

TRITON KNOLL OFFSHORE WIND FARM

Keeping you informed



WELCOME

Welcome to our latest newsletter. We have reached the stage in our work on Triton Knoll's electrical system where we have identified some options for the locations of the onshore infrastructure and are ready to present these options in a consultation.

The consultation will begin on 19th February 2013 and will involve consultees such as local councils, landowners, environmental groups and the general public.

We will also be holding public exhibitions which will give everyone a chance to find out more about the electrical system and meet with members of the Triton Knoll project team.

The exhibitions will run from **5 March to 11 March 2013**. The consultation will run from **19 February to 5 April 2013**.

This newsletter will explain the various options we will be consulting on, some key decisions we have been able to take, where and when public exhibitions will be held and how to get further information.

We are very keen to get your views on our proposals as they will help to shape the project as it develops and we very much hope you have the opportunity to visit our exhibitions.

We hope this newsletter is useful. We will issue further editions as the project evolves to ensure we keep you up to date with the project.

Jacob Hain
Triton Knoll Project Manager

PROJECT BACKGROUND

In 2003, RWE npower renewables, one of the UK's leading wind farm developers, was awarded rights to develop an offshore wind farm of up to 1,200 megawatts at an offshore site approximately 33 kilometres (km) (20.5 miles) off the coast of Lincolnshire.

In 2009, National Grid offered us a grid connection to connect Triton Knoll Offshore Wind Farm to the electricity network in East Lindsey, Lincolnshire. In 2010, we consulted local communities and key stakeholders to help identify the most suitable location for a substation within this area.

However, in December 2010, before we had selected a preferred substation location, National Grid advised that they were undertaking a review of the grid connection location. To prevent unnecessary delays to the development of the offshore wind farm, we decided to split the project into two – the offshore wind farm site and the electrical system and work on them separately.

Offshore wind farm site

In June and July 2011, we formally consulted on the offshore wind farm site. As part of the consultation, we held public exhibition events along the Lincolnshire, North Norfolk and East Riding of Yorkshire coasts which were attended by over 400 members of the public.

As a result of the environmental studies and the consultation responses, alterations were made to the wind farm project. For example, the maximum number of offshore wind turbines was reduced from 333 to 288.

In early 2012, we submitted a planning application for the offshore wind farm site. This is currently being examined by the Planning Inspectorate and a decision on the application is expected to be taken by the Secretary of State towards the middle of this year.

(continued on page 2)

PROJECT BACKGROUND CONTINUED

Electrical system

In order to connect the offshore wind farm to the electricity network, electrical infrastructure will be required both onshore and offshore. This will include offshore cables running from the offshore wind farm to a landing point (the landfall) on the Lincolnshire coast. Underground cables would then run from the landfall to the national grid connection location. Another piece of infrastructure is also required along the onshore cable route which is an intermediate electrical compound.

The conclusion to National Grid's review at the beginning of 2012 was the offer of a new location to connect to the national grid at Bicker Fen, south west of Boston, Lincolnshire.

To find the best potential sites and routes for the electrical infrastructure,

we have carried out onshore and offshore environmental and engineering studies. These initial studies have helped us to narrow down the site and route options and we are ready to present these to people to seek their views and gather information.

The consultation will enable us to find out views and information on the short listed sites and therefore make an informed decision on a preferred site.

We aim to submit our planning application for the electrical system in 2014.



A photo of North Hoyle Offshore Wind Farm where the turbine height measurement from sea level to blade tip is 107 metres. The height to the tip of the blades at Triton Knoll Offshore Wind Farm would be a maximum of 220 metres from sea level.

PROJECT UPDATE

Following a year of carrying out detailed studies, we are now able to announce information on the electrical system.

The Triton Knoll electrical infrastructure includes:

- offshore cables running from the offshore wind farm to a point on the Lincolnshire coast
- underground cables running from the shore to an intermediate electrical compound in East Lindsey
- underground cables running from the intermediate electrical compound to Bicker Fen near the National Grid connection location
- a substation in the vicinity of Bicker Fen near the National Grid connection location point
- a short stretch of underground cables to connect the new substation to the existing substation at Bicker Fen.

