To Whom It May Concern,

I am writing on behalf of CARE Suffolk regarding the non-statutory consultation for the East Anglia GREEN (EAG) reinforcement pylon proposal by National Grid (NG).

We are a community group and have members in the villages of Bramford, Burstall, Elmsett, Flowton, Little Blakenham, Somersham, and Sproughton.

CARE Suffolk Overall Position on EAG

We wish to start by stating that we agree with the need to transform our transmission network due to the shifts in how our energy is produced, but at the same time we must respect the landscape and countryside we all live in and share. Net Zero must not be at any cost or to the detriment of our countryside, local communities and natural environment.

In the words of John Pettigrew, Chief Executive of National Grid *"Business needs to stand for something more than simply profitability. Now, more than ever, we have a responsibility to demonstrate our contribution to society more broadly."*

There has been a significant increase in the number of industrial energy related applications in the area and local communities are bearing the brunt of these individually and cumulatively. The piecemeal approach has led to an overwhelming lack of co-ordination and a serious lack of safeguarding for local communities. This is despite a co-ordinated holistic approach to network design being proposed for East Anglia over a decade ago and still not appearing any closer to fruition. The EAG proposal here further compounds that lack of safeguarding.

CARE Suffolk's preference for EAG is that NG scrap the onshore pylon proposals, and instead redirect those efforts into a co-ordinated offshore grid, with an offshore version of EAG instead. Who better to get this offshore grid kick-started than NG themselves? Considering this is the first public consultation on the project and has an expected delivery of 2028, and the offshore wind projects that NG hope to connect into the East Anglia substation must also be at a very early stage, since the substation doesn't actually exist, all these projects would seem to be very good starting points for the offshore grid.

Thus, CARE Suffolk **STRONGLY OBJECT** to the current proposal.

Assessment of the Current EAG Proposal

Without prejudice to our above statement, we have assessed the documentation specific to this proposal, and have many concerns and points to raise. Our concerns relate specifically to the villages mentioned above, though we understand that some of our concerns are shared along other parts of the route. However, there also appears to be a considerable amount of information lacking from the proposal so far, and despite asking NG for more information many of our group members are still awaiting answers.

Based on the information and proposal documents currently available our additional concerns and feedback are:

- Deficient consultation and information on option details
- Over reliance on Bramford Substation
- Lack of public and project lifecycle costs taken into consideration
- Unknown carbon cost
- Overgrounding at the Bramford end of the proposal
- Cumulative impact on landscape at the Bramford end of the proposal

- Harm to heritage assets
- Harm to wildlife and Flowton Roadside Nature Reserve 92
- Impact on Elmsett Airfield

Deficient consultation and information on option details

It is interesting that the choice of pylons was the starting point for the project, and that it was chosen before the route. Given that numerous planning policies and documents demonstrate that the primary consideration for a development is a suitable location considering environmental constraints, and the variety of technology options available to National Grid, this seems like a tunnel-visioned approach to a project's development.

The EAG project will require an Environmental Impact Assessment (EIA). One of the requirements of an EIA development is that it demonstrates consideration of alternatives.

Studies indicate that reasonable alternatives in EIA should meet six criteria:

- they are considered early in the design process;
- they are credible and appropriate for the project;
- comparisons have been made between them;
- a consultation has been conducted on them;
- they include additional forms of mitigation alongside the alternatives; and
- the environmental statement contains information on alternatives and the approach used to select them.

It is our assessment that NG have not yet met a single one of these criteria. NG has prejudiced the consultation exercise by removing important options without any consultation and in direct contradiction to the statements of its Chief Executive quoted above. A co-ordinated offshore grid has been known to be viable for quite some time, and as such the current proposal fails to meet the requirements under EIA law in its assessment of reasonable alternatives.

A more logical approach would seem to be to:

1. Identify the various route options available both onshore and offshore given environmental constraints
2. Identify the suitable technologies along the various route options given environmental constraints
3. Produce a selection of both onshore and offshore preferred options for public consultation
4. Determine a final route and technology (or combination of technologies) for the project given environmental constraints and public feedback

Page 5 of the Project Background Document is very interesting here. Bold text is our emphasis.

