

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

ScottishPower (DCL) Ltd

Damhead Creek Power Station
Kingsnorth
Hoo St Werburgh
Rochester
Kent
ME3 9TX

Variation application number

EPR/NP3634WE/V002

Permit number

EPR/NP3634WE

Damhead Creek Power Station

Permit number EPR/NP3634WE

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 ELV compliance route.

Each LCP (LCP81 & LCP82) consists of a 711 MWth combined cycle gas turbine (CCGT).

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 137 is changed to LCP 81; and
- LCP 138 is changed to LCP 82.

This variation also removes the previous oil lubrication vent VOC monitoring requirement, and groups these emission points as a generic entry in Table 3.1.

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

Damhead Creek Power Station is operated by ScottishPower (DCL) Limited. The station is located on the Isle of Grain to the east of Chatham and Rochester and to the north of the former Kingsnorth Power Station. The water body of Damhead Creek is located approximately 600 m south east of the installation. The centre of the site is located at NGR TQ 808 728. The installation covers an area of approximately 6.2 Ha. The land surrounding the power station has varied uses. To the west and north-west is a mixed industrial area comprising activities including fuel oil distribution, packaging manufacturers and waste disposal activities. The area to the east and north-east is presently being developed. To the south of the installation, the former Kingsnorth Power Station site occupies a substantial area beyond which is the River Medway.

The installation is located on a chalk aquifer overlain by alluvial deposits. It is not within a Groundwater Protection Zone.

There are 13 groundwater abstractions and 8 surface water abstractions within 2 km of the site which are primarily used for spray irrigation and industrial purposes. There are 6 Natura 2000 sites within a 10 km radius of the site.

This permit covers the listed activity under EPR Section 1.1 Part A1(a) 'Burning of fuel in an appliance with a rated thermal input of 50 megawatts or more'. Damhead Creek Power Station is a combined cycle gas turbine power plant of 805 MWe, comprising two gas combustion turbine sets, each with an electrical capacity of 270 MWe. Each gas turbine (GT) has a dedicated Heat Recovery Steam Generator (HRSG)

which produces steam from the exhaust gases from the GTs. This provides steam for one 265 MWe condensing steam turbine (ST) generator. Exhaust gases are discharged via two stacks of 75 m in height. All the electricity generated is exported to the National Grid except for a small amount used on site.

There are 2 main point source emissions to air (A1 and A2) associated to the Gas Turbines. The principal pollutants emitted are oxides of nitrogen (NO_x), which results mainly from the reaction of oxygen and nitrogen from the atmosphere during the combustion process, and carbon monoxide (CO). Emissions NO_x are minimised by the use of dry low-NO_x burners. Emissions are continually monitored from points A1 and A2 for oxides of nitrogen and carbon monoxide.

An auxiliary start up boiler of approximately 12 MW net thermal input is used during start up and shut down to heat incoming gas and seal the steam turbine glands. The boiler is fuelled by natural gas only and has a steam generating capacity of 11.3 tonnes/hour. It discharges via its own stack at emission point A8.

A new water treatment plant is fed with water from a 200m deep borehole and returned water from the HRSG. This incorporates a water softener system and reverse osmosis plant to produce demineralised water for the HRSG. Process water can be 100% sustained from the borehole and water recovery plant under normal operation. The original water treatment plant runs periodically for preservation, and can also be operated to provide a higher sustained throughput which is required when returning the station from outage or where make up rates are higher than normal.

The ACC uses twin speed fans to force air over tube banks to condense steam rejected from the steam turbine for return to the feed-water system. Visible plumes from this cooling method are of no significance.

Effluent from the treatment process is discharged into waste conditioning basins where pH is adjusted through circulation prior to discharge to the storm water basin. Together with treated sewage effluent, collected rainwater and oil separator discharge, this then discharges via W1 (the sole point source emission to water from the site). W1 discharges to Damhead Creek at NGR TQ 581410 172750. Emissions are continuously monitored for flow, temperature and pH and other parameters on a monthly basis. There are no emissions to sewer.

The site operates an Environmental Management System which is certified to ISO 14001:2010.

