

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

RWE Generation UK Plc

Great Yarmouth Power Station
South Denes Road
Great Yarmouth
Norfolk
NR30 3PY

Variation application number

EPR/KP3531US/V006

Permit number

EPR/KP3531US

Great Yarmouth Power Station

Permit number EPR/KP3531US

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 Transitional National Plan (TNP)

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

- LCP 194 is changed to LCP 267

The requirement to sample Total Hydrocarbons on a weekly basis at sample point W2 has been removed from Table S3.2 and an updated requirement to sample prior to discharge to the seal well has been included and placed into Table S3.5 process monitoring requirements. This change has been initiated by the Environment Agency, but with the operator's agreement.

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

Great Yarmouth Power Station is a combined cycle gas turbine (CCGT) power plant, comprising one gas turbine (710MWth). Natural gas is combusted in the gas turbine to produce electricity. Hot gases from the gas turbine pass through a heat recovery steam generator, which raises steam supplied to the steam turbine to produce electricity, gases are vented to a dedicated HRSG stack. The gas turbine operates in a 1+1 CCGT mode with a single heat recovery steam generator and turbine. The CCGT has an efficiency of 56.55% and therefore qualifies for the IED derogation for higher ELV's. An auxiliary gas fired boiler (28 MWth) is operated during start-up of the CCGT to provide steam to warm the steam turbine.

Directly associated activities included within the installation are:

- Heat recovery steam generator (HRSG)
- Steam turbine
- Water treatment plant
- Cooling plant
- Surface water drainage
- Process effluent drainage

The installation is located within the South Denes industrial area of Great Yarmouth, Norfolk, on land between the River Yare and the North Sea. The site is underlain by made ground and drift deposits, comprising sand, gravel and shell debris, overlying sandstone. The area is classified by the Environment Agency as a principal (major) aquifer.

The main emissions to air are combustion gases from the burning of natural gas (oxides of nitrogen (NO_x) and carbon monoxide). The gas turbine is fitted with dry low NO_x burners, and the auxiliary boiler is fitted with low NO_x burners. Water is abstracted from the River Yare for the process. Waste water, comprising cooling water and effluents arising from boiler blowdown, drain down and water treatment plant, is discharged to the North Sea.

Assessment of impact on the following European designated ecological sites, Breydon Water SPA, Great Yarmouth SPA or Broadland SPA, concluded no likely significant effect on the interest features.

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 received | Duly made 31/03/06 | |
| Additional information received | 24/11/06 | |
| Additional information received | 12/12/06 | |
| Permit determined EPR/KP3531USBP3235LH (PAS Billing ref. BP3235LH) | 30/03/07 | Permit issued to Great Yarmouth Power Station |
| Application for transfer EPR/KP3531US/T001 (PAS Billing ref: KP3521US) | Duly made 15/08/07 | |
| Transfer determined EPR/KP3531US/T001 (PAS Billing ref: KP3521US) | 10/09/07 | Transfer of permit to RWE npower plc |
| Variation application EPR/KP3531US/V002 (PAS Billing ref: RP3937TM) | Duly made 12/04/11 | Variation to amend table S4.2. |
| Variation issued EPR/KP3531US/V002 (PAS Billing ref: RP3937TM) | 02/06/11 | Variation issued to RWE npower plc. |
| Environment Agency Initiated Variation issued EPR/KP3531US/V003 (PAS Billing ref: GP3936ZY) | 11/03/13 | Environment Agency Initiated Variation, to incorporate Eel Regulations improvement condition. |
| Variation application EPR/KP3531US/V004 (PAS Billing ref:HP3638EQ) | Duly made 20/12/13 | Application to remove TRO monitoring requirements when the hypochlorite system is not in use. |
| Variation issued EPR/KP3531US/V004 PAS Billing ref: HP3638EQ) | 21/01/14 | Variation issued to RWE npower plc. |
| Notified of change of company name | 13/11/14 | Name changed to RWE Generation UK Plc. |
| Variation issued EPR/KP3531US/V005 (PAS Billing ref: MP3032WJ) | 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 | 31/03/15 | Response received from the Operator. |
| Additional information received | 26/05/15 | Response to request for further information dated 15/05/15. |
| Additional information received | 26/08/15 | Response to request for further information dated 26/08/15. |
| Additional information received | 01/09/15 | Response to request for further information dated 01/09/15. |
| Additional information received | 07/12/15 | Response received from the operator |
| Additional information received | 21/12/15 | Confirmation of compliance route |
| Variation determined EPR/KP3531US/V006 (PAS Billing ref: YP3838AV) | 23/12/15 | 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/KP3531US

