Light at the end of the tunneling: National Grid completes digging after going underground to create London's new 32km electricity superhighway

Tunneling complete on National Grid's flagship London Power Tunnels project

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- Work to install electricity cables well underway with first section due to go live later this year
- £1billion project will help ensure London has the power it needs to maintain its status as a leading global city

After four years of digging beneath the bustling streets of London, tunneling has now been completed on National Grid's flagship London Power Tunnels project.

The final breakthrough occurred at Kensal Green and marks the end of an era for the project team who first began sinking the tunnel shafts in 2011.

It's been a truly epic undertaking that has seen engineers working around the clock to carve out a 32km network of tunnels using two giant sized TBMs (Tunnel Boring Machines) named Evelyn and Cleopatra.

Working at depths typically ranging from 20 to 60 metres underground engineers have had to negotiate the challenges of tunneling beneath the Thames and working around London's existing labyrinth of tunnels, sewers and underground bunkers.

David Luetchford, National Grid's Head of Cable Tunnels said: "This is a really exciting landmark and takes us one step closer to the completion of the project.

"It's amazing to think that over the last four years our tunneling teams have been digging around the clock, with many Londoners unaware of what's been happening beneath their feet."

Since tunneling began engineers have excavated large amounts of London Clay. This has been put to good use with much of it being used to remediate former National Grid gasworks across the capital, so the land can be freed up for exciting redevelopment opportunities.

Installation of the high voltage electricity cables which will transport energy supplies across London is already well underway and the first section due to go live this year.

The tunnels will plug London into new sources of energy which will help ensure future demand can be met. Currently accounting for 20 per cent of the country's energy use demand in the capital is growing at a rate of around 5 per cent a year.

Mr Luetchford said: "This project will create a new energy superhighway deep beneath the capital which will help ensure Londoners continue to have the energy they need at their fingertips.

"When we switch on London Power Tunnels it will play a vital role in maintaining the capital's status as a leading global city – it's very exciting to be a part of that story."

The project is due to be complete and fully operational in September 2017 a year ahead of schedule. For more information go towww.londonpowertunnels.co.uk

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Notes for editors

Notes to Editors:

National Grid is pivotal to the energy systems in the UK and the north eastern United States. We aim to serve customers well and efficiently, supporting the communities in which we operate and making possible the energy systems of the future.

National Grid in the UK:

- We own and operate the electricity transmission network in England and Wales, with day-to-day responsibility for balancing supply and demand. We also operate, but do not own, the Scottish networks. Our networks comprise approximately 7,200 kilometres (4,474 miles) of overhead line, 1,500 kilometres (932 miles) of underground cable and 342 substations.
- We own and operate the gas National Transmission System in Great Britain, with day-to-day responsibility for balancing supply and demand. Our network comprises approximately 7,660 kilometres (4,760 miles) of high-pressure pipe and 618 above-ground installations.
- As Great Britain's System Operator (SO) we make sure gas and electricity is transported safely and efficiently from where it is produced to where it is consumed. From April 2019, Electricity System Operator (ESO) is a new standalone business within National Grid, legally separate from all other parts of the National Grid Group. This will provide the right environment to deliver a balanced and impartial ESO that can realise real benefits for consumers as we transition to a more decentralised, decarbonised electricity system.

- Other UK activities mainly relate to businesses operating in competitive markets outside of our core regulated businesses; including interconnectors, gas metering activities and a liquefied natural gas (LNG) importation terminal – all of which are now part of National Grid Ventures. National Grid Property is responsible for the management, clean-up and disposal of surplus sites in the UK. Most of these are former gas works.

Find out more about the energy challenge and how National Grid is helping find solutions to some of the challenges we face at https://www.nationalgrid.com/group/news
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