Electricity Act 1989

Inquiry into:

THE NATIONAL GRID ELECTRICITY TRANSMISSION PLC (GRAIN TO TILBURY) COMPULSORY PURCHASE ORDER 2024

Statement of Evidence of
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National Grid

Specialist Field: Projects

On behalf of: National Grid Electricity Transmission Plc

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1. QUALIFICATIONS AND EXPERIENCE

1.1 My name is Lee Driscoll.

1.2 I am a Senior Project Manager on the National Grid . In this role, I am responsible for driving innovation; supporting the investment case and delivery strategy; and managing the delivery of high value, complex construction contracts, integrating across multiple packages to deliver safely, on time and to budget.

1.3 I have extensive experience in project management, primarily within the utility and infrastructure sectors, with a focus on delivering complex, high-value projects on time and within budget. I am currently serving as a Senior Project Manager at National Grid and have held this position since October 2024.

1.4 Previously, I held roles as Lead Engineering, Procurement and Construction ("**EPC**") Project Manager and EPC Project Manager at National Grid, where I was responsible for overseeing project development, mentoring teams, and ensuring compliance with safety and regulatory standards. My experience also includes a position as Project Engineer, managing refurbishment schemes in high-voltage environments.

1.5 Before joining National Grid, I worked at Network Rail in various project management roles, where I successfully delivered significant infrastructure projects, managed budgets, and ensured adherence to safety regulations.

2. INTRODUCTION AND SCOPE OF EVIDENCE

2.1 This statement has been prepared in support of the Grain to Tilbury project ("**the Project**") and the National Grid Electricity Transmission (Grain to Tilbury) Compulsory Purchase Order 2024 ("**the Order**") (**CD C1**) that has been made by National Grid

Electricity Transmission ("**NGET**") to enable the construction of a replacement tunnel under the River Thames to accommodate the Tilbury to Grain and Tilbury to Kingsnorth 400kv circuits. In addition, associated new infrastructure is proposed either side of the River Thames at Tilbury and Gravesend comprising two Sealing End Compounds ("**SECs**") which would contain two new tunnel headhouse buildings and two new gantries together with new and diverted overhead lines to connect to each of the new SECs, for which NGET has an Electricity Transmission Licence. The Order will also facilitate the decommissioning of existing overhead lines and towers. The tunnel and associated new infrastructure and works are described in more detail in section 3 below.

2.2 The overriding test with which the Secretary of State must be satisfied in order to confirm the Order is whether there is a compelling case in the public interest to justify the proposed interference with the private rights of those who have interests in the land affected ("**the Order Land**") (paragraph 12.3 of the Ministry of Housing, Communities and Local Government's Guidance on Compulsory purchase process (January 2025) ("**the CPO Guidance**") (**CD A1**). Other considerations that need to be demonstrated to the satisfaction of the Secretary of State are set out in the CPO Guidance and considered further in my evidence, below.

2.3 The remaining part of my statement of evidence is structured as follows: -

Section 3 – Provides an overview of National Grid Electricity Transmission

Section 4 – Provides a description of the Project

Section 5 – Describes the need for and benefits of the Project

Section 6 – Discusses the alternatives that were considered

Section 7 – Outlines the land and rights required for the Project

Section 8 – Explains how the Project will be delivered and funded

Section 9 – Sets out the powers under which the Order is made

Section 10 – Provides a response to the objections that have been received, insofar as they relate to my evidence

Section 11 – Describes the consideration given by NGET to human rights and equalities matters

Section 12 – Sets out my summary and conclusion

Section 13 – Provides my declaration

2.4 References in my evidence to the core documents are made by the abbreviation, for example, "(**CD XX**)"**.** The evidence of other witnesses is referred to by the name of the author. There is a glossary of key terms used by all the NGET witnesses at (**CD F7**) ("**the Glossary**") and my evidence adopts the terms defined in the glossary.

3. OVERVIEW OF NATIONAL GRID ELECTRICITY TRANSMISSION ("NGET")

3.1 NGET is a key division of National Grid plc and is responsible for the high voltage electricity transmission network in England and Wales.

3.2 NGET owns and maintains approximately 4,500 miles of overhead lines, 900 miles of underground cables, and over 300 substations. Its primary function is to transport electricity from generation sources to distribution networks, ensuring a reliable supply to homes and businesses.

3.3 NGET is currently leading The Great Grid Upgrade, a significant initiative aimed at modernizing the electricity transmission infrastructure to accommodate the increasing demand for clean, low-carbon energy. This upgrade includes 17 major projects designed to enhance the capacity and resilience of the electricity network.

3.4 NGET plays a crucial role in supporting the UK government's climate goals, including achieving 50GW of renewable energy by 2030 and transitioning to a net-zero energy system by 2050. The organization is focused on integrating renewable energy sources, such as offshore wind, into the grid.

3.5 NGET projects are expected to create thousands of jobs and contribute significantly to the UK economy. For instance, investments in infrastructure are projected to boost the economy by approximately £4 billion+ by 2050.

3.6 NGET works closely with various stakeholders, including government bodies, local communities, and supply chain partners, to ensure that projects are delivered efficiently and meet regulatory requirements. This includes managing relationships to secure necessary permissions and community support for infrastructure projects.

3.7 NGET is committed to leveraging new technologies and innovative approaches to enhance the efficiency and effectiveness of the electricity transmission network. This includes the development of intelligent substations and advanced monitoring systems to improve operational performance.

3.8 NGET operates under a regulatory framework established by Ofgem, which oversees the electricity market in the UK. This includes compliance with various license obligations and ensuring that investments are aligned with national energy policies.

3.9 In summary, NGET is integral to the UK's energy infrastructure, focusing on modernizing the electricity transmission network, supporting decarbonization efforts, and ensuring reliable energy delivery to meet future demands.

3.10 Strategic Infrastructure ("**SI**") is a business unit within NGET focused on delivering major projects that enhance the electricity transmission network in the UK.

3.11 SI is primarily responsible for delivering The Great Grid Upgrade. SI oversees the planning, development, and execution of significant infrastructure projects, ensuring they are completed efficiently and effectively. This includes managing relationships with stakeholders, regulatory bodies, and supply chain partners to align incentives and facilitate project delivery.

3.12 SI is responsible for driving innovation in the delivery of electricity infrastructure, particularly in adapting to the challenges posed by climate change and the need for a more resilient energy system.

3.13 In summary, SI plays a crucial role in modernising the UK's electricity transmission network, facilitating the transition to renewable energy, and ensuring that the infrastructure is resilient and capable of meeting future energy demands.

4. DESCRIPTION OF THE PROJECT

4.1 The Project comprises the boring of a new tunnel under the River Thames approximately 2.2km long to house and carry 12 new cross-linked polyethylene ("**XLPE**") cables.

4.2 It comprises the following above ground infrastructure at both ends of the tunnel, in Tilbury and Gravesend:

4.2.1 a new SEC;

4.2.2 new tunnel head house (covering the shaft into the tunnel);

4.2.3 new overhead line gantry structure which will connect the overhead line ("**OHL**") downlead conductors and transfer them to six sealing end structures at both ends of the tunnel; and

4.2.4 modifications to the existing OHL to enable the new OHL conductors which will be connected to the existing 400 kilovolt ("**KV**") OHL conductors via new terminal pylons. The old OHL conductors and existing pylons will be either replaced, refurbished or removed.

4.3 The Project will connect into two existing 400KV overhead lines known as 4VG Kingsnorth to Tilbury (A785) and 4TK Grain to Tilbury (A784) which are proposed to be refurbished as part of a separate package of works once the Project has completed.

