Necton Substation Action Group
[redacted]
27th November 2017

This document is in opposition to Vattenfall Wind Power being granted a Development Consent Order for any further substations (Vanguard, Boreas and National Grid extensions) at Necton.

759 Necton Residents (to date)have signed The Necton Substation Action Group's petition against this development. (Vanguard and Boreas).
This report was compiled by members of the Necton Substation Action Group and verified by a committee of 17 members of the Group.

It is divided in to eleven sections
Information from the PEIR and other official comments are in plain text
Necton Substations Action Group comments are in centred italics

The place-name 'Necton' is first attested in the Domesday Book of 1086, where it appears as Nechetuna and Neketuna. The name is derived from the ground it sits on. An aerial view would show that the ton (or old hundred) was situated in a curve of hilly land or neck. From both these names, neck and ton, the connection is made. The first dwellers were in the Bronze Age, and later, parcels of land were given by William the Conqueror to his Standard bearer, a gentleman named De Toni, for his services. It is said that Mona Hill is a burial mound with a Bronze Age warrior buried beneath. This mound is sited more by Brook Farm than the Mona Farm we all know today. The village sign now erected, shows a Bronze Age warrior, with the type of dwelling he would have lived in. The Mona burial mound is shown in the distance.

1. INTRODUCTION

A1.10 The Secretary of State acknowledges that the EIA process is iterative, and therefore the proposals may change and evolve. For example, there may be changes to the scheme design in response to consultation. Such changes should be addressed in the ES. However, at the time of the application for a DCO, any proposed scheme parameters **should not be so wide ranging as to represent effectively different schemes**.

Guidelines regarding the use of the Rochdale Envelope Approach were issued by the former Infrastructure Planning Commission (IPC) in IPC Note 9 (February 2011). They still remain relevant to the assessment process. The PEIR and Consultation by Vattenfall fail to meet these guidelines.
In the case of the Vanguard project, the Company is keeping open the options of HV AC or DC. We object to this project proposal because the two options give such varying effects on the community and the environment that an accurate assessment cannot be made. The parameters are so wide ranging that they present entirely different schemes as regards size and amount of infrastructure required. So, regarding the Secretary of State's comment above, we believe this project is taking the Rochdale envelope far beyond what could be considered reasonable.
Further, they do not satisfy the underlying principles applicable to public consultation over new development requiring Environmental Impact Assessment as detailed below. The flexibility allowed by use of the Rochdale Envelope should not be allowed to provide the Developer with the option of using a totally inappropriate site, when there are better ones available, purely on grounds of finance.

Cumulative and inter-relational impacts of the various elements of the Project during all phases, but most crucially the operational phase, have not been fully assessed or have been inaccurately assessed. The proximity and cumulative effect of the existing Dudgeon substations has been used throughout as

an excuse for adding to the industrial ruination of a rural village, eg Necton, (which has been incorrectly called a town in the PEIR) and damage to 7 other communities, instead of it being a reason to move the project another areain order to pull the communities back from having their character totally destroyed.

In addition, individual impacts (eg on Ivy Todd farm and Ivy Todd Cottage) have not been assessed.

2. CONSULTATION ISSUES

The Consultation and Response Timetable has been too tight to properly assess such a massive project, and the volumes of data and information – beyond the resources of most authorities and public bodies, let alone ordinary folk. For instance for many, their only opportunity to read the PEIR was at a drop-in session on November 10th 2017. This 31chapter document left most people hopelessly floundering, and to expect the large computer-less percentage of this farming community to read it at one sitting was totally unreasonable. A hard copy could be ordered for around £1000. This again was beyond the means of most. We asked that all households in Necton should be sent this documentation and additional time be provided for us to read it and make reasoned comments. But Vattenfall refused.

Unless they adequately address these matters, the current process will be legally flawed. Details follow.

The details provided in the PEIR and Non-technical Summary do not describe the Proposal as clearly and simply as possible. There are no proper accurate and detailed photo montages/ wireframe images to enable a ready visualisation/ appreciation of their visual impact.

During the consultation to date, including the recent presentation on the 10th November photomontages of the views from local viewpoints were presented, and screen simulations of the views from peoples' home at a height of 1.5 metres. The photomontages were inaccurate and sometimes recently labelled incorrectly, and in Vattenfall's own words in writing on 26th October 2017, were 'not appropriately scaled' and 'not particularly clear'. At the drop-in presentation photomontages were displayed, both with and without mitigation. The mitigation shown after 15 years was so inadequate that it was impossible to see the difference between the two photomontages.

On the screen people were shown simulations with a great deal of hedging missing. The man operating the device said this was because he was unable to judge the height of it. Not a good basis for showing people all the facts. The simulations were shown at 1.5 metres and, with the lack of realistic hedging, did not help them understand what might be seen from upstairs in their homes. As a result people still have no clear idea what they will see of the substations. This project should not be given permission until things are made very much clearer.

We object to this project because Vattenfall have not carried out sufficient consultation with residents. There is reference throughout this document to the fact that Vattenfall alternately say how far the nearest receptor is and then say it hasn't been determined. This must be rectified. It is bad practice to have not found out about the closest receptor by this point. Also, the consultation is not complete because the residents of West End have had no communication from Vattenfall and have received no newsletters and yet partially fall within the 1km envelope of the project. They have a direct view because of the lay of the land. West End resident, Tony Hindley, owner of a high end holiday let business in West End, has confirmed that no residents were contacted or made aware of the development. He, along with the other residents in the West End area will be affected by noise, light and view pollution as well as flooding issues.

Another objection to this project and a reason for it to be refused or at the very least begun again, centres around the National Grid's commitments,

*here:*http://www2.nationalgrid.com/uk/services/land-and-development/planning-authority/community-consultation/#

Community Consultation

National Grid consults with local interest groups and residents whenever we are planning works that will have a high impact on a **residential area** or a site valued for its amenity. This also helps us to identify key environmental issues which can be taken into account and more effectively mitigated.

In order for consultation to be most effective it is done at a stage where the results can be used to influence the design of a project.

When undertaking works which will have a less significant impact, we liaise with and inform affected residents according to the severity of that impact. We will take into account local biodiversity action plans and other local initiatives being undertaken by local communities.

Under the provisions of the Planning Act 2008 we have a duty to consult and engage with communities and stakeholders. We have decided to integrate our amenity duties and our community and stakeholder engagement duties into one document which covers how we will meet these duties.