*"We want to ensure that all stakeholders are engaged in the development of our proposals and have the opportunity to comment on the proposals at **key decision making points**."*

*"We want to carry out **genuine and meaningful consultation**…"*

*"…this is your opportunity to comment on our proposals at an **early stage** of the project development."*

*"It is important that we hear the views of local people. Your feedback is important to us. **Knowing what matters to you, matters to us.**"*

Clearly these are hollow words and are simply lip service to appease the public consultation requirements. The public were not included at a key decision making point at an early stage – to choose pylons. Furthermore, given the huge public outcry over the last decade regarding using pylons for the Bramford to Twinstead project, what matters to the public – protecting our landscape and countryside – has already been forgotten about or ignored (even though Bramford to Twinstead is an active project).

Decisions explained within the documentation are clearly tainted with the pylon first approach, and should NG continue with the project in the way they have thus far, future decisions for the project seem at risk of being poorly informed and judged, producing tainted conclusions.

Furthermore, the environmental constraints considered are severely lacking in detail. We know that environmental information for the proposed route, let alone the other options, is not available, even to NG. The first public consultation for the project opened on 21st April 2022, and at the time of writing this environmental surveys have still not been carried out. Landowners in the swathe received letters from Fisher German (National Grid's land agent) at the start of the consultation, and landowners around the swathe received similar letters around the mid-point of the consultation.

To claim that this is the best option without full environmental information is premature and deceiving.

Over reliance on Bramford Substation

Within the Project Background Document page 34 states *"To maintain system integrity (maintaining supplies under a range of fault and outage conditions), we need to connect the reinforcement into the network in either the Bramford or Twinstead area."*

The document very clearly explains why Twinstead is not an option. However, we question the system integrity if something were to happen to Bramford substation itself.

Several hazardous developments are approved and proposed very close to Bramford substation, namely large scale battery storage. Some even adjacent to it. We have raised this concern with the local planning authority should a significant fire incident occur at one of those sites.

On 15th September 2021 a fire broke out near a major interconnector between the UK and France[1], that supplies up to 2GW of electricity to the UK. Bramford Substation transfers up to 20% of the entire UK's electricity consumption[2], making it a major infrastructure feature in the ability of the UK to basically function. If a fire were to break out near to the Bramford Substation, or something else went wrong in close proximity or even in Bramford substation, it would likely impact the whole site. This is highly irresponsible from a business continuity point of view, let alone the integrity of the UK's electricity supply. We respect that NG are assessing the vulnerabilities of the network routes, but NG should also consider all threats/ vulnerabilities to their infrastructure of being concentrated in one place.

Are too many eggs being put in Bramford Substation?

Lack of public and project lifecycle costs taken into consideration

Within the Corridor and Preliminary Routeing and Siting Study Report (CPRSS) a breakdown is given for the project costs based on the various corridors considered.

It is our understanding that this cost is based on the financial construction cost.

Construction costs are not the only costs within a project though. There are other direct costs, as well as indirect costs associated with a project like this.

Direct costs include, but are not limited to: the project development and research costs, such as for planning consultants and for specialist environmental surveys; consultation costs, including public meetings and printing of project information documents and maps; land agent and landowner access costs as we understand landowners may claim back land agent costs as well as receive payments for access to carry out surveys; construction costs; maintenance costs of the final built project, both ongoing regular maintenance and potential emergency repairs; and end of life costs.

Indirect costs contain a vast range, of which this is only a small portion, such as: health costs to the public who are now experiencing stress over this pylon proposal; loss of house and property value on the public purse in terms of lower stamp duty (if people most affected can even sell their home); costs to wildlife; harm to businesses who rely on

[1] https://www.bbc.co.uk/news/uk-england-kent-58570893
[2] Equinor OTNR Virtual Information Session Recording https://vimeo.com/593280649

their home value for loans to invest in their business and the economy; and harm to tourism which relies on the unspoilt countryside.

