

National Grid Norwich to Tilbury Consultation July / August 2023

Consultation Response

- 1) We support, endorse and subscribe to the submission of Pylons East Anglia.

Consultation

- 2) We object to the manner in which this consultation process is being conducted.

The first consultation, held in the summer of 2022 breached all 4 of the Gunning Principles which are enshrined in Law:

- i. only a single option was presented with no alternatives
- ii. the information provided in support of the developed route including in the Corridor and Preliminary Routeing and Siting Study Report ("CPRSS") was insufficient and contained manifest errors and contradiction between costs for identical routes, the Least Worst Regret ("LWR") methodology used has been shown to be flawed in an independent study commissioned by Ofgem. Many of the routing decisions in the CPRSS were unsubstantiated and bias was evident in some of the numbers and comparisons presented. The CPRSS could not be used as a basis for a reasonable decision.
- iii. Insufficient time was given to form a reasonable conclusion: the consultation was been run during local elections and ended shortly before a new Network Options Assessment due to be published by National Grid, which National Grid themselves say might have a major impact on the need. Consultation for Sea Link and the offshore transmission network review was also expected shortly. It was premature to consult on a land-based route ahead of publication.

- 3) The present consultation does nothing to correct these errors, and indeed compounds the previous mistakes and worsens the situation:

- a. Rather than presenting alternatives, you now present a single very detailed route including positions of individual pylons. There is no stage at which we have been given the opportunity to make an informed decision in respect of alternative routes and asking us whether a pylon needs to be moved 50 metres left or right does not constitute an alternate route or consultation in respect of such. Doubling down on your strategy does not work and many local residents have decided that because of your consultation strategy that it would be dangerous to respond to your consultation at all for fear that you will use their responses as evidence that the route is acceptable.
- b. Your back-testing exercise does nothing to justify the decisions already taken in respect of the route and your slight deviations from that are only as a result of your own extremely poor work in the first place. You have not corrected or enhanced detail in respect of costs and your statement that all previous numbers are now superseded does nothing to allow the reader to make an appropriate comparison of the drivers previously described.
- c. The current consultation has been planned extremely poorly. It is being run through the final week of school term and the school holiday period. This is a time which is extremely busy and when the duties of childcare make it very difficult for parents to find time to read the hundreds of pages of material you have published, to attend events, or to respond to your consultation. You gave very little notice of the drop-in events meaning that residents have been unable to attend. The events are all closely spaced in time meaning that anyone who is for example taking a family

holiday is likely to miss all events in their area. The timings of the events are mainly during the day making it difficult for the working population, farmers in the middle of harvest, and young people at school to attend – even events open until 7pm will be difficult for London commuters to attend. There was only one event on a Saturday which also clashed with a local event (see below). The choice of locations for the drop-in events has been extremely ill advised. There have been only two in the most sensitive area around north Colchester. One was held on a day which clashed with the Tendring show in a location where roads were closed and organisers warned not to travel unless for the show. The other was held in a small village hall in a village with poor public transport, which was impossible to reach from Great Horkesley, Little Horkesley or Fordham except by Car, and led to such concern by the operators of the hall that they arranged for the local primary school to close early, warned on Facebook of concerns in respect of parking and public safety. Your events have minimal or no signage in place and repeated telephone calls to your helpline are going unanswered. Nothing has done to facilitate the largely elderly rural population. At Chelmsford the event was held in a location with no public transport at all, where parking was provided a very significant distance away from the hall.

- d. The consultation is being conducted during July and August when the outcome of the Government-sponsored Offshore Coordination Review is expected to be published at the end of July. This review includes an examination of the possibility of connecting together the Five Estuaries and North Falls wind-farms to your own Sealink project offshore and would eliminate the need for the substation in Tendring entirely, thereby negating the need for cables beneath the Dedham Vale AONB and through the area North of Colchester altogether. Your own consultation material concludes that the outcome is likely to have a very significant impact upon design and to require major changes to route and technology. It makes no sense to rush this consultation. Your build plans are years away and taking an extra 6 to 8 weeks now would not have jeopardised your timescales at all. The process you are undertaking is, however, causing stress and significant negative impacts to mental health for the population in the Dedham Vale/ Tendring / North Colchester area.
 - e. The interactive map omitted to include the AONB making it difficult to properly assess the route as against this significant, protected, area. The other maps (not easy to find online) unfortunately bisected the underground section at Great Horkesley (sheets 1 and 2 of Section D) meaning the location of the CSE Compound NE of Horkesley Plantation could not easily be assessed as against the AONB and wider village and listed buildings.
 - f. Limited notification of local residents makes it difficult for residents to engage (newsletters sent only to residents within 1km of the route; these were brief and did not enclose a paper response to the consultation).
- 4) The leading Planning Barrister, Charles Banner KC has already issued an opinion in respect of the compliance of your first consultation with legal requirements, which was supplied to you, but which you have failed to address. He has also issued an opinion in respect of the need to comply with the Treasury Green Book when assessing project proposals. This is something that both your current and previous consultations fail to do.
- 5) We request, once more, that we are presented with detailed and costed alternatives of alternative routes (and not merely pylon positions) in order to inform our reasonable consideration. These alternatives should include at least one fully integrated offshore alternative and one partially integrated offshore alternative (see below) and must make full use of the Treasury Green Book principles.