1) Electrical technology

Technical and commercial studies have shown that AC (Alternating Current) underground cables are the most viable

technology to transmit the power from the wind farm to the national grid, with less impact on the landscape than AC overhead lines. The alternative option of using DC (Direct Current) technology would have required larger above ground onshore infrastructure and this was one of the reasons it was found to be unsuitable.

2) Offshore cable route

The electricity generated by the offshore turbines will be carried from the offshore substations by cables to shore.

The offshore cables will be buried in the seabed. The offshore cable route from the wind farm to shore is approximately 45 – 55 km long and will comprise up to eight cables in a corridor which is 1600 metres wide. Please see map on page 3.

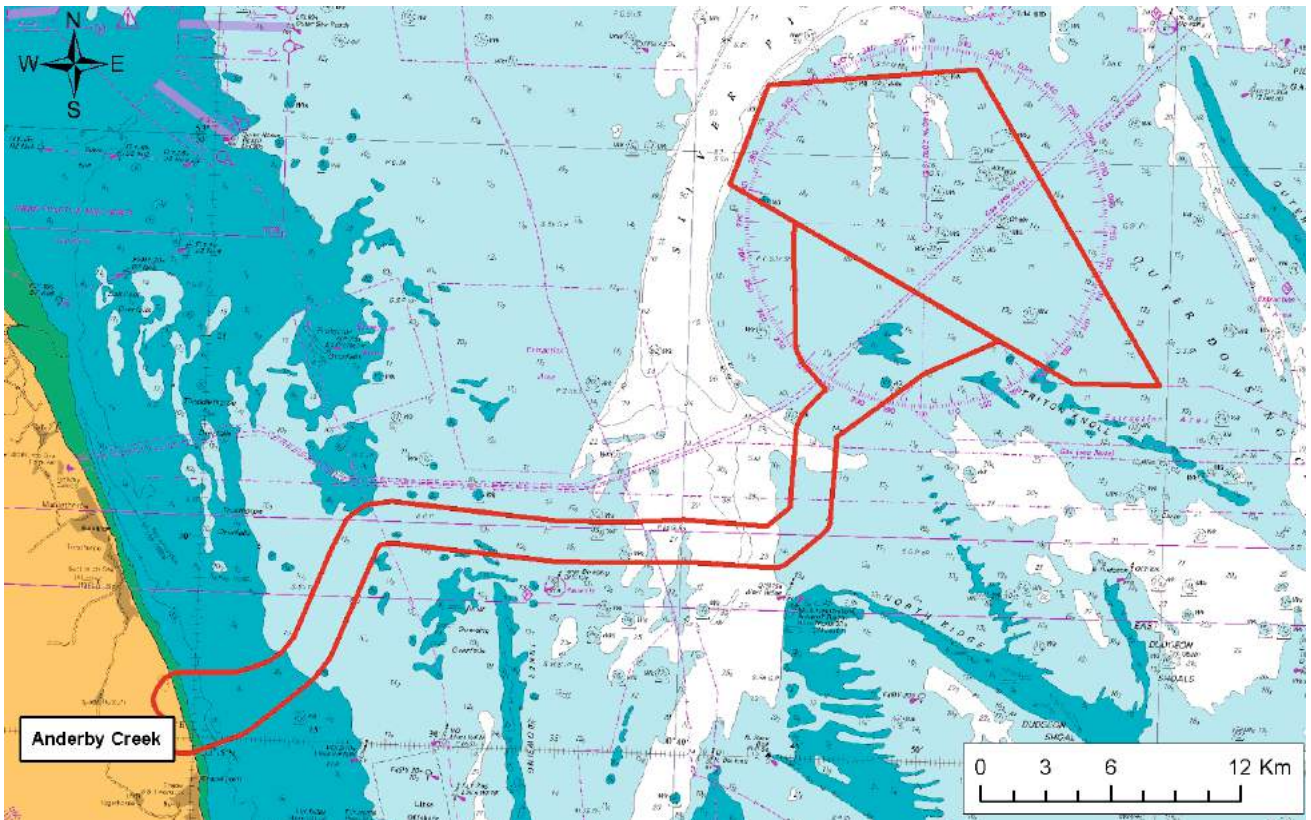
As part of the route identification work, we also investigated the feasibility of laying the offshore cables from the wind farm through the Wash and onto the shore further south towards Boston. We examined the engineering and environmental

