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Wales

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Cadoxton Reserve Power Limited

**Cadoxton Reserve Power Limited
Sully Moors Road
Barry
CF64 5RP**

Permit number

PAN-004134

Cadoxton Reserve Power Limited

Permit number PAN-004134

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 <50 MWth at a specified location.

The engine is an existing medium combustion plant (MCP) on the basis that it was first operated before 20 December 2018.

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

This permit will allow Cadoxton Reserve Power Limited to operate eight 4.65 MWth spark ignition engines (one 37.2 MWth Specified Generator) fuelled by natural gas, with exhausts through eight stacks, of 12m in height. The engines are an existing Medium Combustion Plant (MCP) on the basis that it was operational before 20 December 2018. The Flexible Power Plant (FPP) generates a combined total of 16 MW of electricity which feeds into the local distribution network owned and operated by Western Power Distribution.

The Severn Estuary SAC / SPA / Ramsar and eight SSSIs are within 5 km of the site. Detailed air quality modelling and impact assessments have shown that the impact on airborne NOx concentrations and nitrogen depositions at the designated ecological sites were determined to be insignificant.

The air quality modelling and impact assessments have also shown that exceedances of any air quality objective are unlikely at the local receptors identified to protect human health.

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 PAN-004134	Duly made 11/04/2019	Application for existing Specified Generator permit.
Schedule 5 issued	27/06/2019	Request for revision of air quality modelling.
Additional information received	24/07/2019	Revised air quality modelling received.
Permit determined	16/09/2019	Permit issued to Cadoxton Reserve Power Limited.

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

PAN-004134

The Natural Resources Body for Wales (“Natural Resources Wales”) authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

Cadoxton Reserve Power Limited (“the operator”),

whose registered office is

**6th Floor
33 Holborn
London
England
EC1N 2HT**

company registration number **09127592**

to operate one or more Specified Generators at

***Cadoxton Reserve Power Limited
Sully Moors Road
Barry
CF64 5RP***

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

Signed	Date
<i>Holly Noble</i>	16/09/2019

Authorised on behalf of Natural Resources Wales

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, 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 For the following activities referenced in schedule 1, table S1.1 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, tables S3.1, S3.2 and S3.3.

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 Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables 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 Natural Resources Wales, 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 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 Natural Resources Wales using the contact details supplied in writing by Natural Resources Wales.
- 4.2.2 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by Natural Resources Wales, 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 Natural Resources Wales, 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 Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 Natural Resources Wales 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 5 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 Specified Generator	Fuel	Operating hours limit per Specified Generator per annum^{Note 1}
CADO01, CADO02, CADO03, CADO04, CADO05, CADO06, CADO07 and CADO08 being the individual stacks above each of the eight gas reciprocating engines, comprising one Specified Generator National Grid Reference: 314580,168709	S25B – Specified generator	8 x 4.65 MWth individual engines comprising one 37.2 MWth Specified Generator	Natural gas	<2500 Hours

Table S1.2 Operating techniques for Specified Generators
<ul style="list-style-type: none"> (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. (f) The operating regime of the generator(s) must be in line with document reference CADO 01.08 dated 07/12/2018 submitted as part of permit application PAN-004134.

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) for Tranche B generators only 0-50 MWth all hours of operation >50

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
CADO01	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	Gas engine	190	Periodic (average over one hour)	Every 3 years from date of permit issue	MCERTS BS EN 14792
CADO02						
CADO03						
CADO04						
CADO05						
CADO06						
CADO07						
CADO08						

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 O₂ 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.	CADO01, CADO02, CADO03, CADO04, CADO05, CADO06, CADO07, CADO08	Every 3 years	Date of permit issue or the date when the generator is first put into operation, whichever is later.

Table S4.2 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by Natural Resources Wales	16/09/19

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	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B – to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

“accident” means an accident that may result in pollution.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by Natural Resources Wales 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.

“NRW TGN M5” means ‘Natural Resources Wales 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 Natural Resources Wales’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.

“year” means calendar year ending 31 December.

Schedule 8 – Site plan



END OF PERMIT

Permit Number: PAN-004134 Operator: Cadoxton Power Reserve Limited

Facility: Cadoxton Power Reserve Limited Form Number: Air1 / 16/09/19

Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY

Emission							
Emission Point	Substance / Parameter	Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
CADO01	Oxides of nitrogen (NO and NO2 expressed as NO2)	190 mg/ m ³	Periodic (average over one hour)		MCERTS BS EN 14792		
CADO02							
CADO03							
CADO04							
CADO05							
CADO06							
CADO07							
CADO08							

- [1] The result given is 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, the result is given as the 'minimum – maximum' measured values.
- [2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with Natural Resources Wales is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
- [3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
- [4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed
 (Authorised to sign as representative of Operator)

Date.....