Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

RWE Generation UK Plc

Little Barford Power Station
Little Barford
St Neots
Cambridgeshire
PE19 6YT

Variation application number

EPR/AP3630LG/V005

Permit number

EPR/AP3630LG

Little Barford Power Station
Permit number EPR/AP3630LG

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 variation notice uses updated LCP numbers in accordance with the most recent DEFRA LCP reference numbers. The LCP references have changed as follows:

- LCP 249 is changed to LCP 272 ; and
- LCP 426 is changed to LCP 273.

The Operator has chosen to operate the LCP 272 and 273 under the Transitional National Plan (TNP) compliance route for Oxides of Nitrogen and the Annex V for other substances.

The Operator has chosen to operate LCP 394 under the 500hr compliance route.

The net thermal inputs of the LCPs are as follows:

LCP 272 - one 644MWth Combined Cycle Gas Turbine (CCGT);
LCP 273 - one 644MWth Combined Cycle Gas Turbine (CCGT).

The 58MWth Open Cycle Gas Turbine (OCGT) on site has been allocated a new LCP number of LCP 394.

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

Little Barford Power Station is an electricity generating station, located in St Neots, Cambridgeshire and operated by RWE Generation UK PLC. The site covers an area of 15.8 ha centred at National Grid Reference TL 1858 5776.

The site lies on the B1043, just south of the town of St Neots in a predominantly rural area on the Bedfordshire, Cambridgeshire border. To the west of the site lies the River Ouse and Wyboston Leisure Park. To the east of the site there is a railway line. The nearest residential areas are the southern outskirts of St Neots located to the north of the site.

Little Barford Power Station is a 720 MW(e) combined cycle gas turbine (CCGT) power station comprising of two gas turbines. Each gas turbine drives an electrical generator. Hot gases from the gas turbine pass through associated heat recovery steam generators, which produce steam to supply a single steam turbine which in turn drives a generator. The gas turbines can operate in a 2 + 1 configuration or a 1 + 1

configuration venting there exhaust gases into a dedicated stack. Boiler feed water is obtained on site by de-ionisation of towns mains water in the onsite water treatment plant.

The gas turbines each have a thermal input of 644MWth and will normally be fuelled by natural gas. The gas is supplied via an underground pipeline from an “Above Ground Installation” operated by National Grid Gas plc whom hold a separate Part A installation permit, reference number BP3138LN. Gas oil can be used as standby liquid fuel and is stored on site in a concrete bunded partially buried storage tank.

To minimise waster abstraction a re-circulating column water system is employed. Cooling of the water is achieved by passing it through low-profile mechanical induced draught cooling towers.

A ‘black-start’ facility situated on the southern section of the western site comprises of a 58MWth gas-oil fired open cycle gas turbine to provide start-up power in the event that none is available from the national grid. This OCGT is also used for a short term operation reserve power to the grid.

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 EPR/AP3630LG/A001 received	Duly made 31/03/06	
Additional information received	14/07/06	
Additional information received	11/09/06	Additional information received with regards to the design and condition of surfacing and bunding.
Additional information received	11/09/06	Additional information received with regards to fuel switching requirements
Permit determined EPR/AP3630LG	20/12/06	Permit issued to RWE npower Plc .
Variation application / consolidation EPR/AP3630LG/V002	03/02/11	Mid life upgrade to gas turbine from 648 MW(th) to 670MW(th).
Variation / consolidation determined EPR/AP3630LG/V002	22/03/11	
Variation of application determined EPR/AP3630LG/V003	11/03/13	Environment Agency initiated variation, to incorporate Eel Regulations improvement condition
Notified of change to company name	13/11/14	Name changed to RWE Generation UK Plc
Variation of application issued EPR/AP3630LG/V004	02/12/14	Varied permit issued to RWE Generation UK PLC.

Status log of the permit		
Description	**Date**	**Comments**
Regulation 60 Notice sent to the Operator	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	21/04/15	Response received from the Operator.
Additional information request	17/06/15	Further information requested
Additional information received	26/06/15	Response to further queries received
Additional information received	30/11/15	Response received from operator regarding draft variation
Variation determined EPR/AP3630LG/V005 (Billing ref: YP3738AN)	23/12/2015	Varied and consolidated permit issued in modern condition format. Variation effective from 01/01/2016.