constraints and consulted with Natural England, the Marine Management Organisation, Lincolnshire Wildlife Trust, the local fishing industry and local ports. We found that, due to environmental, technical and engineering challenges, routing offshore cables through the Wash was not a possible option for the Triton Knoll project. The full report which includes feedback from consulted stakeholders can be found on our website.

PROJECT UPDATE SUMMARY:

- AC technology selected
- landfall in the Anderby Creek area
- offshore route selected
- three shortlisted sites for intermediate electrical compound in East Lindsey for consultation
- four shortlisted sites for a substation near Bicker Fen for consultation.

PROJECT UPDATE CONTINUED



A map to show proposed offshore cable corridor route.



PROJECT UPDATE CONTINUED

3) Where the power will come ashore (the landfall)

The cables that travel from the offshore wind farm will come ashore in the Anderby Creek area. The key reasons as to why this area has been chosen are:

- the site requires a minimum amount of drilling to bring the cables on land compared with other possible sites
- there is good access for the point at which the cables come ashore for construction and maintenance
- the area where the cables come ashore is the furthest away from properties and should not have negative affects on tourism.

The route proposed to bring the power from the wind farm to shore is shown in the map at the top of page 3. No specific site has yet been chosen in this area as we are carrying out further engineering and

environmental surveys and will also be consulting with relevant parties.

The offshore cables will come ashore in special ducts. Once installation is complete, the only elements at or above ground would be manhole type covers for future inspection and a short fence to protect these from accidental damage. Following construction, recreational use of the beach would be able to continue as before.

