



Ardleigh Parish Council response to National Grid's East Anglia Green Energy Enablement (GREEN) consultation

1. Introduction

- 1.1. Ardleigh Parish Council considered the proposals at full Council meetings on 9 May and 13 June 2022. Representatives have attended various briefings and exhibitions arranged by National Grid. Our Council, with concerned local residents, has hosted information sessions and public meetings within our Parish.
- 1.2. The strong view of the Council, and of the residents we have spoken to, is that the proposals are unacceptable and must be opposed, and, further, that the consultation is inadequate presenting only one set of options and with a lack of transparency regarding costings and true impact.
- 1.3. Given the proposed position of the substation(s) within our Parish, and the overhead line and/or underground cabling required to connect to that substation, it is clear that Ardleigh would be uniquely and profoundly affected by these proposals, should they go ahead. There would be cables crossing our Parish in two directions, with a double line/ pinch point through Ardleigh approaching the proposed substation. In effect, three sides the centre of Ardleigh village, would be skirted or crossed. These lines/ cabling would be close to the Ardleigh conservation area, many homes and our village primary school and pre-school. The lines/ cables would cut through valued prime farmland and landscape and any pylons (up to 27 are proposed within Ardleigh) would be visible from nearly all parts of our beautiful, rural and relatively 'flat' parish adjoining the Dedham Vale Area of Outstanding Natural Beauty.
- 1.4. Ardleigh Parish Council endorses the opposition to the proposals of the Essex Suffolk Norfolk Pylons campaign group, the strong opposition of Tendring District Council (TDC) *'The selected site does critical damage to the Tendring Peninsula and the village of Ardleigh'* and of our MP, Sir Bernard Jenkin.
- 1.5. We support the calls for a strategic off-shore solution and would call on all parties (including off-shore windfarm providers, battery storage providers etc, local authorities and the government) to work together and, if necessary, to update the regulatory framework, to enable a genuinely strategic and collaborative approach to the issue of energy supply and to ensure that any future consultations provide a full range of considered and costed options.
- 1.6. Failing this, we believe that an alternative route should be seriously considered. It is not clear why existing pylon routes broadly taking the same route cannot be upgraded, or that cables could not follow existing infrastructure such as the A12. An alternative site should be sought for the sub-station and options away from the AONB presented for full consultation.
- 1.7. Both TDC and our MP make direct reference to the impact on Ardleigh, and hence its communities, landscape and wider environment. We will not repeat general points in our submission, but will focus on some specific issues affecting Ardleigh.

2. Consultation with our residents.

- 2.1. There is a strong feeling that despite the glossy appearance and the various information events (online and in person) this has not been a real consultation and that no meaningful options have been presented.
- 2.2. This is especially the case in relation to the siting of the substations. At the briefing session for Tendring parishes on 27 April questions were asked about alternative sites and were encouraged to suggest alternatives ourselves! No detail was provided about the process National Grid had followed in order to choose the proposed site.

- 2.3. We don't believe that the consultation has been properly publicised locally. Many affected residents were unaware of the proposals as the mailshot was too narrow and inconsistent. We were told at the briefing that those within 1 km of the 'purple swathe', where pylons are proposed, should receive a mailing; our understanding is this was not the case.
- 2.4. A provisional booking for Ardleigh Village Hall for a consultation event on 31 May was cancelled, (in late March before we knew about the scheme), hence there was no event in our Parish, despite the significant and disproportionate impact on our community. Why did NG and its agent not proceed with that booking? Our Council and local residents have committed significant time and other resources to raise awareness to ensure that residents can be informed and contribute to this consultation.
- 2.5. Within the materials provided there is inadequate information as to the impact of the proposed new substation site likely to be in Ardleigh close to the borders of Little Bromley, Lawford and Great Bromley
- 2.6. Our view is that the current consultation is so flawed that it is invalid and cannot be relied upon either to gauge public opinion or as the basis for any later statutory consultation.
- 2.7. In addition, there is considerable community anxiety at the prospect of large-scale and intrusive physical on-shore infrastructure in the form of pylons and substations in sensitive locations close to homes, with associated concerns about health (mental and physical health such as reports of childhood cancer near pylons) and land values and house prices. We consider that this could undermine public support for off-shore wind and other means of generating clean and green energy which in turn could be damaging to the government's ambitions around zero carbon and the fight against climate change

