

Bramford to Twinstead

Elected Member Briefings

February & March 2021

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Agenda

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Introductions & Objectives

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Introductions



John Bevan
Project Manager
National Grid



Steve Knight-Gregson
Regional External Affairs
Manager
National Grid



Donna Burnell
Regional External Affairs
Manager
Bramford to Twinstead



Sarah Wardle
Project Community
Relations Team
Bramford to Twinstead



Sebastian Stevens
Consents Officer
National Grid

Objectives

Introduce the project with key stakeholders

Describe the project and why it is needed

Outline work to date, current work and next steps



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Project Background

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Bringing energy to life

National Grid operate at the heart of the energy system, connecting millions of people safely, reliably and efficiently to the energy they use every day.



A cleaner, greener future...



Our teams at National Grid are working to build a cleaner, fairer and more affordable energy system that serves everyone – powering the future of our homes, transport and industry. We believe by acting now, the UK can become the world's first major clean economy, with net zero carbon emissions by 2050, creating growth and jobs for communities across Britain.

UK has largest operating offshore wind capacity in the world – 8.5GW with a further 1.9GW under construction.

Offshore Wind Sector Deal & Energy White Paper – 40GW by 2030 ambition.

Committee for Climate Change – expect electricity demand to double over next 30 years – 6th Carbon Budget suggests 100 GW of offshore wind required by 2050

