

Natural Resources Wales Permitting Decisions

Centrica Distributed Power Limited (Pencoed Peaking Plant)

Decision Document

Application for a Bespoke permit

The application number is: PAN-026165

The permit number will be: EPR/DB3592HH/A001

The applicant / operator is: Centrica Distributed Generation Limited

The Installation is located at: Pencoed Peaking Power Plant, Land to the north of Felindre Road, Pencoed, Bridgend, CF35 5FT

Purpose of this document

This decision document:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

Unless the decision document specifies otherwise, we have accepted the applicant's proposals.

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1. Executive summary

1.1. Application summary

This application was for a new bespoke environmental permit to enable the operation of a peaking power plant. The purpose of the proposed installation is to generate electrical energy, which can be stored and fed into the National Grid, as and when required. The proposal is for the site to have 9no. Gas Peakers (engines) each with a 10.30MWth rated thermal input and therefore the site has a proposed aggregated rated thermal input of 93.5MWth.

The appropriate permitted activity for the above activity is a *Section 1.1 Part A (1) (a) burning any fuel in an appliance with a rated thermal input of 50 or more megawatts.*

Each engine is also subject to the medium combustion plant directive (MCPD) and schedule 25A of EPR.

1.2. Our decision

We have decided to grant the permit for Pencoed Peaking Plant operated by Centrica Distributed Generation Ltd.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

2. Receipt of the application

The application was received on 21/06/2024. In order for us to be able to consider the application duly made, we needed more information. We requested the following:

- An updated Environmental Management System that was inline with our How to comply guidance.
- A site location and boundary plan that clearly demonstrated where the site was located and the extent of the site.

- An updated Air Dispersion Modelling Report providing some further justifications for the approach taken.
- An amended Noise Impact Assessment Report providing some further justifications for the approach taken.

A letter requesting this information was sent to the applicant on 05/12/2024. We received a response on containing this information on 14/01/2025.

We also sent a follow up email requesting additional information regarding the intended operational hours for site, and component gas powered engines. This was sent on the 30/01/2025 and was responded to on the 31/01/2025.

On receipt of these responses we were able to consider the application duly made. This means we considered it was in the correct form and contained sufficient information for us to begin our determination, but not that it necessarily contained all the information we would need to complete that determination.

3. Confidential information

The applicant made a claim for no claim for commercial confidentiality, and we have not received information in relation to the application that appears to be confidential in relation to any party.

4. Legislation

The permit will be granted, under Regulation 13 of the EPR. The Environmental Permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope. In particular, the regulated facility is:

- an *installation* as described by the IED;
- subject to aspects of the Well-Being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016 which also have to be addressed.
- Any other relevant legislation

We address the legal requirements directly where relevant in the body of this document. NRW is satisfied that the decision on this application is consistent with its general purpose of pursuing the sustainable management of natural resources (SMNR) in relation to Wales and applying the principles of SMNR. In particular, NRW acknowledges that it is a principle of sustainable management to take action to prevent significant damage to ecosystems. We consider that, in granting the permit a high level of protection will be delivered for the environment and human health through the operation of the Installation in accordance with the permit conditions. NRW is satisfied that this decision is compatible with its general purpose of pursuing the sustainable management of natural resources in relation to Wales and applying the principles of sustainable management of natural resources

As the EPR regulator for Part A1 installations in Wales, NRW are required to determine any duly made Part A1 permit applications. This means that we must decide either to grant, or to refuse the variation based upon an objective assessment of the proposals against the detailed legal requirements of EPR. Our public participation statement¹ gives more information on what can, and cannot, be taken into account when making our permitting decision.

The application, and this decision document, only considers the permitting of the facility under EPR as described throughout the document. We only assess the installation and its impacts and cannot take into consideration indirect impacts which are not as a direct result of activity within the installation boundary.

Any proposed development and wider associated activities will be required to be compliant with all relevant and applicable law, for example, environmental law, health and safety law, planning law. This other legislation acts largely independently of EPR (although they may be inter-related). Such other matters are beyond both the scope of this document, and of our regulatory remit and expertise and are not relevant to our EPR permitting decision. Ensuring compliance with all other regulation and obtaining any required consents (such as planning permission) is the responsibility of those

¹ [Natural Resources Wales / Public participation: how you can take part in our permit and licence consultations](#)

undertaking the development and is regulated by the relevant appropriate authority for each.

5. Consultation

5.1. Consultation on the Application

We have carried out consultation on the application in accordance with the Environment Permitting Regulations (EPR), our statutory Public Participation Statement (PPS) and our Regulatory Guidance.