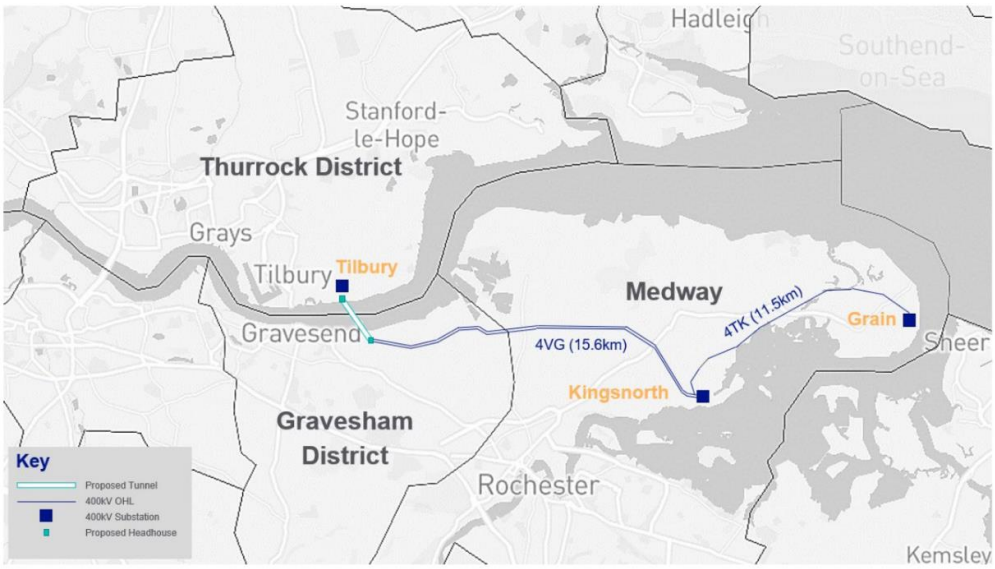

Figure 1- Location plan for the Project

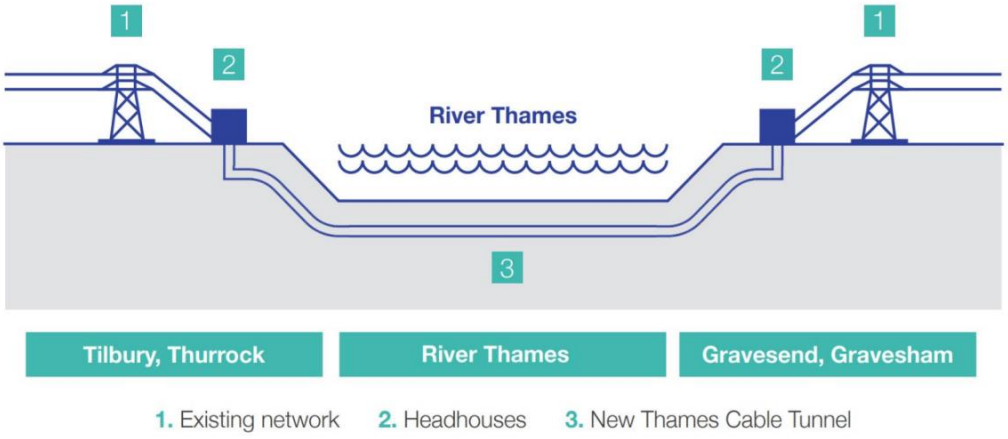

Figure 2 - Cross-Section of the Project tunnelling works

4.4 NGET has had regard to the Construction (Design and Management) Regulations 2015 (**"CDM"**) in its design of the Project. CDM ensures health and safety is coordinated and managed throughout all stages of a construction project (including during the development, design, construction and procurement stages) to reduce the risk of harm to those who will build, use and maintain structures. These requirements have influenced the design and the areas required for construction, including but not limited to, compounds and access roads.

4.5 The component parts of the Project are described in more detail between paragraphs 4.6 and 4.16 below.

4.6 The Tilbury SEC will contain the equipment required to transition the cables out of the tunnel and up onto the overhead lines supported by pylons. The Tilbury SEC will contain:

4.6.1 12 new XLPE cables.

4.6.2 12 new cable terminations (polymeric).

4.6.3 12 new cable support steel structures with buried concrete foundations.

4.6.4 Concrete surface troughs for new cables.

4.6.5 1 water tank for firefighting purposes

4.6.6 6 Surge Arresters for protection of underground cables.

4.6.7 6 earth switches.

4.6.8 1 OLH gantry for the connection on OHL and cable sealing ends.

4.6.9 Tilbury headhouse.

4.7 The Tilbury headhouse will be situated within the Tilbury SEC. The purpose of the headhouse is to allow controlled safe and secure access into the tunnel shafts; provide enclosure for ventilation fans and equipment to regulate the temperature in the tunnel; contain mechanical and electrical equipment and to house control equipment for the cable circuits.

4.8 The headhouse will accommodate:

4.8.1 Office space for maintenance engineers, welfare facilities, parking and electric charging points for vehicles.

4.8.2 Low voltage equipment to manage the building and tunnel systems and ventilation systems for the tunnel.

4.8.3 Communication systems between headhouses.

4.8.4 Tunnel shaft access via a staircase, with space for a lift.

4.8.5 Storage for spares and fibre optics communication cables.

4.9 The Gravesend SEC will contain the equipment required to transition the cables out of the tunnel and up onto to the overhead lines supported by pylons. The Gravesend SEC will contain:

4.9.1 12 new XLPE cables.

4.9.2 12 new cable terminations (polymeric).

4.9.3 12 new cable support steel structures with buried concrete foundations.

4.9.4 Concrete surface troughs for new cables.

4.9.5 1 water tank for firefighting purposes.

4.9.6 6 Surge Arresters for protection of underground cables.

4.9.7 6 earth switches.

4.9.8 1 OLH gantry for the connection on OHL and cable sealing ends.

4.9.9 Gravesend headhouse.

4.10 The Gravesend headhouse will be situated within the Gravesend SEC. The purpose of the headhouse is to allow controlled safe and secure access into the tunnel shafts, to locate mechanical and electrical equipment and to house control equipment for the cable circuits. It will accommodate:

4.10.1 Office space for maintenance engineers and welfare facilities and access to shaft via a staircase.

4.10.2 Low voltage equipment to manage the building and tunnel systems.

4.10.3 Communication systems between headhouses and ventilation systems for the tunnel.

4.10.4 Parking and electric charging points for company vehicles.

4.10.5 Storage for spares and fibre optics communication cables for NGET purposes only.

4.11 The decommissioning of existing overhead lines involves:

4.11.1 Removal of nominated OHL towers;

4.11.2 The construction of temporary road and crane pad to facilitate the removal by crane; and

4.11.3 The felling and removal of de-commissioned OHL cables.

4.12 The new overhead line comprises:

4.12.1 Installation of new OHL tower aligned with the new Tilbury SEC;

4.12.2 Installation of new OHL tower aligned with the new Gravesend SEC;

4.12.3 Temporary works to enable construction, operation and movement of cranes; and

4.12.4 Construction of new OHL cables from the new tower to the existing tower within Tilbury substation.

4.13 The distance in metres to be kept from the foundation of the towers when undertaking any works or placing equipment, as well as the clearance from the conductors of overhead lines and the ground or any structure on the ground will be determined by NGET's "*Third-party guidance for working near National Grid Electricity Transmission equipment*" technical guidance note 287 (**CD F3**)

4.14 During construction and operation of the Project, the area-coloured yellow on the Plan at **Appendix 1** will be used for:

4.14.1 a new cable tunnel (to be constructed between the two shafts and using a tunnel boring machine) which will be approximately 2.2 km in length from headhouse to headhouse, 4m in internal diameter (4.5m external diameter), with six cables per circuit at a depth of not less than 20 metres (measured from ordnance datum).

4.14.2 12 XPLE 400 KV Cables (6 each circuit).