Other Part A installation permits relating to this installation		
Operator	**Permit number**	**Date of issue**
National Grid Gas Plc	EPR/BP3138LN	20/12/06

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/AP3630LG

Issued to

RWE Generation UK Plc ("the operator")

whose registered office is

Windmill Hill Business Park
Whitehill Way
Swindon
Wiltshire
SN5 6PB

company registration number **03892782**

to operate a regulated facility at

Little Barford Power Station
Little Barford
St Neots
Cambridgeshire
PE19 6YT

to the extent set out in the schedules.

The notice shall take effect from 01/01/2016

Name	Date
Rebecca Warren	**23/12/2015**

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/AP3630LG

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/AP3630LG/V005 authorising,

RWE Generation UK Plc ("the operator"),

whose registered office is

Windmill Hill Business Park
Whitehill Way
Swindon
Wiltshire
SN5 6PB

company registration number **03892782**

to operate an installation at

Little Barford Power Station
Little Barford
St Neots
Cambridgeshire
PE19 6YT

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

Name	Date
Rebecca Warren	**23/12/2015**

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.

1.5 Multiple operator installations

1.5.1 Where the operator notifies the Environment Agency under condition 4.3.1 (a) or 4.3.1 (c), the operator shall also notify without delay the other operators of the installation of the same information.

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, which is within the area edged in red on the site plan that represents the extent of the installation covered by this permit and those of other operators of the installation.

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 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: LCP 272 and LCP 273. Standby fuel gas oil may be used for periods of up to 10 days during times of interruption to the gas supply.

2.3.6 For the following activities referenced in schedule 1, table S1.1: LCP 394. The activities shall not operate for more than 500 hours per year.

2.3.7 For the following activities referenced in schedule 1, table S1.1: LCP 272 and LCP 273. 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

2.3.8 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 and S3.2.

3.1.2 The limits given in schedule 3 shall not be exceeded.

3.1.3 Total annual emissions from the LCP emission points set out in schedule 3 tables S3.1 of a substance listed in schedule 3 table S3.3 shall not exceed the relevant limit in table S3.3.

3.1.4 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.

3.6 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 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 S3.1; the Continuous Emission Monitors shall be used such that:

a) for the continuous measurement systems fitted to the LCP release points defined in Table S3.1 the validated hourly, monthly 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 (40 minutes). 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.

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 conditions 2.3.5 and 2.3.6 apply 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.

4.2.5 For the following activities referenced in schedule 1, table S1.1: LCP 272 and 273. Unless otherwise agreed in writing with the Environment Agency, within 1 month of the end of each quarter, the operator shall and submit to the Environment Agency using the form IED RTA1, listed in table S4.4, the information specified on the form relating to the site's mass emissions,

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 without delay, 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 any fuel in an appliance with a rated thermal input of 50 megawatts or more.	LCP 272 GT for production of electricity and steam in 644 MW(th) CCGT 1A fitted with DLN	From receipt of natural gas or gas oil to discharge of exhaust gases and the generation of electricity
		LCP 273 GT for production of electricity and steam in 644 MW(th) combined cycle gas turbine 1B fitted with DLN	From receipt of natural gas or gas oil to discharge of exhaust gases and the generation of electricity
		LCP 394 OCGT burning gas oil for blackstart and short term operation reserve to grid. Net rated thermal input 58W(th)	From receipt of natural gas or gas oil to discharge of exhaust gases and the generation of electricity
		2.33 MW(th) emergency diesel generator	From receipt of fuel to generation of electricity and release of emission to air (handling and storage of fuels in a designated tank for emergency use or routine operational and maintenance testing only)
	Directly Associated Activity		
A2	Directly associated activity	Gas oil storage	From receipt of raw materials to dispatch for use.
A3	Directly associated activity	Water treatment plant	From receipt of raw materials to dispatch to chemical effluent and waste treatment.
A4	Directly associated activity	Evaporative cooling	From abstraction of cooling water to discharge cooling water urge to the River Great Ouse.

