

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

RWE Generation UK PLC

Grimsby A & B Peaking Plant Gate 3 Moody Lane Grimsby DN31 2SW

Variation application number

EPR/WP3036QH/V003

Permit number

EPR/WP3036QH

Grimsby A & B Peaking Plant Permit number EPR/WP3036QH

Introductory note

This introductory note does not form a part of the notice

Under the Environmental Permitting (England & Wales) Regulations (EPR) 2016 (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 the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

Purpose of this variation

This variation is to authorise additional medium combustion plant (MCP) as follows:

4 x 9.9 MWth and 1 x 6.1 MWth natural gas fired reciprocating engines (i.e., a total additional net thermal input of 45.7 MWth). This new plant is referred to as 'Grimsby B'. Grimsby A & Grimsby B will form a single installation but will be able to operate completely independently of one another as peaking plant. Grimsby A & B can operate for up to 1,500 hours per year as a rolling average over a period of five years and with operation in any individual year limited to a maximum of 2,250 hours. The 1,500 hours applies to the entire installation.

Grimsby B will be located on land to the east of the existing Grimsby A plant.

The existing permit allows Grimsby A (10 x 4.8 MWth) to operate for up to 1,500 hours per year. As a combustion plant having a gross thermal input of < 50 MWth, the Grimsby A peaking plant was permitted as MCP/sector generator (SG) under Schedules 25A and 25B of the EPR.

The addition of the new Grimsby B natural gas fired reciprocating engines results in the overall net thermal input for the Grimsby A & B peaking plant increasing from 48 MWth to 93.7 MWth. As a result of this increase in net thermal input to > 50 MWth, the peaking plant is an activity listed in Schedule 1 of the EPR:

Section 1.1 Part A(1)(a): Burning of any fuel in an appliance with a rated thermal input of 50 or more megawatts (MW).

The gas fired engines are classed as MCPs as part of an Industrial Emissions Directive (IED) Chapter II installation.

The variation also reduces the oxides of nitrogen (NOx) emission limits for Grimsby A peaking plant from 190 mg/Nm³ to 100 mg/Nm³.

Non-technical summary

The installation is located at National Grid Reference (NGR) 525322,411329 at the south Humber Bank, in an industrial area. The western area of the site is occupied by the Grimsby A peaking plant, with the eastern area occupied by the Grimsby B peaking plant.

This permit allows RWE Generation UK PLC to operate 15 natural gas fired reciprocating engines as peaking plant. The peaking plant will supply electrical power on a short-term basis meeting peak demand with the electrical distribution network. The installation (Grimsby A & B) will operate as and when called upon by the National Grid for a maximum of 1,500 hours per year as a rolling average over a period of five years and with operation in any individual year limited to a maximum of 2,250 hours.

The gas fired reciprocating engines have the following net rated thermal inputs:

10 x 4.8 MWth, 4 x 9.9 MWth and 1 x 6.1 MWth, with an aggregated rated thermal input of 93.7 MWth.

The peaking plant is an activity listed in Schedule 1 of the EPR:

Section 1.1 Part A(1)(a): Burning of any fuel in an appliance with a rated thermal input of 50 or more megawatts (MW).

The individual gas fired reciprocating engines are also MCP. The 10 x 4.8 MWth engines are 'existing' MCP, operating from 9 January 2018. The remaining engines are 'new' MCP, operating after 20 December 2018.

Emissions to air (primarily oxides of nitrogen (NOx) and carbon monoxide (CO)) are discharged to atmosphere via individual stacks. The stacks serving Grimsby A gas engines are emission points A1 to A10, terminating at a height of 8 m above ground level. The stacks serving Grimsby B gas engines are emission points A11 to A15, terminating at a height of 12.5 m above ground level.

The emission limits for the Grimsby A gas engines are 100 mg/Nm³, lower than those required by the Medium Combustion Plant Directive (MCPD) for 'existing' engines. The emission limits for the Grimsby B gas engines are 95 mg/Nm³, consistent with the MCPD requirements.

There will be no process emissions to water or sewer from the installation.

