RWE npower renewables

TRITON KNOLL OFFSHORE WIND FARM

2013 June

Keeping you informed

This image is not intended to represent the appearance of the proposed Triton Knoll Wind Farm

WELCOME

Welcome to our latest newsletter for the Triton Knoll Offshore Wind Farm following our recent consultation on Triton Knoll's electrical system which ended in April. I would like to express my personal thanks to everybody who took the time to come to one of our public exhibitions or took part in our consultation.

You provided valuable information and shared useful local knowledge with us which has helped in our final choice of preferred locations for the onshore substation and intermediate electrical compound. This newsletter describes why the Blue Zone for the substation and the Brown Zone for the intermediate electrical compound were found to be the most appropriate locations, and explains how participants in the consultation have influenced the decision. It will also answer some of the questions that were commonly asked during our consultation and outline the next steps we will be taking.

As always, if you have any queries or questions, please contact the Triton Knoll team and we will be happy to help.

Jacob Hain
Triton Knoll Project Manager

TRITON KNOLL KEY STATISTICS

Number of wind turbines:
> It is too early to say how many wind turbines will be installed if the wind farm is given planning consent. The number will depend on the size of turbine used but would be up to a maximum of 288 turbines.

Installed capacity of the project:
> Up to 1,200 megawatts (MW).

Maximum height of turbines:
> We have applied for consent for turbines with a maximum height of 220 metres to the top tip of the blade.

Number of average homes supplied:
> The maximum annual electricity expected to be generated from the wind farm site is equivalent to the approximate domestic needs of up to 850,000 average UK households.[1]

Employment benefits:
> It is estimated that Triton Knoll Offshore Wind Farm could create up to 500 UK jobs during construction and up to 325 UK jobs during operation.

PROJECT BACKGROUND

You may be aware that we have split the Triton Knoll project into two packages during the planning application stage:
1) the offshore wind farm
2) the electrical system.

In 2011 we formally consulted on the offshore wind farm site. Following the consultation, we amended our designs and, in early 2012, we submitted a planning application for the offshore wind farm. This has been examined by the Planning Inspectorate and a decision on the application is expected to be taken by the Secretary of State for Energy and Climate Change this summer.

Our most recent consultation concentrated on the electrical system for Triton Knoll. The electrical system is needed to transfer the home-grown renewable energy that will be generated by the wind farm, to the national grid and to homes and businesses throughout the country. Electrical infrastructure will be required both onshore and offshore. This would include offshore cables running from the wind farm to a landing point (the landfall) on the Lincolnshire coast. Underground cables would then run from the landfall to a substation in the vicinity of the national grid connection location at Bicker Fen. An intermediate electrical compound would also be needed along the onshore cable route.

North Hoyle Wind Farm

OUR 2013 CONSULTATION

Earlier this year we consulted with local communities (including residents, businesses and public organisations) on the electrical system alternatives for Triton Knoll. This was an opportunity for local people to put forward local knowledge and have a say on our initial plans. The relevant information we have received has helped us to select the locations for the electrical infrastructure.

> we held seven public exhibitions in Lincolnshire
> we met with almost 900 local residents and businesses to discuss our proposals
> we made our consultation documents widely available and easy to access via our website and at local access points such as libraries and council offices
> we sent our consultation documents directly to over 8,000 addresses
> our consultation approach was in agreement with Boston Borough Council, North Kesteven, South Holland and East Lindsey District Councils, and was set out in our Consultation Statement.

More information about our consultation, including our Consultation Statement can be found on our website at www.npower-renewables.com/tritonknoll.

HOW WE SELECTED THE LOCATIONS

Since the decision to connect into the Bicker Fen substation was agreed with National Grid in 2011, we have been carrying out onshore and offshore environmental and engineering studies to find the best potential sites and routes for the electrical infrastructure. These initial studies helped us to narrow down the site and route options to the seven sites we consulted on. Valuable information and feedback from our consultation has helped us identify the most suitable locations for the intermediate electrical compound and substation.