4.15 The tunnel protection zone of influence will be a zone surrounding the new cable tunnel for the purposes of safeguarding that area from third party interference to protect the structural integrity of the cable tunnel. It is shown shaded green and referred to as the Tunnel Development Exclusion Zone in the inset box on the Plan at **Appendix 1.**

4.15.1 The upper limit of the zone will be not greater than 6 metres from the top of the cable tunnel;

4.15.2 The lower limit of the zone will be not greater than 6 metres below the bottom of the cable tunnel; and

4.15.3 The lateral limits of the zone will be not greater than 3 metres on each side of the external diameter of the cable tunnel.

4.16 Compounds at both Tilbury and Gravesend will need to be established during construction of the Project, for works and usage such as temporary access roads; temporary storage areas; temporary generators; offices, welfare facilities, security huts, canteens, parking facilities; topsoil / subsoil storage bunds; security huts; wheel washes; grout mixing plant; slurry treatment plant area; muck handling; tunnel segment storage area; crane temporary storage area; and access route from existing private road. Plans of

the compound areas, and showing indicative pictures of the Headhouses are at **CD F3** and **CD F10**

5. THE NEED FOR AND BENEFITS OF THE PROJECT

The need for the Project

5.1 As part of its commitment to tackling climate change pursuant to the Paris Agreement 2015, the UK Government has set legally binding targets to become net-zero in all greenhouse gases by 2050 for England and Wales. As part of the United Kingdom of Great Britain and Northern Ireland's 2035 Nationally Determined Contribution[1] the UK is aiming to reduce emissions by 68% by 2030 **(Appendix 2)** and 81% by 2035 **(Appendix 3)** compared with 1990 levels.

5.2 To meet these targets, the UK will need to continue to move away from traditional forms of energy generation to heat homes, charge vehicles and power businesses, and there will be a greater need for cleaner, greener energy.

5.3 NGET owns and operates the national high-voltage electricity transmission system throughout England and Wales. The key role of the transmission system is to connect the electricity generators' power stations with the local distribution networks of the regional electricity companies. NGET holds the Transmission Licence for England and Wales and is thus obligated to develop and maintain an efficient, co-ordinated and economical system of electricity transmission and to facilitate competition in the generation and supply of electricity, as set out in the 1989 Act.

5.4 A large amount of renewable and low carbon energy generation has been forecast to require connection into the electricity transmission network in the east coast of England, together with three

[1] The UK's NDC outlines its commitments under the Paris Agreement to reduce greenhouse gas emissions and combat climate change.

interconnectors from the continent. Through these forecasts, it has been identified that the Tilbury to Grain and Tilbury to Kingsnorth 400 kV circuits will become significantly overloaded in their current capacity and require uprating. The Project is therefore needed to replace existing outdated infrastructure with modern infrastructure that will increase capacity and ensure that the network is prepared for future demand.

5.5 NGET is responsible for delivering the extensive onshore transmission system enhancements that are required to achieve the government's 2030 power section decarbonisation target.

5.6 In December 2022,[2] OFGEM decided to introduce a new regulatory approval and funding framework for onshore transmission projects required to deliver the Government's 2030 Net Zero ambitions which are known as Accelerated Strategic Transmission Investment ("**ASTI**") projects and will apply to an initial 26 projects. The Project is one of those identified ASTI projects. The ASTI framework streamlines the existing large onshore transmission funding submission process by removing the initial needs case and final needs case assessment stages to accelerate project delivery.

5.7 As part of this, OFGEM also decided to:

5.7.1 introduce a new output delivery incentive that rewards/penalises the relevant transmission owner for delivery against target delivery dates; and

5.7.2 provide pre-construction and early-construction funding ahead of planning application submission.

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[2] https://www.ofgem.gov.uk/sites/default/files/2022-12/ASTI%20decision%20doc%20-%20Final_Published.pdf Ofgem - Decision on accelerating onshore electricity transmission investment (15 December 2022) (**CDXXX**)

5.8 OFGEM's updated costs benefit analysis suggests that, if all ASTI projects are delivered by their optimal delivery dates, there will be a net consumer benefit of up to £2.1bn (this was considered a conservative estimate of the benefits given the wider strategic benefits that accelerated decarbonisation unlocks).

5.9 As set out in the ASTI decision document[3], OFGEM accept the need for the 26 ASTI projects as they meet the "ASTI criteria". ASTI criteria are met if a project is expected to cost £100m or more of capital expenditure and needs to be operational by 2030 to meet the Government's ambition to connect 50GW offshore wind generation and there is clear evidence that the expected consumer benefits of applying the accelerated delivery framework to the project exceed any expected consumer detriment.

5.10 The estimated costs of the Project in 2018/19 prices are explained in section 8 below. These costs are significantly exceeded by the savings that the Project will deliver to NGET customers because of the 40-year asset life of the works, compared to the "do nothing" option. Further details on the alternative options considered by NGET when developing the Project can be found in section 6 below.

National Policy Statements

5.11 The UK Government recognises the importance and urgency of new energy developments and has published a series of National Policy Statements (**"NPS"**) which set out national policy for nationally significant energy infrastructure recognising that providing affordable, reliable and sustainable energy is a key issue in UK Government policy. Although applying strictly to those projects falling within the definition of Nationally Significant Infrastructure

[3] https://www.ofgem.gov.uk/sites/default/files/2022-12/ASTI%20decision%20doc%20-%20Final_Published.pdf
Ofgem - Decision on accelerating onshore electricity transmission investment (15 December 2022) (**CDXXX**)

Projects (**"NSIPs"**), the NPSs may also be a material consideration for projects progressed under the Town and Country Planning Act 1990 (as amended).

5.12 For the Project, the NPS for Energy (NPS EN-1) (**CD A8**), and the NPS for Electricity Networks Infrastructure (NPS EN-5) (**CD A9**), which were updated and published in November 2023, and designated by Parliament in January 2024, are considered to be material considerations.

NPS for Energy (EN-1)

5.13 The overarching NPS for Energy (NPS EN-1) sets out the Government's policy for delivery of major energy infrastructure.

5.14 Paragraph 2.1.3 acknowledges that in order to produce the energy required for the UK and ensure it can be transported to where it is needed, a significant amount of infrastructure is needed at both local and national scale, and that high quality infrastructure is crucial for economic growth, boosting productivity and competitiveness.

5.15 Paragraph 2.5.1 explains that given the vital role of energy to economic prosperity and social well-being, it is important that our supply of energy remains secure, reliable, and affordable.

5.16 Paragraph 3.3.1 notes that electricity meets a significant proportion of our overall energy needs and our reliance on it will increase as we transition our energy system to deliver our net zero target. We need to ensure that there is sufficient electricity to always meet demand; with a margin to accommodate unexpectedly high demand and to mitigate risks such as unexpected plant closures and extreme weather events.

5.17 Paragraph 3.3.2 notes that the larger the margin, the more resilient the system will be in dealing with unexpected events, and

consequently the lower the risk of a supply interruption. This includes, but is not limited to, novel technologies or processes may emerge during the life of this NPS, Overarching National Policy Statement for Energy (EN-1) 25 This helps to protect businesses and consumers, including vulnerable households, from volatile prices and, eventually, from physical interruptions to supply that might impact on essential services. But a balance must be struck between a margin which ensures a reliable supply of electricity and building unnecessary additional capacity which increases the overall costs of the system.

5.18 paragraph 3.3.3 notes that to ensure that there is sufficient electricity to meet demand, new electricity infrastructure will have to be built to replace output from retiring plants and to ensure we can meet increased demand. The Government's analysis suggests that even with major improvements in overall energy efficiency, and increased flexibility in the energy system, demand for electricity is likely to increase significantly over the coming years and could more than double by 2050 as large parts of transport, heating and industry decarbonise by switching from fossil fuels to low carbon electricity.