For a genuine and meaningful consultation NG needs to be more transparent regarding the other costs involved, both direct and indirect, and for the full project lifecycle. Many of our members, as well as others along the route, have asked NG for comparison costs. But no answers have been forthcoming. Some of our members at the Burstall public information event were told they haven't been calculated, further confirming the insufficient consideration of alternative options.

Unknown carbon cost

Another cost not considered within the documents is that of the carbon cost. We recognise that the offshore wind and nuclear energy that this project is expected to transmit across the country is low carbon, but there appears to be no consideration of carbon costs for this project itself.

Two of the largest well established carbon emitting industries for raw materials are that of steel and concrete. A 180km route of pylons would require a significant amount of both steel and concrete. Offshore and underground options would need considerably less of both these materials.

It is misleading to claim to be a "green" project on the back of other projects, when the project itself is potentially the most carbon polluting option available.

A full CO_2 emissions comparison between the options needs to be presented.

Cumulative impact on landscape at the Bramford end of the proposal

Bramford Substation appears to have been designated as the hub for all large scale Suffolk produced electricity to travel through. We believe there are currently eight existing overhead lines connected to Bramford substation: four 400kv lines, and four 132kv lines. With additional underground lines. Though some of the overhead 132kV lines are in the process of being upgraded to 400kV. In addition to this there is the proposed Bramford to Twinstead line, and now this EAG route of another two single lines (one north and one south of Bramford substation).

In addition to this, there are a significant number of other industrial developments in the near vicinity of this development. Some are approved applications, some are pending decision.

The applications are not listed within the CPRSS documentation, though there is a passing reference to one of the solar farms: *"Both the Ancient plateau claylands and, to a lesser extent, the Rolling valley farmlands LCTs could be subject to significant adverse effects due to the increased density and extent of wirescape, which, in combination with the proposed solar farm, could alter their key characteristics."*

We are not sure which solar farm NG refer to, because there are in fact three proposed solar farms around Bramford substation, in addition to other industrial energy developments in the area. The combination of these proposed developments would give rise to a significantly changed landscape. We note that the cabling for the EA1 project was fully underground, with the mitigation on the landscape being a key factor for this decision.

Furthermore, within the CPRSS documentation NG makes many statements that clearly demonstrate that overhead pylons are inappropriate at this location. Bold is our emphasis.

"There is high potential for the development of a 400kV OHL within this section to give rise to ***significant adverse effects on local landscape character in combination with the existing NG and DNO assets*** *that converge at Bramford substation. This is because it is possible that* ***this landscape has reached its capacity to accommodate such infrastructure****."*[3]

[3] CPRSS Appendices B3 on Landscape and Visual

*"Potential **significant cumulative effects** in combination with 4YL and BTNO for residents of Burstall and in combination with 132kV OHL for scattered properties within the section."*[4]

*"Some of the cumulative effects on landscape character and the visual amenity of residents and effects on the Babergh SLA **may not be mitigated through normal routeing and siting practices and may require mitigation through the rationalisation of 132kV assets or by the undergrounding** of part the proposed connection."*[5]

*"This section presents some challenges to routeing as an OHL. Particular areas of concern are as follows. **In the vicinity of Bramford substation (potential cumulative effects on local landscape character in combination with the existing NG and DNO assets that converge in this area)**. Conflict with saved policies CR04 and CR05 (Special Landscape Areas) of the Babergh Local Plan 2006 as the section would pass through four areas identified as SLAs."*

Whilst we appreciate the recognition that the line south of Bramford substation passes through a SLA, we must raise the point that the proposal north of Bramford substation also passes through the same Gipping Valley SLA, and the proposal would conflict with saved policy CL2 of the Mid Suffolk Local Plan 1998. This has been omitted from the CPRSS.

Unspoilt view from Somersham Road looking SSW over the Gipping Valley SLA north of the Bramford substation.

