TRITON KNOLL

January 2020

TRITON KNOLL OFFSHORE WIND FARM COMMUNITY NEWSLETTER

WELCOME, AND A VERY HAPPY NEW YEAR TO YOU ALL!

January 2020 marked an amazing milestone for the project as we entered the waters off the Lincolnshire coast to begin installing our new offshore infrastructure.

This month saw the arrival of our foundations installation vessel 'Seaway Strashnov' to the offshore site, located 32 kms off the Lincolnshire coast. It will be responsible for installing each of the 90 monopile foundations and transition pieces, which are the large yellow sections on the top of the monopile.

As work around the foundations progresses, we will also begin installing the two offshore substation platforms and over 600 kilometres of offshore export and array cables, to ultimately transport the power generated by the turbines back to shore and into the national grid network.

Offshore work marks a significant stepping stone for the project towards our goal of generating enough wind energy to power the equivalent of over 800,000 typical UK homes. I'd like to reflect also on the achievements onshore during 2019 for which your continued support and patience has been invaluable.

In the last 12 months onshore, we have:

- Established a live connection from the existing national grid substation, ready to connect in our new infrastructure at Bicker Fen
- Installed almost all of the onshore cable ducting and pulled in over half of the cable along the 57 kilometres onshore cable route
- Installed the ducting at the landfall in Anderby ready for cable installation later this year
- Delivered the major electrical components to the onshore substation and installed the bulk of the physical infrastructure.

In addition, we have also:

- Built our new construction base at Grimsby and recruited locally for our 70 strong team
- Cleared our offshore works locations of unexploded ordnance
- Made good progress with manufacture of our offshore foundations, substation platforms and sub-sea cables

We still have important work to do onshore over the next 12 months, as the project moves into its busiest period ever, with both onshore and offshore works underway at the same time.

Thanks for your support over the previous 12 months, and we look forward to maintaining that relationship in the coming year as we move towards completion of our onshore works.

Julian Garnsey, Project Director

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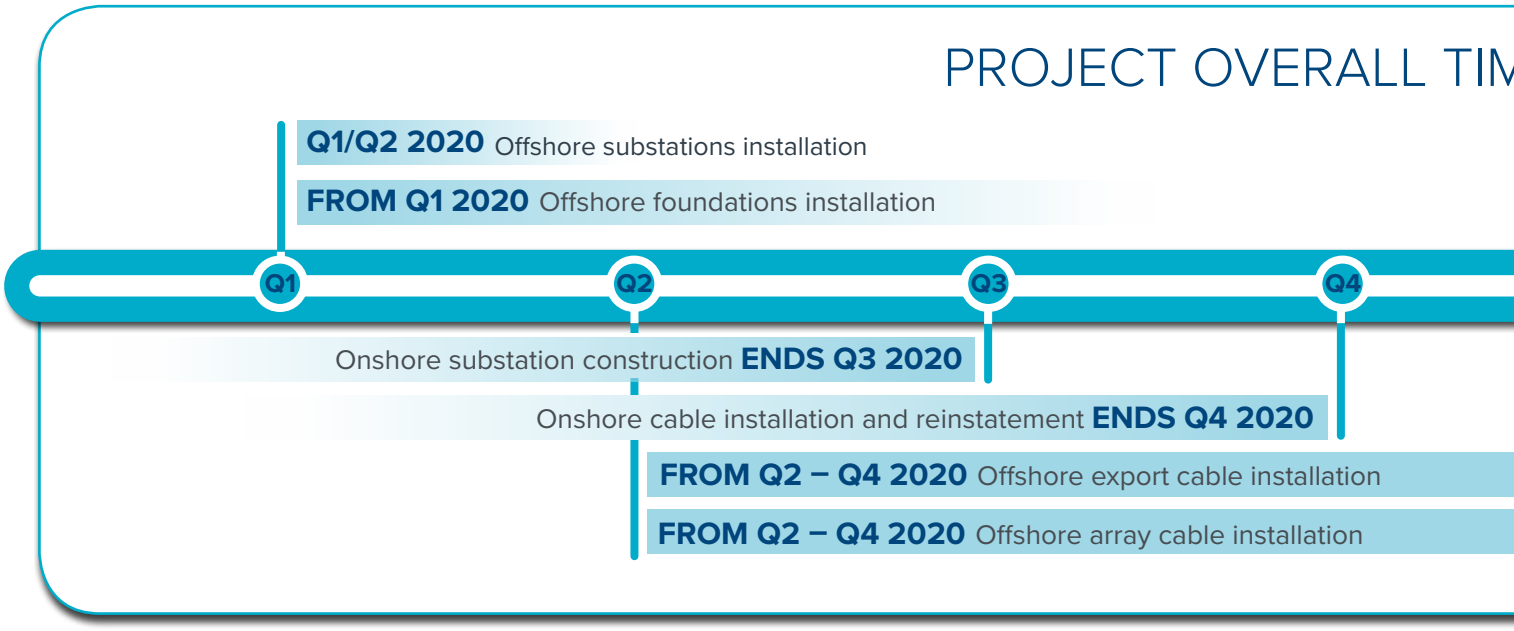
PROJECT OVERALL TIM