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

**Great Yarmouth Power Station
South Denes Road
Great Yarmouth
Norfolk
NR30 3PY**

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/KP3531US

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/KP3531US/V006 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

Great Yarmouth Power Station

South Denes Road

Great Yarmouth

Norfolk

NR30 3PY

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.

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 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” dated 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 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 S1.5
- 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 S1.3 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.

2.5 Pre-operational conditions

- 2.5.1 The operations specified in schedule 1 table S1.4 shall not commence until the measures specified in that table have been completed.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.
- 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, S3.2 and S3.3 of a substance listed in schedule 3 table S3.4 shall not exceed the relevant limit in table S3.4.
- 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, S3.2 and S3.3;
 - (b) process monitoring specified in table S3.5
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continuous), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2, and S3.3 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 3.7.7, 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.

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 267. Unless otherwise agreed in writing with the Environment Agency, within 1 month of the end of each quarter, the operator shall 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 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. | LCP267: GT for production of electricity and steam (710 MWth), fitted with dry low NOx burners. One auxiliary gas fired boiler fitted with low NOx burners (28 MWth). One emergency diesel generator (1.735 MWth). | From receipt of natural gas to discharge of exhaust gases and the generation of electricity and steam. |
| Directly Associated Activity | | | |
| A2 | Directly associated activity | Water treatment plant | From receipt of raw materials to discharge of effluent to the process drainage system. |
| A3 | Directly associated activity | Cooling water treatment system (hypochlorite dosing plant) | From receipt of raw materials to discharge to the cooling water system. |
| A4 | Directly associated activity | Cooling systems | From receipt of steam to release of heat and water vapour, and cooling water to the site drainage system |
| A5 | Directly associated activity | Surface water drainage | Handling and storage of site drainage until discharge to the North Sea. |
| A6 | Directly associated activity | Process effluent drainage | Handling, treatment and storage of effluent drainage until discharge to the site drainage system and discharge to the North Sea or sewer. |

| Table S1.2 Operating techniques | | |
|--|--|----------------------|
| Description | Parts | Date Received |
| Application | The response to section B2.1 and B2.2 in the Application. | 13/03/06 |
| Receipt of additional information to the application | Responses to questions 6 and 7, providing further information on how releases are minimised (releases to air from emergency generator and visible plumes) | 12/12/06 |
| Application to vary permit | The response to section 2 in Part C of the application | 12/04/11 |
| 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/ii/iii (Proposed ELV's, application for higher NO _x , ELV between MSUL/MSDL and 70% load). | Received 31/03/15 |
| Receipt of additional information to the regulation 60(1) Notice. | Confirmation of the compliance routes chosen for LCP 267 (Drafting note: suggested text if operator originally chose multiple compliance routes and subsequently withdrew the alternatives) | Received 21/12/15 |

| Table S1.3 Improvement programme requirements | | |
|--|---|-------------|
| Reference | Requirement | Date |
| IC1 | A written procedure shall be submitted to the Agency detailing the methods for determination of sulphur dioxide and particulate matter from emission points A1, including details of the verification of the suitability of the method. | Complete |
| IC2 | A written procedure shall be submitted to the Agency detailing the measures to be used to ensure emissions to air are minimised during start-up and shut-down. The procedure shall include, but not be limited to, consideration of how the visibility of the plume can be minimised. 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. | Complete |
| IC3 | A written report shall be submitted to the Agency for approval. The report shall contain the findings of a review of the Environment Management System and operating procedures to ensure the operator can demonstrate control over the operation of the installation. The report shall include a timescale for implementation of any improvements identified. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The procedures shall be implemented by the Operator from the date of approval in writing by the Agency. | Complete |

