

## Application Number: PA/2010/0075

(please quote in all correspondence)

**Case Officer:** Ron White Tel: 01724 297488

**email:** [planning@northlincs.gov.uk](mailto:planning@northlincs.gov.uk)

4 February 2010

Green Frog Power Ltd  
Mr David Sheppard  
Unit 4 Trillennium  
Gorsey Lane  
BIRMINGHAM  
B46 1JU

Dear Sir/Madam

### TOWN & COUNTRY PLANNING ACT 1990 NOTIFICATION OF RECEIPT OF A FULL PLANNING APPLICATION

**Proposal:** Planning permission to erect an embedded generating plant with associated works

**Site Location:** YEDL Sub Station Compound Kettleby Lane Wrawby

**Applicant:** Green Frog Power Ltd

Your application was received as valid on 04/02/2010. A decision should be reached by 01/04/2010. Any enquiries should be made to the case officer. Please be aware that the application form, plus any accompanying drawings and most documents will be made publicly available on the Council's web site. You can also check the progress of your application on the web site and view/download digital copies of most documents. Your application, fees and drawings can now be submitted online using the Planning Portal. Further information about this service is available on the Council's web site [www.northlincs.gov.uk](http://www.northlincs.gov.uk)

We decide most applications within the time allowed and we will try to make sure you receive a decision before the due date. This will not be possible in every case, however.

Most applications are decided by myself without reference to the Planning Committee under a clearly defined scheme of delegation. Major or controversial plans will be decided by the Planning Committee. **If you want to put your views to the Committee yourself, or have someone do this for you please write to me within 21 days of the date of this letter.** If you do write, I will let you know the date of the meeting when the application will be considered - it is not possible to say this now.

If, by the 01/04/2010, we have not given you a decision in writing or you have not agreed to extend the decision period, then you may appeal to the Department for Communities and Local Government. You must make your appeal within six months from that date. You must use a form which you can either get from the Planning Inspectorate at Room 304A Kite Wing, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6PN, or you can make your appeal on line and track its progress using the Planning Portal. More information can be found on [www.planningportal.gov.uk/pcs](http://www.planningportal.gov.uk/pcs).

Yours faithfully

**Mike Welton**  
**Head of Planning**

# NORTH LINCOLNSHIRE COUNCIL

## NOTICE OF RECEIPT OF A PLANNING APPLICATION

### PLANNING APPLICATION NO. PA/2010/0075

The Council has received the following proposal:

#### **Planning permission to erect an embedded generating plant with associated works**

**Location:**

**YEDL Sub Station Compound, Kettleby Lane, Wrawby**

The application and submitted plans may be seen in the Highways & Planning Office (Development Control) at Church Square House, Scunthorpe, between 9.00 am and 5.00 pm Mondays to Thursday and 4.30 pm Friday. Alternatively, you may find it more convenient to arrange to inspect the copy of the application (during reasonable hours Monday to Friday) which has been supplied to Mr G D Foster, the Parish Clerk, at York House, Tunnel Road, Wrawby, Brigg, DN20 8SF. Please telephone to arrange a prior appointment on Brigg 651250.

If you wish to express any views about the proposal you should do so by writing to the Development Control team at North Lincolnshire Council, Church Square House, PO Box 42, Scunthorpe, DN15 6XQ, quoting the application reference number stated above.

**Householder Development\*\*** If the application relates to householder development, in the event that an appeal is made against a decision of the Council to refuse to grant planning permission for the proposed development, and that appeal then proceeds by way of the expedited procedure under the written representations procedure, any representations made to the Council about the application will be passed to the Secretary of State and **there will be no opportunity to make further representations.**

If you do write, please bear in mind that anyone may read your letter, either before or after the application is determined or later if there is an appeal against the council's decision. A copy of your letter will also appear on the council's web site [www.northlincs.gov.uk](http://www.northlincs.gov.uk). We will consider all relevant comments although we cannot enter into detailed correspondence.

Written representations received by the council on or before will be considered before the application is determined.