TRITON KNOLL HEADS OFFSHORE IN 2020

Triton Knoll launched into offshore construction this month, to begin the installation of our 90 turbine foundations, and the two offshore substation platforms later in the spring (OSPs.)

Offshore construction will be managed from our new Offshore Construction Coordination (OCC) base at Grimsby's Royal Dock, with the team having already moved in on site in Autumn last year. From the base, we will coordinate the entire offshore construction programme throughout 2020-2021, which includes scores of vessels, installation of 90 x foundations and turbines, 2 x offshore substation platforms, hundreds of kilometres of inter-array and export cables, and the service operations vessel crews which will each spend two weeks at a time working offshore.

One of the main contractors supporting the OCC team is Bridlington based Specialist Marine Consultants Ltd (SMC) which we appointed last October. It aims to generate up to 35 new and primarily local jobs because of the award, bringing much needed investment into the local coastal community. Announcing the contract agreement, Triton Knoll project director Julian Garnsey said: "We are very pleased to have their (SMC's) expertise onboard at Triton Knoll and to be supporting their growth and all that brings with it – opportunities for jobs and for investment into the north east coastal region."

O&M building taking shape at Grimsby.

Construction of a long-term operations and maintenance base, consisting of an office and warehouse, continues to progress well since work began in July 2019. Both buildings' structures and external cladding are complete, with mechanical and electrical fit out underway and on track for completion this summer. The base will support over 70 direct jobs as well as additional indirect jobs and has already recruited the first 20 roles. Further opportunities will continue to be advertised on our project website, at www.tritonknoll.co.uk.

The production of our major components that make up the electrical system has continued to progress well providing some opportunities for UK firms in the North East and Scotland.

Scottish manufacturer JGC was subcontracted to Manchester-based Siemens Transmission and Distribution to complete the manufacture of several offshore container modules to house critical electrical equipment at our two offshore substations.

MELINE **2020 - 2021**

2020 **2021**

Q1 Q2 Q3 Q4

DURING Q1 2021 First generation

FROM Q1 2021 – Q4 2021 Turbine installation and commissioning

SMC team at work in the field.

Monopiles awaiting transport to site.

Assembly of specialist foundation sections called transition pieces (TPs) for the project's two offshore substation platforms (OSPs) has been carried out at Smulders' Wallsend yard, near Newcastle. Each TP is over 20m high, up to 7m in diameter, and weighs over 500 tonne, and includes a "cage" which weighs a further 175 tonne. Both OSPs and each of the wind farm's 90 offshore turbine foundations, will also be fitted with davit crane units designed and built by Granada Materials Handling, continuing our long association with the Manchester firm.

Transition pieces awaiting transport to site.

At 1200 tonnes each, construction of our two purpose-built OSPs has been mechanically completed, with onshore commissioning underway ahead of offshore installation later this spring.