5.19 Paragraph 3.3.4 notes that there are several different types of electricity infrastructure that are needed to deliver our energy objectives. Additional generating plants, electricity storage, interconnectors and electricity networks all have a role, but none of them will enable us to meet these objectives in isolation.

5.20 Paragraph 3.3.65 notes that there is an urgent need for new electricity network infrastructure to be brought forward at pace to meet our energy objectives.

5.21 Paragraph 3.3.66 notes that the security and reliability of the UK's current and future energy supply is highly dependent on having an electricity network which will enable new renewable electricity

generation, storage, and interconnection infrastructure that our country needs to meet the rapid increase in electricity demand required to transition to net zero while maintaining energy security. The delivery of this important infrastructure also needs to balance cost to consumers, accelerated timelines for delivery and the minimisation of community and environmental impacts.

5.22 Paragraph 3.3.67 notes that the need to connect to new sources of electricity generation and new sources of demand is not the only driver for new electricity network infrastructure. As the electricity system grows in scale, dispersion, variety, and complexity, work will be needed to protect against the risk of large-scale supply interruptions in the absence of sufficiently robust electricity networks. While existing transmission and distribution networks must adapt and evolve to cope with this reality, development of new lines of 132kV (and over 2km) and above will also be necessary to preserve and guarantee the robust and reliable operation of the whole electricity system.

NPS for Electricity Networks Infrastructure (EN-5)

5.23 Paragraph 1.1.1 of NPS EN-5 acknowledges that "*the security and reliability of the UK's current and future energy supply is highly dependent on having an electricity network which will enable the new electricity generation, storage, and interconnection infrastructure that our country needs to meet the rapid increase in electricity demand required to transition to net zero*…".

5.24 Paragraph 1.1.2 notes that a significant amount of new network infrastructure is required in the near term to directly support the government's ambition to deploy up to 50GW of offshore wind capacity (including up to 5GW floating wind) by 2030. There is an expectation that there will be a need for substantially more installed offshore capacity beyond this to achieve net-zero by 2050.

5.25 Paragraph 1.1.3 notes that the electricity network infrastructure to support the government's offshore wind ambition is as important as the offshore wind generation infrastructure. Without the development of the necessary networks to carry offshore wind power to where it is needed in the UK, the offshore wind ambition cannot be achieved.

5.26 Paragraph 1.1.4 notes that in addition to offshore wind, new networks infrastructure is needed in support of the development of generation by other technologies.

5.27 Paragraph 1.1.5 notes that, as identified in EN-1, government has concluded that there is a critical national priority for the provision of nationally significant low carbon infrastructure. This includes: for electricity grid infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such as substations. This is not limited to those associated specifically with a particular generation technology, as all new grid projects will contribute towards greater efficiency in constructing, operating and connecting low carbon infrastructure to the National Electricity Transmission System. These are viewed by the government as being critical national priority infrastructure and should be progressed as quickly as possible.

5.28 To support the above, the network must be effectively planned to ensure that the appropriate investment and right kind of technology is brought online at the right time, in the right places.

Consultation Planning for New Energy Infrastructure – revised draft National Policy Statements for Energy Infrastructure

5.29 In July 2024 the Government launched a review of the energy NPSs to ensure they reflected government's energy priorities as set out in the Clean Power 2030 Action Plan (**CD A3**).

5.30 The government's Clean Power 2030 Action Plan sets out the pathway to a clean power system by 2030 and was published in December 2024, as was its response to a consultation on proposed reforms to the National Planning Policy Framework and other changes to the planning system. These documents establish pathways to ensuring by 2030 clean sources produce at least 95% of Great Britain's energy generation, including through the re-introduction of onshore wind into the Nationally Significant Infrastructure Projects (NSIP) regime.

5.31 Following review of energy NPSs EN-1 to EN-5, government has drafted updates to EN-1 (overarching energy NPS) and EN-5 (electricity networks). Some minor and material updates have been made to these draft energy NPSs which require consultation. This consultation is targeted to those material changes in policy. But the changes do not materially affect the sections from EN1 and EN-5 cited above, in support of the Project.

Other Government Policy

5.32 The Energy White Paper – Powering our Net Zero Future ("**EWP**") (**CD A15**) was presented to Parliament in December 2020. At the core of the EWP is the commitment to achieve net zero greenhouse gas emissions by 2050 and tackle climate change. The EWP seeks to put in place a strategy for the wider energy system that transforms energy, supports a green recovery, and creates a fair deal for consumers (page 4).

5.33 Chapter 2 of the EWP deals with 'Power' with the stated goal being to use electricity to enable the transition away from fossil fuels and

decarbonise the economy cost-effectively by 2050. Figure 3.2 of the plan, 'Electricity demand, Net Zero scenarios' (page 42) highlights how electricity demand could double by 2050 as electricity replaces the use of petrol and diesel in transport and to some extent, gas for heating. This would require a four-fold increase in clean electricity generation with the decarbonisation of electricity being required to underpin the delivery of the net zero target.

5.34 On page 76 of the EWP, it is recognised that to maintain a resilient and reliable electricity network that can accommodate this increase in generation, further investment is needed in physical infrastructure, and that this investment is supported by the government.

5.35 The Net Zero Strategy: Build Back Greener, 2021 ("**the Net Zero Strategy**") (**CD A14**) sets out the Government's vision for tackling climate change as an economic opportunity to create prosperity. Part 3i (Power) sets out key commitments to deliver a decarbonised power system by 2035. These include:

5.35.1 Subject to supply, all electricity will come from low carbon sources by 2035;

5.35.2 Delivery of 40GW of offshore wind by 2030;

5.35.3 Investing in supply chains, infrastructure and early-coordination of offshore transmission networks for the offshore wind sector; and

5.35.4 Ensuring the planning system can support the deployment of low carbon energy infrastructure.

5.36 Chapter 2 – the Journey to Net Zero of the NZS explains that low carbon solutions rely on transforming the infrastructure needed to deliver them. Increasing electricity generation needs to be accompanied by building out a flexible grid. Page 88 of Chapter 2

shows a high level summary depicting the building out of energy infrastructure as essential activity across sectors until 2035, particularly during the 2020s. The transition to EVs is central to decarbonising road transport. Higher sales of EVs means overall electricity demand will increase, requiring greater electricity generation and grid capacity

5.37 Paragraph 21 of Chapter 2 notes that by 2035, all our electricity will need to come from low carbon sources, subject to security of supply, moving to a fully decarbonised power system whilst meeting a 40-60% increase in demand. Expected residual emissions will be limited to CCUS plants, unabated gas, and energy from waste. This means increased investment in the grid network, electricity storage solutions and flexible grid management, to ensure decarbonisation without risking security of supply.

5.38 Chapter 3 – Reducing Emissions across the Economy, of the NZS paragraph 5 notes that the next 30 years will see a decisive and permanent shift away from the use of unabated oil and gas as the engine of our economy.

5.39 Paragraph 8 notes that even with major improvements in overall energy efficiency and increased flexibility in the energy system, this could represent a potential doubling of demand. This would require a four-fold increase in low carbon electricity generation and significant expansion of the networks that transport it to where it is needed.

5.40 Paragraph 15 notes that a reliable power system is not only about having a balanced mix of generation technologies. We also need to ensure that the networks can transport electricity to where it is required in a cost-effective manner, and to enable crucial system services such as frequency response.

5.41 Paragraph 18 states that to fully decarbonise the power sector at the pace we have set out whilst meeting increasing demand, total public and private investment of £280-400 billion is needed in generation capacity and flexible assets – around £150-270 billion of this reflects increased ambition from Carbon Budget 6. The electricity transmission and distribution networks will also both require significant expenditures with an additional £20-30 billion required by 2037 to maintain and reinforce Great Britain's electricity network.

