

# TRITON KNOLL OFFSHORE WIND FARM

Project update – 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. This newsletter describes some recent changes that we have made to the project.

As you may know, RWE Innogy UK received Development Consent Order for the offshore array of the Triton Knoll Offshore Wind Farm from the Secretary of State for Energy and Climate Change in July 2013. On 31st January 2014, we changed our name from RWE npower renewables to RWE Innogy UK. This clarifies our position as the UK subsidiary of RWE Innogy, which pools the renewable energy expertise of the RWE Group across Europe.

We are currently developing the electrical system to transfer the renewable home-grown energy from the offshore wind farm to the National Grid. I hope that the content inside this newsletter will give you an understanding of where we are at the moment and why we have made the changes we have.

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

Contact the team. Email: [tritonknoll@rwe.com](mailto:tritonknoll@rwe.com)

## TRITON KNOLL KEY INFORMATION

The Triton Knoll project has been developed in two packages:

1. The Triton Knoll Offshore Wind Farm (the offshore array) – this includes the offshore wind turbines and offshore substations. This was granted consent by the Secretary of State in July 2013.
2. The Triton Knoll Electrical System – this includes the offshore and onshore cables, intermediate compound and onshore substation required to transmit the electricity produced by the wind farm to the National Grid. This is currently in development and the subject of this newsletter.

## UPDATES IN BRIEF

- > Project review leads to reduced footprint for the onshore infrastructure
- > Triton Knoll Electrical System will now be examined by the Planning Inspectorate
- > Change of location of zone selected for the Intermediate Electrical Compound in response to local plans

## PROJECT REVIEW

RWE Innogy UK has revised plans for the proposed Triton Knoll Offshore Wind Farm project following a project review and recent offshore site investigations.

Work on the offshore site design and identification of new seabed constraints means that we have decided to progress the development with a reduced maximum capacity of 900 megawatts, rather than the maximum of 1200 megawatts previously communicated.



North Hoyle Wind Farm, this is not intended to represent the appearance of the proposed Triton Knoll Wind Farm.

## WHAT DOES THIS MEAN?

The new capacity would ensure enough energy to power the equivalent domestic needs of up to 800,000 average UK households.<sup>1</sup>

The area of the offshore site would not change, but the revised site design would ensure the efficiency and utilisation of the offshore site is maximised. In addition to the reduction of the project’s capacity, more detailed design work on the onshore infrastructure has also taken place as part of the project review.

This has resulted in significant reductions to the required onshore footprint of Triton Knoll. A maximum of 8.6 hectares (approx. 21.3 acres) would now be needed for the onshore substation rather than 20 hectares. Also up to 1.8 hectares (approx. 4.4 acres) would be needed for the intermediate electrical compound rather than 3 hectares.

RWE Innogy UK will continue to undertake rigorous review and optimisation of the project as it progresses.

Project Changes	Previous	Updated
Installed capacity	Up to 1,200MW	Up to 900MW
Estimated average number of equivalent homes supplied <sup>1</sup>	850,000	Up to 800,000
Maximum size of the onshore substation	20 hectares 49.4 acres	8.6 hectares 21.3 Acres
Maximum size of the electrical compound	3 hectares 7.25 acres	1.8 hectares 4.4 acres

## PLANNING APPLICATION

The Triton Knoll Electrical System Planning Application will be examined by the Planning Inspectorate.

The Triton Knoll Electrical System will be considered for development consent under the planning Act 2008. The application will be examined by the National Infrastructure Directorate within the Planning Inspectorate and determined by the Secretary of State for Energy and Climate Change.

Since splitting the project into two packages, RWE Innogy UK has been progressing the electrical system package. The intention was to submit applications to the relevant Local Authorities but considering the complexity of the project and timescales to deliver, it was decided to reconsider this approach. Following further consultation, we will now submit an application to the Planning Inspectorate for the Triton Knoll Electrical System next year.

