

VPI Immingham OCGT Project

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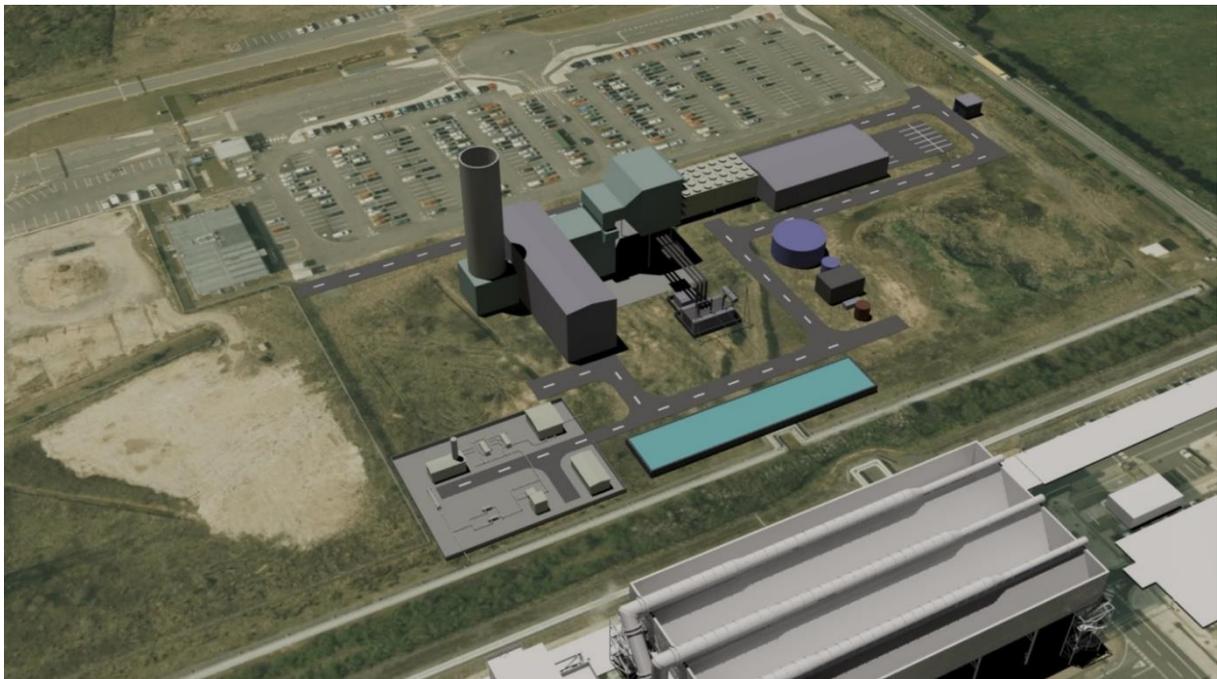
The Immingham Open Cycle Gas Turbine Order

Land to the north of and in the vicinity of the VPI Immingham Power Station, Rosper Road, South Killingholme, Lincolnshire, DN40 3DZ

Grid Connection Statement

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(q)



Applicant: VPI Immingham B Ltd

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GLOSSARY

Abbreviation	Description
APFP Regulations	The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009
CHP	Combined Heat and Power – A technology that puts to use the residual heat of the combustion process after generation of electricity that would otherwise be lost to the environment.
DCO	A Development Consent Order made by the relevant Secretary of State pursuant to The Planning Act 2008 to authorise a Nationally Significant Infrastructure Project. A DCO can incorporate or remove the need for a range of consents which would otherwise be required for a development. A DCO can also include powers of compulsory acquisition.
m	Metres – unit of distance.
MW	Megawatts – unit of energy.
NGET	National Grid Electricity Transmission plc
OCGT	Open Cycle Gas Turbine – a combustion turbine plant fired by gas or liquid fuel to turn a generator rotor that produces electricity.
SoS	The Secretary of State – the decision maker for DCO applications and head of a Government department. In this case the SoS for the Department for Business, Energy & Industrial Strategy (formerly the Department for Energy and Climate Change).
TEC	Transmission Entry Capacity
VPI EPA	VPI Energy Park A – the land proposed for the development of a 49.9 MW gas-fired power station that benefits from planning permission granted by NLC in 2018 (Reference: PA/2018/918).
VPI LLP	VPI Immingham LLP – the owner and operator of the Existing VPI CHP Plant.
VPIB	VPI Immingham B Limited – the Applicant

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1. INTRODUCTION

- 1.1.1 This Grid Connection Statement (Application Document Ref: 5.7) has been prepared on behalf of VPI Immingham ('VPIB' or the 'Applicant'). It forms part of the application (the 'Application') for a Development Consent Order (a 'DCO'), that has been submitted to the Secretary of State (the 'SoS') for Business, Energy and Industrial Strategy, under Section 37 of 'The Planning Act 2008' (the 'PA 2008').
- 1.1.2 VPIB is seeking development consent for the construction, operation and maintenance of a new open cycle gas turbine ('OCGT') plant of up to 299 megawatts ('MW') gross capacity, including electrical and gas supply connections and other associated development (the 'Proposed Development' or 'Project') on land to the north of and in the vicinity of the existing VPI Immingham Power Station, Rosper Road, South Killingholme, Immingham, Lincolnshire, DN40 3DZ.
- 1.1.3 A DCO is required for the Proposed Development as it falls within the definition and thresholds for a 'Nationally Significant Infrastructure Project' (a 'NSIP') under Sections 14 and 15(2) of the PA 2008.
- 1.1.4 The DCO, if made by the SoS, would be known as 'The Immingham Open Cycle Gas Turbine Order' (the 'Order').
- 1.1.5 The Proposed Development includes a new connection to the electricity grid to facilitate the export of the electricity from the OCGT Power Station. This would comprise approximately 300m of overhead or below ground cables, or a combination of both, to connect the generating station to the existing National Grid Electricity Transmission plc ('NGET') substation infrastructure, located approximately 150m to the south of the OCGT Power Station, within the Existing VPI CHP Plant Site.
- 1.1.6 The physical connection will be made at the Humber Refinery 400kV NGET substation which is located in the northern part of the Existing VPI CHP Plant Site. Power would be exported from the NGET substation on the existing transmission infrastructure overhead lines into the NGET transmission network. No additional transmission infrastructure is anticipated to be required.
- 1.1.7 The works to the substation would comprise the installation of a new substation bay, extension of the existing busbar scheme and upgrading of some of the existing 400kV switchgear. The Works Plans (Document Ref. 4.3) and Indicative Electrical Connection Plan (Document Ref. 4.7) shows the route for the cables (Work No. 5) and the connection locations.
- 1.1.8 This Grid Connection Statement has been prepared to comply with Regulation 6(1)(a)(i) of The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 (the 'APFP Regulations'), which requires the Applicant to provide a statement of who will be responsible for designing and building the connection to the electricity grid. Paragraph 4.9.1 of the Overarching Energy National Policy Statement for Energy (EN-1) emphasises that it is for the Applicant to ensure that there will be necessary infrastructure and capacity in the transmission and distribution network to accommodate the electricity to be generated by a proposed new power plant.

2. CONSENTING OF THE GRID CONNECTION WORKS

- 2.1.1 Schedule 1 to the draft DCO (the 'Order') (Document Ref. 2.1) describes the works for which development consent is being sought. Work No. 5 comprises the 'Electrical Connection' which is as follows:
- Work No. 5 – below ground and above ground electrical connection up to 400 kilovolt and control systems.
- 2.1.2 Article 6 of the draft Order ('Benefit of the Order'), provides that the benefit of the Order is solely for VPIB, subject to the ability to transfer it under article 7 ('Consent to transfer benefit of Order'), but also states that both VPIB and NGET have the benefit of the Order in relation to Work No.5.
- 2.1.3 The exercise by NGET of any benefits or rights conferred in this way would be subject to all relevant restrictions, liabilities and obligations under the Order.
- 2.1.4 In addition, the Applicant can transfer the benefit of the Order under article 7, and if the grantee or transferee is a statutory undertaker (i.e. in this case a person who holds a licence under Section 6 of the Electricity Act 1989), the consent of the Secretary of State would not be required for the transfer. NGET holds a licence under Section 6 of the 1989 Act.

