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# **Report to the Secretary of State for Energy Security and Net Zero**

**by J Burston BSc (Hons) MA MRTPI**

**an Inspector appointed by the Secretary of State**

**Date: 7 July 2025**

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**ELECTRICITY ACT 1989**

**ACQUISITION OF LAND ACT 1981**

**THE ELECTRICITY ACT 1989 AND THE ACQUISITION OF LAND ACT 1981  
THE NATIONAL GRID ELECTRICITY TRANSMISSION PLC (GRAIN TO  
TILBURY) COMPULSORY PURCHASE ORDER 2024**

The Inquiry was held on 3 and 4 June 2025  
A site visit took place on 3 June 2025

File Ref: DESNZ/CPO/NGET Grain to Tilbury CPO

**TABLE OF CONTENTS**

|            |                                                                |    |
|------------|----------------------------------------------------------------|----|
|            | List of Abbreviations                                          | 3  |
|            | Case Details                                                   | 4  |
| 1          | Introduction                                                   | 4  |
| 2          | The case for National Grid Electricity Transmission plc (NGET) | 6  |
| 3          | The cases for objectors to the Order                           | 10 |
| 4          | Inspector's Conclusions                                        | 12 |
| 5          | Recommendations                                                | 20 |
| APPENDIX A | Appearances                                                    | 21 |
| APPENDIX B | Documents Submitted at the Inquiry                             | 22 |
| APPENDIX C | Recommended Modifications to the Order                         | 23 |

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## LIST OF ABBREVIATIONS USED IN THIS REPORT

|       |                                                                                                             |
|-------|-------------------------------------------------------------------------------------------------------------|
| AA    | Acquiring Authority                                                                                         |
| ASTI  | Accelerated Strategic Transmission Investment                                                               |
| CPO   | Compulsory Purchase Order                                                                                   |
| DWPL  | Denton Wharf Properties Limited                                                                             |
| ECHR  | European Convention on Human Rights                                                                         |
| EIA   | Environmental Impact Assessment                                                                             |
| EN-1  | Overarching National Policy Statement for Energy                                                            |
| EN-5  | Electricity Networks Infrastructure National Policy Statement                                               |
| GBC   | Gravesend Borough Council                                                                                   |
| HRA   | Human Rights Act 1998                                                                                       |
| Km    | Kilometre                                                                                                   |
| kV    | kilovolt                                                                                                    |
| m     | metre                                                                                                       |
| MOPAC | The Mayor's Office for Policing and Crime                                                                   |
| NGET  | National Grid Electricity Transmission plc                                                                  |
| NPS   | National Policy Statement                                                                                   |
| NRIL  | National Rail Infrastructure Limited                                                                        |
| OHL   | Over Head Line                                                                                              |
| PLA   | Port of London Authority                                                                                    |
| PoTLL | Port of Tilbury London Limited                                                                              |
| RSPB  | Royal Society for the Protection of Birds                                                                   |
| s37   | Section 37 of the Electricity Act 1989 ( <i>to install and keep installed electric lines above ground</i> ) |
| SEC   | Sealing End Compound                                                                                        |
| SGN   | Southern Gas Network                                                                                        |
| TC    | Thurrock Council                                                                                            |

## CASE DETAILS

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

- The Order has been made under section 10 and schedule 3 of the Electricity Act 1989 and the Acquisition of Land Act 1981.
- The Order was made on 14 November 2024.
- The application, supporting documents and Inquiry documents are available at the following website: <http://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/grain-to-tilbury/document-library>
- The Order would authorise the compulsory purchase of land and new rights in land required for the replacement of a tunnelled section of the Tilbury to Grain and Tilbury to Kingsnorth 400 kilovolt (kV) circuits under the River Thames by the construction of a new tunnel under the River Thames through which the electricity cables will run. In addition, associated new infrastructure is proposed either side of the River Thames in Tilbury and Gravesend comprising two Sealing End Compounds ("SECs") which would contain two new tunnel headhouse buildings and two new gantries, new and diverted overhead lines to connect to each of the new SECs, for which National Grid Electricity Transmission Plc (NGET) has an Electricity Transmission Licence. The Order will also facilitate the decommissioning of existing overhead lines and towers.
- There were no objections to the Order outstanding at the close of the Inquiry.

#### Summary of recommendation:

That, subject to the Secretary of State for Energy Security and Net Zero being satisfied that he has approved, or will approve, the section 37 application in respect of overhead line works (ref 12.04.09.05-1933U), the National Grid Electricity Transmission plc (Grain to Tilbury) Compulsory Purchase Order is modified and then confirmed.

