

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Uniper UK Limited

Taylor's Lane Power Station
Brentfield Road
Willesden
London
NW10 8JP

Variation application number

EPR/EP3333RW/V002

Permit number

EPR/EP3333RW

Taylor's Lane Power Station

Permit number EPR/EP3333RW

Introductory note

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

Under the Environmental Permitting (England & Wales) Regulations 2010 (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 1 of the notice specifies that all the conditions of the permit have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made and contains all conditions relevant to this permit.

The requirements of the Industrial Emissions Directive (IED) 2010/75/EU are given force in England through the Environmental Permitting (England and Wales) Regulations 2010 (the EPR) (as amended).

This Permit, for the operation of large combustion plant (LCP), as defined by articles 28 and 29 of the Industrial Emissions Directive (IED), is varied by the Environment Agency to implement the special provisions for LCP given in the IED, by the 1 January 2016 (Article 82(3)). The IED makes 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.

As well as implementing Chapter III of IED, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issued. It also modernises all conditions to reflect the conditions contained in our current generic permit template.

The Operator has chosen to operate this LCP under the emergency 500 hr compliance route which is unchanged from the previous operating regime.

Taylor's Lane originally had the LCP number LCP170; however Taylor's Lane was identified as comprising 2 LCPs and these have been given new numbers in accordance with the most recent DEFRA LCP reference numbers: LCP390 and LCP391.

LCP390:- a 280MWth OCGT (a GT pair delivering approximately 68MWelec) where each GT vents via a separate flue within a single windshield at emission point A1.

LCP391:- a 280MWth OCGT (a GT pair delivering approximately 64MWelec) where each GT vents via separate flue within a single windshield at emission point A2.

Each GT pair can also fire in half-load or partial load modes. There is no steam or cooling circuit for this OCGT.

The variation also corrects the postcode as indicated on the Reg 60 response.

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

Taylor's Lane Power Station is an open cycle gas turbine (OCGT) power generation plant which was owned and operated by E.ON UK Plc. E.ON UK Plc became a registered company Uniper UK Limited in 2015 and the permit was transferred to this entity. The installation runs on gas oil, has a total thermal input capacity of 560MW and has a maximum generating capacity of 132MW electricity which is exported to a regional electricity company.

The Installation is located at Brentfield Road, Willesden, London. The centre of the site is at National Grid Reference TQ 2090 8440 and the site covers an area of 2.5ha. Located to the north of the site are residential properties and allotments on Gibbons and Bridge Roads. To the east of the site are located a railway track and sidings, with two residential properties located beyond the railway track and sidings. Commercial buildings and a primary school and residential properties are located to the south and the west of the site respectively. The nearest residential properties are located 200 metres from the Installation.

The plant comprises two units, each unit comprising of two sets of Olympus aircraft type jet turbine engines. Exhaust gases are discharged to the atmosphere via two stacks. Each unit has a stack of 61m high and an internal diameter of 5.09m.

The plant can run in full power mode (with both power turbine sets in operation at maximum load), half power mode (with either of the power turbine sets in operation at maximum load), partial power mode (with either of the turbine sets running on either maximum or partial load) or synchronous compensation mode (with the alternator running at full speed connected to the distribution system but not coupled to the power turbines). In the synchronous mode, the units do not produce power but are used to stabilise the Grid. No fuel is used in this mode apart from the initial running up on one power turbine to synchronise the speed. There is no emissions abatement equipment fitted.

There are no discharges to sewer, groundwater and land from the permitted activities of the Installation.

The schedules specify the changes made to the permit.

