

Hinkley Connection Project

Project update



Welcome to the autumn update

Welcome to the latest edition of our project update. The summer has been a busy one; we've made good progress with construction work and we're gearing up to start further stages of work early next year – including getting ready to build the world's first T-pylons here in Somerset.

More detailed information our project and all our current activities can also be found on our project website.

Read on to find out how it's all taking shape and to see what's coming next.

Ofgem launches consultation

On Tuesday 15 October 2019, Ofgem launched a consultation on proposed funding, including the funding model, for the Hinkley Connection Project. This consultation does not affect the design or construction of the project.

We're on track to connect our customer, EDF Energy, on time as we help the UK to transition to more low carbon energy.

Protecting wildlife, history and utilities



Our specialists dig trial trenches to look for hidden archaeology

Before any construction work can start, we have to make sure we know what wildlife is present, if there is any hidden archaeology or existing utility services and what the ground conditions are.

We've been carrying out surveys along the route of the new connection for several years. These have helped us to understand where there are particularly sensitive areas and wherever possible, we've avoided them. We've studied the local wildlife and worked closely with Natural England and local authorities to develop detailed action plans to mitigate any potential impact our work may have on the environment.

We also need to carry out detailed surveys on the land where we will build the new connection. These include ground and soil investigations using boreholes and radar equipment.

The findings help us to develop our final detailed designs.

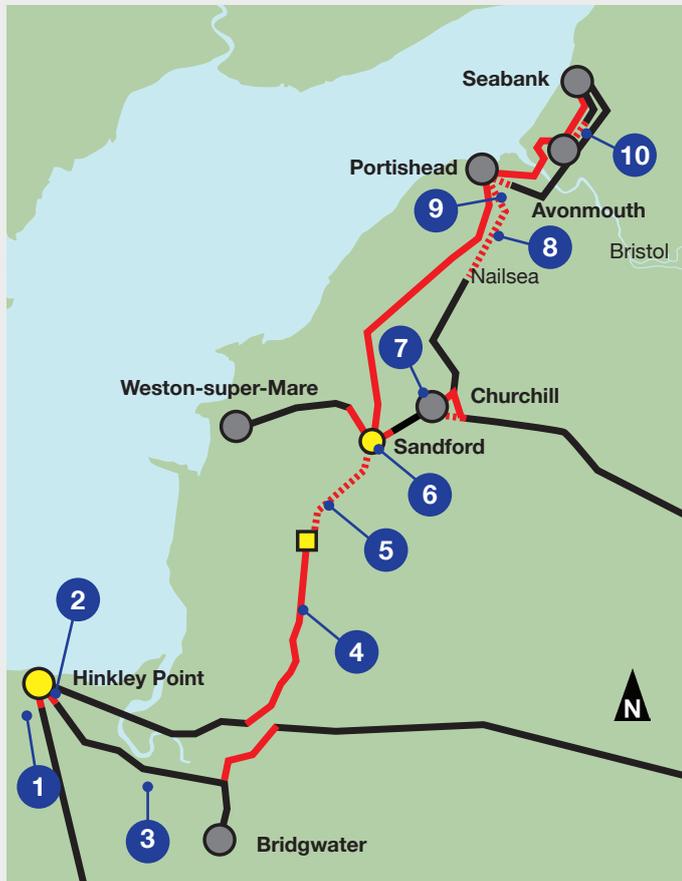
Over the summer we've surveyed along the route for the new T-pylons from Bridgwater to Loxton, as well as along the route of the new underground cable from Nailsea to Portishead.

The surveys in Nailsea were essential to identify existing utility services under the ground. Knowing where they are helps us to protect them when digging our trenches, reducing the construction time and preventing damage.

We've also been carrying out ecology surveys where we are going to modify and upgrade existing overhead lines between Hinkley and Bridgwater. We've been looking for protected mammals, great crested newts, dormice and bats. The findings will tell us what steps we need to take to protect them.