*Necton has had no such engagement from the National Grid regarding their considerable part of the project – ie their extensions to provide connection points. Indeed **Vattenfall only notified Necton of the National Grid Extensions in the last two weeks previous to the meeting on 10th November 2017. Before this they had refused to give any information.***

An alternative site is available near Scarning that will not affect nearly as many residents or have as much of an effect on the environment. Both National Grid and Vattenfall have agreed it is a viable site. Vattenfall have said this option is more expensive but their assessment of cost has not included all the savings from both Vanguard and Boreas. Vattenfall also claimed that in order to switch sites the National Grid would have to re-create the entirety of the substation they built for Dudgeon's connection, as well as the new parts for Vanguard and Boreas. Roger Pateman of NG told us this is not true, and that only a small part of the Dudgeon NG substation will have to be re-created, and that the rest of their extensions would be the same in both places. It is purely more convenient for Vattenfall to stay at Necton, and this should not be allowed to swamp the consultation process. (See attached map and report of the proposed alternative).

3. MISREPRESENTATION

PEIR – Chapter 5 - Table 5.2 Consultation responses

The Scoping Report has identified the need for works to be undertaken by National Grid at the Necton National Grid substation. The ES should describe these works as far as possible with the information available at the time. The ES should also identify whether there is any other consequential development, for example any upgrading of overhead lines, and consider any such works within the cumulative assessment.

The events described below are in total conflict with what was stated above in Table 5.2.

It was only when the PEIR document was released that we discovered that the National Grid extensions at Necton would enlarge their part of the site from 2 hectares to 9.1 hectares, that they would be adding a pylon, and that other overhead work would need to take place as well.

All personnel at the first presentation, introduced themselves as being from Vattenfall. Members of the public understood this to mean they were on Vattenfall's staff and held positions of knowledge and authority within the company. It wasn't until a few months later it became clear, not by them telling us but by our own investigation, that several of the people presented as 'Vattenfall' were actually employed by a marketing company, called Remarkable. As a consequence Vattenfall were able to allow the marketing people to feed us incorrect information, which wenaturally trusted, and which led us to make false assumptions and develop a false sense of confidence in the project, which later worked very much against us.

The residents of Necton believe they have been cleverly manipulated and misled with deliberate misrepresentation. Examples of this are:
At the first representation one member of 'Vattenfall', which we now believe have been Jamie Gordon from Remarkable, told many people that they did not need to be concerned about Boreas, as it would only be a small add-on.
Here are some testimonies to this:
Margaret Woodall, [redacted] Necton:"I do not remember who I spoke to at the first meeting in Necton but when I asked why there were going to be two, I was definitely advised that Boreas would not be as large as Vanguard and would be an add on of around 6.5 acres."

Edna Greening, [redacted] Necton:"I spoke to a couple of Vattenfall people who expressed their concerns 'sympathising' with me re: the treatment we had endured with Dudgeon and I was assured that Vattenfallhad certainly learnt from this Company's mistakes!I wasn't told how big they visualised Vanguard but was told that Boreas would just be like a small extension added on."

Susie Spain.[redacted] Necton:"I was told that because of the Vanguard substation, Boreas would only need to be a small add on. A year later, they quite rudely implied that I had mis-heard but I am certain this is what I was told."

Jenny Smedley, [redacted] Necton: "I was told that we should not 'worry' about Boreas as it would only be a small add-on of around 6 acres. This was told to me by Jamie Gordon at the first Vattenfall presentation in Necton in October 2016.We found out months later that Boreas was in fact going to be the same size as Vanguard."

At the same initial meeting many people were told that Necton was the only option that had been offered to Vattenfall for connection and that they had not been able to choose Norwich Main as Dong (soon to be changed toOrsted)had got there first.' In fact the NG have confirmed that Vattenfall were offered 3 connection points, as they were ***the first*** *to apply. These connections were Walpole, Necton and Norwich Main. Vattenfall/Remarkable also claimed that it was not possible for the National Grid to move the project elsewhere. Whereas in fact, when we suggested an alternative site, the National Grid said it was feasible. These misrepresentations may seem trivial but by them using these and many others that added up, the consensus of opinion is that Vattenfall gradually steered and manipulated the population rather than informing it as fully as possible.*

It is recommended in such consultations as Vattenfall have just undertaken, that 'local knowledge' is made use of. In the first few months following the first presentation Vattenfall contacted Mrs. Jenny Smedley using Jamie Gordon (Remarkable, who introduced himself as 'from Vattenfall'), to ask her to put together a 'panel' of local people who could advise on the suitability or otherwise of site options. Mrs Smedley spent the next several weeks talking to local people and identifying those with long-standing local knowledge. The idea of this 'panel' was cultivated by Jamie Gordon for two months and then dropped by Vattenfall. Had this panel been used then the current site would not have been selected.

Mrs Smedley feels that Mr Gordon was just keeping her busy because she had been identified as a leader in the protest against them, and that there was never going to be a panel.

Jamie Gordon then explained to Mrs Smedley how Vattenfall (or his own company) would achieve what they wanted at Necton. He said they would have already selected their exact preferred site right at the beginning, but they would first say it could be anywhere within 3 km of the connection pylon, in order to try and divide the community. They would then hint at a site that would be so horrendous to villagers that when they offered another slightly better one, it would be accepted. He said they would gradually isolate a small part of the community near the substation site and offer incentives to the rest in order that they would accept the isolated community as a worthwhile sacrifice. Vattenfall of course deny this, but they have 'coincidentally' followed that path very closely, ending up at the small off-shoot of the village known as Ivy Todd. However, this has not been accepted as we have a strong community spirit here. In any case, the scale of the project means it does not fit in anywhere near a rural village.
When Jamie Gordon was told by Mrs Smedley to stop calling her and email instead, as she wanted what he had said in writing, he disappeared completely off the scene. It was said that he had to have surgery, but that was almost a year ago – at the meeting in July 2017 Mrs Smedley asked a group of Vattenfall's people where he was. They all looked back and forth at each other and then one announced that he was on holiday. We apologise for including this matter as it may appear trivial, but it goes to show why we feel we have been misled.

In some ways they have divided the village though, because Necton Farm's owners were disapproved of for selling their land to Dudgeon in the first place, as this has brought the threat of further industrial development to us. Now that Vattenfall are pressuring that same farm to sell them more land for their much bigger projects, the family that own Necton farms has said they are very concerned about being more unpopular. This fracturing of a rural village is not moral.

We were told that the workshop in July 2017 was to discuss the 4 footprints in the selected area and would be interactive, as by definition all workshops are. The invited audience were scheduled (according to the agenda sent round) to discuss what they'd been shown after every part of the presentation. (Initially no ordinary residents from the most affected part of the village were included in the invitations. The Necton Substations Action Group protested this and were eventually given extra invitations for a few of the residents there.)
The discussion items were removed from the agenda, without the previous knowledge of the participants. No discussion was allowed at any time. The participants were shushed in a very unprofessional way by Vattenfall personnel present, and told to write questions and concerns on post it notes, which were to be stuck onto a badly hand-written sheet of paper – one for each footprint. This note session took place some half hour after the footprints had been shown on an inadequately sized screen. Bearing in mind that 99% of people present had not been taken to the site, and had never set foot on it (it being on private land) it was ridiculous in the extreme to expect them to make valid comments on the footprints. Later Vattenfall selected footprint 2, without giving any reason relating to the consultation to do so.