There are ecological sites within the relevant screening distances of the installation. These include the European Sites; Humber Estuary Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar. The Humber Estuary is also a Site of Special Scientific Interest (SSSI). There are also four Local Wildlife Sites (LWSs) within the relevant screening distance.

The Nomenclature of Economic Activities (NACE) code is the European statistical classification of economic activities. The code is NACE D35.11 – Production of electricity.

The schedules specify the changes made to the permit.

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

Status log of the permit						
Description	Date	Comments				
Application EPR/WP3036QH/A001	Duly made 09/01/2019	Bespoke application for a Specified Generator (Grimsby A peaking plant)				
Additional information received	18/03/2019	Response to Schedule 5 information notice with revised air dispersion modelling				
Permit granted EPR/WP3036QH	30/04/2019	Permit issued to RWE Generation UK PLC				
Variation application EPR/WP3036QH/V002	Duly made 08/10/2019	Application to increase oxides of nitrogen (NOx) emission limit				
Variation issued EPR/WP3036QH/V002	27/05/2020	Varied permit issued to RWE Generation UK PLC				
Variation application EPR/WP3036QH/V003	Duly made 02/08/2023	Application to add five natural gas fired engines (Grimsby B peaking plant)				
Request for information sent 09/10/2023	31/10/2023	Response received, air quality assessment				
Request for information sent 13/11/2023	05/12/2023	Response received, air quality assessment (local wildlife site)				
Additional information received	11/01/2024	Updated site plan				
Variation determined and consolidation issued EPR/WP3036QH/V003	15/01/2024	Varied and consolidated permit issued in modern format to RWE Generation UK PLC				

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number

EPR/WP3036QH

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

Grimsby A & B Peaking Plant Gate 3 Moody Lane Grimsby DN31 2SW

to the extent set out in the schedules.

The notice shall take effect from 15/01/2024

Name	Date
Anne Lloyd	15/01/2024

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/WP3036QH

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/WP3036QH/V003 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

Grimsby A & B Peaking Plant Gate 3 Moody Lane Grimsby DN31 2SW

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

Name	Date
Anne Lloyd	15/01/2024

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) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
 - (c) 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 Activity AR1 in schedule 1 table S1.1 shall operate for less than 1,500 hours per year as a rolling average over a period of five years and with operation in any individual year limited to a maximum of 2,250 hours.

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 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; and
 - (b) process monitoring specified in table S3.3.
- 3.5.2 Monitoring shall not take place during periods of start-up or shut-down.
- 3.5.3 The first monitoring measurements shall be carried out:
 - (a) For Grimsby B peaking plant, within four months of the issue date of variation EPR/WP3036QH/V003 or the date when the MCP is first put into operation, whichever is later; and
 - (b) For Grimsby A peaking plant, at any time, but no later than the relevant compliance date.
- 3.5.4 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 continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.5 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.
- 3.5.6 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 S3.1unless 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 annual production data set out in schedule 4 table S4.2; and
 - (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.

4.3 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 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:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual):
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

- 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	
AR1	Section 1.1 Part A(1)(a): Burning any fuel in an appliance with a rated thermal input of 50 or more megawatts	Operation of 15 natural gas fired reciprocating engines with an aggregated total thermal input of 93.7 MW comprising the following plant: Grimsby A peaking plant 10 x 4.8 MWth with a total thermal input of 48 MW Grimsby B peaking plant 4 x 9.9 MWth and 1 x 6.1 MWth with a total thermal input of 45.7 MW	From receipt of natural gas to emissions of combustion gases at emission points A1 to A15 and the generation of electricity for export to the National Grid. The operational hours of the installation shall not exceed the specifications set out in condition 2.3.6 of this permit. Operation of the installation shall be solely for the purpose of providing electricity to the National Grid during peak demand periods.	
Directly as	sociated activities			
AR2	Directly associated activity	Lubricating oil storage	From receipt of raw materials to handling, on-site storage and handling for use.	
AR3	Directly associated activity	Drainage of uncontaminated surface water	From handling and storage of site drainage until discharge of uncontaminated surface water to the site surface water system.	