Live projects update

The Hinkley Connection Project is made up of several different stages of work. More information on all of the stages, construction timings and how they fit together can be found on our project website: www.hinkleyconnection.co.uk



1 Shurton substation

Linxon, our contractor, continues to make good progress with the new substation to connect EDF Energy's new nuclear power station to the grid.

We're working under EDF Energy's existing traffic and delivery management systems and we're coordinating our activity with theirs to reduce any impact on the local community.

The substation is expected to take around four years to build and will be operational in mid-2023, ready for when Hinkley Point C starts generating low-carbon energy.

2 Modifying existing overhead lines in the Hinkley Point area

Over the summer, we carried out some surveys and ground investigations where we need to build new pylons to connect into the new Shurton substation at Hinkley Point C Power Station.

3 Upgrading existing overhead lines between Hinkley and Bridgwater substation

We've been carrying out ecology surveys along the route of the existing overhead line from Hinkley to Bridgwater. The surveys are to look for protected species such as great crested newts, dormice and bats.

We will continue monitoring dormice until the end of 2019, and work to upgrade the existing overhead line will start in mid-2022.

4 Fencing installation and vegetation clearance starts along T-pylon route

Over the summer our contractor, Balfour Beatty, carried out ground investigation surveys between Bridgwater and Loxton. In the autumn we're erecting stock fencing and carrying out early vegetation clearance along the route of the new overhead line.

Construction of the innovative T-pylons is due to start in mid-2020. The pylon's lower height and contemporary design is considered to have less of a visual impact on the landscape than traditional lattice pylons.

5 Mendip Haul Road build continues

We're building a temporary haul road along the route of the cable to allow us to move traffic off of the main roads directly and into the construction areas, limiting our use of the local road network.

Where it crosses existing roads and footpaths, we need to close them temporarily or restrict access so we can keep the area safe for the public and for our staff whilst we are working. Wherever possible we'll keep footpaths open and will escort walkers safely across the construction area during working hours. All closures and diversions have been agreed with and coordinated by the highways authority.

We have now completed work on Webbington Road, A368 Towerhead and Castle Hill and these roads have been reopened to vehicles. Thank you for your patience and we are sorry if we caused inconvenience.

Through our regular contact with North Somerset Council, we found that both National Grid and the Council needed to carry out essential work on Max Mill Lane, which runs between Winscombe and Banwell.

To reduce impact on road users and residents, we delayed our work and coordinated our construction programme with the Council's timetable so that we can carry out the work at the same time. The closure is scheduled to continue until mid-November. This may change if unexpected engineering issues are encountered. Pedestrian access along the Lane and to the public rights of way that cross Max Mill Lane will be maintained.



We've installed a temporary bridge over the Old Axe, near Biddisham

6 Sandford substation site preparations start

We're starting to prepare the site where the new substation will be built near Sandford.

We've developed a detailed ecological mitigation plan for the site. The plan includes early vegetation and tree clearance to protect wildlife when the construction work starts next year. Clearing and strimming vegetation from the site will prevent birds and other animals from nesting in the construction zone and will encourage them to find alternative nesting sites.

We'll keep as many trees in place as possible, particularly along the edges of the site to help maintain screening, and more will be planted after the substation is built. National Grid is committed to protecting the environment, and for every tree removed as part of this project, we'll plant four new trees in the region.

The site preparation work is being carried out by Balfour Beatty and has been timed to take place before newts and other reptiles start their hibernation.

7 Churchill substation

Work to upgrade WPD's substation at Churchill has finished, ahead of programme. WPD is now working on the overhead line that passes to the east of the substation. WPD is installing 220 metres of underground cable and replacing an existing pylon with a cable sealing end (CSE) pylon which will enable the underground cables to connect back up with overhead lines. WPD expect all work in and around the substation to be complete by the end of the year.

The work at Churchill will maintain and reinforce the security of the electricity network in the South West, and enables the removal of the 132,000 volt overhead line between Bridgwater and Avonmouth.

8 Preparing to build underground cables between Nailsea and Portishead

Our contractor, J Murphy & Sons Limited, has completed the ground investigation surveys along the route of the underground cables between the west end of Nailsea and Portishead substation. We're now finalising the exact route and design for the new underground cable.

Before we start construction, we'll hold public events to provide more information and timings. If you are a local resident or business, look out for your invitation in the post. We look forward to welcoming you.



We'll hold public information events before construction work starts on the underground cables between Nailsea and Portishead.

9 Portbury Wharf Nature Reserve

We've fenced off an area within the nature reserve where we're going to install underground cables next year. We're working closely with the local authority and Natural England to make sure it is clear of any protected wildlife before we start work, moving protected species to other designated areas within the reserve.

To keep the construction corridor clear, we need to prune trees and cut grasslands, scrub and hedgerows down to ground level. After the hibernation period ends in spring 2020, we'll carry out further searches to ensure the area is free of protected species before starting construction.

Read more about how we're working to protect barn owls in the area below.

Up to date information on road and footpath closures can be found on the project website:
www.hinkleyconnection.co.uk

Looking after our wildlife

We have a team of experts working with us to make sure local habitats, plants and animals are protected as we work.

Across the project, we carry out extensive surveys to identify protected species and where we find them, we try to locate our work as far away as possible. Where we can't avoid them, we take special steps to move them out of harm's way or to find ways of working so that they are not disturbed by our activities.



During September, we added four new owl boxes to Portbury Wharf Nature Reserve

New barn owl boxes for Portbury Wharf Nature Reserve

We're taking special care to protect nesting sites for species of protected birds in the reserve. We're creating

10 Avonmouth haul road construction continues

Balfour Beatty is progressing well with the construction of a temporary haul road. The haul road allows us to move traffic off the main roads directly into the construction areas, limiting our use of the local road network while we carry our work in the area.

Over the coming months, we'll start to install underground cables. These will replace a section of the overhead lines going north, out of the substation, and making space for new pylons as part of the main connection between Bridgwater and Seabank substation.

To keep public and staff safe, traffic lights are in operation on the haul road crossing point at Kings Weston Lane. These lights work on a sensor and stay on green for local road users, only changing to red when project vehicles need to cross the haul road.

We'll remove the traffic lights when all of our work in this area is complete.

special buffer zones and relocating designated barn owl boxes. Read more on the project website.

Tilting the balance

We're installing a specially designed weir on the existing wetland near the Causeway between Nailsea and Tickenham. It will act as a tilting gate for retaining and raising water levels in this area of marshy wetlands, encouraging wading birds and providing a long-term environment for them to stay.

We're working with Natural England and the local landowner to make this area safer, and a more reliable feeding and breeding ground. The new weir will attract new species of wildlife into the area, which in turn will improve the area for nearby residents and visitors.



An example of a tilting weir. We will build a similar one near the Causeway

Engineering positive futures in local schools

National Grid is passionate about encouraging the next generation of engineers to take an interest in science, engineering and technology. The Hinkley Connection Project has teamed up with educational charity the Smallpeice Trust to help fuel a passion for engineering amongst local secondary school students.

Educators from the Trust will host a series of full-day Smart Build Challenge workshops for pupils aged between 11 and 14 (Key Stage 3). During the day, students will work in small teams to design and build a structure with its own energy and clean water supply.



We're sponsoring workshops in local schools to inspire a new generation of engineers

Going above and beyond to protect our bats

Bats are big news in Somerset with 16 of the 17 species of British bat found in the county.

As part of our commitment to caring for the natural environment, National Grid employ a range of measures to reduce the impact of our works on local bat species. These include the retention or recreation of bat flyways; linear features of the landscape, like hedgerows, which bats use for navigation. And now we are taking this commitment even further.