Need Case

- 6) National Grid have failed to demonstrate the NEED for this project as a whole. Documents obtained from National Grid through EIR requests confirm that your

pylon plans have significant excess capacity over actual need and contain a conclusion that it is worth building because where you build pylons additional energy infrastructure from other customers will follow. In addition to clearly acknowledging lack of need, this clearly demonstrates that:

- i. your plans are disingenuous and fail to inform the public of the impact likely to arise if these plans go ahead;
- ii. your statements about offshore alternatives lacking the same capacity as onshore options are designed to mislead, you do not need a 6GW capacity in the first place [setting aside the obvious comment that 'of course, because you have designed a double circuit with excess capacity onshore and are comparing this to a single circuit with reduced capacity offshore – the offshore alternative could easily carry the required capacity, it merely needs an additional line, the marginal cost of which is negligible]

- 7) Also in respect of NEED, at your Chelmsford event your Project Director Liam Walker confirmed that the already in flight network upgrades will in fact provide you with sufficient capacity in respect of the northern windfarms Vanguard and Boreas. This means that together with the ability to combine Five Estuaries, North Falls and Sealink offshore, the case for your plans onshore is not made at all.

Fully Integrated Offshore Alternative

- 8) Your onshore plans will cause significant harm to the environment, landscape, ecology and cultural heritage of East Anglia. They amount to an industrialisation of a so-far unspoiled area of the country and, in particular, will do significant damage to the Dedham Vale AONB as a result of infrastructure both within and without but in close proximity to it which will alter both the AONB itself and the setting of the AONB. To remind you, the relevant planning guidance and your own Holford Rules speak of avoiding "altogether" the major areas of highest amenity value, this is something your proposals clearly fail to do.
- 9) Your proposals bring works into close proximity with numerous listed buildings and you have entirely failed to set out steps taken to avoid or mitigate damage to those protected settings.
- 10) ***We favour and believe that National Grid should implement a 'Fully Integrated Offshore Alternative' of the type set out by ESO in their November 2020 paper catering to the needs of the whole of the East Anglia region.*** As set out by ESO such an alternative would be easily feasible, would result in a significant reduction in infrastructure both offshore and onshore (something like 50% in total), would lift very significant synergies between projects and avoid duplication of offshore cable-runs, and would thereby be approximately £2Bn cheaper than the 'counterfactual' example using onshore pylons as you have proposed. Although landfall would still be necessary, the harm resulting from such properly integrated alternative would be dramatically lower both offshore and onshore. ESO have also stated that such alternative would be electrically more resilient and more suitable for future needs than an onshore pylon route. Having regard to this together with very significantly reduced harm onshore we consider this to be the optimal solution.

- 11) The ESO paper was written collaboratively with two leading and experienced firms in the energy transmission sector. It considered in detail both offshore and onshore requirements for each of (i) the fully integrated offshore grid (ii) the counterfactual pylons case. Your statements that the proposals were only high level and not comparable to your own are wrong. To the contrary, ESO had to hand and made use of years of experience with onshore routing, evaluation of projects, and had to hand the recently published HND at the time they drafted the paper. Their work is – contrary to your claims – rather more detailed than your own in respect of Norwich to Tilbury, supported by a greater body of engineering expertise (in particular in respect of offshore design), and importantly makes use of the Treasury Green Book in arriving at their conclusions. You have already been provided with a second legal opinion provided by Mr Charles Banner KC in respect of the applicability of the Treasury Green Book and have to date failed to respond. Finally, we note that in their paper ESO provide a summarised view of their work only. It is wrong to paint the ESO proposals as unachievable, expensive, or hypothetical.
- 12) For the avoidance of doubt, we do not consider the on- off- on- again alternative you set out in a letter to MPs in December 2022 and corrected in January 2023 which involves taking a cable from Norwich offshore to Tendring, then onshore, then offshore again to Tilbury to be an Integrated Offshore alternative. Rather, your design has yet further increased duplication and would indeed be even more harmful. The design demonstrates a clear lack of understanding of the principles set out by ESO.

Partially Integrated Offshore Alternative

- 13) In response to EIR requests, National Grid have acknowledged receipt of a paper written by ESO and supplied to them in the summer of 2022 entitled “Early Opportunities ESO Assessment Criteria (June 2022)” in which ESO consider in detail the ‘Status Quo’ alternative comprising of radial connections back to shore for North Falls and Five Estuaries and SeaLink combined with the (then) East Anglia Green proposals, counted against 10 other alternatives of which 9 would avoid the need for East Anglia Green (Norwich to Tilbury) infrastructure in Tendring, Dedham Vale AONB and mid-/north Essex entirely. Some of these 9 alternatives relied only upon SeaLink, North Falls and Five Estuaries, others included EuroLink and / or Nautilus.
- 14) ESO concluded that the alternative of using Sealink to bring power back to shore from the two windfarms would be straightforward. This alternative would clearly lift synergies and save underwater cabling as well as eliminating sub-sea and onshore engineering by the windfarms. Although these costs do not directly fall to National Grid at the time of construction, they would later fall to National Grid as a required purchaser of the assets given that the windfarms cannot legally both generate and transmit. Whilst therefore they are not directly part of the Norwich to Tilbury costing they must be included in order to obtain fair comparison given that in the end the consumer will bear all costs including these.
- 15) ESO concluded that the only significant obstacles in respect of the majority of the other alternatives were in respect of compliance obligations, codes and standards.

