AENC-NG-FIN-REP-0001

Norwich to Tilbury

Volume 4: Compulsory acquisition information

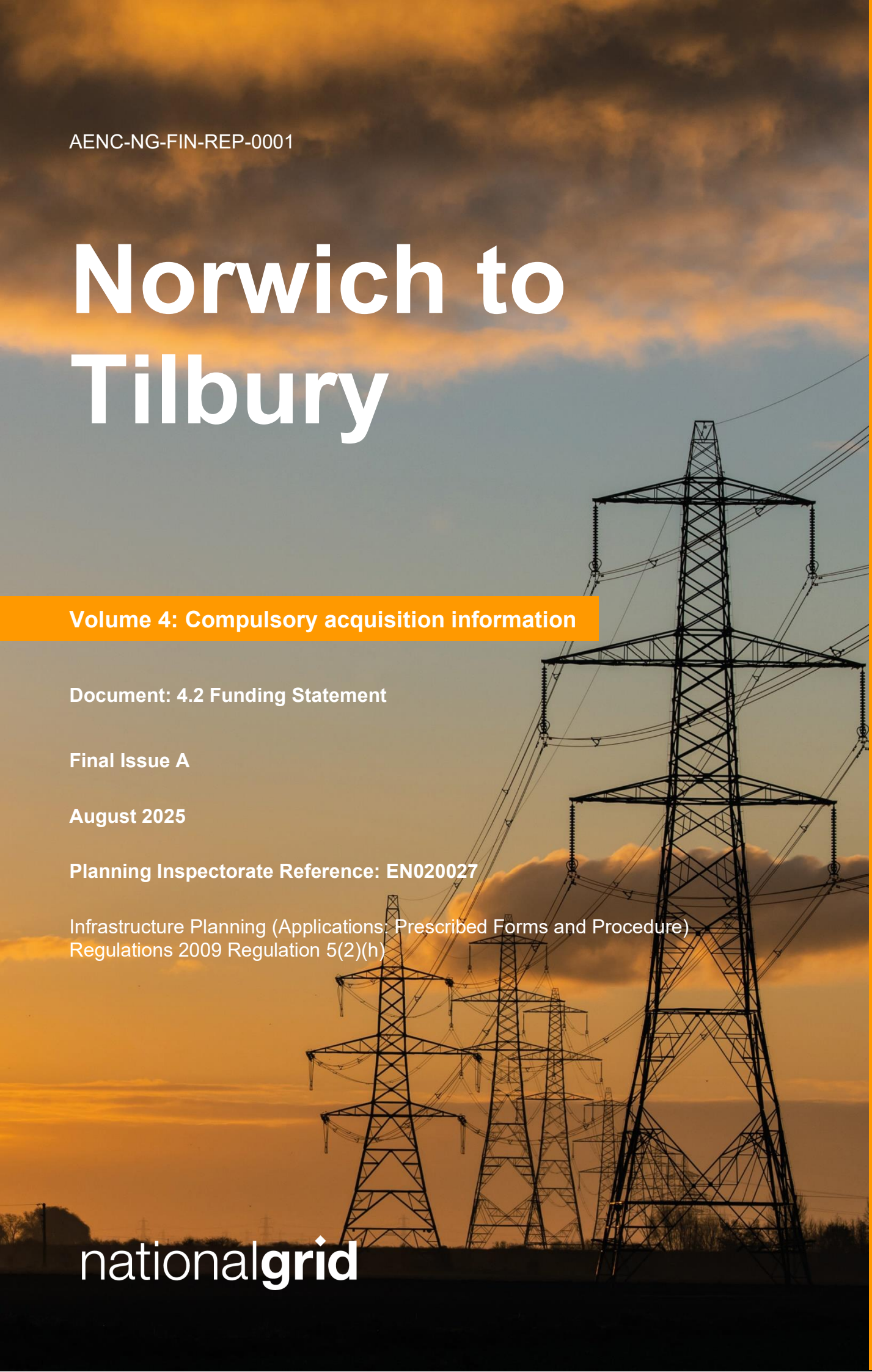
Document: 4.2 Funding Statement

Final Issue A

August 2025

Planning Inspectorate Reference: EN020027

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(h)



nationalgrid

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Introduction

This document outlines the funding strategy for the Proposed Project, a proposal by National Grid Electricity Transmission plc to reinforce the transmission network in East Anglia between Norwich and Tilbury. The project aims to accommodate additional power flows from renewable and low carbon generation.

The document details the Proposed Project's components and emphasises the need for the project due to the existing network's insufficient capacity to handle future energy demands. It also highlights National Grid's regulatory framework, business model, and the financial mechanisms in place to ensure the project's successful implementation.