NOTE: The 3-D virtual model showing what the project might look like is to date still not available online as promised in the SOCC document.

4. ENVIRONMENTAL ISSUES

PEIR – Chapter 25 25.4.1.4

Ground borne vibration can result from construction works and may lead to perceptible levels of vibration at nearby receptors, which at higher levels can cause annoyance to residents. In extreme cases, cosmetic or structural building damage

can occur, however vibration levels have to be of a significant magnitude for this effect to be manifested and such cases are rare. High vibration levels generally arise from 'heavy' construction works such as piling, deep excavation, or dynamic ground compaction.

We object to this disruption, having had previous experience of the Dudgeon substation building project. The first phase will be 2.25 times the size of Dudgeon and will be followed by a second phase2.5 times the size of Dudgeon, with Boreas.

Paragraph 1082 of the Scoping Report states that "there are considered to be no significant sources of vibration associated with the operational scheme", however this statement has not been justified. For example, no details on potential operational vibration from the cable relay station and the substation have been provided and at this stage their location and proximity to receptors has not yet been determined; therefore the Secretary of State does not agree this can be scoped out at this stage. The use of piling during the construction of onshore assets may be required.

We object to the use of piling in either the National Grid or Vattenfall parts of the installation because of the noise and ground disturbance. Wildlife in the area will have just re-established habitats in this area after the Dudgeon disruption, and it is unacceptable for them to be driven out of the area once more, and have their habitats destroyed again.

Chapter 27 Health Impact assessment.
Preliminary Environmental Information Report Volume 1
12. The construction, operation and decommissioning of landfall, onshore cable corridor, <u>onshore project substation,</u> cable relay station (CRS), National Grid substation extension including overhead line modifications and associated infrastructure have the potential to influence the health of local residents and communities.

13 Given the location (away from population centres, schools, colleges and other receptors), type of infrastructure (buried rather than overhead cable) and the method of installation (affecting the overall scale of construction and the human resources required), **the number of people anticipated to be impacted is low.**

This is not correct. We have identified over 30 residences that will be affected. Also there are a school and a pre-school approximately 1 mile away.

23 Stage 3 will comprise a review of the health risks and identify the scale / magnitude of the population at risk and the duration of the risk using the description presented in Table 27.4 (based on various guidance……...
Low score, from table 27.4**, =**Disruption to quality of life or wellbeing. Exposure to noise, odour, visual amenity of low intensity and/or short/intermittent duration and/or over a small area and/or affect a small number of people e.g. less than 100 or so.

Even using the 3-stage risk review process, when looking at the onshore project substation, the Low result should not stand, as a whole village is affected. It is not away from population centres and school as they state.

This is backed up by Public Health England, Table 27.1 Consultation responses Public Health England
…Any assessments undertaken to inform the ES should be proportionate to the potential impacts of the proposal…

Vattenfall state; 14. 27.4 Approach to HIA There is no defined or recommended procedure or guidance for assessing the significance of health impacts within the context of an EIA.
And
17. For this HIA, information will be collated from existing publicly available literature. Secondary information used includes health industry published material and existing examples of HIA undertaken for other, similar projects…

We therefore question Vattenfall's competence and impartiality regarding the local community of Necton.

Chapter 25 Table 25.20
The onshore project substation and CRS will not be permanently manned. O&M staff will visit on a regular basis (e.g. monthly) to carry out routine checks and maintenance. Key maintenance campaigns will take place every summer, duringwhich time there will be teams working up to 24/7 in order to complete the tasks quickly and return any affected equipment to service. Most annual maintenance campaigns will be short (approximately 1 week), but if required some campaigns may be longer (e.g. 1 - 2 months).
These elements represent BAT for proactive and reactive maintenance to minimise noise.

*Nothing had been said in the past year about this form of on-going intrusion. We object to this project being allowed to potentially ruin the summers of the residents in close proximity to the site, who are the most likely to be disturbed by noise and lighting (**in an area designated as dark rural landscape**), for the life of the project.In addition, there will be significant disturbance to the four local holiday let businesses within a kilometre. Vattenfall's research has been superficial as they have not said who these residents are and how many of them there are, and have not identified any holiday accommodation. In summary, those affected will be everyone in Ivy Todd Road, Chapel Road, and in the case of lighting, most of Necton, particularly St Andrew's Lane, Ramm's Lane and Kett's Hill, and all of West End. This new information should be considered in the application examination, especially as there are holiday lets in this immediate area, and this will impact on them, as some repeat holiday bookings are from people who want to star-gaze. No compensation for the owners of the holiday lets is mentioned.*

PEIR – Chapter 29 - 203
The onshore project substation site benefits from some substantial existing hedgerows and woodland blocks within the local area. However Norfolk Vanguard Ltd. has committed to additional planting to further screen both the Norfolk Vanguard and Norfolk Boreas onshore project substations. The location of this proposed additional planting is provided in Figure 5.3. Further information on the proposed screening is provided in Chapter 29 Landscape and Visual Impact Assessment.

Other parts of the PEIR show that 1km of hedges will be removed, which negates the effects of much of the 'additional' planting, which is in fact not additional as in parts it replaces hedgerows torn up. In

addition to this the hedging to be removed is mostly mature of over 20 years standing and should be protected from this development. These plans are in opposition to current government initiatives to protect hedgerows and prevent soil structure damage.

The above statement from the PEIR is also contradicted and negated by the Vattenfall statement below:

PEIR – Chapter 29 - Table 29.18
The local landscape character would be directly affected by the presence of the onshore project substation, with its maximum footprint of 250m x 300m and its maximum height of 25m. This would form a large fenced site containing electrical infrastructure, the most notable component being the HVDC converter halls. **Their scale and mass would appear at variance with the scale and character of the rural landscape.Despite the extent of mitigation planting around the onshore project substation, it would be insufficient in scale to reduce the landscape effect within the operational period.**

This failure to mitigate the damage to the character of the village or the effect on views shows clearly that this project, especially the HVDC option is too large to fit into an area surrounded by 8 rural communities. The alternative option, rejected by Vattenfall purely on economics would be much less severely impacted as it is a much larger area and much less populated. The fact that it is close to the cable corridor shows that this must be seriously considered before a DCO can be applied for.

We object to the Necton site for this project because a reasonable alternative at Scarning has been suggested by the Substation Action Group, accepted as feasible by both Vattenfall and National Grid but dismissed by Vattenfall as more expensive. Had the costs for Boreas cabling been included in the financial assessment, this calculation could have looked very different. See the attached report by BLB utilities Management, showing how the alternative site would affect less people, have considerably less effect on Norfolk agricultural land and reduce the length of the cable corridor.

*It goes against: "*DM8 Design, local landscape and townscape character. Development will be permitted if it will not harm the conservation of, or prevent the enhancement of, key characteristics of its surroundings with regard to the character of the landscape and townscape, including consideration of its historic character and settlement pattern, taking into account any appropriate mitigation measures."