| Table S1.3 Improvement programme requirements | | |
|--|--|-------------|
| Reference | Requirement | Date |
| IC4 | <p>A written procedure shall be submitted to the Agency detailing the measures to be used to ensure that monitoring equipment, personnel and organisations employed for the emissions monitoring programme shall comply with the requirements of MCERTS where available, in accordance with the requirements of condition 3.6.3.</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 procedure shall be implemented by the Operator from the date of approval in writing by the Agency.</p> | Complete |
| IC5 | <p>A written report shall be submitted to the 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.</p> <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report.</p> <p>The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.</p> | Complete |
| IC6 | <p>A written report shall be submitted to the 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.</p> <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report.</p> <p>The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.</p> | Complete |
| IC7 | <p>A written site closure plan shall be submitted to the Agency for approval. The plan shall contain the measures, which will be taken on cessation of part or all of the 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.</p> | Complete |
| IC8 | <p>A written energy efficiency plan shall be submitted to the Agency for approval. The plan shall consider all techniques relevant to the installation in accordance with the requirements of section 2.7 of IPPC Sector Guidance Note for the Combustion Sector and guidance note H2 Energy efficiency for IPPC, and include dates for the implementation of individual improvement measures identified.</p> <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report.</p> <p>The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.</p> | Complete |

| Table S1.3 Improvement programme requirements | | |
|--|---|-------------|
| Reference | Requirement | Date |
| 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"> • 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 <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> | Complete |

| Reference | Operation | Pre-operational measures | Date |
|------------------|---------------------------|--|-------------|
| 1 | Hypochlorite dosing plant | <p>A written report shall be submitted to the Agency for approval. The report shall contain the results of an assessment to identify the most appropriate dosing regime to control biological fouling of the cooling water system.</p> <p>The report shall include an assessment of impact associated with the proposed operation, dosing regime and emission limit values. In particular, the operator shall demonstrate that the discharge of treated cooling water would not result in an exceedence of the Environmental Assessment Level for Total Residual Oxidants in the receiving water (10µg/l).</p> <p>The report shall also include details of the proposed sampling and monitoring method. Due regard shall be given to the requirements of Agency Technical Guidance Note M18: Monitoring of discharges to water and sewer.</p> <p>The report shall be submitted at least 3 months prior to commissioning the hypochlorite dosing plant.</p> | Complete |
| 2 | Hypochlorite dosing plant | The operator shall submit written confirmation that the approved sampling and monitoring systems have been installed at least 2 weeks prior to commissioning the hypochlorite dosing plant. | Complete |
| 3 | Hypochlorite dosing plant | The operator shall submit a report demonstrating that the approved emission limit values can be achieved. The report shall be submitted at least 1 month prior to operation of the hypochlorite dosing plant. | Complete |

| Emission Point and Unit Reference | “Minimum start up load” Load in MW and as percent of rated power output (%) And when two of the criteria listed below for the LCP or unit have been met. | “Minimum shut-down load” Load in MW and as percent of rated power output (%) And when two of the criteria listed below for the LCP or unit have been met. |
|--|---|--|
| A1 LCP267 | 220 MW; 55%; firing temperature exceeds 1256°C; and diffusion to premix combustion mode switchover | 220 MW; 55%; firing temperature exceeds 1256°C; and diffusion to premix combustion mode switchover |

Schedule 2 – Waste types, raw materials and fuels

| Table S2.1 Raw materials and fuels | |
|---|--|
| Raw materials and fuel description | Specification |
| Raw materials where use may result in a discharge to water. | Impurity levels of mercury and cadmium shall be the minimum available in the commercial product. |
| Natural gas | - |
| Diesel | <0.1% S |