\*\* Householder development means development of an existing dwellinghouse, or development within the curtilage of such a dwellinghouse for any purpose incidental to the enjoyment of the dwellinghouse. It does not include a change of use or a change to the number of dwellings in a building.

**M Welton**  
**Head of Planning**



Ref: DS/Wrawby/005  
10<sup>th</sup> March 2010

North Lincolnshire Council  
Highways and Planning  
Church Square House  
PO Box 42  
Scunthorpe  
DN15 6XQ

**For the attention of Ron White**

Dear Ron,

**Embedded Small Scale Generating Plant, Kettleby Road, Wrawby DN20 8SX.  
Portal reference: PP-00951644 and PA/2010/0075**

Further to your telephone conversation with my colleague David Sheppard we write to provide some further details of the generation contract that we will be entering into with the National Grid at the site. Please accept our apologies where the information given is repetitious of our earlier submissions but for ease of reading and completeness we have included it.

In essence the applicant is contracting with the National Grid to provide standby power when there are periods of shortage in generation on the network. Historically standby power plants are only called up for a few hours per year. For example 2008 – 114hrs, 2009 – 95hrs. These power plants are vital to ensuring continuity of supply as the country moves towards a lower carbon economy and as such are considered Essential Infrastructure Projects.

The National Grid have estimated that the network needs to double its standby capacity by 2020 to avoid rolling blackouts from 4000MW – 8000MW. The application was made in response to that requirement.

Embedded distributed power (EDP) generation supplies power to the local distribution network at or near the point of use ie where power is to be used and helps to 'support the network' at times of peak demand avoiding power fluctuations and blackouts. It also does not 'waste' the generated power in transmission losses which occur when the power is transmitted over long distances. Nationally transmission losses amount to between 8% and 14%.

EDP is less susceptible to power failure in that when a large power station goes off line all of its output is lost - many thousands of mega watts of power

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**Southern Region** - Green Frog Power Ltd, 3 Downes Street, Bridport, Dorset DT6 3JR  
**Tel:** 01308 421411

in one event. With distributed power should one station fail to operate only a few mega watts are lost. Wrawby the subject of this application provides the grid 6- 8 MW of power.

It is commonly agreed by both industry experts and Ofgem that there will be severe shortage of supply in the foreseeable future as the anticipated recovery in the economy takes place. A number of both nuclear and coal power plants will be coming off line in the near term leaving the power supply of the whole county in a perilous position.(See annex Two of the original application).

It is an important local benefit of this application that in the event of power shortages in the future anyone who is supplied their power through the Wrawby substation will not suffer as the proposed embedded power station will be turned on by the National Grid and operate to cover these shortages.

The proposed generators are 43% efficient which compares with 27-35% for open cycle gas turbines and 50%-52% for closed cycle coal power generation. However, when the additional benefits of the savings in transmission losses are factored in this makes this form of generation amongst the very best in carbon efficiency and are considered as Low Carbon technology. Some of the heat from the engines is also recovered and stored to maintain engine temperature when not operating. Further details of this is given below however closed cycle gas turbines are not suitable for this standby use as they take several hours to start up and switch off.

The technology proposed is the Best Available Technology (BAT) for the purpose of the proposed rapid start standby generation required by the National Grid and being connected to the network at the point of use offers demonstrable efficiency improvements of 22% to 35% over the non distributed existing standby generation. This is without factoring in the 'enablement facility' that this form of generation offers allowing security of supply to wind and other renewable generation.

Our system allows for start up and connection to the national grid within 5 minutes of being called up another essential and important feature of these small scale embedded generation stations. The average time for generation at each call up period is 44 minutes which averages at only 2.5 call ups per week.

The proposed fuel will be stored in bunded tanks that are located as shown on site in addition there will be smaller double skinned day tanks within the building for each generator. All generators may be operated on natural gas which is to be drawn from the National Grid gas pipeline in the vicinity of the station as well as Diesel. It is important that these embedded stations can operate on a variety of fuels as in future years they will be important in supporting the network during the predicted periods of peak power shortage and uncertainty of gas and various oil supplies. It is therefore important that conditions allow us to generate on natural gas and diesel as and when required.