Table S1.2 Operating te	Table S1.2 Operating techniques					
Description	Parts	Date Received				
Variation application EPR/WP3036QH/V002	 Each generator must be operated in accordance with the manufacturer's instructions and records must be made and retained to demonstrate this. The operator must keep periods of start-up and shutdown of the generators as short as possible. There must be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993. Where secondary abatement is required to ensure compliance with the NOx limit it must be met within 10 minutes from when the generator commences operation or within 20 minutes when the generator was a Tranche A and is now a Tranche B generator. The stacks must be vertical and unimpeded by cowls or caps. 	08/10/2019				
Variation application EPR/WP3036QH/V003	Response provided in table 3 (Technical standards) in Part C3 of the application form. Air Quality Assessment: Section 4 - Operational scenarios and emissions Appendix A – Model input parameters	02/08/2023				

Table	S1.3 Improvement programme requirements	
Ref.	Requirement	Date
IC1	Methane emissions	Within 12
	The operator shall submit a written report to the Environment Agency for assessment and written approval to establish methane (CH ₄) emissions from the Grimsby A & B engines.	months of completion of commissioning of Grimsby B peaking plant
	The report shall compare CH ₄ emissions to the manufacturer's specification and appropriate benchmark level as agreed in writing with the Environment Agency.	peaking plant
	Based on the conclusions of this assessment, an appropriate proposal shall be provided 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.	
	Once approved in writing, any proposals/action plans shall be implemented in accordance with the agreed timescales.	
IC2	Formaldehyde emissions	Within 12
	The operator shall submit a written report to the Environment Agency for assessment and written approval to establish formaldehyde emissions and predicted impacts from the Grimsby A & B engines.	months of completion of commissioning of Grimsby B
	The report shall contain:	peaking plant
	 an assessment of the impacts of formaldehyde emissions in accordance with Environment Agency H1 guidance or equivalent methodology; and a review of the emission levels in comparison to the relevant benchmark 	
	levels.	

Ref.	Requirement	Date
IC3	Site condition report – proposals for baseline investigation The operator shall submit proposals to the Environment Agency for assessment and written approval for a baseline soil and groundwater investigation. This is required to obtain all information necessary to make a quantified comparison with the state of the site upon definitive cessation of activities and surrender of the environmental permit. The proposals shall include: • a description of the scope of investigation; • timescales for implementation; • suite of analysis (for both soil, ground gas and groundwater); • any potential future monitoring requirements to be undertaken; and • appropriate British and International Standards.	31/07/2024
IC4	Site condition report – baseline report The operator shall submit a written baseline report to the Environment Agency for assessment and written approval which presents and discusses the results and analysis of the baseline investigation approved by IC3 in this table. The baseline report shall also outline any requirements for future monitoring and timescales for implementation to satisfy the requirements of permit condition 3.1.3, which is required under the Industrial Emissions Directive.	Within 3 months of written confirmation of completion of IC3 in this table
IC5	 Monitoring location compliance The operator shall submit a written report to the Environment Agency for assessment and written approval on the assessment of air emissions monitoring locations during commissioning of the Grimsby B engines. The report shall include: whether the air emissions monitoring locations meet the requirements of BS EN 15259 and supporting Method Implementation Document (MID); the results and conclusions of the assessment including where necessary proposals for improvements to meet the requirements; where notified in writing by the Environment Agency that the requirements are not met, the operator shall submit proposals or further proposals for rectifying this in accordance with the timescale in the notification. The proposals shall be implemented in accordance with the Environment Agency's written approval. 	Within 3 months of completion of commissioning of Grimsby B peaking plant
IC6	Performance of the plant The operator shall submit a written report to the Environment Agency for assessment and written approval on the commissioning of the Grimsby B engines. The report shall include: • a summary of the environmental and energy efficiency performance of the plant as installed against the design parameters set out in the application; • a review of the performance of the facility against the conditions of this permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions.	Within 3 months of completion of commissioning of Grimsby B peaking plant

Table S1.4 Pre-operational measures					
Reference	Pre-operational measures				
PO1	Prior to the operation of Grimsby B peaking plant, the operator shall provide details for assessment and written approval for the storage of lubricating oils. The information shall include:				
	 the dedicated areas (including site plans) for the delivery of clean lubricating oil and the removal of used lubricating oil; and 				
	 the control measures in place and how these are in accordance with BAT for the facility and the requirements set out in the <u>CIRIA guidance: Containment</u> <u>systems for the prevention of pollution</u>. 				