The appropriateness on each location was judged on the following factors:

> Environmental considerations
Ecology and nature conservation, archaeology and historic environment, flood risk and drainage, traffic and site access, land use, visual impact and operational noise impact
> Results from our consultation
Your local knowledge, feedback and information that you shared and the issues that you felt were most important for us to consider
> Other considerations such as engineering and economics
Potential constructability challenges, access roads and related mitigation measures and cable route length.

THE ONSHORE SUBSTATION

The 'Blue Zone' has been selected as our preferred location for Triton Knoll's onshore substation. It is located to the north west of Bicker and west of Swineshead, adjacent to the South Forty Foot Drain and less than half a mile from the National Grid connection point at Bicker Fen.

WE BELIEVE THIS IS THE APPROPRIATE ZONE AS:

- of all the proposed substation zones, the Blue Zone is the furthest away from properties with the closest property being 550m from the zone boundary
- if located in the Blue Zone the substation would be visually close to similar existing infrastructure, providing a visual setting from most directions
- in the Blue Zone the substation can be screened effectively from the isolated properties and public footpaths
- the Blue Zone is relatively close to the connection point
- a new dedicated haul road to access the Blue Zone would minimise impact on residences and local roads. Traffic enforcement would ensure all construction traffic would use this road
- Boston Borough Council has reviewed our site evaluation methodology and has indicated that if a zone was to be selected, the Blue Zone is the most appropriate for a formal application, provided a new access road was included in the application.

HOW WE HAVE LISTENED TO YOU:

Access and traffic

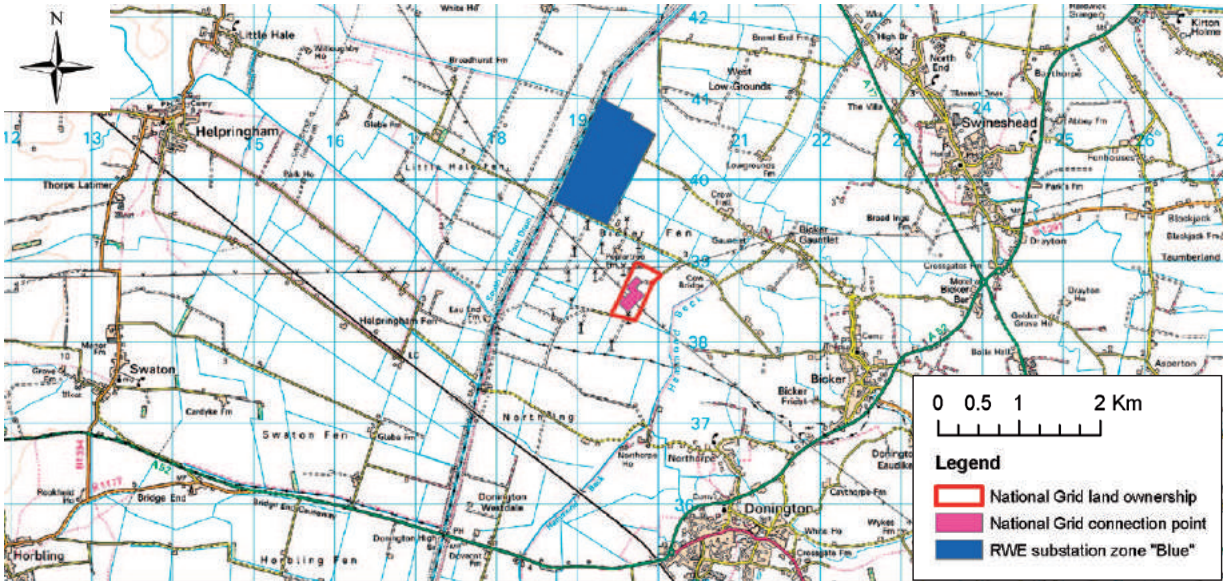
During our consultation, we found that access and traffic were key concerns as these issues were mentioned in 50% of the responses for all substation zones. From the local knowledge we gathered, we learnt that certain local roads we had proposed for access were physically unsuitable in their current state.