3. Substation(s) within Tendring

- 3.1. We are extremely concerned about the potential land-take and height of a new substation at the borders of Ardleigh/Little Bromley/Great Bromley and Lawford. As a rural village there is poor road access, via narrow country lanes which will be badly affected during the construction process to accommodate the huge vehicles required. These concerns are magnified by the fact that potentially two additional customer substations might also be located alongside.
- 3.2. There is little information as to the impact of the proposed new substation site. The size of the proposed substation is enormous at 45 hectares and would dwarf the existing substation (which incidentally is well camouflaged) and take out many fields used for crops and grazing hence impacting on the agricultural output and viability of the area and contribution to the food supply chain.
- 3.3. There is no proper explanation as to why this site has been chosen. We assume that the existence of the existing small substation close to the site was a factor, and the relatively sparse population in the area. We were told at briefings that NG wanted a site with additional potential for expansion in the future. We are braced for not only the 45 hectares needed by NG and the 15 hectares already seeking permission for battery storage, but at least two further 25 hectare substations for the two off-shore windfarms and further solar or other battery storage provision.
- 3.4. We oppose the route selected in because the proposed location of the substation means that the direct path of the pylons must be diverted to go in and out of the substation creating two lines of pylons and then encircling Ardleigh village to re-join the North, South route causing blighting by pylons on three sides.
- 3.5. Like TDC, we do *'not understand the logic around the route of the 400kV powerline deviating from what would otherwise be a relatively straight, direct, and surely less costly, route in order to enter Tendring solely for the purposes of accessing a new sub-station to which 132kV connections would be made. Surely it would make more sense for the 400kV line to take a more direct route and for the substation to be located on that route and for the underground 132kV connections from the off-shore windfarms to be extended. These issues could all be resolved through a route around the coast as suggested elsewhere in these comments'*.
- 3.6. The area proposed is flat, quiet and rural, with narrow lanes bordered by hedges, which are used by walkers and horse-riders and with very little light pollution. The people living in the immediate area, or using it for leisure, would be impacted for ever, not just during construction.

- 3.7. The disruption during the construction phases would be enormous. We have had to deduce how this would be built as the consultation does not provide any information. However, we gather that haul roads of high specification would be built to manage the construction traffic. Once completed the haul roads would be removed and the local road network used for ongoing maintenance and there would be noise and light pollution affecting local residents. The existing single track lanes are simply not suitable for any HGVs. Emergency vehicles such as fire engines could well struggle to reach the site- a particular concern if battery storage is included. If the existing lanes are widened (if this is even possible?) there would be further loss of ancient hedgerows and habitat and loss of landscape and rural outlooks.
- 3.8. Future consultation should include not only the site of the sub-station, but the implications of that site with respect to the impact of cables in and out from the site and of ongoing maintenance. Options should be presented which must include offshore alternatives (off-shore substations) as part of a strategic grid as well as brownfield sites onshore.

4. Underground cabling including Area of Outstanding Natural Beauty (AONB)

- 4.1. Parts of our parish border Dedham and the AONB and it seems clear from the consultation materials and the Tendring parishes briefing session that the intention is to take cables underground only where this is strictly required. We were told that cabling underground is more expensive than pylons and that there was a responsibility on National Grid keep costs down for consumers!
- 4.2. Within the AONB, undergrounding still causes significant damage and blight, with swathes up to 100 metres wide excavated and built for vehicle access. National Grid recognise that significant damage to the AONB would result from use of overhead lines even near to the AONB (CPRSS). National Grid recognise that mitigation in the form of alternate routes, alternative pylon design or more likely significant sections underground would be required close to the AONB
- 4.3. The underground section is far from sufficient to mitigate blight of the AONB. At the very least, any area which abuts the AONB should also be undergrounded as it will have a significant adverse impact on the AONB. The proposed sub-station is in close proximity to the Dedham Vale AONB. There is the potential for significant damage to the AONB as a result of cables in to and out from the sub-station which are scheduled to run along the southern length of the AONB.
- 4.4. Whilst the grounding of the powerline through the AONB would bring about temporary disruption that would be mitigated over time, it would still bring about significant damage to the area and affect the tourism industry during the construction period. An offshore route would avoid any damage to the AONB.
- 4.5. We would argue that should the proposals to take the line over land (rather than via a strategic offshore ring) then further underground sections are needed to minimise the negative impact.
- As a first step, to protect the setting of the AONB cables must be buried wherever they fall within 3 miles / 5km of the boundary of the AONB.
 - Secondly, as has been proposed by Tendring District Council, the diversion off the main north-south route to access the substation through Ardleigh should be placed underground; including the full section from the AONB to the sub-station. This would partly address other concerns below relating to impact on listed buildings, heritage assets and local protected green spaces.
- 4.6. Under the current proposal, the underground cables through the AONB will need to come to land at some point and we expect this to be within our parish. Locations for Cable Sealing End Compounds . sites to facilitate end point of underground section must be carefully chosen and subject to further consultation.
- 4.7. It is assumed that the two new off-shore wind farms will use underground cabling from the coast to their own substations and that these are now expected to be positioned close to that proposed for the National Grid (NG). It is entirely unclear to us how/why the commercial operators of windfarms are able to justify undergrounding while NG are not. If this related to regulatory/ competition requirements we urge a change of approach and regulatory updates to reflect the current realities and aspirations for net zero!

