



Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Centrica Distributed Generation Limited

Roosecote Power Station
Rampside Road
Barrow in Furness
Cumbria
LA13 0PQ

Variation application number

EPR/BM4406IU/V006

Permit number

EPR/BM4406IU

Site Name

Permit number **EPR/BM4406IU**

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 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 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).

The installation was previously permitted to operate one Large Combustion Plant (LCP); LCP No. 57, a single 456 MW_{th} combined cycle gas turbine with a heat recovery steam generator and steam turbine. This had a maximum electrical output of 224 MW from operation of the CCGT. The former power station and supporting ancillary plant have since been demolished and therefore there is no existing unit present on site.

This variation removes, from the permit, the original combined cycle gas turbine, which has since been decommissioned and demolished, as well as removal of the demolished heat recovery steam generator, steam turbine and ancillary plant. This variation adds a peaking plant operating comprising up to five reciprocating spark-ignition gas engines to the permit. The new plant will have a total thermal input of circa 105 MW and will produce up to 49.9 MW of electricity gross. The proposed facility will operate to provide additional energy security during periods of peak electricity consumption within the UK. This electricity will be exported to the grid. Operation of the peaking plant is limited to 1,500 hours per engine per annum.

Natural gas will be delivered to the new peaking plant via a dedicated gas supply. The electrical output from the plant will be exported to the 132kV Distribution Network via a step up transformer. Cooling for the gas engines will be provided by new fin-fan coolers which will operate in a closed circuit cooling water system.

Emissions to air will result from the combustion of natural gas within the gas engines, which will be released into the atmosphere via 5 dedicated exhaust stacks 30m high. It is expected that there will be no significant sources of odour resulting from the operation of the peaking plant. The main pollutants from the facility will be gaseous combustion products (oxides of nitrogen and carbon monoxide). Assessment by the Environment Agency shows that the nitrogen dioxide (NO₂) impact from the proposed activity is likely to be insignificant at sensitive human receptors.

There are no process emissions released to sewer from the site and only uncontaminated surface waters are discharged to Roosecote Sands.

The land surrounding the installation to the south is a gas terminal; whilst to the north-west are a sewage works and small industrial area. To the north-east of the site and to the east beyond Rampside Road are fields and agricultural land. Adjacent to the site to the south-west is an area of sand flats and wetland areas draining into Morecambe Bay. The closest residential properties are located approximately 650m to the north of the peaking plant's location at Dowie Close.

The majority of the site forms part of the Morecambe Bay Special Protection Area (SPA), Special Area of Conservation (SAC), Site of Special Scientific Interest (SSSI) and wetland of international importance under the RAMSAR convention. South Walney and Piel Channel Flats, designated SSSI and SPA, is within 100 metres from the Installation, and the Duddon Estuary, designated SPA and RAMSAR lies approximately 3KM from the Installation. Both Elliscales Quarry and Sea Wood are designated SSSI sites and located

within 10Km of the Installation. Assessment by the Environment Agency shows that emissions from activities undertaken by the Installation are unlikely to have a significant impact on the habitat sites.

There are no changes to the installation boundary as a result of this variation.

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 BM4406IU	Duly made 29/03/2006	
Additional information received	29/11/2006	
Permit determined	19/12/2006	
Variation application	Duly made 05/10/2009	
Additional information received	Requested 07/10/2009	Received 16/10/2009
Variation determined EPR/BM4406IU/V003	11/03/2013	Environment Agency Initiated Variation to incorporate Eel Regulations improvement condition
Variation determined EPR/BM4406IU/V004 (PAS Billing ref PP3232RP)	14/12/2015	Agency Initiated variation to include condition 2.1.2 requiring the operator to provide evidence that the facility will operate in accordance with Chapter III of the Industrial Emissions Directive. Varied Permit Issued.
Variation Application to Change Company name	04/03/2016	
Variation issued EPR/BM4406IU/V005	07/03/2016	Name changed to Centrica Distributed Generation Limited
Variation application EPR/BM4406IU/V006	Duly made 01/07/16	Variation to replace combined cycle gas turbines with 5 gas spark engines
Additional Information received	13/10/16	Response to Schedule 5 Notice issued 21/9/16
Variation determined EPR/BM4406IU	01/12/2016	Varied and consolidated permit issued in modern condition format.

