

## **VPI Immingham OCGT Project**

Document Ref: 5.8 PINS Ref: EN010097

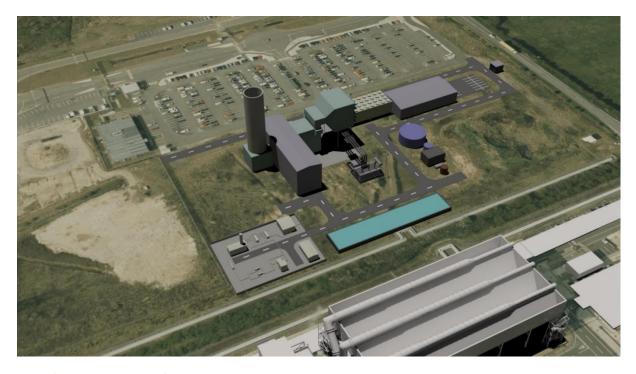
## The Immingham Open Cycle Gas Turbine Order

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

## **Gas Connection & Pipeline Statement**

**The Planning Act 2008** 

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 6(1)(a)(ii) and 6(4)



**Applicant: VPI Immingham B Ltd** 

Date: April 2019



## **DOCUMENT HISTORY**

<b>Document Ref</b>	5.8		
Revision	1.0		
Author	M Seaman (MS)		
Signed	MS	Date	11.04.19
Approved By	A Lewis (AL)		
Signed	AL	Date	11.04.19
<b>Document Owner</b>	VPIB		

## **GLOSSARY**

Abbreviation	Description	
APFP Regulations	The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009	
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.	
Existing AGI	The existing AGI within the Existing VPI CHP Site.	
Existing AGI Site	The land comprising the existing AGI within the Existing VPI CHP Site.	
Existing Gas Pipeline	An existing underground gas pipeline owned by VPI LLP connecting the Existing AGI Site to an existing tie in the National Grid (NG) Feeder No.9 located to the west of South Killingholme.	
Existing Gas Pipeline Site	The land comprising the Existing Gas Pipeline and a stand-off either side of it.	
Existing VPI CHP Plant	The existing VPI Immingham Power Station. This facility is a gas- fired combined heat and power ('CHP') plant near Immingham providing steam and electricity to the neighbouring refineries and electricity to the National Grid.	
Gas Connection	Work No. 4 – the new underground and overground gas pipeline	
GW	Gigawatts – unit of power	
m	Metres – unit of distance	
MW	Megawatts – unit of energy	
NeXA	Network Exit Agreement	
NGG	National Grid Gas plc	
NSIP	Nationally Significant Infrastructure Project – Defined by the Planning Act 2008 and including projects relating to energy (including generating stations, electric lines and pipelines); transport (including trunk roads and motorways, airports, harbour facilities, railways and rail freight interchanges); water (dams and reservoirs, and the transfer of water resources); waste water treatment plants and hazardous waste facilities. These projects are only defined as nationally significant if they satisfy a statutory threshold in terms of their scale or effect. The Proposed Development is a NSIP.	
OCGT	Open Cycle Gas Turbine – a combustion turbine plant fired by gas or liquid fuel to turn a generator rotor that produces electricity.	



Abbreviation	Description
OCGT Power	Work No. 1 – an OCGT power station with a gross capacity of up
Station	to 299MW.
OCGT Power	The land required for Work No.1.
Station Site	
Order Land	The area over which powers of compulsory acquisition or temporary possession are sought in the DCO, shown on the Land Plans. The Order land is the same area as the Project Land.
PARCA	Planning and Advanced Reservation of Capacity Agreement
Proposed	The construction, operation and maintenance of a new gas-fired
Development	electricity generating station with a gross output capacity of up to
	299 MW, including electrical and gas supply connections, and other associated development.
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).
VPI LLP	VPI Immingham LLP – the owner and operator of the Existing VPI
	CHP Plant.
VPIB	VPI Immingham B Limited – the Applicant



### **CONTENTS**

1.	INTRODUCTION	1
2.	CONSENTING OF THE GAS CONNECTION WORKS	3
3.	STATUS OF AGREEMENT WITH NGG	4
	RESPONSIBILITY FOR DESIGNING AND BUILDING THE GAS NNECTION WORKS	5
	ACQUISITION OF LAND AND RIGHTS REQUIRED TO BUILD THE GAS NNECTION WORKS	6
6.	DETAILS REQUIRED FOR APFP REGULATION 6(4)	7
TAI	BLES	
Tah	ole 6.1: Details Required for the APEP Regulation	7



