



# Notice of variation and consolidation with introductory note

## The Environmental Permitting (England & Wales) Regulations 2016

---

Interconnector (UK) Limited

Interconnector Bacton Terminal  
Paston Road  
Bacton  
Norfolk  
NR12 0JD

### **Variation application number**

EPR/GP3538SH/V005

### **Permit number**

EPR/GP3538SH

# Interconnector Bacton Terminal

## Permit number EPR/GP3538SH

### Introductory note

#### **This introductory note does not form a part of the notice.**

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 2 of the notice comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

Article 21(3) of the Industrial Emissions Directive (IED) requires the Environment Agency to review conditions in permits that it has issued and to ensure that the permit delivers compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions. We have reviewed the permit for this installation against the revised BAT Conclusions for the large combustion plant sector published on 17<sup>th</sup> August 2017. Only activities covered by this BAT Reference Document have been reviewed and assessed.

This variation makes the below changes following the review under Article 21(3) of the IED and the consolidation of the Environmental Permitting Regulations that came into force on the 4 January 2017:

- Revised emission limits and monitoring requirements for emissions to air applicable from 17 August 2021 in table S3.1a; and
- Inclusion of process monitoring for energy efficiency in table S3.3.

The rest of the installation is unchanged and continues to be operated as follows:

The Interconnector Bacton Terminal is a gas terminal which can either export or import natural gas between the National Transmission System (NTS) operated by National Grid Transco and the continental gas network.

It falls under the following IED Schedule 1 listed activity description:

**Section 1.1 Part A(1)(a)** – Burning any fuel in an appliance with a rated thermal input of 50 or more megawatts.

Gas flows under high pressure through a subsea pipeline which runs between Bacton and Zeebrugge in Belgium. The installation operates in export mode (termed ‘forward flow’) or import mode (termed ‘reverse flow’) depending on the demand for gas in both locations.

In forward flow gas is sent through the sea-line using up to four compressors, each driven by a gas turbine rated 75 MWth each (LCP193, LCP194, LCP195 and LCP196).

In reverse flow gas arrives at the terminal from the sea-line and is heated and pressure reduced before being fed to the NTS. The gas is heated using a hot water system heated by four gas fired boilers.

Releases to air are primarily combustion gases from the gas turbines and boilers, natural gas is occasionally vented during maintenance activities or emergency shutdowns via a dedicated vent stack.

There are no process water releases to the environment from the installation. Surface water passes through a separator system and is discharged to a local watercourse and then to the North Sea. A separately consented package sewage treatment plant (not part of the installation) on the site discharges to the same watercourse.

The installation is located on the North Norfolk Coast, approximately 500m inland and 500m from the village of Paston. There is a SSSI and SAC within 1km of the installation.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application received	Duly made 13/05/2005	Application for four LCP gas turbines and four <50MWth boilers for gas compression and gas expansion.
Permit determined EPR/GP3538SH (PAS Billing ref. GP3538SH)	30/09/2005	Permit issued to Interconnector (UK) Limited.
Application EPR/GP3538SH/V002	03/07/2008	Application to amend emission limit values and limit operation at very low load.
Variation determined	28/10/2008	Variation issued.
Regulation 60 Notice sent to the Operator	31/10/2014	Issue of a Notice under Regulation 60(1) of the EPR. Environment Agency Initiated review and variation to vary the permit under IED to implement the special provisions for LCP under Chapter III, introducing new Emission Limit Values (ELVs) applicable to LCP, referred to in Article 30(2) and set out in Annex V. The permit is also updated to modern conditions.
Regulation 60 Notice response	24/03/2015	Response received from the Operator.
Additional information received	19/05/2015	Response to request for further information (RFI) dated 15/05/2015 and 05/11/2015.
Variation determined EPR/GP3538SH/V003 (PAS Billing ref: SP3938AC)	18/12/2015	Varied and consolidated permit issued in modern condition format. Variation effective from 01/01/2016.
Notified of change of company registered office address	28/02/2017	Registered office address changed to 10 Furnival Street, London, EC4A 1AB.
Variation issued EPR/GP3538SH/V004	21/03/2017	Varied permit issued to Interconnector (UK) Limited.
Regulation 61 Notice sent to the Operator	01/05/2018	Issue of a Notice under Regulation 61(1) of the EPR. Environment Agency initiated review and variation to vary the permit under IED to implement Chapter II following the publication of the revised Best Available Techniques (BAT) Reference Document for large combustion plant.
Regulation 61 Notice response	18/10/2018	Response received from the Operator.
Additional information received	17/03/2020	Additional information on compliance with BAT conclusions 2, 3, 4, 6, 12, 13, 14, 17, 40, 42 and 44.
Additional information received	08/04/2020	Additional information on compliance with BAT conclusions 3, 4, 6, 17 and IED emission limits.
Variation determined EPR/GP3538SH/V005 (Billing ref: MP3806BJ)	18/06/2020	Varied and consolidated permit issued. Effective from 18/06/2020