These are in any event in the gift of Government and hence entirely addressable. ESO noted that there may be technical challenges if the windfarms were to produce to full capacity as Sealink is designed with only 2 GW capacity whereas the windfarms together have a theoretical production of 3.5GW. Clearly, in the counterfactual ‘status quo’ alternative there are 5.5GW of total capacity from land to shore (2GW sealink and 3.5GW from the windfarms). It may therefore seem that a single 2GW cable is not sufficient. However, it should be self evident that a 2GW cable can indeed carry 4GW as it is able to send 2GW north via Sealink to Friston and the other 2GW south via Sealink to its landfall in Kent. The cable capacity would not be exceeded even by 3.5GW of production. However, even if National Grid were to increase the capacity of Sealink to – for example – 4GW this would still result in significantly less harm offshore than the ‘status quo’. It would further eliminate the need to cable beneath the Dedham Vale AONB and run cables alongside the AONB in the highly sensitive setting of Tendring / North Colchester and thereby dramatically reduce onshore harm also.

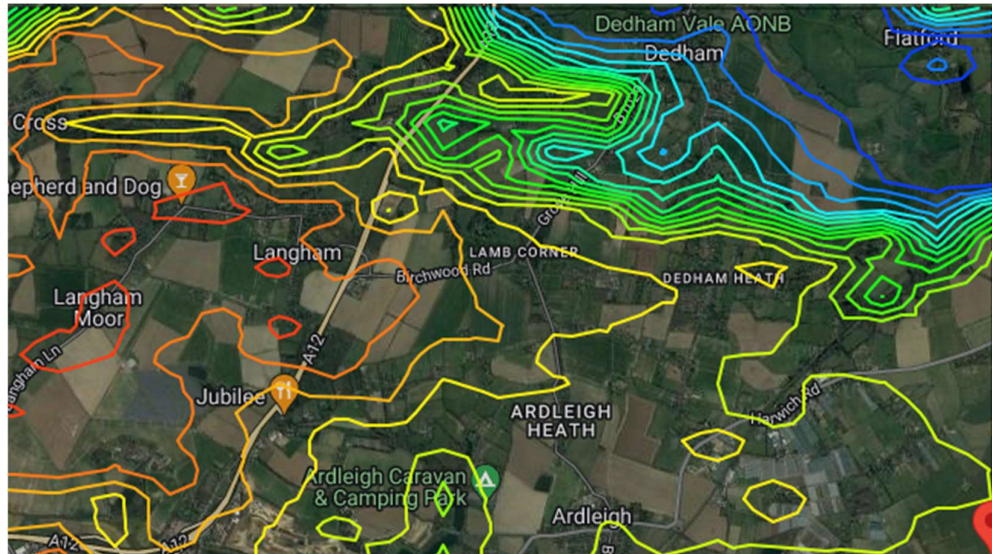
- 16) In the event that a “Fully Integrated Offshore Alternative” of the type set out by ESO in November 2020 is impossible or infeasible, we strongly favour and believe that National Grid should implement a “Partially Integrated Offshore Alternative” of the types set out by ESO in their June 2022 paper on the basis that this will dramatically reduce harm both on- and off-shore as well as forming a more resilient basis from which further expansions in the future can be made in a cost-effective manner.**

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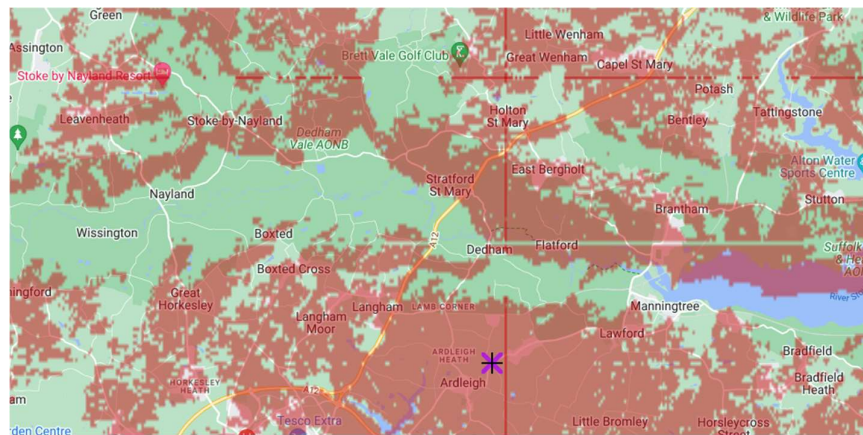
- 17) In the event that both Fully Integrated and Partially Integrated offshore alternatives as set out above are infeasible, we make the following observations in respect of the proposals set out in the current consultation.