We're partnering with the University of the West of England (UWE) to offer a unique, jointly-funded, full-time PHD project to research the most effective strategies to mitigate construction impact on bat populations. The research findings will be applied on future major construction projects across the UK.

The project is being supervised by leading UK bat experts, Dr Paul Lintott and Dr Emma Stone who are specialists in the academic areas of wildlife and human conflict and assessing mitigation techniques.

Dr Lintott says, *"This is an exciting opportunity for us to work with industry to ensure that our research produces timely and useful applied outcomes. Bats are*

The Challengers will also meet one of the National Grid engineers working on the 57km Hinkley Connection Project who'll talk about their role, the world-class engineering that is behind the project and what inspired them to choose engineering as a career.

Two pupils from each workshop will then be offered a full week's work experience at National Grid's purpose-built training facility in Ekring, Nottinghamshire.

In November, Smart Build Challenge days will be held at Kings of Wessex Academy in Cheddar, Robert Blake Science College in Bridgwater and Priory Community School in Worle. More sessions are planned with secondary schools in the New Year.

For pupils aged 5 -11 in Key Stages 1 and 2, we've also created a new workshop programme called Energy and You. A number of primary schools have been invited to take part in 2020 - look out for more in Spring's Project Update.

Both workshop programmes support the STEM curriculum and have been set up to support schools in areas most impacted by the Hinkley Connection Project.

vital for maintaining the health of our ecosystems, yet mitigation work is often costly, time-consuming and its effectiveness is rarely tested. This innovative project will therefore provide greatly enhanced confidence that future conservation strategies for bats are cost-effective, reliable and evidence-based."

Recruitment for the right bat man – or woman – is currently underway.

The successful applicant will divide their time between the university and working on site alongside principal contractors, Balfour Beatty, within the Mendip Hills Area of Outstanding Natural Beauty.



We're constructing 48 temporary bat flyways along the Mendips underground cable route

Community matters



Congresbury Scouts in the great outdoors

Scouts, voles and the Life Bus latest to benefit from Community Grant Scheme

Since 2018 we've awarded grants totalling £200,000 to 12 different community initiatives and groups along the route of the Hinkley Connection Project from the National Grid Community Grant Scheme.

The latest community groups to benefit are Congresbury Scout and Guide Association, Bristol Avon Rivers Trust and Life Education Wessex.

Scouts and Guides in Congresbury will use their £20,000 grant to revamp their HQ, replacing the flat roof and insulation and installing a PV storage system.

Adam Preece, Chair of Congresbury Scouts and Guides says, *"The grant will enable us to keep our subscriptions low, now and into the future, by meeting the costs of urgent repairs and reducing our operating costs for years to come. This means that our services remain accessible to the whole community and our young people continue to thrive."*

The £20,000 to Bristol Avon and Rivers Trust will be spent on protecting the local water vole population. Life Education Wessex tours schools in parts of Somerset with the 'Life Bus' and provides age-appropriate health and drug education as part of the Personal, Social and Health Education curriculum. Its grant of £10,000 will go towards buying additional education resources.

The Community Grant Programme is one of the ways we are supporting the communities and local people most impacted by our operations and site activities. If your project meets our criteria you can apply for a grant of up to £20,000.

For more information and to apply visit:
<http://betl.nationalgrid.co.uk/>

£500 for STEM equipment for your school – applications for 2019/2020 now open

Did you know that every state funded primary and school in the six local authority areas affected by the Hinkley Connection Project is eligible for a £500 STEM grant each year of the project?

The funding, from the National Grid Hinkley Education Fund is for the purchase of science, technology, engineering and mathematics (STEM) resources to support the teaching of these core subjects.

237 Schools were awarded grants in 2018, with over 55,000 pupils benefiting.

We've written to all eligible schools with the details. Do encourage your school to apply via the project website at: <https://hinkleyconnection.co.uk/education/>



Young students enjoy exploring science

Contact us

For further information please contact our Community Relations Team

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