5. Agriculture and disruption to land

- 5.1. The Parish of Ardleigh has some of the best agricultural land in the East of England including designated ancient farmland. Apart from the huge damage that would be caused during construction, there would also

be permanent loss of land, due to both the pylons themselves and the substations, which would have a negative impact on the agricultural output and viability of the area and contribution to the food supply chain at a time when the Government food strategy is seeking to improve food security and sustainable production. We have heard from farmers and landowners who are appalled at the proposed development and who do not feel properly consulted including regarding surveys of their land.

6. Local archaeology

- 6.1. Ardleigh has been continuously settled since Neolithic times between 4000-200BC. Within our Parish and very close to the purple swathe there is an Ancient Monument that consists of crop circles showing bronze age burial sites, ditches and trackways. This area has produced a huge number of archaeological finds from the earliest Neolithic finds through the bronze age, Roman period, Iron Age and into the Saxon period. It is unimaginable that the settlements were limited to the site of the Ancient Monument. A Roman road from Hythe Quay, Colchester to Mistley Quay, crossed our Parish (and the purple swathe close to Badley Hall). Location of pylons, haul roads and substations could seriously damage the archaeology of Ardleigh.
- 6.2. There is a current planning application (21/02070/FUL) for proposed battery storage adjacent to an existing small substation on the edge of Ardleigh and adjacent to the proposed NG substation site. Specialist archaeology advice has been sourced as part of that consultation. As there is evidence of crop marks showing signs of settlement boundaries and potential for below ground archaeological deposits etc. this report recommends a programme of archaeological investigation to be completed before any development including preliminary groundworks. It is a reasonable assumption that the same concerns would apply to any new substations proposed in this vicinity and indeed to any groundworks required e.g. for pylons, cables or access roads.

7. Heritage including Listed buildings

- 7.1. There are around 72 local listed buildings in the Parish of Ardleigh. Nearly all the listed buildings would be within sight of the Pylons including the conservation area at the heart of the village. Listed buildings have protection not just in terms of the buildings themselves but also in relation to the context of the landscape in which they sit. This proposal will permanently damage the context and settings of the listed building and of wider heritage assets.

8. Tourism, leisure and businesses

- 8.1. Ardleigh has a number of businesses relying on tourism and visitors (such as holiday accommodation including caravan and camping site, vineyards, public gardens) which could be blighted by the pylons. We also have angling and sailing on the reservoir which could be affected by pylons as the purple swathe goes across part of the reservoir.

9. Habitats & species

- 9.1. The Parish of Ardleigh has an extremely diverse and rich wildlife and contains ancient woodland and priority habitats. It also has a reservoir which is the home of both indigenous and migratory birds (including swans, herons, cormorants, ducks and geese as well as occasional visitors such as bittern and osprey) and wildlife (including bats). The building of haul roads, erection of pylons and construction of substations would be extremely damaging to the wildlife of Ardleigh.
- 9.2. This would affect the environment directly; due to extensive habitat loss due to the high volume of land take/ loss of habitat, including the decimation of trees and hedgerows, and indirectly; due to the disturbance of habitat during construction. In addition, there is the known issue of bird fatalities caused by striking powerlines.