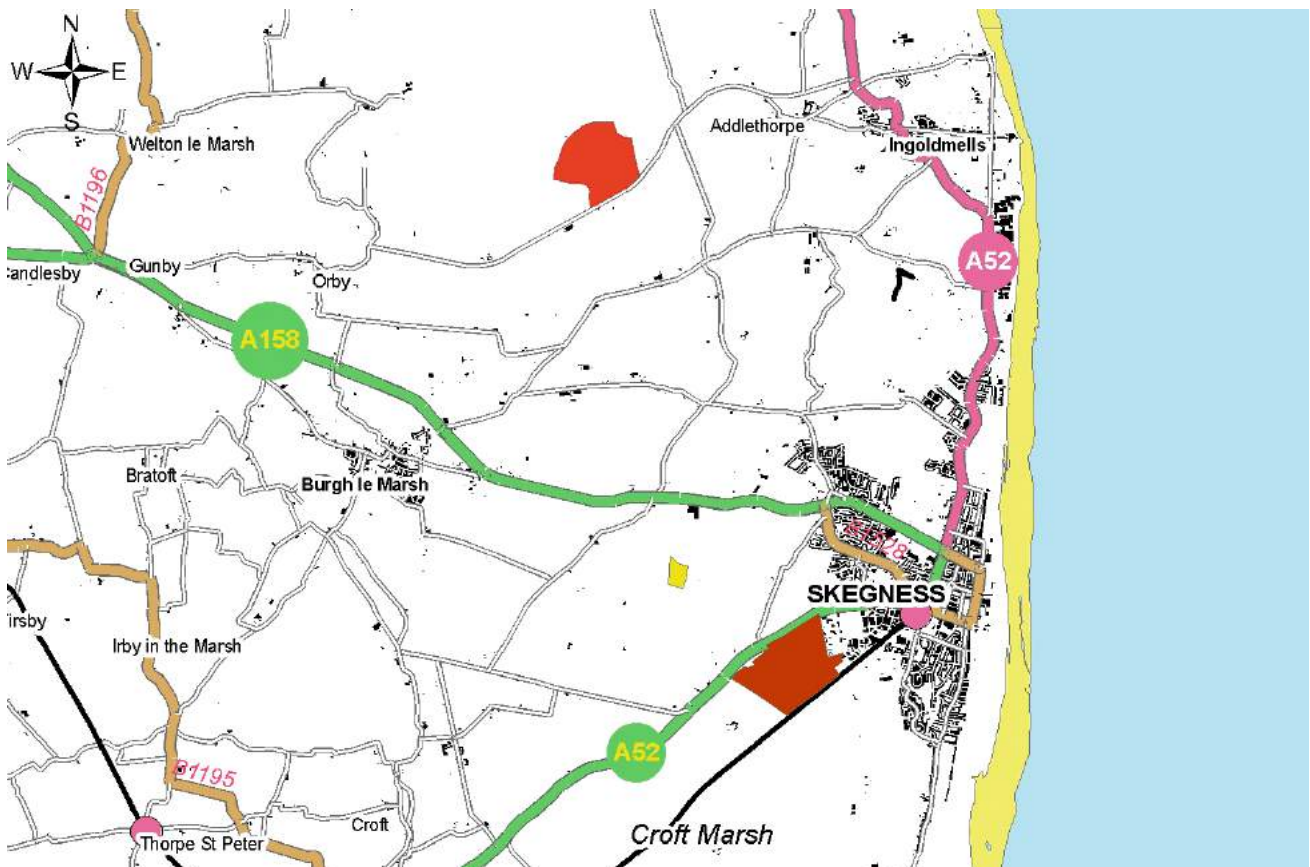
4) Intermediate electrical compound

The electricity generated by the turbines out at sea will be carried by underground cables to an intermediate electrical compound. This compound will ensure the cables carry the electricity in the most efficient way over a long distance.

A shortlist of three potential sites has

been identified for this compound are shown on the map below. How the infrastructure would look has been a key factor in the site selection process. The sites have also been assessed for flood risk, noise and appropriate access for construction and maintenance vehicles. The proposed sites were chosen as they offered the best locations taking into account all the issues that were considered.

The electrical compound will have a footprint of no more than three hectares (7.5 acres) and the maximum height of the components within the compound would be 15 metres (49 feet). It will include landscaping to ensure it blends in with the surrounding countryside as much as possible with some sites giving good opportunities for screening.



A map to show the location of the shortlisted options for the intermediate electrical compound. The yellow, brown and red zones indicate the shortlisted location options for the intermediate electrical infrastructure.

PROJECT UPDATE CONTINUED

5) Substation

The substation will convert the electricity into a voltage which would be compatible to connect to the national electricity network.

