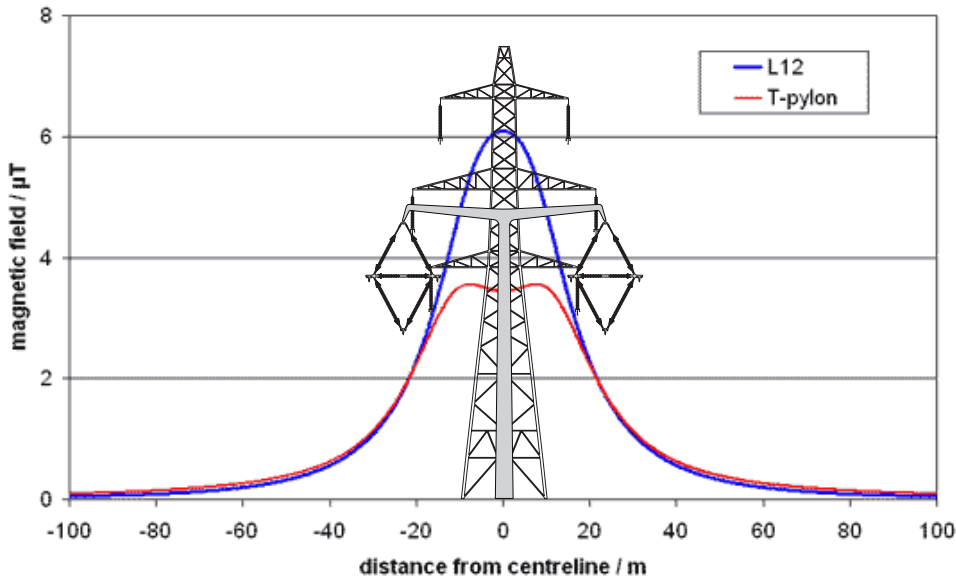
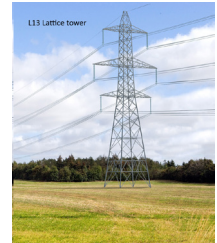


MAGNETIC FIELD

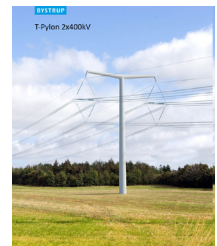
Reduced EMF using compact towers



"L12" (in blue) is the standard steel lattice pylon that National Grid has used for some time.



"T-ylon" (in red) is the new design for future lines.



The following graph compares the T-ylon with an existing traditional lattice pylon design in the same standard conditions. The conditions are a current in each circuit of 500 A, and a clearance above ground of the lowest conductors of 12 m.

The graph shows the fields for the same standard 500 A current in each case, to make the a straightforward comparison.

Information source: emfs.info

The T-ylon is a more compact design with the conductor bundles closer together. It therefore produces less magnetic field. The conductors are in a triangular arrangement instead of roughly linear. The benefit of phasing in reducing the field is less for triangular arrangements. Therefore at the edges of the line, the fields end up fairly similar.

(For the L12, the phasing is transposed. For the T-ylon, where the way in which phasing works is less straightforward, the phasing is the arrangement that produces the lowest field, actually "RYB/BRY" reading from left to right.)