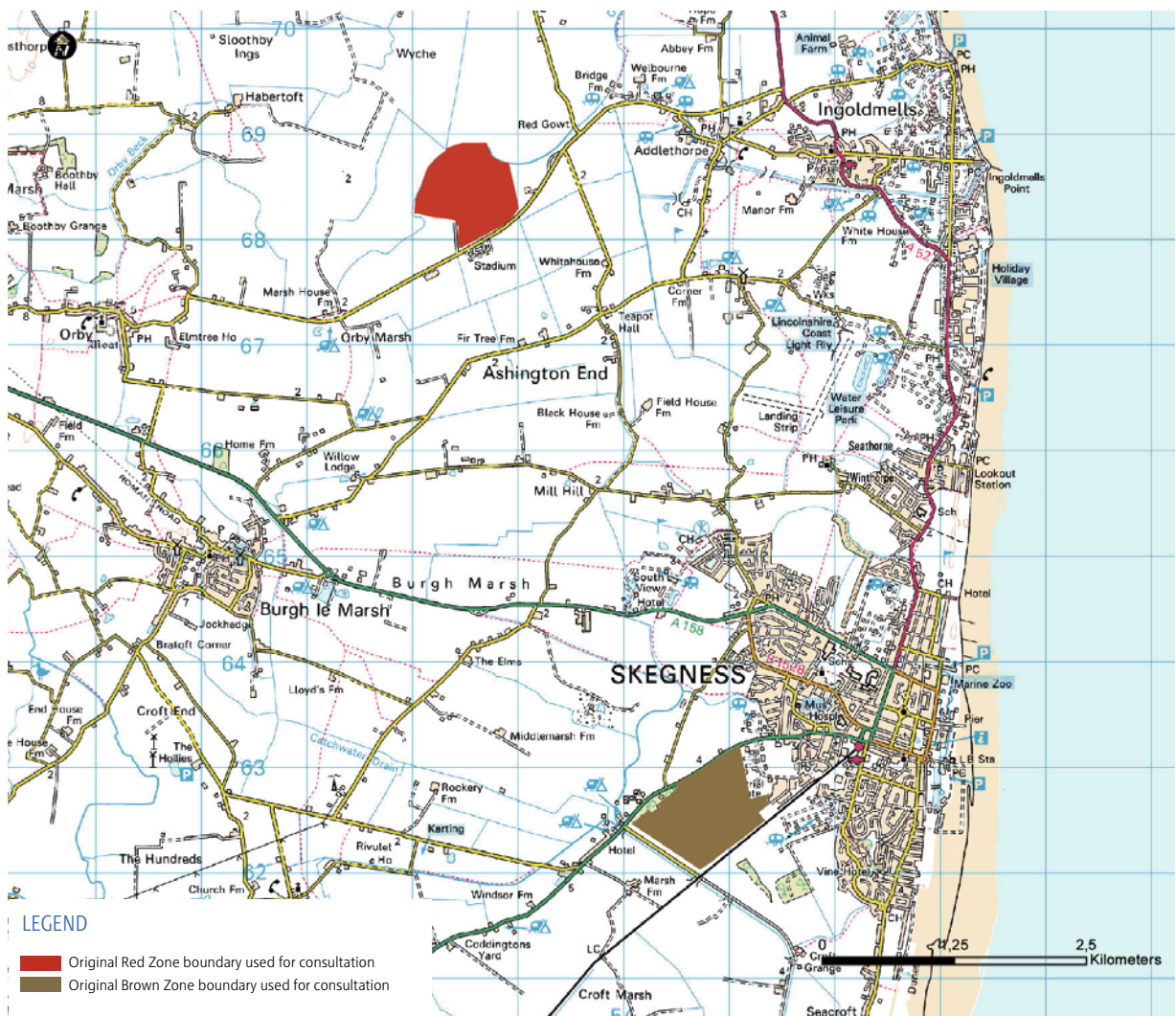
## THE INTERMEDIATE ELECTRICAL COMPOUND (LOCATION CHANGE TO RED ZONE)

In 2013, RWE Innogy UK carried out consultation to determine the zones for the required Intermediate Compound and the onshore Substation.

Three zones were shortlisted as possible sites for the Intermediate Compound. RWE Innogy UK undertook a full evaluation of these three sites, which took into consideration assessments from our experts and all the consultation responses we received. The evaluation showed the Red Zone as the preferred site (near Skegness Stadium between Orby and Addlethorpe). However, East Lindsey District Council advised that their preference was the land adjacent to the Wainfleet Road Industrial Estate known as the Brown Zone.

This advice swayed the results of our evaluation and therefore the Brown Zone was selected and announced in June 2013.

Following this selection however, a planning application for a leisure development on the south-western portion of the Brown Zone was submitted to East Lindsey District Council and subsequently consented. More recently, an economic regeneration initiative known as the Vision for Skegness was announced, which may include retail and leisure facilities, supermarkets, hotels and a major bypass. This development, which was partly located on the Brown Zone, with the proposed bypass being directly on our cable route, began to receive widespread support, including from Lincolnshire



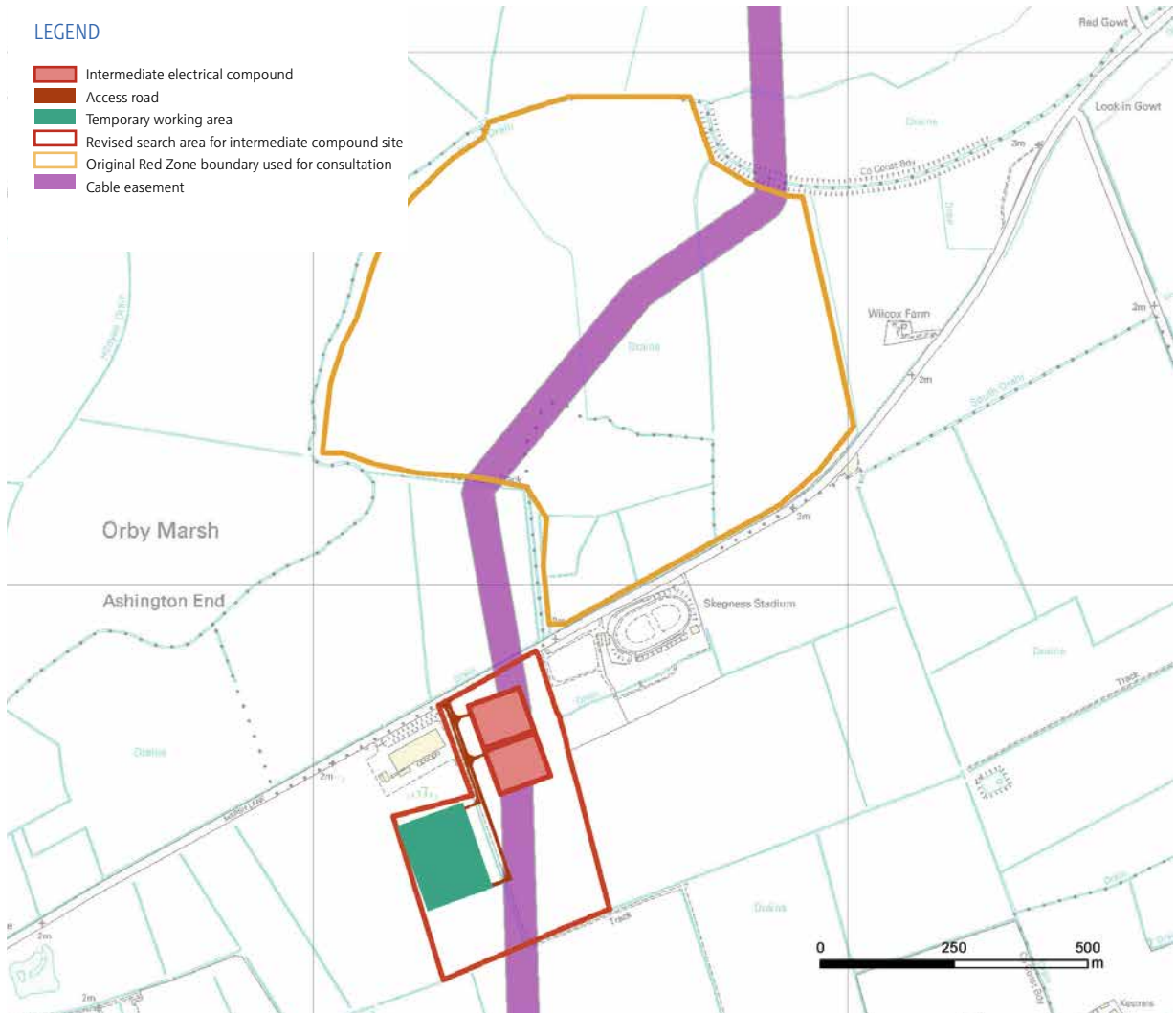
Location of Brown Zone and Red Zone for the Intermediate Compound.

County Council. East Lindsey District Council Planning Officers also indicated that the Council would now object to the siting of the Intermediate Compound on the Brown Zone.

RWE Innogy UK is keen to work together with local communities to support local economic regeneration. Therefore, following the announcements, we went back to review the shortlisted zones and re-assess them.

We assessed the compatibility of the intermediate electrical compound in the Brown Zone with plans for Vision for Skegness and concluded that it would be highly complex to co-locate with these developments.