5.42 The UK Government's British Energy Security Strategy (April 2022) ("**the BESS**") (**CD A13**) identifies a target of delivering 50 GW of renewable wind energy by 2030. The BESS sets out the Government's aims to reduce reliance on coal and gas and to generate and store more renewable and nuclear energy in the UK and recognises the importance of the transmission network within this strategy, noting that accelerating our domestic supply of clean and affordable electricity also requires the expansion and growth of that transmission network to connect new green energy generation, and to transfer the power to where it is needed most.

5.43 Building on the BESS and the Net Zero Strategy, the Government has also published the following plans:

5.43.1 **'**Powering Up Britain' Energy Security Plan (March 2023) ("**the Energy Security Plan**") (**CD A10**); and

5.43.2 'Powering Up Britain' The Net Zero Growth Plan (March 2023) ("**the Net Zero Growth Plan**") (**CD A11**).

5.44 The Energy Security Plan sets out the steps that the Government is taking to ensure that the UK is "*more energy independent, secure and resilient*". It builds on the Government's ambitions set out in the BESS and the Net Zero Strategy, setting out an aim to double Britain's electricity generation capacity by the late 2030s to move towards energy independence, whilst acknowledging that demand

for electricity could itself double by 2050. In this regard, the Energy Security Plan notes that the "*right*" electricity network infrastructure and network connection is critical for building new energy infrastructure, with "*over 250 gigawatts of generation in the transmission connection queue (compared to circa 80 gigawatts that is currently connected)*". The following priorities are identified to speed up the delivery of such infrastructure:

5.44.1 Halving development time for transmission network projects;

5.44.2 Taking a whole system approach to network planning;

5.44.3 Enabling an effective legislative and regulatory framework;

5.44.4 Accelerating electricity network connections; and

5.44.5 Expanding and optimising electricity interconnection with neighbours.

5.45 The Energy Security Plan is complemented by the Net Zero Growth Plan, which notes that energy security and net zero are *"two sides of the same coin*".

5.46 The Net Zero Growth Plan is part of the Government's response to the recommendations of 'Mission Zero', the report of the Independent Review of Net Zero published in January 2023 (**CD A12**). This report identifies infrastructure's key role in the delivery of net zero, noting that scale and speed are required, and recognising the need for the electricity network to keep pace with the Government's renewable energy ambition. The Net Zero Growth Plan confirms that the Government is "*partly or fully acting upon 23 recommendations from the Independent Review of Net Zero report's 25 recommendations for 2025*". It also sets out progress on delivery in various areas, including the Government's ambition

to halve the time it takes to build new transmission network infrastructure.

5.47 The Clean Power 2030 Action Plan ("**The Action Plan**") (**CD A3**) was published by DESNZ on 13th December 2024. The Action Plan sets out a pathway to a clean power system by 2030; what government will do to support and accelerate delivery of the new infrastructure; and how the government will work with relevant stakeholders to get there.

5.48 The Action Plan notes that three transmission operators are responsible for owning and maintaining the high voltage electricity network, ensuring high voltage electricity can reach one of the fourteen Distribution Networks Operators across Great Britain. They are described as key players in ensuring the energy system is suitably maintained and equipped to transport renewable energy across the country.

5.49 The Action Plan notes that urgent action is required to ensure that the necessary grid infrastructure is in place for the connection of low-carbon generation and electrification of sectors such as transport, heating, and industry. Network build must be accelerated to address annual constraint costs, which are projected to increase without action from the already high level of around £2 billion per year in 2022 to around £8 billion per year in the late 2020s in a scenario where delays to network build persist and that it is considered that this cannot be allowed to happen.

5.50 Work is required to significantly reduce the end-to-end delivery time for new transmission infrastructure. The Accelerating electricity transmission network deployment: Electricity Networks Commissioner's recommendations DESNZ 2023[4] (**CD A6)** sets out

[4] Independent Report by Nick Winser (Advisory Commissioner to the Clean Power 2030 Mission)

recommendations to halve timelines for the delivery of transmission infrastructure from 14 to 7 years, starting with strategic spatial planning of energy projects which would allow the network to be planned holistically ahead of need. The independent report sets out that ambitious interventions are needed across every stage of the and government is working with delivery partners to drive the necessary change, including Ofgem, NESO and the network companies.

5.51 The Action Plan notes that:-

"To deliver a decarbonised power system by 2030, we will need to build on Winser's recommendations, going further and faster where necessary, to ensure the network we need is in place in time." (page 63 of the Clean Power 2030 Action Plan).

5.52 The Action Plan notes that electrification and other needs for clean power as part of net zero are likely to result in at least a doubling of electricity consumption compared to today. In respect of networks and transmissions, the Action Plan notes that we need to reform the grid connections process and reduce the queue to connect, working with the National Energy System Operator ("NESO") and Ofgem to provide a framework through which NESO can work with transmission owners and distribution network operators to prioritise projects needed for 2030. Around twice as much new transmission network infrastructure will be needed in the nation's grid by 2030 as has been built in the past decade.

5.53 The Action Plan explains that delivering clean energy by 2030 will include further need to strengthen networks. Higher, and spikier demand for electricity due to electrification will inevitably require strengthening of electricity networks, particularly at the distribution level. The timing and extent of this will, to some extent, depend on the precise mix of heat decarbonisation solutions deployed.

Benefits of the Project

5.54 Delivery of the Project will materially contribute towards achieving the Government objectives discussed above.

5.55 The key benefits that will arise from the Project, which are in-line with NPS EN-1 and EN-5 and other Government publications and policy are:

5.55.1 **Meeting Energy Demand**: the Project will directly address the specific need to uprate the 400 KV circuits in the existing tunnel under the River Thames, which will be significantly overloaded in their current capacity as a result of the large amount of renewable and low carbon energy generation connecting in to the transmission network in the east coast of England. This requires the distribution network to be reinforced and therefore the transmission network also needs to be reinforced to meet this increasing power demand.

5.55.2 **Energy security/reliability of supply**: improving the resilience of the distribution system reduces the risk to consumer supplies under normal and abnormal operating conditions. In addition to ensuring security of supply in Tilbury area, the Project will form an integral part of the UK's wider electricity network and provide energy reliably whilst ensuring security of supply, because constructing additional infrastructure increases the resilience of the network by enabling the power to flow where it is needed and by increasing the security of the system, ensuring a robust network.

5.56 The Project will:

5.56.1 Replace and modernise existing outdated infrastructure;

5.56.2 Deliver increased capacity to meet energy demand and customer connection requirements;

5.56.3 Assist in the transition to net zero/low carbon economy; and

5.56.4 Contribute to energy security/reliability of supply.

5.57 These benefits will not be delivered if NGET is unable to secure the necessary land and new rights to enable the construction and operation of the Project.

6. ALTERNATIVES

6.1 ES Volume II, Chapter 2: Alternatives (**CD B7** and **CD B8**) sets out the detail of the site selection and the alternatives considered at each of the design stages of the Project. This process has been informed by engagement and consultation with stakeholders, as explained in ES Volume II Chapter 5: Consultation (**CD B9** and **CD B10**).

6.2 Three potential options were considered:

Option 1 – Installation of new cables within existing tunnel

6.3 This option comprised the removal of the existing oil-filled cables within the existing tunnel and the retrofitting of XLPE cables. The existing tunnel would require civil repair work and replacement of the existing mechanical ventilation system as it is not compliant with current NGET standards. A new mechanical ventilation system would be required in a building of approximately 20m x 10m. Further mechanical and electrical services at Tilbury would also be required.

6.4 The risks associated with Option 1 meant it did not meet with health and safety regulations or NGET's technical requirements. The works take place within a confined space where the working area would be extremely limited. This would result in the manual handling of heavy plant as there would be no room for lifting equipment. Additionally,

the work would need to be undertaken adjacent to live equipment, as at least one 400kV circuit would need to remain live to maintain supply.