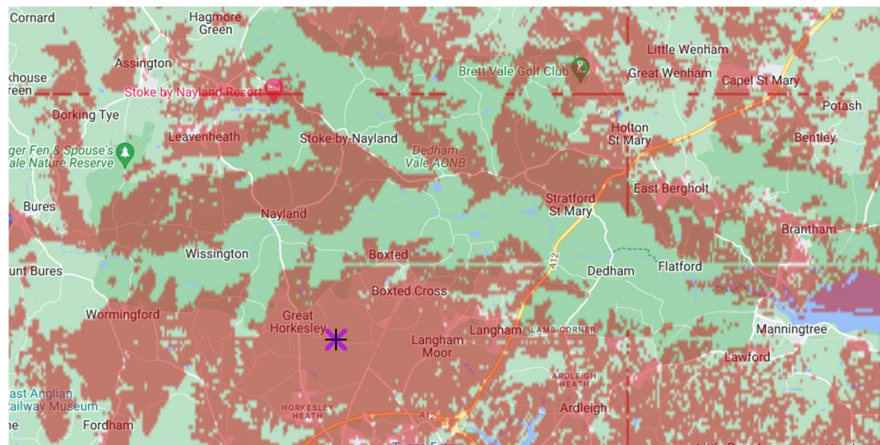
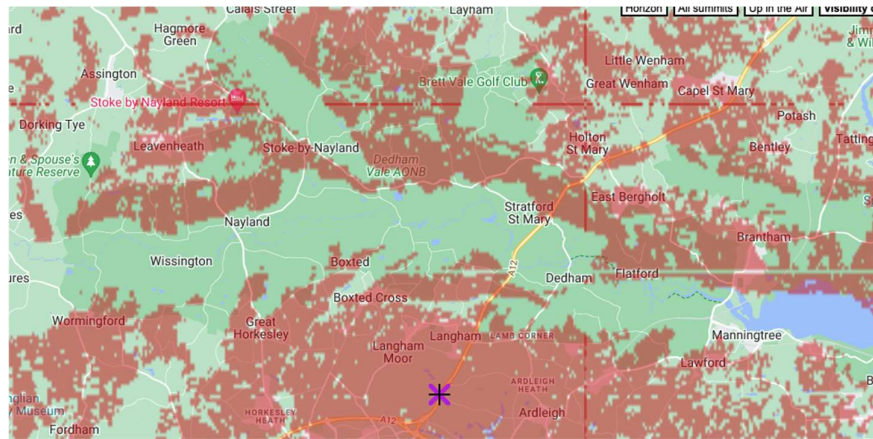
18) Tendring to Great Horkesley

- i. National Grids own work presented in the Corridor and Preliminary Routeing and Siting Study Report (“CPRSS”) for last years consultation repeatedly highlighted in chapters 5 and 7 the risk of significant damage to the AONB resulting from use of overhead lines in this area (5.1.4; 5.5.5; 5.5.24; 7.5.15; 7.5.16; Appendix B30) and stated that mitigation in the form of alternate routes (5.1.4; 5.5.5) alternative pylon design (5.5.18; Appendix B30) or more likely significant sections underground (1.3.40; 3.1.9; 5.5.8; 5.5.9; Appendix B30) would be required.
- ii. During consultation events your member of staff Jacqui Fenn indicated that in fact it was practice to underground within 3km of an AONB.
- iii. Whilst you have elected to partially underground though this area you appear to have drawn a boundary at 1.3km distance from the AONB. This is significantly beneath both the threshold mentioned in the CPRSS (2km) and the boundary mentioned by your staff at events (3km). This reduction in scope causes harm to the Dedham Vale AONB and its setting. Pylons TB1 to TB34 remain highly problematic. Indeed, only pylons TB26 to TB28 fall outside of the 2km boundary which National Grid themselves have highlighted. None fall outside of the 3km boundary suggested by your staff.
- iv. Pylons in this area will be clearly visibly from across the AONB. The area is relatively flat ranging from 40m to 46m above sea-level and falling away only immediately adjacent to the River Stour.



- V. The following diagrams illustrate the viewsheds within the AONB of a 50m tall pylon from sample pylons near to TB11, TB22 and TB33 respectively. As can be seen, the impacts are broad and spread across the whole of the AONB. Only the very narrowest corridor immediately adjacent to the River Stour where land falls away quickly to 7m above sea-level is unimpacted. The addition of impact from the remaining pylons significantly increases the overall harm. There are numerous listed buildings throughout this area which would be negatively impacted as a result and where the setting is important. It is not plausible that, aside from the use of undergrounding, damage in this area to each listed building could be mitigated.





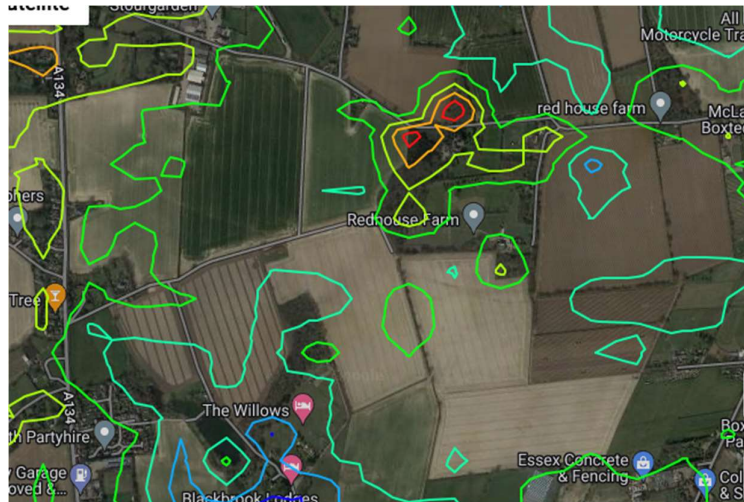
(AONB illustrated in dark green, viewfall in red. Note that map areas differ between maps.)