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/BM4406IU

Issued to

Centrica Distributed Generation Limited (“the operator”)

whose registered office is

**Millstream
Maidenhead Road
Windsor
Berkshire
SL4 5GD**

company registration number 04713745

to operate a regulated facility at

**Roosecote Power Station
Rampside Road
Barrow in Furness
Cumbria
LA13 0PQ**

to the extent set out in the schedules.

The notice shall take effect from 01/12/2016

Name	Date
J Linton	01/12/2016

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/BM4406IU/V006

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BM4406IU/V006 authorising,

Centrica Distributed Generation Limited (“the operator”),

whose registered office is.

**Millstream
Maidenhead Road
Windsor
Berkshire
SL4 5GD**

company registration number 04713745

to operate an installation at

**Roosecote Power Station
Rampside Road
Barrow in Furness
Cumbria
LA13 0PQ**

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

Name	Date
J Linton	01/12/2016

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
 - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.2 Energy efficiency

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

1.3 Efficient use of raw materials

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

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

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

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

2 Operations

2.1 Permitted activities

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

2.2 The site

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

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 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.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 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.
- 2.3.5 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.
- 2.3.6 For the following activities referenced in Schedule 1, table S1.1: A1. The activities shall not operate for more than 1500 hours per year per engine.

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 activities shall not be brought into operation until the measures specified in schedule 1 table S1.4 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 and S3.2
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 The emission values from emission points A7, A8, A9, A10 and A11 listed in schedule 3 table S3.1, measured during periods of abatement equipment malfunction and breakdown shall be disregarded for the purposes of compliance with Table S3.1 emission limit values.
- 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 table S3.1
- 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 unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

- 4.1.1 All records required to be made by this permit shall:
- (a) be legible;
 - (b) be made as soon as reasonably practicable;
 - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
 - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) off-site environmental effects; and
 - (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
 - (b) the resource efficiency metrics set out in schedule 4 table S4.2;
 - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule and
 - (d) where condition 2.3.6 applies the hours of operation in any year;
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
 - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
 - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.3 Notifications

- 4.3.1 In the event:
- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
 - (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
 - (b) of a breach of any permit condition the operator must immediately—
 - (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
 - (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i) or 4.3.1(b)(i) where the information relates to the breach of a condition specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and
 - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
- Where the operator is a corporate body other than a registered company:
- (c) any change in the operator's name or address; and
 - (d) any steps taken with a view to the dissolution of the operator.
- 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.

4.4 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.	5 Reciprocating Spark Ignition gas engines for the production of electricity	From receipt of natural gas to discharge of exhaust gases, and the generation of electricity. Operation of combustion plant for no more than 1500 hours per year per engine.
Directly Associated Activity			
A2	Directly associated activity	Surface water drainage to Salhouse Pool	Handling and storage of site drainage from external areas of the site until discharged to the Salhouse Pool
A3	Directly associated activity	Miscellaneous utility systems(including emergency diesel generator, lubrication systems, control systems)	From receipt of raw materials to dispatch for use

Table S1.2 Operating techniques		
Description	Parts	Date Received
Variation Application BM4406IU/V006	Section 3 of the application document “ Roosecote Power Station Application to vary Permit EPR/BM4406IU For Centrica Distributed Generation Limited” provided in response to section 3a –technical standards, Part C3 of the application form	01/07/2016