6.5 During cable replacement, each circuit would need to be switched out for a full outage season with an Emergency Return to Service on commissioning. The maximum outage duration that could be facilitated for the refurbishment of the tunnel and shafts would be two six-month outages, in 2026 and 2028 (noting system access would not be available in 2027). An uninterrupted 18-month outage per circuit would not be possible for the Kingsnorth-Tilbury and Grain-Tilbury circuits with consecutive outages required per year between 2029 and 2033 for the cable replacement. Given the minimum construction programme to replace a single circuit is 13 months, it is not considered feasible to remove each existing circuit, supporting concrete and install new cables within the outages provided.

Option 2 – Installation within new tunnel

6.6 This option comprised the boring of a new tunnel approximately 2.2km long[5] (from shoreline to shoreline), 4m in diameter underneath the River Thames, parallel to the existing tunnel, and installations of new XLPE cables. Two cables per phase would be required. This option also includes associated infrastructure including new shaft headhouses, cable sealing end compounds and modifications to the existing overhead lines.

Option 3 – Overhead Line River Thames crossing

6.7 This option comprised the construction of an approximately 2 km span length overhead line across the River Thames, to replace the cables within the existing tunnel. There is limited space for the

[5] Please note reference to 1.4km at paragraph 6.7 of the Statement of Case is incorrect and was included in error.

anchor towers and diversions to be able to achieve a straight line for tension / loading. The siting of the towers is also constrained on the south bank of the river due to a railway running parallel and sensitive wildlife habitat. The towers, their foundations and the conductor system would require a bespoke design as well as a complex and extended construction period.

6.8 This option would require larger land take to accommodate the anchor towers in line with crossing towers and the space required to construct them.

6.9 Twin conductor bundle would be required including a crossing and tension tower either side of the River Thames. Tension (or angle) towers would be required to connect the new overhead line into the existing network where the angle of deviation is greater than degree of five.

6.10 The overhead line crossing towers would be approximately 245 m in height due to the approximately 130m sag at maximum operating temperature which needed to allow clearance of the frequent numbers of large shipping vessels which use this section of the River Thames. Further design engineering work would be required to confirm whether two tension/anchor towers either side of the River Thames would be necessary to carry the weight of conductors required.

Option Selection

6.11 Option 1 was discounted due to Health and Safety risks.

6.12 Option 3, given its location and scale, would have greater and permanent environmental impacts. Option 3 would also require a Development Consent Order which would result in longer lead in times and determination timescales. Option 3 is cheaper and can be constructed more quickly but it was ultimately discounted due to the

consenting phase timeframes and risks attached to it given the potential impacts on landscape and ecology. As alternative solutions were available, it was considered unlikely that Option 3 would satisfy the derogation principles under the Habitats regime.

6.13 On balance it was considered that Option 2 was preferable overall. While the costs for this option are greater compared to option 3, it results in fewer environmental impacts and can be delivered more quickly through the consenting phase so as to address the urgent need for the Project.

6.14 Since the optioneering was concluded, there have been no changes in circumstances that affect the selection of the preferred option.

Options Considered for Other Works

6.15 Following the decision to adopt Strategic Option 2 (a new tunnel), further options appraisal work was carried out to identify suitable areas for the other temporary and permanent works.

6.16 It was noted early that it would be preferable to site the required infrastructure as close to the existing as possible, so as to reduce the amount of construction work required to divert the overhead line and minimise impacts.

6.17 Land adjacent to both existing SECs at Tilbury and Gravesend was deemed suitable for both the temporary and permanent works. Environmental and engineering constraints were taken into account to inform site selection. It was also recognised that the proposed Tilbury SEC and overhead line connection options would need to avoid and minimise impacts on Natural England's Thames Estuary Invertebrates Essex & Kent' SSSI notification project (highlighted by Natural England in consultation).

6.18 For Tilbury, five preferred shaft locations were identified and eight areas were ranked for the location of the tunnel shaft, headhouse and SEC having regard to environmental and engineering constraints. Following this appraisal, seven SEC and OHL connection options were assessed at Tilbury. The appraisal of these seven options is addressed at Table 2.3 (paragraph 2.6.29) of the Alternatives section of the Environmental Statement (**CD B8**). Option 5 was selected for design development as it was the only option outside the proposed SSSI and would remove existing pylons within the proposed SSSI.

6.19 For Gravesend, three shaft location options were appraised and following this, six SEC and OHL connection options were assessed, as summarised at 2.6.31 onwards to 2.6.38 and Table 2.4 of the Environmental Statement Alternatives Chapter 2 (**CD B7**)**.** Option 2 was taken forward as having the best balance of positives to negatives for the reasons explained in Chapter 2 of the Environmental Statement. Again, NGET is not aware of anything that has changed since the 2022 optioneering that would alter the option appraisal for the siting of the shafts, SECs and OHLs, or the selection of the preferred options.

7. THE LAND AND RIGHTS NEEDED FOR THE PROJECT

7.1 The Order Land comprises all the land required for the construction, operation, repair, maintenance and decommissioning of the Project.

7.2 As explained in the Statement of Evidence of Darren Kempson, NGET is taking a proportionate approach to acquisition and only seeks to acquire the freehold title to land it does not already own where that land is needed for the purposes of permanent infrastructure, namely for the Tilbury headhouse and SEC.

7.3 NGET has been and continues to be in negotiation for acquisition of the necessary land and rights necessary which, if successful would mean that the Order powers would not need to be exercised. The progress that has been made is explained in the evidence of Darren Kempson. Whilst significant progress for the voluntary grant of land rights has been made, it remains the case that despite these efforts, NGET has not yet secured all of the land and rights in the Order Land that it requires for the delivery of the Project.

7.4 In order to provide certainty that the land and rights required for the Project can be assembled within a reasonable timeframe to enable the Project to be delivered, it was therefore necessary for NGET to start the CPO process in parallel with private treaty negotiations. Progressing the CPO process in parallel with continuing landowner negotiations is expressly envisaged by paragraph 2.8 and section 17 of the CPO Guidance. NGET remains fully committed to continuing to progress negotiations throughout the CPO process in order to acquire land by agreement, where possible.

8. PROJECT DELIVERY AND FUNDING

Delivery

8.1 NGET is part of the National Grid group of companies with an excellent track record in delivering infrastructure projects.

8.2 NGET has extensive experience of building, operating and maintaining linear infrastructure schemes, both overhead and underground systems, substations and associated infrastructure. Notably, NGET has delivered the underground London Power Tunnels 2 project which crosses beneath London and for which compulsory purchase orders were obtained. NGET has extensive experience of acquiring rights and land needed for its infrastructure projects, including allowing for unforeseen matters.

8.3 Following a competitive and comprehensive procurement process that complied with the Utilities Contract Regulations 2016, a contract for tunnel works and associated works for the Project was awarded to Ferrovial Construction (UK) Limited and BeMo Tunnelling UK LTD joint venture on 19 December 2024.

8.4 The ASTI target delivery date for this Project is 31 December 2028 and the timescales for delivery is tightly constrained to 2028 due planned outage windows, but in order to do this it is essential that all the land and rights are in NGET's ownership as soon as practicable in 2025 so as not to impact NGET's obligation to provide network reinforcements through its licence obligations requiring compliance with the National Electricity Transmission System Security and Quality of Supply Standards ("**NETS SQSS"**) 7 and to facilitate generation connections. Without the required reinforcement, multiple contracted customers holding connection offers may be adversely impacted. The absence of the planned reinforcement will result in reduced network security in East Anglia. This can increase the risk of more constraints due to limited network availability.