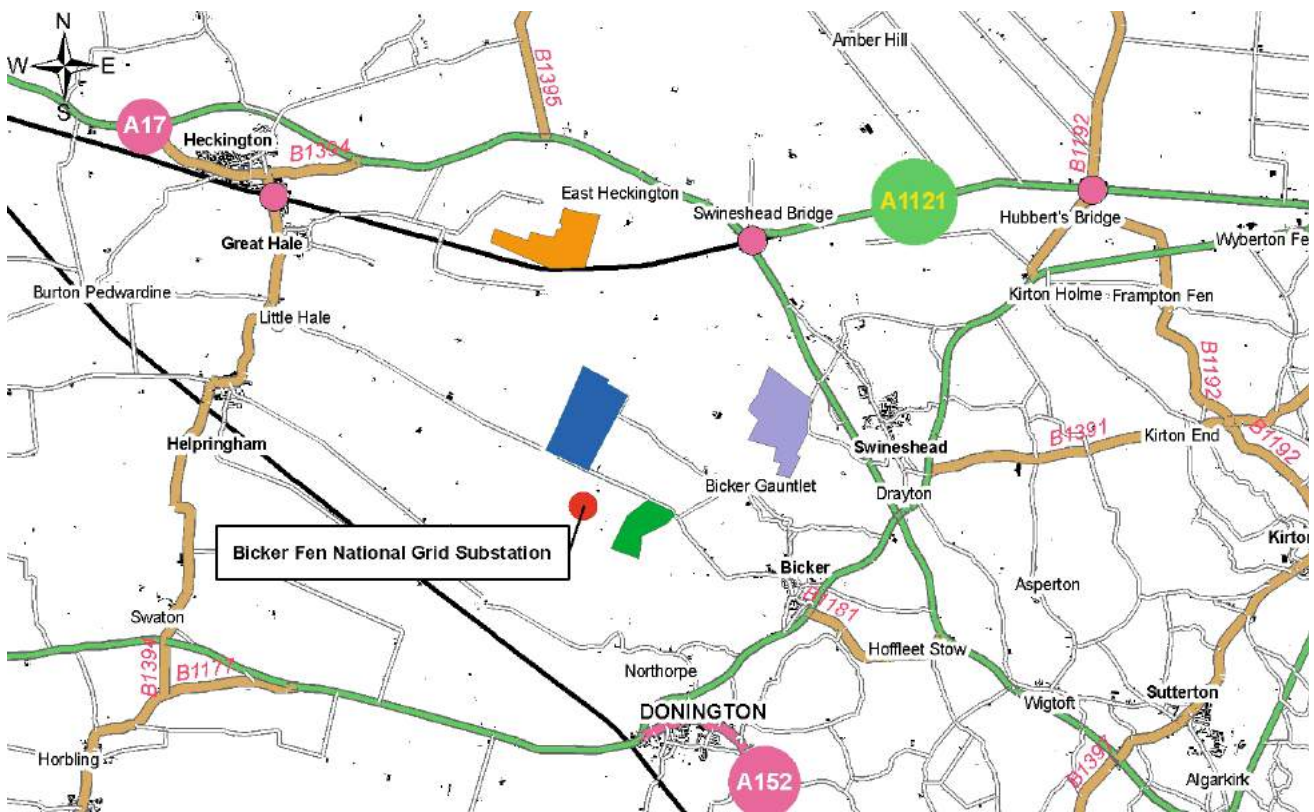
The shortlisted proposed substation sites in the vicinity of the national grid connection point at Bicker Fen were selected following detailed environmental

and engineering studies over a wide area. The sites have also been assessed to see how they would look within the landscape, flood risk, noise and access for construction. The proposed sites selected were chosen as they offered the best locations taking into account these factors.

The substation will have a footprint of up

to 20 hectares (49 acres) and a maximum height of the components within the compound of up to 15 metres (49 feet).

We will also be able to landscape around the substation to ensure the building is as sympathetic as possible to the surrounding countryside. The four shortlisted potential sites are shown on the map below.



A map to show the location of the shortlisted options for the substation. The orange, purple blue and green zones indicate the shortlisted location options for the substation.

6) Onshore cable route

The onshore cable route is the path taken by the onshore cables carrying the electricity from the landfall site in the vicinity of Anderby Creek via the intermediate electrical compound to the substation at Bicker Fen. The cable route will not be known until the sites for each potential intermediate electrical compound and the substation have been decided upon following this consultation.

