

National Grid Energy Transmission Response sent by email: contact@n-t.nationalgrid.com

ECC reference: N020027 – NSC2

14 August 2023

Dear Catrin

Norwich to Tilbury: second round of non-statutory public consultation by National Grid Energy Transmission Limited.

Thank you for consulting and providing briefing sessions for Essex County Council (ECC) in relation to changes to the 2022 draft preferred route alignment for Norwich to Tilbury as detailed in paragraphs 3.28 - 3.2.13 on pages 19 - 21 of the Design Development Report (June 2023). ECC maintains its in-principle objection to Norwich to Tilbury.

<u>Proposed project:</u> Norwich to Tilbury is a nationally significant infrastructure project (NSIP) to reinforce approximately 183 kilometres (km) of high voltage electricity transmission network between Norwich Main substation in Norfolk, Bramford substation in Suffolk and Tilbury substation in Essex. The proposed project would include the following:

- Approximately 158 km of new overhead line (OHL) supported by approximately 520 steel lattice pylons.
- Four separate sections of underground 400kV cabling that would total 25km in length, including approximately 19 km through and in the vicinity of the Dedham Vale Area of Outstanding Natural Beauty (AONB).
- Six cable ceiling end compounds (CSE) to connect the OHLs to the underground cables.
- A 400 kV substation on the Tendring Peninsula.
- No details have yet been provided relating to associated development as defined in Section 115 of the Planning Act 2008 (as amended) required either to support the construction or operation of the principal development or to help address its impacts.

Project promoter: National Grid Electricity Transmission Limited (NGET)

Date consultation received: 27 June 2023

Date consultation closes: 21 August 2023

For brevity, ECC have sought to provide comments in relation to the proposed changes only, or where it considers there are important outstanding matters that it would wish to resolve prior to NGET's planned statutory consultation in 2024. It is recommended that this 2023 consultation response is read alongside ECC's previous June 2022 response to the 1st round of non-statutory consultation, which has been included as an appendix 1.

Where possible, ECC has sought to avoid replicating technical comments made in response to consultation by the Planning Inspectorate (PINS) on the scope of the environmental impact assessment (EIA) in December 2022, or to subsequent engagement by NGET on the various EIA Topic Technical Notes that have been circulated. However, given the extent of consultation in the last 12 months, some overlap has been inevitable. ECC would advise that any overlap should not be read as replacing previous comments, unless explicitly stated.

As part of this 2nd round of consultation, ECC has reviewed its previous grounds for objecting in principle to the strategic proposal for Norwich to Tilbury, as well as its more detailed objection to sections of the draft 2022 preferred route alignment. Since the 1st round of non-statutory consultation, ECC has adopted a Nationally Significant Infrastructure Policy which has been used to inform this response and will continue to do so throughout the development consent process.

In accordance with this policy, ECC will only support NSIPs that create resilience in Essex and not those that exacerbate existing or create new vulnerabilities, in isolation or cumulatively with other development. This particularly relates to ECC's commitment to deliver sustainable growth that levels up the economy, environment and health and wellbeing of communities across the county.

ECC acknowledges the proposed changes that have been made to the draft 2022 preferred route and welcomes the continued commitment by NGET to engage constructively with host local authorities and affected communities. Nevertheless, ECC's in principle objection to the strategic proposal still stands, alongside more detailed objections to sections of the draft 2023 preferred route. These grounds for objection are discussed further in the remainder of this letter.