Furthermore, it is confusing that in the Bramford to Twinstead project NG propose to remove a 132kV line to the south of Bramford substation, stating an added benefit of it improving the landscape, only now to propose to destroy it with even larger pylons.

[4] CPRSS Appendix B3 on Landscape and Visual
[5] CPRSS Appendix B18 on Landscape and Visual

Unspoilt view from footpaths south of Burstall Hall looking south over the Gipping Valley SLA south of the Bramford substation.

NPS EN-1 at 5.9.8 states (our emphasis in bold) *"Landscape effects depend on the existing character of the local landscape, its current quality, how highly it is valued and its capacity to accommodate change. All of these factors need to be considered in judging the impact of a project on landscape. Virtually all nationally significant energy infrastructure projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints* ***the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate****."*

Whilst we strongly prefer a co-ordinated offshore approach, a secondary preference would be for underground cables, rather than pylons. Whilst we would expect to see a detailed LVIA as part of the statutory consultation, it is clear that increased wirescape in the area would further join together development in the area and significantly change the rural arable landscape character to one of industrial development. The above analysis by NG and conversations with NG representatives at the Burstall public information event confirms this is already known and it is disappointing that mitigation of such effects through underground cabling has not been proposed at this early stage.

We note that another option of mitigation not mentioned is the use of T-pylons. At this stage we do not believe these would be suitable for this project at this location. Though T-pylons may be suitable at other locations along the route out of the scope of this response. Whilst the shorter design would have a lower impact on landscape and visual amenity in terms of distance from the project, the starkly contrasting design to existing lattice style pylons converging on Bramford substation would have a jarring effect. However, this does not negate our strong preference for an offshore option or secondary underground option to be put forward first and foremost.

Harm to heritage assets

The villages under our consideration are known to be centuries and millenia old. Recordings in the Doomsday book, a wealth of listed buildings and non-listed heritage assets, and archaeology surveys in the area confirm that this area has been a valuable and rich area for agriculture. No mention of assessments, or even recognition, of these heritage assets has been mentioned in the documentation, further alluding to the lack of consideration for environmental constraints when choosing the route, technology, or mitigation.

Listed and non-listed heritage assets in our area that would, to varying degrees, be impacted negatively by the proposal include (but are not limited to):

Grade 1 Listed Buildings	Grade 2 Listed Buildings	Non-Listed Heritage Assets
St Mary's Church, Flowton St Peter's Church, Elmsett St Mary's Church, Burstall	Gates Farmhouse, Flowton Granary at Gates Farm, Flowton Valley Farmhouse, Flowton Bleak Hall, Somersham Gunn's Farmhouse, Somersham Barn at Gunn's Farmhouse, Somersham Canes Farmhouse, Burstall Burstall Hill Cottages, Burstall Half Moon, Burstall Barn at Whitehouse Farm, Burstall Mulberry Hall, Burstall Fenn Farmhouse, Burstall Tye Farmhouse, Bramford Bullenhall Farmhouse, Bramford	Flowton Hall, Flowton Burstall Hall, Burstall

Setting south of St Mary's Church, Flowton. The graduated swathe passes across this entire view through the field in the foreground, between St Mary's Church and Flowton Hall. The 50m height of lattice style pylons would dominate this view, where existing pylons are just discernible in the distance and only a small 33kV line currently passes.

NPS EN1 at 5.8.14 states *"There should be a presumption in favour of the conservation of designated heritage assets and the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be. Once lost heritage assets cannot be replaced and their loss has a cultural, environmental, economic and social impact. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II listed building park or garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; registered battlefields; grade I and II* listed buildings; grade I and II* registered parks and gardens; and World Heritage Sites, should be wholly exceptional."*

The area is an attractive rural countryside, which contributes significantly to the setting of many of these buildings. Clear and convincing justification for the harm to the setting of so many heritage assets has not been made.

Harm to wildlife and Flowton Roadside Nature Reserve 92

There is an abundance of wildlife in the area as noted in various proposed projects, such as the various solar farms, battery storage projects, and Bramford to Twinstead project. This is also apparent on any site visit to the area. There are also several ancient woodland sites that do not appear to have been considered. It is disappointing that surveys have not yet been carried out as discussed above and presented as part of this consultation. It is a significant oversight when assessing different routes and technologies.