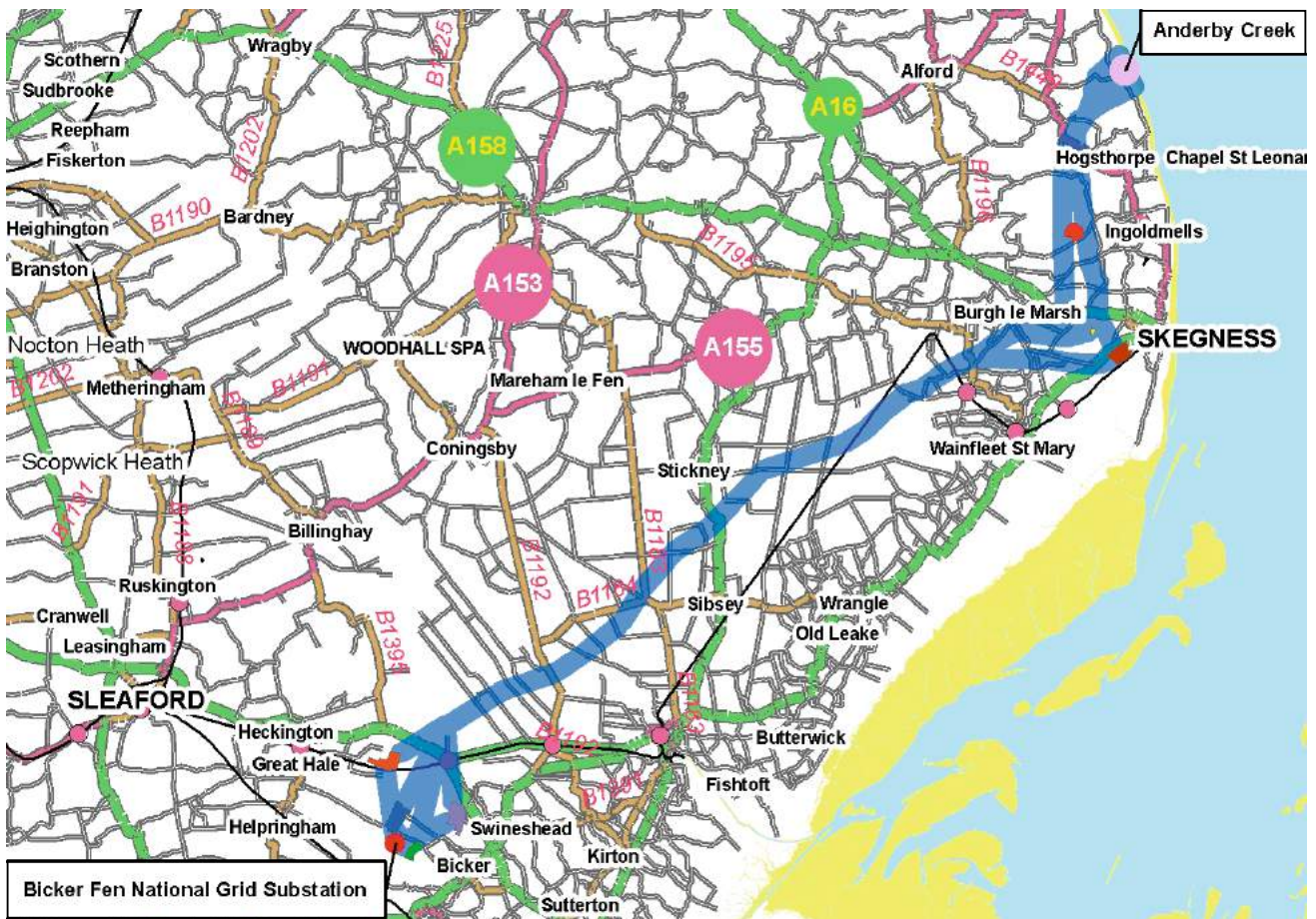
We are proposing a wide path that the cables may take, known as the 'cable corridor', of approximately 1 km, for each

shortlisted option. Within the cable corridor, we will identify an exact cable route which will be no more than 60 metres wide. Whilst we know the cable route will be no more than 60 metres wide, the exact cable route will be decided upon at a later date following further detailed engineering and environmental studies. We are interested to hear from local people, farmers and landowners who may have useful information that will help define the final cable route.

The construction of the cable route incorporates cable trenches, soil storage

and access roads. The construction area will be fenced on all sides and will be up to 60 metres wide. Topsoil will be removed and stored at the sides of the corridor for later reinstatement. A temporary access road will be built along the cable route to reduce construction traffic on the local highways, and although some access on to public roads will be inevitable, a traffic management plan will be agreed in advance which will ensure that disturbance is minimised. The temporary access road will be removed as part of the reinstatement of the land once the cables have been laid.