8.5 Subject to securing the consents referred to in Kate McGregor's Evidence, and to acquiring the necessary land interests it requires for the Project, NGET will be in a position to proceed with the delivery of the Project and the Earliest In Service Date ("**EISD"**) is Q4 2028.

Funding

8.6 The current estimated costs of the project in 2018/19 prices are £338.9m. As explained in section 4 above, the Project is an ASTI Project. The funding of ASTI projects is explained in Ofgem - Decision on accelerating onshore electricity transmission investment (15 December 2022) (**CD F2**). ASTI Projects are funded through Pre-

construction funding, early construction funding (**"ECF**") and then an application for full project costs via a project assessment process.

8.7 NGET has already received £8.9m (2018/19 prices) in pre-construction funding to aid surveys, assessment and studies; project design; engineering development; stakeholder consultation; tasks associated with wayleaves; planning applications, and tender activities. To maintain the programme for a 2028 EISD, it will also be necessary to incur costs on early construction activities ahead of finalising the design and tendering for the delivery of the works. The ASTI regime allows for NGET to request ECF at any time up to 20% of the forecasted total project costs. ECF provides NGET with approval from Ofgem to proceed with early construction activities that are required for acceleration or to reduce risk ahead of the project assessment process in which they assess the efficiency of the cost of the activities.

8.8 As noted above, NGET has been awarded a proportion of the total project forecast costs as stated in the ASTI decision pursuant to an ECF application. This funding can be used for land purchases, early enabling works, early procurement activities and other activities agreed by Ofgem. Ofgem agreed that the rest of the works included in the ECF request were required to ensure timely progression of the Projects' main works, and thus reduce overall schedule and cost risk on the project. Ofgem were satisfied that the ECF activities NGET requested will accelerate delivery of the wider TKRE Project and that it is in consumers interests for the costs to be incurred early.

8.9 The next funding stage is the project assessment submission which was submitted in March 2025. The project assessment can be submitted once all material planning applications have been made. Those planning applications were made in 2024.

8.10 NGET would expect the project assessment decision to be issued by Ofgem within 6 months of the submission. Given that the Project is an ASTI project and that NGET has been engaging with Ofgem throughout, if Project costs are deemed efficient then full project assessment funding will be awarded which provides access to the full costs for the construction of the Project.

8.11 As explained above, NGET has already been awarded a proportion of the total Project costs, and Ofgem have recognised the importance of the Project. The above process and stage gates for funding is standard for ASTI projects.

8.12 There is a high degree of confidence that the Project will receive funding given the need for the Project and its status as an ASTI project. For the reasons set out above, the Secretary of State can be satisfied that all aspects of the Project would be fully funded and that there is no reason to believe that, should the Order be confirmed, the Project would not proceed due to an absence or shortfall in available funding. The Secretary of State can also 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 Order, and for the costs of implementing the project.

8.13 NGET has carried out an assessment of the compensation that it expects will arise as a result of the acquisition of the rights and the land in the Order. NGET have taken expert advice on the likely costs of implementing the Project, including the funding of the acquisition of the interests in land described in the Order (**CD C1**). NGET is confident that land acquisition costs and potential compensation claims can be fully met as and when they are required under the provisions of the Order, and this would include any "early payments"

under the blight provisions of the Town and Country Planning Act 1990.

8.14 Given the above, and NGET's strong credit rating, the requisite funding is available to meet the implementation and land acquisition/compulsory purchase compensation costs associated with the Project as and when required (including any advance payments).

8.15 Accordingly, NGET considers that the criteria in paragraphs 13 and 14 of the CPO Guidance (**CD A1**) are met.

9. POWER UNDER WHICH THE ORDER IS MADE AND DECISION TO MAKE THE ORDER

9.1 Pursuant to section 9(2) of the 1989 Act, the holder of a licence authorising them to participate in the transmission of electricity is charged with the duty "*to develop and maintain an efficient, co-ordinated and economical system of electricity transmission.*"

9.2 NGET holds an Electricity Transmission Licence granted by the Gas and Electricity Markets Authority under section 6(1)(b) of the 1989 Act. As such, it is empowered to exercise powers of compulsory acquisition.

9.3 NGET owns the high voltage electricity transmission network in England and Wales and operates the transmission system across Great Britain.

9.4 The Order (**CD C1**) was made pursuant to section 10 of, and schedule 3 to, the 1989 Act, and having regard to the CPO Guidance (**CD A1**).

9.5 Section 10 of the 1989 Act provides that the powers in schedule 3 (which provides for the compulsory acquisition of land) have effect in relation to the holder of a transmission licence.

9.6 Paragraph 1(1) of schedule 3 to the 1989 Act provides that:

(a) *"the Secretary of State may authorise a licence holder to purchase compulsorily any land required for any purpose connected with the carrying on of the activities which the licence holder is authorised by the licence to carry on."*

9.7 Paragraph 1(2) of schedule 3 to the 1989 Act confirms that "land" includes any right over land, and that the Secretary of State's power includes power to authorise the acquisition of rights over land by creating new rights, as well as acquiring existing ones. This includes the creation of new rights similar to an easement and "restrictive rights", akin to restrictive covenants.

10. RESPONSE TO OBJECTIONS

10.1 There were four objections to the Order but two have subsequently been withdrawn. None of the objections question the need for the Project, or its public benefits or suggest that NGET should have adopted an alternative approach or found alternative sites for any aspects of the Project. None of the objections question NGET's ability to deliver or fund the Project.

10.2 I have summarised the objections further below, and then provided my response to them beneath the summary:

Network Rail ("NRIL") (various plots of land along private road)

10.3 NRIL state that operational railway land is adversely affected and reserves the right to produce additional and further grounds of

objection when further details of the Order and their effect on Network Rail's land are available.

10.4 NRIL has not explained in detail how its operational railway is affected by the rights sought in the Order Land. Further detail on NGET's attempts to understand how NRIL is impacted and attempts to agree a way forward with NRIL is contained in the evidence of Darren Kempson.

10.5 **SGN (apparatus under the road to be used to transport the tunnel boring machine)**

10.6 SGN has gas mains in the Order Land or the vicinity of the Order Land and has expressed concerns that the tunnel boring machine ("**TBM**") may adversely affect the integrity of and /or access to these gas mains. NGET has been actively engaged with SGN to resolve these concerns. Further detail as regards NGET's response to this objection is contained in the evidence of Tim Hyett.

10.7 In summary I do not consider the Project will give rise to any adverse impacts on the private rights of objectors but to the extent that it does, those impact are clearly outweighed by the public interest benefits in delivering the Project

11. HUMAN RIGHTS AND THE EQUALITY ACT CONSIDERATIONS

Human Rights

11.1 As explained in the evidence of Darren Kempson and Dave Rogerson, all of the land and rights in the Order Land are required either for the purposes of the Project, or to facilitate, mitigate, or is incidental to the Project.

11.2 NGET is taking a proportionate approach to compulsory acquisition and, rather than seeking to acquire the freehold title to all of the

Order Land, is seeking to acquire a combination of freehold title (for the SEC and headhouse) and rights (such as rights to install and maintain the newly realigned OHL).

11.3 NGET has sought to acquire the rights and interests in land which are required to deliver the Project through private treaty negotiation.

11.4 Notwithstanding the efforts that have been made to acquire interests in the land by way of voluntary agreement, as at the date of making the Order, NGET has been unable to secure all of the requisite interests through negotiation. It is therefore necessary to seek compulsory powers to enable the delivery of the Project.

11.5 Negotiations to acquire interests by private treaty will continue in parallel with the CPO process.

11.6 With regards to Human Rights, section 6 of the Human Rights Act 1998 prohibits public authorities from acting in a way which is incompatible with rights protected by the European Convention on Human Rights ("**the Convention**"). The position is summarised in section 12 of the CPO Guidance, which states that a compulsory purchase order should only be made where there is *"a compelling case in the public interest".* The CPO Guidance makes it clear that an acquiring authority should be sure that the purposes for which it is seeking compulsory acquisition powers sufficiently justify interfering with the human rights of those with an interest in the land affected. In making this assessment, an acquiring authority should have regard to the provisions of Article 1 of the First Protocol to the Convention, and in the case of dwelling, Article 8.

