



AERODROME SAFEGUARDING ALERT

C \ A \ S \ T



Combined Aerodrome Safeguarding Team

GA5 – National Grid Proposed Pylon Routes



1 CAST

The Combined Aerodrome Safeguarding Team (CAST) is made up of industry stakeholders including aerodrome authorities, planning experts and a range of expertise from within the UK CAA. The purpose of CAST is to dedicate focus and expertise to the many safeguarding related challenges our aerodromes face. For further information please see [CAST Introduction | Civil Aviation Authority \(caa.co.uk\)](#).



2 INTRODUCTION

National Grid are currently undertaking significant projects to expand the country's power distribution network. These projects feed into the "great grid update", described by National Grid as "*the largest overhaul of the electricity grid in generations.*" According to National Grid, more of our energy will come from renewable sources including offshore. The projects include reinforcement of existing high voltage power network in areas which includes new over ground pylons, as well as completely new lines in other areas. There are undersea elements and the replacement of existing 1960's cabling underground elsewhere.

CAST is aware that elements of the schemes could be disruptive to general aviation operations. The CAA's Airfield Advisory Team (AAT¹) is working closely with National Grid and their appointed aviation consultants to ensure that they are aware of the potential impacts to aviation safety although this has focused principally on the Norwich to Tilbury project so far. Further support is being provided by the General Aviation Awareness Council (GAAC²).

As these important national infrastructure projects develop and gather pace, it will be important to develop a detailed understanding of expected challenges and to ensure effective lines of communication are maintained with those leading the projects. Such challenges are likely to be nuanced. They could be as clear as a new vertical obstruction (pylon) in close proximity to an aerodrome, or high voltage lines suspended in a new area making flight planning more challenging, particularly for gliders for example.

More details can be found at: www.nationalgrid.com/the-great-grid-upgrade. We include some key extracts from the National Grid website in an annex to this alert.

¹ aat@caa.co.uk

² info@gaac.org.uk



3 WHAT SHOULD I DO?

As described earlier, it is likely that aerodromes will be affected as a result of this scheme. As such, it may be beneficial to carry out an impact analysis of your operational requirements.

- Will airborne tracks be impacted by new infrastructure? If so, to what extent? Can this be simply and reasonably mitigated?
- Will gliding operations face new challenges (think task completion, routes, land outs etc)?
- Will commencement of works associated with the scheme impact your operation at all?

If you need assistance, please contact us³ – we can provide advice and, if needed recommend technical expertise suited to your particular situation.

In addition to contacting us, it may well be worth putting your concerns to the Local Planning Authority and National Grid by writing a letter, and you may well find the following wording a useful template:

Aerodrome safeguarding is the process used to ensure the safety of aircraft manoeuvring on the ground, taking off, landing or flying in the vicinity of aerodromes. It is vital that the safe operation is not impacted upon by structures or buildings which have the potential to infringe the Obstacle Limitation Surfaces (OLS) or to impact or Communication, Navigation & Surveillance (CNS) equipment utilised by the airport. Lighting can sometimes be distracting or confusing and some developments have the potential to increase the bird strike risk to the aerodrome.

Aerodrome Safeguarding is embedded in the Town & Country Planning Process by way of ODPM/DfT Circular 01/2003 'Safeguarding of aerodromes, Technical Sites & Military explosives Storage Areas Direction 2002 which can be found at [Safeguarding aerodromes, technical sites and military explosives storage areas - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

The Government's National Planning Policy Framework (NPPF) give specific support to General Aviation airfields. Paragraph 110(f) states 'Planning policies should....recognise the importance of maintaining a national network of general aviation airfields, and their need to adapt and change over time – taking into account their economic value in serving business, leisure, training

³ cast@caa.co.uk

and emergency service needs, and the Government's General Aviation Strategy'

The NPPF also specifically supports sports venues and as Sport England identifies all GA aviation as 'sport' this reinforces the importance of GA aerodromes.

With regard to the proposals for the grid update for the area covering, they have the potential to impact on the safe operation of aerodrome by way of: (list points)