Schedule 2 – Waste types, raw materials and fuels

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

Schedule 3 – Emissions and monitoring

Emission point ref. & location	Source	Parameter	Limit (including unit) Note 3	Reference period	Monitoring frequency	Monitoring standard or method
A1 to A10 Note 2	Existing MCP	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	100 mg/m ³	Periodic	Annually Note 4	MCERTS BS EN 14792
(Grimsby A peaking plant)	gas engine exhaust stacks	Carbon monoxide	No limit set	Periodic	Annually Note 4	MCERTS BS EN 15058
A11 to A15 Note 2	New MCP	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	95 mg/m ³	Periodic	Annually Note 5	MCERTS BS EN 14792
(Grimsby B peaking plant)	gas engine exhaust stacks	Carbon monoxide	No limit set	Periodic	Annually Note 5	MCERTS BS EN 15058

Note 1: Emission points on site plan in schedule 7 of this permit.

Note 2: Emission limits and monitoring requirements are applicable to each individual emission point A1 to A15.

Note 3: Reference conditions in schedule 6 of this permit.

Note 4: At any time, but no later than the relevant compliance date, in accordance with condition 3.5.3 of this permit.

Note 5: Once within four months of the issue date of variation EPR/WP3036QH/V003 or the date when the engine is first put into operation, whichever is later, in accordance with condition 3.5.3 of this permit.

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
W1 Note 1	Uncontaminated site surface water	No parameters set	No limits set	-	-	-

Note 1: Emission point on site plan in schedule 7 of this permit.

Table S3.3 Process monitoring requirements							
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications			
A1 to A15 Note 1	Beginning and end of operation periods of individual engines	Continuous	Engine performance parameters	Record the time of day and duration of operation of each engine			
	Total operating hours	Continuous	Engine performance parameters	As specified in condition 2.3.6 of this permit			
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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		
Point source emissions to air	A1 to A10	Annually Note 1	1 January		
Parameters as required by condition 3.5.1	A11 to A15	Annually Note 1			

Table S4.2: Annual production			
Parameter Units			
Power generated	MWhe		

Table S4.3 Performance parameters				
Parameter	Frequency of assessment	Units		
Water usage	Annually	m ³ /MWh _e generated		
Energy usage	Annually	Total energy used/MWh _e generated		
Natural gas usage	Annually	Tonnes/MWh _e generated		
Total engine operating hours	Annually	Hours		
Oil changes	Annually	MWh _e generated between oil changes		

Table S4.4 Reporting forms					
Parameter	Parameter Reporting form				
Point source emissions to air	Emissions to Air Reporting Form, or other form as agreed in writing by the Environment Agency	version 1, 08/03/2021			
Water usage	Water usage Reporting Form, or other form as agreed in writing by the Environment Agency	version 1, 08/03/2021			
Energy usage	Energy usage Form, or other form as agreed in writing by the Environment Agency	version 1, 08/03/2021			
Other performance parameters	Other Performance Parameters Reporting Form, or other form as agreed in writing by the Environment Agency	version 1, 08/03/2021			
Engine operating hours	Form hours 01 operational engine hours or other form as agreed in writing by the Environment Agency	07/03/2019			

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	
	any malfunction, breakdown or failure of equipment or techniques, ince not controlled by an emission limit which has caused, is 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 breach of permit conditions not related to limits				
To be notified within 24 hours of detection				
Condition breached				
Date, time and duration of breach				
Details of the permit breach i.e. what happened including impacts observed.				
Measures taken, or intended to be taken, to restore permit compliance.				

(d) 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.

"emissions to land" includes emissions to groundwater.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 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.

"existing MCP" means an MCP first put into operation before 20/12/2018.

"first put into operation" means that the plant must have been fired with its design fuel up to its full load. This can be, but does not have to be, during commissioning.

"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, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"Medium Combustion Plant" or "MCP" means a combustion plant with a rated thermal input equal to or greater than 1 MW but less than 50 MW.