These results, along with East Lindsey District Council's revised consultation response, changed the scoring of our evaluation back to our original conclusion of the Red Zone being the preferred site. This zone is located approximately 6km to the north west of Skegness and 4.5km west of the North Sea coastline.



Red Zone and the selected site south of the Red Zone now available due to a reduced footprint, keeping development together.



## THE INTERMEDIATE ELECTRICAL COMPOUND (LOCATION CHANGE TO RED ZONE) CONTINUED

Following the reduction of the footprint of the required equipment at the Intermediate Electrical Compound, and listening to comments from our consultation, we have selected a site that is between the existing infrastructure as shown in the map on page 4.

Further information on this decision can be found on our website: [www.rweinnogy.com/tritonknoll](http://www.rweinnogy.com/tritonknoll)



How the Intermediate Electrical Compound could look. This picture is indicative and for illustrative purposes only.

## THE SUBSTATION

Following overwhelming responses from the consultation regarding access to the selected Substation site known as the Blue Zone, we have selected a route for a new dedicated access road that would avoid any properties or local roads.

The land 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, known as the Blue Zone was selected as the preferred Substation site. In response to the consultation responses received in 2013 regarding construction traffic to this zone, we said we would build a dedicated access road to the substation from the A-road to avoid using local roads and passing local residencies.

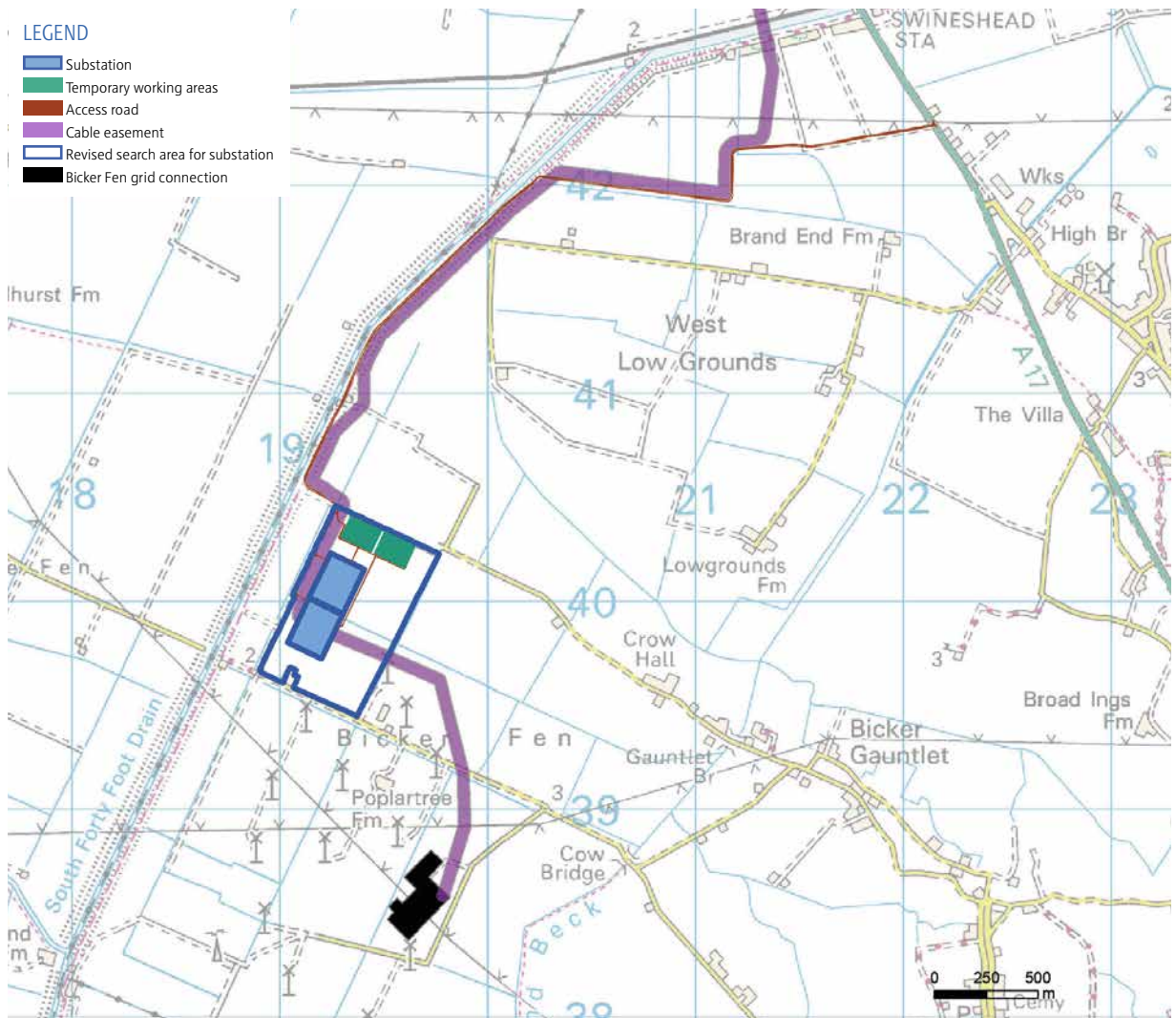
The map on page 6 shows the proposed dedicated road to access the Substation, which will minimise disruption to the village of Bicker and the residents on Cowbridge Lane. The route follows field boundaries to minimise disruption of farming activities and, as far as possible, the cables would

follow the same route as the access road in order to minimise land take. A temporary road would be built first to allow for construction of the Substation to start whilst the permanent road is getting built. The temporary road would be removed once construction of the Substation is complete.

As with the Intermediate Compound, we have looked at a more specific location for the Substation considering the reduced footprint. This location is now approximately 3.5km (2.2 miles) from the village of Bicker and 4.1km (2.5 miles) from the village of Swineshead. The map on page 6 shows the proposed location which was selected under the following criteria:

- > siting as far away from residencies as possible, with the closest one being approximately 900m (0.5 mile) from the Substation
- > giving enough space for around 50m of screening thickness around the site
- > no need of removal or diversion of major drains.

# THE SUBSTATION CONTINUED



The proposed blue zone and access road.



How the Substation could look. This picture is indicative and for illustrative purposes only.



# THE CABLE ROUTE – HAVE YOUR SAY

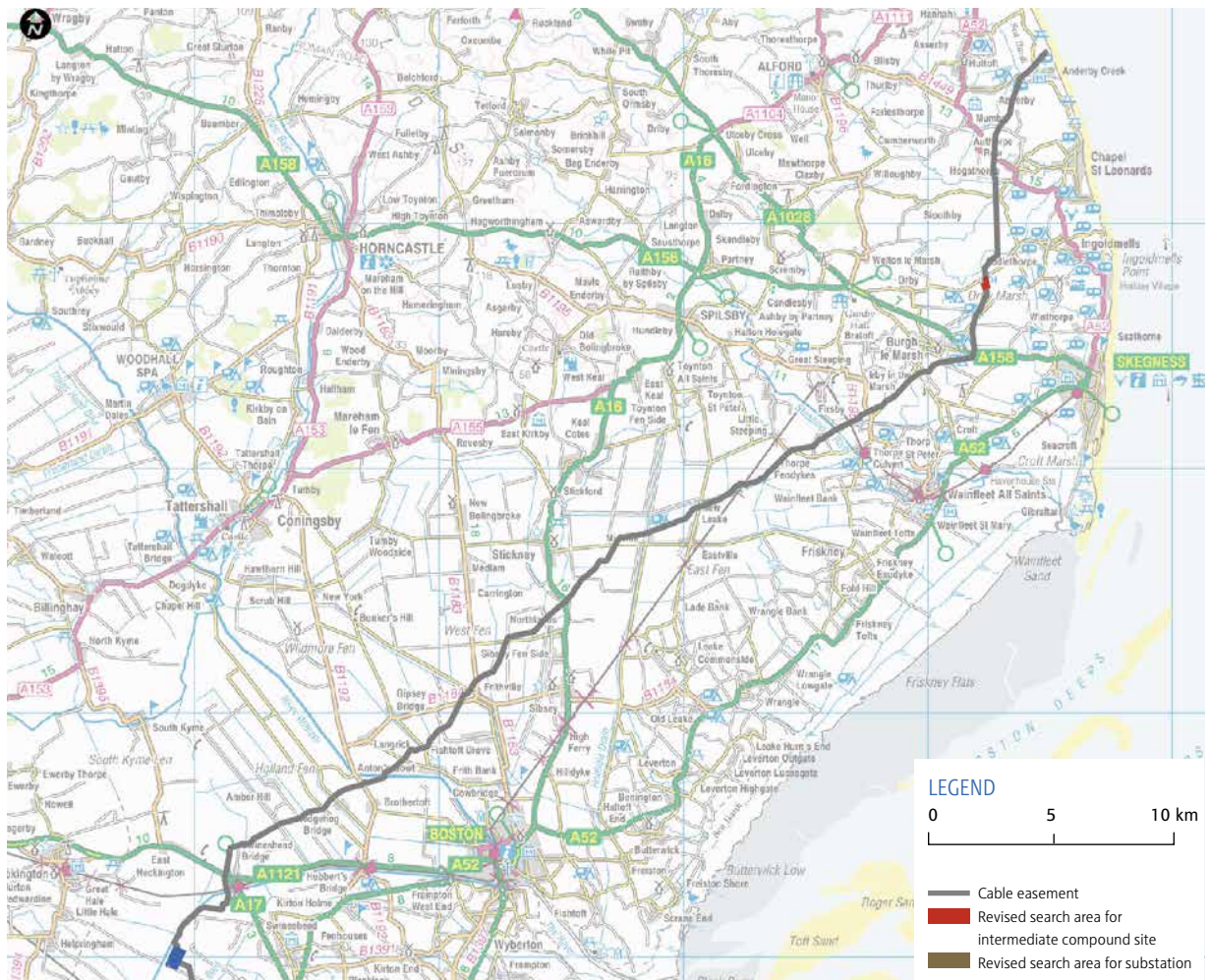
## Consultation on cable route alignment – 3 February until 16 March