11.7 Article 1 of the First Protocol states that:

(b) *"…Every natural or legal person is entitled to peaceful enjoyment of his possessions" and "no one shall be deprived of his*

possessions except in the public interest and subject to the conditions provided for by the law and by the general principles of international law…".

11.8 Whilst owners and occupiers of the Order Land may be deprived of their property/interest in property if the Order is confirmed, this will be in accordance with the law. NGET is only seeking the acquisition of the freehold title to the Order Land where necessary. The remainder of the Order Land is proposed to be affected by new rights only. There are no residential interests affected by the Order and no persons' lawful occupation will be displaced. The Order is being promoted in the public interest as required by Article 1 of the First Protocol and the public benefits have been set out in detail earlier in this Statement. NGET considers that the Order will strike the right balance between the public interest in the implementation of the Project and those private rights that will be affected by the Order.

11.9 Article 6 of the Convention provides that:

(c) *"In determining his civil rights and obligations… everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law."*

11.10 The Order has been extensively publicised, and consultation has taken place with the community and key stakeholders in the region. All those affected by the Order have been notified, have the right to make representations and objections to the Secretary of State, and objecting parties will have the right to be heard at a public inquiry. It has been held by the courts that statutory processes are in compliance with Article 6 of the Convention.

11.11 Those whose interests are acquired under the Order will also be entitled to compensation which will be payable in accordance with the Compulsory Purchase Compensation Code. The Compensation

Code has been held to be compliant with Article 8 and Article 1 of the First Protocol to the Convention.

11.12 NGET has sought to keep any interference with the rights of those with interests in the Order Land to a minimum. The land within the Order has been limited to the minimum required for the Project infrastructure to be installed, operated and maintained.

11.13 The requirements of the Human Rights Act 1998 and the Convention, particularly the rights of property owners, have therefore been fully taken into account. There is a compelling case in the public interest for the Order to be made and confirmed, and the interference with the private rights of those affected that would be the inevitable result of the exercise of compulsory purchase powers conferred by the Order would be lawful, justified and proportionate.

Equality Act

11.14 The public sector equality duty set out in s149(1) of the Equality Act 2010 does not apply to NGET in making the Order (**CD C1**) but NGET has, as a non-public body exercising public functions, had regard to that duty in promoting the Order, and has undertaken a community consultation and landowner engagement exercise.

11.15 NGET has taken account of and considered receptors and effects on those receptors through its environmental assessment processes for the Project.

11.16 NGET does not currently consider that the Project will give rise to any impacts or differential impacts on persons who share a relevant protected characteristic as defined in the Equality Act, or upon persons who do not share such relevant protected characteristic. However, the engagement process is ongoing and NGET's position will be continually monitored. Should any persons be identified who

may adversely impacted by the Project, packages of assistance measures will be put in place as necessary so as to mitigate so far as practicable any identified activity that may have an adverse impact on these individuals.

12. SUMMARY AND CONCLUSIONS

12.1 I was appointed by NGET as Senior Project Manager for the of the Grain to Tilbury project and am giving evidence on behalf of NGET in respect of the project management matters relevant to the Order. I have had particular regard to the key aspects of the CPO Guidance that are relevant to my evidence.

12.2 The purpose of the Project is to enable the construction of a replacement tunnel under the River Thames to accommodate the Tilbury to Grain and Tilbury to Kingsnorth 400kv circuits. This comprises the boring of a new tunnel under the River Thames approximately 2.2km long to house and carry 12 new cross-linked polyethylene cables.

12.3 There is a compelling need for the Project in assisting the Government to tackle climate change to meet their legally binding targets to become net-zero in all greenhouse gases by 2050 for England and Wales and the various other energy and electricity policy requirements as set out in this evidence

12.4 The Scheme benefits include

12.5 the need to upgrade 400 kV circuits in the River Thames tunnel due to increased renewable and low carbon energy generation in the east coast of England.

12.6 Enhancement of the resilience of the distribution system, ensuring reliable energy supply and security, particularly in the Tilbury area, by constructing additional substations.

12.7 The Project will:

12.8 Replace and modernize outdated infrastructure.

12.9 Increase capacity to meet energy demand and customer connection needs.

12.10 Assist in the transition to a net-zero/low carbon economy.

12.11 Contribute to energy security and reliability of supply.

12.12 These benefits depend on NGET securing the necessary land and rights for the Project's construction and operation.

12.13 My evidence discusses the alternatives of the Project that were considered and sets out why the various alternatives were disqualified and the new tunnel option was necessary.

12.14 NGET is negotiating to acquire the necessary land and rights for the Project, but to ensure timely delivery, it began the compulsory purchase order process alongside these negotiations

12.15 NGET is part of the National Grid group of companies with an excellent track record in delivering infrastructure projects. NGET has extensive experience of acquiring rights and land needed for its infrastructure projects, including allowing for unforeseen matters. Given the above, and NGET's strong credit rating, and the fact that the Project is an ASTI project, the requisite funding will be available to meet the implementation and land acquisition/compulsory purchase compensation costs associated with the Project as and when required. I have explained the national importance of ASTI projects.

12.16 NGET holds an Electricity Transmission Licence granted by the Gas and Electricity Markets Authority and has the powers under section 10 and schedule 3 of the 1989 Act to make the Order.

12.17 I have explained that a developer has now been procured for the Project, which shows how committed NGET is to the Project. Planning permission is now in place for the Project, and progress on the other consents is underway. NGET secured a voluntary set of agreements for acquisition of the relevant land and rights from the largest land owner (by number of plots) in the Order land, which was a significant achievement by the NGET Lands team.

12.18 I do not consider the Project will give rise to any adverse impacts on the rights of objectors but to the extent that it does, those impact are clearly outweighed by the public interest benefits in delivering the Project.

12.19 NGET has given consideration to human rights and equalities matters, which as set out NGET does not consider that the Project will give rise to any impacts or differential impacts on persons who share a relevant protected characteristic as defined in the Equality Act, or upon persons who do not share such relevant protected characteristic and this position is being continuingly monitored by NGET. The Order is being promoted in the public interest. NGET considers that the Order will strike the right balance between the public interest in the implementation of the Project and those private rights that will be affected by the Order.

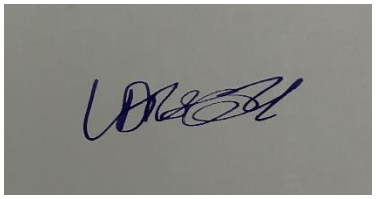
12.20 As set out in the evidence of Darren Kempson and Kate McGregor, NGET has engaged considerably and has nearly reached voluntary agreement on a range of agreements for the acquisition of the land and rights needed. Where statutory undertakers are affected, the acquiring authority does not consider that any of them would suffer serious detriment as a result of the Project or the acquisition of the relevant land or rights. If the Order is confirmed, relevant parties will be compensated in accordance with the Compensation Code as applicable.

12.21 Accordingly, I consider that the criteria in the CPO Guidance is satisfied and that there is a compelling case in the public interest for the confirmation of the Order so that the land and rights can be obtained to ensure this important Project goes ahead.

13. DECLARATION

13.1 I confirm that the evidence prepared for this Inquiry and contained within this statement of evidence are my true and professional opinions. I confirm that I have understood and complied with my duty to the Inquiry as an Expert Witness and have provided my

evidence impartially and objectively. I confirm that I have no conflicts of interest



Lee Driscoll

13 May 2025