<b>Other permits relating to this installation</b>		
<b>Operator</b>	<b>Permit number</b>	<b>Date of issue</b>
Interconnector (UK) Ltd (Greenhouse Gas Emissions Permit)	GB-EA-ETC02-0388	12/03/2003
Interconnector (UK) Ltd (Water discharge permit, formerly Water Resources Act 1991 discharge consent)	PRENF/13668	15/06/2001
Interconnector (UK) Ltd (Permit for activities listed in Schedule 23 of the Environmental Permitting Regulations)	EPR/QB3435DW	10/09/2012

End of introductory note

# The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

## Permit number

**EPR/GP3538SH**

## Issued to

**Interconnector (UK) Limited** (“the operator”)

whose registered office is

**10 Furnival Street  
London  
EC4A 1AB**

company registration number **02989838**

to operate a regulated facility at

**Interconnector Bacton Terminal  
Paston Road  
Bacton  
Norfolk  
NR12 0JD**

to the extent set out in the schedules.

The notice shall take effect from 18/06/2020

<b>Name</b>	<b>Date</b>
<b>Simon Hunt</b>	<b>18/06/2020</b>

Authorised on behalf of the Environment Agency

## **Schedule 1**

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation.

## **Schedule 2 – consolidated permit**

Consolidated permit issued as a separate document.

# Permit

## The Environmental Permitting (England and Wales) Regulations 2016

### Permit number

**EPR/GP3538SH**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/GP3538SH/V005 authorising,

**Interconnector (UK) Limited** (“the operator”),

whose registered office is

**10 Furnival Street  
London  
EC4A 1AB**

company registration number **02989838**

to operate a regulated facility at

**Interconnector Bacton Terminal  
Paston Road  
Bacton  
Norfolk  
NR12 0JD**

to the extent authorised by and subject to the conditions of this permit.

<b>Name</b>	<b>Date</b>
<b>Simon Hunt</b>	<b>18/06/2020</b>

Authorised on behalf of the Environment Agency

# Conditions

## 1 Management

### 1.1 General management

1.1.1 The operator shall manage and operate the activities:

- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
- (b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

### 1.2 Energy efficiency

1.2.1 The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
- (b) take appropriate measures to ensure the efficiency of energy generation at the permitted installation is maximised;
- (c) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (d) take any further appropriate measures identified by a review.

### 1.3 Efficient use of raw materials

1.3.1 The operator shall:

- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
- (b) maintain records of raw materials and water used in the activities;
- (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
- (d) take any further appropriate measures identified by a review.

### 1.4 Avoidance, recovery and disposal of wastes produced by the activities

1.4.1 The operator shall take appropriate measures to ensure that:

- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities;
- (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
- (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.



- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

## **2 Operations**

### **2.1 Permitted activities**

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

### **2.2 The site**

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

### **2.3 Operating techniques**

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 For the following activities referenced in schedule 1, table S1.1: LCP193, LCP194, LCP195 and LCP 196. The activities shall be operated in accordance with the “Electricity Supply Industry IED Compliance Protocol for Utility Boilers and Gas Turbines” dated December 2015 or any later version unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan , and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.4 The total accumulated running time in BC mode for each of the gas turbines shall not exceed 3% of the total running time for each of the respective LCP.
- 2.3.5 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.6 For the following activities referenced in schedule 1, table S1.1: LCP193, LCP194, LCP195 and LCP 196. The end of the start up period and the start of the shutdown period shall conform to the specifications set out in Schedule 1, tables S1.2 and S1.4.
- 2.3.7 For the following activities referenced in schedule 1, table S1.1: LCP193, LCP194, LCP195 and LCP 196. The effective Dry Low NOx threshold shall conform to the specifications set out in Schedule 1, tables S1.2 and S1.5.
- 2.3.8 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.