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## 1 INTRODUCTION

- 1.1 The Order has been made by NGET as the Acquiring Authority (AA), which is the holder of an electricity transmission licence granted under s6(1)(b) of the Electricity Act 1989.
- 1.2 The Order and the associated maps provide for NGET to:
  - Acquire all interests in land needed for the permanent headhouse and SEC at Tilbury on the north side of the Thames. This land is shown coloured pink on sheets 3 and 4 of the Order Maps;
  - All interests not currently in either NGET's or PoTLL's ownership in NGET's existing electricity substation site at Plot 3/7 of the Order Land, which is shown coloured pink on sheet 3 of the Order Maps, which is required for the

removal of overhead lines and the realignment of overhead lines to the new tower;

- All interests not currently in NGET's ownership of the land needed for the new SEC and related infrastructure on the south side of the Thames at Gravesend. The land is owned mainly by NGET (freehold), but also some is owned by Kent County Council (Plots 7/2 and 8/2 in respect of their interest as highways authority in the public footpath);
- Acquire new rights in land for the tunnel and cables under the River Thames and to maintain a protection zone around it;
- Acquire new rights in land for the new and diverted overhead lines, decommissioning working areas and associated infrastructure at both the Tilbury and Gravesend ends of the scheme;
- Acquire new rights in land for the use of land as construction compounds;
- Acquire new rights in land for access for construction and operational purposes;
- Acquire new rights in land for the carrying out surveys and monitoring of the tunnel; and
- Acquire new rights in land for the access needed to drain into existing watercourses.

1.3 The Project will connect into two existing 400kV overhead lines which are proposed to be refurbished as part of a separate package of works once the Project has completed.

## **Objections**

1.4 Four objections to the Order were received by the Department for Energy Security and Net Zero, which had been withdrawn by the close of the Inquiry. Whilst the objections have been withdrawn, for completeness, the objections raised the following key points about the impact of the Order:

- The land is not required for the works proposed under the Order;
- The works proposed under the Order prejudice the use of the adjacent land;
- Operational railway land would be adversely affected;
- The Order would adversely affect the integrity of and / or access to gas mains;
- The Order contains drafting errors;
- The effect on existing businesses and planning permissions; and

- The extent of rights sought through the Order are excessive.

### **Compliance with statutory procedural requirements**

- 1.5 At the Inquiry NGET confirmed that it had complied with all relevant statutory requirements in making the Order. I have seen copies of the relevant notices and documents. With no evidence to the contrary I have no reason to disagree that all the relevant statutory requirements have been met.

### **Planning Permission**

- 1.6 The Grain to Tilbury tunnel replacement project crosses two local authority administrative boundaries, namely Thurrock Council (TC) and Gravesend Borough Council (GBC). Accordingly planning permission for the project was sought from both planning authorities. NGET submitted the planning applications for the Project on 18 December 2023. TC granted conditional consent on 24 January 2025 (reference 23/01502/FUL) and GBC granted conditional consent on 4 March 2025 (reference 20231313).

### **Environmental Impact Assessment (EIA) screening**

- 1.7 The Project was screened under The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) by both TC and GBC. Only GBC determined the proposed development to be EIA. Whilst there is disagreement between the Councils, there is no evidence to indicate that these opinions were not robust. In any event, NGET decided to treat the whole Project as EIA development and submitted an Environmental Statement to support the regulatory process.

### **The report**

- 1.8 The remainder of this report sets out the substance of NGET's and the objectors' cases in respect of the proposed Order and my conclusions and recommendations to the Secretary of State.

## **2 THE CASE FOR NATIONAL GRID ELECTRICITY TRANSMISSION PLC (NGET)**

### **Introduction**

- 2.1 The Grain to Tilbury Project ("the Project") is required to replace existing, outdated transmission infrastructure in order to meet future energy demands and ensure resilience in the transmission network. It comprises a new 2.2 kilometre (km) tunnel under the River Thames to carry 12 new high voltage cables which will replace the existing tunnelled section of the Tilbury to Grain and Tilbury to Kingsnorth 400kV circuits; together with above ground infrastructure at Tilbury and Gravesend; the diversion of existing overhead lines and the removal and decommissioning of existing overhead lines and towers; together with two temporary construction compounds.

- 2.2 NGET considered a number of alternatives before arriving at its preferred scheme. These included three strategic options of (a) installing new cables within the existing tunnel; (b) installing the cables within a new tunnel and (c) installing new overhead lines across the River Thames. Those strategic options were subject to consultation with environmental stakeholders.
- 2.3 The first option was rejected on the basis that there was insufficient space within the existing tunnel to allow for the installation of 12 new cables and because of the health and safety risks of carrying out those works in a confined space alongside live high voltage electricity cables. Furthermore, each circuit would need to be switched off for a full outage season. This would adversely affect the reliability and resilience of the network. The maximum outage duration that could be facilitated for the refurbishment of the tunnel and shafts was two, six-month outages. Given the construction programme to replace a single circuit is 13 months, this was not considered to be a feasible option. The third option would require the construction of a span of overhead lines of approximately 2km over the River Thames. The pylons would need to be approximately 245 metre (m) in height, which would make them the tallest pylons in Europe, to allow for the clearance of large shipping vessels using this stretch of the River and would push the boundaries of current Over Head Line (OHL) technology. This option would also have required considerably greater land-take than the other options in order to accommodate the anchor pylons.
- 2.4 Following the selection of option 2, further work was carried out to identify suitable sites and route options, which led to the selection of the preferred sites. There has been no suggestion from any party that an alternative solution, site or route should have been selected in preference to the Project.
- 2.5 As is apparent from the evidence presented, NGET has a clear idea of how it intends to use the Order Land for the tunnelling and electrical works and has taken no more land and rights than are necessary to enable the safe construction and operation of the Project.
- 2.6 There is extensive policy support for the Project. National Policy Statement (NPS) EN-1 recognises that a significant amount of infrastructure is required to ensure that energy can be transported to where it is needed. High-quality infrastructure is crucial for economic growth, boosting productivity and competitiveness. There is an urgent need for new electricity network infrastructure to be brought forward at pace to meet Government energy objectives. In addition to the need for transmission infrastructure to connect new sources of (largely renewable) energy generation to the grid, EN-1 explains that investment in such infrastructure is also necessary to preserve and guarantee the robust, reliable and resilient operation of the electricity system.
- 2.7 NPS EN-5 recognises that the security and reliability of present and future energy supply is highly dependent on having an electricity network which will enable the new energy generation and connection infrastructure needed to meet the rapid increase in electricity demand required to transition to net zero.
- 2.8 The Energy White Paper; Net Zero Strategy; British Energy Security Strategy; Powering Up Britain documents and Clean Power 2030 Action Plan all recognise the vital role of new electricity transmission infrastructure if the UK's net zero and

