

## Concerns regarding proposed sittings of Vattenfall's Norfolk Vanguard and Norfolk Boreas, and the National Grid Extension, at Necton

I am very concerned that Vattenfall are not carrying out their obligations regarding the proposed siting of the Nationally Significant Infrastructure near the village of Necton, Norfolk.

### Invitation only workshop 19<sup>th</sup> July 2017

I attended Vattenfall's invitation only 'workshop' 19 July 2017, after initially being refused a place. After this meeting I didn't feel any more informed, just very cheated and frustrated.

Vattenfall's experts were unprofessional, and speedily presented brief overviews and statistics (using power point). They were difficult to understand as there were no microphones, the room was very warm and we were crowded around small tables.

Members of the public were not allowed to question the speakers after each presentation or comment, but were told to wait until all the presentations had been delivered (I feel that the points would have then been diluted as out of context).

However, on conclusion, the experts were not prepared to take questions from the group; this is contrary to the schedule on the invitation which included opportunities for group discussion.

We were asked to write our comments on 'post it notes' and attach these to sheets of paper on the wall to be documented.

Vattenfall's representatives appeared uncomfortable, defensive and embarrassed – not at all what I was expecting.

### Public meeting 20<sup>th</sup> July 2017

The following day Vattenfall held a public open day with experts on hand to speak with.

Their emphasis was on the visual impact and how they would plant screening – hoping this mitigation would encourage members of the public to accept their proposal for building Norfolk Vanguard next to their village. Again, Vattenfall's representatives were ill at ease and when I asked "would you like this happening next to your home?" they agreed they would not!

I spoke with an expert about alternative sites and she was very dismissive. As they had invested heavily in researching the Necton site they wouldn't want to consider an alternative site now. I said "It's a fait accompli," and she actually agreed! I felt very upset and cheated.

They have already made their decision and the public meetings are being held just to fulfil their obligation to hold them. They have recorded other points of view, but do not intend to take them into consideration.

On request, they were showing the potential view using computer generated images (like google earth) projected from the various locations of people's homes, and showing Norfolk Vanguard placed in four different positions.

Substantial planted screenings to disguise the visual impact were simulated, but they omitted to include the very large NG extension in their projected images, as they "didn't know what it would look like!" Surely some attempt to show a mockup of an appropriate sized structure should have been included when showing the potential visual Impact!

### Site selection

I strongly disagree with the proposed siting of the Norfolk Vanguard substation (also the National Grid extension and Norfolk Boreas to follow) close to the village of Necton.

The search area consists of highly productive arable land, which should not be forfeited. This area already produces food – the country's power production should be located elsewhere and not at the expense of the country's food production. The accompanying rural lifestyle and agricultural jobs should also be preserved.

The search area has moved approx. one mile towards the small hamlet of Ivy Todd, adjoining Necton, where my family lives at Ivy Todd Farm. Of the four possible positions within this location the closest is only 0.32 miles (516 meters) from the house.

There are no compelling reasons for siting the two substations so close to Ivy Todd, a very rural and peaceful group of dwellings.

Vattenfall says;

"Developing these projects (Norfolk Vanguard, Norfolk Boreas and National Grid Extension) in close succession leads to strategic advantages. It makes sense to co-locate infrastructure for both projects where possible in order to reduce potential impacts, maximise opportunities and help reduce energy costs"

In response to above quote, Vattenfall recorded the following statistics from their public drop in meetings:

Necton had the lowest agreement to this statement, only 39% agreed. In other villages 80% -90% agreed, obviously as it was not directly affecting them!

According to the Human Right Act, article 8 there is a need to apply 'proportionality'. I believe proportionality needs to be applied in relation to concentrating nationally significant infrastructure projects around the small village of Necton.

There are concerns around Planning too. The proposed development is over-bearing, out-of-scale and out of character in terms of its appearance compared with existing development in the vicinity and will have an adverse effect on the residential amenity of neighbors, by reason of loss of existing views, noise, disturbance and overshadowing.