UK offshore wind – the story so far & UK future ambition

First commercial project



First UK contracts for Difference Auction



March 2019 30GW sector deal by 2030

Dec 2020 Govt 10 point plan target of 40GW by 2030

Quadruple installed capacity over the next decade

2000

2003

2010

2015

2020

..... 2030



First demonstration offshore wind farm



2009 OFTO regime introduced.

2010 Winners of The Crown Estate's Round 3 leasing competition were announced, the largest with capacity up to 10GW.

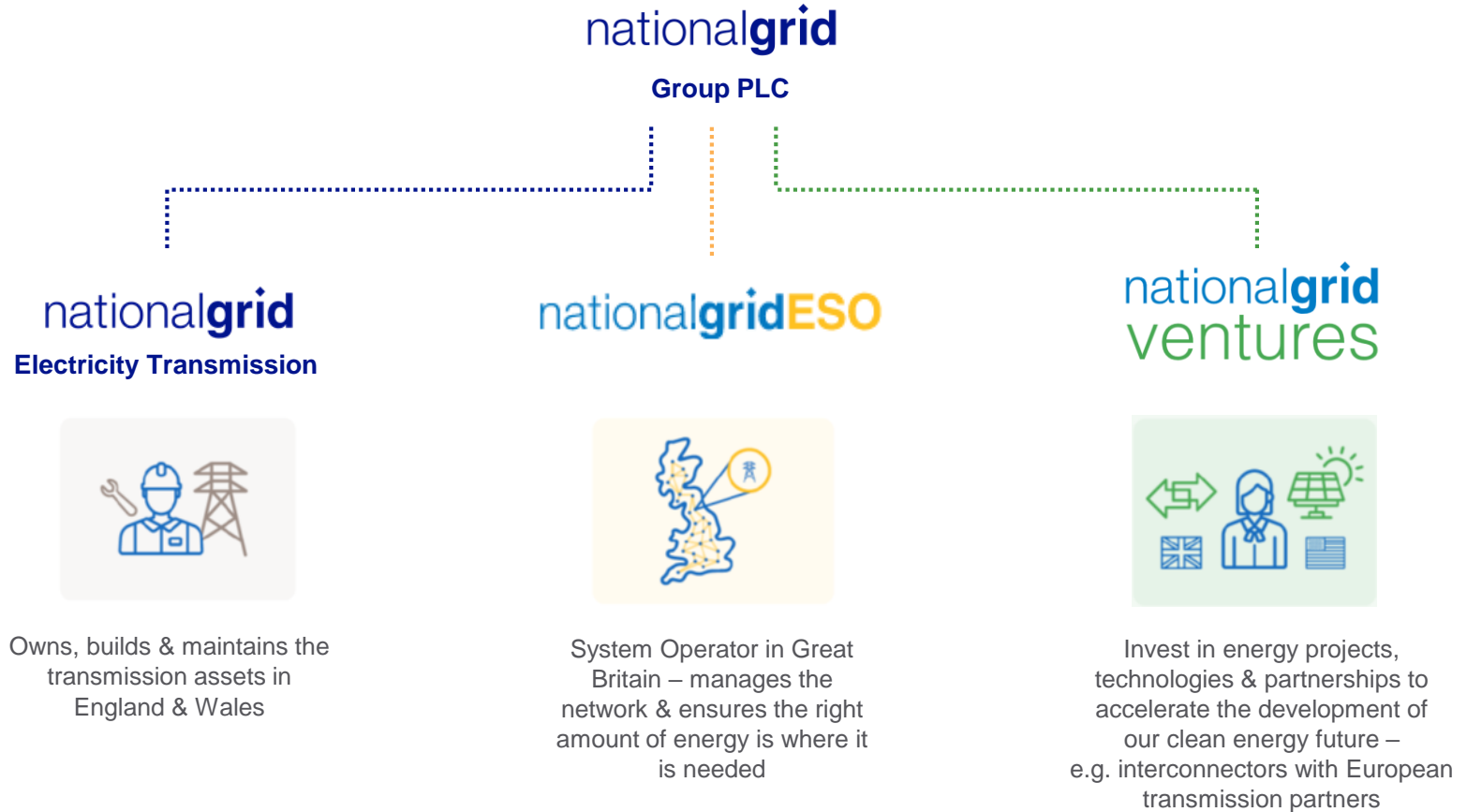


Circa 10GW installed offshore wind

First decommissioning of UK offshore wind project - 4MW Blyth offshore wind farm commissioned in 2000



National Grid in the UK



Our role and obligations



When new sources of electricity seek to connect to the network, National Grid ESO must offer terms to connect.

When developing transmission network proposals, we must, under the Electricity Act 1989, do that in an efficient, coordinated and economical way, and have regard to the desirability of preserving amenity.

When the development being connected is offshore, be that a wind farm or an interconnector, the offshore aspects need to be considered in that evaluation too.

Identifying network capability needs

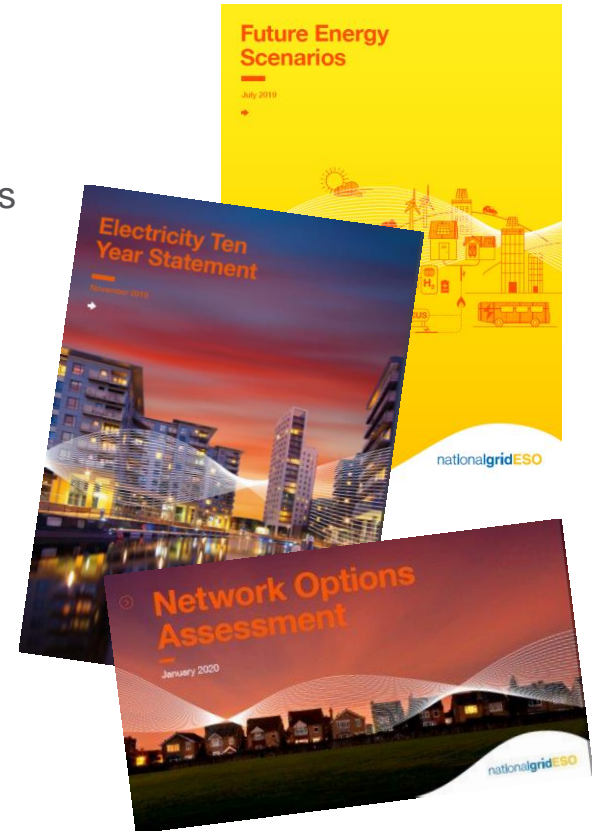
National Grid ESO lead an annual cycle looking at network capability requirements...

A range of [Future Energy Scenarios](#) are discussed with stakeholders – published each summer.

Those inform the analysis in the [Electricity Ten Year Statement](#) of transmission network requirements over the next decade – published each autumn.

The [Network Options Assessment](#) recommends which projects Transmission Owners proceed with to meet the future network requirements identified in ETYS – published each spring.

National Grid Electricity Transmission responds to NOA recommendations in its [Network Development Policy](#) – published each summer.