1. ECC's in principle objection to the strategic proposal for Norwich to Tilbury

- 1.1 ECC welcomes further information that supports greater transparency on the assessment of need for additional transmission capacity, and the appraisal of strategic options to meet this need that are provided in the Design Development Report (June 2023) and Strategic Options Back Check and Review (June 2023). ECC understands that this work was undertaken by NGET prior to the first round of non-statutory consultation and informed by National Grid Electricity Systems Operator's (ESO) assessment of future transmission requirements and network capability, as detailed in the 10 Year Electricity Statement 2022 and refreshed Network Option Assessment 2021/22 (NOA).
- 1.2 Unfortunately, this information is not sufficient for ECC to be certain about how much additional transmission capacity is required, and by what date, to fully evidence a strategic proposal that relies on onshore reinforcement technology, and a programme delivery date of 2030. Given the recent announcement that the Norfolk Boreas offshore wind farm will not be progressed, ECC would challenge ESO's assumption that 100% of contracted projects in East Anglia will be successfully awarded Contract for Difference and require connection to the network by this date.
- 1.3 ECC consider that there are significant uncertainties and sensitivities around the need and timing of Norwich to Tilbury that would have been evident to NGET and ESO during the appraisal of strategic options and choice of strategic proposal. ECC understands that NGET has contracts with offshore wind developers at North Falls and Five Estuaries, and with Tarchon Energy for an interconnector with Germany that require connection into the proposed new East Anglia Connection Node substation in Tendring by 2030. However, it is not clear beyond the existence of these contracts why Norwich to Tilbury was included in the government's Accelerated Strategic Transmission Investment (ASTI), which then made it out of scope for Holistic Network Design (HND) as part of the Offshore Transmission Network Review (OTNR).
- 1.4 ECC is concerned that Norwich to Tilbury has been scoped out of HND and into the OTNR Early Opportunities workstream without reasonable justification. This is not helped by the lack of engagement by ESO and opportunities for stakeholders to challenge the energy generation scenarios presented in the 10 Year Electricity

Statement 2022 and NOA that NGET rely on to evidence the need, timing, and choice of proposed technology for Norwich to Tilbury.

- 1.5 There is very little information available on Early Opportunities, including the Offshore Coordination Support Scheme (OCSS), and ECC remains uncertain how effective offshore wind developers 'opting in' to OCSS will be in reducing the onshore adverse impacts from Norwich to Tilbury. This further adds to the concerns of ECC that Norwich to Tilbury will remain an example of the uncoordinated and inefficient approach to energy transmission that the government accepts requires urgent improvement and is currently reviewing.
- 1.6 ECC wishes to reiterate that its preferred strategic option for Norwich to Tilbury remains an integrated offshore technology that minimises onshore transmission infrastructure and does not include OHLs and pylons. ECC recognises that this option would need to be delivered at pace and without risk to national net zero, renewable energy and decarbonisation targets, and energy security.
- 1.7 If the strategic proposal were to retain the current onshore option, ECC considers that significant changes are required to sections of the 2023 preferred route to reduce adverse impacts and harmful effects to the local economy, environment and health and wellbeing of communities. This should also include the consideration by NGET of how benefits from Norwich to Tilbury, both direct and indirect, are maximised from all possible sources. ECC expects the vital role that Essex and its local communities are expected to have in hosting nationally significant onshore transmission infrastructure, which supports the delivery of cheaper, more secure, and low carbon energy generation, to be recognised.
- 2. Residual impacts, community benefits and social value
- 2.1 ECC considers Norwich to Tilbury will have residual impacts that adversely affect the local economy, environment and health and wellbeing of communities in Essex that cannot be sufficiently mitigated or compensated through the planning regime. Furthermore, that Norwich to Tilbury will deliver significant benefits at the national level, but not at the local level. ECC expects secondary mitigation and compensatory offsetting for Norwich to Tilbury to be robust and provide a positive legacy beyond construction, but also wants to ensure that its local communities benefit directly from hosting transmission infrastructure that supports national objectives. ECC would welcome working in partnership with NGET to plan and deliver a generous and innovative community benefits package for Norwich to Tilbury. This should include any emerging requirements from the government's anticipated community benefits guidance for electricity transmission network infrastructure and explore opportunities to coordinate with other projects.
- 2.2 As part of statutory consultation, ECC would expect NGET to undertake a social value self-assessment and to submit a Social Value Statement. This statement would explain how NGET will work in partnership with ECC to ensure that the design, procurement, and construction of Norwich to Tilbury improves the economic, environmental, and social wellbeing of local communities in Essex and for the lifecycle of the project. ECC's main social value priorities are currently centred around the support of entry level employment, local employment, employment of disadvantaged groups and environmental measures to address both the climate and environment crisis.
- 3. Dunton Hills Garden Village/West Basildon the need for rerouting/undergrounding.