The EA1 and EA3 offshore windfarm cable routes that connect into Bramford substation were put underground. We understand that Scottish Power Renewables (SPR) decided this early on, and that in the decision letter for the project it states *"the Secretary of State is aware of the potential for Electric and Magnetic Fields (EMF) to have direct and indirect effects on human health… He is also aware that mitigation is available for such effects through the burying of cables…"*

With so many overhead cable lines already converging into the area, further overhead cabling presents even greater cumulative, and unnecessary, risks of EMF on the health of nearby residents and wildlife.

Furthermore, of specific concern at this stage is the omission of the Flowton Roadside Nature Reserve (RNR) 92.[6] This is an area of semi-natural grassland and designated County Wildlife Site. Whilst these grasslands were once widespread through the UK, they have experienced a 98% decline since 1945 and as such are now rare ecosystems.

Flowton Roadside Nature Reserve 92 is designated with particular protection to the Sulphur Clover (a vulnerable and near threatened species[7]) and Man Orchid (a critically endangered species[8]). The graduated swathe bisects the northern end of this RNR. We would expect to see this valuable ecosystem recognised in any further documentation and consultations, and for any and all harm to be completely avoided. This would obviously be achieved with a co-ordinated offshore option, but also through routing the lines to the north of the RNR, and through the use of horizontal direct drilling for an underground onshore option should it need to go through the RNR. Any temporary site compounds and access should also avoid disturbing the RNR.

Impact on Elmsett Airfield

From the available information it appears that little consideration has been given to operational airfields around the area. Within the CPRSS Appendices document page 5 it states *"There is potential for the proposed infrastructure within the route corridor to interact with various existing, or proposed, commercial land-uses (for example solar generation, golf courses, wind turbines, airfields etc) within or in proximity to the corridor."*

Only one airfield is mentioned in the documentation, Wortham Airstrip, as it is within the graduated swathe. No other airfields have been mentioned. Our particular concern is with Elmsett Airfield. Aircraft on approach to Elmsett Airfield

[6] https://www.suffolk.gov.uk/assets/planning-waste-and-environment/suffolks-countryside-and-wildlife/RNRs/Flowton-RNR-92.pdf
[7] https://www.plantlife.org.uk/uk/discover-wild-plants-nature/plant-fungi-species/sulphur-clover
[8] https://www.plantlife.org.uk/uk/discover-wild-plants-nature/plant-fungi-species/man-orchid

pass between the villages of Flowton and Somersham and would bisect the graduated swathe at a low altitude. We are concerned about aircraft safety should pylons and overhead lines be developed within this approach path.

Summary

In conclusion we understand the need to reinforce the transmission network, but we urge NG to reconsider the longer term and wider benefits of a co-ordinated offshore grid and integrating this project as part of that approach. We also ask that the "costs" taken into consideration extend further than simply that of the construction costs.

The current option presented appears to create substantial negative impacts on the landscape, heritage, residents, businesses, and overall environment of this area, and indeed those along the full length of the proposal. Given the alternatives available, we see no compelling case for a 180km line of pylons and we are not convinced that NG have put forward the best option for the consumer.

"…it will be critical to strike the right balance between the need to connect the growing amount of offshore windpower, the cost to UK consumers and the impact to local communities and the environment."[9]

We are not sure if National Grid continually overlook this point on purpose, or if they are simply oblivious to it, but it must be pointed out that the local communities are UK consumers too. The current proposal puts a highly disproportionate amount of the impact and indirect costs mentioned above on local communities. We are not convinced that the cost to UK consumers in this instance is the right balance, particularly when you consider that offshore options are being developed for the north of England and Scotland.

This proposal may be the preferred option for NG, but it is clearly not the best option for the UK public and the environment.

Yours sincerely,

Samantha Main
Chair

[9] Project Background Document page 17