Ivy Todd is a small farming hamlet that will be irrevocably changed by the insertion of an admitted massive industrial project.

Also:
PEIR - Chapter 22 – Table 22.2 **Breckland Council state:**
Appropriate landscaping schemes to mitigate against the landscape impact of and complement the design of new development will be required, where appropriate.

It has been admitted in the PEIR document (Chapter 29 – Table 29.18) the mitigation against the landscape impact will be unsatisfactory for the operational life of the substation. We object to the proposed siting on these grounds.

Also:
PEIR - Chapter 22 – Table 22.2 **Breckland Council state:**

Large scale renewable energy proposals should deliver economic, social, environmental or community benefits that are directly related to the proposed development and are of reasonable scale and kind to the local area.

This development is far bigger than could be construed as a reasonable scale and kind to the local area. With the National Grid extensions and both new substations, given the existing 2, the area will encompass an almost 50% increase in the size of the entire village.

We object to this proposal because it is far bigger than can be considered of a reasonable scale and kind to the local area. See comment below.

PEIR – Chapter 29 - Table 29.18
The local landscape character would be directly affected by the presence of the onshore project substation, with its maximum footprint of 250m x 300m and its maximum height of 25m. This would form a large fenced site containing electrical infrastructure, the most notable component being the HVDC converter halls. Their scale and mass would appear at variance with the scale and character of the rural landscape.

The footprint of the HVAC option would be the same.

Also:
PEIR - Chapter 22 – 22.3.5.6 National Grid Extension
Impact without mitigation, the greatest magnitude arising from one element of the onshore infrastructure is medium magnitude on a high importance receptor, resulting in an impact of at worst major adverse significance.

Mitigation of the National Grid Extension would appear to be impossible looking from the Dereham direction on the A47, as the current site sits 'up' from the road, having been placed on a high point. With the new extensions it will present a line of development almost ***one third of a mile long****, with the new substations forming a backdrop. The height of the new substations will create a towering structure totally out of context with the character of the rural landscape. The National Grid have told us that regardless of the Horlock Rules, their substation extensions, as with the original Dudgeon one, will be built of aluminium. This creates a sparkle and flash in sunshine, which brings it further to the attention of receptors. National Grid stated that over a period of time, the impact would reduce but this has not proved to be the case with the Dudgeon substation, which has now been shining for well over two years.*

PEIR – Table 4.3 Application of Horlock Rules to onshore project substation
The onshore project substation benefits from relatively substantial existing hedgerows and woodland blocks within the local area (e.g. Great Wood and Necton Wood). These would provide a level of mitigation of landscape and visual effects from the outset and can be strengthened with planting proposals during the phases of the proposed project to ensure robust screening.

However, this is contradicted by:
PEIR – Chapter 29 - Table 29.18
Despite the extent of mitigation planting around the onshore project substation, it would be insufficient in scale to reduce the landscape effect within the operational period.

We object to this project being given approval when it is obvious that it cannot be screened sufficiently within its operational lifetime.

PEIR – Chapter 21 - 21.6.2

Agricultural land in Norfolk is a particularly valuable resource. The rural economy in Norfolk accounts for 44% of jobs, and has the largest agricultural sector of any English county, with a GVA 2 of £50,000 per job, and is therefore an important part of the county's economy (Norfolk Rural Development Strategy. The total area of farmed land in Norfolk as of 2013 3 is 411,085Ha (Defra, 2013). The footprint of agricultural land in the onshore project area constitutes approximately 0.4% of the county resource.

If the footprint of Boreas is added to that of Vanguard, approaching 1% of the county resource will be lost. This loss could be averted by the use of an off-shore ring main (ORM) to Walpole. If Dong and other projected wind farms are included, destruction of much more of this valuable resource could be avoided. See the section 'Strategic direction for UK windfarms' below.

Almost 1% of agricultural land does not sound that much, but local knowledge (farmers who were cabled through by Dudgeon) says that it will take ten years or more (depending on the length of the project and the times it will disturb the same areas - up to 3 times according to the PEIR) and can add up to a significant amount rather quickly, and could, with the proliferation of off-shore windfarms around Norfolk, seriously affect the economy of the county.

27.4 Approach to the HIA

12. ...Effects on health can be both positive (e.g. employment and income) and negative (e.g. exposure to elevated noise levels, reductions in air quality, loss of access to green space).

In reality how many village residents will have the necessary skills to benefit from employment and income? So how can this project have any positive effect on the community at all? Vattenfall have already admitted that the work force for the substations will be largely from outside of the county.

Looking at the cumulative effects of other similar projects in the area, it is noticeable that if the Hornsea (Dong) project and Vanguard and Boreas (Vattenfall) were to exchange substation destinations, it would reduce the cable corridors by 4,5km and 9km respectively. This is taking the same route around the Norfolk Broads that is currently proposed. Any undue length to the cable corridor, with all its ramifications, needs serious investigation and corroboration, especially as Vattenfall seems economical with its demonstration of alternative substation and connection proposals. For Vattenfall, who applied first, to opt for routes which will mean Vattenfall and Dong have to cross cable corridors, as well as taking a longer route, for their own convenience, shows a lack on the company's part to commit to good environmental practises.

Policy EN 2 Protection and Enhancement of Landscape and Settlement Character - Nocturnal character

The entire area around Necton is designated dark rural landscape. The building and operation of the Dudgeon substation has caused many problems in this area, lights too bright, too high, left on both by accident and design, all night, and sometimes all weekend. The site resembled some kind of lit up dome from miles away, especially from high ground, and turned the skyscape light blue, swamping any and all

celestial bodies. That development has been here for around 3 years – the Vattenfall projects could take from 6 – 10 years.

We object to the project because this amount of light pollution is inacceptable both for residents and for holiday let businesses.

PEIR – Chapter 30 – 7.4.2 – 196

General operation noise impacts of substation infrastructure are assessed to be of moderate impact during the day and major impact at night…. As the substation location is considered to be of negligible value for tourism and recreation, the significance of the impact is assessed to be negligible.

We disagree with this assessment. Vattenfall have completely missed the fact that there are 4 holiday let businesses within close proximity of the proposed substation site.

PEIR – Chapter 25 - 25.4.1.6

Receptor identification, sensitivity and classification Noise Receptors have been categorised as medium sensitivity where noise may cause disturbance and a level of protection is required but a level of tolerance is expected. Such subgroups include residential accommodation, private gardens, hospital wards, care homes, schools, universities, research facilities, national parks, during the day; and **temporary holiday accommodation at all times**.