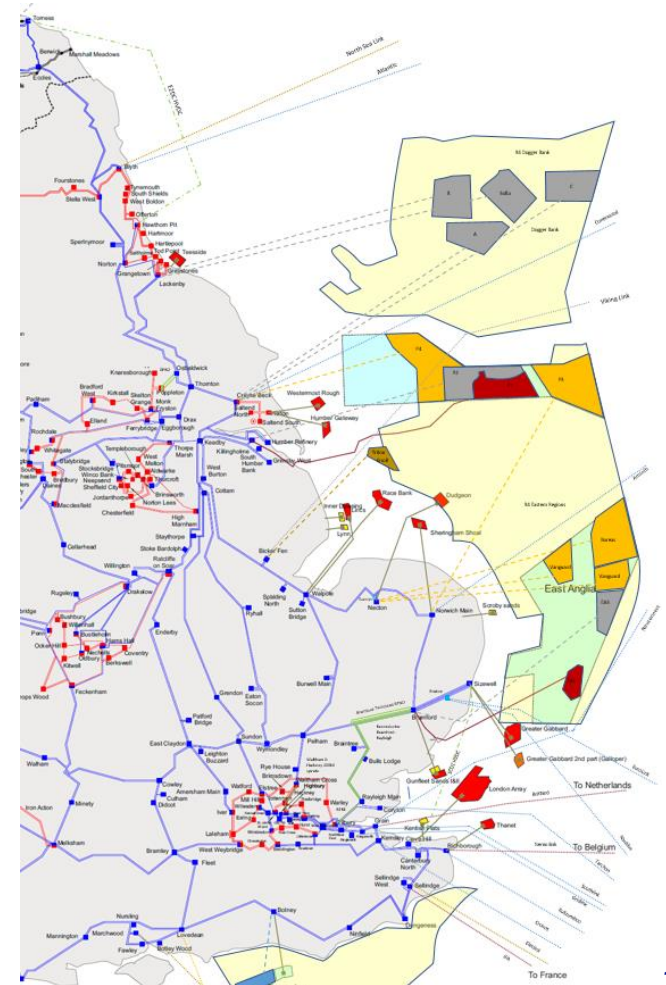
East Coast context

Network reinforcement needed to facilitate the March 2020 UK Offshore Wind Sector Deal (30GW by 2030) includes, but is not limited to:

- the first HVDC Anglo-Scottish Eastern Link (Torness to Hawthorn Pit)
- an East Anglia-Kent HVDC link
- Bramford to Twinstead
- Central Yorkshire reinforcement

Bramford to Twinstead is ‘critical’ in all scenarios due to high exports from East Anglia (NOA 2020/21 p43)

Illustration shows 30GW by 2030 current position – Round 1, Round 2, Round 2.5, Round 3 offshore wind and interconnectors that are either built (red), under construction (e.g. Triton Knoll), consented (grey), awaiting consent (yellow), in scoping (blue), NOA proceed (green)



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Regional Context & Reinforcement

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The Existing Transmission System in the East of England

- Developed in the 1960s to supply regional demand (Norwich & Ipswich)
- Large 'loop' from Walpole – Pelham, via Norwich and Bramford (Ipswich)
- 'Spurs' off to connect Magnox nuclear stations at Sizewell A (1967) and at Bradwell A (1962)
- Norfolk & Suffolk relatively peripheral part of the network – historically limited generation (c.400MW at Sizewell, c 300 MW at Bradwell). Supplied demand is low and falling (1,426 MW peak in 2019).
- Built using largest pylons and operating at highest voltage (400kV) – spare capacity



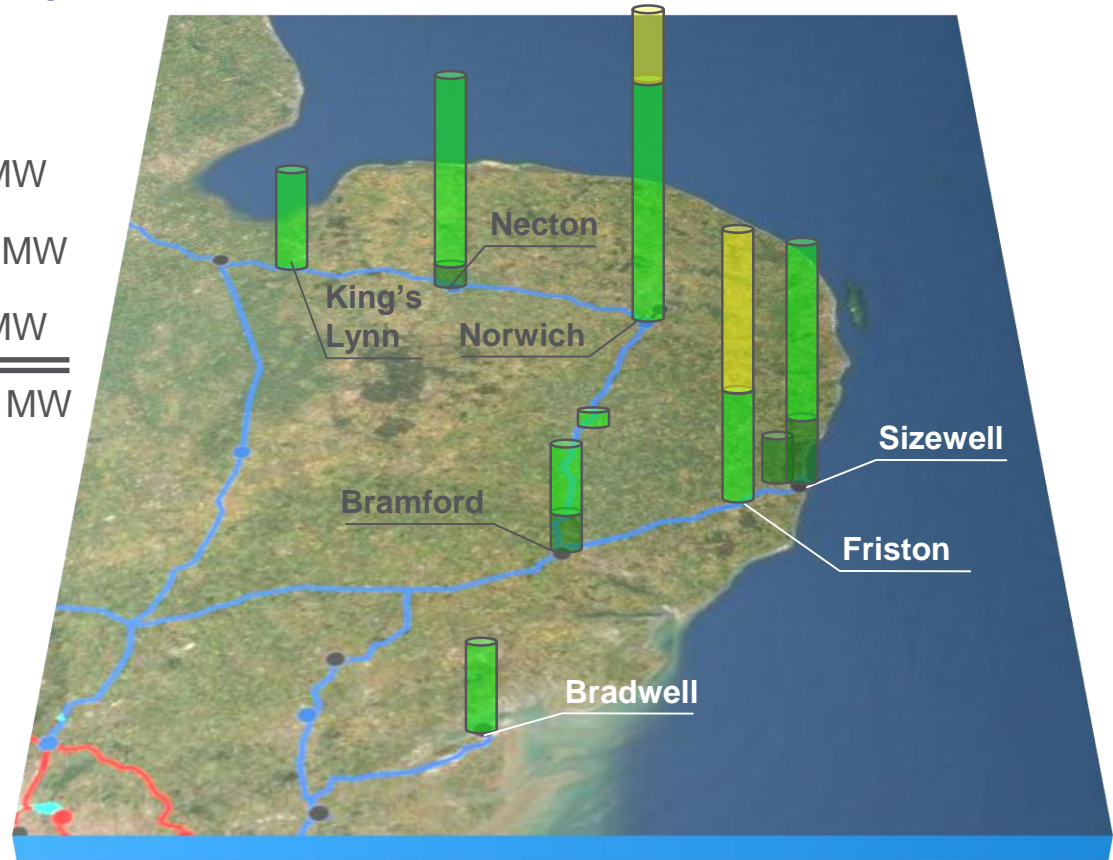
The need for reinforcement

Driven by Customers

Existing Generation	4,091 MW
New Contracted Generation	19,612 MW
New Contracted Interconnection	4,500 MW
Total? (by 2032?)	<u><u>28,203¹ MW</u></u>

But customer outcomes and timings are uncertain...