3. STATUS OF AGREEMENT WITH NGET

- 3.1.1 In November 2016, VPI LLP began discussions with NGET regarding the export of an additional 600 MW through the existing NGET substation on the Existing VPI CHP Site. NGET indicated that a connection would be possible and either a modification application or new application would need to be submitted to NGET to identify what, if any works would be required.
- 3.1.2 On 4 January 2017, VPI LLP submitted a draft Grid Modification Application to NGET for review pursuant to a formal Modification Application. NGET ratified the draft Modification Application and subject to detailed design data, indicated that a connection could be secured.
- 3.1.3 A formal application was not submitted by VPI LLP however through 2017 and 2018 NGET and VPI LLP continued dialogue with regard to potential projects and connection options at the NGET substation.
- 3.1.4 On 7 June 2018 VPI Immingham Energy Park A ('VPI EPA'), a group company of VPIB, submitted a Modification Application for a 50 MW increase in VPI LLP's existing Transmission Entry Capacity ('TEC') to export power from a new gas fired power generating plant. That is the proposed gas-fired power station adjacent to the Proposed Development, and which has been consented by way of a planning permission. NGET made a formal connection offer and on 12 September 2018 VPI EPA accepted the offer, thereby entering into agreement to secure 50 MW TEC for VPI EPA.
- 3.1.5 On 14 January 2019 VPIB introduced NGET to the development of a 299 MW OCGT (i.e. the Proposed Development) and the desire to connect at the NGET substation on the Existing VPI CHP Site with a provisional connection date of October 2022. As there had been previous works to investigate a potential 600 MW connection, NGET were confident that a connection at the substation would be possible however this could be confirmed through an initial feasibility study.
- 3.1.6 NGET have undertaken an initial connection assessment which considered the current generation background and network's topology and has not identified any immediate issues with a new 299 MW generation plant connecting at Humber Refinery 400kV substation. They have also confirmed that following submission of a formal application they will be able to identify the full extent of enabling works and that a connection could be secured through a Grid Connection Application.
- 3.1.7 Following VPIB's submission of Grid Connection Application, NGET will submit a Connection Agreement offer to VPIB which will comprise a Connection Agreement, a Construction Agreement, a connection date and technical details of the connection location and equipment to be installed.
- 3.1.8 Following VPIB's acceptance of the offer, NGET will begin procurement and planning works to provide a grid connection as agreed in the Connection Agreement. The required completion date for the connection works is Q4 2022, a date which both parties currently believe will be met.
- 3.1.9 If this Application is successful and a DCO is made for the Proposed Development, then the Applicant will grant or transfer such powers to NGET as are included in the

Order that NGET requires to construct, operate and maintain the Electrical Connection Works.

4. RESPONSIBILITY FOR DESIGNING AND BUILDING THE GRID CONNECTION WORKS

- 4.1.1 A connection (the 'Electrical Connection') will be required to export electricity from the Proposed Development to the overhead lines at the Humber Refinery 400kV NGET substation infrastructure within the existing VPI CHP Power Station Site. The Electrical Connection would comprise either overhead or below ground cables, or a combination of both with a total length of approximately 300m.
- 4.1.2 On the OCGT Power Station Site, a compound housing switchgear and cable connections and control systems will be required to connect the cable to the OCGT 400kV transformer. Cables will follow the route as shown by the coloured and hatched areas on the Works Plans (Document Ref. 4.3) and Indicative Electrical Connection Plan (Document Ref. 4.7), crossing over or under existing infrastructure; the exact routing has yet to be finalised.
- 4.1.3 At present the design, installation, operation and maintenance of the OCGT compound and cable (Work No. 5) is the responsibility of the Applicant.
- 4.1.4 At the NGET substation a new connection bay, switch gear and substation modifications will be required to connect the cable to the NGET busbars to export electricity from the OCGT Power Station to the NGET transmission network. It is anticipated that the connection bay, switchgear, transformer and associated works and modifications to the relevant existing substation will be designed, built and commissioned by NGET as part of the Grid Connection Agreement.

5. ACQUISITION OF LAND AND RIGHTS REQUIRED TO BUILD THE GRID CONNECTION WORKS

- 5.1.1 In order to construct and operate the Electrical Connection, the Applicant is seeking powers in the Order to:
- temporarily enter on to land shown on the Land Plans (Document Ref. 4.2) for construction purposes; and
 - compulsorily acquire land and rights for the purposes of operation and maintenance (also shown on the Land Plans).
- 5.1.2 Details of the temporary use and compulsory acquisition powers sought are contained in the Book of Reference (Document Ref. 3.1) and the Statement of Reasons (Document Ref. 3.2).
- 5.1.3 NGET benefit from a long-term lease of the substation and have informed the Applicant that they intend to use the rights under that lease and their statutory undertakers' powers to build, maintain and operate the Electrical Connection within the NGET substation.
- 5.1.4 The Applicant is seeking to secure the necessary rights over all of the Order land by agreement in parallel with the Application. To the extent that rights are required from landowners (including other statutory undertakers) for the construction and operation of the Electrical Connection, the Applicant is working closely with them to seek to achieve that.