Notice of variation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Drax Power Limited

Hirwaun OCGT Plant
Main Avenue
Hirwaun Industrial Estate
Hirwaun
Aberdare
CF44 9UP

Variation number

EPR/BB3297CG/V002

Permit number

EPR/BB3297CG

Hirwaun OCGT Plant
Permit number EPR/BB3297CG

Introductory note

This introductory note does not form a part of the notice.

The following notice gives notice of the variation of an environmental permit.

This variation allows the operator to operate 2no. natural gas-fired water heaters for the purposes of warming incoming natural gas to the main OCGT power plant. The water heaters are each 4.144MW net rated thermal input and will operate mutually exclusively of one another, given that one will act as a duty plant and the other as a standby plant. They are both classed as new Medium Combustion Plant.

They will operate for a maximum of 1500 hours per year as a rolling five-year average, in line with the maximum permitted operating hours already allowed for the OCGT.

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 PAN-002854	Duly made 10/07/18	Application for a natural gas-fired 760MW power station.
Schedule 5 request for more information	13/08/18	Further information sought regarding noise modelling – revised modelling assessment.
Schedule 5 Information received	11/09/18	
Schedule 5 request for more information	15/10/18	Further information sought regarding noise modelling.
Schedule 5 Information received	14/12/18	
Schedule 5 request for more information	20/12/18	Further information sought regarding noise modelling.
Schedule 5 Information received	25/01/19	
Schedule 5 Information received	14/03/19	
Schedule 5 Information received	09/04/19	
Schedule 5 request for more information	29/04/19	Further information sought regarding remote operations
Schedule 5 Information received	01/05/19	
Permit Issued EPR/BB3297CG	05/06/2019	
Application EPR/BB3297CG/V002	Duly made 17/04/2025	Application to add 2 x 4.144MWth net thermal input natural gas-fired water heaters.
Variation determined EPR/BB3297CG	14/07/2025	Varied permit issued.

End of introductory note

Notice of variation

The Environmental Permitting (England and Wales) Regulations 2016

The Natural Resources Body for Wales ("Natural Resources Wales") in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number
EPR/BB3297CG

issued to
Drax Power Limited ("the operator")

whose registered office is

Drax Power Station
Drax
Selby
North Yorkshire
YO8 8PH

company registration number 4883589

to operate a regulated facility at

Hirwaun OCGT Plant
Main Avenue
Hirwaun Industrial Estate
Hirwaun
Aberdare
CF44 9UP

to the extent set out in the schedules.

The notice shall take effect from 14/07/2025

Signed	Date
Holly Noble	**14/07/2025**

Authorised on behalf of Natural Resources Wales

Schedule 1 – conditions to be deleted

None.

Schedule 2 – conditions to be amended

The following conditions are amended as a result of the application made by the operator.

Condition 2.3.1 shall be amended to

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 and table S1.2A, unless otherwise agreed in writing by Natural Resources Wales.

Table S1.1 is amended to

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**

A1 LCP002854	Section 1.1 A (1) (a): Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more.	Production of electricity in an open cycle gas turbine (OCGT) with a net thermal input of approximately 760MW operating on natural gas. and Schedule 25A: Medium Combustion Plants, activity references A1a, A1b, A2 and A3. with a combined thermal input capacity of approximately 772MW. Producing up to 299MW electrical output.	From receipt of natural gas to the discharge of combustion gases from the associated 35m stack, and the generation of electricity. All activities to be carried out within a dedicated building Dry Low NOx burners are to be used
Directly Associated Activity			
		Gas Reception Facility (GRF)	From receipt of natural gas at Grid pressure to dispatch of natural gas at the flow and pressure required for input to the gas turbine.
		Main cooling system	Fin fan air cooling utilised within a closed cycle cooling system.
		Raw materials storage	From receipt of raw materials to their use and dispatch from the Installation of any wastes arising.
	Tank Farms	Waste tanks	Storage of waste and associated emissions. All storage tanks are contained within a bund complying with relevant guidelines and in an area with sealed drainage.

W1	Surface water drainage	From collection of rainwater through operation of oil-water separators to discharge to an un-named watercourse.	