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IP1	<p>A written plan shall be submitted to the Environment Agency for approval detailing measures required in order to prevent, and where that is not possible, minimise visible emissions during start-up and shutdown periods, in accordance with section 2.2.of TGN V2.03 "IPPC Sector Guidance Note for Combustion Activities",27 July 2005.</p> <p>This plan shall address those issues documented within sections 2.1,5.2/3 and 4.3.6 of the application, and shall include a timetable for the implementation of any such measures in order to ensure compliance with this condition.</p> <p>The plan shall be implemented by the operator from the date of approval in writing by the Environment Agency.</p>	Complete
IP2	<p>The Operator shall undertake an assessment into the containment measures on site. This shall include, but not be limited to bunding of distillate fuel oil storage tanks.</p> <p>The assessment shall take into account the requirements of section 2.2.6 and 2.2.9 of TGN V2.03 'IPPC Sector Guidance Note for Combustion Activities', 27 July 2005.</p> <p>A written report summarising the findings, together with a timetable for any improvements identified shall be submitted to the Environment Agency.</p>	Complete
IP3	<p>The Operator shall assess current monitoring equipment, personnel and organisations employed for air emissions monitoring (as specified within table S4.1 of this Permit) for compliance with MCERTS (condition 3.6.3), as specified within section 2.10.1.7 of the application.</p> <p>A written summary shall be provided to the Agency documenting the findings, together with a timetable for any improvements identified. The notification requirements of condition 2.5,2 shall be deemed to have been complied with upon submission of this plan.</p>	Complete
IP4	<p>The Operator shall carry out a further noise survey in accordance with the assessment procedure given in BS4142: 1997 Method for rating industrial noise affecting mixed residential and industrial areas.</p> <p>A written summary shall be provided to the Agency documenting the findings of the survey, together with a comparison to the assessment provided within appendix E of the application.</p> <p>The summary shall include a timetable for the implementation of any proposed improvements, as appropriate, and shall seek written approval from the Agency to the timescales indicated within the summary.</p>	Complete
IP5	<p>The Operator shall carry out monitoring for emissions to air of Carbon Monoxide from emission point A1 for the validation of current in-house methods, in accordance with table S4.1.</p> <p>Prior to undertaking such monitoring, the Operator shall submit a plan detailing proposed monitoring methods to the Agency for agreement. The plan shall have regard to Agency Technical Guidance Note M2 for monitoring.</p> <p>The results of the monitoring shall be reported to the Agency together with a summary report for the validation of current monitoring methods, in accordance with table S4.1. This report shall also identify any variations, which might exist, between monitoring results.</p> <p>This assessment shall be used to assess the requirement for either the reduction of, or setting of any additional monitoring parameters.</p>	Complete

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IP6	<p>The Operator shall assess options available for reducing emissions of NOx in order to meet benchmark levels, as detailed within section 3.2 of TGN V2.03 'IPPC Sector Guidance Note for Combustion Activities', 27 July 2005.</p> <p>A written report summarising the assessment shall be submitted to the Agency. This shall take into account air emissions data as provided within the application and; monitoring, as required by schedule 4 of the permit, and shall re-assess information on NOx control technologies, as provided within section 5.4.1 of the application.</p> <p>The report shall include a timetable for the implementation of any proposed improvements, as appropriate, and shall seek written approval from the Agency to the timescales indicated within the report.</p>	Complete
IP7	<p>The Operator shall carry out a waste minimisation audit, in accordance with section 2.4.2 of TGN V2.03 'IPPC Sector Guidance Note for Combustion Activities', 27 July 2005.</p> <p>A summary of the audit shall be submitted to the Agency together with a timetable to implement any necessary improvements identified.</p>	Complete
IP8	<p>The Operator shall carry out a water efficiency audit, in accordance with section 2.7 of TGN V2.03 'IPPC Sector Guidance Note for Combustion Activities', 27 July 2005</p> <p>A summary of the audit shall be submitted to the Agency together with a timetable to implement any necessary improvements identified.</p>	Complete
IP9	<p>The Operator shall carry out an Energy efficiency audit, in accordance with section of TGN V2,03 "IPPC Sector Guidance Note for Combustion Activities", 27 July 2005</p> <p>A summary of the audit shall be submitted to the Agency together with a timetable to implement any necessary improvements identified.</p>	Complete
IP10	<p>The Operator shall produce a written site closure plan, in accordance with section 2.11 of V2.03 'IPPC Sector Guidance Note for Combustion Activities", 27 July2005. A copy of the plan shall be submitted to the Environment Agency.</p>	Complete

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IP11	<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. 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
IP12	The Operator shall submit a report in writing to the Environment Agency for acceptance. The report shall define and provide a justification of start-up and shut down definitions for the gas engines.	3 months prior to completion of commissioning
IP13	The operator will provide written notification to the Environment Agency of the date when commissioning of the gas engine units is complete	1 month after completion of commissioning
IP14	<p>The operator shall provide a commissioning report to the Environment Agency, detailing</p> <ul style="list-style-type: none"> i) The results of the commissioning programme: and ii) Any significant changes to the information provided in the pre-operation condition report. 	1 month after completion of commissioning
IP15	<p>The Operator shall establish the methane emissions from the engines and compare these to the manufacturer's specification and appropriate benchmark level as agreed in writing with the Environment Agency.</p> <p>Based on the conclusions of this assessment the Operator shall propose an appropriate proposal to assess potential methane slip for the lifespan of the engines and outline an action plan that will be followed in the instance that emissions above the manufacturer's specification or appropriate benchmark level are identified.</p> <p>The result of the assessment and the proposed action plan shall be submitted in writing to the Environment Agency for approval.</p>	12 months from commissioning or as otherwise agreed in writing with the Environment Agency.

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IP16	<p>The Operator shall establish emissions of carbon monoxide and formaldehyde from the engines.</p> <p>Using this information, an assessment of the impacts of carbon monoxide emissions and possible impacts of formaldehyde should be undertaken in line with our H1 guidance or equivalent methodology. A review of the emission levels in comparison to the relevant benchmark levels shall also be carried out. A written report detailing the findings of the assessment of the emissions, predicted impacts and the review in comparison to the relevant benchmarks should be submitted to the Environment Agency for approval.</p>	12 months from commissioning or as otherwise agreed in writing with the Environment Agency.

Table S1.4 Pre-operational measures	
Reference	Pre-operational measures
1	<p>The operator shall submit a report to the Environment Agency providing detailed design(s) for the new gas engines and a finalised location plan.</p> <p>The operator shall undertake a review of the final detailed design/ plans for the new unit(s) prior to construction to ensure that:</p> <ol style="list-style-type: none"> 1) the final design will meet the requirements of BAT; . 2) the application still accurately reflects the final operating proposals; and 3) the environmental impact assessment still accurately reflects the predicted impacts from the proposal. <p>The operator shall submit a written report to the Environment Agency for approval, 3 months prior to construction, detailing the findings of this review.</p>
2	The operator shall inform the Environment Agency in writing prior to fuel being burned for the first time in the new gas engine units.

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Natural Gas	-
Diesel Oil	<0.1% sulphur light fuel oil (diesel)

Schedule 3 – Emissions and monitoring

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
A7,A8,A9,A10,A11	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	Spark Ignition engine exhausts number 1-5 fired on natural gas	95 mg/m ³	-	Annually	BS EN 14792
	Carbon Monoxide		No limit set	-	Annually	BS EN 15058
	Oxygen		No limit set	-	Annually	BS EN 14789
	Water Vapour		No limit set	-	Annually	BS EN 14790
	As required by the Method Implementation Document for BS EN 15259		No limit set	-	Pre-operation and where there is a significant operational change	BS EN 15259
A12		Exhaust from black start diesel generator	No limit set	-		

Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference period	Monitoring frequency	Monitoring standard or method
W1 on site plan in schedule 7 prior to discharge to Salthouse Pool	No parameters set	Surface water run off from roofs, roads and hard standing	-	-		No permanent sampling access required

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	A7, A8, A9, A10, A11	Every year	1 January
Carbon Monoxide	A7, A8, A9, A10, A11	Every year	1 January

Table S4.2: Annual Production/treatment	
Parameter	Units
Electricity Exported	MWhr

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Engine operating hours	Annually	Operating Hours for each gas engine, total plant operating hours & number of runs

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form Air 1 or other form as agreed in writing by the Environment Agency	December 2016
Energy Usage	Form energy 1 or other form as agreed in writing with the Environment Agency	December 2016
Other performance Indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	December 2016
Gas Engine operating hours	Form operating hours or other form agreed in writing with the Environment Agency	December 2016

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	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
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.

“Air Quality Risk Assessment” has the meaning given in Annex D of IED Compliance Protocol for Utility Boilers and Gas Turbines.

“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.

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

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

“CEN” means 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 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.