The funding statement confirms that the estimated cost of the project is approximately £895 million (2020/21 price base) and the mechanisms National Grid has to secure the necessary funding.

The document also addresses the acquisition of land and rights required for the Proposed Project, with a total estimated cost of £180.2 million for land acquisition and compensation (2024/2025 figures).

National Grid is committed to securing these acquisitions through voluntary agreements or compulsory acquisition if necessary. The statement concludes by assuring that all aspects of the Proposed Project will be fully funded within the relevant time period, ensuring the Proposed Project's progression without any financial shortfall.

1. Introduction

1.1 Introduction

Summary

1.1.1 This Funding Statement ('this Statement') explains how the proposed Norwich to Tilbury Project (the 'Project') is to be funded, and how the acquisition of land and rights in, on or over land which are necessary to build the Project will be funded.

1.1.2 This Statement has been prepared for submission to the Planning Inspectorate as part of National Grid's application for development consent for the Project. It should be read alongside other application documents, in particular Statement of Reasons (document reference 4.1), which explains how National Grid intends to use the land which it is proposed to acquire and justifies the powers of compulsory acquisition that are sought in the draft Development Consent Order (DCO). (document reference 3.1)

The Project

1.1.3 The Project is a proposal by National Grid to upgrade the electricity transmission system in East Anglia between Norwich and Tilbury, comprising:

- A new 400 kilovolt (kV) electricity transmission connection of approximately 180 km overall length from Norwich Main Substation to Tilbury Substation via Bramford Substation, a new East Anglia Connection Node (EACN) Substation and a new Tilbury North Substation, including:
  - Approximately 159 km of new overhead line supported on approximately 509 pylons, either standard steel lattice pylons (approximately 50 m in height) or low height steel lattice pylons (approximately 40 m in height) and some of which would be gantries (typically up to 15 m in height) within proposed Cable Sealing End (CSE) compounds or existing or proposed substations
  - Approximately 21 km of 400 kV underground cabling, some of which would be located through the Dedham Vale National Landscape (an Area of Outstanding Natural Beauty (AONB1)
- Up to seven new CSE compounds (with permanent access) to connect the overhead lines to the underground cables
- Modification works to connect into the existing Norwich Main Substation and a substation extension at the existing Bramford Substation
- A new 400 kV substation on the Tendring Peninsula, referred to as the EACN Substation (with a new permanent access). This is proposed to be an Air Insulated Switchgear (AIS) substation
- A new 400 kV substation to the south of Orsett Golf Course in Essex, referred to as the Tilbury North Substation (with a new permanent access). This is proposed to be a Gas Insulated Switchgear (GIS) substation

- Modifications to the existing National Grid Electricity Transmission overhead lines to facilitate the connection of the existing network into the new Tilbury North Substation to provide connection to the Tilbury Substation
- Ancillary and/or temporary works associated with the construction of the Project.
- In addition, third party utilities diversions and/or modifications would be required to facilitate the construction of the Project. There would also be land required for environmental mitigation and Biodiversity Net Gain (BNG).
- As well as the permanent infrastructure, land would also be required temporarily for construction activities including, for example, working areas for construction equipment and machinery, site offices, welfare, storage and temporary construction access.

Project purpose

1.1.4 The Project would be a critical part of a network which can support the delivery of renewable energy and the flow of clean power for the UK electricity supply. The National Energy System Operator (NESO), in Clean Power 2030 (NESO, 2024a), noted that the clean power objective could not be achieved without the Project, adding significant costs to consumer energy prices.

Developer

1.1.5 The Project is a proposal of National Grid Electricity Transmission plc ('National Grid'). National Grid owns, builds and maintains the electricity transmission network in England and Wales.

1.2 Legal Context and Relevant Guidance

Regulations

1.2.1 This Statement is required because the DCO to enable the construction of the Project would authorise the compulsory acquisition of land or interests in land. Regulation 5(2)(h) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) requires a statement indicating how the compulsory acquisition of land will be funded.

Guidance

1.2.2 The Department for Communities and Local Government (DCLG) (2013a) guidance 'Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land' explains that:
'18. ...Applicants should be able to demonstrate that adequate funding is likely to be available to enable the compulsory acquisition within the statutory period following the order being made, and that the resource implications of a possible acquisition resulting from a blight notice have been taken account of.'

References

1.2.3 This Statement has been prepared:

- To meet the requirement of Regulation 5(2)(h) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended)
- In accordance with Paragraphs 25 and 26 of DCLG guidance 'Planning Act 2008: Application Form Guidance' (DCLG, 2013b)
- In accordance with Paragraphs 9, 17 and 18 of DCLG guidance 'Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land', published September 2013 (DCLG, 2013a).