Emissions from the generators for all fuel types are given at Annex Three - full emissions data. The use of these engines is well within the requirements of the Environment Agency for this location.

As given above this type of embedded generation is ideal as a support to wind and other 'green' power sources. It is the most flexible type of generation as it can be turned on exactly when needed (when the wind stops blowing) which very few other forms of power generation can. Indeed the only types of existing generating equipment that can provide this quick start standby generation are old heavy fuel oil generators that are really inefficient and have poor emissions profiles or open cycle gas turbines that are again much more inefficient (27-35% system efficiency) and produce power in much larger blocks of 100MW or more. Neither of these options offers the distributed power solution that is the main frame of central government policy in this area.

### **Planning Policy as it relates to the application with regard to low carbon energy generation and BAT.**

#### **PPS1 – Planning and Climate Change Dec 2007**

Tackling climate change is a key government priority for the planning system. This policy sets out how planning should contribute to reducing emissions and stabilising climate change and take into account unavoidable situations. It is noted that planning applications should also consider how well the proposals for their development contribute to the Governments target in their ambition for a low carbon economy.

PPS1 also states at para 20

*“that the planning system needs .....to promote and encourage renewable and low carbon energy generation. Policies should be designed to promote and not restrict renewable and low carbon energy and supporting infrastructure.”*

*“In particular the planning authorities should not require applicants for energy development to demonstrate either the overall need for renewable and low carbon energy and its distribution, nor question the energy justification for why a proposal for such development must be sited in a particular location.”*

*“There is a positive consideration for Local Development Orders to be used to secure renewable and low carbon energy supply systems. LDOs could be used to provide additional permitted development rights across the whole planning authority's area. LDOs could also be used to grant permission for a particular type of development in parts of a planning authority's area.”*

*And*

*“Planning Authorities should expect a proportion of the energy supply of new development to be secured from decentralised, renewable or low carbon sources.”*

### **2007 Energy White Paper (Meeting the Energy Challenge)**

PPS1 references the 2007 Energy White Paper (Meeting the Energy Challenge) at many points. Within this document there is a chapter headed Heat and Distributed Generation. The applicant has given due consideration to this as it forms the backbone of the legislation and ideas around which the proposed development has been devised. A copy of this was given at Annex 1 of the original application and it states:-

*'Most of the UK's electricity and more than two thirds of the UK's gas is supplied through a large nationwide grid. This centralised system has kept down costs through economies of scale and provided secure, cost-effective delivery of energy directly to our homes and businesses. As we seek to reduce the carbon emissions from the electricity and heat we use, it is increasingly clear that technological developments are opening up the possibility of a more decentralised low carbon energy system with local energy supply, ranging from household to community-scale, which will play an important part in our strategy.'*

### **Yorkshire and Humber Plan Regional Spatial Strategy to 2026**

#### **Policy ENV 5 A (5)**

This states that “ Plans, strategies, investment decisions and programmes should :- Reduce Greenhouse gas emissions, improve energy efficiency and maximise the efficient use of power sources by providing for new efficient energy generation and transmission infrastructure in keeping with the local amenity and areas of demand.”

Our application is on all fours with current and proposed legislation in this regards.

We hope that the above information is helpful in assessing this application. Standby generation is essential to the National Grid for security of supply and as such is considered an Essential Infrastructure project. We are contracting with the National Grid for the next 15 years to provide this service. The power plant will normally only operate for a few hundred hours per annum. It is required that the permission allows us to generate on either natural gas or diesel and whilst we can operate on liquid biomass we are aware that there are wider environmental issues that need to be resolved in this regard. Should our permission allow we would not intend to operate on this fuel until such time as these issues have been resolved.

Please find attached an updated Design and Access Statement with this information included.

Should you require any further information please do not hesitate to contact David Sheppard or myself on the numbers given.

With kind regards,

A black rectangular redaction mark covering the signature of Mark Jones.

Mark Jones B.Eng.(Hons)MICE  
Managing Director