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

“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.

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 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.

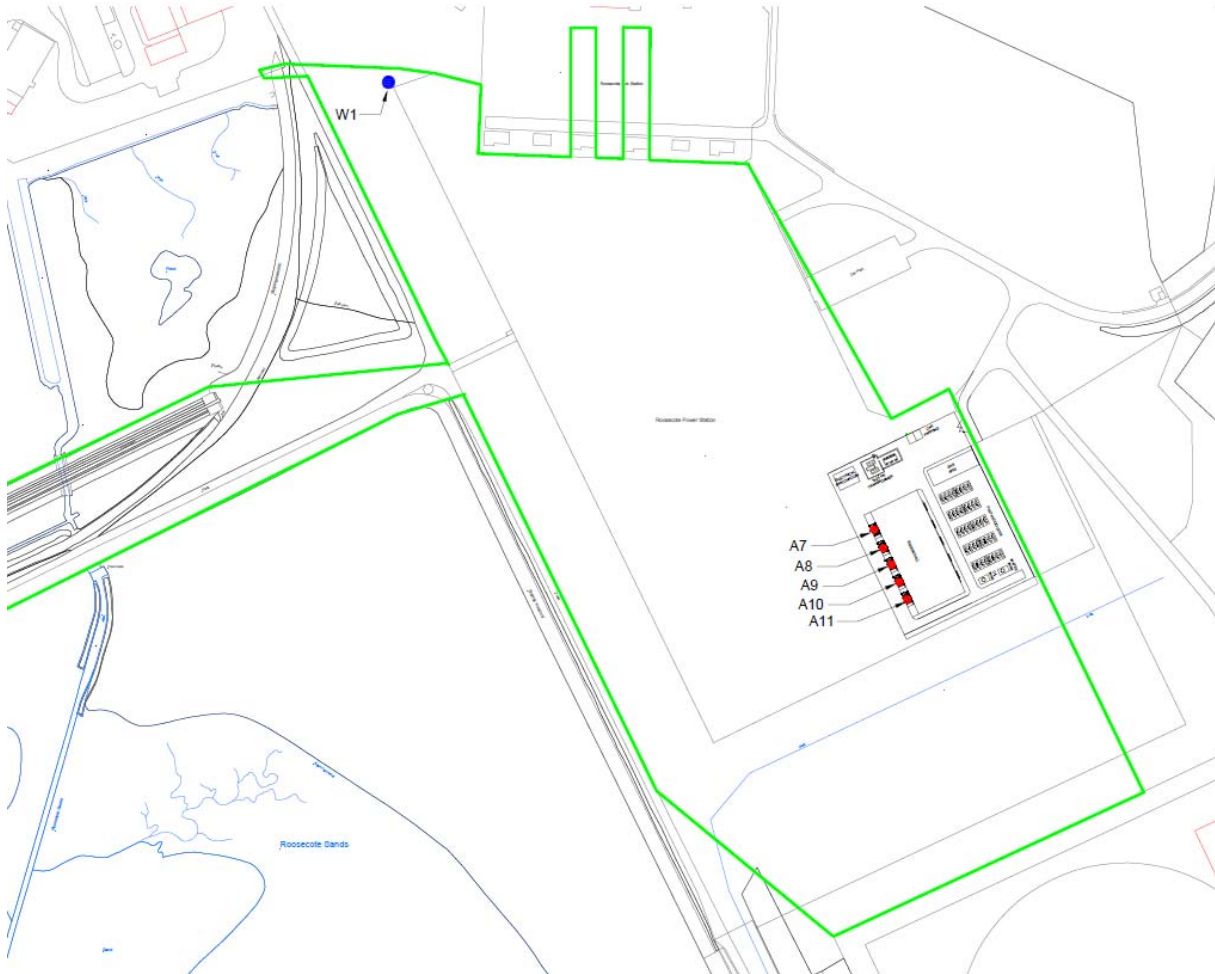
“year” means calendar year ending 31 December.

Schedule 7 – Site plan

Full site installation boundary plan



Expanded plan showing emission point locations



© Crown Copyright. All rights reserved. Environment Agency, 100026380, 2016.

END OF PERMIT