2. National Grid Electricity Transmission plc and Regulatory Framework

2.1 The Role of National Grid

2.1.1 Within the National Grid Group there are distinctly separate legal entities, each with their individual responsibilities and roles.

2.1.2 National Grid holds the Transmission Licence for England and Wales and is thus obligated to develop and maintain an efficient, coordinated and economical system of electricity transmission and to facilitate competition in the generation and supply of electricity, as set out in the Electricity Act 1989. As a licence holder, National Grid has specific duties to uphold in relation to the desirability of preserving amenity of certain aspects of the environment and to mitigate the effects of its activities on the environment.

2.1.3 National Grid is regulated by the Office of Gas and Electricity Markets (Ofgem), which sets price controls and monitors how the company develops and operates the network on behalf of consumers.

2.1.4 National Grid owns and manages the national high voltage electricity transmission system throughout England and Wales. National Grid owns, builds and maintains the infrastructure, for example overhead lines, buried cables and substations, to allow power to move around the country. The key role of this transmission system is to connect the electricity generators' power stations with regional Distribution Network Operators who then supply businesses and homes. In return for the connection, users of the transmission network pay a tariff to National Grid.

2.1.5 This revenue is then used by National Grid to maintain, improve and invest in the transmission network. As there is a stable demand for the use of the transmission network in the UK, there is a reliable revenue stream for National Grid.

2.1.6 National Grid publishes its full accounts on an annual basis. The financial results set out in the Annual Report and Accounts 2023/2024 (National Grid plc, 2024) show that National Grid Group has underlying operating profits of £4,773 million and National Grid has underlying operating profits of £1,314 million. National Grid Group has a regulatory asset value of £55,453 million and National Grid has a regulatory asset value of £18,462 million.

2.2 Other relevant bodies

2.2.1 NESO is a separate publicly owned company which controls the movement of electricity around the country, transporting power from generators (such as wind farms) to local Distribution Network Operators ensuring that supply meets demand.

2.2.2 Every year it produces, in regular cycles, Future Energy Scenarios to examine ways of achieving net zero by 2050. These inform the Electricity Ten Year Statement (NESO, 2024b) and, finally, the Network Options Assessment (NOA). The NOA recommends which reinforcement projects should receive investment during the year.

2.2.3 In November 2024, NESO published Clean Power 2030 (NESO, 2024a), advice commissioned by the Department for Energy Security and Net Zero to provide practical advice on achieving clean power by 2030 for Great Britain, including developing a range of pathways that reflect the possible routes to a decarbonised power system.

2.2.4 As mentioned in Paragraph 1.1.3, NESO's Clean Power 2030 provides important context for the Project purpose. NESO notes that the analysis in Clean Power 2030 provides information about:

- Energy generation and demand mixes
- Key requirements for the transmission network
- Consideration of criteria that could support connections reform
- View of actions needed to enable delivery
- High level assessment of costs and benefits, opportunities, challenges and risks.

3. Need for the Norwich to Tilbury Project

3.1 The need for the Project

3.1.1 The Project is needed because the existing electricity transmission network does not have enough capacity to reliably and securely transport all the new energy expected to be connected to the network in the future, while working to the required standards.

3.1.2 The way electricity is generated in the UK is changing rapidly, with the country transitioning to more secure, cheaper, and cleaner forms of energy such as new offshore windfarms. This is a result of the UK government's commitment to net zero by 2050 and the delivery of up to 50 gigawatts (GW) of offshore wind energy by 2030.

3.1.3 The energy industry is key to this transition, from developing renewable energy generation, to upgrading the existing electricity transmission network, enabling other sectors to decarbonise, and enabling communities across the country to benefit from clean energy.

3.1.4 As part of this, the electricity transmission network is undergoing its largest overhaul in generations, with more than five times the amount of transmission infrastructure built in the last 30 years in the UK needing to be delivered in the next seven years. National Grid has a key part to play in this work, which is known as The Great Grid Upgrade. The Project is one of the projects being delivered to make sure the network is ready for the anticipated increase in supply and demand of electricity.