energy security ambitions are to be met. It is these twin objectives of decarbonising the energy system and ensuring security of supply that underpin the Project.

- 2.9 In light of Government targets, there is an urgent need for the Project to be operational by 2030. The Grain to Tilbury Project has been selected as one of just 26 Accelerated Strategic Transmission Investment (ASTI) projects designated by Ofgem on the basis that it needs to be operational by 2030 and there is clear evidence that the consumer benefits of applying the accelerated delivery framework will exceed any consumer detriment. The selection of the Project under the ASTI framework demonstrates its importance, urgency and significant benefits that it will deliver.

#### Human rights and equality

- 2.10 The need for and benefits of the Project justify the proposed interference with the human rights of affected landowners. All of the land and rights comprised in the Order Land are required for the construction and operation of the Project. Whilst owners and occupiers of the Order Land may be deprived of their interests or subject to additional rights over their property, this will be in accordance with the law. NGET has taken a proportionate approach and is only seeking to acquire freehold title where necessary for permanent infrastructure. 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 promoted in the public interest as required by Article 1 of the First Protocol and is justified by the public benefits described above. It strikes the right balance between the public interest in securing the delivery of the Project and those private rights that will be affected by the Order. Any interference with the rights of affected landowners is in accordance with the law, justified and proportionate. Importantly, none of the landowners object to the Compulsory Purchase Order (CPO).

- 2.11 NGET has had regard to the public sector equality duty in promoting the CPO. It has undertaken extensive consultation with the community, local planning authorities and affected landowners. As a result of that engagement, it does not consider that the Project will give rise to any differential or disproportionate impacts on persons with a relevant characteristic. However, NGET will continue to engage with landowners and the public through the Project website which provides a free telephone number and postal address by which representations can be made; newsletters and consultation events. Should any impacts on persons with protected characteristics be identified, packages of assistance measures will be put in place to mitigate impacts so far as reasonably practicable.

#### Efforts to acquire by agreement

- 2.12 NGET relies on powers of compulsory acquisition as a measure of last resort to assemble the land and rights that are needed to implement the Project. As explained in the Government's guidance on the compulsory purchase process, it will often be sensible for acquiring authorities to begin the compulsory purchase process alongside continued negotiations with affected persons. This has proved to be effective, with only four objections received to the CPO, and no outstanding objections by the time the Inquiry closed.

- 2.13 Engagement with affected landowners began in 2022. The majority of the Order Land is owned by PoTLL. NGET has engaged extensively with the Port as to the location of the sealing end and construction compound and has accommodated a number of requests from PoTLL in its ultimate design. It has also entered into voluntary land agreements with PoTLL which have enabled its objection to be withdrawn. Similarly, NGET has entered into voluntary agreements with DWPL; Network Rail Infrastructure Limited (NRIL) and Southern Gas Networks (SGN), as a result of which all parties have withdrawn their objections.
- 2.14 It is clear that NGET has made genuine and reasonable efforts to acquire the relevant land and rights by agreement and relies on powers of compulsory acquisition as a measure of last resort to ensure the deliverability of the Project.

#### Compulsory purchase powers

- 2.15 NGET has made every effort to minimise interference with affected land by proposing freehold acquisition only where this is required for permanent infrastructure associated with the SECs at Tilbury and Gravesend. In all other instances, NGET has sought bespoke packages of rights which have been carefully considered and tailored to the specific plots to enable requisite works to be carried out and operated without unduly burdening the land. Its approach to acquisition constitutes a proportionate interference with the rights of affected landowners.