Medium Combustion Plant				
Activity reference	**Activity listed in the EP regulations**	**Description of Medium Combustion Plant**	**Fuel**	**Operating hours limit per year**
A1a (MCP 3) and A1b (MCP 4) water heaters	Schedule 25A – Medium Combustion Plant	2 x 4.144 MWth boilers	Natural gas	Operating hours limited as per condition 2.3.5 MCP3 and MCP4 shall not be operated concurrently
A2 (MCP 1)	Schedule 25A – Medium Combustion Plant and Specified Generator that is excluded	<2MWth generator	Gas Oil (diesel)	A back-up generator operated for the purpose of testing for no more than 50 hours per year
A3 (MCP 2)	Schedule 25A Medium Combustion Plant	<2MWth water pump	Gas Oil (diesel)	A fire water pump operation for the purpose of testing for no more than 50 hours per year

Table S3.1 is amended and now reads as follows:

Table S3.1 Point source emissions to air						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit) – these limits do not apply during start up or shut down** [Note 2]	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 [Point A1 on site plan in Schedule 7]	LCP002854 Gas turbine fired on natural gas	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	50 mg/m^3 Effective Dry Low NO_x to baseload[Note 1] 70% to baseload[Note 1]	Monthly mean of validated hourly averages	Continuous	BS EN 14181
			50 mg/m^3 Effective Dry Low NO_x to baseload[Note 1] 70% to baseload[Note 1]	Daily mean of validated hourly averages	Continuous	BS EN 14181
			TBC following completion of IC9 From MSUL to baseload[Note 3]	Daily mean of validated hourly averages	Continuous	BS EN 14181
			100 mg/m^3 Effective Dry Low NO_x to baseload[Note 1] 70% to baseload[Note 1]	95% of validated hourly averages within a calendar year	Continuous	BS EN 14181

Table S3.1 Point source emissions to air						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit) – these limits do not apply during start up or shut down** [Note 2]	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
			35 mg/m^3 Effective Dry Low NO_x to baseload[Note 1]	Annual mean of validated hourly averages	Continuous	BS EN 14181
A1 [Point A1 on site plan in schedule 7]	LCP002854 Gas turbine fired on natural gas	Carbon monoxide	100 mg/m^3 Effective Dry Low NO_x to baseload[Note 1] 70% to baseload[Note 1]	Monthly mean of validated hourly averages	Continuous	BS EN 14181
			110 mg/m^3 Effective Dry Low NO_x to baseload[Note 1] 70% to baseload[Note 1]	Daily mean of validated hourly averages	Continuous	BS EN 14181
			TBC following completion of IC9 From MSUL to baseload[Note 3]	Daily mean of validated hourly averages	Continuous	BS EN 14181
			200 mg/m^3 Effective Dry Low	95% of validated hourly averages within a	Continuous	BS EN 14181

Table S3.1 Point source emissions to air						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit) – these limits do not apply during start up or shut down** [Note 2]	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
			NO_x to baseload[Note 1] 70% to baseload[Note 1]	calendar year		
			TBC following completion of IC3 Effective Dry Low NOx to baseload [Note 1]	Annual mean of validated hourly averages	Continuous	BS EN 14181
		Oxygen	-	-	Continuous As appropriate to reference	BS EN 14181
		Water Vapour	-	-	Continuous As appropriate to reference	BS EN 14181
A1 [Point A1 on site plan in schedule 7]	LCP002854 Gas turbine fired on natural gas	Stack gas temperature	-	-	Continuous As appropriate to reference	Traceable to national standards
		Stack gas pressure	-	-	Continuous As appropriate to reference	Traceable to national standards
		Stack gas volume flow	-	-	Continuous	BS EN 16911 & MID for EN 16911-1
		Sulphur dioxide	-	-	6 monthly by	Agreed in writing with

