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Cymru  
Natural  
Resources  
Wales**

## **Permit with introductory note**

The Environmental Permitting (England & Wales) Regulations 2016

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**UK Power Reserve Limited**

**South Cornelly Power Station  
South Cornelly  
SC Trading Estate  
Porthcawl Road  
Bridgend  
CF33 4RE**

Permit number

**PAN-005329**

# South Cornelly Power Station

## Permit number PAN-005329

### 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 Specified Generator comprises of 3 x 6.47 MWth and 1 x 4.72 MWth spark ignition reciprocating generator engines forming one 24.13 MWth Specified Generator. Each generator engine is fuelled on natural gas, from a combined stack with a height of 25m. Each generator engine is defined as existing medium combustion plant (MCP) on the basis that they were first operated before 20 December 2018. Operating hours are expected to be more than 50 hours per year under a capacity market or balancing service agreement which was signed after 31<sup>st</sup> October 2017. This remains in place after December 2018 and therefore the site consists of a Tranche B Specified Generator.

There are two European designated habitat sites within 5.0km of the Specified Generator (Kenfig SAC and Cefn Cribwr Grasslands SAC). There are no sites of special scientific interest (SSSI) within 2.0km of the Specified Generator. An Air Quality Assessment of the impact on the SAC designated habitat sites has been completed, showing that the impact on ecological receptors are predicted to be below limit values at the locations where the Air Quality Directive states that they must be applied.

The Air Quality Assessment also showed that impacts at relevant human receptors are predicted to be below limit values at the locations where the Air Quality Directive states that they must be applied.

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

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-005329	Duly made 13/09/19	Application for a Specified Generator permit.
Additional Information Received	11/12/19	Additional Air Quality Modelling report produced to address potential impacts of Nitrogen deposition and Acid deposition.
Permit determined	30/01/20	Permit issued to UK Power Reserve Limited.

End of introductory note

# Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

**PAN-005329**

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

**UK Power Reserve Limited** (“the operator”),

Whose registered office is:

**UK Power Reserve Limited**

**6<sup>th</sup> Floor**

**Radcliffe House**

**Blenheim Court**

**Solihull**

**B91 2AA**

Company registration number **07385282**

To operate one Specified Generator at:

**South Cornelly Power Station**

**Porthcawl Road**

**Bridgend**

**CF33 4RE**

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

Signed	Date
Holly Noble	30/01/2020

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 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 For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) the activities shall be operated using the techniques and in the manner described in schedule 1, table S1.2B.

## 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 3.1.

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 Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (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 For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) where secondary abatement is required to ensure compliance with the NOx ELV monitoring shall start 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.
- 3.2.4 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 <sup>Note 1</sup>	Fuel	Operating hours limit per annum
A1, NGR SS 82118 79999	S25B – Specified generator	1 x 4.72 MWth spark ignition reciprocating generators	Natural gas	Not Restricted
A2, NGR SS 82119 80003		3 x 6.47 MWth spark ignition reciprocating generators		
A3, NGR SS 82119 80010				
A4, NGR SS 82120 80013				
Note 1: 1 x 4.72 MWth & 3 x 6.47 MWth individual spark ignition reciprocating generator engines comprising one 24.13 MWth Specified Generator.				

Table S1.2 Operating techniques for Specified Generators
<ul style="list-style-type: none"> <li>(a) Each generator must be operated in accordance with the manufacturer's instructions and records must be made and retained to demonstrate this.</li> <li>(b) The operator must keep periods of start-up and shut down of the generators as short as possible</li> <li>(c) There must be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993.</li> <li>(d) Where secondary abatement is required to ensure compliance with the NO<sub>x</sub> 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.</li> <li>(e) The stack must be vertical and unimpeded by cowls or caps.</li> <li>(f) The operating regime of the generator(s) must be in line with the Complex Bespoke Permit Application: Non-Technical Summary dated April 2019 submitted as part of permit application PAN-005329.</li> </ul>

## **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 <sup>3</sup>	Reference period	Monitoring frequency	Monitoring standard or method Note 1
A1, A2, A3, A4	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Gas engine	190	Periodic (average over one hour)	Every 3 years	MCERTS BS EN 14792

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<sub>2</sub> 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.	A1, A2, A3, A4	Every 3 years for all emission points	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	30/01/20

## 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	

<b>(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</b>	
<b>To be notified within 24 hours of detection</b>	
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>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Emission point reference/ source	
Parameter(s)	

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

<b>Time periods for notification following detection of a breach of a limit</b>	
<b>Parameter</b>	<b>Notification period</b>

<b>(c) Notification requirements for the detection of any significant adverse environmental effect</b>	
<b>To be notified within 24 hours of detection</b>	
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.

“combined heat and power” (CHP) or Cogeneration means the simultaneous generation in one process of thermal energy and electrical or mechanical energy.

“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.

“limited operating hours MCP” means an MCP that meets the requirements of paragraph 8 of Part 2 of Schedule 25A of the EP Regulations.

“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.

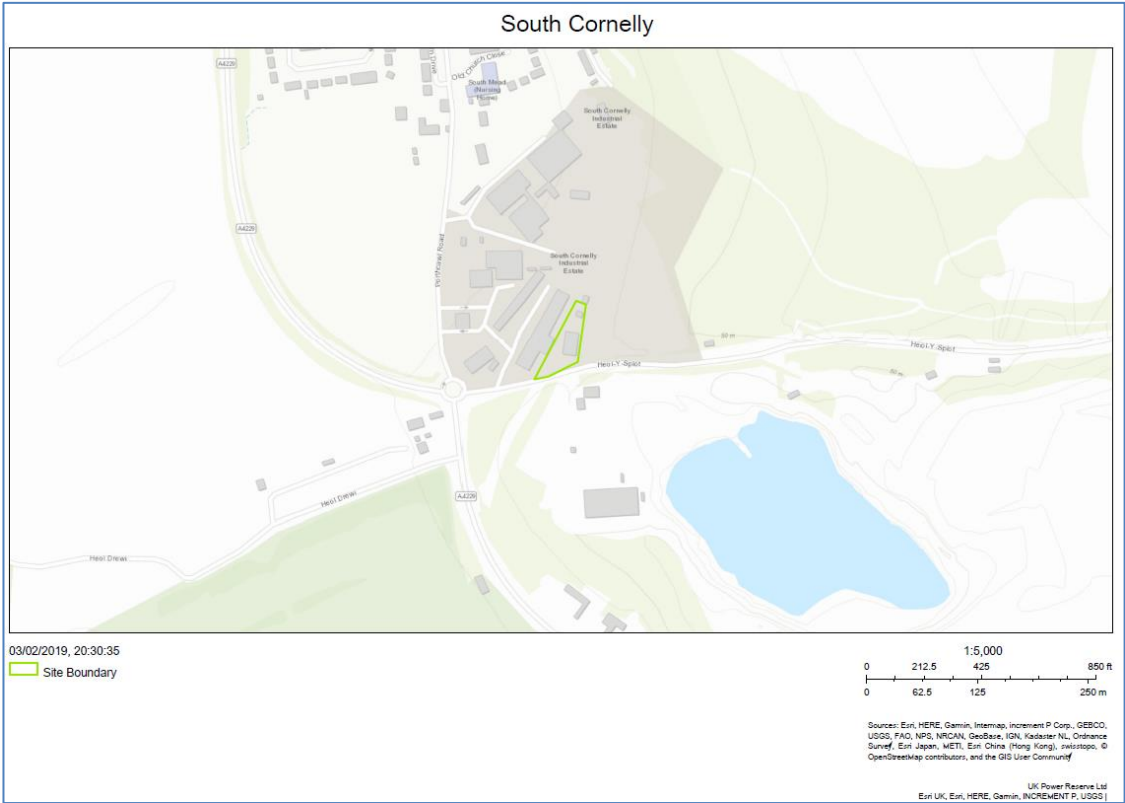
“operating hours” means the time, expressed in hours, during which a combustion plant is operating and discharging emissions into the air, excluding start-up and shut-down periods.

“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 7 – Site plan



END OF PERMIT

Permit Number: PAN-005329 Operator: UK Power Reserve Limited  
 Facility: South Cornelly Power Station Form Number: Air1 / 30/01/20

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

Emission Point	Substance / Parameter	Emission		Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
		Limit Value	Reference Period				
A1	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	190 mg/Nm <sup>3</sup>	Periodic (average over one hour)		MCERTS BS EN 14792		
A2							
A3							
A4							

- [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.....