#### Impediments to the delivery of the project

- 2.16 There are no impediments to the delivery of the Project. Planning permission has been granted by both GBC and TC for all aspects of the Project that require such permission. Both planning applications, as well as the CPO itself have been subject to extensive public consultation. Following the grant of those permissions, NGET is now actively engaged in the discharge of pre-commencement conditions.
- 2.17 NGET submitted an application for s37 consent for the new overhead lines to the Department for Energy Security and Net Zero in June 2024. The application was subject to consultation with both relevant local authorities. There have been no objections to the application. There are a number of additional or secondary consents that will be required, such as a River Works Licence and temporary Public Rights of Way diversion but these requirements are typical for this type of development and NGET is confident that they will be agreed with relevant authorities so as to enable the delivery of the Project.
- 2.18 NGET has extensive experience of building, operating and maintaining linear infrastructure schemes including large-scale tunnelling projects and has carried out extensive technical and engineering analysis to inform Front End Engineering Design. Contractors have been appointed, following a thorough tendering process and are making further progress on detailed design and early construction works. Both the contractors and NGET are subject to penalties in the event that the Project is not delivered and operational by 2030, in accordance with the ASTI requirements which provide strong incentives for delivering the Project on time. The Secretary of State can have every confidence that the Project will be delivered in the event that the CPO is confirmed.

2.19 NGET's investments, including for the Grain to Tilbury Project, are funded via Ofgem's regulatory framework. ASTI projects are funded through pre-construction funding; early construction funding and then an application for full project costs via a project assessment process. NGET has already received £8.9m in pre-construction funding and a proportion of the total Project costs pursuant to an early construction funding application. The next funding stage is the project assessment submission which was made in March 2025 and is expected to be determined within 6 months of submission. Given that the Project is an ASTI project; the funding that has been awarded to date and the continuous engagement between NGET and Ofgem throughout the process, there is a high degree of confidence that full funding will be awarded to enable the Project to be delivered.

### Conclusion

2.20 The need for and benefits of the Project outweigh the private loss to affected persons. NGET has a clear idea of how it intends to use the land and proper and reasonable efforts have been made to acquire the requisite interests through voluntary agreements. NGET has taken a proportionate approach in only seeking such land and rights as are necessary to facilitate the construction and operation of the Project. There is a high degree of confidence that necessary resources will be sanctioned by Ofgem to cover the full costs of the Project. There are no impediments to the delivery of the Project, with planning permissions now secured and secondary consents unlikely to pose any difficulty to its delivery. As such, there is a compelling case in the public interest justifying the exercise of compulsory purchase powers and to confirm the CPO subject to a minor modification to correct the entity owning plot 3/7 in Table 1 of the CPO to refer to the "Port of Tilbury **London Limited**".

## **3 THE CASES FOR THE OBJECTORS TO THE ORDER**

### *Network Rail Infrastructure Limited (Objector 1)*

- 3.1 NRIL objects to the above Orders on the grounds that operational railway land is adversely affected. NRIL 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.
- 3.2 NRIL has also made representations to the Railways Directorate of The Department for Transport under Section 16 and Schedule 3 Part 11 of the Acquisition of Land Act 1981.
- 3.3 The objection to the CPO and the representation to the Department for Transport were formally withdrawn on 30 May 2025.

### *Denton Wharf Properties Limited (DWPL) (Objector 2)*

- 3.4 DWPL objected to the proposed Order on the grounds that:

- The land is not required for the works proposed under the Order.
- That the works proposed under the Order prejudice the use of adjacent land owned by DWPL.

3.5 This objection was formally withdrawn on 8 April 2025.

*Southern Gas Networks (Objector 3)*

- 3.6 SGN own and operate low and medium pressure gas mains within and in the vicinity of the Order boundary.
- 3.7 SGN objects to the Order due to concerns that it may adversely affect the integrity of and /or access to these gas mains which form an essential part of the local gas network. They are subject to very specific working practices that must be followed by any third party undertaking works near them. To ensure that these working practices are observed and all reasonable measures are taken prior to any works taking place, SGN will require NGET to enter into a legally binding Asset Protection Agreement. SGN will draft the agreement and expect their associated reasonable costs to be met.
- 3.8 This objection was formally withdrawn on 30 May 2025.

*Port of Tilbury London Limited (Objector 4)*

- 3.9 This objection is made in part pursuant to section 16 of, and paragraph 3 of Schedule 3 to, the Acquisition of Land Act 1981, namely that the CPO includes land, the purchase of, and the acquisition of rights over which, would cause serious detriment to PoTLL's statutory undertaking. PoTLL confirms that this objection has also been sent to the Secretary of State for Transport, being the "appropriate Minister" for the purposes of section 16 of, and paragraph 3 of Schedule 2 to, the Acquisition of Land Act 1981.
- 3.10 Drafting errors: The CPO purports to exclude PoTLL's interests from the effect of the CPO in respect of plot 3/7. However, the CPO incorrectly refers to "Port of Tilbury Limited". This error must be corrected by modification to the CPO on confirmation to refer to the correct PoTLL entity: Port of Tilbury **London** Limited.
- 3.11 As statutory harbour authority, the land held by PoTLL that is included within the CPO is subject to the test in section 16 of, and paragraph 3 of Schedule 3 to, the Acquisition of Land Act 1981. To include a statutory undertaker's land within a compulsory purchase order, it must be possible for (a) that land to be purchased or subject to new rights and not replaced, or (b) purchased and replaced by other land, without causing serious detriment to the carrying on of the statutory undertaking for which that land is held.
- 3.12 All land included in the CPO that is located north of the River Thames is owned by PoTLL. The land includes the access road serving that part of the operational Port of Tilbury known as Tilbury 2 and development land, designated as part of the Thames Freeport, in relation to which a planning application for port expansion

proposals is being actively developed and for which a Scoping Opinion has been obtained.