- 3.1 ECC acknowledges further consideration of its objection to the 2022 preferred route on land allocated in Policy R01: Dunton Hills Garden Village Strategic Allocation of adopted Brentwood Local Plan (2022). The grounds for objection were made as part of the first round of non-statutory consultation in June 2022 and related to the visual impact of the 2022 preferred route and its likely adverse effects on housing delivery in Brentwood and Basildon, and the financial viability and general amenity of Dunton Hills Garden Village (DHGV). ECC welcomes the recent opportunity to discuss these issues further in regular meetings with NGET and joint local authority partners Basildon Borough Council and Brentwood Borough Council. Given the need to address this part of the route where there is planned development, we would ask for these meetings continue.
- 3.2 Unfortunately, the 2023 preferred route does not contain sufficient mitigation for ECC to withdraw its objection. ECC consider that, should there be no reasonable alternative to the 2023 preferred route whereby the land allocated for DHGV is avoided altogether, sufficient mitigation would require the use of underground cabling. ECC consider that this position is supported by the Holford Rules guidelines cited in paragraph 2.8.6 of the adopted National Policy Statement for Electricity Networks Infrastructure (2011) and paragraphs 2.11.10 and 2.11.14 of the draft National Policy Statement for Electricity Networks Infrastructure (2021), which includes consideration of undergrounding outside of nationally designated landscapes.
- 3.3 ECC has summarised its argument below but would defer to joint local authority partners who have provided further details in appendices 2 and 3 on national and local planning policy as it relates to DHGV and wider issues around viability and housing delivery in the South East Housing Market Area.
- 3.4 ECC notes the proposed change to the 2022 preferred route described in paragraph 3.2.12 on page 21 of the Design Development Report (June 2023) as:

"...proposal to restrict the graduated swathe and alignment to the eastern edge of the preferred corridor to reduce interaction with the Dunton Hills Garden Village development..."

3.5 Further, the consideration of alternative route alignments between Hutton and West Horndon detailed in paragraphs 5.5.142 – 5.5.145 on pages 62-63 of the same report. The Design Development Report concludes in paragraph 5.5.145 on page 63:

"The majority of the Dunton Hills Garden Village proposals...are set back by around 80m from an existing high pressure gas pipeline, which itself is some distance from the eastern edge of the consultation corridor. It is considered that there is sufficient space to allow for an alignment that is consistent with the Holford Rules and the relevant policy framework without reducing the available development area".

- 3.6 ECC does not support this conclusion and is concerned that the justification for the 2023 preferred route is too narrowly framed around the proximity to an existing high-pressure gas pipeline. The Design Development Report makes no reference to any consideration having been given to Brentwood Local Plan policy R01 or the associated Dunton Hills Garden Village Supplementary Planning Document, which describes in detail the extensive work that has been undertaken at the national and local level to plan, design and develop a viable garden village.
- 3.7 The same report is also silent on the strategic importance of DHGV for housing delivery in Brentwood, Basildon, and the south-east, given that the wider evidence base does not refer to the various housing market areas in place across the route.

This is further compounded by the absence of any reference to the significant affordable housing need in both the Brentwood and Basildon boroughs, which is exacerbated by the areas of green belt land designation, the lack of development finance and public subsidy, as well as both boroughs' proximity to, and links with Greater London.

- 3.8 ECC would have expected the 2023 preferred route to have been informed by the relevant local development plans for both Councils and specifically in relation to Basildon, the absence of an up-to-date Local Plan and five-year housing land supply. ECC considers that the 2023 preferred route would materially undermine the local plan-making processes in both Brentwood and Basildon to the significant harm of local people needing to access affordable, high-quality housing.
- 3.9 ECC would consider that from the outset the 2022 preferred route was contrary to Holford Rule 7, which states that a new high-voltage route alignment should only be chosen after consideration has been given to the effects on the amenity of "...existing development and proposals for new development." Holford Rule 7 further states that when a new line needs to pass through a "development area" it should be routed to minimise as far as possible effects on development.
- 3.10 The 2022 preferred route was engineering led and appeared not to benefit from robust consideration (if any) being given to the visual impact and effects to amenity on DHGV. It follows that mitigation was not proposed. ECC accepts that the 2023 preferred route is intended to "…*reduce interaction with Dunton Hills…*" but it is not clear how this change addresses compliance with the Holford Rule 7, or the general presumption in the Holford Rules against routing overhead lines close to residential areas. Given that DHGV is an allocated site in an adopted local plan, supported by a supplementary planning document and has had a live planning application to develop the site since 2021, ECC consider that this general presumption should be applied purposively to include DHGV as a residential area.
- 4. Education, skills, employment, and supply chain
- 4.1 The construction of Norwich to Tilbury will result in an increased demand for the skills necessary to deliver the pipeline of nationally significant and major infrastructure projects that are proposed in Essex or neighbouring counties. Given a national and local skills shortage, ECC would welcome working with NGET and other stakeholders to develop an infrastructure skills base for the East. This base will be required to understand and practically address potentially national and local skills shortages, whilst also mitigating any potential further impact that could disrupt infrastructure delivery and/or adversely affect the local labour market. ECC expect that long term opportunities for local people to access the necessary education, skills and employment on the construction and operation of Norwich to Tilbury and/or other energy infrastructure projects are maximised. This will require NGET to agree meaningful and timely investment in further education, apprenticeships and with local training providers.
- 4.2 ECC would further welcome working with NGET and other stakeholders to find highquality suppliers to the main contractors for Norwich to Tilbury, as well as stimulating readiness and competitiveness within the supply chain for other nationally significant and major infrastructure projects.
- 5. ECC Transportation and Highways, including Public Rights of Way