#### 1. INTRODUCTION

- 1.1.1 This Gas Connection and Pipeline Statement (Document Ref. 5.8) 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 'The Immingham Open Cycle Gas Turbine Order' (the 'Order').
- 1.1.5 The Proposed Development makes use of an existing gas pipeline (the 'Existing Gas Pipeline') and includes a new gas connection and pipeline (the 'Gas Connection').
- 1.1.6 The Existing Gas Pipeline was constructed in 2003 to provide fuel to the Existing VPI CHP Plant. The route of the pipeline runs from a connection point at an above ground installation (the 'Existing AGI Site') within the Existing VPI CHP Plant Site to a tie in point at the existing National Grid Gas ('NGG') Feeder No.9 pipeline located to the west of South Killingholme.
- 1.1.7 The physical Gas Connection would be made at the Existing AGI and would comprise of an over ground or underground pipe, or a combination of both, crossing the Existing VPI CHP Plant Site to supply gas to the OCGT Power Station.
- 1.1.8 Discussions have been held with National Grid Gas plc (NGG) which have determined that the existing connection at Feeder No. 9 has sufficient capacity to supply gas to the Proposed Development and the Existing VPI CHP Plant. A capacity analysis has also been undertaken by VPI LLP on the Existing Gas Pipeline, which has determined there is sufficient capacity to supply gas from NGG Feeder No. 9 to the Proposed Development and the Existing VPI CHP Plant.
- 1.1.9 VPI LLP has a Network Exit Agreement ('NeXA') with NGG which provides for the delivery of gas from the NGG network to the Existing VPI CHP Plant. Through discussions, NGG has indicated that a variation of the NeXA and, depending on commercial arrangements, a Planning and Advanced Reservation of Capacity Agreement ('PARCA') would be required to secure the delivery of gas to the Proposed Development. Discussions with NGG have also confirmed that no additional NGG infrastructure would be required.
- 1.1.10 This Gas Connection and Pipeline Statement has been prepared to comply with Regulation 6(1)(a)(ii) and 6(4) of The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 (the 'APFP Regulations'),



which respectively require the Applicant to provide a statement of who will be responsible for designing and building the gas pipeline connection to the generating station, and details of the proposed pipeline.



#### 2. CONSENTING OF THE GAS CONNECTION WORKS

- 2.1.1 Schedule 1 to the draft DCO (the 'Order') (Application Document Ref. 2.1) describes the works for which development consent is being sought. Work No. 4 comprises the 'Gas Connection' which is as follows:
  - Work No. 4 gas supply connection works (the 'Gas Connection') comprising an underground and/or overground gas pipeline of up to 600 millimetres (nominal internal diameter) and approximately 600 m in length for the transport of natural gas from the Existing Gas Pipeline to Work No. 1.
- 2.1.2 The Applicant is not seeking consent to carry out any works to the Existing Gas Pipeline and, as a result, it does not form part of the Site or Proposed Development. It is included in the Application as the Applicant is seeking rights to use and maintain the Existing Gas Pipeline and it is therefore included within the 'Order land' (the area over which powers of compulsory acquisition or temporary possession are sought). The area of land covered by the Existing Gas Pipeline, including a 13 m stand-off either side of it to provide for access and any future maintenance requirements, is referred to as the 'Existing Gas Pipeline Site'.



#### 3. STATUS OF AGREEMENT WITH NGG

- 3.1.1 VPI LLP has a capacity agreement with NGG for the supply of gas to the Existing VPI CHP Plant. The agreement has been in place since 2003 and provides for up to 2.8 GW of gas flow for the 1218 MW Existing VPI CHP Plant.
- 3.1.2 In November 2016 VPI LLP began discussions with NGG regarding the proposed construction of a new gas fired power plant adjacent to the Existing VPI CHP Plant Site. The proposed plant would require up to an additional 1 GW of gas capacity supplied from the NGG network connection. A draft connection application was submitted to NGG in December 2016 to facilitate discussion to determine if there is sufficient gas capacity at NGG Feeder No. 9 to supply the proposed new gas fired power plant.
- 3.1.3 Following application and through subsequent discussions, NGG confirmed that the existing NeXA has a maximum capacity of 4.6 GW meaning that up to 4.6 GW of gas could be provided through the connection at Feeder No. 9. This is more than the combined consumption of 3.8 GW and demonstrates that the existing network connection has sufficient capacity.
- 3.1.4 In June 2017 further discussions were held with NGG regarding possible connection and commercial arrangements of utilising the Existing Gas Pipeline in connection with the Proposed Development. NGG identified two commercial arrangements which are suitable for the Proposed Development, both of which require a modification to the existing NeXA and additional metering to be installed. The metering would be on the Gas Connection i.e. Work No. 4.
- 3.1.5 Additional gas volumes for the Proposed Development would be secured through a commercial agreement with the existing VPI LLP gas supplier or secured separately by VPIB through the Planning and Advanced Reservation of Capacity Agreement (PARCA) process. The approach is the subject of ongoing discussions with VPI LLP and NGG.
- 3.1.6 As no new connection to the NGG network is needed, only a modification to the NeXA is required which can be completed within a few months. Installation of additional metering will be undertaken during construction of the Gas Connection. The timing of a PARCA application (if required) and NeXA modification will be agreed through ongoing dialogue with NGG to meet the Proposed Development commissioning date of Q4 2021.