3.1.5 NESO's (2024a) Clean Power 2030 report noted:
'Three projects have been identified as critical to delivering a network which supports the clean power pathways, but at present have delivery dates after 2030. Support is therefore needed to bring these projects forward for 2030 delivery. These are projects in East Anglia and in the southeast that are critical for connecting offshore wind in the North Sea and supporting the flow of clean power. Our assessment suggests that without these projects, the clean power objective would not be achieved, leaving the clean power target short by around 1.6% in 2030 (assuming a typical weather year) and consumers could face extra constraint costs of around £4.2 billion in 2030'. .[1]

3.1.6 The reason these projects are critical is because the existing transmission network infrastructure in East Anglia and the southeast of England was not designed to accommodate the large volumes of generation capacity that is planned to connect to the network in these areas. The network in and between East Anglia and the southeast of England therefore needs to be reinforced for four main reasons:

- The existing transmission network was not designed to transport electricity from where it is increasingly being generated (largely offshore)
- The growth in offshore wind, interconnectors and nuclear power means that more electricity will be generated in the years ahead than the current network is able to reliably transport

[1] Two of the three critical projects mentioned are AENC and ATNC, which together form the Norwich to Tilbury project.

- As a country, electricity demand is forecast to at least double by 2050, increasing the amount of energy that needs to be transported to homes and businesses
- Upgrading the existing network as it is today (such as through replacing cables to carry more power) will not be enough to meet the increasing need for electricity while operating to required standards.

3.1.7 The Project is just one of several electricity network reinforcements that are needed to ensure the electricity transmission network is fit for the future. Further detail of the need that the Project is addressing can be found in the Planning Statement's Need Case section (document reference 5.6).

3.1.8 The holder of a Transmission Licence, including National Grid, must be able to finance the activities which it is required to undertake. The Secretary of State and Ofgem, when carrying out their duties, are required to have regard to this.

3.2 National Grid's Business Model

3.2.1 National Grid operates as a regulated monopoly. Regulators safeguard consumers' interests by setting allowances for the delivery of transmission assets. National Grid is regulated by Ofgem.

Revenue

3.2.2 Most of National Grid's revenue is set in accordance with its regulatory agreements. This is referred to as its 'allowed revenue' and is calculated based on a number of factors. These include:

- Investment in network assets
- Performance against incentives
- Return on equity and cost of debt.

3.2.3 National Grid's allowed revenue gives it a level of certainty over future revenues if it continues to meet safety and reliability targets, as well as the efficiency and innovation targets included in the 'Revenue = Incentives + Innovation + Outputs' (RIIO) regulatory framework (as defined in Paragraphs 3.2.8 to 3.2.10 of this Statement).

Investment

3.2.4 National Grid invests efficiently in its networks to deliver strong, regulated asset growth over the long term. This allows it to continue generating revenue growth and growth in its regulated asset base. This in turn generates additional cash flows and allows National Grid to continue reinvesting in its networks and providing sustainable dividends to its ultimate shareholders.

3.2.5 This approach is critical to the sustainability of National Grid's business. By challenging its investment decisions, it continues to deliver reliable, cost-effective networks that benefit its customers. The way in which its investment is funded is also an important part of its business. The long-term, sustainable nature of its assets and its credit ratings help National Grid secure efficient funding from a variety of sources.

3.2.6 In May 2024, National Grid announced a new five-year financial framework to fund the group's £60bn investment plan out to March 2029. The investment programme is backed by a balanced, comprehensive financing plan, including a £7 billion fully underwritten Rights Issue, providing funding clarity out to March 2029.

Cash Flow

3.2.7 National Grid's ability to convert revenue to cash is an important factor in the ongoing reinvestment in its business. Securing low-cost funding, carefully managing its cash flows and efficient development of its networks are essential to maintaining strong sustainable returns. Cash generation is underpinned by agreeing appropriate regulatory arrangements. It is through this business model, with a mixture of revenue, investment, and cash flow, that it is able to fund major infrastructure projects, including the Project.

RIIO Mechanism

3.2.8 In 2013, Ofgem introduced a new regulatory framework called RIIO (Revenue = Incentives + Innovation + Outputs) that became effective on 1 April 2013. The first RIIO period (RIIO-T1) lasted eight years. This was then followed by a second RIIO period, RIIO-T2, which will last five years and began on 1 April 2021. It puts in place funding arrangements to allow National Grid to discharge its duties as transmission operator and owner.

3.2.9 The framework includes mechanisms to be reimbursed for the capital costs of constructing new transmission equipment, and for associated costs including compulsory acquisitions and foreseeable incidental costs.

3.2.10 The Project is made up of two regulated investments AENC and ATNC:

- AENC has confirmed Pre-Construction Funding allowances, and as part of the RIIO-T2 price control set by Ofgem, the Project was given an allowance of £54.4 million (2018/19 Price Base) in order to deliver pre-construction activities required to secure development consent.
- ATNC was part of a portfolio level allowance as part of the ASTI licence and had an initial project allowance totalling £25.52 million (2018/19 Price Base) however the ASTI licence allowed for reopeners to be triggered and for additional funding to be requested. National Grid has triggered that reopener with Ofgem in August 2025 and is awaiting confirmation from Ofgem on that application.