- 5.1 ECC is the local highway authority for any part of Norwich to Tilbury that is within the administrative boundary of Essex.
- 5.2 The comments made in relation to the draft 2022 preferred route and included as part of the 1st round of non-statutory consultation are still relevant to the draft 2023 preferred route. Until such time that further detail is provided on the preferred route, which includes any associated development, ECC would reiterate that it expects all impacts on the strategic and local highways network, including the Public Rights of Way (PRoW) to be fully assessed for the lifecycle of the development and where necessary mitigated. Please refer to appendix 4 for technical comments in full.

6. ECC Minerals and Waste

- 6.1 ECC is the minerals and waste local planning authority for any part of Norwich to Tilbury that is within the administrative boundary of Essex.
- 6.2 The comments made in relation to the draft 2022 preferred route and included as part of the 1st round of non-statutory consultation are still relevant to the draft 2023 preferred route. Please refer to appendix 5 for minor additional comments.

7. ECC Sustainable Urban Drainage Systems

- 7.1 ECC is the lead local flood authority for any part of Norwich to Tilbury that is within the administrative boundary of Essex.
- 7.2 The comments made in relation to the draft 2022 preferred route and included as part of the 1st round of non-statutory consultation are still relevant to the draft 2023 preferred route. Please refer to appendix 6 to read this response in full.

8. ECC Place Services - Arboriculture

8.1 The comments made as part of and after the 1st round of non-statutory consultation in June 2022 are considered sufficient to address the potential impacts from the draft 2023 preferred route to existing trees, woodlands, and protected sites. Please refer to appendix 7 to read this response in full.

9. ECC Place Services - Ecology

- 9.1 The comments made in relation to the draft 2022 preferred route and included as part of the 1st round of non-statutory consultation are still relevant to the draft 2023 preferred route.
- 9.2 Further comments relate primarily to the need for further ecological survey and assessment work to consider the cumulative impacts of Norwich to Tilbury with other development. There is concern that more information is needed to understand the impacts on hedgerows, particularly those that could be important for bat foraging and commuting routes for Barbastelle bats or Dormouse connectivity. Substation site constraints will need to include non-statutory designated sites to avoid significant ecological impacts that could trigger the need to deliver compensatory habitat. ECC Place Services Ecology seeks to inform choices on micro routing to avoid ecological features including veteran trees (irreplaceable habitat) and specifies options for restoration planting schemes, in addition to securing temporary mitigation measures during construction. ECC would welcome working with NGET and other host local authority partners on a Biodiversity Net Gain Plan for Norwich to Tilbury that would deliver beyond the statutory minimum 10%. Please refer to appendix 7 to read this response in full.

10. ECC Place Services – Archaeology

- 10.1 The comments made in relation to the draft 2022 preferred route and included as part of the 1st round of non-statutory consultation are still relevant to the draft 2023 preferred route.
- 10.2 Further comments state that the proposed changes and increase to the areas undergrounding in the draft 2023 preferred route will significantly increase the impact on below ground archaeological deposits. The undergrounding will involve a development corridor approximately 100 metre (m) wide creating significant disturbance to the archaeological deposits within this area. It will be important to undertake both desk based, non-intrusive and intrusive archaeological evaluation within these areas to understand the impact of the proposed development. ECC Place Services Archaeology notes that a methodology for the landscape viewpoint assessment was circulated as a technical note in July 2023. This has been largely agreed but contains caveats that include the need to agree additional viewpoints in Essex and as early as possible to ensure that on site assessments can be undertaken in both the summer and winter months. Please refer to appendix 7 to read this response in full.

