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From: [REDACTED]
Sent: 09 April 2026 19:20
To: Norwich to Tilbury
Subject: submission S55846EAC

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Good afternoon,

I have just submitted the above submission in response to the Inspectors' Questions. I did not reference the questions I was referring to. I apologise for the omission. They are:

DES 1.10 and DES 1.11 re T-pylons.

For data protection I also stated in my submission that I would submit to you separately the contact details for Bystrup. These are:

[REDACTED] [@bystrup.dk](#).

Kind regards

Stephen Podd

NG Comments about aesthetic/visual redesign of pylons

NG state that “The latest independent report on the Comparison of Electricity Transmission Technologies: Costs and Characteristics (Institute of Engineering and Technology, 2025) confirms that whilst T-Pylons may in certain locations provide an alternative to conventional overhead lines with potential benefits in visual impact and reduced land-take, this comes at a higher cost. The build cost is approximately 2 to 2.5 times that of an equivalently rated conventional overhead line, and the lifetime costs are around 1.6 to 1.7 times higher. The current arrangements for the oversight of funding by Ofgem require that the lowest cost acceptable design is taken forward rather than a more expensive design even where the latter is perceived to reduce the level of effect. As such, consideration of the use of T-pylons follows after establishing a need to mitigate effects of the standard lattice design and after considering the benefits of adopting a low- height lattice pylon design. T- pylons themselves are also less adaptable to varied terrains and require more substantial access infrastructure. Furthermore, while their resilience and environmental impact are comparable to conventional overhead lines, they have increased carbon intensity due to construction materials used.” Ref:

[EN020027-001967-8.4.1 Applicant's Comments on Relevant Representations.pdf](#)

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I put the cost figures quoted by NG above to the Danish company (Bystrup – contact details sent separately to the Inspectorate) which designs T-pylons. The response from the designer was:

“Regarding the construction costs of a T-pylon – we find the mentioned costs very high. The reason might be that the structural design, and the foundation of the T-pylons hasn’t been optimized. We have - in a meeting with Nationalgrid – about a year ago, - proposed to make an optimization of the total structure – unfortunately without luck.

If we compare the lattice pylon with the Danish T-pylon – the Eagle pylon – then the cost of the Eagle will be around 1.7 times more – than a standard lattice tower. But please note that this is just a part of the total cost.

The Eagle pylon has a small footprint – Ø 200 cm – which demands more steel in the structure – but it opens up for a fast foundation of the tower, without the additional costs of excavation and casting.

Lifetime maintenance cost ifor the Eagle pylons is very low, due to a coating process, that is developed with Hempel.

It is designed to last for 80 years.”

Given the conflicting information about the comparative costs, NG need to be asked the following questions:

- 1) Have long-term wayleave costs been included in their overall costings, or are NG simply looking at construction and maintenance costs? Given that T-pylons are designed to last for 80 years, and that the current wayleave for a lattice pylon is considerably higher than for a T-ylon (much greater area required for a lattice pylon's four legs), has the greater wayleave cost over a period of up to 80 years been factored in to NG's costings? Do the comparative costs include a hypothetical inflation figure over that period?
- 2) Presumably the higher wayleave costs for a lattice pylon include an element for lost cropping area and therefore lost income for farmers. But do those costs also include management of the area beneath a lattice pylon? In my own farming experience (over 20 years working on clayland farms in Suffolk) lattice pylon base-areas quickly become a source of weeds, including noxious weeds such as Broad-leaved Dock, Curled Dock, Spear Thistle, Creeping Thistle and Ragwort which have to be controlled by law (Weeds Act 1959). This means time and cost for farmers – or does NG pick up that cost?
- 3) Does the wayleave cost include a payment for extra time needed during field operations to negotiate round lattice pylons with farm machinery – everything from initial ploughing through to combining? Each individual lattice pylon needs a separate 'headland' for all arable operations. By comparison, T-pylons have a small footprint, and (depending where they are and how they align in a field) can be used as a baseline for setting up tramlines for spraying etc, enabling machinery to pass them with a minimum of deviation and without stopping. That is not always possible, of course, but making a circle around a T-ylon – just as currently around wooden electricity / telephone poles where they do not fit in with tramlines – is relatively quick and easy compared to negotiating a lattice pylon headland.
- 4) Do NG's costings include the not-insignificant cost of reinstating land drains interrupted or damaged by pylon construction? Clearly the risk is far greater where four foundations are needed (lattice pylon) rather than one (T-ylon). Good underdrainage is a critical factor for farming clay soils (Norwich to Tilbury is largely over clay soils).

In relation to NG's comment that "T- pylons themselves are also less adaptable to varied terrains and require more substantial access infrastructure", this argument has already been refuted by the T-ylon designers and was highlighted in my last submission (email correspondence available if you wish to see it). The Norwich – Tilbury route is not "varied", and T-pylons would require no "substantial access infrastructure"; in fact, lattice pylons probably need more, taking several days to construct, whereas a T-ylon can be erected in a single day.

It is readily acknowledged that T-pylons use more steel, but they use much less concrete (which has its own 'carbon intensity').

Bystrup have given me permission to release all my email correspondence with them to the Inquiry.