

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

UK Power Reserve Limited
Mollison Avenue Power Station
Mollison Avenue
Enfield
EN3 7NN

Permit number

EPR/SP3608PA

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Introductory note

This introductory note does not form a part of the permit

This permit will allow the operator to operate one Tranche B Specified Generator aggregated to <50MWth at a specified location.

The details of the units and associated limits and monitoring requirements are specified in tables S1.1 and S3.1.

The Mollison Avenue Power Station facility is located in Enfield and it is operated by UK Power Reserve Limited. The facility is made up of ten natural gas-fired reciprocating engines, each engine has a thermal input of 4.9MWth. The facility has an aggregated rated thermal input of 49MWth. The gas engines collectively are considered to be a 'Specified Generator'. Each engine discharges directly to the atmosphere via a dedicated 8 metre high stack. The plant operates as a peaking plant to provide electricity to the National Grid to meet peak demand. As a result, the hours for the facility will be flexible to National Grid demand. The operation of the 'Specified Generator' is restricted to each individual generator limited to 1,500 hours per annum.

The 'Specified Generator' ceased to be a Tranche A and became a Tranche B when the engines remained in operation after 31 December 2018 following the signing of a balancing service agreement after 31st October 2017. Therefore the engines are required to be regulated under Schedule 25B of the Environmental Permitting Regulations.

Each engine is also an existing Medium Combustion Plant (MCP) because they were brought into operation prior to 20 December 2018. The MCPs each have a thermal input between 1 and <5MWth, and therefore they will need to be permitted as MCPs and be compliant with Emission Limit Values (ELVs) within Annex II of the Medium Combustion Plant Directive by 1st January 2030.

The facility is approximately centred at National Grid Reference TQ 36838 98104. There is one Special Protection Area site, one Special Conservation Area site and one Ramsar site within 5 kilometres of the facility and there is one Site of Special Scientific Interest within 2 kilometres of the facility.

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

Status log of the permit		
Description	Date	Comments
Application EPR/SP3608PA/A001	Duly made 29/05/19	Bespoke application for Specified Generator.
Additional information	11/07/19	Confirmation that each engine has a thermal input less than 5MWth at 100% of rated load.
Permit determined EPR/SP3608PA	01/08/19	Permit issued to UK Power Reserve Limited.

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/SP3608PA

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

UK Power Reserve Limited ("the operator"),

whose registered office is

6th Floor Radcliffe House

Blenheim Court

Solihull

B91 2AA

company registration number 07385282

to operate one or more Medium Combustion Plant and/or Specified Generators at

Mollison Avenue Power Station

Mollison Avenue

Enfield

EN3 7NN

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

Name	Date
Simon Hunt	01/08/2019

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, so far as is reasonably practicable, 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.

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 only be carried out at the address in this permit where the plant is located.

2.3 Operating techniques

- 2.3.1 The activities shall be operated using the techniques and in the manner described in schedule 1, table S1.2.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to air except from the sources and emission points listed in schedule 3, table S3.1.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.

3.2 Monitoring

- 3.2.1 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, or at a greater frequency if notified to the operator in writing by the Environment Agency:
- (a) point source emissions specified in table S3.1.
- 3.2.2 Monitoring shall not take place during periods of start up or shut down.

- 3.2.3 The operator shall maintain records of all monitoring including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, test and surveys and any assessment or evaluation made on the basis of such data.

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.
- 4.1.2 The operator shall maintain convenient access, in either electronic or hard copy, to the records, plans and management system required to be maintained by this permit.
- 4.1.3 The operator shall maintain a record of the type and quantity of fuel used and the total annual hours of operation for each MCP and/or generator.
- 4.1.4 The operator shall maintain a record of any events of non-compliance and the measures taken to ensure compliance is restored in the shortest possible time.

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 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 S4.2; and
 - (c) giving the information from such results as required by the forms specified in those tables.

4.3 Notifications

- 4.3.1 In the event:
- (a) of a breach of any of the permit conditions 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;
 - (b) of a breach of any of the permit conditions which causes a significant degradation of local air quality, the operator must immediately suspend the operation of the activities or the relevant part of them until compliance with the conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed in writing within 24 hours.

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.