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

Status log of the permit		
Description	Date	Comments
Application JP3536ST	Duly made 06/03/06	
Additional information received (details of surface water drainage, copy of ISO14001 certification and copy of Emissions Trading Scheme Licence)	11/08/06	Response 07/09/06
Additional Information Received (Revised air quality assessment report)	11/08/06	Response 08/09/06
Additional Information Received (revised site plan)	11/08/06	Response 11/09/06
Permit determined	25/09/06	
Additional Information received	13/02/07	Response 20/02/07
Variation Notice XP3632UR issued	30/11/07	
Application EPR/EP3333RW/T001 (full transfer of permit EPR/JP3536ST)	Duly made 09/07/15	Application to transfer the permit in full to Uniper UK Limited.
Transfer determined EPR/EP3333RW	30/09/15	Full transfer of permit complete.
Regulation 60 Notice sent to the Operator	09/12/14 (corrected version of notice sent on 31/10/14)	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	27/03/15	Response received from the Operator (with some additional information relating to the air emissions report which was provided on request)

Status log of the permit		
Description	Date	Comments
Variation determined EPR/EP3333RW/V002 (PAS Billing ref: GP3538RT)	18/12/15	Varied and consolidated permit issued in modern condition format. Variation effective from 01/01/2016.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

Permit number

EPR/EP3333RW

Issued to

Uniper UK Limited (“the operator”)

whose registered office is

**Westwood Way
Westwood Business Park
Coventry
CV4 8LG**

company registration number 2796628

to operate a regulated facility at

**Taylor's Lane Power Station
Brentfield Road
Willesden
London
NW10 8JP**

to the extent set out in the schedules.

The notice shall take effect from 01/01/2016

Name	Date
J Linton	18/12/2015

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 2010

Permit number

EPR/EP3333RW

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/EP3333RW/V002 authorising,

Uniper UK Limited (“the operator”),

whose registered office is

**Westwood Way
Westwood Business Park
Coventry
CV4 8LG**

company registration number 2796628

to operate an installation at

**Taylor's Lane Power Station
Brentfield Road
Willesden
London
NW10 8JP**

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

Name	Date
J Linton	18/12/2015

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 red 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: LCP390 and LCP391. Without prejudice to condition 2.3.1, the activities shall be operated in accordance with the “Electricity Supply Industry IED Compliance Protocol for Utility Boilers and Gas Turbines” revision 1 dated February 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 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.5 For the following activities referenced in schedule 1, table S1.1: LCP390 and LCP391. 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
- 2.3.6 For the following activities referenced in schedule 1, table S1.1: LCP390 and LCP391. The activities shall not operate for more than 500 hours per year for LCP390 and no more than 500 hours per year for LCP391.
- 2.3.7 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.
- 2.3.8 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 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 and S3.2.
- 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 and S3.2 unless otherwise agreed in writing by the Environment Agency.
- 3.5.5 The generation of electricity by either of the two gas turbine sets shall not exceed 500 hours in any calendar year in full power mode, half power mode or partial power mode. Therefore the turbines shall not be subject to continuous measurement systems of emissions to air consistent with MCERTS requirements specified in condition 3.6.1.

3.6 Monitoring for the purposes of the Industrial Emissions Directive Chapter III

- 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.
- 3.6.2 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.

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.
- (d) where condition 2.3.6 applies the hours of operation in any year;

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), 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.

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

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
A1	Section 1.1 A(1) (a): Burning fuel in an appliance with a rated thermal input of 50 megawatts or more.	LCP390: Combustion of gas oil in gas turbine engines to produce electricity LCP391: Combustion of gas oil in gas turbine engines to produce electricity	From intake of gas oil and air and entry of hot gas into power turbines to release of exhaust gas to air via two chimneys and the generation and export of electricity to the grid under the 500 emergency hours in full, half or partial load modes.
Directly Associated Activity			
A2	Directly Associated Activity	Receipt, storage and delivery system of raw materials (gas oil, cooling oil and lubrication oil)	From receipt of raw materials to dispatch of waste for disposal
A3	Directly Associated Activity	Surface water drainage system - treatment of surface water runoff with water/ oil separators and retention tanks From the collection of surface water run off	From the collection of surface water runoff to discharge of treated surface water run off