One of the most important findings in relation to the Blue and Green Zones and raised by a number of residents, were comments originating from previous experience that construction traffic travelling via Bicker and Cowbridge Lane would be unacceptable. We have taken this into consideration and instead are committing to constructing dedicated new access road to avoid this disruption. By mitigating the access disturbance on all zones, the Blue zone became a better option due to its isolation and closeness to existing infrastructure.

The location of the new road has not yet been decided but would be from a direct junction off one of the A roads and would avoid any residences and local roads. We would consult with the local planning authorities, Lincolnshire Highway Authority and landowners to ensure the new road is appropriate. A traffic management plan would also be put into place.

What the substation would look like

Councils and residents told us that the potential visual impact was a key concern, being mentioned in nearly 40% of responses. It is generally preferred to locate new infrastructure where similar buildings already exist in order to reduce any visual impact. The Blue and Green Zones were closest to the existing wind farm, substation and pylons meaning visually, the infrastructure would be more clustered together.



Map of selected location for the proposed onshore substation. Reproduced from Ordnance Survey digital map data © Crown copyright, All rights reserved. 2012. Licence number 0100031673.

THE ONSHORE SUBSTATION CONTINUED

In addition, the Blue Zone was further away from houses, which will increase the effectiveness of screening from these properties.

Screening

We will ensure that screening is used to minimise the visual impact of the substation. This would be done by developing and agreeing a landscaping strategy in conjunction with the local authority and feedback from the community. This strategy would help ensure that the infrastructure is screened in the most effective way, and may also provide an opportunity to create habitats for local wildlife.

We would propose both long term and short term strategies by using a mix of plant ages. In the short term, some screening could be provided immediately from planting older plants and faster growing species. We could also plant slower growing species such as hedgerows and trees to provide effective long-term screening.

Flooding

We are aware that the Blue Zone is located in a flood risk area and we will have to mitigate against this risk. We understand this is also an important issue for local residents, as 25% of consultation responses in relation to the Blue Zone expressed a concern that the development itself might increase the risk of flooding to the surrounding area. We will continue to work with the local Drainage Board and the Environment Agency to ensure that the proposed design in our application would allay any additional risk of flooding to the site and to the local area.

Agricultural land

Almost 30% of the consultation responses we received in relation to the location of the substation were concerned with the loss of agricultural land. The studies we have undertaken have shown that all of the proposed sites were of high agricultural value and the consultation has shown that this was of importance to you. Unfortunately no brownfield sites (previously developed sites) or land of Grade 3 or below are available in the area. Our site evaluation took into account the relatively small difference in land classification: both the Orange and Purple Zones contained Grade 1 agricultural land whereas the Blue and Green Zones were entirely Grade 2. We will continue to work on the design of the substation within the Blue Zone in conjunction with the local authorities to consider land-take alongside other design factors such as: height of equipment, land needed for visual screening, noise mitigation and engineering design requirements.

Photomontage of the Blue Zone from Timms Drove, 1.2km from the Blue Zone boundary. This is an indicative view of what the substation could look like.