"Medium Combustion Plant Directive" or "MCPD" means Directive 2015/2193/EU of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion plants, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

"new MCP" means an MCP first put into operation on or after 20/12/2018.

"operating hours" means the time, expressed in hours, during which a combustion plant is operating and discharging emissions into the air, excluding start-up and shut-down periods.

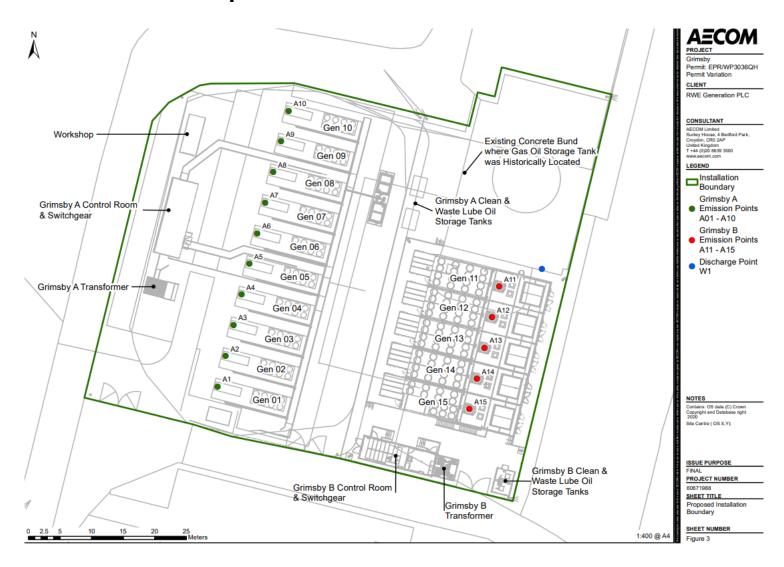
"year" means calendar year ending 31 December.

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

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

• in relation to emissions from gas engines or gas turbines, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 15% dry for liquid and gaseous fuels.

Schedule 7 – Site plan



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END OF PERMIT

Emissions to Air Reporting Form

Permit number: [EPR/AB1234CB] Operator: [A Company Name Limited]

Facility name: [Unit A, Anytown] Emissions to Air Reporting Form: version 1, 08/03/2021

Reporting of emissions to air for the period from [DD/MM/YY] to [DD/MM/YY]

Emission point	Substance / parameter	Emission Limit Value	Reference period	Test method ¹	Result ²	Sample dates and times ³	Uncertainty ⁴
[e.g. A1]	[e.g. Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)]	[e.g. 200 mg/m³]	[e.g. daily average]	[e.g. BS EN 14181]	[State result]	[State relevant dates and time periods]	[State uncertainty if not 95% confidence interval]

Emission point	Substance / parameter	Emission Limit Value	Reference period	Test method ¹	Result ²	Sample dates and times ³	Uncertainty ⁴

Operator's comments	
Signed	Date
(authorised to sign as representative of Operator)	
(authorised to sign as representative of Operator)	

Guidance for use: Use this form to report your monitoring results.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Complete columns 1 to 5 using the information from schedule 3 of your permit. Complete columns 6 to 8 with your monitoring data. Add additional rows as necessary.

- ¹ Where an internationally recognised standard test method is used, give the reference number. Where another method that has been formally agreed with the Environment Agency, give the appropriate identifier. In other cases state the principal technique, for example gas chromatography.
- ² Give the result as the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, give the result as the 'minimum to maximum' of the measured values.
- ³ For non-continuous measurements give the date and time of the sample that produced the result. For continuous measurements give the percentage of the process operating time covered by the result.
- ⁴ Complete if the uncertainty associated with the result is not a 95% confidence interval. Leave blank for 95% confidence intervals.

