with Scenario B with standard height pylons to the south of the River Chelmer.</p>

Ref	Matter Raised	Applicant's Comments
	<p>further technical details being refined – this may also include removing the need for one of the three pylons and a change to the location I urge for this to be considered as part of the examination, and if possible, be mandated as a change to the design such that change of just 2 (not all) to full height pylons will facilitate the move of TB141 further away from the edge of Great Waltham Conservation Area , the main road and the non-designated heritage asset Windmill House. The introduction of full height pylons and the omission of one pylon could potentially reduce the level of heritage harm by positioning the pylon more towards the centre of the adjacent field, further away from the road, and significantly reducing to overbearing aspect of the pylon.</p>	

Abbreviations

Abbreviation	Full Reference
AIS	Air Insulated Switchgear
AONB	Area of Outstanding Natural Beauty
BNG	Biodiversity Net Gain
CPRSS	Corridor and Preliminary Routeing and Siting Study Report
CSE	Cable Sealing End
DCO	Development Consent Order
DNO	Distribution Network Operators
EACN	East Anglia Connection Node
EIA	Environmental Impact Assessment
ES	Environmental Statement
ESO	Electricity System Operator
GIS	Gas Insulated Switchgear
GW	Gigawatts
kV	Kilovolt
NSIP	Nationally Significant Infrastructure Project
NETS	National Electricity Transmission System
NETS SQSS	National Electricity Transmission System Security and Quality of Supply Standard
NGET	National Grid Electricity Transmission
Ofgem	Office of Gas and Electricity Markets
PEIR	Preliminary Environmental Information Report
SOBR	Strategic Options Backcheck and Review
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest

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