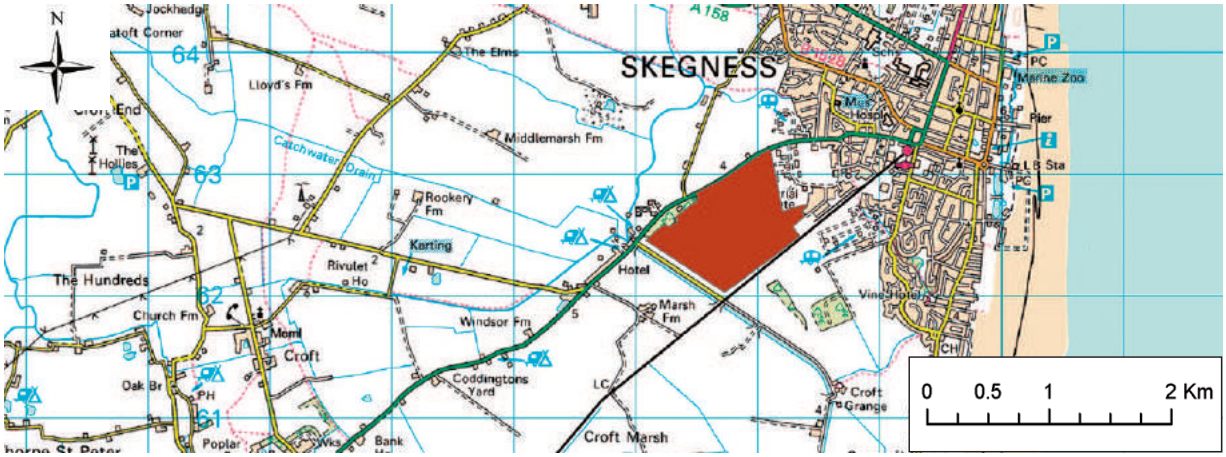
THE INTERMEDIATE ELECTRICAL COMPOUND

The 'Brown Zone' has been chosen as our preferred location for the onshore electrical compound. This zone is located approximately south west of Skegness and adjacent to the Wainfleet Road Industrial Estate.

We believe this is the appropriate zone as:

- the Brown Zone has good access via the A52 and would not require the use of local roads
- we envisage that there would be no adverse effects to designated built heritage features
- despite having a longer cable route than the other zones, the Brown Zone gives the opportunity to place the infrastructure next to an industrial estate, which would visually keep development together and avoid proliferation of infrastructure in the countryside.
- East Lindsey District Council has reviewed our site evaluation methodology and recommended that if a compound had to be selected, the Brown Zone is the best option that has been put forward.

THE INTERMEDIATE ELECTRICAL COMPOUND CONTINUED



Map of selected location for the proposed onshore substation. Reproduced from Ordnance Survey digital map data © Crown copyright, All rights reserved. 2012. Licence number 0100031673.

HOW WE HAVE LISTENED TO YOU:

Access and traffic

Access and traffic were commonly raised during our consultation. The volume of traffic, especially in the summer season, was a key concern. The Brown Zone has a better access than the other proposed zones as no local road would need to be used. However, through the consultation we now understand that being the main access route to Skegness, the A52 can become heavily congested at some critical times such as during the summer months. We will therefore ensure that this is taken into consideration in our traffic management plan.

Local Wildlife

Feedback from our consultation revealed that nature conservation and wildlife was important to a third of respondents. We learned that a larger area of the Yellow Zone than was shown in our data is in an area important for birds. The Brown Zone is approximately 2km away from Gibraltar Point and Natural England is satisfied that a development in the Brown Zone would not have any direct effect on this site. We would undertake surveys for protected species and would continue to consult with Natural England, the Lincolnshire Wildlife Trust and other organisations to ensure our infrastructure would have minimal impact on ecology.

What the Intermediate Electrical Company will look like

The consultation revealed that there were concerns about the visual impact of the intermediate electrical compound in the rural settings of the proposed Red and Yellow Zones, confirmed by the formal advice received from the local authority. We believe that locating the intermediate compound in the Brown Zone would have less potential visual impact due to the industrial setting provided by existing development.

Preferential siting within the Brown Zone

The local planning authority has advised that we should locate the intermediate compound close to the existing commercial development in order to reduce the visual impact. This part of the Brown Zone is already designated for development (business park and site for industry) by East Lindsey District Council.

Photomontage of the Brown Zone from Hassall Road Industrial Estate, on the edge of the Brown Zone boundary. This is an indicative view of what the intermediate electrical compound could look like.