Table S3.1 Point source emissions to air						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit) – these limits do not apply during start up or shut down** [Note 2]	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
					calculation	NRW
		Dust	-	-	6 monthly by calculation	Agreed in writing with NRW
A1a and A1b [Points A1a and A1b on site plan in schedule 7]	New medium combustion plant other than engines and gas turbines fuelled on natural gas	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	100mg/m^3	Periodic	Every 3 years	In line with web guide Monitoring stack emissions low risk MCPs and specified generators
		Carbon monoxide	No limit set			
A2 [Point A2 on site plan in schedule 7]	New medium combustion plant other than turbines and gas turbines	Carbon monoxide	No limit set	Periodic	After 3 times the maximum average annual operating hours have elapsed	In line with web guide Monitoring stack emissions low risk MCPs and specified generators
A3 [Point A3 on site plan in schedule 7]	New medium combustion plant other than engines and gas turbines fuelled on gas oil	Carbon monoxide	No limit set	Periodic	After 3 times the maximum average annual operating hours have elapsed	In line with web guide Monitoring stack emissions low risk MCPs and specified generators

Note 1: This ELV applies between the effective dry low NOx threshold and baseload once IC5 has been completed. Effective dry low NOx thresholds are defined in Table S1.6 (following completion of IC2), until IC5 has been completed the 70% to baseload threshold applies.
Note 2: ELV averaging periods and applicable load ranges may be rationalised upon receipt and approved in writing by Natural Resources Wales following completion of Improvement Condition IC5,
if sufficient justification and evidence is provided.
Note 3: This ELV applies between the minimum start-up load (MSUL) (as defined in Schedule 6) and baseload.

Schedule 3 – conditions to be added

The following conditions are added as a result of the application made by the operator.

2.3.11 For the following activities referenced in schedule 1, table S1.1 (A1a and A1b) the activities shall be operated using the techniques and, in the manner, described in schedule 1, table S1.2A.

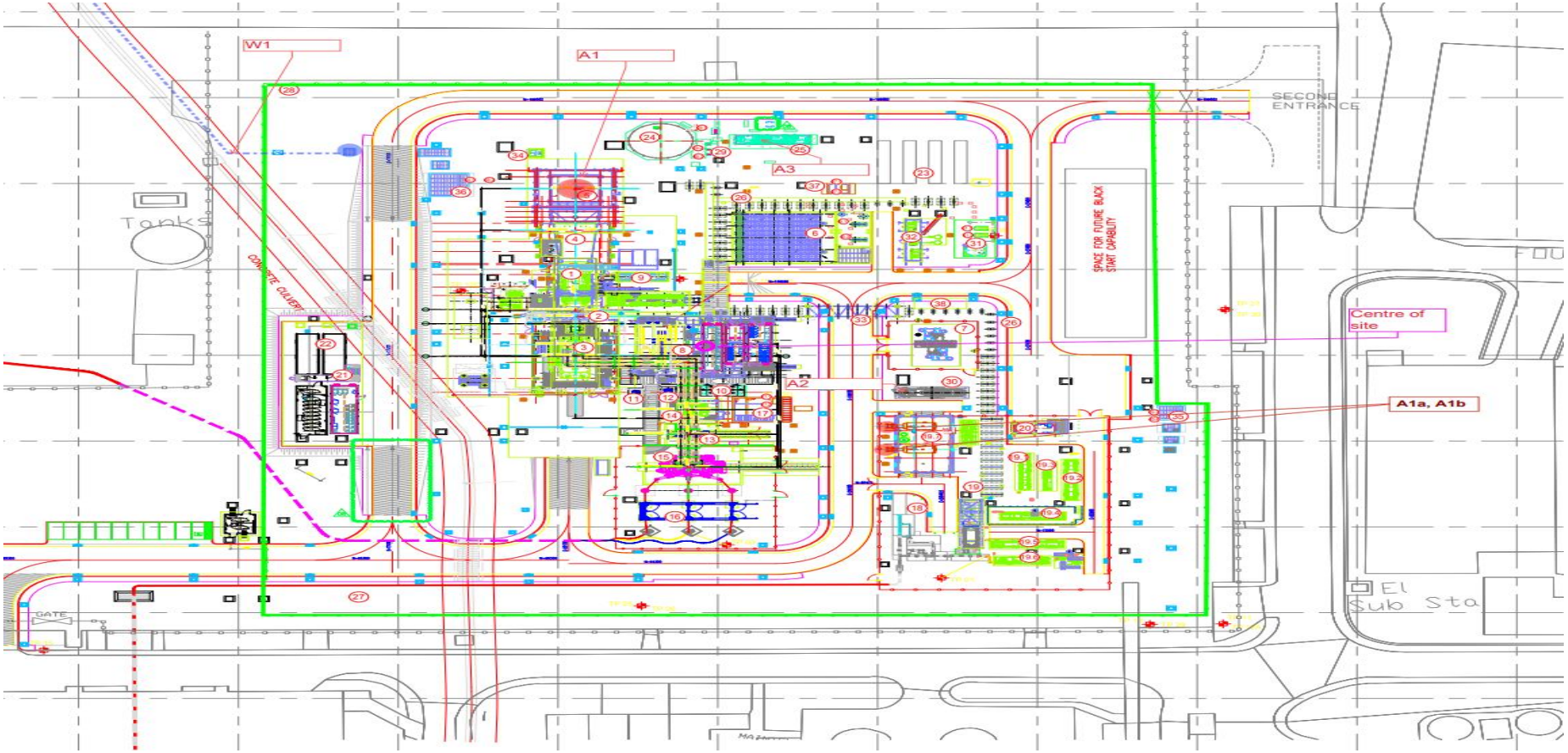
3.5.5 For the following activities references in schedule 1, table S1.1 (A1a, A1b, A2 and A3) the first monitoring measurement shall be carried out