During 2020, the new turbine assembly base will begin to take shape at Able Seaton port in Teesside, ready for turbine installation in 2021. Thanks to the commitment of Triton Knoll and our turbine supplier MHI Vestas, we are unlocking important investment in new turbine handling infrastructure at the port. For the first time, the port will be able to handle both foundations and turbines, enhancing its competitiveness in the UK and European offshore market.

ONSHORE SUBSTATION **UPDATE**

Works at the Triton Knoll Onshore Substation are continuing to progress well. Since the last newsletter, construction has moved into the electrical phase and we have realised several key milestones.

During October 2019, we took delivery of two transformers. The transformers are the largest and one of the most important components for the substation. Each transformer weighs over 240 tonnes and each one is over 13 metres long and 4 metres wide, so the delivery required careful management to ensure the safe and successful delivery to site. They were each transported from Port of Sutton Bridge via an 85m long specialist transport arrangement to site under police escort. Our contractor, Siemens Transmission and Distribution Limited created a great video showing the journey of the transformers which you can view on our website at www.tritonknoll.co.uk.

We also took delivery of other electrical infrastructure which, although smaller than the transformers, are still very important components. The arrival of electrical infrastructure follows nearly seven months of civil engineering works, carried out by sub-contractor BAM Nuttall. This focused on construction of the control and other specialist buildings, cable troughs, equipment foundations and duct installation across the site.

The control building is the brains of the substation that monitors and controls all the electrical equipment installed at the substation. The control building is complete, and the electrical equipment is starting to get installed within the building.

The substation construction will now see a shift in emphasis of works to the electrical installation. This includes the installation of the two transformers, shunt reactors, Static Vars Compensation infrastructure, cables, electrical panels and the connection of wiring.

The transformers are installed on bunds, requiring the further fitting of components to make up the full transformer. Following the build, each transformer is filled with a special oil, and is expected to be commissioned and energised by the end of Q3 2020.

All the Horizontal Directional Drilling (HDD) required for this package of works are complete and cable pulling is continuing along the 400kV section of the cable route which will connect the Triton Knoll Onshore Substation with the National Grid Bicker Fen Substation.

SAFETY FIRST AT TRITON KNOLL

Triton Knoll is the largest offshore wind farm currently being constructed by innogy. It's a significant UK infrastructure project which, at its busiest period, could potentially see up to 3,000 people working both directly and through our contractors, at sites in the UK and Europe.

We have one main goal - that together, we aim to make this the safest offshore wind farm ever built.

We pledge to make sure everyone working on our project goes home safely at the end of the working day. We expect all our teams to Start Safe, Act Safe, and go Home Safe – the motto of the project's safety programme which will run for as long as the project operates.

But our focus on safety isn't just exclusive to the project. We're now sharing our safety messages, tools and guidance on our website for all to see and benefit from.

Please feel free to take a look and see how safety plays a part in the delivery of our project. Go to www.tritonknoll.co.uk and look for 'Safety at Triton Knoll.'

CHARITIES SAFETY WINDFALL

Safety is paying dividends for six local Lincolnshire charities, thanks to onshore substation contractor Siemens and Triton Knoll.

During the year, the two have been making regular contributions into a charity pot, based on achieving important safety performance targets.

Thanks to the dedication of the project's safety-focused teams, a total fund of £12,000 was raised and has been donated to local charities, each of which were nominated by members of the project team. Each charity received £2,000 at an event held in Boston in November 2019.

The successful charities were:

- Age UK Lincoln and South Lincolnshire
- Lincs and Notts Air Ambulance
- Boston Women's Aid
- Butterfly Hospice Trust Boston
- Centrepoint Outreach Ltd Boston
- Macmillan Cancer & Support Centre.

The team will continue to support the charities safety fund throughout the onshore construction and a second round of donations will follow later this year.