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 VP3133LP (EPR/VP3133LP/A001)	Duly made 31/03/2006	
Submission of site plan for permit	Received 31/01/2007	
Submission of additional air dispersion modelling results (final version C)	Received 05/02/2007	
Submission of revised EP OPRA spreadsheet	Received 05/02/2007	
Submission of revised H1 assessment and clarification of emissions to water data	Received 05/02/2007	
Submission of EMAS certificate of registration and results of sampling undertaken 5/2/07 for emissions to water	Received 16/02/2007	
Permit determined	28/03/2007	
Variation Application determined EPR/VP3133LP/V002	11/03/2013	Environment Agency initiated variation to incorporate Eel Regulations improvement condition.

Status log of the permit		
Description	Date	Comments
Transfer Application EPR/NP3634WE/T001	Duly made 06/11/14	Full transfer of permit EPR/VP3133LP from ScottishPower Damhead Creek Operations Ltd to Scottishpower (DCL) Ltd
Transfer Application determined EPR/NP3634WE	27/11/2014	Full transfer of permit complete
Regulation 60 Notice sent to the Operator	09/12/2014	Issue of a Notice under Regulation 60(1) of the EPR. Environment Agency Initiated review and variation to vary the permit under IED to implement the special provisions for LCP under Chapter III, introducing new Emission Limit Values (ELVs) applicable to LCP, referred to in Article 30(2) and set out in Annex V. The permit is also updated to modern conditions.
Regulation 60 Notice response	30/03/2015	Response received from the Operator.
Additional information received	15/06/2015	Response to request for further information (RFI) dated 29/05/2015.
Variation determined EPR/NP3634WE/V002 (Billing ref: NP3234AT)	22/12/15	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/NP3634WE

Issued to

ScottishPower (DCL) Ltd (“the operator”)

whose registered office is

ScottishPower (DCL) Ltd

3 Prenton Way

Prenton

CH43 3ET

company registration number 02675504

to operate a regulated facility at

Damhead Creek Power Station

Kingsnorth

Hoo St Werburgh

Rochester

Kent

ME3 9TX

to the extent set out in the schedules.

The notice shall take effect from 01/01/2016

Name	Date
Tom Swift	22/12/2015

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/NP3634WE

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/NP3634WE/V002 authorising,

ScottishPower (DCL) Ltd (“the operator”),

whose registered office is

ScottishPower (DCL) Ltd
3 Prenton Way
Prenton
CH43 3ET

company registration number 02675504

to operate an installation at

Damhead Creek Power Station
Kingsnorth
Hoo St Werburgh
Rochester
Kent
ME3 9TX

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

Name	Date
Tom Swift	22/12/2015

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: A1: LCP81 and LCP82. 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: A1: LCP81 and LC82. 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 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.
- 2.3.7 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 S1.4 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 Where a substance is specified in schedule 3 table S3.2 but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.
- 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.
- 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;and
- 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) and 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 any fuel in an appliance with a rated thermal input of 50 megawatts or more.	LCP81: Operation of a combined cycle gas turbine power plant (CCGT) burning gas to produce electricity. LCP82: Operation of a combined cycle gas turbine power plant (CCGT) burning gas to produce electricity.	From receipt of natural gas to discharge of exhaust gases, and the generation of electricity.
A2	Directly associated activity	Start up boiler fuelled by natural gas, approximately 12 MW net thermal input.	From receipt of natural gas to generation of steam and releases to air. Used during start up to heat gas and seal steam turbine glands.
A3	Directly associated activity	Emergency generator (1.2MW) operated on diesel.	From receipt of diesel to generation of electricity and releases to air. Used for emergency purposes when network is down and tested monthly.
Directly Associated Activity			
A4	Directly associated activity	Operation of one 270 MW steam turbine and air cooled condenser (ACC) system	Input of steam from the heat recovery steam generators associated with GT1 and GT2 into steam turbine for the generation of electricity for export to the National Grid. Rejection of waste steam to ACC and return of condensate to feedwater system.
A5	Directly associated activity	Raw water storage tank	From receipt of towns water to use for domestic supply, for cooling, in the water treatment plant and for fire mains.
A6	Directly associated activity	Water treatment plant. Treatment of water by reverse osmosis and ion exchange.	From receipt of raw materials to despatch for use in HRSG, cooling systems and domestic heating system. Transfer of effluent to neutralisation tank for pH adjustment.
A7	Directly associated activity	Plant drainage system and effluent neutralisation and storage. Sumps and drains in process areas and site surface water drainage. Storm water storage basin and pumping system and pipeline to discharge point.	From transfer of wastewater effluent streams (neutralisation tank effluent, treated sewage effluent, rainwater and surface water via interceptors and oily separator effluent) to storm water basin prior to discharge to Damhead Creek at NGR TQ 81410 72750.
A8	Directly associated activity	Fuel oil storage for use in emergency generator. Maximum storage capacity 8000 litres.	From receipt of raw materials to dispatch for use.
A9	Directly associated activity	Gas feeder pipeline including slam shut valve	From receipt of raw materials to dispatch for use.
A10	Directly associated activity	Waste handling and storage.	From waste generation, storage and monitoring to waste dispatch.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to questions B2.1 and B2.2 provided in Section 2 of the Application.	31/03/2006
Response to regulation 60(1) Notice – request for information dated 09/12/2014	Compliance route) and operating techniques identified in response to questions 2 (ELV compliance route) and 6 (MSUL/MSDL definitions).	30/03/2015
Receipt of additional information to the regulation 60(1) Notice. requested by letter dated 29/05/2015	Operating techniques identified in response to questions 2 (thermal input), 3 (MSUL/MSDL definitions).	15/06/2015

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p>A written plan shall be submitted to the Agency for approval detailing measures to be taken that ensure the methods and equipment used for monitoring emissions to surface water meet the requirements of the Environment Agency Guidance M18 where appropriate. The plan shall include but not be limited to:</p> <ul style="list-style-type: none"> • proposed monitoring methods, both periodic and continuous • frequency of monitoring • equipment to be used for monitoring emissions • a timetable for implementation of the improvements. <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the procedure. The procedure shall be implemented by the operator from the date of approval in writing by the Agency</p>	Completed
IC2	The operator shall submit in writing, details of the method for the determination of sulphur dioxide and particulate matter from emission points A1 and A2 including details of the verification of the suitability of such a method.	Completed
IC3	<p>A written report shall be submitted to the Agency detailing the review of the performance testing on the Mitsubishi 701F gas turbines. The report shall include but not be limited to:</p> <ul style="list-style-type: none"> • The results of all the tests carried out as outlined in section 3.0 of the report submitted to the Environment Agency on 30/6/06 to comply with improvement condition 8.9 of variation CA0891 • An assessment of the ability of the Mitsubishi 701F gas turbines to run consistently below 50 mg/m³ NO_x emissions when the impact of the LNG is taken into consideration. 	Completed

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC4	<p>The operator shall undertake an assessment of the existing incident response manual against section 2.8 of the IPPC Sector Guidance Note Combustion Activities to identify and address any deficiencies. The assessment shall include but not be limited to:</p> <ul style="list-style-type: none"> • Identification of hazards listed in the Guidance Note • an assessment of the risks for each hazard identified in line with the Guidance note • identification of techniques necessary to reduce the risks associated with each hazard identified • consideration of flood risk issues <p>A written report of the assessment, including a plan for corrective actions, timescales and revisions to the current incident response manual shall be submitted to the Agency.</p> <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the procedure.</p> <p>The corrective action plan shall be implemented from the date of approval by the Agency.</p>	Completed
IC5	<p>An energy efficiency plan shall be submitted to the Agency for approval in accordance with section 2.7 of the IPPC Sector Guidance Note Combustion Activities. The plan shall include but not be limited to:</p> <ul style="list-style-type: none"> • revision of the existing monitoring plan to include the requirement to monitor energy flows • review of energy use and identification of areas of energy wastage • identification of areas for energy use reduction • production of an energy management policy which includes targets and performance indicators in accordance with the overall aims and policies of the installation • identification of staff training and education required and timetable for implementation • frequency of review periods. <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>The plan shall be implemented from the date of approval by the Agency.</p>	Completed
IC6	<p>A written report shall be submitted to the Agency detailing the review of possible measures for noise reduction from the roof fans located on the turbine and HRSG roof building. The report shall include but not be limited to:</p> <ul style="list-style-type: none"> • identification of noise reduction measures • the potential benefit following implementation of the measures identified • a plan for the implementation of the measures including timescales for completion of actions with justification for these. <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>The plan shall be implemented from the date of approval in writing by the Agency.</p>	Completed