THE INTERMEDIATE ELECTRICAL COMPOUND CONTINUED

Operational noise

A number of local residents who responded mentioned that they were concerned by the potential impact of operational noise from the substation. Noise from the electrical equipment at the Brown Zone can be mitigated and we will continue to work with the local planning authority to ensure we meet stringent noise guidelines.

Cost considerations

By locating the intermediate electrical compound in the Brown Zone, a longer underground cable would be needed than if we went to any of the other proposed zones we consulted on. We feel that the additional cost for the longer cable route is appropriate given the consultation responses we have received.

CABLE ROUTE AND LANDFALL

CABLE ROUTE

Thanks to your feedback, we have been able to select the zones for the intermediate electrical compound and the electrical substation. By participating in the process, you have influenced the decision. We are now able to identify a 60m wide cable route from the landfall to the connection point in Bicker Fen, via the Brown Zone and the Blue Zone. The cable route has been refined from the 1km wide corridor presented during the consultation. We will shortly be approaching landowners along the route who will receive an information pack and a questionnaire regarding the land where we would like to install our cables. The information collected from landowners will help refine further the cable route.

LANDFALL

Following further engineering studies at the two landfall options south and north of Anderby Creek, we are pleased to announce that we have selected the area north of Anderby Creek. This area will allow a shorter connection under the dune for the offshore cable. The South of Anderby has a proposed wetland area developed for birds by the Lincolnshire Wildlife Trust between Roman Bank and the beach. This would require drilling over a long distance which has substantial engineering challenges. There is also a Site of Special Scientific Interest (SSSI) in the South of Anderby Creek. Despite being within the proposed Lincolnshire Country Park, the north of Anderby Creek presents less impact and less engineering risk than the South of Anderby. The exact location and installation methodology is still to be determined and we will consult with the relevant organisations, including the Environment Agency, the local authority and Lincolnshire County Council to ensure the potential impacts are minimised.

Map of Triton Knoll Offshore Wind Farm Electrical Works. Reproduced from Ordnance Survey digital map data © Crown copyright, All rights reserved. 2012. Licence number 0100031673.

YOUR QUESTIONS ANSWERED

A number of questions were asked during our consultation. Below we have shared the questions most commonly asked and our responses.

What the Intermediate Electrical Compound will look like?

The substation would be a maximum of 20 hectares (49 acres) in size and the intermediate electrical compound will be up to three hectares (7.4 acres) in size. Now we have chosen our preferred location, we will commission specialist companies to look at the specific design and arrangement of the substation.

How noisy will the electrical infrastructure be during the construction and once it is operating?

Any noise produced by the electrical infrastructure would comply with planning guidance. We would use noise barriers within the compound area to ensure there are no significant impacts. We are already in discussions with Boston Borough Council and East Lindsey District Council and will work to agreed limits.

Will local contractors be used for construction work?

When awarding contracts, we follow current legislation and go through a competitive tender process for each part of the works. Local companies are often well placed to win these tenders. For example, at our North Wales Gwynt y Môr offshore wind farm, a £15 million contract was awarded to local firm Prysmian Cables and Systems Limited to supply and install all onshore underground cabling. This contract secured continuity of employment for the 350 North Wales based employees. In addition 90 employees were contracted locally as part of the cable installation process. Additionally there was a multi-million pound contract to Ruthin based Jones Bros for preparatory groundworks for the building of the onshore substation for Gwynt y Môr offshore wind farm. This contract secured work for 40 local people.

Local businesses are also gaining from spin-off economic benefits. For example, hotels in Llandudno, a cleaning company in Prestatyn, a catering company in St Asaph and an ecology consultant in Ruthin have all received contracts and business as a direct result of the Gwynt y Môr wind farm.

How will the local community benefit?

We propose to offer a community investment fund in association with the substation and intermediate electrical compound. As we know that all communities are different, we will listen to the community and work with them to ensure we develop a bespoke funding package that will really meet their needs.

