



## The Stour Valley Underground Winter Newsletter 2013

### National Grid propose a new SUBSTATION for the Suffolk - Essex border

**This newsletter explains why we ALL need to vigorously oppose it  
and that the time to make your voice heard is NOW.**

### A Cancer in our Countryside

Yes this newsletter is about a substation proposal from National Grid and yes, the title is highly emotive. So I had better get on with justifying this ghastly metaphor.

A cancer:-

- is something that grows without the control that should stop it growing.
- saps the life out of its host by depleting the resources that would otherwise sustain the host.
- is alien, the result of a corrupted plan through mutated DNA
- and ultimately, cancer is utterly destructive of the life it inhabits.

#### Rural Life

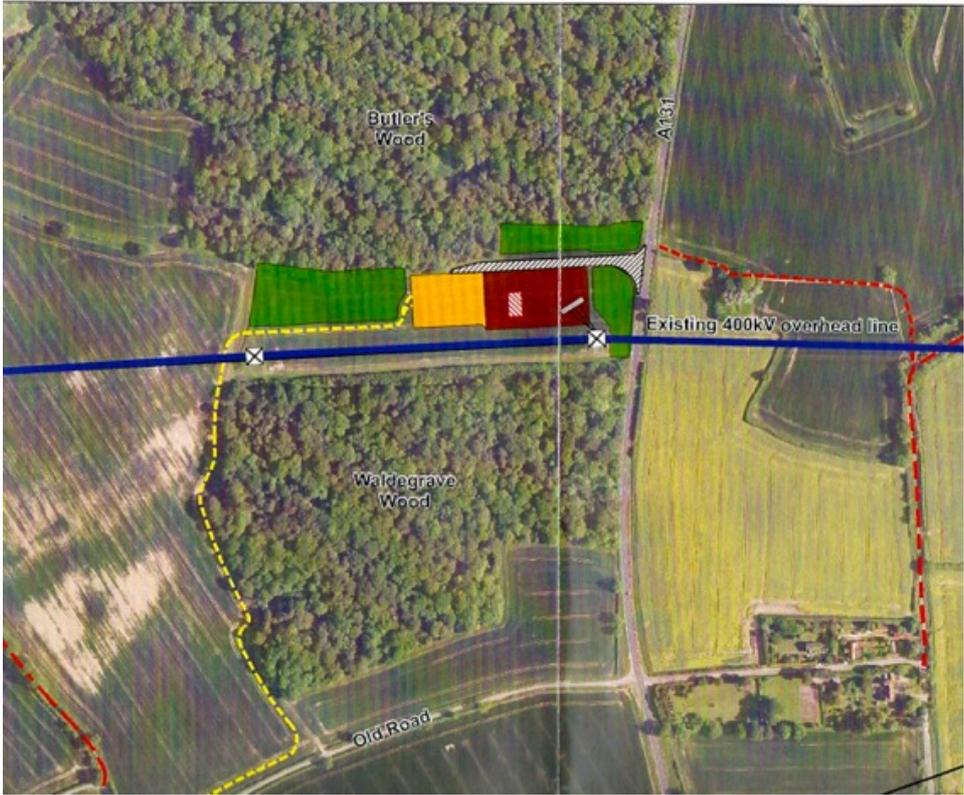
A life in the country is a privilege. The surrounding **natural beauty** brings well-being benefits that have never been properly valued. In many senses they have been seen to be invaluable. And yet the government is currently trying to put figures to this value in order to weigh it against the value and costs of developments that damage it.

The natural beauty, tranquility and cultural associations of our countryside bring visitors to our area, swelling our local economy in challenging times. So we possess resources that make others want to come here and partake of our countryside's benefits. And this is an area of notable tranquility, people here sit with windows open, listening to the nightingales that sing around our woodlands. There are indeed, many gentle reasons why this area is a special place.