# 4. RESPONSIBILITY FOR DESIGNING AND BUILDING THE GAS CONNECTION WORKS

- 4.1.1 A new gas connection and pipeline (the 'Gas Connection') will be required to transport gas from the Existing AGI to the Proposed Development. The physical connection would be made at the Existing AGI and would comprise of an over ground or underground pipe (or combination of both) of up to 600mm nominal internal diameter, crossing the Existing VPI CHP Plant to the OCGT Power Station.
- 4.1.2 At the Existing AGI a new pipeline will be connected to the manifold that supplies gas to the Existing VPI CHP Plant. New isolating, bypass and vent valves and associated controls and telemetry will be installed at the manifold to ensure safe and independent operation of the Gas Connection.
- 4.1.3 On the OCGT Power Station Site, a gas control skid comprising isolation, control and vent valves, pressure reducing equipment and associated controls and telemetry will be installed to ensure safe and independent operation of the Proposed Development.
- 4.1.4 Two Gas Connection routes are currently under consideration and are included in the Application;
- 4.1.5 The first is a route running along the northern boundary of the Existing VPI CHP Plant Site from the south eastern corner of the OCGT Power Station Site to a point adjacent to the southern tip of the OCGT Power Station Site before turning south east through the central part of the Existing VPI CHP Plant Site to the Existing AGI. This route is approximately 600m in length.
- 4.1.6 The second is a route following the internal roadway of the Existing VPI CHP Plant Site to the east and south of the main Existing VPI CHP Plant infrastructure to the Existing AGI. This route is approximately 640m in length.
- 4.1.7 Selection of the final route is dependent on the outcome of technical discussions with VPI LLP who owns and operates the Existing VPI CHP Plant and the landowner, Phillips 66. The Works Plans (Application Document Ref. 4.3) and Indicative Gas Connection Plan (Application Document Ref. 4.6) show the two potential routes for the Gas Connection (Work No. 4) and the connection locations.
- 4.1.8 The design, installation, operation and maintenance of the Gas Connection is the responsibility of the Applicant. The Existing Gas Pipeline is owned and operated by VPI LLP and no works are required to this to enable the Proposed Development to operate.



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

- 5.1.1 In order to construct and operate the Gas Connection, the Applicant is seeking powers in the Order to:
  - temporarily enter on to land shown on the Land Plans (Application 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 draft Order (Application Document Ref. 2.1), the Book of Reference (Application Document Ref. 3.1) and the Statement of Reasons (Application Document Ref. 3.2).
- 5.1.3 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 Gas Connection, the Applicant is working closely with them to seek to achieve that.



### 6. DETAILS REQUIRED FOR APFP REGULATION 6(4)

6.1.1 Regulation 6(4) requires applications including the construction of a proposed pipeline to include certain details, which are provided in Table 6.1 below. These relate to the Gas Connection (Work No. 4).

Table 6.1: Details Required for the APFP Regulation

Requirement	Details
Name of the proposed	VPI Immingham OCGT Gas Pipeline
pipeline	
Owner of the proposed	VPI Immingham B Limited.
pipeline	
Start and end point of the	The proposed pipeline will start at the Existing AGI within the
•	
proposed pipeline	Existing VPI CHP Plant Site and will end at Work No. 1 within the
	Proposed Development.
Length of the proposed	Approximately 0.6 kilometres
pipeline in km	7 Approximately ero mismoure
pipeline in kin	
External diameter of the	Up to 700 mm
proposed pipeline	
What will be conveyed by	Supply of natural gas to the OCGT Power Station
the proposed pipeline	
Whether any rights are	New rights in land are required to allow the construction,
, ,	
required or consents for	maintenance and use of the Gas Connection. There are no road or
road/river crossings, and if	river crossings. The new rights are being sought by agreement with
so whether they can be	the relevant land owners, and the Applicant is also seeking powers
obtained by agreement	of compulsory acquisition in the Order (Document Ref. 2.1). The
	position in relation to the rights sought and negotiations is set out in
	the Statement of Reasons (Document Ref. 3.2).