In any other case:

- (e) the death of any of the named operators (where the operator consists of more than one named individual);
- (f) any change in the operator's name(s) or address(es); and
- (g) 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.

4.4 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				
National Grid Reference and or activity reference/ emission point	Activity listed in the EP Regulations	Description of MCP and/or specified generator	Fuel	Operating hours limit per annum
Specific identifier: 66304881 NGR TQ 36839 98140	Schedule 25B – Specified generator	10 x 4.9MWth engines	Natural gas	No individual generator shall exceed 1500 hours per annum
Specific identifier: 66304846 NGR TQ 36835 98131				
Specific identifier: 66304825 NGR TQ 36832 98127				
Specific identifier: 66304814 NGR TQ 36829 98123				
Specific identifier: 66304873 NGR TQ 36827 98119				
Specific identifier: 66304802 NGR TQ 36824 98115				
Specific identifier: 66304866 NGR TQ 36822 98111				
Specific identifier: 66304838 NGR TQ 36819 98107				
Specific identifier: 66304862 NGR TQ 36816 98103				

Table S1.1 activities				
National Grid Reference and or activity reference/ emission point	Activity listed in the EP Regulations	Description of MCP and/or specified generator	Fuel	Operating hours limit per annum
Specific identifier: 66304817 NGR TQ 36814 98099				

Table S1.2 Operating techniques for Specified Generators	
(a) Each generator must be operated in accordance with the manufacturer's instructions and records must be made and retained to demonstrate this. (b) The operator must keep periods of start-up and shut down of the generators as short as possible (c) There must be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993. (d) Where secondary abatement is required to ensure compliance with the NOx ELV 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. (e) The stack must be vertical and unimpeded by cowls or caps.	

Schedule 2 – Waste types, raw materials and fuels

This schedule is not used.

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements (applicable to each generator)						
Emission point ref. & location as referenced in table S1.1	Pollutant	Combustion Technology	Emission limit mg/Nm ³	Reference period	Monitoring frequency	Monitoring standard or method ^{Note 1}
Specific identifier: 66304881 NGR TQ 36839 98140 Specific identifier: 66304846 NGR TQ 36835 98131 Specific identifier: 66304825 NGR TQ 36832 98127 Specific identifier: 66304814 NGR TQ 36829 98123 Specific identifier: 66304873 NGR TQ 36827 98119 Specific identifier: 66304802	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	Gas engine	190	Periodic (average over one hour)	Once within 4 months of the issue date of the permit or the date when the generator is first put into operation, whichever is later, or as agreed with the Environment Agency	MCERTS BS EN 14792

Table S3.1 Point source emissions to air – emission limits and monitoring requirements (applicable to each generator)

Emission point ref. & location as referenced in table S1.1	Pollutant	Combustion Technology	Emission limit mg/Nm³	Reference period	Monitoring frequency	Monitoring standard or method ^{Note 1}
NGR TQ 36824 98115 Specific identifier: 66304866 NGR TQ 36822 98111 Specific identifier: 66304838 NGR TQ 36819 98107 Specific identifier: 66304862 NGR TQ 36816 98103 Specific identifier: 66304817 NGR TQ 36814 98099						
Note 1: Monitoring requirements are defined at a temperature of 273.15 K, a pressure of 101.3 kPa and after correction for the water vapour content of the waste gases at a standardised O ₂ content of 15% for engines.						

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
Emissions to air Parameters as required by condition 3.2.1.	Specific identifier: 66304881, 66304846, 66304825, 66304814, 66304873, 66304802. 66304866, 66304838, 66304862, 66304817 as referred to in table S3.1	4 months from date of issue of permit, or as agreed with the Environment Agency	Date of issue of permit

Table S4.2 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Environment Agency	01/08/19

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.

“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.

“EA TGN M5” means the ‘Environment Agency Technical Guidance Note M5: Monitoring of stack gas emissions from medium combustion plants and specified generators’ guidance published on Gov.UK.

“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.

“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.

“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.

“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.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“specified generator” has the meaning given in paragraph 2(1) of Schedule 25B of The EP Regulations.

“tranche A generator” has the meaning given in paragraph 3(3) of schedule 25B of The EP Regulations.

“tranche B generator” is any generator that is not a Tranche A generator.

“year” means calendar year ending 31 December.

END OF PERMIT