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC7	<p>A water efficiency audit shall be submitted to the Agency in accordance with section 2.4.2 of the IPPC Sector Guidance Note Combustion Activities. The audit shall include but not be limited to:</p> <ul style="list-style-type: none"> • methodology used • review of water mass balances for the installation • establishment of water quality requirements associated with each use • exploration of opportunities and techniques for water re-use • installation specific water efficiency objectives <p>The audit shall contain a plan including timescales for the implementation of individual improvement measures.</p> <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the audit.</p> <p>The plan shall be implemented from the date of approval in writing by the Agency.</p>	Completed
IC8	<p>The Operator shall produce a written site closure plan in line with the requirements of section 2.11 of the IPPC Sector Guidance Note Combustion Activities. A copy of the site closure plan shall be submitted to the Agency for approval.</p>	Completed
IC9	<p>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.</p> <p>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:-</p> <ul style="list-style-type: none"> <input type="checkbox"/> Providing a written proposal for the installation of an eel screen. <input type="checkbox"/> Providing a written proposal to the modification of existing screening arrangements. <input type="checkbox"/> 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. <input type="checkbox"/> Providing a written response setting out a case for an exemption <p>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.</p> <p>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.</p> <p>The proposals shall be implemented in accordance with the Environment Agency’s written approval.</p>	Completed
IC 10	<p>For LCPD LCP 137 and LCP 138 (now LCP 81 and LCP 82 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.</p>	28/01/16

Table S1.4 Start-up and Shut-down thresholds		
Emission Point and Unit Reference	“Minimum Start-Up Load” Load in MWe and as percent of rated power output (%)	“Minimum Shut-Down Load” Load in MWe and as percent of rated power output (%)
A1: LCP 81	250 MWe; 62.5% - “part module” operation – single GT and ST	250 MWe; 62.5% - “part module” operation – single GT and ST
A2: LCP 82	250 MWe; 62.5% - “part module” operation – single GT and ST	250 MWe; 62.5% - “part module” operation – single GT and ST
A1: LCP 81 + A2: LCP 82	480 MWe; 59.6% - “full module” operation – two GTs and ST	480 MWe; 59.6% - “full module” operation – two GTs and ST

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
-	

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. 81 Gas turbine fired on natural gas	50 mg/m ³	Monthly mean of validated hourly averages	Continuous	BS EN 14181
A1 [point A1 on site plan in schedule 7]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	LCP No. 81 Gas turbine fired on natural gas	55 mg/m ³	Daily mean of validated hourly averages	Continuous	BS EN 14181
A1 [point A1 on site plan in schedule 7]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	LCP No. 81 Gas turbine fired on natural gas	90 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. 81 Gas turbine fired on natural gas	80 mg/m ³	Monthly mean of validated hourly averages	Continuous	BS EN 14181
A1 [Point A1 on site plan in schedule 7]	Carbon Monoxide	LCP No. 81 Gas turbine fired on natural gas	80 mg/m ³	Daily mean of validated hourly averages	Continuous	BS EN 14181
A1 [Point A1 on site plan in schedule 7]	Carbon Monoxide	LCP No. 81 Gas turbine fired on natural gas	120 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]	Oxygen	LCP No. 81 Gas turbine fired on natural gas	-	-	Continuous As appropriate to reference	BS EN 14181
A1 [Point A1 on site plan in schedule 7]	Water Vapour	LCP No. 81 Gas turbine fired on natural gas	-	-	Continuous As appropriate to reference	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
A1 [Point A1 on site plan in schedule 7]	Stack gas temperature	LCP No. 81 Gas turbine fired on natural gas	-	-	Continuous As appropriate to reference	Traceable to national standards
A1 [Point A1 on site plan in schedule 7]	Stack gas pressure	LCP No. 81 Gas turbine fired on natural gas	-	-	Continuous As appropriate to reference	Traceable to national standards
A1 [Point A1 on site plan in schedule 7]	As required by the Method Implementation Document for BS EN 15259	LCP No. 81 Gas turbine fired on natural gas	-	-	Pre-operation and when there is a significant operational change	BS EN 15259
A1 [Point A1 on site plan in schedule 7]	Sulphur dioxide	LCP No. 81 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]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	LCP No. 82 Gas turbine fired on natural gas	50 mg/m ³	Monthly mean of validated hourly averages	Continuous	BS EN 14181
A2 [Point A2 on site plan in Schedule 7]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	LCP No. 82 Gas turbine fired on natural gas	55 mg/m ³	Daily mean of validated hourly averages	Continuous	BS EN 14181
A2 [Point A2 on site plan in Schedule 7]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	LCP No. 82 Gas turbine fired on natural gas	90 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]	Carbon Monoxide	LCP No. 82 Gas turbine fired on natural gas	80 mg/m ³	Monthly mean of validated hourly averages	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. 82 Gas turbine fired on natural gas	80 mg/m ³	Daily mean of validated hourly averages	Continuous	BS EN 14181
A2 [Point A2 on site plan in Schedule 7]	Carbon Monoxide	LCP No. 82 Gas turbine fired on natural gas	120 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]	Oxygen	LCP No. 82 Gas turbine fired on natural gas	-	-	Continuous As appropriate to reference	BS EN 14181
A2 [Point A2 on site plan in Schedule 7]	Water Vapour	LCP No. 82 Gas turbine fired on natural gas	-	-	Continuous As appropriate to reference	BS EN 14181
A2 [Point A2 on site plan in Schedule 7]	Stack gas temperature	LCP No. 82 Gas turbine fired on natural gas	-	-	Continuous As appropriate to reference	Traceable to national standards
A2 [Point A2 on site plan in Schedule 7]	Stack gas pressure	LCP No. 82 Gas turbine fired on natural gas	-	-	Continuous As appropriate to reference	Traceable to national standards
A2 [Point A2 on site plan in Schedule 7]	As required by the Method Implementation Document for BS EN 15259	LCP No. 82 Gas turbine fired on natural gas	-	-	Pre-operation and when there is a significant operational change	BS EN 15259
A2 [Point A2 on site plan in schedule 7]	Sulphur dioxide	LCP No. 82 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
A4	Emergency diesel generators exhaust	-	No limit set	-	-	-
A8 (Point A8 on site plan in Schedule 7)	Start up boiler stack fired on natural gas via 45m stack	(NO and NO2 expressed as NO2)	No limit set	-	-	-
A8 (Point A8 on site plan in Schedule 7)	Start up boiler stack fired on natural gas via 45m stack	Carbon monoxide	No limit set	-	-	-
Vents for lubricating oil systems	Gas and steam turbines	VOCs	No limit set	-	-	-
Steam and pressure release valves	Process areas on site	-	No limit set	-	-	-
Vents for natural gas venting	Gas distribution pipelines on site	-	No limit set	-	-	-