- vi. In addition to being visible within the AONB, Pylons and gantries TB1- TB35 provide a backdrop to ALL vehicular access to the centre and east of the AONB. Those visiting the AONB will pass between 'arches of pylons' situated left and right of the roads and will be beneath dual-circuit 400kV cables as they drive in. This will materially impact the setting of the AONB even in those places where pylons are not visible.
- vii. This is an area of relative tranquillity where natural sounds such as streams and birdsong are predominant, the landscape and expansive "large sky" views are of good quality.
- viii. There appears to be little justification for having this overhead section of cable given the considerable detrimental impact on the AONB and surrounding area, given the relative shortness of this section, and given that having it overhead adds to infrastructure, necessitating the CSE Compound situated NE of Horkesley Plantation and TB34 and 35, which itself is problematic (see below).
- ix. The industrialisation of the area and of the AONB through use of Pylons in this area is entirely incompatible with the setting and will do significant and lasting harm to an area which, per the Holford rules, should be 'avoided altogether'. ***The section from TB1-TB35 must be under-grounded.***

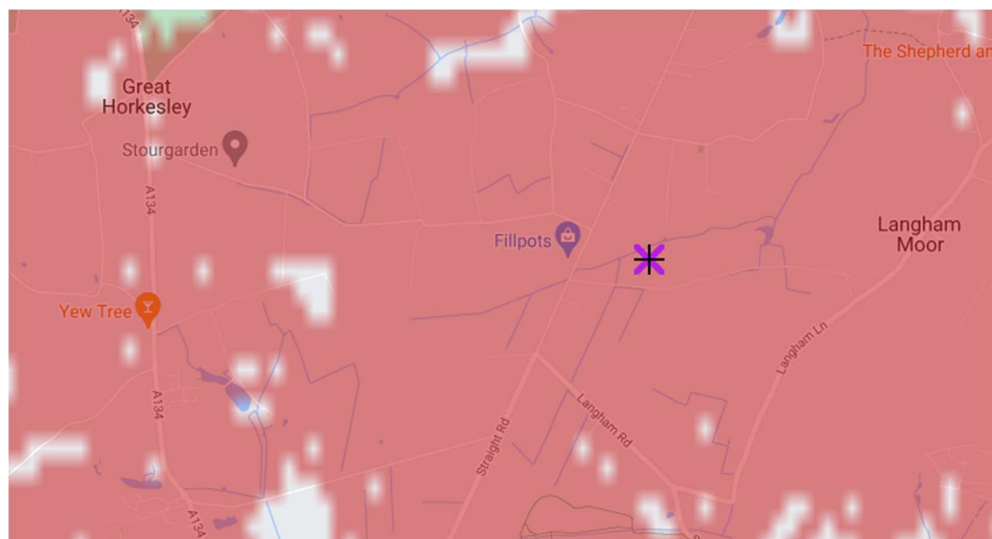
19) Sealing End Compound near to Boxted Road & NE of Horkesley Plantation

- i. Horlock Rule (2) states that sealing end compounds should "as far as reasonably practicable seek to avoid altogether international and nationally designated areas....".

- ii. Holford Rule (1) states “avoid altogether, if possible, the major areas of highest amenity value, by so planning the general route of the first line in the first place, even if the total mileage is somewhat increased in consequence. ”
- iii. The siting of the sealing end compound at Horkesley Plantation necessitates multiple gantries and pylons in a small area in close proximity to both the AONB and also to a very significant concentration of Listed Buildings at Great Horkesley (including a large number of Grade II listed and one Grade II* listed very near to the route and whose setting and tranquility would be harmed).
- iv. Land in this area is exceedingly flat, with only a few metres between the local peak (55m, Redhouse Farm) and the intended location of the Sealing End Compound (50m) at TB34/35. Land contours are illustrated below.



- v. Given the flatness of the land, and towers in this area will be visible throughout the area as illustrated in the viewfall map below. There are no significant dips in the area and no other features capable of providing screening to or from either the listed buildings or the AONB. As already illustrated above, towers in this location will be clearly visible across a wide area of the AONB and due to the close proximity will cause significant harm.



- vi. The landscape is of good quality and the setting tranquil. Given the nature of the landscape natural sounds travel significantly and birdsong and hawk-calls can be heard over wide distances.