- 2.3.9 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

## **2.4 Improvement programme**

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

## **3 Emissions and monitoring**

### **3.1 Emissions to water, air or land**

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.1a and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

### **3.2 Emissions of substances not controlled by emission limits**

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

### **3.3 Odour**

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;

- (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

### **3.4 Noise and vibration**

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
  - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

### **3.5 Monitoring**

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
  - (a) point source emissions specified in tables S3.1, S3.1a and S3.2; and
  - (b) process monitoring specified in table S3.3.
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continuous), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.1a and S3.2 unless otherwise agreed in writing by the Environment Agency.

### **3.6 Monitoring for Large Combustion Plant**

- 3.6.1 All monitoring required by this permit shall be carried out in accordance with the provisions of Annex V of the Industrial Emissions Directive and the Large Combustion Plant Best Available Techniques Conclusions.
- 3.6.2 If the monitoring results for more than 10 days a year are invalidated within the meaning set out in condition 3.6.7, the operator shall:
  - (a) within 28 days of becoming aware of this fact, review the causes of the invalidations and submit to the Environment Agency for approval, proposals for measures to improve the reliability of the continuous measurement systems, including a timetable for the implementation of those measures; and
  - (b) implement the approved proposals.

- 3.6.3 Continuous measurement systems on emission points from the LCP shall be subject to quality control by means of parallel measurements with reference methods at least once every calendar year.
- 3.6.4 Unless otherwise agreed in writing by the Environment Agency in accordance with condition 3.6.5 below, the operator shall carry out the methods, including the reference measurement methods, to use and calibrate continuous measurement systems in accordance with the appropriate CEN standards.
- 3.6.5 If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall be used, as agreed in writing with the Environment Agency.
- 3.6.6 Where required by a condition of this permit to check the measurement equipment, the operator shall submit a report to the Environment Agency in writing, within 28 days of the completion of the check.
- 3.6.7 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3, table(s) S3.1 and S3.1a; the Continuous Emission Monitors shall be used such that:
- (a) for the continuous measurement systems fitted to the LCP release points defined in table(s) S3.1 and S3.1a the validated hourly, monthly, yearly and daily averages shall be determined from the measured valid hourly average values after having subtracted the value of the 95% confidence interval;
  - (b) the 95% confidence interval for nitrogen oxides and sulphur dioxide of a single measured result shall be taken to be 20%;
  - (c) the 95% confidence interval for dust releases of a single measured result shall be taken to be 30%;
  - (d) the 95% confidence interval for carbon monoxide releases of a single measured result shall be taken to be 10%;
  - (e) an invalid hourly average means an hourly average period invalidated due to malfunction of, or maintenance work being carried out on, the continuous measurement system. However, to allow some discretion for zero and span gas checking, or cleaning (by flushing), an hourly average period will count as valid as long as data has been accumulated for at least two thirds of the period. Such discretionary periods are not to exceed more than 5 in any one 24-hour period unless agreed in writing. Where plant may be operating for less than the 24-hour period, such discretionary periods are not to exceed more than one quarter of the overall valid hourly average periods unless agreed in writing; and
  - (f) any day, in which more than three hourly average values are invalid shall be invalidated.

## **4 Information**

### **4.1 Records**

- 4.1.1 All records required to be made by this permit shall:
- (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
    - (i) off-site environmental effects; and

(ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

## 4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
- (b) the resource efficiency metrics set out in schedule 4 table S4.2;
- (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

## 4.3 Notifications

4.3.1 In the event:

- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
  - (i) inform the Environment Agency,
  - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
  - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) of a breach of any permit condition the operator must immediately—
  - (i) inform the Environment Agency, and
  - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

- 4.3.2 Any information provided under condition 4.3.1 (a)(i) or 4.3.1 (b)(i) where the information relates to the breach of a condition specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and
  - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
- Where the operator is a corporate body other than a registered company:
- (c) any change in the operator's name or address; and
  - (d) any steps taken with a view to the dissolution of the operator.
- In any other case:
- (e) the death of any of the named operators (where the operator consists of more than one named individual);
  - (f) any change in the operator's name(s) or address(es); and
  - (g) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
- (a) the Environment Agency shall be notified at least 14 days before making the change; and
  - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
- (a) a decision by the Secretary of State not to re-certify the agreement;
  - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
  - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.
- 4.3.8 The operator shall inform the Environment Agency in writing of the closure of any LCP within 28 days of the date of closure.

## **4.4 Interpretation**

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

# Schedule 1 – Operations

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity</b>	<b>Limits of specified activity</b>
AR1	Section 1.1 A(1) (a): Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more.	LCP193: 75 MWth natural gas fired gas turbine for provision of mechanical energy to drive the gas compressors.	From receipt of natural gas to release of combustion products.
		LCP194: 75 MWth natural gas fired gas turbine for provision of mechanical energy to drive the gas compressors.	
		LCP195: 75 MWth natural gas fired gas turbine for provision of mechanical energy to drive the gas compressors.	
		LCP196: 75 MWth natural gas fired gas turbine for provision of mechanical energy to drive the gas compressors.	
		4 x 11 MWth gas fired boilers to pre-heat gas transported in reverse flow direction before pressure reduction.	
		1 x 0.7 MWth gas fired fuel gas heater	
		1 x 1.4 MWth standby diesel generator	From receipt of diesel oil to release of combustion products.
	<b>Directly Associated Activity</b>		
AR2	Directly associated activities	Utility systems and natural gas venting	Air coolers, solid and liquid waste storage, vent stack

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application	The response to questions 2.1 and 2.2 given in sections 2.1 and 2.2 of the application.	13/05/2005
Response to regulation 60(1) Notice – request for information dated 31/10/2014	Compliance route(s) and operating techniques identified in response to questions 1 (LCP details), 2( compliance route), 4 (configuration of LCP's), 5 (net rated thermal input), 6 (start up and shut down) and 11 (monitoring).	24/03/2015
Receipt of additional information to the regulation 60(1) Notice. requested by letter dated 15/05/2015	Compliance route(s) and operating techniques identified in response to questions 5 (net rated thermal input), 6(start up and shut down) and 11 (monitoring).	Received 19/05/2015 and 05/11/2015
Response to Improvement Condition 8	Response to Improvement Condition 8, Ref 934586-RPT-1 CO ELV justification.	15/04/2016
Response to regulation 61(1) Notice – request for information dated 01/05/2018 EPR/GP3538SH/V005	Compliance and operating techniques identified in response to the BAT Conclusions for large combustion plant published on 17 <sup>th</sup> August 2017.	18/10/2018
Additional information in response to regulation 61(1) Notice EPR/GP3538SH/V005	Letter dated 08/04/2020 including additional information on compliance and operating techniques identified in response to BAT conclusions 2, 3, 4, 6, 12, 13, 14, 17, 40, 42 and 44, compliance with IED emission limits and continuous monitoring through Predictive Emissions Monitoring System (PEMS).	08/04/2020

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC1	The operator shall submit the methods that are proposed to be used to calculate the annual releases of oxides of nitrogen, sulphur dioxide and dust for the purpose of completing form A6 of this permit.	completed
IC2	The operator shall carry out quarterly emission monitoring for the determinands of carbon monoxide and oxides of nitrogen from release points A7-A to A7-D for 12 months starting 1 October 2005 and shall report the results on a quarterly basis to the Agency. The monitoring shall be carried out on each boiler operating at the time of the monitoring and at the current load of each boiler. Each boiler shall be monitored at least once in the 12 month period.	completed
IC3	The operator shall use the data obtained from improvement programme item 2 to validate the conclusions made in the application concerning the environmental impact of operation the boilers. A report of the validation shall be submitted to the Agency.	completed
IC4	The operator shall compare the data obtained from improvement programme item 2 with data from the Continuously Calculating Emission Monitors (CCEM) and identify any improvements required of the CCEM system. A report of the comparison and improvements shall be submitted to the Agency.	completed



<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC5	The operator shall develop the complaints system for the installation such that complaints for all potential environmental reasons are included.	completed
IC6	The operator shall update the drainage drawings for the installation to "as built" status following the completion of the enhanced reverse flow facility.	completed
IC7	'For LPCD LCP 430, 431, 432 and 433 (now LCP 193, 194, 195 and 196 under IED). Annual emissions of dust, sulphur dioxide and oxides of nitrogen including energy usage for the year 01/01/2015 to 31/12/2015 shall be submitted to the Environment Agency using form AAE1 via the NERP Registry. If the LPCD LCP was a NERP plant the final quarter submissions shall be provided on the RTA 1 form to the NERP Registry.'	completed
IC8	The operator shall provide a report in writing to the Environment Agency. The report shall contain a detailed justification for the carbon monoxide emission limit value increase to 110mg/m <sup>3</sup> between 70% load and baseload during the daily reference period. This applies to emission points A1-A to A1-D.	completed

<b>Table S1.4 Start-up and Shut-down thresholds</b>		
<b>Emission Point and Unit Reference</b>	<b>Discrete processes-when two of the criteria listed below for the LCP have been met.</b>	<b>Discrete processes-when two of the criteria listed below for the LCP have been met.</b>
A1-A (LCP193)	Burner switched into AB mode	Burner switched out of AB mode
A1-B (LCP194)	Power Turbine speed >4270rpm	Power turbine speed <4270rpm
A1-C (LCP195)	Fuel flow >3 GJ/sec (failsafe)	Fuel flow <3 GJ/sec
A1-D (LCP196)		

<b>Table S1.5 Dry Low NOx effective definition</b>	
<b>Emission Point and Unit Reference</b>	<b>Dry Low NOx effective definition Load in MW and as percent of rated power output (%)</b>
A1-A (LCP193) A1-B (LCP194) A1-C (LCP195) A1-D (LCP196)	Load: 20.91 MW; 75% of base load.