1. Contracted at end 2020.



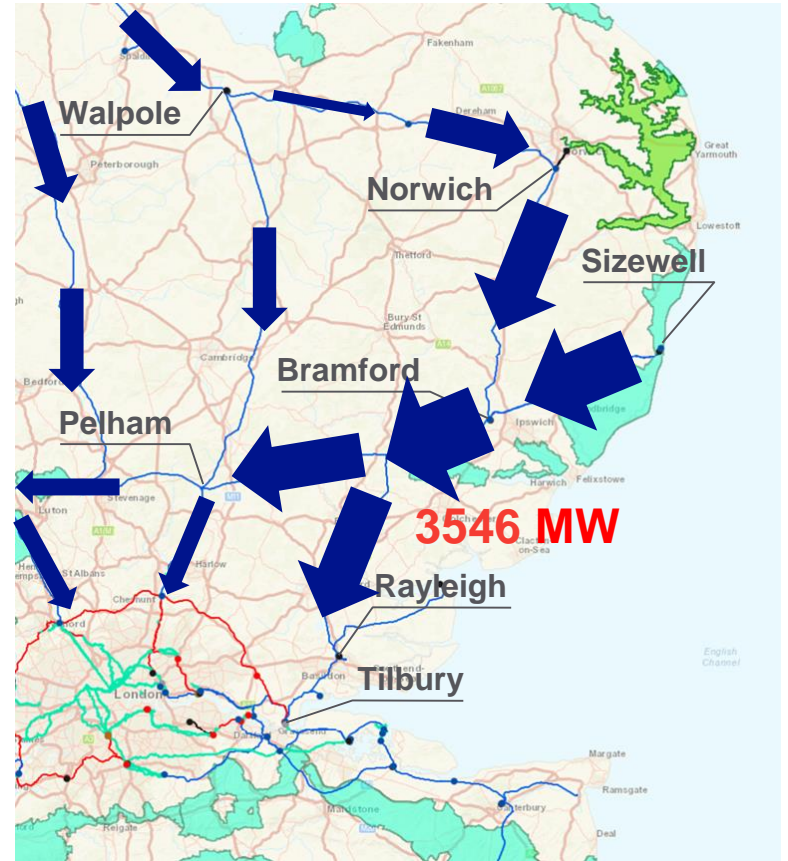
The need for reinforcement

Power Flows Forecast by NGENSO

NGESO and Future Energy Scenarios

Electricity Ten Year Statement (ETYS) sets out range of possible future system requirements

Latest ETYS suggests c15 GW transmission capability required by 2030 – compared to 3.5 GW export capability today



What can be done – NOA 2020/21

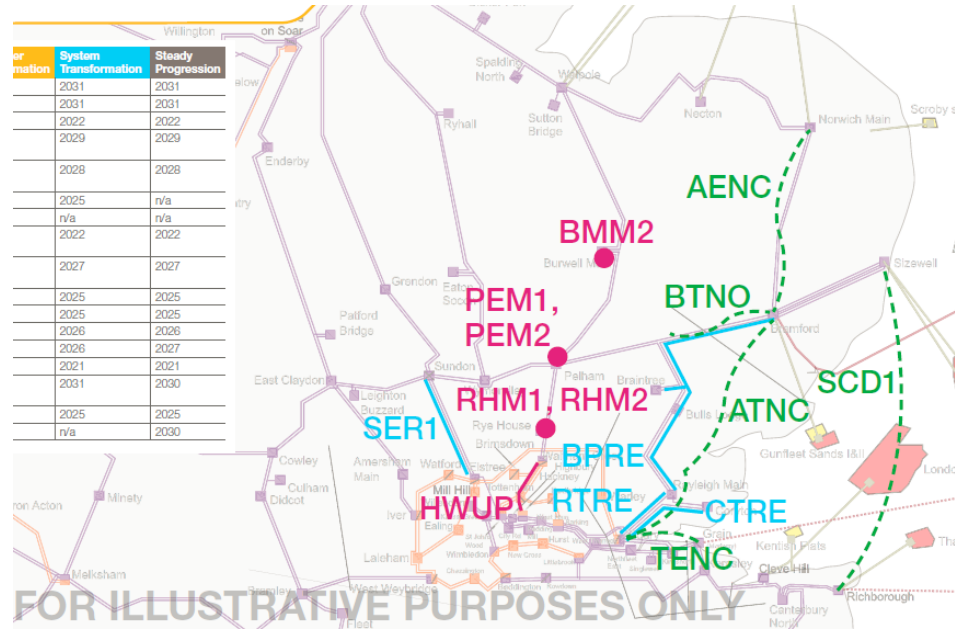


1. Establishing need

We will only seek to build electricity lines or pipelines along new routes, or above-ground installations in new locations where:

- our existing infrastructure can not be upgraded (technically or economically) to meet system security standards and regulatory obligations
- forecasted increases in demand for electricity or gas will not be satisfied by other means
- customer connections are required or
- where an existing electricity transmission line has been identified for replacement through our Visual Impact Provision (VIP)¹ project.