- 3.13 Excessive powers within the CPO: The powers within the CPO are excessive for two reasons. First, rights sought for temporary purposes are nevertheless stated to be capable of use for the purpose of the decommissioning of the Authorised Project. Secondly, the rights purport to affect land adjoining the Order Land, despite this not being included within the CPO or specifically identified.
- 3.14 In respect of temporary purposes, the Statement of Reasons confirms at paragraph 7.3 that some rights are only required for temporary purposes, such as the creation of construction compounds, and *will only be exercised during the construction phase* [emphasis added]. However, the rights packages described in the CPO, including for Construction Access Rights, Construction and Operational Access Rights and Construction Compound Rights, state that they may be used for the purposes of constructing, installing, commissioning, removing *and decommissioning* of the Authorised Project” [emphasis added].
- 3.15 This appears to be an error in drafting and can be simply corrected by the removal of the words “*and decommissioning*” from the definitions of the temporary rights packages in order to bring the CPO’s powers in line with what is described in the Statement of Reasons. However, as drafted, the reference to decommissioning of the Authorised Project means the power will enable NGET to “prevent or remove any works or use of the land that may interfere with the exercise” of these construction rights for the purpose of decommissioning the Project at the end of its lifespan, at least 40 years in the future.
- 3.16 Similarly, the inclusion in the CPO of rights of access over adjoining land appears to be an error in drafting. The undefined ‘adjoining land’, not specified within the CPO, will cause significant uncertainty over where NGET has a right of access. Removing references to adjoining land or clarifying that the adjoining land must also be land in which NGET has existing rights, would provide certainty over the scope of the CPO powers and the extent of rights acquired pursuant to the CPO, if confirmed.
- 3.17 This objection was formally withdrawn on 3 February 2025.

## 4 INSPECTOR’S CONCLUSIONS

- 4.1 In considering the Order I have had regard to the Guidance on Compulsory Purchase Process (Ministry of Housing, Communities and Local Government January 2025), section 12 of which advises that a CPO should only be made where there is a compelling case in the public interest.
- 4.2 References to earlier paragraphs in the report are shown thus: [2.8].
- 4.3 Guidance on Compulsory purchase process (2025) confirms that a CPO should only be made where there is:
- A compelling case for acquisition in the public interest, and
  - evidence that the acquiring authority has a clear idea of how the land is to be used, and

- evidence that the acquiring authority can show that all necessary resources to carry out its plans are likely to be available in a reasonable time scale, and
- evidence that the scheme is unlikely to be blocked by any impediment to implementation, and
- evidence that this justifies interfering with the human rights of those with an interest in the land.

4.4 These, and other relevant considerations, are assessed in turn below as they relate to the Order. I then turn to whether the scheme should be modified and the Human Rights implications of the scheme.

### **A compelling case for acquisition in the public interest**

- 4.5 The Climate Change Act 2008 sets the UK's approach on climate change. It has long-term and medium-term targets for reducing emissions, and a requirement that the Government develop policies to meet them. It requires that UK climate risks are assessed and that a plan is developed to adapt to them. The greenhouse emission targets were subsequently updated in 2019 with the target of achieving an effective 100% reduction of emissions by 2050 compared to 1990 levels, also known as the 'net zero' target.
- 4.6 To achieve this target the Government has introduced a suite of policies including 'Powering up Britain' (dated March 2023) to accelerate the deployment of renewables, particularly offshore wind. Further to this, the 'Powering up Britain – Energy Security Plan' (dated March 2023), establishes that network connection is often on the critical path for building new energy infrastructure, and that the Government is aware that the current processes for building new networks and connecting new generation and demand projects to the grid needs to be speeded up significantly and addressing this is a high priority. Therefore, improved networks and grid connections are fundamental to rapid renewables deployment. [2.8]
- 4.7 Moreover, the Government has produced a series of NPSs which comprise the Government's objectives for the development of nationally significant infrastructure in a particular sector and state. Of particular relevance are the Energy NPSs including the 'Overarching NPS for Energy' (EN-1) and the 'Electricity Networks Infrastructure' (EN-5). [2.6]
- 4.8 EN-1 sets out the Government's policy for delivery of major energy infrastructure and states 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. Such infrastructure is urgently needed and needs to be delivered at pace to meet the Government's energy objectives. [2.6]
- 4.9 EN-5 comments 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. [2.7]