Norfolk's other vital industry is tourism. Whilst most of it is centred in the Broads' area, there are many hundreds of holiday lets in other areas of the county, and a lot of them are affected by this project. With the advent of Google maps, it is easy nowadays for potential tourist to look at maps of the area when choosing an appropriately picturesque site. The Dudgeon/Necton substation is already labelled as such on Google maps, and once these new projects are built, this will certainly put people off. There are4 holiday-let businesses in the Necton area at St. Andrews Barn, Claypit Farm Campsite, Mona Bungalow Caravan Site and Westbrook Farm's cottages in West End. There are many more strung along the cable route to Happisburgh. The A47 itself is a major route to Norwich and the Broads and the current National Grid and Dudgeon substations are unmissable when driving through the area. The new proposed substation will make this situation many times worse, All NG extensions and Boreas and Vanguard substations will be clearly and readily seen from the A47, creating an industrial area almost half the size of the whole of Necton. Mitigation, according to the PEIR will not make any noticeable effect for the operational period – ie 25 years.(Although we note that the Secretary of State often refers in these documents to the operational life as being 50 years).

This goes against Policy EN7 Renewable Energy

Proposals for renewable energy technology, associated infrastructure and integration of renewable technology on existing or proposed structures will be permitted where individually, or cumulatively, there are no significant adverse effects on the surrounding landscape, townscape and historical features areas.

We object to the project because by their own admission in the PEIR Vattenfall have said their project is so massive that it will change the character and landscape of the area, and that mitigation (hedges) will not be satisfactory in the life of the project.

PEIR – Chapter 30 – 30.5.1 - 32

Direct impacts (such as noise, air quality, traffic, visual disturbance, closures and other disruptions) to the area within 500m of the landfall, onshore project substation, CRS, onshore cable corridor and National Grid substation extension including overhead line modifications
A distance of 500m is considered to be conservative and direct impacts to tourism and recreation assets are not anticipated to occur beyond this distance

Ref The on-shore substation at Necton. When trying to fit a project 80 feet high and 50 acres in size, in between 8 communities, this statement is frankly ridiculous. The Dudgeon substation of 16 acres and 45 feet tall is seen from 8 communities and several major roads. It can be seen from Bradenham Road, it can be seen from as far as Ashill Common, it can be seen from the outskirts of Swaffham (approximately 4 miles away), and on the tourist route along the A47. To suggest that a project almost twice as high and 4.5 times as large, close to the original will not been seen or affect the character for tourism, or make these situations worse, from more than 500 metres away, shows complete incompetence.

PEIR–Chapter 21 - 21.7.4.2.3
Substation area
Without mitigation, the greatest magnitude of effect arising from one element of the onshore infrastructure is medium magnitude, on a high sensitivity receptor, resulting in an impact of **major adverse significance**. Following implementation of the proposed mitigation measures, including minimising land take, reducing sterile land parcels, aligning with field boundaries and voiding the BMV land, the residual impact is deemed to be moderate adverse.

We do not agree with this assessment. Also, moderate adverse is still a significant amount of damage. This project will be damaging in so many areas, not least because it is too big to fit into the preferred area. By the PEIR's own admission view mitigation will not be satisfactory within the lifetime of the project. Therefore it is our opinion that the impact will still be of Major Adverse Significance.

PEIR Chapter 3
Policy DC16
All design proposals must preserve or enhance the existing character of an area.
Form and Character:
Development should complement the natural landscape, natural features and built form that surround it. Density, Height, Massing and Scale: In considering new development, consideration will be given to the density of buildings in a particular area and the landscape/townscape effect of any increased density. The real or perceived heights and scales of buildings relative to each other and their surround will be a key consideration as will the relationship of the density, scale and height. Landscaping, Boundary Treatments and Enclosure: For all new developments consideration will be given to the, incorporation, preservation and enhancement of natural features on a site.

An addition of two National Grid extensions plus the two Vattenfall substations on top of the 16 acre Dudgeon site, will not follow these policies. Using the existence of the Dudgeon project as an excuse to place another approximately 50 acres at a possible 80 feet high here, will further change the area for the worse. The fact that there are already 16 acres of substations here should stop any future similar development, (it would create a national disgrace for it not to). Also, the spread of these buildings from the current substation will make it appear much larger than the acreage suggests.

5. NOISE ISSUES

PEIR – Chapter 25 - Table 25.23

There is a potential for a cumulative impact associated with operational phase to occur during operation of the onshore project substation and CRS in conjunction with other onshore electrical infrastructure within the vicinity of the onshore project substation and CRS.

Implementation of appropriate mitigation within the detail design should ensure that any impacts will be of negligible significance and that residential amenity will not be subject to creeping background levels

The Scoping Report identifies potential operational mitigation measures, including the installation of acoustic enclosures Site specific mitigation measures have not been devised at this stage. The detailed design stage will identify the document where addressed in the PEI and barriers and the construction of a landform/embankment around the substation. These measures should be taken into account in other technical assessments, for example the landscape and visual assessment and the ecological assessment.

It is understood that electrical plant installation and commissioning works for the onshore project substation and CRS will be undertaken without any significant noise contributing plant or activities

These works have therefore not been included at PEIR stage

Prior to submission of the ES further consideration will be given to determine whether additional assessment is required.

For the purposes of this assessment it was assumed construction activities

Would normally take place between 0700hrs and 1900hrs Monday to Friday and between 0700hrs and 1300hrs on Saturday; the onshore project substation is located near the village of Necton to the west of the larger town of Dereham. **Noise in this area is likely to be dominated by road traffic on the A47.** The area is generally rural in nature with the village of Necton containing the largest concentration of residential properties. Smaller villages and isolated residential properties are also located within the search

The proposed locations for the onshore infrastructure has undergone a sensitive site selection process in order to minimise any unnecessary noise and vibration impacts on the environment and residential amenity.

This is not an acceptable conclusion. Road noise in Necton from the A47 is ***entirely dependent*** *on wind direction. When the wind is blowing from the northeast to the southeast and south, road noise is totally imperceptible in Necton. At these times of quiet, the wind will be blowing towards the village directly from the proposed substations, and therefore will be most severe at times that would normally be quiet. Wind direction is a very valid component in sound surveys, and in this one in particular. This has been completely ignored by Vattenfall and testing has not taken it into account.*

PEIR – Chapter 25 - 25.4.1.6

The closest human receptors to the proposed project are to be determined during consultation with relevant stakeholders.

Receptor identification, sensitivity and classification Noise Receptors have been categorised as medium sensitivity where noise may cause disturbance and a level of protection is required but a level of tolerance is expected. Such subgroups include residential accommodation, private gardens, hospital wards, care homes, schools,

universities, research facilities, national parks, during the day; and temporary holiday accommodation at all times.

At other points in the PEIR Vattenfall (see below) says that the nearest receptor to the substations is 750 metres away (see below). It becomes quite obvious that Vattenfall have no idea how many 'receptors' the noise issues and vibration issues are going to affect.

Additionally, the closest receptor locations to the onshore project substation are circa 750m away. At a setback distance of 750m it is very unlikely that any vibration levels would be perceptible at receptor locations.