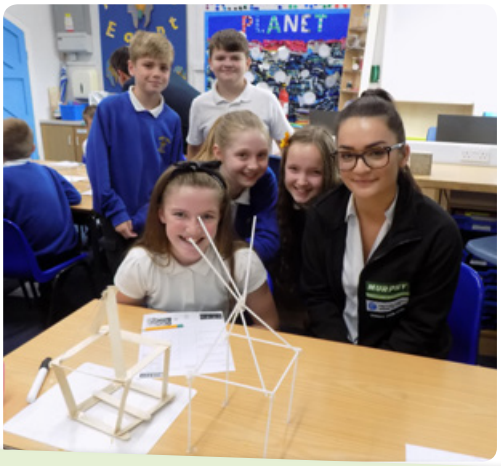
SCHOOL GETS THE **SAFETY** MESSAGE

Pupils at Sibsey Primary School, which is located near to the Triton Knoll onshore cable route, have been getting to grips with onsite safety thanks to our lead onshore cable installation contractor J Murphy & Sons Ltd (Murphy).

Engineering Manager Sam Wickins (pictured right) spent a day with pupils explaining about Health and Safety and specifically what the project and Murphy are doing in the local area. Murphy is constructing the onshore cable route and some of the large drums, each weighing up to 24 tonnes and containing up to 1,700 metres of specialist HVAC cable, have been situated at the main project compound off the A16, on the route to school for many of the pupils.

Younger pupils were challenged with constructing their very own working windmills This offered a simple but effective opportunity to demonstrate the principles of how we are harnessing wind energy at Triton Knoll.

Finally, some of the youngest pupils from classes 2 and 3 produced Health and Safety posters to highlight some of the dangers of construction activities on site. All the posters were reviewed and a top 3 were selected to make a final Health and Safety poster (pictured), which will be displayed at the main site compound.



LATEST COMMUNITY FUND AWARDS

Another 13 projects have successfully bid into the Triton Knoll Community Fund and are now set to share a windfall of £101,670 to support important local community projects and activities.

Each of the successful bids ultimately help to bring together the communities in which Triton Knoll is being constructed and will operate. They were selected from bids representing the entire length of the onshore electrical system, from the point of landfall near Anderby Creek, to the onshore substation at Bicker Fen.

This is the third and penultimate round of awards from the £500,000 One Off Construction Fund, which was set up to operate during the two years of construction of our onshore electrical system.

Round 4 is the final bidding and allocation phase of the One Off Construction Fund. The fund is currently open for round 4 bids and will close on 1 May 2020.

The One-Off Construction Fund officially opened in August 2018 and supports grassroots groups, delivering vital support to the local community. It is part of the larger Triton Knoll Community Fund, which will deliver a total of £1.5m into communities closest to the project's onshore construction works and infrastructure.

The latest successful projects range from the installation of energy efficient lighting at Burgh Community Complex; replacement of outdoor play equipment at Great Hale Parish Council; car park resurfacing at Stickney Community Hall; a defibrillator for Swineshead Parish Council; and new equipment for Castle Bowmen Archery Club.

All applications are reviewed and determined by a panel made up of local people to ensure the best decisions are made for nearby communities.

The full list of successful funding round 3 projects is as follows:

Burgh Community Complex	£11,270.54
Great Hale Parish Council	£17,000
6th Boston Scout group	£9,877.37
Bicker Village Hall	£11,160
Stickney Bowls Club	£1,998.56
Bicker Bowls Club	£2,050
Langriville Parish Church	£3,181.82
Stickney Community Hall	£9,344
Swineshead Parish Council	£1,000
Sunshine Children's Centre	£7,788.26
Donington Parish Council	£7,000
IDEA, Donington	£15,000
Castle Bowmen Archery Club	£5,000.

Total amount awarded this round = £101,670.55

You can find out more about the community fund and how to apply from our website, including case studies of some of the previous rounds' successful bidders, including those pictured above. Go to **www.tritonknoll.co.uk**

ONSHORE CABLES **UPDATE**

The last year saw important progress made during the installation of the project's 57km onshore export cable, which stretches from the point of landfall near Anderby Creek to the new onshore substation at Bicker Fen.