10. Landscape and visual including Green Spaces and our Neighbourhood Plan

- 10.1. Since 2020 we have been developing a Neighbourhood Plan for Ardleigh which is nearing completion. During the consultation for this emerging plan the majority of our respondents told us that they valued the green spaces and rural feel of our parish and did not wish to see further development. We did not ask directly about pylons, but cannot conceive that 50m high pylons could be compatible with the aspiration to protect our rural setting.
- 10.2. In particular a number of new Protected Local Green Spaces are proposed to protect specific areas which were valued by our residents as places of beauty, tranquility or local interest. Around 12 spaces were

proposed a number of which fall within the purple swathe and which could have pylons passing directly over them. This includes an area of public footpaths and a lake behind the village Primary School which our residents wanted to be protected for future generations. As a minimum, cables should go underground in such spaces.

11. Strategic solutions and collaboration.

11.1. Prior to this consultation, two new wind farm providers, North Falls and Five Estuaries have been consulting and liaising with landowners about their own proposed routes from sea to land and on to the rest of the power network. We understand that the initial cabling will be underground taking different routes across the Tendring peninsular heading to the new substations which we expect to be close to the proposed NG one (see above).

11.2. In December 2021 we responded to the North Falls consultation, copied to Five Estuaries, as follows

'In principle, the Parish Council supports the generation of green energy and is not opposed to the development of offshore wind farms. We are, however, very concerned about the loss of high-grade agricultural land, which is in relatively short supply in the wider area and is vital for food production. There are concerns about potential damage to the ecology of the land used and passed through, as well as potential disruption to the communities caused by the cabling and other infrastructure required.

Our particular concerns relate to the potential proliferation of sub-stations and the cumulative impacts of numerous sub-stations, battery storage and associated cabling.

Our understanding (partly from the meeting with yourselves) is that it would be technically possible for some infrastructure to be shared between providers, but that there were commercial and (perhaps) legal/competition constraints which mean that multiple sites and cabling would be needed. Further, that some of the cabling and infrastructure could be placed offshore, but that this would be more costly and time consuming (and perhaps less commercially viable).

We feel that there is a parallel with the telecommunications sector where mobile operators were not able/willing to share masts until required to do so by legislation (eg Shared Rural Network).

We would therefore urge all parties to recognise the value of working together in order to minimise disruption to communities and to the ecology of the area and to lobby for this to be made possible. Further we would urge that brown field, rather than agricultural land is used for the sub-stations etc. We will be liaising with other councils in our area, at all levels, and with our MP (District and County Councillors and MP for Ardleigh all copied) to seek to promote a more collaborative approach to infrastructure requirements of the new wind farms which does not cause harm to the landscape, ecology and minimises disruption to our communities.'

11.3. The fact that each provider and National Grid will each need their own substations is, we understand, in part due to the regulatory position which prevents full co-operation and sharing of infrastructure.

11.4. Similar issues have been flagged by Tendring District Council;

'We are very concerned about an apparent lack of coordination between engagement on East Anglia Green, North Falls and Five Estuaries. Whilst it is understood that these projects are being promoted by three separate organisations, the fact that they are so closely interrelated and are all aimed at helping to achieve government targets for zero carbon, a more coordinated approach to consultation and the planning process should surely be achievable.

There is confusion as to the differences between the three projects and are unclear as to how they relate to one another. For example, in considering this consultation, many residents are interested in understanding how the connection from the offshore windfarms to the substation and 400kV powerline will be achieved - these are questions that National Grid is not in a position to answer as North Falls and Five Estuaries are being promoted separately.

There is also significant concern about the impact, efficiency and common sense of separate offshore windfarms making land-fall at separate locations and having separate harmful impacts in terms of routing across the countryside and in the establishment of multiple substations.'

11.5. The impact on local people, and presumably the overall cost to consumers, is increased by a lack of joined up thinking/ co-ordinated approach leading to the creation of parallel infrastructures which ought to be technically possible to share. These issues could be addressed through a strategic off-shore grid and changes

to regulatory restrictions to support full collaboration. We, again, call on all parties to seek collaborative solutions which have the least negative impact both on our communities and our environment.

12. Summary

- 12.1. As stated above, we endorse the position of the Essex, Suffolk, Norfolk Pylons campaign.
- 12.2. This proposal with its pylons and substations would be devastating to our landscape, wildlife, agriculture, archaeology, heritage and most importantly the wellbeing of our residents. This was not a valid consultation. No alternative proposals were offered including the one that we think is the only truly sensible option which is to create an undersea ring main.

*Ardleigh Parish Council
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