Accelerated Strategic Transmission Investment

3.2.11 The Accelerated Strategic Transmission Investment (ASTI) framework was implemented by Ofgem to facilitate the expedited delivery of projects (including the Project) which are required to meet the government's 2030 net zero ambitions.

3.2.12 The ASTI framework confirms National Grid as the delivery body for 17 ASTI projects and removes the option of competitive third-party delivery. The Project has been identified as needed by 2030 and is therefore an ASTI project. National Grid now has a Licence Obligation to deliver it.

3.2.13 The ASTI regulatory allowance arrangements require National Grid to submit a Project Assessment. Ofgem's decision on the Project Assessment sets the allowances that determine efficient spend to deliver the Project, which can be recovered over 45 years.

3.2.14 The Project Assessment for the Project is expected to be submitted to Ofgem in Q3 2026, with a decision expected to be received from Ofgem in Q1 2027 following confirmation of the development consent.

Cost of Delivering the Scheme

3.2.15 National Grid has already committed significant funds in relation to securing resources for the Project to date.

3.2.16 The estimated cost of implementing the Project is approximately £895 million (2020-2021 cost base)

3.2.17 All major investments carried out by companies within the National Grid Group require the approval of the board of National Grid Group or another designated committee or board with the appropriate level of delegated authority. National Grid is satisfied that the funding required to meet the estimated implementation costs (in accordance with the appropriate cost base at the time) will be made available for the Project within the relevant time period to meet National Grid's Licence Obligation. Release of this funding will be subject to the appropriate internal governance and sanction approval process.

4. Land Acquisition

4.1.1 National Grid is currently seeking to secure the necessary acquisitions and land rights through voluntary agreement but will utilise the powers of compulsory acquisition included in the draft DCO (document reference 3.1) if necessary. Negotiations with affected landowners will continue after the submission of the application for development consent.

4.1.2 National Grid has published guidance, titled Guidance on Land Rights for New Electricity Transmission Assets (National Grid, 2011), which sets out how it will seek to obtain, from the very outset of a project, by negotiation, permanent and temporary land rights for all new electricity transmission assets. National Grid seeks to reach early agreement with all landowners.

4.1.3 Statement of Reasons Appendix B: Schedule of Negotiations with Land Interests (document reference 4.1.2) is a summary of the status of all negotiations with landowners to secure voluntary agreement.

4.1.4 National Grid has taken expert advice on the likely costs of implementing the Project, including the cost of construction and the funding of the acquisition of the interests in land described in the Book of Reference (document reference 4.3).

4.1.5 The assessment of the required funding has taken into account the total cost of payments for acquiring both freehold land and rights over land. This total cost includes the estimated value of compensation payable in relation to disturbance, severance and injurious affection, third party professional fees, blight, and claims arising under both s10 of the Compulsory Purchase Act 1965 and Part 1 of the Land Compensation Act 1973. The cost of acquiring all the necessary land and rights is estimated to be £180.2 million (2024/2025 figures).

4.1.6 Specialist property consultants who use national, regional and local data are employed to compile the Property Cost Estimate. National Grid's in-house specialists cross-check the data given to an individual project against data supplied to recent and current projects to ensure greater overall accuracy.

4.1.7 It is possible that some local factors may emerge after the initial estimates have been prepared. Experience across National Grid projects indicates that a 10% contingency is sufficient to contain such costs. The figures quoted in this Statement contain such contingency.

4.1.8 The land acquisition costs, and potential compensation claims for blight will be fully met as and when they are required under the provisions of the DCO, and this would include any 'early payments' under the blight provisions of the Town and Country Planning Act 1990.

4.1.9 The overall costs of the Project include securing the necessary resources for land related activities in connection with the construction of the Project. These resources will be procured through a tender process that will commence in advance of a decision being made on the application for development consent by the Secretary of State.

5. Conclusions

5.1.1 The Project is required to fulfil National Grid's existing licence obligations, to deliver a safe, economical, efficient and reliable transmission network which supports the UK government's legally binding net zero commitments

5.1.2 For the reasons set out above, the Secretary of State can be satisfied that all aspects of the Project will be fully funded within the relevant time period and that there is no reason to believe that, should the DCO be made, the Project will not proceed due to an absence or shortfall in available funding.

5.1.3 The Secretary of State can be satisfied that funding will be available for the acquisition of any land and other interests required for the Project, for any compensation or blight claims brought by those interested in the land affected by the DCO, and for the costs of implementing the Project.

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