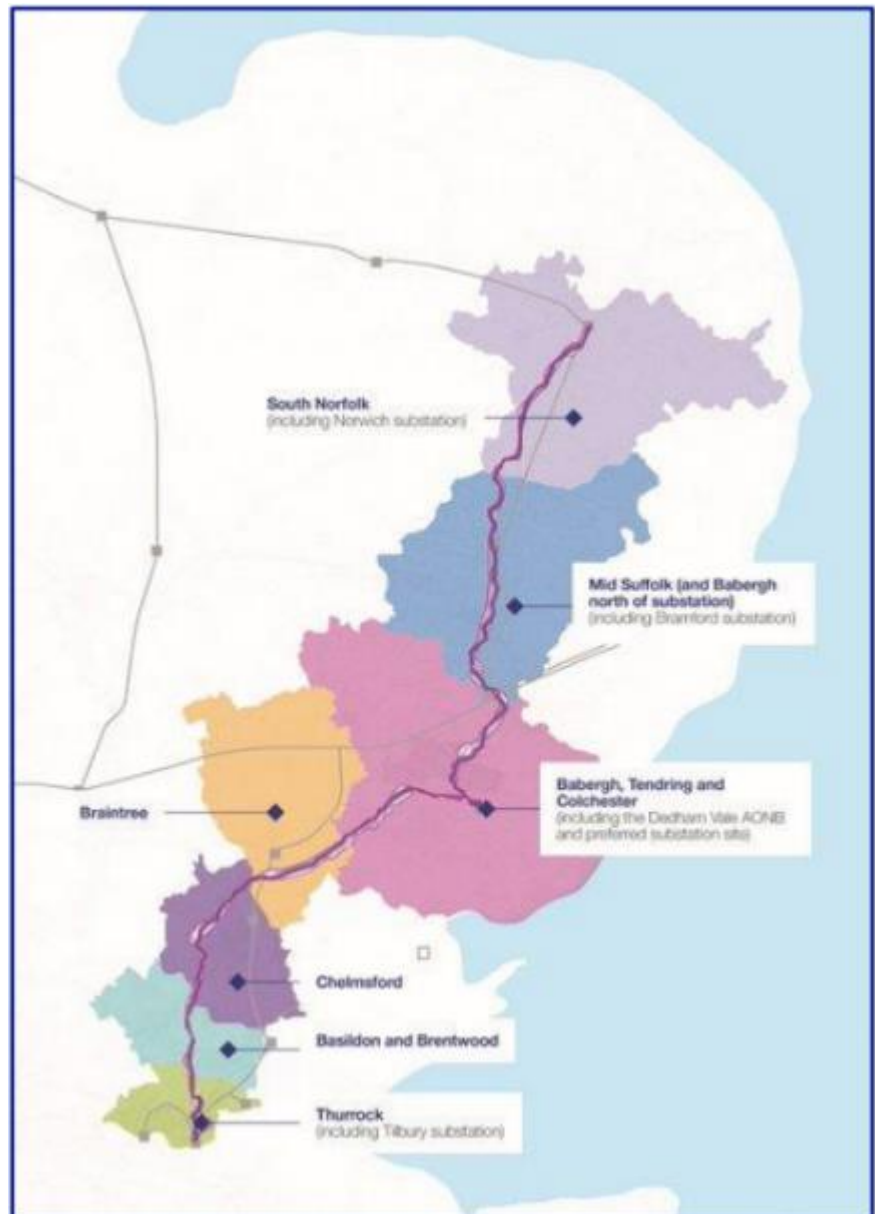


ANNEX: EXCERPTS FROM NATIONAL GRID WEBSITE

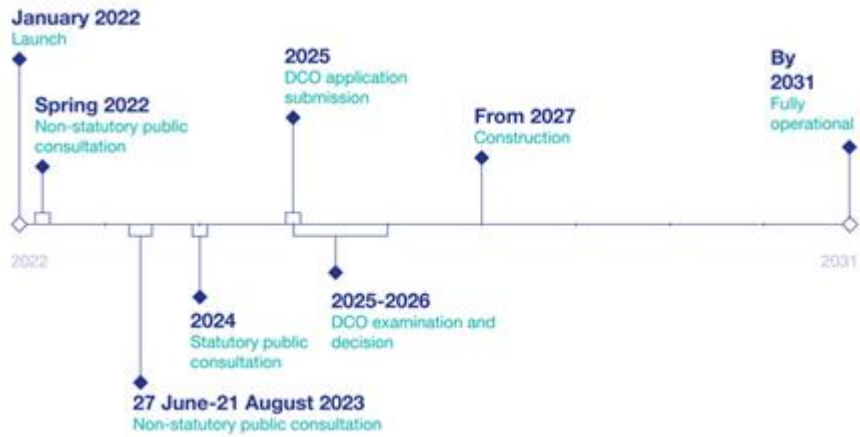
Norwich to Tilbury

Norwich to Tilbury is a proposal by National Grid Electricity Transmission (National Grid) to reinforce the high voltage power network in East Anglia between the existing substations at Norwich Main in Norfolk, Bramford in Suffolk, and Tilbury in Essex, as well as connect new offshore wind generation.”

“We are proposing to build approximately 183 km of new electricity transmission reinforcement between Norwich and Tilbury. This will be made up mostly of overhead line and pylons, along with some underground cables and a new 400 kV substation.



Project Map – 2022 Non statutory Consultation feedback report⁴



Norwich to Tilbury – Project timeline

North Humber to High Marnham

Proposing to build a new high voltage electricity transmission line and associated works between a new substation north of Hull at Creyke Beck in the East Riding of Yorkshire and a new substation at High Marnham in Nottinghamshire.



Project map

Grimsby to Walpole

The Grimsby to Walpole upgrade is a proposal to build a new high voltage overhead line in Lincolnshire, including building new pylons and new substations.

The Grimsby to Walpole upgrade will include building a new 400,000 volt (400kV) overhead electricity transmission line from proposed new substations to be built in the vicinity of Grimsby West and the Walpole area, via two new substations in land from the Lincolnshire coast, to connect proposed new sources of renewable

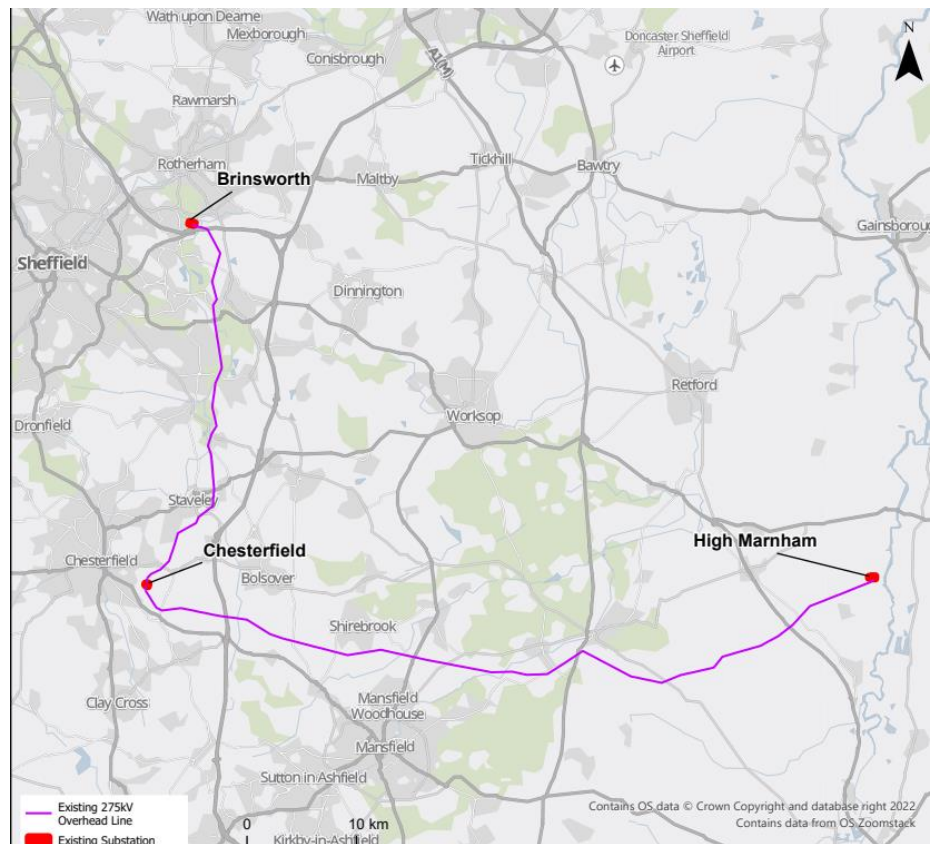
⁴ Great Grid Update - June 2023 issue number AENC-NG-CNS-REP-0003

energy to the new line.

Brinsworth to High Marnham

We propose an uprating of the existing 275kV overhead lines to facilitate a transmission load of 400kV and the development of three new substations to help carry more green power from the North of England to the Midlands. Doing so means we can get the most out of the existing network before needing new lines and, therefore, at a better cost for the consumer, while providing a larger, more resilient supply of electricity.

We are at a very early stage in the development of the project, and are currently contacting landowners and other key stakeholders in the Spring 2023 to discuss the requirement for surveys and land access to support the development of our proposal. Public consultations will be arranged in areas of proposed construction, and we will publicise the venues and dates in due course. These are likely to start later this year.



Project map

Bramford to Twinstead

We need to build a network reinforcement between Bramford Substation in Suffolk and Twinstead Tee in Essex. Our proposals include constructing up to 18 km of overhead line and around 11 km of underground cable (through the Dedham Vale AONB and in the Stour Valley).

Acceptance of the application marks the completion of the second stage (acceptance) and the beginning of the pre-examination stage, during which anyone with an interest in the project will have an opportunity to register as an Interested Party by making a Relevant Representation. The period to register as an Interested Party by making a relevant representation closes at 23:59 on 18 July 2023. Representations can be submitted online through the Bramford to Twinstead Reinforcement page of the Planning Inspectorate's website for the duration of the registration period.

Following this, the Planning Inspectorate will hold a Preliminary Meeting, followed by a detailed examination of the application. This examination will be conducted by an Examining Inspector (or panel of Inspectors) appointed by the Planning Inspectorate.

Yorkshire Green

The Yorkshire GREEN project proposes new infrastructure including substations, overhead lines, underground cables and cable sealing end compounds (where underground cables meet overhead lines). It would also include work to upgrade the existing transmission system, including some installation of new equipment at existing sites.



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