

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

Statutory Nuisance Statement

The Planning Act 2008

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



Applicant: VPI Immingham B Ltd Date: April 2019



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GLOSSARY

Abbreviation	Description
BAT	Best Available Techniques
CCGT	Combined Cycle Gas Turbine.
CCS	Considerate Constructors Scheme
CEMP	Construction Environmental Management Plan.
CEMS	Continuous Emissions Monitoring System
CWTP	Construction Worker Travel Plan
DCO	Development Consent Order
EA	Environmental Agency
EIA	Environmental Impact Assessment.
EMS	Environmental Management System
EPA	Environmental Protection Act 1990
ES	Environmental Statement
IED	Industrial Emissions Directive. Directive 2010/75/EU of the European
	Parliament and the Council on industrial emissions.
NLC	North Lincolnshire Council
NSIP	Nationally Significant Infrastructure Project
OCGT	Open Cycle Gas Turbine
PINS	Planning Inspectorate.
SoS	Secretary of State
SWMP	Site Waste Management Plan



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1.0 INTRODUCTION

- 1.1.1 This Statutory Nuisance Statement has been prepared on behalf of VPI Immingham B Ltd ('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 The Applicant is seeking development consent for the construction, operation and maintenance of a new gas-fired electricity power station with a gross output capacity of up to 299 megawatts ('MW'), and other associated development (the 'Project' or 'Proposed Development') on land ('the Site') at and in the vicinity of the existing Immingham Power Station, Rosper Road, South Killingholme, North Lincolnshire, DN40 3DZ. The principal infrastructure of the power station would be a single Open Cycle Gas Turbine (OCGT).
- 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').

1.2 The Applicant

- 1.2.1 VPI Immingham LLP ('VPI LLP') owns and operates the existing VPI Immingham Power Station, one of the largest combined heat and power ('CHP') plants in Europe, capable of generating 1,240 MW (about 2.5% of UK peak electricity demand) and up to 930 tonnes of steam per hour (hereafter referred to as the 'Existing VPI CHP Plant'). The steam is used by nearby oil refineries to turn crude oil into products, such as gasoline. The land comprising the Existing VPI CHP Plant is hereafter referred to as the 'Existing VPI CHP Plant Site'.
- 1.2.2 VPI LLP is a wholly owned subsidiary of the Vitol Group ('Vitol'), founded in 1966 in Rotterdam, the Netherlands. Since then Vitol has grown significantly to become a major participant in world commodity markets and is now the world's largest independent energy trader. Its trading portfolio includes crude oil, oil products, liquid petroleum gas, liquid natural gas, natural gas, coal, electricity, agricultural products, metals and carbon emissions. Vitol trades with all the major national oil companies, the integrated oil majors and independent refiners and traders. For further information on VPI LLP and Vitol please visit:

https://www.vpi-i.com/

1.2.3 VPIB has been formed as a separate entity for the purposes of developing and operating the Proposed Development.

1.3 The Proposed Development Site

1.3.1 The Site is primarily located on land immediately to the north of the Existing VPI CHP Plant Site, as previously stated. Immingham Dock is located approximately 1.5 km to the south east of the Site at its closest point. The Humber ports facility is located approximately 500m north and the Humber Refinery is located approximately 500m to the south.



- 1.3.2 The villages of South Killingholme and North Killingholme are located approximately 1.4 km and 1.6 km to the west of the Site respectively, and the town of Immingham is located approximately 1.8 km to the south east. The nearest residential property comprises a single house off Marsh Lane, located approximately 325 m to the east of the Site.
 - The Site comprises the following main parts:
 - OCGT Power Station Site;
 - Access Site;
 - Temporary Construction and Laydown Site;
 - Gas Connection Site;
 - Electrical Connection Site; and
 - Utilities and Services Connections Site.
- 1.3.3 The Site is located entirely within the boundary of the administrative area of North Lincolnshire Council ('NLC'), a unitary authority. The different parts of the Site are illustrated on the Works Plans (Application Document Ref: 4.3).