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 ³ | 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. 267 Gas turbine fired on natural gas | 75mg/m ³ 70% to base load ¹ | 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. 267 Gas turbine fired on natural gas | 82.5mg/m ³ 70% to base load ¹ 82.5mg/m ³ MSUL/MSDL to base load ² | 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. 267 Gas turbine fired on natural gas | 90mg/m ³ 70% to base load ¹ | Validated hourly average | Continuous | BS EN 14181 |
| A1 [Point A1 on site plan in schedule 7] | Carbon Monoxide | LCP No. 267 Gas turbine fired on natural gas | 100mg/m ³ 70% to base load ¹ | Monthly mean of validated hourly averages | Continuous | BS EN 14181 |
| A1 [Point A1 on site plan in schedule 7] | Carbon Monoxide | LCP No. 267 Gas turbine fired on natural gas | 110mg/m ³ 70% to base load ¹ 110mg/m ³ MSUL/MSDL to base load ² | Daily mean of validated hourly averages | Continuous | BS EN 14181 |
| A1 [Point A1 on site plan in schedule 7] | Carbon Monoxide | LCP No. 267 Gas turbine fired on natural gas | 150mg/m ³ 70% to base load ¹ | Validated hourly average | 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 down³ | Reference period | Monitoring frequency | Monitoring standard or method |
| A1 [Point A1 on site plan in schedule 7] | Sulphur Dioxide | LCP No. 267 Gas turbine fired on natural gas | - | - | At least every 6 months | Concentration by calculation, as agreed in writing with the Environment Agency. |
| A1 [Point A1 on site plan in schedule 7] | Oxygen | LCP No. 267 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. 267 Gas turbine fired on natural gas | - | | Continuous As appropriate to reference | BS EN 14181 |
| A1 [Point A1 on site plan in schedule 7] | Stack gas temperature | LCP No. 267 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. 267 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. 267 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 2] | Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂) | Auxiliary boiler fired on natural gas with low NOx burners | 140mg/ m ³ | Hourly average | Annual | BS EN 14792 |

| Emission point ref. & location | Parameter | Source | Limit (including unit)-these limits do not apply during start up or shut down³ | Reference period | Monitoring frequency | Monitoring standard or method |
|---|-------------------|---|--|-------------------------|-----------------------------|--------------------------------------|
| Emergency generator | No parameters set | Emergency generator fired on diesel | - | - | - | Permit sampling access not required |
| Natural gas vents | No parameters set | LP purge, HP purge, Pressure relief valve | - | - | - | Permit sampling access not required |
| Vents from storage stacks | No parameters set | Bulk chemical storage tanks | - | - | - | Permit sampling access not required |

Note 1: This ELV applies when the load is >70% throughout the reference period.

Note 2: This ELV applies when the load varies between MSUL/MSDL and base load during the daily reference period. MSUL and MSDL are defined in Table S1.5.

| Emission point ref. & location | Parameter | Source | Limit (incl. unit) | Reference period | Monitoring frequency | Monitoring standard or method |
|---|------------------|--|---------------------------|-------------------------|-----------------------------|--------------------------------------|
| W1 on site plan in schedule 2 emission to North Sea | Flow | Cooling water and effluent arising from boiler blow down, boiler drain down, and water treatment plant | 9.3 m ³ /s | Daily mean | Continuous | As agreed in writing by the Agency |
| W1 on site plan in schedule 2 emission to North Sea | Temperature | Cooling water and effluent arising from boiler blowdown, boiler drain down, and water treatment plant | 35°C | Hourly mean | Continuous | As agreed in writing by the Agency |

| 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 |
| W1 on site plan in schedule 2 emission to North Sea | Increase above inlet temperature | Cooling water and effluent arising from boiler blowdown, boiler drain down, and water treatment plant | 10°C | Hourly mean | Continuous | As agreed in writing by the Agency |
| W1 on site plan in schedule 2 emission to North Sea | Product of flow and increase above inlet temperature | Cooling water and effluent arising from boiler blowdown, boiler drain down, and water treatment plant | 65.1 m ³ °C/s | Hourly mean | Continuous | As agreed in writing by the Agency |
| W1 on site plan in schedule 2 emission to North Sea | pH | Cooling water and effluent arising from boiler blowdown, boiler drain down, and water treatment plant | 9.0 maximum | Instantaneous | Continuous | As agreed in writing by the Agency |
| | | | 6.0 minimum | | | |
| W1 on site plan in schedule 2 emission to North Sea | Total residual oxidant (TRO) | Cooling water discharge | 0.2 mg/l | Hourly average | Continuous ¹ | As agreed in writing by the Agency |
| | | | 0.1 mg/l | Daily average | | |

¹ TRO monitoring only required when the hypochlorite system is in use.

| Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site—emission limits and monitoring requirements | | | | | | |
|---|-------------------|--|---------------------------|-------------------------|-----------------------------|--------------------------------------|
| Emission point ref. & location | Parameter | Source | Limit (incl. Unit) | Reference period | Monitoring frequency | Monitoring standard or method |
| S1 on site plan in schedule 2 emission to Anglian Water Services Ltd foul sewer | No parameters set | Effluent arising from turbine building floor drains via the oily water interceptor | - | - | - | - |

| Table S3.4 Annual limits (excluding start up and shut down except where otherwise stated). | | | | |
|---|---------------|--|---|------------------------|
| Substance | Medium | Limit (including unit) | | Emission Points |
| Dust, Sulphur dioxide and Oxides of nitrogen | Air | Assessment year | LCP TNP Limit | LCP 267 |
| | | 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 | |
| | | 01/06/20-30/06/20 | | |

| Table S3.5 Process monitoring requirements | | | | |
|--|------------------|---------------------------------|--|-----------------------------|
| Emission point reference or source or description of point of measurement | Parameter | Monitoring frequency | Monitoring standard or method | Other specifications |
| Storm water pond discharge | Hydrocarbon | Prior to discharge to seal well | As agreed in writing with the Environment Agency | |

Schedule 4 – Reporting

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

| Parameter | Emission or monitoring point/reference | Reporting period | Period begins |
|---|---|--|---------------------------------------|
| Oxides of nitrogen | A1 | Every 3 months for continuous monitoring | 1 January, 1 April, 1 July, 1 October |
| Carbon Monoxide | A1 | Every 3 months for continuous monitoring | 1 January, 1 April, 1 July, 1 October |
| Sulphur Dioxide | A1 | Every 6 months for periodic monitoring | 1 January, 1 July |
| Releases to water monitoring Parameters as required by condition 3.6.1 | W1 and W2 | Every 3 months | 1 January, 1 April, 1 July, 1 October |

| Parameter | Units |
|---|----------------|
| Electricity Exported | GWhr |
| Heat Exported | GWhr |
| Mechanical Power Provided | GWhr |
| Fossil Fuel Energy Consumption | GWhr |
| Non-Fossil Fuel Energy Consumption | GWhr |
| Annual Operating Hours | hr |
| Water Abstracted from Fresh Water Source | m ³ |
| Water Abstracted from Borehole Source | m ³ |
| Water Abstracted from Estuarine Water Source | m ³ |
| Water Abstracted from Sea Water Source | m ³ |
| Water Abstracted from Mains Water Source | m ³ |
| Gross Total Water Used | m ³ |
| Net Water Used | m ³ |
| Hazardous Waste Transferred for Disposal at another installation | t |
| Hazardous Waste Transferred for Recovery at another installation | t |
| Non-Hazardous Waste Transferred for Disposal at another installation | t |
| Non-Hazardous Waste Transferred for Recovery at another installation | t |
| Waste recovered to Quality Protocol Specification and transferred off-site | t |
| Waste transferred directly off-site for use under an exemption / position statement | t |

| 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 | TJ |
| Total Emissions to Air for Oxide of Nitrogen for LCP267 | Annually | t |
| Total Emissions to Air for Sulphur Dioxide for LCP267 | Annually | t |
| Total Emissions to Air for Dust for LCP267 | Annually | t |
| Operating Hours for each LCP | Annually | hr |

| Table S4.4 Reporting forms | | | | |
|-----------------------------------|--|-----------------------|-------------------------|---------------------|
| Media/parameter | Reporting format | Starting Point | Agency recipient | Date of form |
| Air & Energy | Form IED AR1 – SO ₂ , NO _x and dust mass emission and energy | 01/01/16 | National | 31/12/15 |
| 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 |
| 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 |
| 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 | KP3531US |
| Name of operator | RWE Generation UK Plc |
| Location of Facility | Great Yarmouth 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.