Water Usage Reporting Form

Permit number: [EPR/AB1234CB] Operator: [A Company Name Limited]

Facility name: [Unit A, Anytown] Water Usage Reporting Form: version 1, 08/03/2021

Reporting of water usage for the year [YYYY]

Water source	Water usage (m³)	Specific water usage (m³/unit) ²			
Mains water	[insert annual usage in m³ where mains water is used]	[insert annual usage in m³/unit where mains water is used]			
Site borehole	[insert annual usage in m³ where water is used from a site borehole]	[insert annual usage in m³/unit where water is used from a site borehole]			
River abstraction	[insert annual usage in m³ where abstracted river water is used]	[insert annual usage in m³/unit where abstracted river water is used]			
Other – [specify other water source where applicablel. Add extra rows where needed]	[insert annual usage in m³ where applicable]	[insert annual usage in m³/unit where applicable]			
Total water usage	[insert total annual water usage in m ³]	[insert total annual water usage in m³/unit]			

Operator's comments

Signed: [Name] Date: [DD/MM/YY]

(Authorised to sign as representative of the operator)

Guidance for use: Use this form to report your annual water usage.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Add additional rows as necessary.

Energy Usage Reporting Form

Permit number: [EPR/AB1234CB] Operator: [A Company Name Limited]

Facility name: [Unit A, Anytown] Energy Usage Reporting Form: version 1, 08/03/2021

Reporting of energy usage for the year [YYYY]

Energy source	Energy consumption / production (MWh)	Specific energy consumption (MWh/unit) ²
Electricity imported as delivered - source [specify source, e.g. supplied from the national grid]	[insert annual consumption in MWh where electricity is imported]	[insert annual consumption in MWh/unit where electricity is imported]
Electricity imported as primary energy 1 – conversion factor of [specify conversion factor used to convert electricity delivered to primary energy]	[insert annual consumption in MWh where electricity is imported]	[insert annual consumption in MWh/unit where electricity is imported]
Natural gas	[insert annual consumption in MWh where natural gas is used]	[insert annual consumption in MWh/unit where natural gas is used]
Gas oil – conversion factor of [specify conversion factor used to convert tonnes to MWh]	[insert annual consumption in MWh where gas oil is used]	[insert annual consumption in MWh/unit where gas oil is used]
Imported heat	[insert annual consumption in MWh where heat is imported]	[insert annual consumption in MWh/unit where heat is imported]
Other – [specify other energy source and conversion factors where applicable, e.g. renewable fuel. Add extra rows where needed]	[insert annual consumption in MWh where applicable]	[insert annual consumption in MWh/unit where applicable]
Electricity exported	[insert annual production in MWh where electricity is exported]	Not applicable
Heat exported	[insert annual production in MWh where heat is exported]	Not applicable

Operator's comments			

Signed: [Name] Date: [DD/MM/YY]

(Authorised to sign as representative of the operator)

Guidance for use: Use this form to report your annual energy usage.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Add additional rows as necessary.

¹ Multiply delivered electricity by 2.4 to convert to primary energy where the electricity is supplied from the national grid. If the electricity is supplied from another source, specify the conversion factor used. Add additional rows as needed if electricity is imported from multiple sources.

² Divide energy consumption by an appropriate unit of raw material processed or product output.

Other Performance Parameters Reporting Form

Operator: [A Company Name Limited]

Facility name: [Unit A, Anytown]	Other Performance Parameters Reporting Form: version 1, 08/03/2021
Reporting of other performance parameters for t	the period from [DD/MM/YY] to [DD/MM/YY]
Parameter	Units
[e.g. Total raw material usage]	[e.g. tonnes per production unit]
Operator's comments	

Permit number:

[EPR/AB1234CB]

Signed	Date
(authorised to sign as representative of Operator)	

Guidance for use: Use this form to report the performance parameters (other than water and energy) required by your permit. Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. The parameters to report and units to be used can be found in the 'Performance parameters' table in schedule 4 of your permit. Add additional rows as necessary.

Engine operating hours Reporting Form

Permit number: [EPR/AB1234CB] Operator: [A Company Name Limited]

Facility name: [Unit A, Anytown] Hours01 Reporting Form: 07/03/2019

Reporting of Operational Engine Hours for the period from DD/MM/YYYY to DD/MM/YYYY

Emission	Month										Total	Operating occasions	Occasions		
point	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Hours	occasions	>2hours

Operator's comments	
Signed	Date
(authorised to sign as representative of Operator)	