We will hold a consultation with those living in the areas close to the preferred locations to identify all viable community involvement and investment options which could help support local communities. In conjunction with the community we will then tailor a community investment package especially for them.

When will key decisions in the project's life be taken?

The offshore application is being examined by the Planning Inspectorate and the Secretary of State. We expect a decision in July 2013.

No activity has started offshore yet. Our next step is to survey the seabed in order to determine the exact locations on which to site the turbines and the offshore substations. We are also currently carrying out engineering and design studies to evaluate the best design for the wind farm. We would not install the wind turbines offshore before the electrical system has secured all necessary consents. The timeline of the project is below:

Summer 2013	Locations of the **onshore** electrical infrastructure announced
July 2013	Triton Knoll **Offshore** Wind Farm planning consent decision
Late 2013/ early 2014	Second stage of consultation for the **onshore** electrical system
2014	Submission of planning application for the **onshore** electrical system

How will you cross rivers and roads?

Large obstacles such as watercourses, major roads, railways and sea defences may require a drilling technique called horizontal directional drilling. This is carried out by creating temporary compounds on either side of the obstacle drilling a small borehole underneath the obstacle. Plastic ducts are installed in the borehole allowing cables to be pulled through. Once completed, the compounds are removed and the land is restored. This avoids open-cut techniques and allows cables to be buried deep under obstacles over short distances with minimum disruption and maintenance.

We are consulting stakeholders such as the Environment Agency, the Internal Drainage Boards and the Highways Authority on this.

Would you need pylons to connect from the new substation to the existing substation?

No. We intend to connect using underground cables.

YOUR QUESTIONS ANSWERED CONTINUED

How will local communities know what is happening when construction starts?

We will keep local communities informed of our construction programme to give advance notification of key works. Local residents in the vicinity of construction works or traffic routes will receive prior notification of works that may affect them and will be kept informed by letters. We will also be contacting landowners directly whose land is affected directly by the proposed cable route.

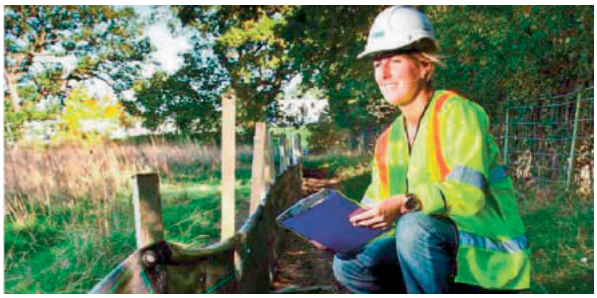
Gwynt y Môr substation

NEXT STEPS

Now we have selected the sites, we will undertake the environmental impact assessments. We will refine the design of the substation and the intermediate electrical compound and find the exact location within each selected zone. We will also be making contact with landowners to seek voluntary agreement with them to allow us to commence construction once all of the permissions have been put in place.

We will continue to consult with the relevant local authorities, statutory bodies and other organisations. Once we have refined our proposal, and before we submit any planning applications we will do further public consultation to get your input in the design of the scheme.

The Cairnsphairn Community Garden received a contribution from the Windy Standard Wind Farm Fund



Environmental works

FURTHER INFORMATION

For more background into the project and to view our frequently asked questions please visit our website at www.npower-renewables/tritonknoll or, scan here with your smart phone's QR reader:

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

FOOTNOTES

[1] Equivalent homes supplied is based on an annual electricity consumption per home of 4700 kWh. This figure is supported by recent domestic electricity consumption data available from The Digest of UK Energy Statistics and household estimates and projections from the UK Statistics Authority.

Energy predicted to be generated by the proposal is derived using wind speeds monitored in the local area and correlating to a modelled reference node. This enables a calculation to be made to estimate the average annual energy production for the site based on 195 turbines each of rated capacity 6.15 MW. The energy capture predicted and hence derived homes equivalent or emissions savings figures may change as further data are gathered.

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