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity**	**Limits of specified activity**
A5	Directly associated activity	Surface water drainage	Handling and storage of site drainage until discharge to the site surface water system.
A6	Directly associated activity	0.75 MW(th) diesel fired pump	Handling and storage of fuel in a designated tank for emergency use or routine operational and maintenance testing only.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	The response to section B2.1 and B2.2 in the Application	31/03/06
Receipt of additional information to the application	Response to the request for further information with regards to: the design and condition of site surfacing, bunding, prevention or environmental impacts from spillages during delivery and unloading, nature of the SDX sump, underground fuel pipelines, storage requirements for containers, venting of natural gas, cooling tower improvements, visibility of the plume, boiler blowdown, techniques to reduce energy consumption and identification and impacts fro other diesel fired plant.	14/07/06
Receipt of additional information to the application	Response to the request for further information with regards to the design and condition of the site surfacing and bunding	11/09/06
Receipt of additional information to the application	Response to the request for further information with regards to fuel switching requirements.	11/09/06
Receipt of additional information to the application	Further information supplied to describe short term operational reserve (STOR) requirements	22/11/10
Variation application EPR/AP3630LG/V002	Responses to section 3, 4, 5 and 6 of application form part C	03/02/11

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Response to regulation 60(1) Notice – request for information dated 31/10/14	Compliance routes and operating techniques identified in response to questions 2 (2.2: compliance route), 4 (2.4: LCP configuration), 5 (2.5: net rated thermal input), 6 (2.6: MSUL/MSDL), 9i/iii (proposed ELV's, application, ELV between MSUL/MSDL and 70% load), 11 (monitoring requirements) Excluding compliance route Article 30 (2) Annex V Part 1 – 500 hour emergency operation for LCP 272 and 273 and related operating techniques, which was subsequently withdrawn by the operator.	Received 21/04/15
Receipt of additional information to the regulation 60(1) Notice. requested by letter dated 17/06/15	Operating techniques identified in response to questions 6	Received 26/06/15
Receipt of additional information to the regulation 60(1) Notice.	Confirmation of the compliance routes chosen for LCP 272, 273 and 394	Received 21/12/15

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC1	The operator shall undertake a review of the BAT listed within section 2 of the Combustion Technical Guidance Note (TGN) for oxides or nitrogen which will enable them to achieve the emission benchmark given within section 3 of the TGN for the release to air from the operation of the gas turbines. The review shall include, but not be limited to, all of the relevant techniques listed within the TGN, the reduction in the level of oxides of nitrogen and the costs of achieving the reduction (for each option). The report shall include a timetable to implement any proposed changes as appropriate. The operator shall implement the proposals as agreed in writing with the Environment Agency	Complete
IC2	A written report shall be submitted to the Environment Agency for approval, detailing the measures to be taken to ensure that any leak from the gas oil pipe work in areas of unmade ground (includes gravelled areas) does not contaminate the land/groundwater. Where appropriate the report shall contain dates of the implementation of individual members The measure identified shall be implemented by the Operator from the date of approval by the Environment Agency.	Complete
IC3	The Operator shall implement a formal structured accident management plan which covers the aspects given in section 2.8 of the IPPC sector Guidance Notes for the Combustion Sector. The operator shall submit a written plan for approval to the Environment Agency summarising the main elements of the accident management plan.	Complete