1.4 The Proposed Development

- 1.4.1 The main components of the Proposed Development are summarised below, as set out in the draft DCO (Application Document Ref: 2.1):
 - Work No. 1 an OCGT power station (the 'OCGT Power Station') with a gross capacity of up to 299MW;
 - Work No. 2 access works (the 'Access'), comprising access to the OCGT Power Station Site and access to Work Nos. 3, 4, 5 and 6;
 - Work No. 3 temporary construction and laydown area ('Temporary Construction and Laydown') comprising hard standing, laydown and open storage areas, contractor compounds and staff welfare facilities, vehicle parking, roadways and haul routes, security fencing and gates, gatehouses, external lighting and lighting columns;
 - 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 800 m in length for the transport of natural gas from the Existing Gas Pipeline to Work No. 1;
 - Work No. 5 an electrical connection (the 'Electrical Connection') of up to 400 kilovolts and associated controls systems; and
 - Work No 6 utilities and services connections (the 'Utilities and Services Connections').
- 1.4.2 It is anticipated that subject to the DCO having been made by the SoS and a final investment decision by VPIB, construction work on the Proposed Development would commence in early 2021. The overall construction programme is expected to last approximately 21 months and is anticipated to be completed in late 2022, with the Proposed Development entering commercial operation later that year or early the following year.



- 1.4.3 A more detailed description of the Proposed Development is provided at Schedule 1 'Authorised Development' of the draft DCO (Application Document Ref: 2.1) and in the Environmental Statement (ES) Volume I, Chapter 4 'The Proposed Development' (Application Document Ref: 6.2).
- 1.4.4 The areas within which each of the main components of the Proposed Development are to be built are shown by the coloured and hatched areas on the Works Plans (Application Document Ref: 4.3).

1.5 The Purpose and Structure of this Document

- 1.5.1 The purpose of this document is to comply with Regulation 5(2)(f) of The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 (the 'APFP Regulations'), which states that any application for a DCO should be accompanied by a statement setting out whether the development proposal could engage one or more of the matters set out in Section 79(1) of the Environmental Protection Act 1990 (EPA), i.e. may cause a statutory nuisance. If such a nuisance could occur, the statement must set out how the applicant proposes to mitigate or limit it.
- 1.5.2 Paragraph 4.14.1 of the Overarching National Policy Statement for energy EN-1 states that:

"Section 158 of the PA 2008 confers statutory authority for carrying out development or doing anything else authorised by a development consent order. Such authority is conferred only for the purpose of providing a defence in any civil or criminal proceedings for nuisance. This would include defence for proceedings for nuisance under Part III of the EPA (statutory nuisance) but only to the extent that the nuisance is the inevitable consequence of what has been authorised. The defence does not extinguish the local authority's duties under Part III of the EPA to inspect its area and take reasonable steps to investigate complaints of statutory nuisance and to serve abatement notice where satisfied to its existence, likely occurrence or recurrence. The defence is not intended to extend to proceedings where the matter is 'prejudicial to health' and not a nuisance."

- 1.5.3 Paragraph 4.14.2 goes on to state that it is important that, at the application stage, the SoS considers sources of nuisance under Section 79(1) of the EPA and how these may be mitigated or limited, so that appropriate 'requirements' can be included in any DCO that is granted.
- 1.5.4 Whilst it is not expected that the construction, operation, maintenance and decommissioning of the Proposed Development would cause a statutory nuisance, the draft DCO accompanying the application (Application Document Ref. 2.1) contains a provision that would provide a defence to proceedings in respect of statutory nuisance (in respect of sub-paragraph (g) of Section 79(1) of the EPA (noise emitted from premises so as to be prejudicial to health or a nuisance), subject to certain criteria.
- 1.5.5 This Statement first describes the legislative context for the identification of matters which constitute statutory nuisance and the methodology for the assessment of these. This is followed by a summary of the assessment of the categories of statutory nuisances, using information from the ES (Application Document Ref Nos. 6.1 to 6.4), including any relevant mitigation measures and residual effects, whether embedded within the design of the Proposed Development or secured through requirements within the DCO.



2.0 IDENTIFICATION AND ASSESSMENT OF STATUTORY NUISANCE

2.1 Legislative Framework

- 2.1.1 Section 79(1) of the EPA identifies the matters which are considered to be statutory nuisance as follows:
 - "(a) any premises in such a state as to be prejudicial to health or a nuisance;
 - (b) smoke emitted from premises so as to be prejudicial to health or a nuisance;
 - (c) fumes or gases emitted from premises so as to be prejudicial to health or a nuisance;
 - (d) any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance;
 - (e) any accumulation or deposit which is prejudicial to health or a nuisance;
 - (f) any animal kept in such a place or manner as to be prejudicial to health or a nuisance;
 - (fa) any insects emanating from relevant industrial, trade or business premises and being prejudicial to health or a nuisance;
 - (fb) artificial light emitted from premises so as to be prejudicial to health or a nuisance;
 - (g) noise emitted from premises so as to be prejudicial to health or a nuisance;
 - (ga) noise that is prejudicial to health or a nuisance and is emitted from or caused by a vehicle, machinery or equipment in a street or in Scotland, road; and
 - (h) any other matter declared by any enactment to be statutory nuisance."

2.2 Assessment and Significance

- 2.2.1 The ES for the Proposed Development addresses the likelihood of significant effects arising that could constitute a statutory nuisance, as identified in Section 79(1) of the EPA.
- 2.2.2 Chapter 4: Proposed Development of ES Volume I (Application Document Ref No. 6.2) and the Framework Construction Environmental Management Plan (CEMP, Appendix 4A, ES Volume III (Application Document Ref. 6.4)), describe impact avoidance measures inherent to the proposed design and methods of construction and operation, which address the potential statutory nuisances defined above. The draft DCO (Application Document Ref No 2.1) secures the necessary embedded and additional mitigation through the requirements (in Schedule 2), including in particular the submission, approval and implementation of a construction environmental management plan ('CEMP') in accordance with the Framework CEMP submitted with the DCO application (Appendix 4A, ES Volume III, Application Document Ref. 6.4).
- 2.2.3 The ES provides an assessment of the potential effects on receptors as negligible, minor, moderate or major; adverse or beneficial. Moderate and major impacts are considered to be significant for the purposes of the EIA.



2.2.4 No matters addressed by the EPA have been assessed as potentially being significant for the Proposed Development.

2.3 Minor and Other Potential Impacts

Smoke, Fumes and Gases

2.3.1 Section 79(1) of the EPA states:

"smoke emitted from premises so as to be prejudicial to health or a nuisance" (subparagraph b).

- 2.3.2 No smoke is expected to be generated from the Proposed Development as a part of normal operation.
- 2.3.3 Section 79(1) of the EPA states:

"fumes or gases emitted from premises so as to be prejudicial to health or a nuisance" (sub-paragraph c).

- 2.3.4 The Proposed Development will be designed and operated to meet the requirements of the Industrial Emissions Directive (IED) and, as appropriate, the revised Best Available Techniques (BAT) conclusions from the Large Combustion Plant BAT Reference document and its operations will be regulated by the Environment Agency under an Environmental Permit. It would be operated and maintained by an operations and maintenance team with an established planned preventative maintenance programme.
- 2.3.5 The proposed high efficiency gas turbines for the Proposed Development are able to comply with the current IED requirements without the need for secondary abatement; primary combustion control measures and burner designs mean that emissions of nitrogen oxides and carbon monoxide can meet the IED emission limits, while emissions of sulphur dioxide and particulates are expected to be negligible based on the use of natural gas fuel. The process is controlled through an automated process control system in accordance with BAT.
- 2.3.6 The air quality effects from operation of the Proposed Development have been identified as negligible/ not significant through the selected stack height for the gas turbine. Therefore, no additional mitigation has been identified as necessary for the operational phase of the Proposed Development.
- 2.3.7 Monitoring strategies for the operational plant would be enshrined within the Environmental Permit and are likely to require continuous monitoring of key pollutant emissions from the stack during normal plant running, with annual reporting of results to the EA and annual independent validation of the monitoring results. Sampling and analysis of exhaust emissions would be carried out to appropriate standards (e.g. ISO, international or national standards). The velocity and thermal buoyancy of the warm gas would allow the flue gases to rise before becoming dispersed.
- 2.3.8 The fuel to be used in the OCGT Power Station is natural gas. The gas would be received at a new gas receiving station located on the Site where it is depressurised before being used in the OCGT Power Station. No emissions of natural gas are expected to occur from the gas receiving station. Likewise, the OCGT Power Station would combust the gas so that emissions of unburnt gas would not occur during normal plant operation.



2.3.9 Therefore, the assessment has concluded that no fume or gases which can cause significant impact would arise from the Proposed Development.

Dust, Steam, Smells or other Effluvia

2.3.10 Paragraph 1, Section 79(1) of the EPA states:

"any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance" (sub-paragraph d).

- 2.3.11 The operation of the Proposed Development in accordance with the IED and Environmental Permit, through the activities of the operation and maintenance teams, would minimise the potential for statutory nuisance from atmospheric emissions. The OCGT Power Station is not expected to give rise to dust or odour emissions during operation as natural gas fuel does not generate dust during combustion and also because there is not envisaged to be any loss or release of unburned gas during normal operation. No secondary abatement is required for the control of emissions to air and there is no ammonia storage or emission arising from such secondary abatement.
- 2.3.12 There is the potential for dust generation during earthworks and construction activities. However, the dust generated from construction is predicted to have minor or negligible effects as emissions would be controlled in accordance with industry best practice. The control of dust emissions during construction and application of appropriate mitigation measures would be undertaken through the proposed CEMP. Additionally, the Considerate Constructors Scheme (CCS) would be adopted to assist in reducing pollution and nuisance from the Proposed Development. In addition, the closest sensitive receptor is further from the Site than the screening distance which the Institute of Air Quality Management considers could be affected by construction dust.
- 2.3.13 The impacts from waste generated from the Proposed Development are considered to be negligible, as minimal waste arisings are expected during construction or operation. A Site Waste Management Plan (SWMP) would be implemented by the contractor to reduce, reuse and recycle construction waste where feasible (a Framework SWMP is provided within the Framework CEMP (Appendix 4A ES Volume III, Application Document Ref. 6.4)). Good practice waste management procedures would also minimise the risk of adverse effects on human or ecological receptors from the waste storage, transfer or disposal.
- 2.3.14 During plant operation, cooling is undertaken through a closed loop cooling system and fin fan cooler arrangement. These fans are external to any structure and use air as the cooling medium. A small amount of water is retained in the closed loop system with top up periodically required; there is no steam cycle installed on the OCGT Power Station and therefore no need for large volumes of cooling water to be abstracted from or returned to the river and no visible plume arises from the cooling system.
- 2.3.15 Therefore, the assessment has concluded that no significant emissions of dust, steam, smell or other effluvia would arise from the Proposed Development.

Accumulations and Deposits

2.3.16 Section 79(1) of the EPA states:



"any accumulation or deposit which is prejudicial to health or a nuisance" (subparagraph e).

- 2.3.17 The volumes of waste generated from the Proposed Development are expected to be very small. While some ground clearance and levelling works would be required, it is not envisaged that large volumes of spoil or surplus materials would be generated requiring off-site treatment or disposal. During construction the CEMP and SWMP would be implemented by the contractor to control dust emissions and to reduce, re-use and recycle construction waste where feasible.
- 2.3.18 Waste arisings during plant operation would be minor, as there is no ash or by-product formation from the combustion of natural gas fuel. Good practice waste management procedures during operation would also minimise the risk of adverse effects on human or ecological receptors from the storage, transfer or disposal of waste.
- 2.3.19 No accumulation or deposit is expected from the Proposed Development.

Animals and Insects

2.3.20 Paragraph 1, Section 79(1) of the EPA states:

"any animal kept in such a place or manner as to be prejudicial to health or a nuisance" (sub-paragraph f).

- 2.3.21 No animals would be kept at the Proposed Development.
- 2.3.22 Paragraph 1, Section 79(1) of the EPA states:

"any insects emanating from relevant industrial, trade or business premises and being prejudicial to health or a nuisance" (sub-paragraph fa).