“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.

“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.

“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.

“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

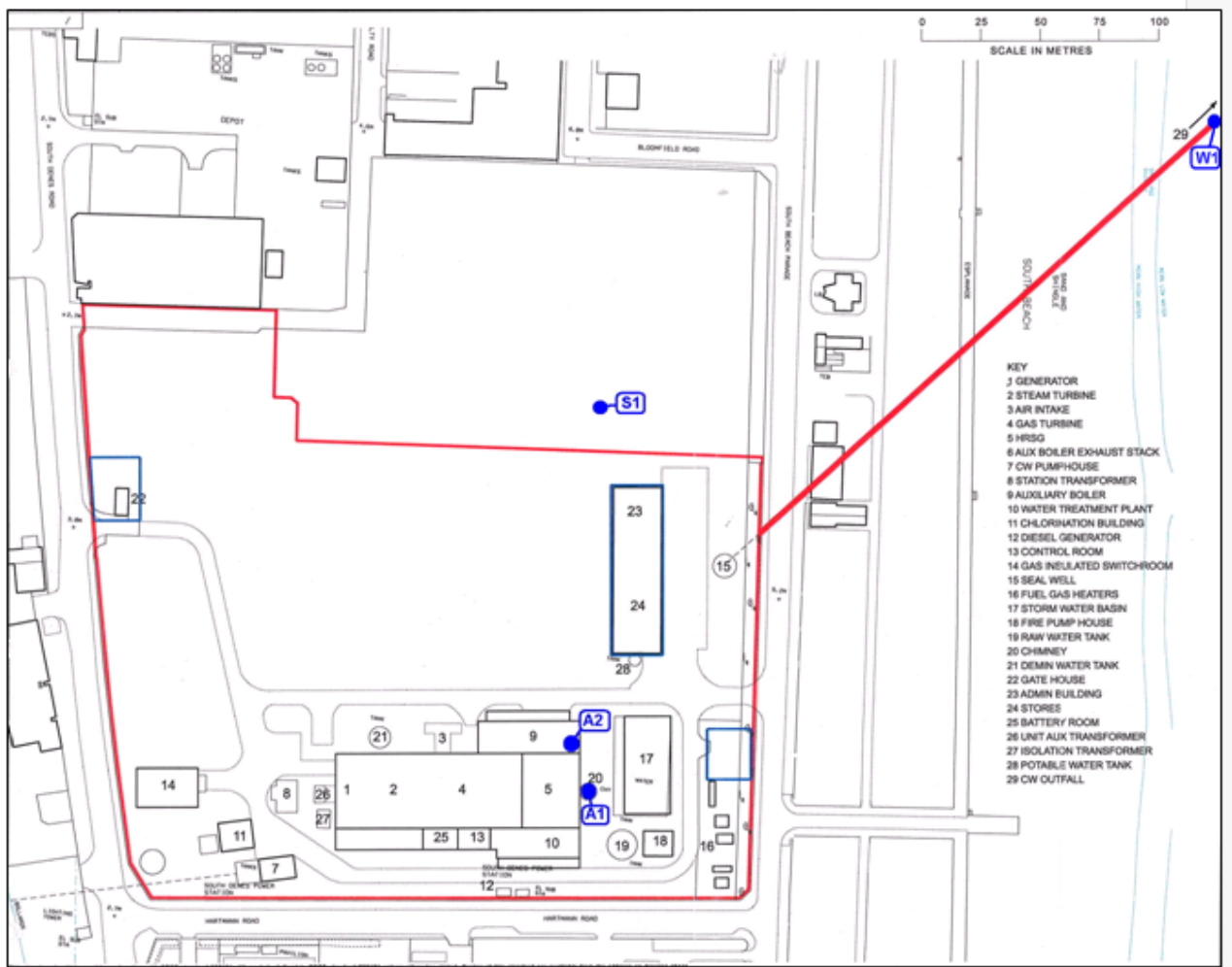
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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