PEIR CH31 - Table 31.17
Search areas for community infrastructure receptors Location Direct Impact Possible indirect impact Necton - None - East of Necton within 1 km of site boundary.

214. Above ground infrastructure does have the potential to create impacts due to noise and visual disturbances (see Chapter 25 Noise and Vibration and Chapter 29 Landscape and Visual Impact Assessment). However, the lack of community infrastructure in the vicinity of these elements removes this impact pathway.

The PEIR claims in various parts that the closest receptors distances are unknown, and in other parts that the closest receptor is 750m away. In fact the closest receptor's boundary is 425m away. Therefore this table, 31.17, which claims there are no Necton receptors within 1km is incorrect, as there are several, and following on, so is point 214. (See attached map)

We object to this project being granted a DCO because it is quite clear that Vattenfall have shown disregard, and ignorance of local knowledge and of the infrastructure of the 8 communities that will be affected by it. The consultation is flawed in many areas, and their handling of concerned residents has been unsympathetic throughout.

This section of the PEIR document is not based on fact and should be changed. The closest receptors to the substations are in Ivy Todd Farm, whose boundary according to their maps is less than 450 metres. Statutory noise limits state that a person is as entitled to enjoy their garden/land as they are their house, so a set-back of 400 metres should be built into the noise mitigations, not 750 metres

PEIR – Chapter 25 - Terminology
Measurements in dB(A) broadly agree with people's assessment of loudness. A change of 3 dB(A) is the minimum perceptible under normal conditions, and a change of 10 dB(A) corresponds roughly to halving or doubling the loudness of a sound.

This is an incorrect statement. A change of 3 dB(A),not 10 dB(A), corresponds to a doubling or halving of the noise level. When asked, the Breckland environmental enforcement officer said: "Vattenfall will have to be ensuring that their noise levels will be 3dB below (or half the loudness) of the condition levels set for Dudgeon". This is in response to the noise survey done for Dudgeon that show there is very little room for noise from Vanguard and none for noise from Boreas. Since Boreas will not be able to be silent, we believe that if a green field site eg near Scarning will have to be used for Boreas, it should be used at this point for both Boreas and Vanguard.

The lack of understanding shown by Vattenfall throughout the consultation process on the noise issues questions their competence. This point was made to them by a noise expert in 2016 and has been disregarded.

Dudgeon/Statoil have 3 transformers, whereas this project will have 8, so will logically make much more noise, especially with the HV DC option. Dudgeon, who use AC equipment, have complied with the noise restrictions by using extreme measures. At a recent meeting Ruari Lean (Project Manager for Vanguard) was asked if Vattenfall had been to the Dudgeon site to see what measures had already been used there to meet the noise restrictions. His reply was no. He was asked if they had contacted Statoil to ask for sight of their noise mitigation specifications. His reply was no. This leads us to the conclusion that Vattenfall are not serious in their claims that they will be able to get the noise of their project within the noise restriction levels, as without knowledge of Dudgeon's extreme measures, how can they plan successful noise mitigation? Every option for mitigation that has been suggested in the PEIR has already been used by Dudgeon. Members of our group have visited the Dudgeon site with a view to seeing what extreme measures Dudgeon had to take to get their one (comparatively small – less than 8 acres compared to Vattenfall's total project of 37 acres) substation within the noise limitations.

Here are some direct quotes (totally unedited) from Breckland's environmental enforcement officer, Sue Hammond.

"…they (Vattenfall) will have to be ensuring that their noise levels will be 3dB below (or half the loudness) of the **condition levels** set for Dudgeon…..

"It would have to ensure that its noise, combined with Dudgeon and the further proposed substation does not exceed what is already set for Dudgeon….

"Your concerns are very valid, creeping noise threshold occur when planning conditions are applied that allowing noise to rise more than' X' dB above existing back ground, for example 5dBA is often used. If a second application is made the background is then 5db higher allowing the second company to theoretically increase noise by 10dBA on the original back ground. This will not be the case for Vattenfall…"

"I have advised that I will be applying the same conditions to Vattenfall as I have for Dudgeon, which is a fixed level, irrespective of what noise may or may not be arising from Dudgeon. We also discussed using the last back ground noise levels taken for Dudgeon as the backgrounds for Vattenfall, which I feel would be acceptable…"

At every opportunity in the past year we have attempted to bring this serious noise issue to Vattenfall's attention but have been ignored.

6. <u>FLOODING ISSUES</u>

PEIR – Chapter 21 - 21.7.4

The excavation of the cable trenches, earthworks associated with onshore project substation construction, and the excavation and stockpiling of soils has the potential to cause an adverse impact to the natural and artificial field drainage systems during construction works. Existing field drains are likely to be at a depth of between 0.5m – 1.5 m, and are expected to be made of ceramic, plaster or other materials. It will be

necessary to truncate the drainage systems temporarily during excavation and installation, followed by reinstatement after construction.
At the onshore project substation and CRS, any existing field drainage would be permanently altered as land would be taken out of use during the operation of the project. This is discussed further in section 21.7.5
With regards to Table 3.24, the Secretary of State considers that Water Resources and Flood Risk also have the potential to have effects on Land Use.

Vattenfall have never fully investigated the historical flooding in the area. They have never consulted or listened to 'local knowledge'. Attached is a map provided by http://www.checkmyfloodrisk.co.uk/ which shows just how bad this site selection is. You can clearly see that the whole area of existing and proposed substations drains into one water course, which has regularly flooded historically. Local knowledge tells us that the land in this area does not allow water to soak through, and that disturbing all the drains, which reduced the flooding incidences, will create unacceptable far-reaching flooding risk in many local communities.
Also attached are some photographs showing historical flooding in Ivy Todd and West End, before the farm drainage was installed. It can be seen that Dudgeon substation already uses the same watercourse as the new proposed substations. This watercourse cannot possibly take the extra run-off Vattenfall would create.
Please see enclosed flooding map of the area and historical photographs.

Vattenfall have said that the Environment Agency flood risk maps show a low risk ***at the connection*** *but they do not appear to have consulted the maps with regard to the high risk of flooding on the land surrounding their selected substation site. Vattenfall appear to be using ambiguous language to disguise the fact they are building in a high flood risk area and we object to the proposal on the grounds of high flood risk.*

Breckland Council's Policy states: (DC13 Flood Risk – as recorded in the PEIR document) New development should be located in areas at least risk of flooding. New developments will be expected to minimise flood risk to people, property and places.

We object to this development as it does not follow Breckland policy and will undoubtedly make flooding worse in several areas.

Norfolk Vanguard Offshore Wind Farm Appendix 20.1
Flood Risk Assessment
Preliminary Environmental Information Report Volume 3
Norfolk County Council states: The following **settlements have historical flooding** issues and are likely to be sensitive to disruptions to the wider drainage network; North Walsham; Dereham; and Necton" Table 20.1 Summary of relevant flood risk comments.
Vattenfall states:
75. The onshore project substation and the National Grid substation extension are located within an area of very low flood risk from surface water. However, an area of high risk of surface water flooding is located adjacent to the western edge of the project. Review of aerial imagery within this location has shown the area of high surface water flood risk is associated with an existing land drain located within the existing field network.

This information is not complete. It fails to state that the project substation land area does not flood at the moment, but that this is only because it had a field drainage system laid, probably more than 50 years ago. By definition, 'the purpose of a land drain is to allow water in wet or swampy ground to rapidly drain away'. If this agricultural land was not artificially drained it would not grow crops, as it would be too wet, so would not be deemed low flood risk. The run-off from 37 acres of concrete created by the substations will inevitably cause the adjacent land mentioned by Vattenfall above, to flood. The next point shows that even climate change could be a threat to the efficiency of the land drainage.

Vattenfall states:
76. As such the risk of flooding from surface water sources at the onshore project substation and the National Grid substation extension are deemed to be low at present, potentially increasing taking into account climate change should the existing land drain not contain sufficient capacity.

Important points are missing from the flood assessment because if land drainage couldn't cope with climate change, any construction work will certainly destroy this established drainage pattern, destroy delicate eco systems and potentially cause flooding in other areas.

Norfolk County Council stated, on 25th January 2017, at Topic Group Meeting 1. Highlighted: Change in land use will increase surface flows; Potential to alter existing drainage patterns; …More risk in winter months and also intense summer storms;

Although the project substation is in a zone 1 low flood risk area, as artificially drained, it is very close to zone 3 high risk areas as stated in the next 2 points. We are concerned that these high-risk areas could be worsened by the nearby construction works.

20.4.4.8) 81. An area of high surface water flood risk, which appears to be controlled by the existing agricultural and land drain network is located outside of the onshore project substation to the west". (Summary of flooding sources)

20.4.4.2) 71…The onshore project substation and National Grid substation extension are is located approximately 5km to the south-west of the first strategic crossing point (Site 1) and <u>approximately 0.5km to the north of the nearest Flood Zone 3 extent</u>.

We object to this project on the grounds that flood assessment are muddled and incomplete and take no account whatsoever of local knowledge, which we have now supplied from people who were born in the area.

7. <u>ALTERNATIVE SITE OPTIONS</u>

PEIR - Chapter 4 – 4.1
2. An important part of the Preliminary Environmental Information (PEI) process is to review the alternatives considered during the evolution of the project, and to set out why they have been discounted in favour of the preferred sites for development.

Vattenfall have been offered alternative sites but dismissed them without proper consideration. In the meeting with the Substation Action Group that Vattenfall held prior to the open meeting on 10th November, Vattenfall stated that they were not interested in discussing alternative sites for their

substation because the decision had already been made to site it at Necton and it was not up for discussion. We believe it is unreasonable to have made this decision before any consultation and ask that the alternative be revisited in the light of the attached report and map of the area.

PEIR - Chapter 4 - 4.3.1

11. The new EIA Regulations (2017) amend the wording slightly but do not significantly change the position. The new Regulations require an Environmental Statement (ES) to include "a description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects".

This has not been done. No such descriptions have been offered.

*Vattenfall claim that they moved the substation east of Dudgeon as they had been requested to do. This is not true. The public consensus was that it *might* be accepted by Necton residents if it was at Top Farm. Vattenfall were offered Top Farm (over 180 acres) from the landowner, but they consistently insist it is not for sale. This is a written quote from the owners of Top Farm, 'Top Farm has never been on the open market as such, however we offered it to the substation company to buy if they wanted – but they have declined.' (Top Farms owners no longer farm it.)*

What was actually requested was that they did not place the substations any closer to Necton Village than the Dudgeon substations are. Instead they have chosen to try and place it on pristine green fields, on a farm that is in full production with the owners, Necton Farms, which is closer to some residents than Dudgeon is.

Here it will be very close to the part of Necton known as Ivy Todd. The closest Necton residence is, they say, 750 metres from the substation. This is incorrect. The boundary of this nearest property is 425 metres from the new substation site. The boundary/house of the same residence is 1000 metres from Dudgeon. Therefore whether the measurement is done from boundary or dwelling, they have actually moved the substation closer to Necton than Dudgeon is.

Please find attached the report we commissioned on another alternative site, from a professional utilities management company BLB Utilities Management. (There is a map attached). When presented with our alternative, Vattenfall said they would first speak to the National Grid (The NG claim they were never approached by Vattenfall about it), and would then give it serious consideration. It lies on the same pylon line, but closer to landfall. It is in close proximity to the A47 crossing by the cable corridor, and is much more sparsely populated than Necton. (see attached map) When asked for a report on their consideration of the alternative site, Vattenfall produced just a short letter with no detail on it, rejecting the alternative site, merely saying, there was no good reason to move their project there.
The area they are continuing to propose as a substation site is surrounded by 8 communities, which are all in close proximity to it. To complete this substation in Necton, there will have to be extensive mitigation, such as, noise, views, flooding, vibration, cabling and health issues, which are not relevant at the alternative site. We are only able to locate 1 property which may be affected there, although with careful site positioning even this need not be the case. Whereas, in Necton the substation will directly affect more than 30 households.

Something Vattenfall misled us about was when they said National Grid could only connect them at Necton. Roger Pateman (National Grid Power Systems Engineer) told us on 10th November that whilst

in the first instance the NG had to first offer sites that already had some infrastructure on them, if that site proved unacceptable – noise restrictions, too big a scale to fit into the surroundings, too close residents etc - they had to authority to move the new substations to another location that currently had no infrastructure on it – ie possibly our alternative at Scarning. He also told us that NG would only have to replicate a small part of the Dudgeon NG substation in order to do so. The rest of the work would be the same at either site.

PEIR - Chapter 4 - 4.4

18. Norfolk Vanguard Ltd. has an on going commitment to effective engagement with stakeholders and communities in order to seek input upon the development of the project design and communicate this process as it develops. The scoping report (Royal HaskoningDHV, 2016) sets out a process for the development of the onshore and offshore elements of the projects showing a series of search areas for landfall, onshore cable corridor, CRS locations and onshore project substation locations.

Despite email requests from 3 Parish Councils and our group, Vattenfall refused to give detailed progress reports on alternative sites that had been offered.

The onshore project substation and CRS will not be permanently manned. O&M staff will visit on a regular basis (e.g. monthly) to carry out routine checks and maintenance. Key maintenance campaigns will take place every summer, during which time there will be teams working up to
24/7 in order to complete the tasks quickly and return any affected equipment to service. Most annual maintenance campaigns will be short (approximately 1 week), but if required some campaigns may be longer
(e.g. 1 - 2 months).
These elements represent BAT for proactive and reactive maintenance to minimise noise.