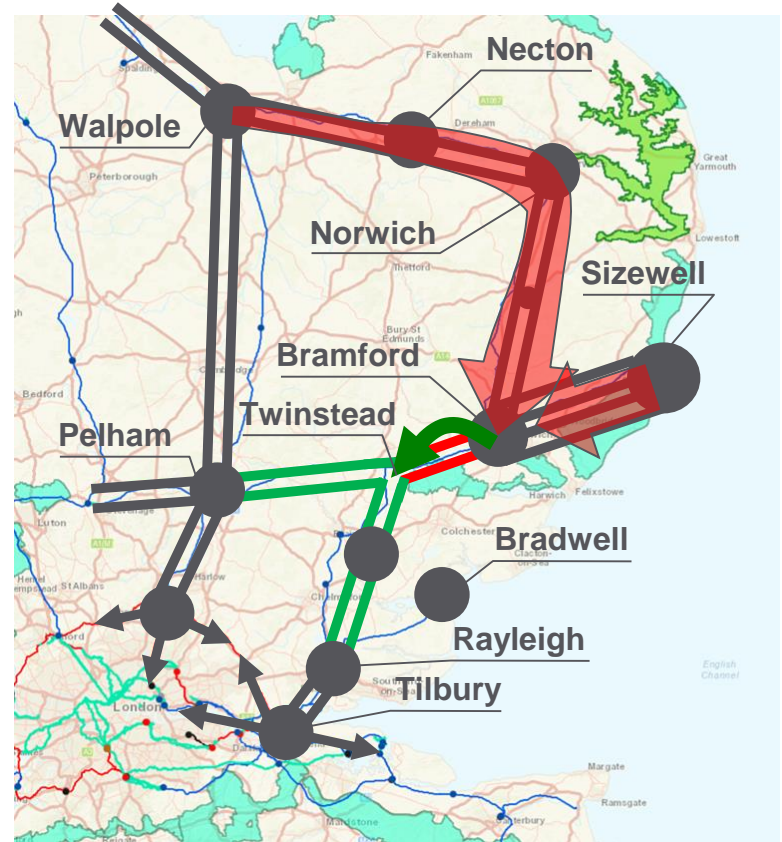
1. Install power control devices at substations (locations marked with **red dots**)
2. Update a 275kV line (**red line**) & reconductor 400kV routes with largest conductors (**blue lines**)
3. Build new routes to relieve existing ones (**indicative green dotted lines**)



Rationale for new route

Bramford – Twinstead

- Amount of generation at Bramford overloads circuit to Pelham and circuit to Rayleigh
- This needs directly addressing by the Bramford – Twinstead reinforcement
- This would relieve the overloads and also utilise spare capacity in routes beyond Twinstead
- Could go further west but not favoured on cost and environmental grounds



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Bramford to Twinstead

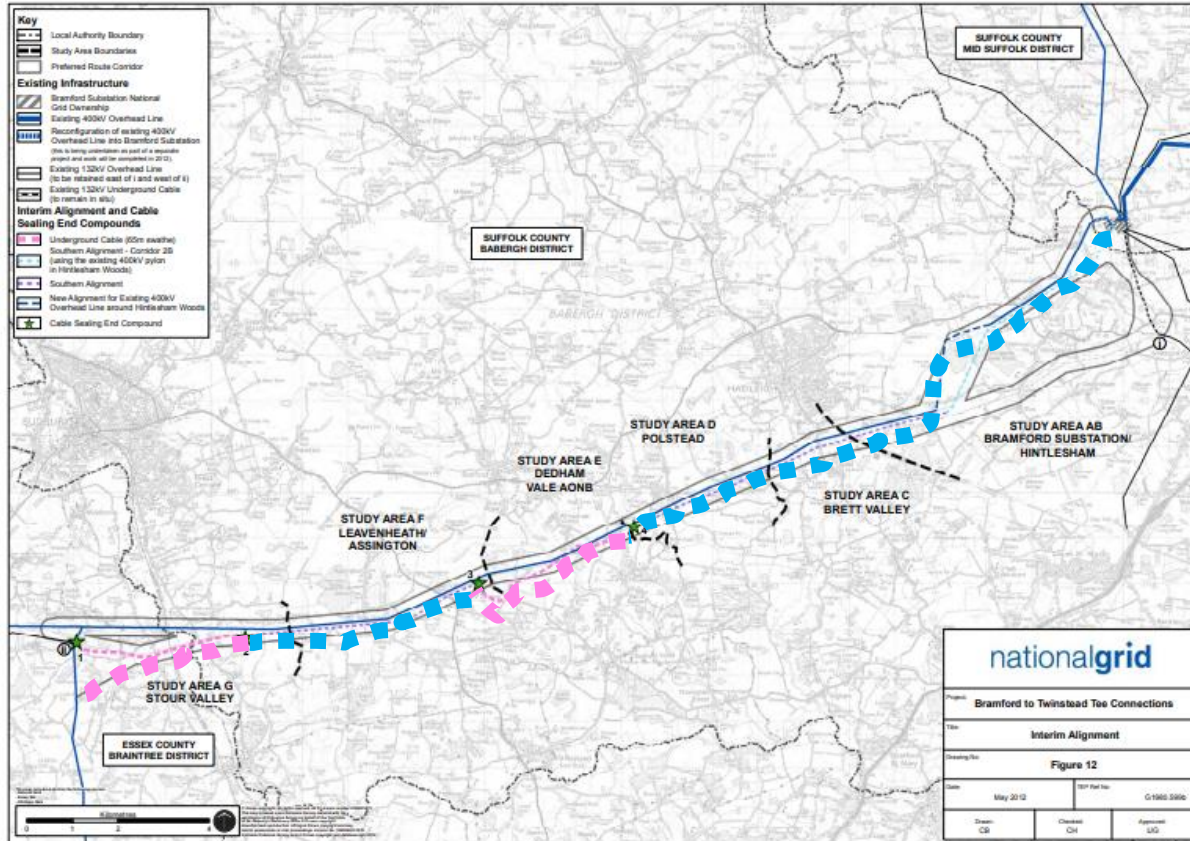
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Project at pause in 2013