11. ECC Place Services - Historic Buildings

11.1 The comments made in relation to the draft 2022 preferred route and included as part of the 1st round of non-statutory consultation are still relevant to the draft 2023 preferred route. ECC Place Services – Historic Buildings reiterates the comments made by ECC Place Services - Archaeology in relation to landscape viewpoints. Please refer to appendix 7 to read this response in full.

12. ECC Place Services - Landscape

- 12.1 The comments made in relation to the draft 2022 preferred route and included as part of the 1st round of non-statutory consultation are still relevant to the draft 2023 preferred route. ECC Place Services – Landscape considers that additional undergrounding evident in the draft 2023 preferred route is welcome, but more needs to be done by NGET to underground or re-route sections of the draft 2023 preferred route as mitigation for visual impact and its harmful effects on the landscape character and amenity. An up-to-date assessment of landscape value for the length of the draft 2023 proposed route and graduated swathe is required, with further undergrounding or rerouting mitigation required at a number of additional locations listed in the Design Development Report:
 - Ardleigh (TB1 TB20) as shown in Figure 6.18 (TB1 TB20) on page 91.
 - The River Colne Valley (TB33 39 and TB39 61) as shown in Figure 6.20 on page 94 and Figure 6.21 on page 95.
 - Marks Tey (TB59 TB78) as shown in Figure 6.22 on page 97.
 - Coggeshall / Kelvedon (TB78 TB98) as shown in Figure 6.23 on page 98.
 - Fairstead (TB96 TB120) as shown in Figure 6.24 on page 99.
 - Great Leigh to Great and Little Waltham (TB120 TB140) as shown in Figure 6.25 on page 101.
 - Broomfield / Chelmsford (TB141 TB161) as sown in Figure 6.26 on page 102.
 - Ingatestone (TB182 TB198) as shown in Figure 6.28 on page 104.
 - Hutton (TB197 TB213) as shown in Figure 6.29 on page 105.
 - Dunton Hills Garden Village (TB214 TB231) as shown in Figure 6.30 on page 106.

12.2 ECC Place Services – Landscape considers that there will be notable residual visual impacts from the draft 2023 preferred route, the effects of which cannot be mitigated. Accordingly, any landscape value assessment should also be used to inform a robust and substantial landscape mitigation and compensation scheme. Please refer to appendix 8 to read this response in full.

13. ECC Green Infrastructure

13.1 The comments made in relation to the draft 2022 preferred route and included as part of the 1st round of non-statutory consultation are still relevant to the draft 2023 preferred route. Please refer to appendix 9 to read this response in full.

14. East of England Ambulance Service

- 14.1 The comments made in relation to the draft 2022 preferred route and included as part of the 1st round of non-statutory consultation and scoping for EIA are still relevant to the draft 2023 preferred route. Please refer to appendix 11 to read this response in full.
- 15. The removal of obsolete 132kV pylons
- 15.1 ECC considers that there are opportunities for Norwich to Tilbury to facilitate the removal of 132kV pylon lines operated by UK Power Networks, to rationalise and improve the network resilience overall, whilst reducing the cumulative visual impact of energy infrastructure, and compensating for the additional visual impact of the proposed new 400kV power lines.

16. The avoidance of Boxted Airfield

16.2 In the interests of amenity, national defence and the aviation industry, Norwich to Tilbury needs to ensure the continued and safe use of Boxted Airfield.

Yours sincerely

Graham Thomas.

Graham Thomas Head of Planning and Sustainable Development

- Appendix 1 ECC's response to the 1st round of non-statutory consultation
- Appendix 2 Briefing note to ECC from Brentwood Borough Council

Appendix 3 – Briefing note to ECC from Basildon Borough Council

- Appendix 4 ECC Highways and Transportation, including Public Rights of Way
- Appendix 5 ECC Minerals and Waste
- Appendix 6 ECC Sustainable Urban Drainage Systems
- Appendix 7 ECC Place Services (Arboriculture, Ecology, Archaeology and Historic Buildings)
- Appendix 8 ECC Place Services Landscape
- Appendix 9 ECC Green Infrastructure
- Appendix 10 ECC Employment and Skills
- Appendix 11 East of England Ambulance Service