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to sections 2.1 and 2.2 in the original application	08/03/06
Response to regulation 60(1) Notice – request for information dated 09/12/14	Compliance route and operating techniques identified in response to questions 2 (LCP compliance route), 4 (LCP configuration), 5 (rated inputs), 6(MSUL/MSDL), 9ii (500 hours) and 11 (monitoring derogations).	Received 26/03/15

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	A written report shall be submitted to the Agency for approval detailing the site closure plan. The plan shall comply with the requirements of section 2.11 of the Agency Guidance IPPC Technical Guidance Note for the Combustion Sector V2.03: Dated 27.07.05.	Completed 27/02/07
IC2	The Operator shall carry out a review of all pollution prevention measures (hard-standing, sub-surface structures, bunding, kerbing and secondary containment for gas oil and waste storage areas) within the installation. The measures shall include but not limited to the gas oil storage tanks. A written report shall be submitted to the Agency for approval detailing the results of the review and the improvement measures identified for the installation to comply with the requirements of sections 2.2.5 and 2.8 of the IPPC Technical Guidance Note for the Combustion Sector V2.03: Dated 27.07.05. The report shall contain a timetable for the	Completed 10/10/07

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	implementation of the improvement measures identified. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the written report. The improvement measures identified in the report shall be implemented by the operator from the date of approval in writing by the Agency, in accordance with the timescales agreed	
IC3	The Operator shall review and revise the installation's accident management plan, having regard for the requirements set out in Sections 2.2.5 and 2.8 of the Agency Guidance IPPC Technical Guidance Note for the Combustion Sector V2.03: Dated 27.07.05. The review shall include but not be limited to; - Measures for the containment of emergency firewater to minimise any risk of the firewater getting into land, surface water and groundwater through the site - Assessment of the impact of any accidents and measures for the minimisation of such impact. A written report shall be submitted to the Agency for approval detailing the results of the review, the revisions made, the improvement measures identified and a timetable for implementation of the improvement measures. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the written report. The improvement measures identified in the report shall be implemented by the operator from the date of approval in writing by the Agency, in accordance with the timescales agreed.	Completed 28/08/07
IC4	The Operator shall carry out a waste minimisation audit in accordance with section 2.4 of IPPC Technical Guidance Note for the Combustion Sector V2.03: Dated 27.07.05 and submit a written report to the Agency. The report shall contain a timescale for the implementation of any actions identified to address any deficiencies. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The actions to address deficiencies shall be implemented by the operator from the date of approval in writing by the Agency.	Completed 28/08/07
IC5	The operator shall provide a report in writing to the Environment Agency for acceptance which provides the net rated thermal input for LCP390 and LCP391. The net rated thermal input is the 'as built' value unless the plant has been modified significantly resulting in an improvement of the plant efficiency or output that increases the rated thermal input (which typically requires a performance test to demonstrate that guaranteed improvements have been realised). Evidence to support this figure, in order of preference, shall be in the form of:- (a) Performance test results* during contractual guarantee testing or at commissioning (quoting the specified standards or test codes), (b) Performance test results after a significant modification (quoting the specified standards or test codes), (c) Manufacturer's contractual guarantee value, (d) Published reference data, e.g., Gas Turbine World Performance Specifications (published annually);	31/12/16

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	(e) Design data, e.g., nameplate rating of a boiler or design documentation for a burner system; (f) Operational efficiency data as verified and used for heat accountancy purposes, (g) Data provided as part of Due Diligence during acquisition, *Performance test results shall be used if these are available. Clearly the option to carry out operational performance tests would be subject to availability and predictability of emergency hours running.	
IC6	For LCP170 (now LCP390 and LCP391) 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 LCPD LCP was a NERP plant the final quarter submissions shall be provided on the RTA 1 form to the NERP Registry	28/01/16