A copy of the application is available on the public register for anyone to view. We advertised the application to the public by a notice placed on our website directing people to the public register, advising them of how they could arrange for copies to be made if required and how they can provide comments.

We also consulted with the following bodies, which includes those with whom we have “Working Together Agreements”:

- Public Health Wales
- Director of Public Health
- Health and Safety Executive
- Bridgend County Council Planning
- Bridgend County Council Environmental Health

These are bodies whose expertise, democratic accountability and/or local knowledge make it appropriate for us to seek their views directly.

The consultation started 14/02/2025 and ended on 14/03/2025.

A summary of consultation comments and our response to the representations we received can be found in Annex 1. We have taken all relevant representations into consideration in reaching our decision.

5.2. Draft Permit Consultation

We carried out consultation on our draft decision. This consultation began on 28/05/2025 and end on 25/06/2025.

No consultation responses were received.

6. Requests for information

Several informal information requests were also made via email. These related to

- Location of the discharge point for surface water run-off
- National Grid References for each Gas Engine (MCP)

A copy of the e-mails requesting further information were placed on our public register as were the responses when received. In all cases, the responses we received adequately satisfied our queries.

7. The Installation

7.1. The permitted activities

The regulated facility will be an installation which comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations:

- S1.1 Part A (1) (a) Burning any fuel in an appliance with a rated thermal input of 50 or more Megawatts thermal.
- Schedule 25A Medium Combustion Plant

The engines are classed as excluded generator and are not subject to Schedule 25B of EPR – Specified Generator, as the engines are part of an installation as defined in Chapter II of the Industrial Emissions Directive.

An installation may also comprise “directly associated activities”, which at this Installation include:

- Emergency Diesel Generator (555KWth)
- Diesel Fuel Storage
- Clean Oil Storage Tank 10,000L
- Waste Oil Storage Tank 10,000

Together, these listed and directly associated activities comprise the Installation.

8. Operation of the installation

8.1. Operator competence

The applicant is the sole operator of the Installation. We are satisfied that the applicant is the person who will have control over the operation of the Installation after the permit is granted; and that they will be able to operate the Installation so as to comply with the conditions included in the permit, if issued.

The decision was taken in accordance with EPR RGN 1 Understanding the meaning of operator².

Relevant Convictions

The applicant has declared they have no relevant convictions.

NRW's COLINS Database has been checked to confirm there are no relevant convictions.

No relevant convictions were found.

Financial Provision

The applicant has declared they have no current or past bankruptcy or insolvency proceeding against them.

There is no known reason to consider that the operator will not be financially able to comply with the permit. The decision was taken in accordance with RGN 5 on Operator Competence.

8.2. Environmental Management System

The applicant has stated in the application that they will implement an Environmental Management System (EMS) that will meet the requirements for an EMS in our “How to comply with your environmental permit” guidance³

The applicant has confirmed that their EMS is third party accredited and meets the requirements of the International Standard ISO 14001 and incorporates the standards plan, do, check, and act approach.

The applicant has submitted a summary of the EMS with their application which shows that the information within the EMS will be inline with our requirements.

² [RGN 1 Understanding the meaning of 'operator' \(naturalresources.wales\)](#)

³ [Natural Resources Wales / Guidance to help you comply with your environmental permit](#)

We have reviewed the application and are satisfied that appropriate management systems and management structures will be in place for this Installation, and that sufficient resources are available to the Operator to ensure compliance with all the Permit conditions.

Site security

Having considered the information submitted in the application, we are satisfied that appropriate infrastructure and procedures will be in place prior to start up to ensure that the site remains secure.

8.3. Operating techniques

Installation activities and assessment of Best Available Techniques

The applicant has described the proposed equipment and operating techniques and compared these against the relevant sections of the technical guidance note 1.1.

We have reviewed the techniques proposed and consider them in line with them to represent BAT at this installation.

We have specified that the applicant must operate the permit in accordance with descriptions in the application. See section 12 of this document for more information on how we have incorporated the application/variation into the permit and how emission limit values have been set.

Avoidance, recovery or disposal of wastes produced by the activities

Having considered the information submitted in the application, we are satisfied that the waste hierarchy referred to in Article 4 of the WFD will be applied to the generation of waste and that any waste generated will be treated in accordance with this Article.

We are satisfied that waste from the Installation that cannot be recovered will be disposed of offsite using a method that minimises any impact on the environment. Permit condition 1.4.1 of the permit will ensure that this position is maintained.

9. The site

9.1. Site Plan

The applicant has provided a plan which we consider is satisfactory, showing the extent of the site of the facility and its emission points.

The plan will be included in the permit and the operator will be required to carry on the permitted activities within the site boundary.

9.2. Site Condition Report

The applicant has provided a description of the condition of the site in a Site Condition Report. We have reviewed this and consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports – guidance and templates (H5)⁴.

The proposal does not include the addition of any land and so a Site Condition Report was not required to support this application.

9.3. Site protection: potentially polluting substances and prevention measures

The operator has a duty to ensure that soil and groundwater are protected in order to meet the requirements of Articles 14 (1)(b), 14(1)(e) and 16(2) of the IED.

Based upon the information in the application we are satisfied appropriate measures will be in place to protect the site and its surroundings from polluting substances.

10. Environmental Risk Assessment

Regulated activities can present different types of risk to the environment, these include odour, noise and vibration; accidents, fugitive emissions to air and water; as well as point source releases to air, water, sewer and discharges to ground or groundwater, global warming potential and generation of waste. All these factors have been considered during our determination and the relevant risks from this proposal are discussed in this and other sections of this document.

⁴ [Environmental Permitting Regulations , Guidance for applicants H5, Site Condition Report, Guidance and Template \(naturalresources.wales\)](https://naturalresources.wales/guidance-for-applicants/H5-Site-Condition-Report-Guidance-and-Template)

The next sections of this document explain how we have approached the critical issue of assessing the likely impact of emissions from the Installation on human health and the environment and what measures we are requiring ensuring a high level of protection.

In line with our guidance, the applicant has provided an environmental risk assessment with the application which identifies and the sources of key risks from the installation possible pathways and receptors. This risk assessment and further assessments provided by the applicant and/or completed by NRW will be discussed in further detail below.

10.1. Assessment of impact on air quality

This section of the decision document deals primarily with the dispersion modelling of emissions to air from the stack and its impact on local air quality.

The applicant has assessed the Installation's potential emissions to air against the relevant air quality standards, and the potential impact upon human health in line with relevant guidance⁵. These assessments predict the potential effects on local air quality from the Installation's stack emission.

The air impact assessments, and the dispersion modelling has been based on the Installation operating continuously at the relevant long-term or short-term emission limit values, i.e., the maximum permitted emission rate

The applicant has calculated process contributions (PC) and predicted environmental concentrations (PEC) at locations within the immediate vicinity and all identified sensitive receptor locations. The modelling results for each pollutant will be discussed separately below.

Emissions of NO_x was assessed against a long-term critical level of 40µg/m³ (annual) and short term critical level of 200µg/m³ (hourly). At sensitive receptor locations the

⁵ [Air emissions risk assessment for your environmental permit - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit)

maximum predicted long-term PC was >1 % and the long-term PEC was <70 % of the long-term critical level. Therefore, in accordance with the relevant guidance ([Air emissions risk assessment for your environmental permit - GOV.UK](#) and [Environmental permitting: air dispersion modelling reports - GOV.UK](#)) the long-term impacts from NO_x can be screened out and as such no further assessment is required. At sensitive receptor locations the maximum predicted short-term PC was <10 % of the short-term critical level. Therefore, in accordance with the relevant guidance the short-term impacts from the site can be considered insignificant.

Emissions of CO was assessed against a short-term critical level of 10,000µg/m³ (8 hourly). At sensitive receptor locations the maximum predicted short-term PC was <10 % of the short-term critical level. Therefore, in accordance with the relevant guidance([Air emissions risk assessment for your environmental permit - GOV.UK](#) and [Environmental permitting: air dispersion modelling reports - GOV.UK](#)) the short-term impacts from CO can be considered insignificant.

Emission limits

We have decided that emission limits should be set for the parameters listed in the permit.

The following substances have been identified as being emitted in significant quantities and Emission Limit Values (ELVs) based on BAT have been set for those substances. In this instance, the ELVs that are most relevant and conservative are those defined in the Medium Combustion Plant Directive. For new natural gas engines these are as follows:

- Oxides of Nitrogen (NO₂ and NO expressed as NO₂): 95 µg/m³

It is considered that the ELVs or technical measures described above will ensure that significant pollution of the environment is prevented and a high level of protection for the environment secured.

10.2. Assessment of impact to surface and ground water

The proposal includes a direct discharge to surface water of clean site run-off only

This ensured by the site having a sealed impermeable surface, and appropriate containment and bunding around all fuel/oil storage. This combined with a suitable inspection regime for any containerised substances and a spill procedure should ensure adequate environmental protection and ensure that the discharge to surface waters of clean site run-off (rainwater) should not cause harm to the environment.

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent pollution of ground and surface water.

10.3. Noise and vibration assessment

There are sensitive receptors within the vicinity of the installation. The nearest of which are 240m South East and 210m North East from the site boundary.

The applicant has identified the following sources of noise in their environmental risk assessment:

- 9.no Gas Peakers
- Grid Connection Transformer.

The application details measures which will be in place for preventing and minimising noise and/or vibration.

The applicant provided a Noise Impact Assessment which has been undertaken inline with BS4142:2014+A1:2019 and our guidance which includes:

- [Method Implementation Document \(MID\) for BS 4142](#)
- [Noise and vibration management: environmental permits - GOV.UK](#)
- [Noise impact assessments involving calculations or modelling - GOV.UK](#)

The Noise Impact Assessment concludes that the predicted rating sound level is below the existing background sound level at the receptor. BS4142 would consider this to be a 'low impact'.

We are satisfied that vibration is unlikely to be an issue at the installation. The nature of the activity means that there are no significant sources of vibration on site. Therefore, vibration does not need to be included in the management plan.

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent or where not practicable to minimise the effects of noise..

Conditions 3.3.1 of the permit requires noise from the activities to be below that which could cause pollution outside the site. We are satisfied that this will be sufficiently protective in conjunction with the measures described by the applicant for minimising noise at the installation.

10.4. Global warming potential

Emissions of carbon dioxide (CO₂) and other greenhouse gases differ from those of other pollutants in that, except at gross levels, they have no localised environmental impact. Their impact is at a global level and in terms of climate change.

Global Warming Potential (GWP100) emissions as carbon dioxide equivalents (CO₂e) have estimated for the proposed facility by the applicant in accordance the relevant guidance⁶

11. Impact on National Site Network Sites, SSSIs and non-statutory sites

The applicant has used the relevant screening distance criteria to identify relevant protected conservation sites which could be at risk from the proposal. We are in agreement with the screening distances used.

A full assessment of the variation application and its potential to affect the identified sites identified has been carried out as part of the permit determination process. National Site Network sites, Sites of Special Scientific Interest (SSSI) and non-statutory conservation sites will be discussed separately below.

⁶ [Assess the impact of air emissions on global warming - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/assess-the-impact-of-air-emissions-on-global-warming)

11.1. The National Site Network

The following National Site Network sites are located within 10 km of the installation:

- Blackmill Woodlands SAC is located 5.5km NW of the site boundary
- Cefn Cribwr Grasslands SAC 9.4km WNW of the site boundary

11.2. Habitat Regulations Assessment (HRA)

A HRA was completed to assess the potential to affect any of the sites identified. The project was screened for likelihood of significant effects and is considered not likely to have a significant effect on any National Site Network site (as documented in section 3.2 of OGN 200 Form 1, or section 5 if applicable). The full assessment is available to view on the public register.

11.3. Sites of Special Scientific Interest (SSSI)

The following SSSIs are located within 2 km of the installation:

- Brynna a Wren Tarw SSSI is located 1.1km NNE of the site boundary
- Coed y Mwstwr Woodland SSSI (and Restored Ancient Woodland) is located 1.6km W of the site boundary.

As a Section 28G Authority as defined in the Countryside Rights of Way Act 2000 permitting teams within NRW has a legal duty, under Section 28I of the Wildlife and Countryside Act 1981, to consult with NRW for formal advice when permitting an activity which has been determined to be likely to damage the features of a SSSI.

To determine if consultation is required, a SSSI Assessment was completed. The assessment concluded that the proposed permission is not likely to damage any of the flora, fauna or geological or physiological features which are of special interest.

A copy of the assessment is available to view on the public register.

11.4. Non-statutory conservation sites

There are 6no. Ancient Semi-Natural Woodlands and 1no. Restored Ancient Woodland Site located between 1km and 1.6km from the site boundary.

Worst case scenario shows that the process contribution is less than 100% the critical level and as such, there is no need for further assessment as the emissions screen out.

Based upon the information in the application we are satisfied that there will be no adverse impact to the non-statutory conservation sites identified.

12. The Permit Conditions

12.1. Incorporating the application

We have specified that the applicant must operate the permit in accordance with descriptions in the application, including additional information received as part of the determination process.

These descriptions have been specified in the Operating Techniques table in the permit.

12.2. Emission Limits

Article 14(3) of IED states that BAT conclusions shall be the reference for permit conditions. Article 15(3) further requires that under normal operating conditions; emissions do not exceed the emission levels associated with the best available techniques as laid down in the decisions on BAT conclusions.

BAT conclusions set out specific limits that the operator must comply with. Modelling has been used to demonstrate that the operator will be able to comply with the emission limits described as BAT.

In regards to this application we consider that the emission limits set out in the Medium Combustion Plant Directive constitute BAT. Emissions Limit Values (ELVs) are in line with those set out in the MCP Directive.

12.3. Monitoring

We have decided that monitoring should be carried out for the parameters listed in Schedule 3 of the permit using the methods and to the frequencies specified in those tables. These monitoring requirements have been imposed in order to demonstrate compliance with the emissions limits in the permit. These monitoring requirements have been set in line with the MCP Directive.

Pollutant	Type of Specified Generator	Fuel Type	Emission Limit Value (mg/Nm³)	Monitoring Required
Carbon Monoxide (CO)	<i>Gas Fired Engines</i>	<i>Natural Gas</i>	<i>No limit set</i>	Periodic, Annually, MCERTS BS EN 15058.
<i>Oxides of nitrogen (NO₂ and NO expressed as NO₂)</i>	<i>Gas fired Engines</i>	<i>Natural Gas</i>	95	<i>Periodic, Annually. MCERTS BS EN 14792</i>

12.4. Reporting

We have specified the reporting requirements in Schedule 4 of the Permit to ensure data is reported to enable timely review by Natural Resources Wales to ensure compliance with permit conditions and to monitor the efficiency of material use and waste recovery at the installation.

12.5. Improvement conditions

Based on the information on the application, we consider that we need to impose improvement conditions. Details of the improvement conditions used can be found at Annex 1.

The improvement condition requires the operator to undertake a follow up Noise Impact Assessment (NIA) following successful commissioning and establishment of routine steady operation at the site. This is so the operator can demonstrate the noise emissions from the site and their impacts do not exceed those anticipated by the modelling predictions included in their application.

13. OPRA

The agreed OPRA score at the installation is 75. This will form the basis for ongoing subsistence fee's.

ANNEX 1: Improvement Conditions

We have incorporated the following Improvement Condition into the permit.

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC 1	Following successful commissioning and establishment of routine steady operation, the Operator shall undertake a BS 4142:2014+A1:2019 noise impact assessment following guidance set out in Noise and Vibration Management: Environmental Permits and Method implementation document (MID) for BS 4142, to demonstrate that impacts do not exceed those specified in the permitting stage Noise Impact Assessment (Document Reference: CENT.31.01/ADM Issue 3 – Dated February 2025).	3 months after permit issue.

As the site is not yet up and running the Noise Impact Assessment (NIA) undertaken to support the application relies on a number assumptions (eg. The sound power levels of the engines used is based on manufacturers data as opposed to real world measurements). This means that the conclusions of the NIA (and the predicted impact at any receptors) are based on environmental modelling predictions. We are however satisfied this methodology is in line with our guidance.

IC1 requires the operator to undertake their NIA again once the site is up and running which will enable them to use real world measurements for BS4142 assessment (eg. the rated sound level at the receptor). This will allow the operator to demonstrate that the site is operating in line with the NIA assessed during permitting stage, or not.

ANNEX 2: Consultation Responses

1. Advertising and consultation on the Application

The application has been advertised and consulted upon in accordance with Natural Resources Wales Public Participation Statement. Responses to this consultation and how we have taken consultation responses into account in reaching our draft decision is summarised in this Annex.

Consultation Responses from Statutory and Non-Statutory Bodies

Response Received from Public Health Wales	
Brief summary of issues raised:	Summary of action taken / how this has been covered
<p>We have no grounds for objection based upon the public health considerations contained within the application and provided the site is operated in line with current sector guidance and BAT (best available techniques).</p> <p>We would strongly recommend that the regulator is completely satisfied with the Environmental Management System (EMS) and that the installation is operated and managed in accordance with the risk management mitigation plan.</p>	<p>Through the determination of this permit application we have assessed the application documents (including but not limited to the Environmental Management System, Risk Assessments, Noise Impact Assessment, Air Dispersion Modelling etc) in line with our guidance and BAT.</p> <p>Necessary aspects of these documents that help control the risk from site activities have been incorporated into the Operating Techniques S1.2 of the permit and are therefore considered permit conditions.</p>

2. Consultation on the draft decision

Our draft decision has been advertised and consulted on in accordance with requirements under the Industry Emissions Directive. Responses to this consultation and how we have taken consultation responses into account in reaching our final decision is summarised in this Annex.

Consultation Responses from Statutory and Non-Statutory Bodies

None received

Consultation Responses from Members of the Public, and Community Organisations

None received.