### Environmental Impact Assessment Scoping Report, Site Selection

I fear that Vattenfall are publishing statements which they do not adhere to.

The National Grid's Horlock Rules are cited throughout the Environmental Impact Assessment Scoping Report, but their interpretation and implementation is questionable.

In the introduction 1.1.2, I feel the following points are contradictory as they state:

10. "The onshore scoping area is *currently based on wide search areas*.....

Within these search areas are *sensitive features that will be avoided where possible* see Section 1.5.6..."

(Horlock Rules 235. 1.5.6.....which include "Community; Proximity to residential properties; ..... and Sensitive land uses, e.g. schools, hospitals.")

But in the next paragraph it is not a wide search area!

11. "...*The substation search area is in the parish of Necton.*"

They have NOT avoided sensitive features as specified in the Horlock Rules, but use the Horlock rules instead to arrive at the village of Necton because:

233. "The Horlock Rules State..."

234. "Consideration is given to placing the electrical infrastructure as close as possible to the existing National Grid connection point (if feasible) in order to minimise the landscape and visual effects associated with introducing new electricity infrastructure to the environment..."

237. "In accordance with the Horlock Rules, the substation search area has been defined as a 3km radius from the existing Necton 400kV National Grid Substation."

But, as shown they are very selective in which of the Horlock rules are implemented.

### Alternative Site

Vattenfall have been made aware of a new site found by Tony Smedley, a member of the Necton Substations Action Group. There are no villages close by and includes two farms which are currently available for sale as one lot of 164 acres, near Scarning, Dereham, Norfolk.

This potentially satisfies the many requirements for Norfolk Vanguard, Norfolk Boreas and National Grid Extension as it is directly next to their A47 cable crossing, and with the pylons running along one side of it. This site would also mean a much shorter cable route.

This has much support from Necton residents.

Vattenfall say they are looking at this alternative: I would like re-assurance that the necessary environmental assessments will be carried out as this is a profoundly more suitable area as it is not in close proximity to a village.

In my opinion, the following is very relevant:

“scoping opinion” “appendix 1” from the Planning Inspectorate, Nov 2016,

“A1.42 The ES must set out an outline of the main alternatives studied by the applicant and provide an indication of the main reasons for the applicant’s choice, taking account of the environmental effect (Schedule 4 Part 1 paragraph 18).”

“A1.43 Matters should be included, such as inter alia alternative design options and alternative mitigation measures. The justification for the final choice and evolution of the scheme development should be made clear. Where other sites have been considered, the reasons for the final choice should be addressed”.

As far as I can see, the only site being considered is the small area adjacent Necton where the structures are being juggled around to provide the necessary alternatives. As mentioned, this cannot be fair or proportional to condense everything near one small populated village. Although this is more cost effective for Vattenfall.

Scoping Opinion appendix 3 Response by Necton Parish Council

Necton Parish Council requests:

“An assessment of how climate change, human health and natural resources will be affected by this development, to include a focus on the sub-station selection area. A detailed report on the consideration of alternative sites for the sub-station, including sites outside the selected area”.

### Flood Risk

“233 The Horlock Rules” state

“Consideration must be given to environmental issues from the earliest stage to balance the technical benefits and capital cost requirements for new developments against the consequential environmental effects in order to keep adverse effects to a reasonably practicable minimum.”

At this crucial pre-application stage, local knowledge should be taken into account rather than relying fully on professional data gathering and research, which is not immune to human error and anomalies.

Vattenfall has been made aware (by many emails) of the regular flooding which occurs in Necton and Ivy Todd after prolonged rain when the river Wissey overflows its banks. This can make roads impassable and historically has flooded property, including my family's home at Ivy Todd Farm.

Losing acres of permeable agricultural land to acres of concrete, even with added drainage (which would also be an added cost) would increase flood risk.

This combined with the impact of climate change, potentially causing more severe storms, would again increase the risk of flooding.

Norfolk County Council comments on the Norfolk Vanguard Offshore Wind Farm Environmental Impact Assessment Scoping Report; October 2016

A relevant excerpt follows:

"5.8...it is noted the following settlements have historical flooding issues and are likely to be sensitive to disruptions to the wider drainage networks: ...Necton - Drains to the South (River Wissey)."

This cannot be a viable site.

Health

I think any risk to human health, however small, should be paramount in assessment of siting. Vattenfall puts too much emphasis on visual impact mitigation and have not addressed the following health topics.

Scoping Report 3.11 Health .11.2.2 Potential impacts during operation

"...are expected to include: Noise disturbance in the proximity of the operational substation and cable relay station; Electromagnetic Fields (EMFs) generated above the buried cable route..."

(There are also increased impacts on health during construction and decommissioning).

I can find many authorities advising to be cautious regarding the long-term effects of EMFs on human health.

For example:

NHS studies re cancer and extremely low electromagnetic fields state:

"...The potential health effects of the very low frequency EMFs surrounding power lines and electrical devices are the subject of on-going research and a significant amount of public debate."

Scoping Opinion for Norfolk Vanguard Offshore Wind Farm; Health Impact Assessment

4.42 The Secretary of State considers ... the applicant should have regard to the responses received from the relevant consultees regarding health, and in particular

to the comments from Public Health England and the Health and Safety Executive (see Appendix 3 of this Opinion).

#### Excerpts from appendix 3 of the Scoping opinion

##### Public health England;

Public Health England states: “There is concern about the possible effects of long-term exposure to electromagnetic fields, including possible carcinogenic effects at levels much lower than those given in the ICNIRP guidelines. ... However, the results of these studies represented uncertainty in the underlying evidence base, and taken together with people’s concerns, provided a basis for providing an additional recommendation for Government to consider the need for further precautionary measures, particularly with respect to the exposure of children to power frequency magnetic fields.”

Public Health England also cites anxiety as a good reason not to build close to a populated area.

PHE: “There is evidence that, in some cases, perception of risk may have a greater impact on health than the hazard itself...Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard...PHE supports the inclusion of this information within EIAs as good practice”

The primary school is just only a mile away – you must consider any possible health risk to these children. No one can categorically deny an associated health risk to long term exposure to such a large area (potentially 70 acres, possibly more to follow) producing an Electro Magnetic Field.

Some parents are already worried about the perceived risk to the health and development of their children, including the risk developing childhood leukaemia.

Is this fair and the best way to proceed?

Necton Substation Action Group has commented, “Why are Vattenfall refusing to give us EMF figures? What are they hiding?”

Another important point raised by Necton Substaion Actions Group is:

“What will be the cumulative EMFs from the various sites? Adding to an existing substation will greatly increase the EMFs especially as the cabling will change from underground to overhead. It is not clear how they will mitigate the EMF and this should be included in the PEIR as it will have an effect on the environment.”

Within the scoping report there is much discussion about amenity, environment, biodiversity, wildlife, species, habitats, sites of historic interest, mitigation and screening which is excellent, they are all important issues, but there is very little focus on the wellbeing and habitats of the human species!

The focus is on planting more trees and screening so it will be hidden from view, but views will be replaced by walls of vegetation, and it is not a case of “out of sight out of mind!”

What about the Human rights of the Necton population, especially those who have homes closest to the infrastructure or families with young children attending the primary school?

A quote from the HUMAN RIGHTS ACT:

“It is a fundamental responsibility of the state – arising from Article 2 of the Convention itself – to take appropriate steps to protect the safety of its citizens.”

### Human Rights

I have looked at the publication Human Rights: Human Lives Local Authority Publication.

Article 8; Respect for your private and family life, home and correspondence.

“In particular, the rights in Articles 8 to 11 can be restricted where it is necessary and proportionate to do so in order to achieve a legitimate aim.... In this way the Convention recognises that there are certain situations where a state is allowed to restrict individual rights in the best interests of the wider community”.

“But the interference must be necessary (not just reasonable) and it should be ‘proportionate’ – that is, not more than is needed to achieve the aim desired.”

“Article 8 in practice Balancing – Article 8 is one of the Convention rights that requires you to strike a balance between a person’s private rights and the needs of other people or society as a whole.”

Proportionality. “The principle of proportionality is at the heart of how the qualified rights are interpreted...”

“The principle can perhaps most easily be understood by the saying ‘Don’t use a sledgehammer to crack a nut’.”

“When taking decisions that may affect any of the qualified rights, a public authority must interfere with the right as little as possible, only going as far as is necessary to achieve the desired aim”.

As already mentioned Vattenfall commented: “Developing these projects in close succession leads to strategic advantages. It makes sense to co-locate infrastructure for both projects where possible in order to reduce potential impacts, maximise opportunities and help reduce energy costs.”

I think the proportionality of this undertaking needs justifying. Also I question that as an alternative site has been found, is this necessary?

In accordance with the above points I believe that many individual home owners at Necton are not being fairly treated. How can concentrating so much infrastructure to benefit the whole country to the detriment of one small village be justified? The lives of people living in Necton will be adversely affected to the benefit of 1.3 million of the population. How can this be justified when alternative sites have not been fully researched?

Necton is reported to have a populated area of 15.48 km<sup>2</sup> (5.98 sq mi) and had a population of 1,923 at the 2011 Census

The Norfolk Vanguard project will have a capacity of 1800MW which is enough to power 1.3 million homes in the UK, then potentially Norfolk Boreas will be added.

This must be surely 'Using a sledgehammer to crack a nut!'

Article 8. The right to respect for one's home may mean, for example, that the state has to take positive action so that a person can peacefully enjoy their home, for example, to reduce aircraft noise or to prevent serious environmental pollution.

What about EMFs and increased background noise and vibration from substations?

### Noise and Vibration

Human Rights Protocol 1, Article 1 protects your right to enjoy your property peacefully.

There is concern about the additional continuous background noise and vibration that would be caused by Norfolk Vanguard operating so close to residential properties.

### Base Line Noise Monitoring

There has been confusion regarding the base line noise monitoring carried out by Vattenfall at Ivy Todd Farm, home to my mother and brother. This is one of the closest properties to the 'search area'.

Firstly, Vattenfall said it had been declined which was completely untrue. Then they said it had been carried out at a boundary, so not coming onto my brother's land although he had given them permission. He was not aware when this had been carried out although they have now provided results for a quiet area at Ivy Todd.

I find the following points relevant and interesting:

### Scoping Opinion for Norfolk Vanguard Offshore Wind Farm



“3.156 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.”

“3.157 Consideration should be given to the potential noise impacts resulting from the maintenance campaigns referred to in paragraph 192 of the Scoping Report, which are stated to take place every summer and would require 24/7 working.”

### Property Blight

“The Royal Institution of Chartered Surveyors (RICS) included in their March 2016 survey report: “13.0.0 ELECTRO-MAGNETIC FIELDS”

“You should be aware that unresolved medical controversy exists concerning the effect on health of electro-magnetic fields generated by overhead power lines, electricity sub-stations, and mobile phone masts. Public awareness of this issue could have an effect on future saleability and value which could be substantial if a link with ill health is proven.”

### Scoping Opinion appendix 3 Response by Necton Parish Council requesting:

“We would welcome a commitment from the applicant to consider a compensation scheme for homeowners who find their sale prices are adversely affected by the presence of substations. We would wish to understand the enduring economic legacy this development would provide to the sub-station area”.

At Vattenfall’s ‘workshop’ of 19<sup>th</sup> July they stated

“Vattenfall has developed four alternative footprints for the substations within the refined search area. The design of each footprint was an engineering led process. Key considerations included:

- Routing of incoming and outgoing cables from each substation
- Known environmental sensitivities and constraints
- Land ownership boundaries”

The nearby population is not included in this list of priorities, which I find very upsetting.

How can we trust Vattenfall to fulfil their future obligations when they constantly choose to put people’s lives so low on their agenda?