- vii. Proximity of the CSE compound and TB35 / TB34 to the Essex Way will cause significant harm to amenity for significant numbers of walkers from across the region and beyond.
- viii. The siting of the sealing end compound and associated infrastructure NE of Horkesley Plantation (including TB35 and TB34) is on prime agricultural land; a location on less-fertile agricultural land / uncultivated land would cause less harm and should be preferred.
- ix. The location at TB34/35 fails to comply with either Holford or Horlock rules. Against this backdrop, and notwithstanding the comments above in respect of the whole route in this area, ***TB 34/35 is unsuitable as a location for the Sealing End Compound, which must be significantly further East if it is to be located along the route currently indicated.***
- x. Due to the fact that the AONB boundary slopes Northward at this point the separation of pylons from the AONB could be dramatically increased by moving the Sealing End Compound a relatively short distance. For example, the line-of-sight distance to the AONB from TB30 is almost double that at TB34/35.

20) Great Horkesley to Little Horkesley

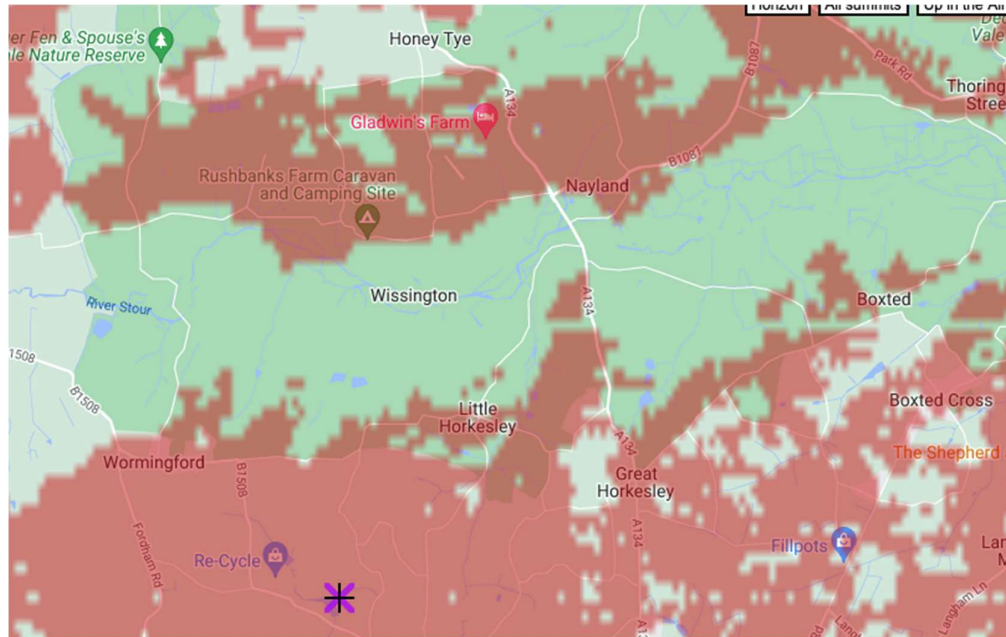
- i. The Holford Rules require the avoidance of residential areas. Use of underground cables through residential land is unacceptable and to be avoided at all costs.
- ii. Given the rural nature of the area many buildings known as “Farm” or “Barn” are in fact residential and not agricultural or commercial properties. The underground section of route must be thoroughly reviewed in order to ensure that trenching does not occur through residential land or parkland / paddock land associated with residential properties. Agricultural land should be favoured in all cases. (Feedback as to construction in Agricultural land is set out below).
- iii. In particular, the split cable arrangement at Knowles Barn (Farm) proceeds directly through residential land and is not acceptable. Cables should not be routed through or oversail residential land and this route segment requires modification.
- iv. The position of the Sealing End Compound is unsuitable for the reasons set out below and must be relocated at least as far as the alternative site at TB40/41 highlighted in your Design Development Report.

21) Sealing End Compound nr Crabtree Lane

- i. National Grids own work presented in the Corridor and Preliminary Routeing and Siting Study Report (“CPRSS”) for last years consultation repeatedly highlighted in chapters 5 and 7 the risk of significant damage to the AONB resulting from use of overhead lines in this area (5.1.4; 5.5.5; 5.5.24;7.5.15; 7.5.16; Appendix B30) and stated that mitigation in the form of alternate routes (5.1.4; 5.5.5) alternative pylon design (5.5.18; Appendix B30) or more likely significant sections underground (1.3.40; 3.1.9; 5.5.8; 5.5.9; Appendix B30) would be required. As referenced above, the CPRSS indicated mitigation within 2km of the AONB and during consultation events your staff indicated that it was standard practice to underground within 3km.
- ii. Whilst you have elected to partially underground though this area you appear to have drawn a boundary at 1.3km distance from the AONB. This is significantly beneath both the threshold mentioned in the CPRSS (2km) and the boundary mentioned by your staff at events (3km). The Sealing End Compound and Pylons TB36 to TB 41 fall within 2km of the AONB and cause significant harm to the AONB and to its setting.
- iii. Horlock Rule (2) states that sealing end compounds should “as far as reasonably practicable seek to avoid altogether international and nationally designated areas....”.
- iv. Holford Rule (1) states “avoid altogether, if possible, the major areas of highest amenity value, by so planning the general route of the first line in the first place, even if the total mileage is somewhat increased in consequence. “
- v. The siting of the sealing end compound at the junction of the B1508 and Crabtree Lane necessitates multiple gantries and pylons in a small area in close proximity to the AONB. Contrary to what is written in the Design Development Report the siting here is not within a valley. The maximum

difference in elevation between the ridge and site is 8m and this applies at the lower end of the span only. Landscape in this area will not provide any meaningful degree of screening from hill or tree backdrops.

- vi. The choice of site fails in respect of Horlock Rule (2) and Holford Rule (1) in that it is readily visible from within the AONB as illustrated in the viewfall map below. It is similarly readily visible within the Stour Valley Project Area which as highlighted in Chapter 5 of the CPRSS is also an environment deserving of special recognition and protection. The situation is made more problematic by the concentration of infrastructure in a small space.

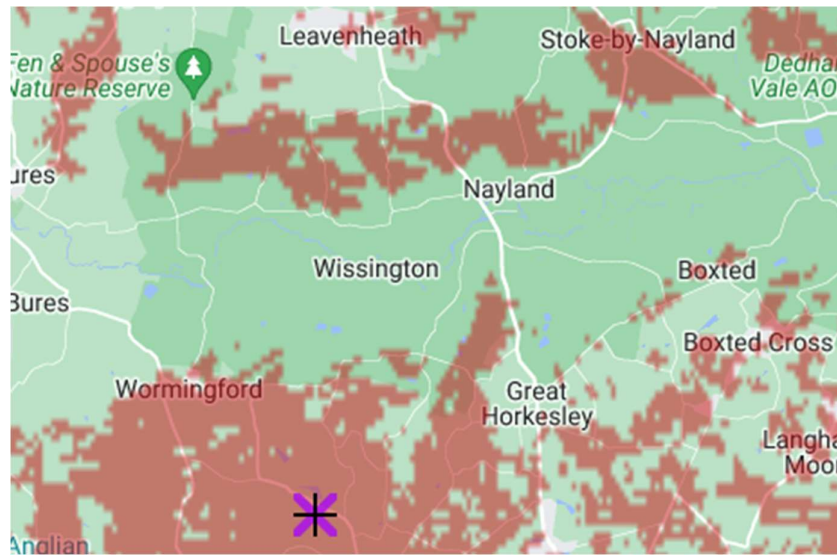


- vii. The selected Sealing End Compound and Pylon sites similarly fail Horlock Rule (2) and Holford Rule (1) in that they are also in close proximity to and readily visible from Listed Buildings and / or curtilage of Listed Buildings at each of:

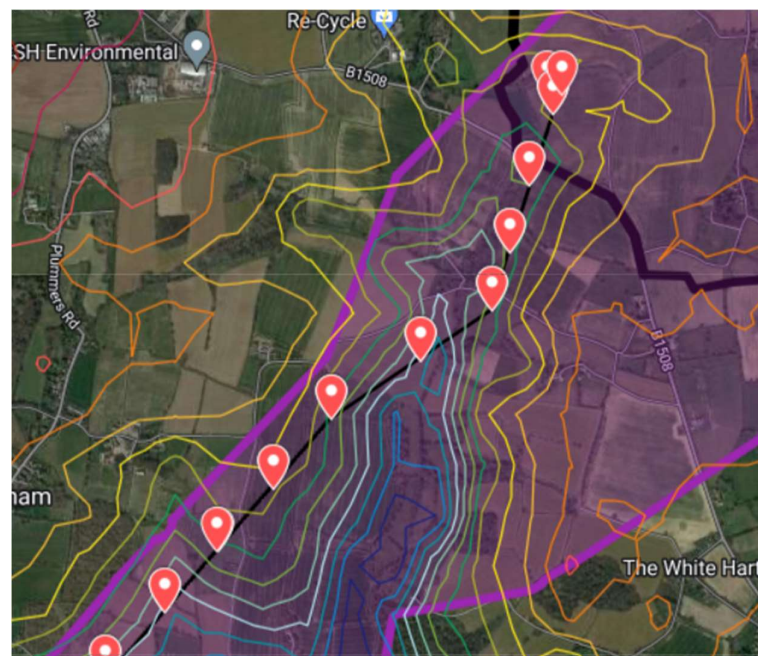
- The Grove, a 16th and 18th century timber framed house likely the same residential site associated with Roman archaeology nearby.
- Gladwins Farm, Holts, Upper Dairy Farm, Cockerells Farmhouse, Maltings Farmhouse: each of which being grade II listed farmhouses where uninterrupted views across open countryside including in to and out from the AONB have been enjoyed for 500 or more years and are integral to the cultural and heritage value of the region, setting and property. In all cases the agricultural setting from modern infrastructure is of cultural importance. [Note: the Gladwins Farm visible on the map above is a different Gladwins Farm to the one in close proximity to the Sealing End Compound]

Significant harm would result to these Listed Buildings and to their settings from the currently proposed site. The planning history of these buildings indicates a significant number of occasions on which residents have been required to modify proposals in order to ensure that views of the buildings across the landscape are protected and preserved, indicating their importance and the importance of views to/from these buildings. ***The choice of site is unsuitable as it would harm these buildings, hence contravenes the Holford Rules. The site cannot be moved closer to the AONB as this would also contravene the Holford Rules and hence needs to be relocated to the south, further along the route.***