PROJECT UPDATE CONTINUED



A map to show the proposed options for the onshore cable route.

OUR CONSULTATION

Our consultation on the shortlisted substation and intermediate electrical compound will begin on the 19th February and run until the 5th April 2013. The consultation will provide information and enable you to have your say on:

- the possible zones where the intermediate electrical compound could be located in the East Lindsey District Council area
- the possible zones where the onshore electricity substation could be located in the Boston Borough Council area.

Additional public exhibitions will be carried out near to the landfall location and the onshore cable corridor. The exact onshore cable route will be identified



The RWE npower renewables staff meeting members of the public.

after the consultation once the intermediate electrical compound and substation sites have been chosen.

The Triton Knoll project will have a community investment scheme which will

be consulted on later in the year once the intermediate electrical compound and substation sites have been chosen.

HOW WILL WE CONSULT AND WHO WITH?

To get views on our plans for the onshore substations and intermediate electrical compound, we will use:

Questionnaires – As agreed with Boston Borough Council and East Lindsey District Council, we will send questionnaires, prior to the consultation commencing, to all addresses with postcodes within 1.5 km around each of the potential onshore substation locations and the intermediate electrical compound locations. We will also send questionnaires to all addresses within 200 metres of current potential access routes from the nearest ‘A’ road. An editable version of the questionnaire will be available on our website.

We will also provide a summary of each of the sites within a site report booklet. These will be available with the questionnaires on request and can also be viewed and downloaded on our website.

Questionnaires will also be sent to:

- local elected representatives
- local libraries

- parish and town councils with areas near each of the potential substation locations
- key groups and organisations identified by Boston Borough Council and East Lindsey District Council
- Boston Borough Council access points at Boston Municipal Buildings offices
- East Lindsey District Council access points at Spilsby, Alford, Skegness, Mablethorpe and Horncastle area offices.

Anyone can complete a questionnaire online or request a paper copy by using the contact details within this newsletter. People will be able to respond by returning the completed questionnaire by freepost or by using the on-line questionnaire which will be available at: www.npower-renewables.com/tritonknoll

Public exhibitions – all are welcome to our public exhibitions which will be held at the times, dates and locations in the table below.

Newsletters – this newsletter has been sent to those people living close to the proposed electrical infrastructure and

to other organisations and individuals identified as interested parties. More newsletters will also be placed in key public outlets to reach the wider community.

Engagement with elected representatives and parishes – we will keep regionally and locally elected politicians informed of our proposals. We will also offer copies of documents to parish clerks so they can decide on the best locations to provide information to their community.

Details about the consultation will also be made available on the Triton Knoll Offshore Wind Farm web pages and through press releases issued to the local media.

How to respond to the consultation

We are keen for as many people as possible to respond, in writing, to our consultation. You can respond by filling in a questionnaire which you can find:

- on our website – www.npower-renewables.com/tritonknoll
- at our exhibitions
- by requesting a form via email or by post or on the telephone – see contact details on the back page
- Boston Borough Council access points at Boston Municipal Buildings offices
- East Lindsey District Council access points at Spilsby, Alford, Skegness, Mablethorpe and Horncastle area offices
- local libraries.

Consultation responses must be received by 5pm on 5th April

Any responses made must include contact information including a name and an address to which any correspondence relating to the consultation can be sent.

Your comments may be made public in a consultation report. The report will record comments received and explain how the views of consultees have been considered in developing the final application. This report could become part of our planning application.

