

T Pylons

If you head out of Lympham and Eastertown in an eastward direction, you will inevitably pass under a new feature in the landscape. If you failed to notice the new T shaped electricity pylons that cross the A38 near Rooksbridge, may I respectfully advise an eyesight check! They are bright and white and 35m tall, with diamond shaped “earrings”.



Joking aside, these are a Danish designed replacements for the lattice pylons that have been around for most of the last century. My father spent much of his career modifying and testing (in a nearby Cheddar quarry) the traditional towers that were first designed in 1927 by the American Milliken Brothers engineering firm based in the United States. Although few people would be prepared to admire the aesthetics of the grey towers that progressively marched over the countryside as the National Grid expanded, most would happily accept the electricity that they brought to our homes and places of industry.



The new pylons form part of the Hinkley Connection project and are the world’s first T-Pylons, running a 57 km route between Bridgwater and Portbury. A section through the Mendip Hills Area of Natural Beauty, in the valley running below Winscombe, has been spared this embellishment, by virtue of underground cables. The costs of sending the entire new network underground or undersea has been exhaustively debated for many years. A 2012 estimate of the lifetime costs of underground cables was £10.2m - £24m per kilometre, compared to around £2.2m - £4.2m when placed on towers above ground.

(The study was carried out by engineering consultancy Parsons Brinckerhoff in association with Cable Consulting International, drawing on data from manufacturers, installers, operators and others. National Grid has funded the work, and the IET has provided independent quality assurance.)

The Government Energy Minister at the time, Charles Hendry, said "Over the coming years major transmission reinforcements will be needed to connect Britain's new power stations. I know that many people are concerned about the impact that new transmission lines can have on the landscape and on local communities. It is essential that these reinforcements are taken forward on the basis of the best available evidence. While the costs of individual proposals will differ on a case-by-case basis, the IET's report is a vital contribution."

The new design has some benefits the bases of a lattice pylon takes up around three times the ground area and uses around 1.5 times the amount of concrete. It is expected that the operational life of a T-ylon is about the same as a traditional lattice pylon, at around 70-80 years. The conductors, insulators and fittings normally last for about 40 years, and are replaced mid-lifecycle.

These new beasts are being manufactured by Allied Insulators, based in Stoke-on-Trent and Balfour Beatty is responsible for constructing the pylons on behalf of National Grid. The fewer, steel plate parts making up the pylon have been welded together and subsequently painted white. The colour was apparently stipulated in the development consent order, to be in line with (as well as being complementary to) the colour of wind turbines.



If you wish to understand the construction of the new pylons, follow this link to a short video published by the National Grid.

[What is a T-ylon? | National Grid Group](#)



Whether we all agree that these are less obtrusive than the older lattice towers, is going to be a matter of personal opinion. They will undoubtedly appear elsewhere in the country as time goes by. Peter Smith Sept 2024.