- 4.10 NGET is currently leading ‘The Great Grid Upgrade’, comprising 17 major infrastructure projects to connect 40GW of offshore wind to the electricity grid by 2030 to accommodate the increasing demand for clean, low-carbon energy.
- 4.11 NGET owns and operates the national high-voltage electricity transmission system throughout England and Wales. The 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 therefore 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 [1.1]. Furthermore, NGET is responsible for delivering the extensive onshore transmission system enhancements that are required to achieve the Government’s 2030 power sector decarbonisation target.
- 4.12 Confirmation of the Order would enable the Grain to Tilbury electricity infrastructure upgrade, involving the replacement of the existing 1960s Thames Cable Tunnel beneath the Thames between Tilbury and Gravesend. The existing tunnel is reaching the end of its useful life, and therefore the proposals include the construction of a new tunnel, the installation of new cabling, and the construction of two headhouses at either end of the tunnel. [2.1]
- 4.13 The National Grid Electricity System Operator has also identified that the Tilbury to Grain and Tilbury to Kingsnorth kV circuits will be significantly overloaded in their current capacity and therefore the Project would also facilitate the connection of two existing 400kV overhead lines known as Kingsnorth to Tilbury (A785) and Grain to Tilbury (A784).
- 4.14 As explained at the Inquiry the scheme would undoubtably improve the resilience of the electricity distribution network. It would therefore reduce the risk to consumer supplies under normal and abnormal operating conditions.
- 4.15 Consequently, the scheme is likely to be of key significance in contributing to the UK’s transition to “net zero” and on this basis the scheme has the support of Ofgem [2.9] and accords with national energy policy. Moreover, there are no objections to the scheme nor suggestion that its cited benefits are unlikely to be achieved or that the same benefits could be delivered with a substantially different scheme.
- 4.16 In the light of this I conclude that the scheme’s likely significant contribution to the UK’s transition to “net zero” is a very substantial public benefit, of national significance, which would be enabled by the Order.

### **How the land is to be used**

- 4.17 NGET undertook a Strategic Options Appraisal in 2022 to inform the selection of a preferred option for the Project. Three options were identified [2.2], namely:
- Option 1: The installation of new cables within the existing tunnel
  - Option 2: The installation of new cables within the new tunnel

- Option 3: The installation of a new overhead line across the River Thames

- 4.18 The risks associated with Option 1 result in it not meeting health and safety regulations or NGET's technical requirements. In particular, the works would have to take place within a confined space where the working area would be extremely limited and the work would need to be conducted adjacent to live equipment, as at least one 400kV circuit would need to remain live to maintain supply. [2.3]
- 4.19 Option 3 would require a larger land take to facilitate the construction of an approximately 2km span length overhead line across the River Thames with the associated anchor towers. Furthermore, given the predicted height of the towers, some 245m, and potential biodiversity impacts it was considered unlikely that Option 3 would satisfy the derogation principles under the Habitats regime and would unlikely meet the timescales for project delivery. [2.3]
- 4.20 On balance the Strategic Options Appraisal considered that Option 2 would be considered preferable overall. While the costs for this option were greater in comparison to Option 3, the risk of potential significant effects would be less and temporary in nature.
- 4.21 Following the decision to adopt Strategic Option 2 NGET undertook further options work to identify areas that were suitable for the temporary and permanent works required for the new tunnel and associated infrastructure. A range of considerations including, former land use, access to a major road, environmental constraints, topography, engineering design and cost were factored into the decision to determine the approach and location for the cable SECs, headhouses, overhead line connection and tunnel location. [2.4]
- 4.22 As set out in the evidence before me, the Order comprises 108 Plots of land, which are listed in the schedule to the Order. The Order Land spans both sides of the River Thames at Tilbury in Thurrock and Gravesend in Kent and includes land on the banks of the River and the riverbed. It comprises all the land required for the construction, operation, repair, maintenance and decommissioning of the Project. Whilst some of the land included in the Order is already owned or leased by NGET, this land has been included in the Order to ensure that there are no other third-party interests which could prejudice the delivery of the Project.
- 4.23 It is apparent that where land and/or new rights have to be acquired NGET has a clear purpose for the acquisition, and that overall, NGET has taken a proportionate approach to acquisition and has only sought to acquire the freehold title to land it does not already own where that land is needed for the purposes of permanent infrastructure. [2.15]
- 4.24 Given that all the objections to the Project have been withdrawn there is no fundamental argument that the broad thrust of the land and rights included in the Order are not required to implement the scheme. Further, no respondents have commented that the same benefits could be delivered with a substantially different scheme. [2.12]

### **The availability of necessary resources**

- 4.25 To support the delivery of the Government's ambition to achieve net zero, Ofgem has introduced the ASTI framework. ASTI aims to accelerate the delivery of large,

strategic electricity transmission projects by fast tracking the approval and funding for them.

- 4.26 The Project has been accepted as one of Ofgem's ASTI schemes and would benefit from pre-construction funding and early construction funding. As I heard at the Inquiry the Project has already received £8.9 million in pre-construction funding. [2.9, 2.19]
- 4.27 The current estimated costs of the Project (using 2018/19 prices) are £338.9 million. NGET submitted the project assessment submission in March 2025, which if approved, will allow the full costs for the construction to be awarded. Given that NGET has had ongoing consultation with Ofgem throughout the process and that Ofgem has recognised the importance of the project, funding is unlikely to be an impediment to implementation of the scheme.
- 4.28 The NGET target delivery date for this Project is 31 December 2028 and the timescales for delivery is tightly constrained to this date due to planned outage windows. NGET has provided comprehensive evidence of its experience of building, operating and maintaining linear infrastructure schemes, both overhead and underground systems, substations and associated infrastructure. This would offer some confidence that they would deliver the project within this tight deadline. Furthermore, NGET has confirmed that contractors have been appointed and the contracts include penalty clauses if 'gateway' deadlines are not met. [2.18]
- 4.29 Therefore, I am satisfied that the proposal is consistent with the expectations of the CPO Guidance regarding information relating to the sources and timing of funding. The evidence is that NGET and its partners are committed to the Project, which is of high priority.