- viii. This choice of site necessitates crossing the B1508 with pylons closely adjacent to and visible from the road in both directions. The B1508 is the main access route to the western side of the Dedham Vale AONB as well as the central access route to the Stour Valley Project area. Those visiting the AONB and Stour Valley Project will pass between 'arches of pylons' situated left and right of the roads and will be beneath dual-circuit 400kV cables as they drive in. This will materially impact the setting of the AONB and Stour Valley Project even in those places where pylons are not visible.
- ix. The industrialisation of the AONB through use of Pylons in this area is entirely incompatible with the setting and will do significant and lasting harm to an area which, per the Horlock and Holford rules, should be 'avoided altogether'. The situation is made more problematic by the concentration of infrastructure in a small space which leads to unacceptable wirescape and a significant "industrialisation".
- x. This is an area of tranquillity. Natural sounds and birdsong provide the predominant backdrop. The area is home to at least four types of bird of prey (several types of owl, hawks and buzzards) as well as significant bat populations especially close to the waterbodies. It is noteworthy that in this area even roads remain largely invisible from the Listed Buildings, being predominantly single track and set beneath the level of fields, in a manner in which the pylons would not. This all combines to provide a setting which is essentially unchanged in hundreds of years and in which a heritage landscape has remained unimpacted by modern life.
- xi. For the reasons set out above, the selected location for Sealing End compound at TB36/37 is greatly detrimental to a protected landscape, unsuitable and an alternative must be identified.***
- xii. Pylon site TB39 is situated at precisely the location of a Roman Kiln, archaeology is readily visible even at soil level. The type and nature of tiles indicates a more complex facility with underfloor heating and hence likely of value. A pylon cannot reasonably be situated here.
- xiii. Within the Design Development Report you state that an alternate site for the Sealing End Compound was considered at TB40 and discarded for the reason that it would require longer cable route and offer no additional benefit. This is untrue.
 - Whereas the selected site at TB37 is only 8m below the ridge, not in a valley, is overlooked by multiple listed buildings without screening and pylons there would be visible widely across the Stour Valley and AONB, the same is not true of the alternate site TB40 identified in your Design Development Report.
 - TB40 is situated some 16m below the ridge and is located within the start of a narrow valley. As highlighted in your report, the fields around TB40 are well screened by tall trees from each of the nearby listed buildings. The site is significantly less visible from within the AONB. Pylons would not frame the entry to the AONB or Stour Valley Project Area. Pylons located here will cause significantly less harm to the AONB than those at TB36/37 as illustrated in the viewfall map below.



- Elevations are illustrated on the map below commencing at TB37 (top right) through to TB47 (bottom left).



- Notwithstanding what is written below, the alternate site at TB40 offers significant advantages to the selected site at TB36/37, would reduce harm to both the AONB and Listed Buildings, and hence would be strongly preferable given that you currently intend to build at both. This change can be easily made and hence **is required** when measured against Holford Rule (1).
- ***Undergrounding must be extended to at least the alternate site at TB40, but ideally as far as TB42, in order to mitigate impact on protected landscapes and listed buildings.***

22) Comments in respect to construction along the whole route

- i. Undergrounding in itself is significantly damaging. Careful construction and mitigation including screening would be required during construction, in respect of the underground sections of line especially in the vicinity of Sealing End Compounds, and afterwards.
- ii. Use of underground cables through residential land is unacceptable and to be avoided at all costs.
- iii. Where undergrounding is to be used particular care must be taken in respect of road-movements as the local road network is not suitable for repeated heavy traffic movement and traffic plans must be presented to and agreed by parish councils.
- iv. Work should be conducted only during regular hours, avoiding evenings and weekends, and not overnight and should proceed 'one field at a time' in order to allow residents to return to normal life as quickly as possible. Trenches should be opened, cables laid, and trenches be re-filled in as short a time as possible (ie months, not years).
- v. Due to the presence of heavy clay soils work in agricultural fields must be constrained to the period between April and August in order to mitigate risk to soil structure.
- vi. It is important that infrastructure / construction within agricultural fields is positioned so as to allow passage and use of modern farm vehicles. This would require National Grid infrastructure / construction to be positioned along field boundaries, preferably making use of the corners of fields, and where not possible allowing 40 m clearance on all sides.
- vii. Trenches in agricultural fields should be to a minimum depth of 1500mm to allow for land cultivations such as ploughing.
- viii. Trees in fields should be avoided and protected during construction. When crossing hedgerows use should be made of existing gaps and otherwise where not possible work should be constrained to just the cable burying width. Gaps created in hedges must be re-planted with mixed native species to match adjacent hedging.
- ix. Given the nature of the local road network, work must be carried out in a way which will minimise closure of roads. The A134, B1508, London Roan, Vinesse Road and Straight Road must not be closed or traffic flow restricted under any circumstances.
- x. Where use of boring / drilling / tunneling near to pinch-points necessitates wider compounds these must be located away from populated areas and be subject to further consultation with residents and parish councils.
- xi. Construction should be started and completed in the minimum possible timeframe within this section to minimize disruption, and not during evenings or weekends.