We are now well positioned to complete final drilling and duct installation during the early part of 2020 and ensure cable installation remains on target for completion in 2020.

During summer 2019, we completed one of the more complex Horizontal Directional Drill (HDD) on the project, at the River Witham. The river is one of the region's primary drainage waterways, stretching over 130 kilometres across Lincolnshire and is in parts over 90 metres wide.

A highly specialised HDD was required (pictured above in action), of around 264 metres in length and to a depth of around 16 metres, through very difficult ground conditions.

With the success of the Witham, the project has since completed over 99% of the individual HDDs required on the project, with a small number of drills remaining at key locations along the route. To date, specialist teams have successfully installed over 79,300 metres of HDD ducts, including over 740 individual HDD drill shots.

Installation of protective plastic cable ducting, through which the High Voltage Alternating Current (HVAC) cable is later pulled, is also 99% complete, with the final sections ready to be installed once the HDD works are complete.

So far, 50% of HVAC onshore cable has been installed and over 30% of the cable joints completed, with the works remaining on target and according to programme.

Ariel images of reinstatement already undertaken by the project.

One of the project's aims has been to minimise construction impacts on the region's agricultural heartland. As soon as we were able, we began reinstatement of sections of land used during construction.

Martin Knagg, onshore cables package manager explained: "We are absolutely delighted to have already reinstated around 15% of the land used in the cable route, which formally began just 12 months ago. This has been very well received by the landowners involved, and that reinstated land has already been re-ploughed for the first winter crops to be planted."

Looking ahead, the project expects to achieve various milestones in 2020, as the onshore cable works drilling, ducting and cable installation are completed.

Towards the end of the first quarter (Q1) of 2020, preparations for the cables tie-in to the new Triton Knoll Onshore Substation will take place. This represents a significant moment for the project, making the first physical connection of the separate elements of the cable route and the new onshore substation.

In preparation, work will continue to complete two remaining HDDs south of the A16 and between the A17 and the onshore substation, to conclude the cable pull programme by the end of Q1 2020 and complete the ongoing jointing programme and fibre optic cable installations.

Preparations to recommence reinstatement will begin in early Q2 of 2020, once the worst of the winter months has passed, and could possibly be sooner if the weather is favourable.

TRITON KNOLL

LANDFALL **UPDATE**

Following on from Boskalis' successful completion of the two 800m offshore Horizontal Directional Drills (HDDs). in July last year, J Murphy & Sons (Murphy) have been busy completing enabling works at Temporary Construction Compound (TCC)1 ready for the offshore cable installation works which will take place later this year.

The latest works required the import of stone which was taken from other locations along the onshore cable route which have already been reinstated. The stone was required to raise the ground at the location of the Transition Joint Bay (TJB) which is where the offshore cables and onshore cables will join.

This work has been completed and the overall footprint of the construction compound has been reduced, due to the need for less storage space for plant and equipment than was required for the HDD works.

Murphy will recommence work to construct the TJB this month in preparation for the site to be handed back to our offshore cable contractor, Boskalis, to complete the offshore cable installation works. We expect these works to commence from around April 2020. Once installed, the cables will require testing followed by restoration works.

Residents will be kept fully up to date with progress and will be notified prior to the offshore cable installation works commencing. We will also look to hold a Community Drop-in Session to enable us to answer any queries from members of the community in Q2 2020.

HOW TO KEEP UP TO DATE

Our project website is kept up to date with all our latest news and information, while we will also keep communities informed using newsletters and community drop-in events. In the meantime, please feel free to contact the team using the details below.

Please note our change of address

E. info@tritonknoll.co.uk

T. 0800 2545 270

A. Triton Knoll Offshore Wind Farm Ltd
Windmill Hill Business Park, Whitehill Way,
Swindon, Wiltshire, SN5 6PB.

W. www.tritonknoll.co.uk

If you require this newsletter in large print, please request a copy by calling 0800 2545 270.

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