### **Impediments to implementation of the scheme**

- 4.30 Planning permission was granted by both TC and GBC. Both permissions are subject to planning conditions, some of which would require further schemes and/or details to be submitted and approved by the relevant planning authority. At the Inquiry I was told that NGET is working with the Councils to approve conditions, including those relating to construction traffic; construction management; environmental management; lighting and archaeological investigations. There is no evidence before me that the discharge of the planning conditions would not be forthcoming. [2.16]
- 4.31 The consent of the Secretary of State under s37 of the Electricity Act 1989 is also required for the section of new overhead line and a new pylon. NGET has sought approval from the Secretary of State for Energy Security and Net Zero for the section of new overhead line and a new pylon which are an essential part of the Project (application 12.04.09.05-1933U, dated 21 June 2024 refers). [2.17]
- 4.32 At the time of the Inquiry no objections had been made to the s37 application and the Secretary of State had not raised any concerns. Nevertheless, it should be noted that, the Secretary of State should not confirm this Order unless he is satisfied that the s37 approval has been, or will be, granted.
- 4.33 Further additional consents will also be required to deliver the Project, including:

- River Works Licence;
- Public Rights of Way temporary stopping-up and diversion; and
- Abstraction licence.

4.34 Such requirements are a typical requirement for large infrastructure schemes and are being actively sought by NGET and its contractors. The ongoing consultation with the relevant authorities has not, at the time of the Inquiry, identified any prohibitive reasons why these licences would not be granted. [2.17]

4.35 Accordingly, there is no convincing evidence of any impediments that would prevent or delay implementation of the Project as proposed.

### **Engagement with those with an interest in the land affected by the Order**

4.36 The Guidance on Compulsory Purchase Process establishes at Section 2 *“The confirming authority will expect the acquiring authority to demonstrate that they have taken reasonable steps to attempt the acquisition of all of the land and rights included in the compulsory purchase order by agreement.”*

4.37 Section 3 states: *“In order to reach early settlements, public sector organisations should make reasonable initial offers, and be prepared to engage constructively with claimants about relocation issues and mitigation and accommodation works where relevant.”* Section 17 echoes this point: *“Acquiring authorities are expected to provide evidence that the negotiations and engagement set out in ‘When should compulsory purchase powers be used?’ have been undertaken, save for lands where land ownership is unknown or in question.”*

4.38 In this respect, NGET adopted an overarching Land Rights Strategy in 2010 to provide a consistent approach for acquiring land and rights for infrastructure projects. NGET first made contact with landowners about the scheme and land acquisition in 2022, as set out in NGET’s Engagement Schedule (Appendix 1 of Mr Darren Kempson’s Statement of Evidence). The Engagement Schedule also lists the extensive contact between representatives of NGET and landowners and wider stakeholders which has been ongoing until the Inquiry, when all objections had been withdrawn. [2.13]

4.39 I have no evidence that there were any failures by NGET to provide full details of the CPO to affected parties. Indeed, the evidence presented by both Mr Darren Kempson and Ms Kate McGregor sets out the extensive consultation undertaken, and the responses received. Throughout the CPO process NGET has demonstrated a willingness to listen and negotiate with landowners and stakeholders. Demonstrated by the fact that all objections had been withdrawn by the close of the Inquiry.

### **Whether the CPO should be modified**

4.40 One modification has been proposed to the Order which arose following an objection made by PoTLL. The effect of the modification would be to correct a factual error. The proposed modification does not involve the acquisition of any additional land such as to engage section 14 of the 1981 Act. [2.20]

4.41 Moreover, no sound reason has been offered to challenge the merits of the modification and no party would be prejudiced by its acceptance. My overall conclusion in this regard is to accept the proposed modification as submitted and set out at Appendix B.

## **Human Rights**

4.42 The AA must address the effects of the implementation of the Project against those rights established under the requirements of the European Convention on Human Rights (ECHR), enshrined in law by the Human Rights Act (HRA) 1998.

4.43 Article 1 of the First Protocol (Article 1), as incorporated by the HRA, provides that every person is entitled to peaceful enjoyment of their possessions, including their property. Article 1 requires that no one shall be deprived of their possessions except in the public interest and subject to conditions provided by law. The CPO Guidance indicates that an AA should be sure that the purposes for which it is making a CPO sufficiently justify interfering with the Human Rights of those with an interest in the land affected. The ECHR has recognised, in this context, that regard must be had to the fair balance which has to be struck between the competing interests of the individual and the community as a whole.

4.44 Article 8 of the HRA confers a right to respect for private and family life. It should be noted that these are qualified rights, whereby interference may be justified in the public interest, but the concept of proportionality is crucial.