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
Point W1 on site plan in Schedule 7- emission to Damhead Creek						
W1	Flow	Storm water basin ⁽¹⁾	30 m ³ per hour	Instantaneous	Continuous	Permanent access not required
W1	Temperature	Storm water basin	30°C	Instantaneous	Continuous	Permanent access not required
W1	pH range	Storm water basin	6-9	Instantaneous	Continuous	BS6068-2.50
W1	Total suspended solids	Storm water basin	60 mg/l	Flow weighted monthly average	Monthly	BS EN 872
W1	Mercury and its compounds, expressed as mercury (Total Hg)	Storm water basin	0.005 mg/l	Flow weighted monthly average	Monthly	BS EN 13500
W1	Cadmium and its compounds, expressed as cadmium (Total Cd)	Storm water basin	0.01 mg/l	Flow weighted monthly average	Monthly	BS 6068-2.89
W1	BOD	Storm water basin	40 mg/l	Flow weighted monthly average	Monthly	ISO 5815
W1	Total Ammonia	Storm water basin	8 mg/l	Flow weighted monthly average	Monthly	BS 6068 2.11
W1	Oil or grease	Storm water basin	No visible traces ⁽²⁾	Instantaneous	Daily	Permanent access not required.

⁽¹⁾ Storm water basin comprises the following effluent streams:

- Plant processing areas having passed through wastewater conditioning basin
- Treated sewage effluent
- Collected rain water
- Site drainage having passed through oil separator

⁽²⁾ No visible oil or grease on the surface of the of the storm water basin at point of discharge. Physical visual checks required once per day.

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,
Emissions to water Parameters as required by condition 3.5.1	W1	Every 3 months	1 January, 1 April, 1 July, 1 October

Table S4.2: Resource Efficiency Metrics	
Parameter	Units
Electricity Exported	GW hr
Heat Exported	GW hr
Mechanical Power Provided	GW hr
Fossil Fuel Energy Consumption	GW hr
Non-Fossil Fuel Energy Consumption	GW hr
Annual Operating Hours	hr
Water Abstracted from Fresh Water Source	m 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

Table S4.3 Chapter III Performance parameters for reporting to DEFRA and other Performance parameters		
Parameter	Frequency of assessment	Units
Thermal Input Capacity for each LCP	Annually	MW
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 (Load Factor)	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 CON 2 – continuous monitoring	01/01/16	Area Office	31/12/15
CEMs	Form IED CEM1 – Invalidation Log	01/01/16	Area Office	31/12/15
Air	Form IED PM1 - discontinuous monitoring	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

“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.