Overhead line

Underground cable




In your area

 new 400kV overhead line

 new 400kV underground cable

 options for new 400kV underground cable

 existing 400kV overhead line

 existing 132kV overhead line to be removed



In your area



new 400kV overhead line



new 400kV underground cable



options for new 400kV underground cable



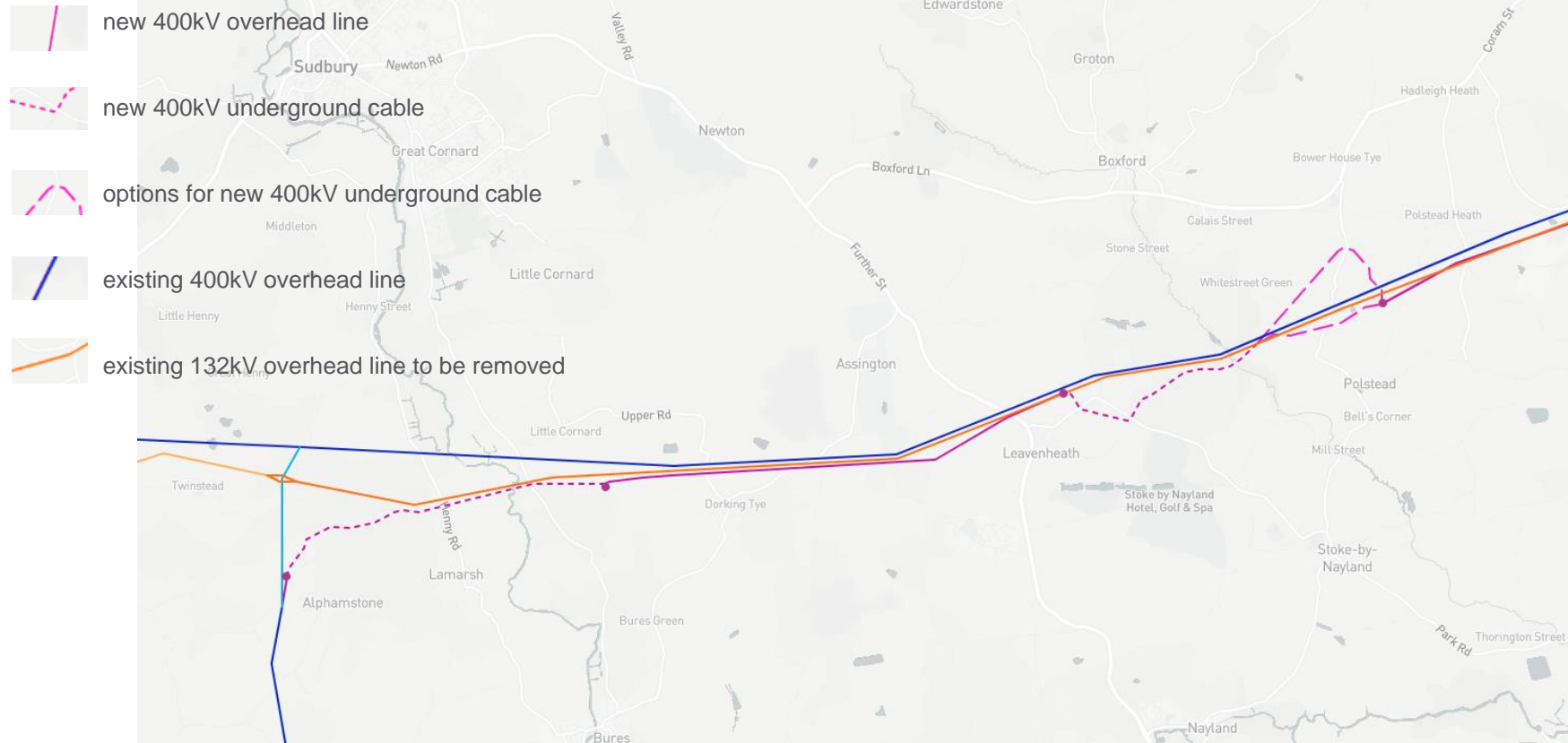
existing 400kV overhead line



existing 132kV overhead line to be removed



In your area

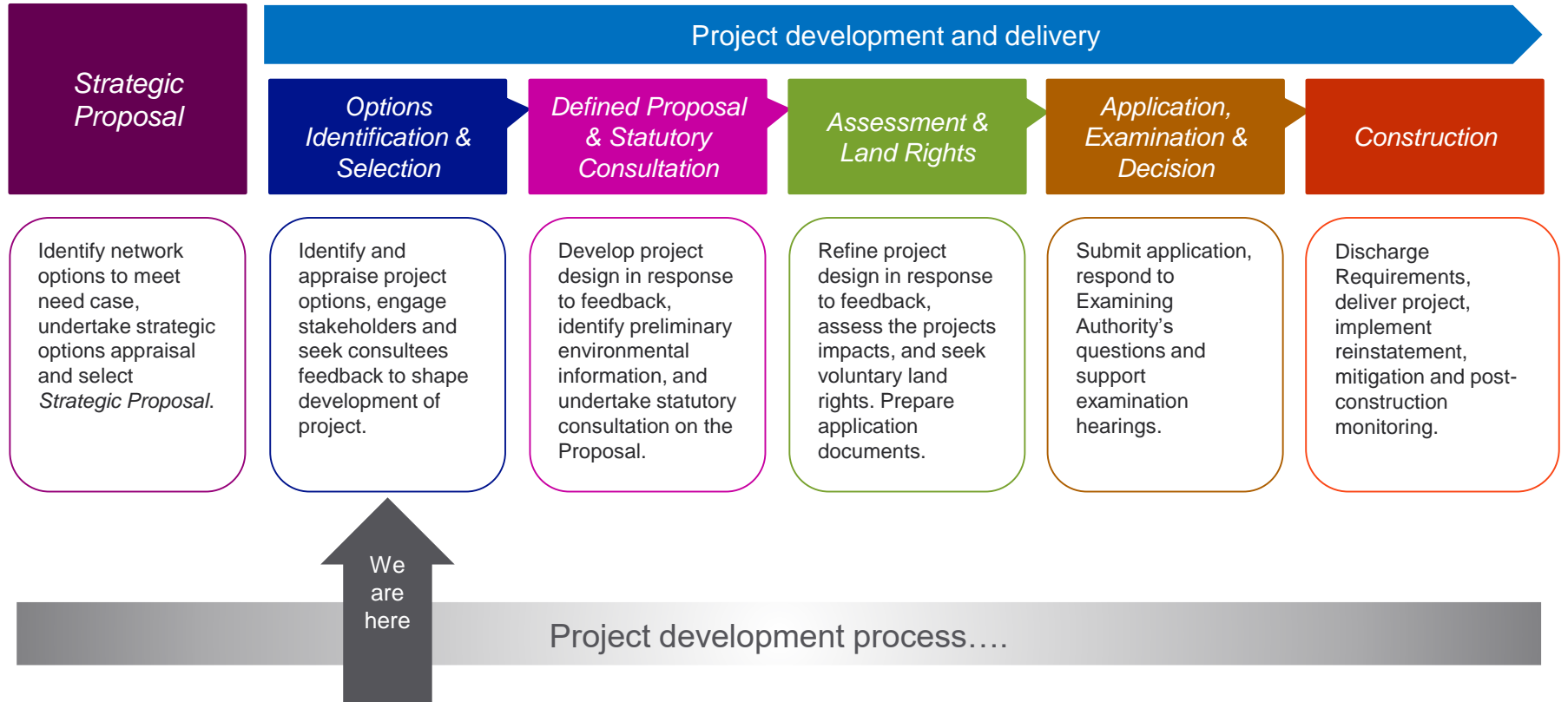


Project re-start 2020/21

Necessary to explore, re-visit, test and confirm aspects around which there is uncertainty...