4.45 In terms of Article 1, the CPO would cause interference through the acquiring of private land and rights either temporarily or in full. NGET has sought to minimise such land and rights acquisition through the design of the scheme, efforts to acquire the Order Land by agreement and that compensation would be available. [2.15, 2.10]

4.46 NGET has carefully considered the benefits that the Project will create, in particular the meeting of energy demand and ensuring energy security and the reliability of supply. Whilst I have considered the alternatives put forward, I have found that these would not achieve the objectives or benefits that the proposed project would offer. I am satisfied that any interference with human rights under the ECHR is in accordance with the law, pursuant to a legitimate aim, and proportionate given the scale of the public benefits to which the use of the Order Land would give rise.

4.47 The Public Sector Equality Duty as set out in the Equality Act 2010 does not apply to NGET, nevertheless, it has had regard to that duty in promoting the Order. In the promotion of the CPO, NGET has been mindful of any impacts of the Project on protected characteristics. NGET has continued to engage with landowners, stakeholders, including local communities, and has put in place appropriate measures to ensure that no demographics are excluded. [2.10]

4.48 Continued monitoring will also be established throughout the construction process so that if any person with protected characteristics is adversely impacted by the Project, packages of assistance measures will be put in place to mitigate, so far as practicable, any identified activity that may have an adverse impact on these individuals. [2.11]

4.49 I am satisfied that the legitimate aims of meeting energy demand and ensuring energy security and the reliability of supply cannot be achieved by any means which are less interfering with the rights of such affected parties. They are proportionate and necessary in the circumstances and would not result in a violation of their human rights.

## **Overall conclusion**

4.50 The land and rights included in the Order are necessary to implement the Grain to Tilbury electricity infrastructure upgrade project, and I have concluded that in contributing towards the UK's transition to "net zero", meeting energy demand and ensuring energy security and reliability, this scheme would have substantial benefits of public interest and of national significance.

4.51 There are unlikely to be any financial or legal impediments to the implementation of the Order and project. However, as the Secretary of State for Energy Security and Net Zero is considering a s37 application in respect of overhead line works, which are a necessary part of the Project, the Order should not be confirmed unless this application has been approved or the Secretary of State is satisfied that he will approve this application.

4.52 Accordingly, if and when the s37 application has been approved (or the Secretary of State is satisfied that he will approve it), I conclude that there would be a compelling case in the public interest to justify conferring on NGET the powers to compulsorily acquire the land and rights over land contained in the modified Order for the purposes of the Grain to Tilbury electricity infrastructure upgrade project.

4.53 Furthermore, the aims of the Grain to Tilbury electricity infrastructure upgrade project are sufficient to justify interfering with the human rights of those with an interest in the land affected by the compulsory purchase powers sought, having regard to the HRA.

## **5. RECOMMENDATIONS**

5.1 If and when the Secretary of State for Energy Security and Net Zero being satisfied that he has approved, or will approve, the s37 application, in respect of overhead line works, I recommend that the Order is modified as set out in Appendix C and is then confirmed.

5.2 Should the Secretary of State for Energy Security and Net Zero not be satisfied that he will approve the s37 application in respect of overhead line works, I recommend that the Order is not confirmed.

*J Burston*

INSPECTOR

## **APPENDIX A**

### **APPEARANCES AT THE INQUIRY:**

#### **For National Grid Electricity Transmission plc (the Acquiring Authority):**

Ms Isabella Tafur (Barrister), Francis Taylor Building

Instructed by:

Mr Martin Jeffrey (Legal Director), Eversheds Sutherland LLP

Who called:

Mr Lee Driscoll (Senior Project Manager) NGET

Mr Darren Kempson (Senior Surveyor) NGET

Mr Tim Hyett (Tunnel and Geotech Engineering) Subject Matter Expert for NGET

Mr Dave Rogerson (Lead Transmission Engineer) NGET

Ms Kate McGregor (Senior Consents Manager) NGET

## **APPENDIX B**

### **DOCUMENTS SUBMITTED AT THE INQUIRY:**

#### **For National Grid Electricity Transmission plc (the Acquiring Authority):**

1. Opening Statement
2. Letter dated 3 June 2025, setting out the steps taken to comply with the statutory and regulatory requirements
3. Closing Statement

**APPENDIX C****RECOMMENDED MODIFICATION TO THE ORDER****THE NATIONAL GRID ELECTRICITY TRANSMISSION PLC (GRAIN TO  
TILBURY) COMPULSORY PURCHASE ORDER 2024****THE ELECTRICITY ACT 1989****THE ACQUISITION OF LAND ACT 1981**

Table 1 (Page 10)

| <b>Number on Plan (1)</b> | <b>Extant description and situation of the land (2)</b>                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3/7                       | <p>All Interests in approximately 4585 square metres of land being part of electricity substation site, part of private road, electricity pylon and overhead lines, north east of Substation Road and east of railway line, Thurrock; Excluding the Interest of the Acquiring Authority &amp; Excluding the Interests of the Port of Tilbury <b>London</b> Limited</p> <p>Freehold - EX639032</p> <p>Leasehold - EX826359</p> |