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC4	The Operator shall undertake an assessment of the emissions from emission points A1 and A2 when firing gas oil. The assessment shall propose emission limit values for NO_2, SO_2 and CO_2 with regard to section 3 of the Combustion Sector. The results of the assessment along with the proposed emissions limit values shall be submitted to the Agency in writing. The revised emission limit values shall be imposed from the date of approval in writing by the Environment Agency.	Complete
IC5	A written site closure plan shall be submitted to the Environment Agency for approval. The plan shall contain the measures, which will be taken on cessation of activities, to avoid any pollution risk and return the site to a satisfactory state, in accordance with the requirements of section 2.11 of IPPC Sector Guidance Note for the Combustion Sector. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report.	Complete
IC6	The Operator shall implement procedures for the regular review of new developments in raw materials and for the implementation of suitable ones with an improved environmental profile. In addition the Operator shall implement quality-assurance procedures for controlling the impurity content of raw materials in line with sector 2.4 of IPPC Sector Guidance Note for the Combustion Sector. The Operator shall submit the procedures in writing for approval to the Environment Agency.	Complete
IC7	A written report shall be submitted to the Environment Agency for approval. The report shall contain the findings of a waste minimisation audit in accordance with the requirements of section 2.4.2 of IPPC Sector Guidance Note for the Combustion Sector, including dates for the implementation of individual improvement measures identified. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements shall be implemented by the Operator from the date of approval in writing by the Environment Agency.	Complete
IC8	A written report shall be submitted to the Environment Agency for approval. The report shall contain the findings of a water efficiency audit in accordance with the requirements of section 2.4.3 of IPPC Sector Guidance Note for the Combustion Sector, including dates for the implementation of individual improvement measures identified. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements shall be implemented by the Operator from the date of approval in writing by the Environment Agency.	Complete

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC9	The Operator shall carry out the improvements identified in the application, document reference ENV/098/2006, to the packing of the cooling towers to improve the cooling efficiency. The Operator shall notify the Environment Agency in writing upon completion of the improvements.	Complete
IC10	The Operator shall undertake an assessment of the NO_x emissions from points A1 and A2 when firing gas oil and investigate the possibility of lowering the emission limit. A written report should be submitted to the Environment Agency for approval. The report shall contain the findings of the assessment and a proposed emissions limit for NO_x from points A1 and A2 when firing gas oil. The emissions limit value and any other findings shall be implemented by the Operator form the date of approval in writing by the Environment Agency.	Complete
IC11	The Operator shall carry out a pre and post upgrade noise survey to demonstrate that the upgraded turbines have not significantly changes the noise levels outside the site boundary. Details of the surveys should be submitted to the Environment Agency for approval prior to commencement of the survey and a report of the findings shall be submitted to the Environment Agency of completion. Any recommendations contained within the report shall be implemented by the Operator from the date of approval in writing to the Environment Agency.	Complete

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC12	The Operator shall undertake a review of the existing screening measures at the intakes and outfalls which provide and discharge water to and from the Installation. The review shall be undertaken with reference to the Eels (England and Wales) Regulations 2009 (SI 2009/3344) and the Environment Agency ''Safe Passage of Eel'' Regulatory Position Statement version 1 dated July 2012. The Operator shall submit details of the arrangement suitable to meet the requirements for the safe passage of eels [of the Eels (England and Wales) Regulations 2009 (SI 2009/3344)] by either:- • Providing a written proposal for the installation of an eel screen. • Providing a written proposal to the modification of existing screening arrangements. • Providing a written response with an explanation and description of how the existing screening arrangements can be regarded to meet the requirements for the safe passage of eels [of SI 2009/3344] either without change or with mitigation measures. • Providing a written response setting out a case for an exemption In all cases, the proposal shall be submitted in writing for the approval of the Environment Agency. Where appropriate, each proposal shall contain an assessment of alternative options considered including impacts on other fish species and an explanation of why the proposed option has been chosen. Where installation of eel screen; modification of existing arrangements; or mitigation measures are proposed, the submission shall contain relevant timescales for installation in accordance with the Safe Passage of Eel Regulatory Position Statement version 1 dated July 2012. The proposals shall be implemented in accordance with the Environment Agency's written approval.	Complete
IC 13	For LCPD LCP 249 and 426 (now LCP 272 and 273 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.	28/01/2016
IC 14	The operator shall provide a report in writing to the Environment Agency for acceptance which provides details, and justification, for relocating the measurement point of the temperature of the emissions to RD3 to an alternative location.	31/06/2016

Table S1.4 Start-up and Shut-down thresholds		
Emission Point and Unit Reference	**“Minimum start up load”**	**“Minimum shut-down load”**
A1 LCP 272	95 MWe; 40% of rated power output	95 MWe; 40% of rated power output
A2 LCP 273	95 MWe; 40% of rated power output	95 MWe; 40% of rated power ouput
A3 LCP 394	0.5 MW; 2.9% of rated power output	0.5 MW; 2.9% of rated power output

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
mercury concentration in the raw materials used within the installation	Discharges of mercury as a result of the impurities of raw materials used in the water treatment plant shall be controlled by ensuring that impurity levels are the minimum available in the commercial product.
cadmium concentration in the raw materials used within the installation	Discharges of cadmium as a result of the impurities of raw materials used in the water treatment plant shall be controlled by ensuring that impurity levels are the minimum available in the commercial product.

