# nationalgrid

## Twinstead overhead line

**Project information leaflet** March 2023

# National Grid need to complete some maintenance work to the 400 kV overhead electricity transmission line running south of Twinstead Tee. This work is unrelated to the Bramford to Twinstead Reinforcement.

This work is needed as some of the existing wire conductors, which are bundled together to form the overhead line, are reaching the end of their asset life and need to be replaced.

The maintenance work will replace sections of wire and refurbish other parts of the overhead line. The new line will be capable of carrying slightly more power, helping transport cleaner, greener energy from where it is generated to homes and businesses.

Our work will not affect local electricity supplies.

This leaflet provides a high-level summary of what you can expect to see and when. If you have any questions about how the works may affect you, please contact us using the details at the bottom of the leaflet.



#### **Key facts**

- an overhead line is constructed using a variety of materials, from concrete and steel for the foundations, steelwork for the pylon and aluminium and steel for the wire. All these materials have an expected lifespan, which varies depending on how the overhead line is used and where it is located
- typically, the pylons will last for about 80 years, whereas the conductors, insulators and fittings normally last for about 40 years. Therefore, each overhead line will usually go through at least one refurbishment during its lifespan
- the refurbishment is carried out as two separate periods of work. This is because overhead lines have two circuits, one on each side of the pylon, so work is carried out on one side only, in order that the other side can be kept 'live'. Once all the work has been completed on one side of the overhead line, the circuit is re-energised, and the opposite side is switched off so that the work can be carried out on that side.

#### FAQs

#### Will you be installing new pylons?

No. We are just replacing one line (and fittings) with a newer line that can carry more electricity. We may need to install temporary scaffolds around pylons but there will be no additional or temporary pylons needed for these works.

#### Will my electricity supply be interrupted?

No. There will be no interruption to the local supply of electricity.

#### Will there be road closures?

National Grid has lodged applications with the relevant Local Authority and National Highways for road closures.

Details of road closures will be widely communicated once the details of the closures have been finalised.

#### Where exactly will work take place?

Our work spans 34 km of the overhead line between Bramford and Twinstead.

There are three sections of the route where you can expect to see works being undertaken:

- a small section of line south of Twinstead Tee
- between Braintree substation and Bulls Lodge substation
- between Bulls Lodge substation and Rayleigh substation.

#### How long will it take?

We anticipate that the maintenance works will take six to eight months to complete from January 2023. We started undertaking environmental and technical surveys in September 2022 to help us prepare for the works. We anticipate that maintenance works will conclude in June, with all demobilisation and reinstatement works concluded by August 2023.





#### **Project timeline**

#### January – Clearance and access

- vegetation and tree clearance
- access work to install fencing/gating.

#### February – Site set-up

- scaffold deliveries/builds
- trackway installation for paths to the work area
- linesman activity to install steelwork on site visits
- active security set-up.

### March to June – Overhead line refurbishment

 wiring refurbishment to take place across the sites, at differing times
for further details contact the project team.

## May to August – Demobilisation and reinstatement works

• clearing of all materials and reinstatement works concluded by August 2023.