Triton Knoll public exhibition locations and times

Date	Location	Times
Tuesday 5th March	Swineshead – Swineshead Village Hall, North End, Boston PE20 3NA	3pm to 7pm
Wednesday 6th March	Bicker Fen – Bicker Fen Village Hall, Cemetery Road, Bicker, Boston PE20 3BT	3pm to 7pm
Thursday 7th March	Anderby Creek – Anderby Village Hall, Sea Road, Anderby, Skegness PE24 5YE	3pm to 7pm
Saturday 9th March	Stickney – Stickney Community Hall, Hall Lane, Stickney, Boston PE22 8BA	3pm to 7pm
Sunday 10th March	The Royal Hotel, South Parade, Skegness, Lincolnshire PE25 3EH	3pm to 7pm
Monday 11th March	The Royal Hotel, South Parade, Skegness, Lincolnshire PE25 3EH	12pm - 6pm

WORKING WITH THE COMMUNITY

Major wind farm developments such as Triton Knoll bring many benefits to the local communities that host them.

These include employment opportunities via the supply chain, a boost for some local businesses such as hotels, B&Bs and shops and the funding of specific projects through a community investment scheme.

Jobs and supply chain

The building of offshore wind farms, such as Triton Knoll, have the potential to generate employment opportunities in areas such as construction, operation and maintenance through to positive effects on the supply chain. When awarding contracts, we follow current legislation and go through a competitive tender process for each part of the works. However, it is normal to expect local suppliers and contractors with appropriate skills to be well placed to win some of the contracts.

Should the Triton Knoll application be approved it is anticipated that up to 500 UK based jobs would be created during the construction phase and 325 UK based jobs would be created during the operational life of the wind farm.

Community investment

We have over 15 years experience of delivering community investment in association with our renewable energy projects. Our community investment programmes are designed around the community.

Once we know the exact locations of the substation, intermediate electrical compound and cable route, we will



A new Changing Hall at Farr village, Inverness, is just one of several community projects supported by our benefits programme.

hold a consultation with those living in those areas to identify all viable community involvement and investment options which could help support local communities. We will then work with communities to tailor a community investment package to meet their needs.

Case study

Shore Thing is a community-based project group in Colwyn Bay, set up to improve the local area by taking ideas from local people. One of its projects is to raise the money it needs to begin restoration work on Colwyn Bay pier. Initially, Colwyn Bay Town Council gave £5,000 to support project planning. As part of their community investment fund for Rhyl Flats Offshore Wind Farm RWE npower renewables provided £30,000 to help develop their application for £4.8 million from the Heritage Lottery Fund.

Education

We recognise that we have a responsibility to work with the next generation in order to foster new talent and encourage young people towards career paths in energy and renewables.

We want to support the engineers and developers of tomorrow to flourish within this growing industry.

Because of this, this year we launched six apprenticeships positions. Each full time apprenticeship starts with two years in college followed by a year working on site at our offshore and onshore wind farm projects. We are committed to taking additional trainees each year.

We run STEM (Science, Technology, Engineering and Maths) events at local schools to allow students to find out how an interest in science, technology, engineering and maths can be applied to the renewable sector. They are an opportunity for teenagers who are making decisions about their future career choices to find out how an interest in science, technology, engineering and maths related subjects can be applied to resolve real life situations and tasks. The skills day is designed to enhance the students' understanding of engineering with the teams being judged on aesthetics, cost, performance, stability and team-working.

We also offer free educational materials which aim to support young people to learn and teachers to deliver the curriculum in the areas of renewable energy and climate change. The materials which include fact sheets and teachers activity packs can be downloaded from our website www.npower-renewables.com/educationresources

If you would like this newsletter in larger print or in another format, please contact us on: 01793 474244

FURTHER INFORMATION

For more background into the project and to view our frequently asked questions

please visit our website at www.npower-renewables/tritonknoll.

Contact Us:

Email:
Tritonknoll@npower-renewables.com

Telephone: 01793 474244

Web:
www.npower-renewables.com/tritonknoll

Post:

FREE POST - RTBK-ABSH-TGLU
Triton Knoll Offshore Wind Farm
RWE npower renewables
Auckland House
Lydiard Fields
Great Western Way
Swindon
SN5 8ZT

This booklet is printed on paper which is made from FSC certified pulp.