This further infringement of residents' rights in their own homes goes against the Equality and Human Rights Commission, in that "whilst there are some situations in which public authorities can take things you own or restrict the way you use them, this is only possible where the authority can show that its action is lawful and necessary for the public interest…and the government must strike a fair balance between your interests as a property owner and the general interests of society as a whole…every ***natural or legal person is entitled to the peaceful enjoyment*** *of his possessions. A person has the right to use, develop, sell, destroy or deal with their property in any way they please". In this case, as there is a viable alternative to the substation site chosen by Vattenfall, it should have to be justified by the government as to why the alternative has not been fully considered, and further, why the affected residents' rights to enjoy the whole of their properties can be destroyed every summer for the next possibly 25 years.*

8. <u>SUMMARY</u>

Vattenfall have consistently refused to answer questions, left emails un-responded to, promised to allay residents' fears at every next drop in and failed to do so. People feel ignored and disregarded and that this company is not transparent in any way. They constantly state that it is too late to look at alternative sites or change things. This is a situation entirely of their own making, as they did not supply enough information for feedback to be accurate or well-thought out, and indicates that this entire process should be started again. They misrepresented the facts and themselves until it was too late for them to listen to local knowledge.

PEIR – Chapter 29 - 29.6.4.1
Necton is a small town located to the south-west of the onshore project substation.

This is not correct. Necton is a village not a town, and has the character of a village not a town. It has a Parish Council, and not a Town Council. It has the population and housing/business pool of a village, and this cluster of developments would increase its size by almost 50%.

Designating Necton as a town rather than a village distorts the matrix evaluation of the effects of the substation on its surroundings. The evaluation should be redone correctly.

PEIR – Chapter 29 - 29.6.4.1
Ivy Todd is a small village set to the south of the onshore project substation.

This is incorrect. Ivy Todd is a tiny hamlet that comes under Necton Parish Council. It will be badly affected by the substations in terms of landscape, character change, noise and light pollution and increased flooding risk. A town has more noise, more buildings, more people, and more roads and would not be as badly affected as Necton will be by a project of this size. This incorrect assessment of Vattenfall's suggests the possibility of the matrix being manipulated to their advantage, and should be investigated.

West End is a hamlet that comes under Bradenham Parish Council, but its extremely close proximity to Ivy Todd, and the dip in the landscape, makes it vulnerable to both views and flooding in addition to the light and noise issues. Its residents have been missed out by Vattenfall and they have not received any information from them.

PEIR – Chapter 29 - 29.6.4.2
The A47 The section of relevance to the assessment of the onshore project substation sites lies between Little Fransham in the east and Necton in the west. This section provides access into Necton National Grid substation, although visibility of this large-scale development from the A47 is reduced by the extent of road-side planting. The bare trees filter views in the winter and the leafed trees largely screenviews in the summer.

This is not correct. The trees planted screen the view when approaching from Swaffham direction of the A47, but when approaching from Dereham direction the entire site is clearly visible as there are no trees blocking the higher ground that the substations stand on – nor could this be able to be mitigated by trees in the foreseeable future as it is too high in the landscape, and as the PEIR has confirmed, satisfactory mitigation is not possible. In the winter, 95% of the site is visible from all directions. The proposed area for the National Grid extensions and the Vattenfall substations is situated between Necton, Ivy Todd-Necton, West End, Holme Hale, Ashill, Little Fransham, Little Dunham and Spicer's Corner, all of which have sight of, and are affected by the existing infrastructure. It is also visible in all seasons when exiting Swaffham onto the A47. With the new National Grid extensions, almost one third of a mile of NG infrastructure will be clearly seen, running in a continuous line. The two new substations will also be in clear view, as can be seen from the photographic simulations displayed from Spicer's Corner – another hamlet whose residents have been mistakenly forgotten by Vattenfall.

9. CONCLUSION

We believe the Dudgeon project is enough of a change to our landscape, and additional substations should not be built here. A project of National Importance is not sufficient to justify the approval of this

project when a suitable alternative is available near Scarning that, with suitable care, will not be seen from any residence or from the A47.

10. TERRORISM

Many residents have become concerned that this project would make us a target for terrorism. Part of this is because we will have almost 70 acres of substations here presenting a tempting target from the air, and partly because the design of the new substations could easily be mistaken for another kind of power station, possibly gas or even nuclear.
Vattenfall's answer to this question at the last drop-in was to belittle the person who was asking, and say that terrorists will only attack London.
We wish our governments had this insight into the minds of terrorists'. London has strict regulations about what is allowed to fly over the capital, whereas here with RAF Marham so close, planes in the sky are taken no notice of as they are an everyday occurrence.
The substations proposed will add to the 16 acres we already have. Vattenfall will take 37 acres, and the National Grid will extend their substation from 2 hectares to 9.1 hectares. Not only that, but Vanguard and Boreas will be 65 – 80 feet tall – and that is the entire site, so people in the air will not know exactly what it is except that it will be massive and something to do with our power network.

- Terrorist attacks on energy infrastructure are more common than many might think. According to a report by the Electric Power Research Institute (EPRI), which conducts research on issues related to the electric power industry in the US, from 1996 – 2006 there were approximately 2500 attacks from terrorist groups against transmission lines and towers in various parts of the world and 500 attacks on substations. http://www.power-technology.com/features/featureunder-threat-protecting-substations-and-power-lines-from-attack-4192867/

- Regarding the threat from 'conventional' terrorism, we note that the electricity system is critical national infrastructure and it must be assumed that it is a potential target. https://publications.parliament.uk/pa/ld201415/ldselect/ldsctech/121/12107.htm

11. STRATEGIC DIRECTION FOR UK WINDFARMs CONNECTION TO THE GRID

A question has been asked in Parliament, on our behalf, by George Freeman MP, concerning a strategic marine cable (Offshore Ring Main) around the coast to Walpole. All the windfarms would connect into the ORM and a single take-off would occur at Walpole. Damage to land and rural communities caused by the proposed substations and cable corridors would disappear. If all the currently planned windfarms were charged a proportion of the cost of the ORM, it would be financially viable and much less damage to the environment would be caused. 400 miles of sub-sea cable is being planned from Norway to Scotland and Norway to Northumberland and an additional one across the channel to Zeebrugge, so the cable is a viable option. National Grid told members of the Substation Action Group that there is a problem with the Walpole installation. This should be repaired and should not be used as a reason to side-line the option of an ORM, which would avoid the ruining of a sizeable amount of Norfolk agricultural land needed for food production. We therefore object to this and all wind farm planning applications until the ORM option is fully investigated because it would save disruption during construction, land spoilage, rural community changes and noise and light pollution during ongoing operation.www.bbc.co.uk/news/uk-scotland-scotland-business-39080305

Attachments:
Report by Martin Page of BLB Utilities Management on alternative site suggestion.
Map of flooding risk in the area – substations existing and proposed marked.
Photos of historical flooding in the area of the proposed new substations.
Map of alternative site.
Map of holiday lets and other information on Necton (such as closest receptors).