Table S1.4 Start-up and Shut-down thresholds		
Emission Point and Unit Reference	“Minimum Start Up Load” Load in MW and as percent of rated power output (%)	“Minimum Shut-Down Load” Load in MW and as percent of rated power output (%)
A1: LCP390	Not required for 500 hour emergency plant. Operating hours for generation are recorded from the closure of the generator breaker at synchronising until the generator breaker re-opens at De-Sync (full load within 5 minutes)	
A2: LCP391	Not required for 500 hour emergency plant. Operating hours for generation are recorded from the closure of the generator breaker at synchronising until the generator breaker re-opens at De-Sync. (full load within 5 minutes)	

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Gas oil	Not exceeding 0.1% w/w sulphur content

Schedule 3 – Emissions and monitoring

Emission point ref. & location	Source	Parameter	Limit	Reference Period	Monitoring frequency	Monitoring standard or method
A1 [Point A1 on site plan in schedule 7]	Turbines fired on gas oil LCP390	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	-	-	Concentration by calculation, every 4380 operational hours or 2 years, whichever is sooner.	Agreed in writing with the Environment Agency
		Carbon Monoxide (CO)				
		Dust				
		Sulphur Dioxide (SO ₂)				
A2 [Point A2 on site plan in schedule 7]	Turbines fired on gas oil LCP391	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	-	-	Concentration by calculation, every 4380 operational hours or 2 years, whichever is sooner.	Agreed in writing with the Environment Agency
		Carbon Monoxide (CO)				
		Dust				
		Sulphur Dioxide (SO ₂)				

Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference period	Monitoring frequency	Monitoring standard or method
W1 on site plan in schedule 7 (emissions to Mitchell Brook)	Oil & grease	Surface water through oil-water separator	None visible. Maximum of 20 mg/ml if visible	Spot sample	Weekly	Visual or UKAS accredited method for analysis
W2 on site plan in schedule 7 (emissions to Mitchell Brook)	-	Surface water runoff	-	-	-	-
W3 on site plan in schedule 7 (emissions to Mitchell Brook)	-	Surface water runoff	-	-	-	-

Schedule 4 – Reporting

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

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Oxides of Nitrogen	A1, A2	Annually	1 January
Carbon Monoxide	A1, A2	Annually	1 January
Sulphur Dioxide	A1, A2	Annually	1 January
Dust	A1, A2	Annually	1 January
Oil and grease	W1	Annually	1 January

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

Parameter	Frequency of assessment	Units
Thermal Input Capacity for each LCP	Annually	MW

Table S4.3 Chapter III Performance parameters for reporting to DEFRA		
Parameter	Frequency of assessment	Units
Annual Fuel Usage for each LCP	Annually	TJ
Total Emissions to Air of NO _x for each LCP	Annually	t
Total Emissions to Air of SO ₂ for each LCP	Annually	t
Total Emissions to Air of dust for each LCP	Annually	t
Operating Hours for each LCP	Annually	hr

Table S4.4 Reporting forms				
Media/ parameter	Reporting format	Starting Point	Agency recipient	Date of form
Air & Energy	Form IED AR1 – SO ₂ , NO _x and dust mass emission and energy	01/01/16	National	31/12/15
LCP	Form IED HR1 – operating hours	01/01/16	National	31/12/15
Air	Form IED PM1 discontinuous monitoring and load.	01/01/16	Area Office	31/12/15
Resource Efficiency	Form REM1 – resource efficiency annual report	01/01/16	National	31/12/15
Water	Form water 1 or other form as agreed in writing by the Environment Agency	01/01/16	Area Office	31/12/15

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	

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

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
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.	

Name*	
Post	
Signature	
Date	

* 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.

“background concentration” means such concentration of that substance as is present in:

- for emissions to surface water, the surface water quality up-gradient of the site; or
- for emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge.

“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.

“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.

“emissions to land” includes emissions to groundwater.

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

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“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.

“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.

“hazardous property” has the meaning given in Schedule 3 of the Hazardous Waste (England and Wales) Regulations 2005 No.894 and the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138).

“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.

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

Pests” means Birds, Vermin and Insects.

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

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

“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

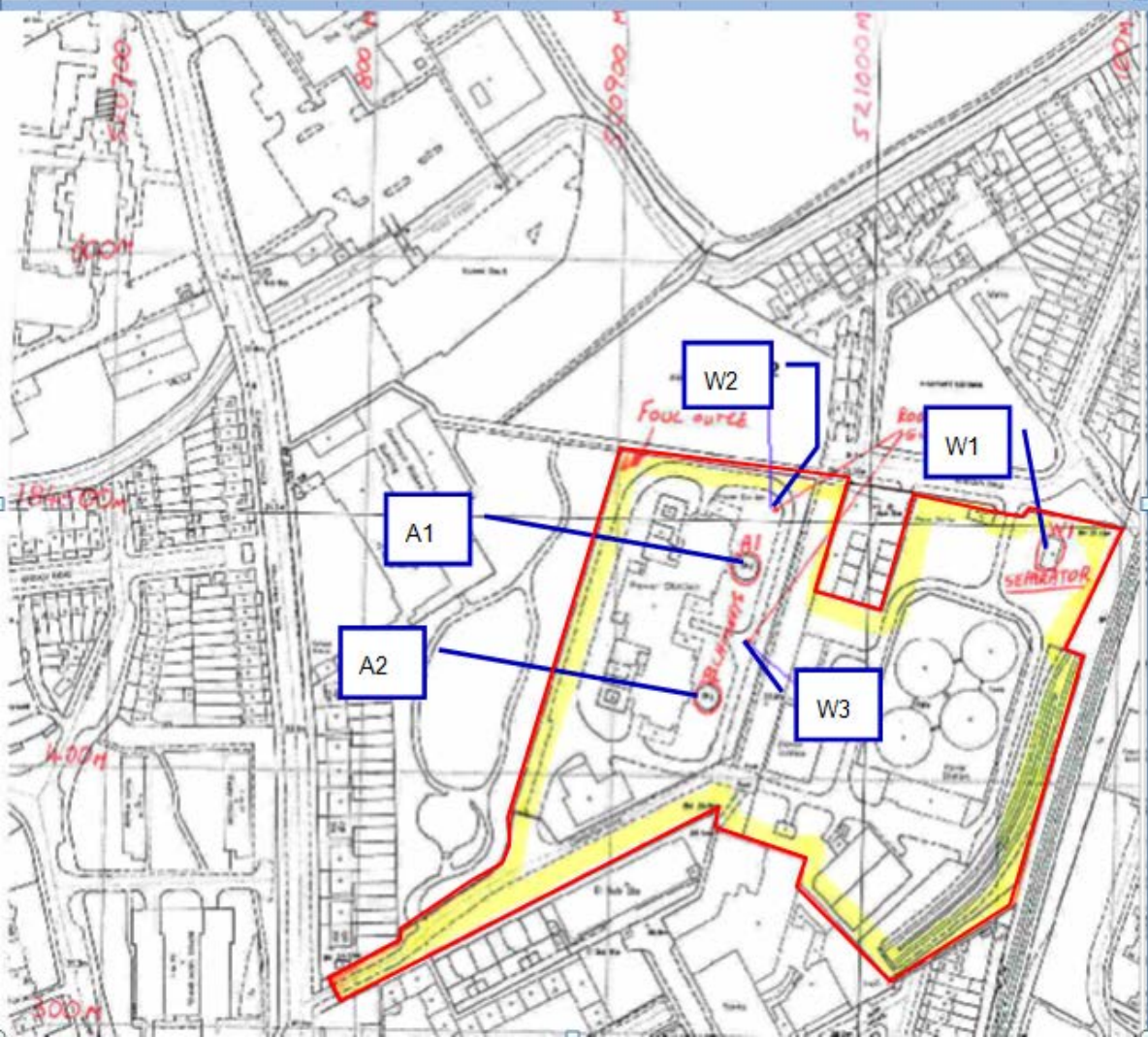
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

- in relation to emissions from 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

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT