

T-pylon – an innovative new design for Somerset

The Hinkley Connection Project will connect low carbon energy to UK homes and businesses and increase capacity on our network for more green energy from the south west.

The new connection will be 57 km long - made up of 48.5 km of overhead line and 8.5 km of underground cable through the Mendip Hills Area of Outstanding Natural Beauty (AONB).

We're using T-pylons for most of the overhead line sections.

This is an exciting time for the industry. We're introducing the first new design for pylons in this country for almost a century.

What is a T-ylon?

The T-ylon is an exciting new design for overhead lines. It has a single pole and T-shaped cross arms which hold the wires in a diamond 'earring' shape.

It is around 35 metres high; about a third shorter than traditional 400,000 volt steel lattice pylons.

It also has a smaller footprint and will use less land.

We are using this new design as a result of consultation feedback.

How was the design selected?

The T-ylon was selected from over 250 ideas put forward in an international competition organised by the Royal Institute of British Architects, the then Department of Energy and Climate Change, and National Grid. We wanted to find a new pylon design for the twenty-first century.

We believe the T-ylon's lower height and contemporary design will have less of an impact on the landscape than traditional lattice pylons.



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How we build T-pylons

Before we build pylons, we carefully survey the route for wildlife, ground conditions and other environment considerations. The results of these surveys help us develop detailed construction plans for each pylon location.

- 1** Build road access and temporary haul road along route so we can easily access each pylon location

Set up working area at each pylon location. A working area is a large flat area for positioning plant and equipment

- 2** Build foundations - starting with installing piles to attach to T-ylon

Add reinforced concrete to make a 'pile cap' on top to provide stability

- 3** Erect T-ylon using cranes to lift each section into place

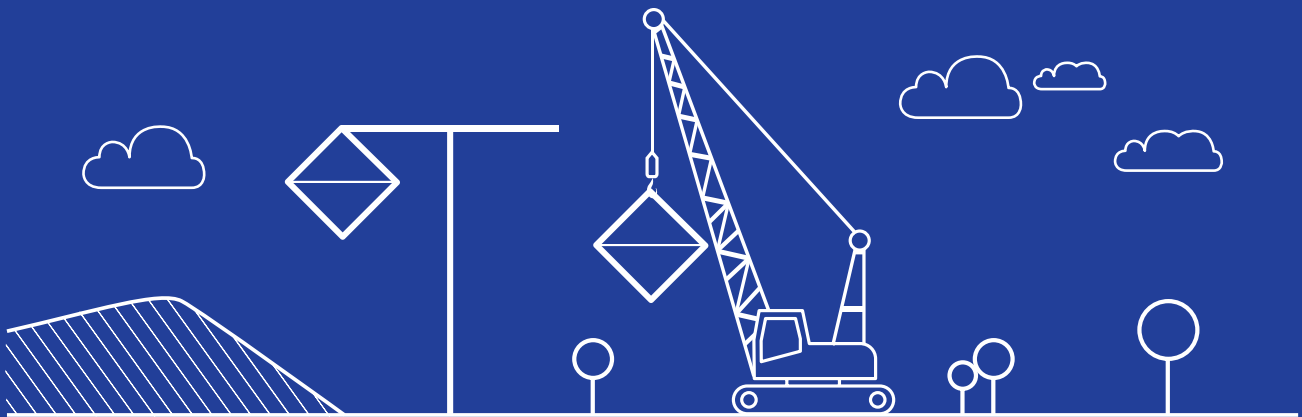
- 4** Install insulator sets - the diamond shapes suspended from each arm of T-ylon

- 5** Pull cables through each insulator. A steel wire rope, called a pilot bond, is positioned to keep a steady flow of wire during pulling

The pilot bond is attached to a winch which pulls cables through

- 6** Repeat until all cables and earth wires are pulled through

- 7** When all cables are in place and everything checked, remove temporary haul road and working area and reinstate landscape with new planting



Contact us

For further information please contact our Community Relations Team

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