- **local changes since 2013** – development along the route (e.g. solar farms), progress with proposed AONB at Stour Valley, planning policy, need case
- **appropriateness of the proposals we had at pause in 2013** – overhead and underground justification; UKPN's requirements and distribution system reconfiguration options to maintain local supplies; proposed 400kV overhead alignment
- **consenting/land rights approach & regulatory strategy** – considering approach to consenting, re-scoping EIA, re-evaluation of costs
- **refreshing project information** – confirming interests in land, obtaining access for surveys, carrying out up-to-date environmental surveys, agreeing consultation approach within the limitations of Covid-19

Our project development process



Indicative Key Dates

Milestone	Start	Finish
Back Check	Q4 2019	Q3 2020
Early Stakeholder Engagement	Q4 2020	Q2 2021
Routeing and Siting Review	Q4 2020	Q3 2021
Submit EIA Scoping		Q2 2021
Non-statutory Consultation	Q2 2021	Q2 2021
EIA Surveys	Q2 2021	Q3 2022
Statutory Consultation	Q1 2022	Q1 2022
DCO Submission		Q1 2023
DCO Examination & Decision	Q1 2023	Q2 2024
Requirements / Procurement	Q2 2024	Q2 2025
Construction	Q2 2025	Q2 2028

*programme dates may be subject to change as project progresses

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Consultation
& Next Steps

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Previous consultations

Stage 1 (Oct 2009 to Jul 2011)

- need, strategic options & corridor options
- >3,000 responses
- preferred corridor & removal of UKPN 132kV line as mitigation announced July 2011

Stage 2 (Jul 2011 to May 2012)

- community forums & thematic group meetings – examining significance of potential environmental effects
- Summer 2012 consultation on a draft route including two sections of underground cable – 4km at Dedham Vale & 4km at the Stour Valley
- October 2012 preferred route announced

Western cable sealing end compound (Nov/Dec 2012)

- Siting options for western sealing end compound
- Southern site identified in January 2013 – allowing for removal of an additional 1km of 400kV overhead line in the Stour Valley

UKPN substation grid supply point (Feb 2013)

- Siting options for proposed substation to maintain local supplies & facilitate 132kV line removal
- Site identified at Butler's Wood, west of Wickham St Paul, screened by woodland

Communications & engagement

Digital & conventional approaches

Interactive website content

Virtual briefing meetings

Online consultations

Inviting feedback Spring 2021



Consultation strategy

Early engagement

- Host LPAs – started end Aug 2020
- PINs & core stakeholders – starting Dec 2020
- MPs, councillors, parish councils, landowners – starting late Jan/Feb 2021

Spring 2021 (non-statutory)

- Provide a full explanation of the project, focusing on how the project developed prior to the pause
- Provide information about the need to increase the capability of the network in this location
- Outline next steps and likely programme as we further develop proposals
- Gather feedback on the proposals

Consultation strategy – being discussed with LPAs

Primary Consultation Zone (those within 1km)

- Summary newsletter; feedback form; freepost envelope; contact details; project website link; how to engage further (live chat, webinars or telephone surgeries); & what to do/how to obtain hard copy information if no internet connection

Secondary Consultation Zone (those within 5km)

- Advertising events (print & community locations); deposit copies of documents; targeted social media advertising (events, how to engage, live chats, webinars, telephone surgeries); advertising & documentation about how to get in touch, ask questions or request hard copies

Consultation strategy

Accessible information

- Primary & Secondary Consultation Zone – pro-active awareness raising, advertising & encouraging engagement
- Deposit documents (hard copy & digital)
- Project website (to be established) – explainer videos, interactive map; document library (Project Background document, Project Development Options Report, previous Consultation Feedback reports); virtual consultation; live chat; book a telephone surgery call; sign up for webinars; searchable FAQs; download & print materials/feedback form; project updates; contact us information; feedback form (online & downloadable); GDPR statement
- Social media & print advertising
- Provision of print hard copies

- Consultation website - audio description, sign language/subtitled videos, font size adjuster, Google translate service
- Building links with hard-to-reach groups & using their established comms channels
- Engage hard-to-reach ambassador/champion support to implement & encourage engagement
- Targeted hard to reach awareness raising activities (e.g. printed materials, postcards, e-letters, multi-lingual materials, social media, videography)

Statutory consultation

- Draft Statement of Community Consultation (SoCC) to be discussed with LPAs and finalised SoCC to be published ahead of consultation
- Will include PEIR

Next steps



*Options
Identification &
Selection*

- Core stakeholder engagement – Council officers and environmental bodies (HE, NE, EA, AONB)
- Landowner contact – requesting access for surveys
- MP, councillor and parish council briefing
- Project website www.nationalgrid.com/bramford-tinstead
- Contact details bramford-tinstead@nationalgrid.com & 0808 196 1515 (9:00am – 5:30pm)
- Non-statutory consultation

Supporting Communities where we're working

Our Community Grant Programme

Supporting charitable & not-for-profit community organisations in areas we are working with grants for social, economic and environmental initiatives – how to apply & find out more [here](#)

STEM initiatives

Encouraging the next generation to get inspired about science, technology, engineering & maths – e.g. funding Science Made Simple sessions for local primary schools

Skills development

Supporting the long term unemployed with skills development training

Supporting local charities

Donations to local good causes through our construction site observation card system

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Questions & AOB



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