Following the change of the Intermediate Compound location, we have also looked at a new cable route linking the connection point at Bicker Fen, the Substation location at the Blue Zone, the intermediate electrical compound at the Red Zone and the landfall just north of Anderby Creek.

We are now able to propose a cable route that takes into account factors such as engineering feasibility, drainage systems, impacts on ecology and protected species, archaeology and the location of other utilities. We now want to gather further information from landowners and local people who may have knowledge of the area that could help to refine the cable route.

We are contacting relevant landowners directly to consult on the cable route alignment on their land. We also invite everyone to participate in this consultation and give their feedback on the proposed cable route. You can have a closer look at the cable route on maps available on our website [www.rweinnogy.com/tritonknoll](http://www.rweinnogy.com/tritonknoll) or on request via the contact details on page 8.

The objective of the consultation is to give landowners and residents the opportunity to influence the routing of the underground cables for the Triton Knoll Wind Farm Electrical System. Interested individuals can provide feedback in a short questionnaire regarding the location of the proposed route and any information that could influence the cable routing. Find out more and have your say: [www.rweinnogy.com/Tritonknoll](http://www.rweinnogy.com/Tritonknoll)



Map of the proposed cable route for consultation.

## KEY MILESTONES

Date	Milestone	How you can get involved
Winter/Spring 2014	Consultation on the onshore cable route location and alignment	Direct consultation with relevant landowners along the cable route. Local residents can get involved – all consultation documents will be available on our website and open to everybody to participate.
Autumn 2014	Formal Consultation on the whole Triton Knoll Electrical System	Consultation with local residents, communities, statutory bodies and other organisations on the offshore & onshore cables, the landfall, the intermediate compound and the onshore substation.
Winter/Spring 2015	Planning application submitted to the Planning Inspectorate (PINS)	Your opportunity to register as an 'Interested Party' directly with PINS.
Spring – Winter 2015	PINS Examination	Interested parties are invited to take part in the examination of the application
2016	Decision announced by the Secretary of State	The decision will be announced on the PINS website

## WHAT HAPPENS NEXT

We will hold further consultation on the electrical system in 2014 before submitting an application to the Planning Inspectorate (PINS) in 2015.

The PINS process ensures thorough examination inviting local communities and interested parties to actively get involved and have their say.

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

### FOOTNOTES

<sup>1</sup> Energy predicted to be generated by the proposal is derived using long term wind speeds calculated by meteorological models seeded with historical weather data obtained from satellite, surface-based and airborne measurement systems. This enables a calculation to be made to estimate the average annual energy production for the site based on 100 to 150 turbines each of rated capacity 6 MW. The energy capture predicted and hence derived homes equivalent or emissions savings figures may change as further data are gathered.

Equivalent homes supplied is based on an annual electricity consumption per home of 4500 kWh. This is an amendment from the previously used 4700kWh. 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.

### TRITON KNOLL BENEFITS

#### Investment

- > The Triton Knoll Offshore Wind Farm could represent billions of pounds of investment in clean green energy infrastructure.

#### Employment Benefits

- > It is estimated that Triton Knoll Offshore Wind Farm could create up to 325 permanent UK jobs during operation.

#### 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 between 550,000 and 800,000 average UK households.<sup>1</sup>

#### Spend to date

- > The project has already resulted in £18m investment in the UK, with £1.75 million spent in the East Coast of England.

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