“breakdown” has the meaning given in the ESI IED Compliance Protocol for Utility Boilers and Gas Turbines.

“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.

“malfunction” has the meaning given in the ESI IED Compliance Protocol for Utility Boilers and Gas Turbines.

“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.

“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.

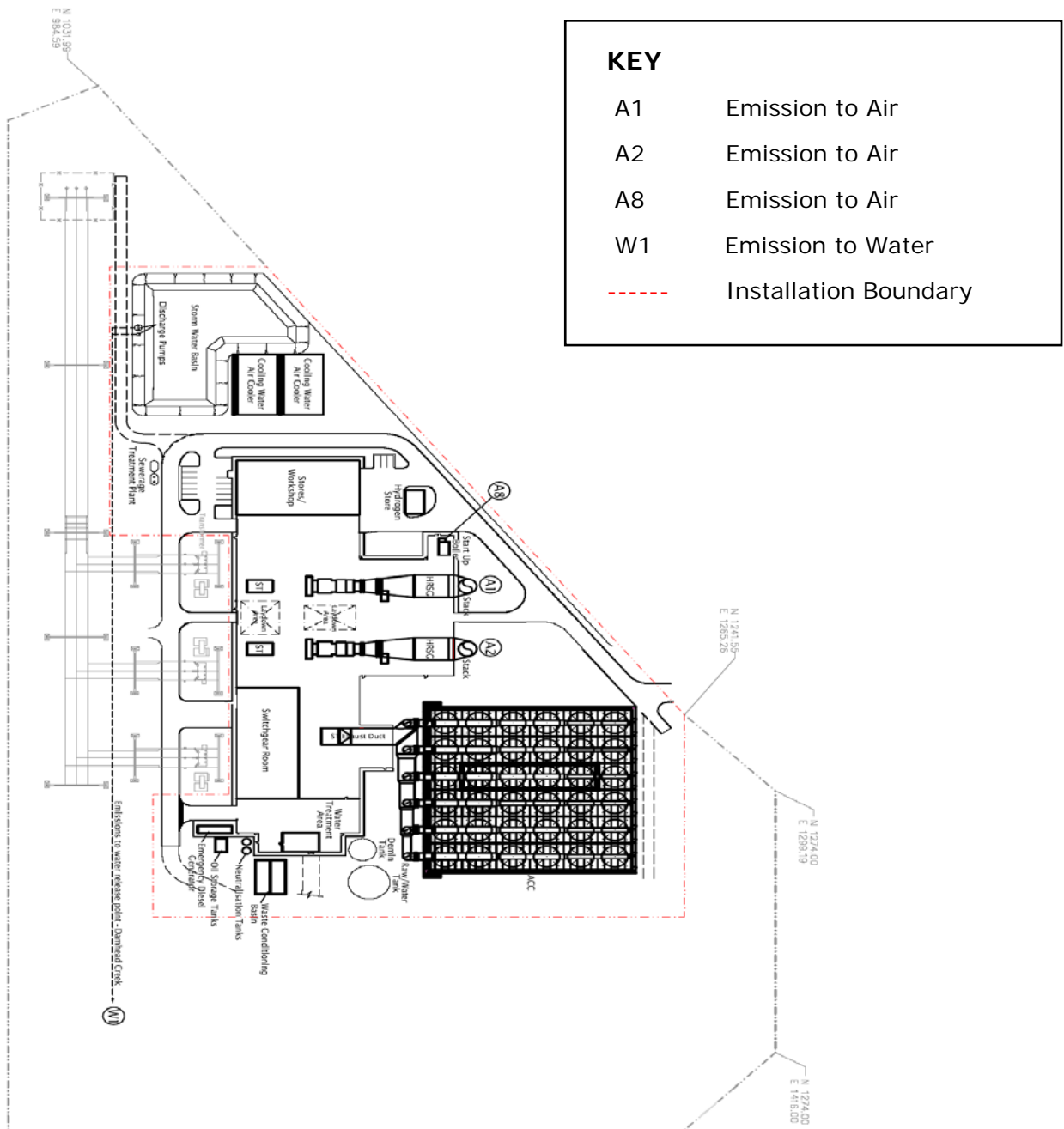
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

in relation to emissions from gas turbine 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

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT