

National Grid Norwich to Tilbury Pylons/Trenching

Statutory Consultation 2024

Re: Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) - Regulations 10 and 11.

Application by National Grid Electricity Transmission (NGET) (the Applicant) for an Order granting Development Consent for the East Anglia Green Energy Norwich to Tilbury upgrade.

Objection to the scheme

West Bergholt Parish Council accepts the need to transmit wind power generated by the North Sea but objects in the strongest terms to the National Grid's proposal to transmit the said power to Tilbury via a network of newly constructed pylons to include a small section of undergrounding designed to minimise the impact of the scheme on an area of outstanding natural beauty (AONB).

As far as West Bergholt is concerned, we are particularly interested in the area concerning from Ardleigh to Marks Tey.

The infrastructure to be installed in this area amounts to cabling suspended from approximately 115 new pylons over a distance of some 33.5 km. In addition, approximately 4 km. of underground cabling will be buried in the AONB which lies within the area. Needless to say, a great deal of this new facility will be visible from many vantage points in our village and its environs and will of course, be installed on pristine farmland.

The visual impact on the village is best illustrated in a photo montage attached hereto as **Appendix A**.

The Parish council maintains that consultation and discussion has been inadequate, particularly in the realm of cheaper, viable alternatives even insofar as the technicalities of the solution offered are inadequate and in fact are altogether the wrong choices. The reasons for stating this will become apparent further on in this document.

West Bergholt Parish Council supports the two following alternatives to the proposed scheme:

A fully integrated offshore grid

or

Underground High-Voltage Direct Current (HVDC) cables from Norwich to Tilbury, either underground or sub-sea. The sub-sea option includes a platform for Five Estuaries and North Falls which we welcome.

Harm caused by the project

After due consideration the Council finds the project to be inadequate and detrimental to the village and its environs generally and thus the Council objects in the strongest of terms to the project and we detail below the principal areas of objection.

The Project, if implemented, would impinge very heavily on the visual amenity of the village and its environs. As can be seen from the map Figure 1 below, the red line denotes the parish boundary, and the yellow arrow denotes the broad swathe within which the pylons would lie.

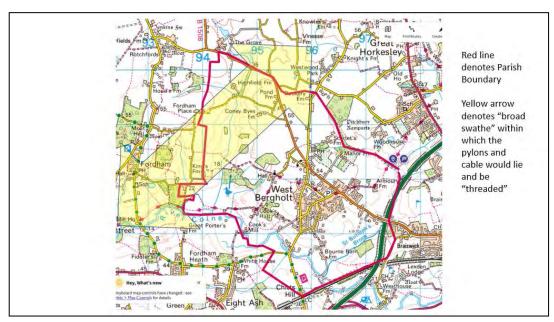


Fig. 1

Figure 2 below, denotes the general pylon zone within the Parish boundary which would be most severely affected should the project be implemented. Note that this figure denotes certain aspects of this area which relate to the photographs detailed in appendix A below and which are of particular environmental importance.

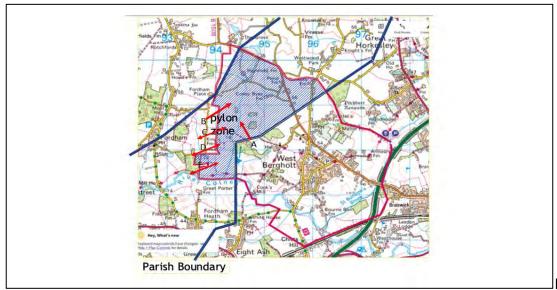


Fig. 2

The proposed installation of 9 steel lattice pylons, each some 50 metres tall, plus the Cable Sealing End compound, along with the proposed supporting infrastructure is bound to cause considerable disturbance to the area especially in terms of traffic movements and physical damage during a protracted period of construction.

These pylons will lie broadly to the North and West of our village which lies on rising ground of some 200m. This being the case, the pylons will be clearly visible from many sites within the village and will impact visually on much of the adjacent woodland which is under the protection of the Woodland Trust.

A more detailed example of the impact of the scheme on West Bergholt is given in the plan shown in Appendix C below. The plan illustrated a cluster of three pylons and associated infrastructure all clearly visible from West Bergholt and similar surrounding parishes.

Traffic access to the areas in question is generally from the A12 through Eight Ash Green and West Bergholt via narrow winding and limited access roads and it's anticipated to cause very major disruption to all routes in the vicinity of West Bergholt thus impacting heavily on local and business traffic.

Further harms are: -

<u>Heritage</u>

The planned route is in very close proximity to St. Mary's Church, a Grade I listed building dating from Saxon times and adjacent to the church is the Grade II listed Bergholt Hall. West Bergholt Parish Council is therefore of the opinion that the closeness of the project to such assets of national significance would cause material harm to them.

Archaeology

There is evidence of Bronze Age settlements close to the planned route and further evidence of similar settlements in the general area.

Environment, habitat, species

The proposed route through the valley to the Northwest of the parish boundary passes the ancient Hillhouse Wood. Species observed in the valley include: -

Deer – Fallow, Muntjac and Roe

Owls - Small eared, Barn

Birds - Pheasant, Partridge, White Egret, Buzzard

And an array of UK wildlife and insects.

Landscape

The proposed route crosses a natural valley which includes a waterway and spectacular views across the North Essex countryside, all of which will be heavily impacted by a series of 50m pylons. West Bergholt Parish Council would therefore urge National Grid to conduct a Valued Landscape Assessment of the Colne Valley so that the full impact of the development on the landscape can be understood.

Proximity to houses and businesses

There are several businesses in the immediate area along the proposed route that would be severely impacted by additional traffic movements during construction of the pylons and their accompanying infrastructure as would the many residential properties. It is anticipated that this increased traffic would be evident for many years to come thus impacting heavily on property values.

Public Rights of Way

The valley forms part of the Essex Way, formed in 1972. The Way is very popular with walkers, tourists and locals alike. All these groups would have their vista spoiled by the pylons and would be negatively impacted by construction work and heavy machinery for years to come.

Agricultural Land

The whole area encompassed by the scheme is heavily cultivated and the route crosses many arable crop fields which are often used for the planting of potatoes – a very high-water use crop. The possible clash of electric and watering systems would entail high risk which would mean that this valuable crop would be unable to survive once the pylons were active. This in turn would have a negative impact on rural employment in the area.

Aside from and in addition to the general environmental effects due to the proposed establishment of the Norwich to Tilbury overhead cable and pylon routing, West Bergholt Parish Council wishes to object to the scheme in the strongest possible terms on the basis that the chosen routing is the wrong choice firstly, the excess cost of the routing and secondly that the chosen routing is technically inferior as will be demonstrated below:

Economic and Technical factors

1. Cost-differential

National Grid is a private monopoly and as such NG has a legal requirement when installing major infrastructure facilities to follow the Treasury Green Book in order to assess among other considerations the financial impact on communities affected by the proposed development. Thus, in the case in point it will be the taxpayer and/or the bill payer who will ultimately bear the cost of the development and the

parish council has to date seen no evidence that National Grid has followed the legal requirement incumbent upon it in this regard. Accordingly, the parish council would point out that National Grid have themselves produced costings which demonstrate that the proposed scheme would cost some £2 billion pounds more than our preferred subsea routing. Therefore, the parish council can see no financial justification for proceeding with the overland route.

2. Technical

The following points showing the advantages of installing underground or subsea High Voltage Direct Current (HVDC) cables are clearly set out below. These advantages are self-evident but have not previously been included in West Bergholt Parish Council's list of objections to the overhear position:

Underground High-Voltage Direct Current (HVDC) cables offer several benefits over traditional Alternating Current (AC) cables, particularly in specific contexts such as long-distance transmission or undersea cables. Here are some of the key benefits of HVDC cables compared to AC cables:

- Reduced Transmission Losses: HVDC cables are more efficient over long distances. They experience lower electrical losses, making them suitable for transmitting power over large distances without the need for multiple substations along the route.
- 2. Stability and Control: HVDC systems offer better control over power flow, improving the stability of the network. This is particularly beneficial in connecting asynchronous grids or integrating renewable energy sources.
- 3. Lower Electromagnetic Fields: Underground HVDC cables produce lower electromagnetic fields compared to AC cables. This reduces potential environmental impacts and health concerns, making them more suitable for densely populated areas.
- 4. Space and Visual Impact: Because HVDC cables can transmit more power over the same diameter of cable compared to AC, they can be more compact. This is particularly beneficial for underground or undersea routes, where space is at a premium and visual impact needs to be minimised.
- 5. Technical Challenges with AC: For AC cables, especially when buried underground or laid underwater, the cable capacitance can lead to high reactive power generation. They can necessitate the use of compensating equipment along the route, increasing complexity and cost. HVDC does not have this issue, making it more efficient for such applications.
- Flexibility in Network Design: HVDC allows for the transmission of power between grids that operate
 at different frequencies or are not synchronised. This flexibility can be crucial in integrating energy
 markets and renewable energy sources across borders.
- 7. Cost-Effectiveness for Long Distances: For very long distances, the lower operational costs and reduced transmission losses of HVDC can offset the higher initial costs associated with HVDC converter stations. This makes HVDC more cost-effective for long-distance and undersea cable projects.

It's important to note that while HVDC offers the benefits stated above, the choice between HVDC and AC transmission also depends on various factors, including distance, cost, and the specific requirements of the electricity network.

Further flaws in the consultation process

It has been brought to the attention of the Council that, in addition to National Grid having to date ignored the stipulations of the Treasury Green Book, it appears national Grid is also in breach of----

With further reference to the environmental aspects of this matter, reference is made to the West Bergholt Neighbourhood Plan adopted by Colchester Borough Council on 16th October 2019/minute ref.19/148. Section14.3.2 of the Neighbourhood Plan advises in the landscape surrounding the village, the views to the west and southwest of the village are particularly noted as containing numerous footpaths extensively used by residents. In that regard the, attention is drawn to Neighbourhood Plan Community Ambition

Policy CA7 and map CA7, the Neighbourhood Plan can be found on <u>westbergholt-pc.gov.uk</u>. The overall area benefits from general protection by Colchester Borough Council countryside environment policies. Section 14.3.7 also states 'there are ten local wildlife sites of importance for nature conservation within the area which are protected within the local planning system'.

In addition to the environmental aspects, the Parish Council would reiterate further its objections to the project. The principle of these concerns the fact that National Grid has chosen a single preferred route to be consulted upon. The Parish Council objects in the strongest terms to this approach which it considers to be in contravention of standard planning procedure and of the Gunning Principles in particular. In that regard the Parish Council would have anticipated seeing alternative routes/options considered alongside with the overhead pylon route.

For the avoidance of doubt, Fig. 3 below is a graphic illustration including the cost differential, of the Integrated offshore grid that the Council is proposing compared with the unplanned piecemeal proposal being proposed by National Grid

Unplanned, piecemeal approach. COST £7billion with pylons.



Integrated offshore grid. COST £5billion.

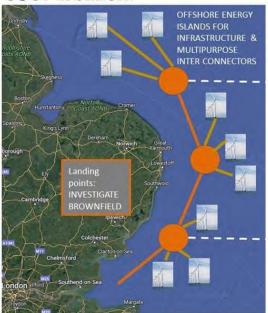


Fig. 3

It appears that National Grid has already entered into contractual agreements to take electricity from offshore wind farms as soon as construction of the wind farms is completed. This means that a separate connection from each wind farm will connect to the main grid separately thus precluding the construction of connections between wind farms. If this were the case, any attempt to construct an offshore network would be nullified.

Out of the anticipated new power generated from the offshore wind farms serving the Norwich-Tilbury route, approximately only 3% to 5% will be consumed in Norfolk, Essex and Suffolk with the remainder destined to supply Tilbury and London. Thus, those three counties will bear the maximum level of despoilation for the least return. This would not be the case if a truly offshore scheme was to be implemented.

When asked if National Grid had any alternative route in mind if in the event that the existing plan should be cancelled, the answer given was that no alternative plan had been given any consideration. Thus, we conclude that National Grid intends to proceed with its plan regardless of any opposition from whatever quarter.

Mitigation

In the very unfortunate case that permission for the National Grid Norwich to Tilbury upgrade was granted, the Parish Council would be seeking to mitigate the loss of amenity which would be experienced by the village population at large. It is fair to say that erection of the pylons will impinge unfavourably on every single member of the village community of some 3300 persons occupying some 1600 dwellings at present. This being the case, the Parish Council would be seeking for each dwelling to have electricity bills waived in full for twenty-five years from commencement of construction of the scheme in the area of West Bergholt. Alternatively, the Council would seek for a lump sum of £150,000 to be paid to every household within the Parish boundary (this to take into account inflation over twenty-five years from commencement of construction.

Under the Town and Country Planning Act 1990, it is incumbent upon the Planning Authorities to undertake an impact assessment on the site to be developed (in the case of West Bergholt the total area bounded by the profile of the pylons and gantries between pylon TB035 and pylon TB045 as shown in Appendix C below, this to include the infrastructure connecting the proposed underground section with the pylon as described).

Under the Act, any development must be acceptable in planning terms. This applies to any future development of the land if the amenity of open space is lost. Clearly this condition applies in respect of the Norwich to Tilbury project.

In light of the foregoing, West Bergholt Paish Council is of the opinion that the proposed development falls under section 106 of the Town and Country Planning Act and therefore there is the need for a section 106 agreement and this need should be discussed between the developer of the project and the planning officer assigned to the development and said discussions should have taken place prior to the planning application having been submitted.

Conclusion

In view of all the foregoing comments, it is the opinion of West Bergholt Parish Council that the proposed overhead routing of the Norwich to Tilbury upgrade is unacceptable and without merit and that the scheme should be abandoned in its present form. If it is the case that the scheme is approved, then West Bergholt Parish Council would insist that the offshore development should be implemented and failing that solution, the parish council would wish to see the HVDC undergrounding scheme instigated, before the one tabled is even considered.

Appendix A





Appendix B

Views that would impact West Bergholt's residents, road and recreational users if the pylons were installed within the corridor as advised by National Grid:

Location A: view from footpath leading from the Old Church toward Hillhouse Wood.

Location B: view from Fossetts Lane towards Rams Hall Lane.

Location C: view from Fossetts Lane, Hill Top Cottage.

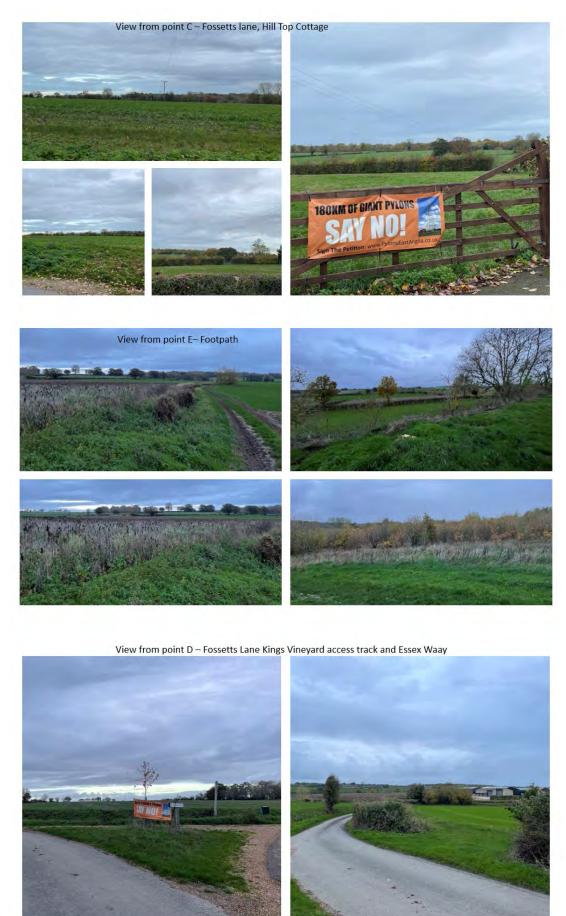
Location D: view from Fossetts Lane, Kings Vineyard access track, and the Essex Way.

Location E: view from public footpath at location E.





Appendix B cntd.



Appendix C

Plan showing location of a cluster Pylons and infrastructure crossing to the North of the Parish