2.3.23 Due to the nature of the process, no insects are expected to emanate from the Proposed Development or be attracted to it.

Artificial Light

2.3.24 Paragraph 1, Section 79(1) of the EPA states:

"artificial light emitted from premises so as to be prejudicial to health or a nuisance" (sub-paragraph fb).

- 2.3.25 Artificial lighting would be required during construction and operation of the Proposed Development, for safety and security purposes. However, good practice methods and design measures, including directional lighting (directed downwards to minimise light spill), would be employed to minimise off-site lighting effects and minimise light spill from the Site.
- 2.3.26 Construction lighting would be mitigated by measures outlined in the CEMP.
- 2.3.27 Operational lighting would be in accordance with the Indicative Lighting Strategy (Application Document Ref. 5.6). The Indicative Lighting Strategy specifies the values and levels of lighting that would be applied through detailed design and a Requirement would



be imposed on the DCO (refer to the draft DCO (Application Document Ref. 2.1) to control external lighting.

2.3.28 Due to the absence of nearby sensitive receptors and the restrictions placed on lighting, it is not likely that the lighting effects resulting from the Proposed Development would have the potential to cause nuisance.

Noise

2.3.29 Paragraph 1, Section 79(1) of the EPA:

"noise emitted from premises so as to be prejudicial to health or a nuisance" (subparagraph g); and

"noise that is prejudicial to health or a nuisance and is emitted from or caused by a vehicle, machinery or equipment in a street" (sub-paragraph ga).

- 2.3.30 The Proposed Development has the potential to generate noise at levels that may cause nuisance during both construction and operational phases both directly and as a result of an increase in traffic.
- 2.3.31 The potential for noise effects have been assessed as negligible or minor (not significant) for both construction and operation (refer to Chapter 8 ES Volume I, Application Document Ref: 6.2). Partially this is due to the distance between the Site and the nearest noise sensitive receptor but also due to the existing sound environment. The Site is located in an industrial area in close proximity to the Existing VPI CHP Plant and the Lindsey Oil Refinery (TLOR) and the Humber Refinery. The addition of the Proposed Development to this existing sound environment is not considered to represent an additional discernible noise source that could cause a nuisance.
- 2.3.32 Increases in traffic as a result of both the construction and operational phases of the Proposed Development are also considered to be negligible (refer to Chapter 7: Traffic and Transport ES Volume I, Application Document Ref: 6.2). Accordingly the noise resulting from the traffic increases are also assessed as negligible.
- 2.3.33 However, the Proposed Development will apply best practice during the construction phase to minimise the risk of noise nuisance (both directly and as a result of traffic movements) through application of the measures identified in the CEMP. Noise emissions of the operational power station will be regulated through the Environmental Permit.
- 2.3.34 It is not considered that noise emissions from the Proposed Development would have the potential to cause nuisance.

Other Matters

2.3.35 Paragraph 1, Section 79(1) of the EPA states:

"any other matter declared by any enactment to be statutory nuisance" (subparagraph h)

2.3.36 No other matters are considered to be a potential statutory nuisance associated with the construction and operation of the Proposed Development.



3.0 PROPOSED MITIGATION MEASURES

3.1 Potentially Significant impacts

3.1.1 As no matters have been assessed as potentially being significant, no additional mitigation is necessary or proposed.



4.0 CONCLUSION

- 4.1.1 This Statement identified the matters set out in Section 79(1) of the EPA in respect of statutory nuisance and considers whether the Proposed Development could cause a statutory nuisance.
- 4.1.2 No matters addressed by the EPA have been assessed as potentially being significant for the Proposed Development, therefore no mitigation is necessary or proposed.
- 4.1.3 Other potential nuisance aspects have been considered and through embedded mitigation no statutory nuisance effects are considered likely to occur.
- 4.1.4 The operation of the Proposed Development will be regulated by the Environment Agency through an Environmental Permit.



5.0 **REFERENCES**

Best Available Techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for Large Combustion Plants, European IPPC Bureau, July 2017