## Schedule 2 – Raw materials and fuels

<b>Table S2.1 Raw materials and fuels</b>	
<b>Raw materials and fuel description</b>	<b>Specification</b>
Gaseous fuel	Maximum 15ppmv sulphur content
Gas oil	Not exceeding 0.1% w/w sulphur content

## Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air - emission limits and monitoring requirements shall apply until 16 August 2021						
Emission point ref. & location <sup>3</sup>	Source	Parameter	Limit (including unit)-these limits do not apply during start up or shut down.	Reference period	Monitoring frequency	Monitoring standard or method
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	82.5 mg/m <sup>3</sup> 70% to base load <sup>1</sup>  90 mg/m <sup>3</sup> MSUL/MSDL to base load <sup>2</sup>	-	At least every 6 months	BS EN 14792
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Carbon Monoxide	110 mg/m <sup>3</sup> 70% to base load <sup>1</sup>  80 mg/m <sup>3</sup> MSUL/MSDL to base load <sup>2</sup>	-	At least every 6 months	BS EN 15058
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Sulphur dioxide	-	-	At least every 6 months	Concentration by calculation, as agreed in writing with the Environment Agency
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Stack gas temperature	-	-	At least every 6 months	Traceable to national standards

**Table S3.1 Point source emissions to air - emission limits and monitoring requirements shall apply until 16 August 2021**

Emission point ref. & location <sup>3</sup>	Source	Parameter	Limit (including unit)-these limits do not apply during start up or shut down.	Reference period	Monitoring frequency	Monitoring standard or method
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Oxygen	-	-	At least every 6 months	BS EN 14789
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Water Vapour	-	-	At least every 6 months as appropriate to reference	BS EN 14790
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	As required by the Method Implementation Document for BS EN 15259	-	-	Pre-operation and when there is a significant operational change	BS EN 15259
A7-A-D	Boilers A-D Exhaust	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	140 mg/m <sup>3</sup>	-	At least every 6 months	BS EN 14792
A7-A-D	Boilers A-D Exhaust	Carbon Monoxide	60 mg/m <sup>3</sup>	-	At least every 6 months	BS EN 15058

Note 1: This ELV applies where the load is >70% for the duration of the sampling period.

Note 2: This ELV applies where the load varies between MSUL/MSDL and base load during the sampling period. MSUL and MSDL are defined in Table S1.4.

Note 3: Location as shown in EPR/GP3538SH/A001 application document titled 'Location of release points to the environment' doc. No. 710101-14-EV-MI-0002, dated 04/05/2005.

**Table S3.1a Point source emissions to air - emission limits and monitoring requirements shall apply from 17 August 2021**

Emission point ref. & location <sup>8</sup>	Source	Parameter	Limit (including unit)-these limits do not apply during start up or shut down.	Reference period	Monitoring frequency	Monitoring standard or method
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	60 mg/m <sup>3</sup> DLN effective to base load <sup>1</sup>	Yearly average	Continuous	Predictive Emissions Monitoring as described in documents referred in Table S1.2 or as otherwise agreed in writing with the Environment Agency
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	75 mg/m <sup>3</sup> 70% to base load <sup>3</sup>	Monthly mean of validated hourly averages	Continuous	Predictive Emissions Monitoring as described in documents referred in Table S1.2 or as otherwise agreed in writing with the Environment Agency

<b>Table S3.1a Point source emissions to air - emission limits and monitoring requirements shall apply from 17 August 2021</b>						
<b>Emission point ref. &amp; location <sup>8</sup></b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit)-these limits do not apply during start up or shut down.</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	65 mg/m <sup>3</sup> DLN effective to base load <sup>1, 6</sup>  82.5 mg/m <sup>3</sup> 70% to base load <sup>3</sup>  90 mg/m <sup>3</sup> MSUL/MSDL to base load <sup>2</sup>	Daily mean of validated hourly averages	Continuous	Predictive Emissions Monitoring as described in documents referred in Table S1.2 or as otherwise agreed in writing with the Environment Agency
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	65 mg/m <sup>3</sup> DLN effective to base load <sup>1, 7</sup>  82.5 mg/m <sup>3</sup> 70% to base load <sup>5</sup>  90 mg/m <sup>3</sup> MSUL/MSDL to base load <sup>4</sup>	Average over the sampling period	At least every 6 months	BS EN 14792
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	150 mg/m <sup>3</sup> 70% to base load <sup>3</sup>	95% of validated hourly averages within a calendar year	Continuous	Predictive Emissions Monitoring as described in documents referred in Table S1.2 or as otherwise agreed in writing with the Environment Agency

<b>Table S3.1a Point source emissions to air - emission limits and monitoring requirements shall apply from 17 August 2021</b>						
<b>Emission point ref. &amp; location <sup>8</sup></b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit)-these limits do not apply during start up or shut down.</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Carbon Monoxide	40 mg/m <sup>3</sup> DLN effective to base load <sup>1</sup>	Yearly average	Continuous	Predictive Emissions Monitoring as described in documents referred in Table S1.2 or as otherwise agreed in writing with the Environment Agency
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Carbon Monoxide	100 mg/m <sup>3</sup> 70% to base load <sup>1</sup>	Monthly mean of validated hourly averages	Continuous	Predictive Emissions Monitoring as described in documents referred in Table S1.2 or as otherwise agreed in writing with the Environment Agency
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Carbon Monoxide	110 mg/m <sup>3</sup> 70% to base load <sup>1</sup>  80 mg/m <sup>3</sup> MSUL/MSDL to base load <sup>2</sup>	Daily mean of validated hourly averages	Continuous	Predictive Emissions Monitoring as described in documents referred in Table S1.2 or as otherwise agreed in writing with the Environment Agency

<b>Table S3.1a Point source emissions to air - emission limits and monitoring requirements shall apply from 17 August 2021</b>						
<b>Emission point ref. &amp; location <sup>8</sup></b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit)-these limits do not apply during start up or shut down.</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Carbon Monoxide	200 mg/m <sup>3</sup> 70% to base load <sup>3</sup>	95% of validated hourly averages within a calendar year	Continuous	Predictive Emissions Monitoring as described in documents referred in Table S1.2 or as otherwise agreed in writing with the Environment Agency
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Carbon Monoxide	110 mg/m <sup>3</sup> 70% to base load <sup>5</sup>  80 mg/m <sup>3</sup> MSUL/MSDL to base load <sup>4</sup>	Average over the sampling period	At least every 6 months	BS EN 15058
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Sulphur dioxide	-	-	At least every 6 months	Concentration by calculation, as agreed in writing with the Environment Agency



<b>Table S3.1a Point source emissions to air - emission limits and monitoring requirements shall apply from 17 August 2021</b>						
<b>Emission point ref. &amp; location <sup>8</sup></b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit)-these limits do not apply during start up or shut down.</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Flue gas flow	-	-	Continuous	Determination by calculation from fuel gas flow Calculation method described in documents referred in Table S1.2 or as otherwise agreed in writing with the Environment Agency
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Stack gas temperature	-	-	Continuous as appropriate to reference	Traceable to national standards
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Oxygen	-	-	At least every 6 months	BS EN 14789
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	Water Vapour	-	-	At least every 6 months as appropriate to reference	BS EN 14790

<b>Table S3.1a Point source emissions to air - emission limits and monitoring requirements shall apply from 17 August 2021</b>						
<b>Emission point ref. &amp; location <sup>8</sup></b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit)-these limits do not apply during start up or shut down.</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A1-A to A1-D	Gas turbines fired on natural gas (LCP193, LCP194, LCP195, LCP196)	As required by the Method Implementation Document for BS EN 15259	-	-	Pre-operation and when there is a significant operational change	BS EN 15259
A7-A-D	Boilers A-D Exhaust	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	140mg/m <sup>3</sup>	Average over the sampling period	At least every 6 months	BS EN 14792
A7-A-D	Boilers A-D Exhaust	Carbon Monoxide	60mg/m <sup>3</sup>	Average over the sampling period	At least every 6 months	BS EN 15058
<p>Note 1: DLN effective points are defined in Table S1.5.</p> <p>Note 2: This ELV applies when the load varies between MSUL/MSDL and base load during the reference period. MSUL and MSDL are defined in Table S1.4.</p> <p>Note 3: This ELV applies when the load varies between 70% load and base load during the reference period.</p> <p>Note 4: This ELV applies when the load varies between MSUL/MSDL and base load during the sampling period. MSUL and MSDL are defined in Table S1.4.</p> <p>Note 5: This ELV applies when the load varies between 70% load and base load during the sampling period.</p> <p>Note 6: This ELV applies when the load varies between DLN effective point and base load during the reference period.</p> <p>Note 7: This ELV applies when the load varies between DLN effective point and base load during the sampling period.</p> <p>Note 8: Location as shown in EPR/GP3538SH/A001 application document titled 'Location of release points to the environment' doc. No. 710101-14-EV-MI-0002, dated 04/05/2005.</p>						

<b>Table S3.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (incl. unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
W1 on site plan in schedule 7	Chemical Oxygen Demand	Effluent Treatment plant	50 mg/l	Monthly during release	Monthly	ISO 15705
W1 on site plan in schedule 7	pH	Process water	6-9	Instantaneous	Daily	BS6068-2.50
W1 on site plan in schedule 7	Oil or grease	Surface water	No visible emission	Instantaneous	Daily	-

<b>Table S3.3 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
LCP193, LCP194, LCP195, LCP196	Net mechanical energy efficiency	After each modification that could significantly affect these parameters	EN Standards or equivalent	-

## Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Oxides of nitrogen	A1-A, A1-B2, A1-C, A1-D	Every 3 months	1 January, 1 April, 1 July, 1 October
	A1-A, A1-B2, A1-C, A1-D	Every 6 months	1 January, 1 July
	A1-A, A1-B2, A1-C, A1-D	Yearly	1 January
	A7-A, A7-B, A7-C, A7-D	Every 6 months	1 January, 1 July
Carbon Monoxide	A1-A, A1-B2, A1-C, A1-D	Every 3 months	1 January, 1 April, 1 July, 1 October
	A1-A, A1-B2, A1-C, A1-D	Every 6 months	1 January, 1 July
	A1-A, A1-B2, A1-C, A1-D	Yearly	1 January
	A7-A, A7-B, A7-C, A7-D	Every 6 months	1 January, 1 July
Sulphur dioxide	A1-A, A1-B, A1-C, A1-D A7-A, A7-B, A7-C, A7-D	Every 6 months	1 January, 1 July
Emissions to Water Parameters as required by condition 3.5.1	W1	Every 6 months	1 January, 1 July

<b>Parameter</b>	<b>Units</b>
Electricity Exported	GW hr
Heat Exported	GW hr
Mechanical Power Provided	GW hr
Fossil Fuel Energy Consumption	GW hr
Non-Fossil Fuel Energy Consumption	GW hr
Annual Operating Hours	hr
Water Abstracted from Fresh Water Source	m <sup>3</sup>
Water Abstracted from Borehole Source	m <sup>3</sup>
Water Abstracted from Estuarine Water Source	m <sup>3</sup>
Water Abstracted from Sea Water Source	m <sup>3</sup>
Water Abstracted from Mains Water Source	m <sup>3</sup>
Gross Total Water Used	m <sup>3</sup>
Net Water Used	m <sup>3</sup>
Hazardous Waste Transferred for Disposal at another installation	t
Hazardous Waste Transferred for Recovery at another installation	t

<b>Table S4.2 Resource Efficiency Metrics</b>	
<b>Parameter</b>	<b>Units</b>
Non-Hazardous Waste Transferred for Disposal at another installation	t
Non-Hazardous Waste Transferred for Recovery at another installation	t
Waste recovered to Quality Protocol Specification and transferred off-site	t
Waste transferred directly off-site for use under an exemption / position statement	t

<b>Table S4.3 Large Combustion Plant Performance parameters for reporting to DEFRA and other Performance parameters</b>		
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
Thermal Input Capacity for each LCP	Annually	MW
Annual Fuel Usage for each LCP	Annually	TJ
Total Emissions to Air of NO <sub>x</sub> for each LCP	Annually	t
Total Emissions to Air of SO <sub>2</sub> for each LCP	Annually	t
Total Emissions to Air of CO for each LCP	Annually	t
Total Emissions to Air of Dust for each LCP	Annually	t
Gas exported (forward flow)	Annually	MSCM
Gas imported (reverse flow)	Annually	MSCM
Operating hours per each LCP	Annually	Hours
Operating hours in BC mode per each LCP	Annually	Hours

<b>Table S4.4 Reporting forms</b>		
<b>Media/ parameter</b>	<b>Reporting format</b>	<b>Agency recipient</b>
Air & Energy	Form IED AR1 – SO <sub>2</sub> , NO <sub>x</sub> and dust mass emission and energy. Form as agreed in writing by the Environment Agency.	National and Area Office
LCP	Form IED HR1 – operating hours. Form as agreed in writing by the Environment Agency.	National and Area Office
Air	Form IED CON 2 – continuous monitoring. Form as agreed in writing by the Environment Agency	Area Office
CEMs	Form IED CEM1 – invalidation Log. Form as agreed in writing by the Environment Agency.	Area Office
Air	Form IED PM1 - discontinuous monitoring and load. Form as agreed in writing by the Environment Agency.	Area Office
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency. Form as agreed in writing by the Environment Agency.	Area Office

<b>Table S4.4 Reporting forms</b>		
<b>Media/ parameter</b>	<b>Reporting format</b>	<b>Agency recipient</b>
Water	Form water 1 or other form as agreed in writing by the Environment Agency	Area Office

# Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

## Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

<b>(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution</b>	
<b>To be notified within 24 hours of detection</b>	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

<b>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

<b>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Measures taken, or intended to be taken, to stop the emission	
Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

<b>(c) Notification requirements for the detection of any significant adverse environmental effect</b>	
<b>To be notified within 24 hours of detection</b>	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

## Part B – to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

<b>Name*</b>	
<b>Post</b>	
<b>Signature</b>	
<b>Date</b>	

\* authorised to sign on behalf of the operator



## Schedule 6 – Interpretation

“accident” means an accident that may result in pollution.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“average over the sampling period” means the average value of three consecutive measurements of at least 30 minutes each or as agreed in writing with the Environment Agency.

“base load” means: (i) as a mode of operation, operating for >4000hrs pa; and (ii) as a load, the maximum load under ISO conditions that can be sustained continuously, i.e. maximum continuous rating.

“BC mode” is the lowest stable operating condition for the operation of the mechanical drive gas turbines below the MSUL/MSDL points, corresponding to the operation of mixing nozzles (burners) banks B and C as described in the application documents.

“calendar monthly mean” means the value across a calendar month of all validated hourly means.

“CEN” means Comité Européen de Normalisation.

“Combustion Technical Guidance Note” means IPPC Sector Guidance Note Combustion Activities, version 2.03 dated 27th July 2005 published by Environment Agency.

“commissioning” means testing of the installation that involves any operation of a Large Combustion Plant referenced in schedule 1, table S1.1 or as agreed with the Environment Agency.

“daily average” means the average over a period of 24 hours of validated hourly averages obtained by continuous measurements.

“disposal” means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“DLN” means dry, low NO<sub>x</sub> burners.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission or background concentration limit.

“emissions to land” includes emissions to groundwater.

“Energy efficiency” means the annual net plant energy efficiency, the value for which is calculated from the operational data collected over the year.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions.

“large combustion plant” or “LCP” is a combustion plant or group of combustion plants discharging waste gases through a common windshield or stack, where the total thermal input is 50 MW or more, based on net calorific value. The calculation of thermal input, excludes individual combustion plants with a rated thermal input below 15MW.

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“MCR” means maximum continuous rating.

“MSDL” means minimum shut-down load as defined in Implementing Decision 2012/249/EU.

“MSUL” means minimum start-up load as defined in Implementing Decision 2012/249/EU.

“Natural gas” means naturally occurring methane with no more than 20% by volume of inert or other constituents.

“ncv” means net calorific value.

“Net mechanical energy efficiency” means the ratio between the mechanical power at load coupling and the thermal power supplied by the fuel.

“operational hours” are whole hours commencing from the first unit ending start up and ending when the last unit commences shut down.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“SI” means site inspector.

“Standby fuel” means alternative liquid fuels that are used in emergency situations when the gas fuel which is normally used, is not available.

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from gas turbine or compression ignition engine combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3kPa and with an oxygen content of 15% dry for liquid and gaseous fuels; and/or
- in relation to emissions from combustion processes comprising a gas turbine with a waste heat boiler, the concentration in dry air at a temperature of 273K, at a pressure of 101.3kPa and with an oxygen content of 15% dry, unless the waste heat boiler is operating alone, in which case, with an oxygen content of 3% dry for liquid and gaseous fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

“year” means calendar year ending 31 December.

“yearly average” means the average over a period of one year of validated hourly averages obtained by continuous measurements.

## Schedule 7 – Site plan

This plan has been removed for reasons of National Security

END OF PERMIT