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)-these limits do not apply during start up or shut down.**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 [Point A1 on site plan in Schedule 7]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	LCP No. 272 Gas turbine fired on **natural gas**	50 mg/m^3	Monthly mean of validated hourly averages	Continuous	BS EN 14181
			50 mg/m^3	Daily mean of validated hourly averages	Continuous	BS EN 14181
			100 mg/m^3	95% of validated hourly averages within a calendar year	Continuous	BS EN 14181
A1 [point A1 on site plan in schedule 7]	Carbon Monoxide	LCP No. 272 Gas turbine fired on **natural gas**	100 mg/m^3	Monthly mean of validated hourly averages	Continuous	BS EN 14181
			100 mg/m^3	Daily mean of validated hourly averages	Continuous	BS EN 14181
			200 mg/m^3	95% of validated hourly averages within a calendar year	Continuous	BS EN 14181
A1 [Point A1 on site plan in schedule 7]	Sulphur dioxide	LCP No. 272 Gas turbine fired on **natural gas**	-	-	At least every 6 months	Concentration by calculation, as agreed in writing with the Environment Agency

Table S3.1 Point source emissions to air						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)-these limits do not apply during start up or shut down.**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 [Point A1 on site plan in schedule 7]	Oxygen	LCP No. 272 Gas turbine fired on **Natural gas**	-	-	Continuous As appropriate to reference	BS EN 14181
	Water Vapour		-	-	Continuous As appropriate to reference	BS EN 14181
	Stack gas temperature		-	-	Continuous As appropriate to reference	Traceable to national standards
	Stack gas pressure		-	-	Continuous As appropriate to reference	Traceable to national standards
	As required by the Method Implementation Document for BS EN 15259		-	-	Pre-operation and when there is a significant operational change	BS EN 15259
A2 [Point A2 on site plan in Schedule 7]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	LCP No. 273 Gas turbine fired on **Natural gas**	50 mg/m^3	Monthly mean of validated hourly averages	Continuous	BS EN 14181
			50 mg/m^3	Daily mean of validated hourly averages	Continuous	BS EN 14181
			100 mg/m^3	95% of validated hourly averages within a calendar year	Continuous	BS EN 14181

Table S3.1 Point source emissions to air						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)-these limits do not apply during start up or shut down.**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A2 [point A2 on site plan in schedule 7]	Carbon Monoxide	LCP No. 273 Gas turbine fired on **Natural gas**	100 mg/m^3	Monthly mean of validated hourly averages	Continuous	BS EN 14181
			100 mg/m^3	Daily mean of validated hourly averages	Continuous	BS EN 14181
			200 mg/m^3	95% of validated hourly averages within a calendar year	Continuous	BS EN 14181
A2 [Point A2 on site plan in schedule 7]	Sulphur dioxide	LCP No. 273 Gas turbine fired on **Natural gas**	-	-	At least every 6 months	Concentration by calculation, as agreed in writing with the Environment Agency
A2 [Point A2 on site plan in schedule 7]	Oxygen	LCP No. 273 Gas turbine fired on **Natural gas**	-	-	Continuous As appropriate to reference	BS EN 14181
	Water Vapour		-	-	Continuous As appropriate to reference	BS EN 14181
	Stack gas temperature		-	-	Continuous As appropriate to reference	Traceable to national standards
	Stack gas pressure		-	-	Continuous As appropriate to reference	Traceable to national standards
	As required by the Method Implementation Document for BS EN 15259		-	-	Pre-operation and when there is a significant operational change	BS EN 15259

Table S3.1 Point source emissions to air						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)-these limits do not apply during start up or shut down.**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A2 and A3 [Point A2 on site plan in schedule 7]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	LCP No 272 and 273 gas Turbine fired on **Gas Oil**	-	-	Concentration by calculation every 4380 operational hours or 2 years whichever is sooner.	Agreed in writing with the Environment Agency.
	Carbon Monoxide		-	-	Concentration by calculation every 4380 operational hours or 2 years whichever is sooner.	Agreed in writing with the Environment Agency.
	Sulphur dioxide		-	-	Concentration by calculation every 4380 operational hours or 2 years whichever is sooner.	Agreed in writing with the Environment Agency.
	Dust		-	-	Concentration by calculation every 4380 operational hours or 2 years whichever is sooner.	Agreed in writing with the Environment Agency.
A3 [Point A3 on site plan in schedule 7]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	LCP No. 394 Black start **Gas oil**	-	-	Concentration by calculation, every 4380 operational hours or 2 years, whichever is sooner.	Agreed in writing with the Environment Agency
	Sulphur dioxide		-	-		
	Dust		-	-		
	Carbon Monoxide		-	-		

Table S3.1 Point source emissions to air						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)-these limits do not apply during start up or shut down.**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
Fire pump	No parameters set	Diesel fire pump (for emergency use only)	-	-	-	Permanent sampling access not required
Emergency generator	No parameters set	Diesel generator (for emergency use only)	-	-	-	Permanent sampling access not required

Table S3.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
RD1 on site plan in schedule 7 emission to the River Great Ouse	Total suspended solids	Surface water from oil storage area via oily water separator	100 mg/ml	Spot sample	Monthly	SCA blue book 105 ISBN 011751957X Note 1
RD1 on site plan in schedule 7 emission to the River Great Ouse	Oil or grease	Surface water from oil storage area via oily water separator	10 mg/ml	Spot sample	Monthly	SCA blue book 77 ISBN 0117517283 Note 1
RD2 on site plan in schedule 7 emission to the River Great Ouse	Total suspended solids	Surface water via oily water separator	100 mg/ml	Spot sample	Monthly	SCA blue book 105 ISBN 011751957X Note 1
RD2 on site plan in schedule 7 emission to the River Great Ouse	Oil or grease	Surface water from oil storage area via oily water separator	10 mg/ml	Spot sample	Monthly	SCA blue book 77 ISBN 0117517283 Note 1

Table S3.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
RD3 on site plan in schedule 7 emission to the River Great Ouse	Flow	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	330 m^3/hr		Continuous	Note 1
RD3 on site plan in schedule 7 emission to the River Great Ouse	pH	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	6-9		Continuous	SCA blue book 14 ISBM 0117514284 Note 1
RD3 on site plan in schedule 7 emission to the River Great Ouse	Temperature	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	30^0C		Continuous	Note 1
RD3 on site plan in schedule 7 emission to the River Great Ouse	Free chlorine	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	100µg/l		Continuous	Note 1
RD3 on site plan in schedule 7 emission to the River Great Ouse	Total suspended solids	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	-	Spot sample	Monthly	SCA blue book 105 ISBN 011751957X Note 1

Table S3.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
RD3 on site plan in schedule 7 emission to the River Great Ouse	Biological oxygen demand	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	20 mg/ml	Spot sample	Monthly	SCA blue book 130 ISBN 0117522120 Note 1
RD3 on site plan in schedule 7 emission to the River Great Ouse	Ammonia	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	-	Spot sample	Monthly	SCA blue book 48 ISBN 0117516139 Note 1
RD3 on site plan in schedule 7 emission to the River Great Ouse	Mercury and its compounds, expressed as mercury (Total Hg)	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	0.002 mg/l	Spot sample	Monthly	BS EN ISO 17852 Note 1
RD3 on site plan in schedule 7 emission to the River Great Ouse	Cadmium and its compounds, expressed as cadmium (Total Cd)	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	0.01 mg/l	Spot sample	Monthly	BS 6068-2.89 Note 1
RD3 on site plan in schedule 7 emission to the River Great Ouse	Sulphate	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	1000 mg/l	Spot sample	Monthly	SCA blue book 136 ISBM 0117522406 Note 1

Table S3.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
RD3 on site plan in schedule 7 emission to the River Great Ouse	Chloroform	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	15µg/l	Spot sample	Monthly	Note 1
RD3 on site plan in schedule 7 emission to the River Great Ouse	Bromoform	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	5µg/l	Spot sample	Monthly	Note 1
RD3 on site plan in schedule 7 emission to the River Great Ouse	Dibromochlor	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	10µg/l	Spot sample	Monthly	Note 1
RD3 on site plan in schedule 7 emission to the River Great Ouse	Bromodichlor omethane	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	10µg/l	Spot sample	Monthly	Note 1
RD3 on site plan in schedule 7 emission to the River Great Ouse	Oil/Grease	Cooling water purge, water treatment plant, boiler blowdown and SDX effluent	10mg/l	Spot sample	Monthly	SCA blue book 77 ISBM 0117517283 Note 1

Note 1: Alternative monitoring method as agreed in writing with the Environment Agency

Table S3.3 Annual limits (excluding start up and shut down except where otherwise stated).				
Substance	**Medium**	**Limit (including unit)**		**Emission Points**
Oxides of nitrogen	Air	Assessment year	LCP 272 and LCP 273 TNP Limit	LCP 272 & LCP 273
		01/01/16 and subsequent years until 31/12/19	Emission allowance figure shown in the TNP Register as at 30 April the following year	

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Oxides of nitrogen	A1, A2	Every 3 months	1 January, 1 April, 1 July, 1 October
Carbon Monoxide	A1, A2	Every 3 months	1 January, 1 April, 1 July, 1 October
Sulphur dioxide	A1, A2	Every 6 months	1 January, 1 July
Dust	A1, A2	Every 3 months	1 January, 1 April, 1 July, 1 October
Oxides of nitrogen	A3	2 yearly	1 January
Carbon Monoxide	A3	2 yearly	1 January
Sulphur dioxide	A3	2 yearly	1 January
Dust	A3	2 yearly	1 January
Emissions to air (discontinuous measurements) Parameters as required by condition 3.5.1	A3	Every 6 months	01/01/07
Emissions to water Parameters as required by condition 3.5.1	RD1, RD2 and RD3	Every 3 months	01/01/07

Table S4.2: Resource Efficiency Metrics	
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

Table S4.2: Resource Efficiency Metrics	
Parameter	**Units**
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

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Thermal Input Capacity for each LCP	Annually	MW
Annual Fuel Usage for each LCP	Annually	T
Total Emissions to Air for Oxide of Nitrogen for LCP272, 273 and 394	Annually	t
Total Emissions to Air for Sulphur Dioxide for LCP272, 273 and 394	Annually	t
Total Emissions to Air for Particulate Matter for LCP272, 273 and 394	Annually	t
Operating Hours for each LCP	Annually	hr
Operating hours for LCP 272 and 273, using standby fuel during interruptions to the natural gas supply.	Quarterly for each quarter the standby fuel is used.	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
Air	Form IED RTA1 –TNP quarterly emissions summary log	01/01/16	National	31/12/15
LCP	Form IED HR1 – operating hours	01/01/16	National	31/12/15
Air	Form IED CON 2 – continuous monitoring	01/01/16	Area Office	31/12/15
CEMs	Form IED CEM – Invalidation Log	01/01/16	Area Office	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

Table S4.4 Reporting forms				
Media/ parameter	**Reporting format**	**Starting Point**	**Agency recipient**	**Date of form**
Sewer	Form sewer 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	**EPR/AP3630LG**
Name of operator	**RWE Generation UK Plc**
Location of Facility	**Little Barford Power Station**
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.

"OCGT" means open cycle gas turbines.

"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.

"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.

"Black Start" means the procedure to recover from a total or partial shutdown of the UK Transmission System which has caused an extensive loss of supplies. This entails isolated power stations being started individually and gradually being reconnected to other power stations and substations in order to form an interconnected system again.

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

"CEN" means Commité 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.

"DLN" means dry, low NO_x burners.

"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.

"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.

“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.

“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.

“TNP Register” means the register maintained by the Environment Agency in accordance with regulation 4 of the Large Combustion Plants (Transitional National Plan) Regulations 2015 SI2015 No. 1973

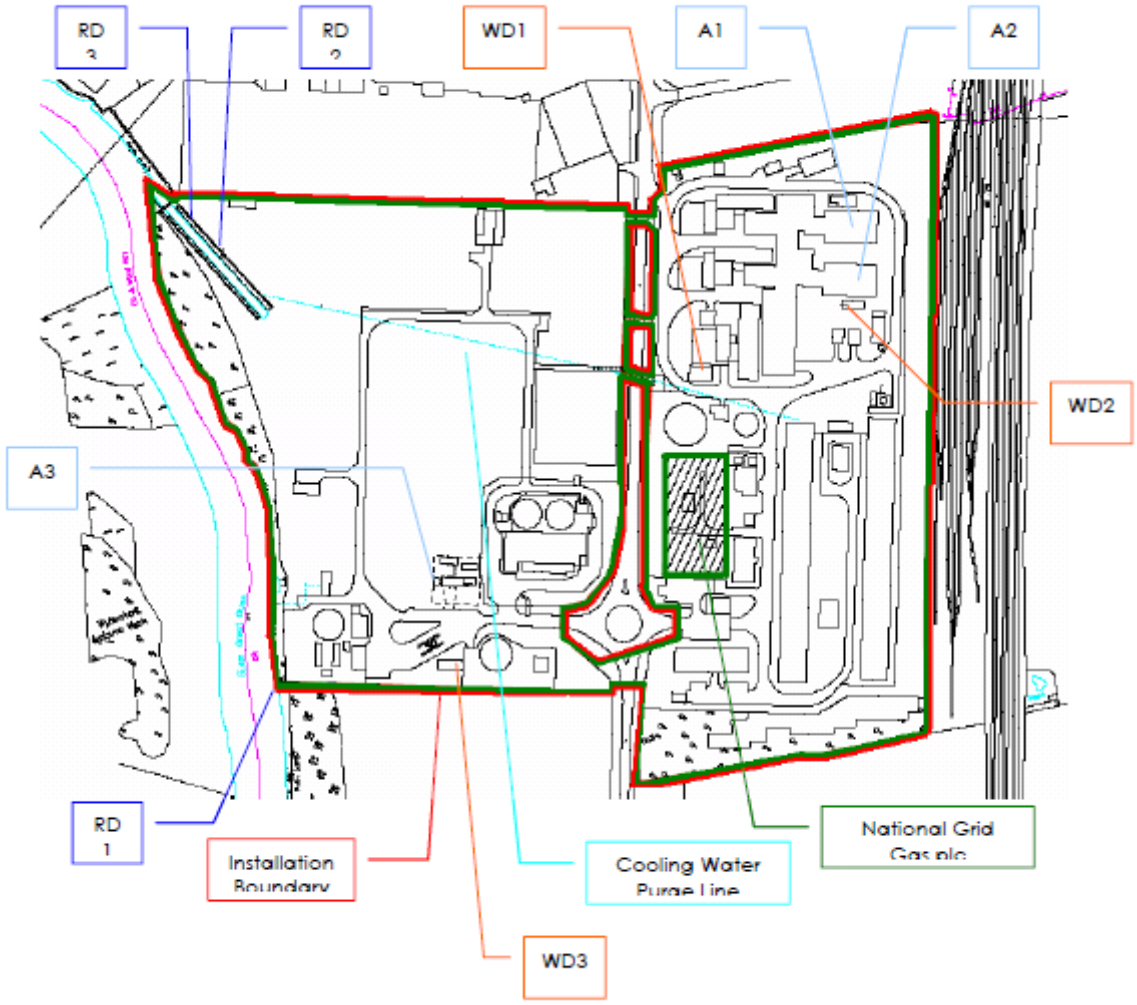
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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.

Schedule 7 – Site plan



END OF PERMIT