#### National Grid's Proposals

And so to National Grid's proposed substation, proposed for a location in the quiet borderlands between Essex and Suffolk. A number of sites have been considered, all in essentially beautiful open countryside with scattered woodlands, hedgerows and treasured ancient buildings. But the most favoured site according to National Grid is

known as C2 and sits hard beside the main road that runs from Sudbury, past the heritage landscapes painted by Gainsborough through to the quaint though currently waning town of Halstead. The site sits between ancient woodlands that lie between the villages of Twinstead and Wickham St Paul on high set flat land where the horizon seen from eye level is way across the Stour Valley into Suffolk, beyond Melford, as far as Alpheton.



The National Grid supplied proposal image for a substation at location C2 near Twinstead.

The existing overhead line is blue, the pylons marked with a cross and the A131 runs top to bottom. Twinstead is to the right and Wickham St Paul to the left of this view

I will concentrate on National Grid's preferred C2 site but in what follows, much is common to all the sites they are currently discussing with us all through their consultation. On this copy of National Grid's proposal we see a red block which is their substation, a yellow block which would be UK Power Networks' attached substation and green blocks which are supposed to be screening mounds and planting which after 15 years would only reach a maximum of ten metres high. Now lets think about what this would actually look like. Firstly, the substation sits level with the far side of the pylon beside the A131. As you can see from the photograph below, the pylon is very near the road and so the "screening mounds and planting are confined to a small space and cannot possibly screen the site effectively, not for a generation or more - if ever. And according to the plan, they also seem to want to remove some woodland to build mounds and plant more slow growing screening? But oddest of all, the largest block of screening planting is behind the substation, away from the road and from the nearest houses: why have National Grid come forward with this plan?



A view of the proposed C2 site beside the A131.

Note how tall the pylon is by comparison with the ancient woodlands that border it.  
Photo taken from across the field around which are set a number of houses.



The future?

Photo taken on a National Grid organised visit to Eaton Socon Substation

## ...So why have National Grid come forward with this plan?

To provide you with an answer, we must look more widely at the plans National Grid are bringing forward across our nation. National Grid's plans are all too often not about what they say they are about. In the west country, our colleagues fight other pylon plans: in this case the Hinkley Point new nuclear generator connection. But this connection is not just, or even mostly about connecting a new reactor plant that will not be built till the middle of the next decade - if at all. What it is really about is connecting as yet unspecified renewable generation in a designated renewable energy park in the Severn Estuary. Similarly, our colleagues in Mid Wales fight vast substation and pylons proposals that National Grid say are needed to connect on-land windfarms in Wales to the grid. But the total output of these windfarms will never be more than could be connected by a far cheaper, lower voltage underground cable. No, the Mid Wales pylon proposals are about much more: National Grid want to connect the renewable energy sources off our western shores and in particular Ireland to our grid. And this is part of an even bigger project to make our grid part of the European one so that National Grid can grow their business on energy export across our country to mainland Europe. So when National Grid come forward with a proposal, we must look at the bigger picture and we must assume a greater agenda.

And so what might that greater agenda be here on the Suffolk - Essex border?

UK Power Networks outlined their need case for a new substation near Twinstead in 2012 and in it made it clear that they expect demand for electricity in this area to increase by around 25% up to 2026. And the scale of house building plans in Sudbury alone give credence to that. To supply that demand, UKPN said that a 2 transformer substation would be needed, not the smaller one transformer version NG propose. And so logically, what we have before us is a proposal for a substation that must grow.

Now look back at the plan NG have come forward with. That planting area behind the substation looks ideal to house the second transformer and its attendant hardware. What we are looking at on this plan is a design developed to allow future expansion. If NG are able to put the substation near the road, then who could successfully counter proposals for such an extension? The major and most catastrophic damage to the amenity value of the countryside in this area would already have been done. If this were not so, then NG would have proposed to place the substations toward the back of the field to provide more space for screening planting between it, the nearby houses and the road.

But there's more: Bramford Substation at the eastern end of NG's pylons proposals is already highly congested and connecting the proposed Bramford - Twinstead overhead line into the substation will already require reconfiguration of the existing ones. It is therefore entirely possible that NG are looking for another foothold in our landscape for any further major grid developments. And so the land even further back might also become substation in the not too far distant future.

What you might ask makes us think this? Well a European Grid development group of which the UK and NG are members suggests that bringing low carbon energy south through the UK will continue to be a problem and they propose a sub sea cable from Humberside into Norwich Main Substation. From there, the power would be brought south on overhead lines - but where to? If Bramford is already congested and bringing more power there is seen as a case of "too many eggs in one basket" with respect to power transmission and system security in the UK, then they might well look for another established site at a reasonably nearby location. I should point out that this is only informed speculation though we have credible official documents to support it. But the point remains: NG could well be looking for a foothold in our countryside which will grow and grow and place a vast industrial carbuncle at the gateway to culturally important landscapes of great natural beauty and environmental rarity.

We therefore must oppose this proposal for a new substation in the Suffolk - Essex borderland countryside with all the strength we can muster. And as I am sure you know, a new substation is completely unnecessary. We in SVU have put forward an entirely credible, deliverable and economic alternative: an upgrade to Braintree Substation and an underground link to the local distribution grid. Yes it costs more but the difference is more than justified by the cumulative socio-economic impact of a vast ugly substation in this area.

To unpack that last statement a little, we need to realise that in our changing times, we in the rural areas need to find new resources on which to grow our economy. From an economic point of view, this area is far from purely agricultural: the tourism economy is larger. Here on the Suffolk Essex border we have vast underexploited cultural capital and natural beauty on which we can build part of our communities' economic sustenance. Retailing in town centres like Halstead and Sudbury is in decline due to the impact of the internet. If the town centres are to survive and prosper, then tourism and leisure must contribute more to the economy than they do now. For this to happen we have to exploit our history and natural environment such that we develop and maintain an area worth visiting. And to make this possible, we must protect our countryside from ugly industrialisation. Thus it is not just for our personal benefit that we must oppose NG's proposals, we must oppose them for the good of our regional economy and for that of future generations.

And to bring the issue back to a very local level, we must be aware that the blighting of our countryside would not just be visual. A substation would hum. Low frequency 50 and 100hz sound would propagate through the ground and air. Trees and planting would not stop it. Walls would not stop it - low frequency sound wraps around solid structures and moves on. The majority of substations are sited near major roads or urban centres where background noise muffles the sound from transformers and other equipment. But out in the tranquil countryside of north Essex, no such background noise would ease our inhabitants burden. Gone will be the days of sleeping with windows open or lying awake listening to the nightjar as he sings. And this is not just utopian waxing. Such impacts have very personal impacts and can include savage economic ones including large scale devaluation of property.

## Conclusions

I hope that I have shown that the title of the article is not overstated polemic. The substation National Grid propose would, like a cancer be hugely detrimental to its host, would grow beyond our control and damage the life blood of our rural economy by undermining its resources.

National Grid speak of "mitigation" - screening off the ugliness they propose to perpetrate on our landscape. But the mitigation of which they speak cannot work. The vast gantries and ironmongery will always be taller than the ancient woodlands and any trees they plant. No matter what they do, a substation will be visible and detrimental across miles and miles of high value countryside.

A new substation is not necessary. The existing one at Braintree can readily accommodate the new hardware and provide a future proof and economic solution that does not put a lasting scar on the landscape because the underground cable link we propose would quickly disappear into the landscape leaving it unblemished.

A long time ago, one of our MP's listened politely to our arguments against pylons. He seemed to answer us with words that meant "I agree that they are inappropriate and ugly but they are the cheapest solution: ergo you loose the economic argument and thus loose your battle." We now know from NG's research that the people of this country are willing to pay to avoid the detriment of ugly pylons. Why is that? Because they understand that the wider economic, well-being and social costs that accumulate year on year for generations are far, far greater than the cost to avoid the ugliness and put NG's hardware where it belongs: in this case, at Braintree Substation and under our beautiful countryside.

You can learn more on many aspects of this issue on our website:  
[www.stourvalleyunderground.org.uk](http://www.stourvalleyunderground.org.uk),

but whatever you do,

**please respond to National Grid's substation consultation.**

**The closing date for feedback on  
National Grid's proposals will be 8 April.**