(a) For new MCP within four months of the issue date of the permit or the date when the MCP is first put into operation, whichever is later.Table S1.2A is to be added.

Table S1.2A Operating techniques for Medium Combustion Plant as detailed in Table S1.1
Description
Each MCP 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 shut-down of each MCP 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
Description in relation to MCP1 only
A Limited Operating Hours MCP which is an excluded generator may only be operated for the sole purpose of maintaining power supply to a site during an on-site emergency and it may not participate in any balancing services
A Limited Operating Hours MCP which is an excluded generator may only be operated for the sole purpose of testing no more than 50 hours per year

Schedule 4 – amended plan

Amended plan attached



Schedule 8 – Annex I of MCPD

MCP Identifier A1a	**Ternox 2S 3800 Low NOx indirect three pass hot water boilers**
1. Rated thermal input (MW) of the medium combustion plant.	4.144
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Other medium combustion plant
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas 100%
4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.	14/07/2025
5. Sector of activity of the medium combustion plant or the facility in which it is applied (NACE code.	D35.1.1
6. Expected number of annual operating hours of the medium combustion plant and average load in use.	1500 as a five year rolling average (no more than a maximum of 2250 hours per year)
7. Where the option of exemption under Article 6(3) or Article 6(8) is used, a declaration signed by the operator that the medium combustion plant will not be operated more than the number of hours referred to in those paragraphs.	N/A
8. Name and registered office of the operator and, in the case of stationary medium combustion plants, the address where the plant is located.	Drax Power Limited Drax Power Station Drax

	Selby North Yorkshire YO8 8PH Hirwaun OCGT Plant Main Avenue Hirwaun Industrial Estate Hirwaun Aberdare CF44 9UP

MCP Identifier A1b	**Ternox 2S 3800 Low NOx indirect three pass hot water boilers**
1. Rated thermal input (MW) of the medium combustion plant.	4.144
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Other medium combustion plant
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas 100%
4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.	14/07/2025
5. Sector of activity of the medium combustion plant or the facility in which it is applied (NACE code.	D35.1.1
6. Expected number of annual operating hours of the medium combustion plant and average load in use.	1500 as a five year rolling average (no more than a maximum of 2250 hours per year)
7. Where the option of exemption under Article	N/A

6(3) or Article 6(8) is used, a declaration signed by the operator that the medium combustion plant will not be operated more than the number of hours referred to in those paragraphs.	
8. Name and registered office of the operator and, in the case of stationary medium combustion plants, the address where the plant is located.	Drax Power Limited Drax Power Station Drax Selby North Yorkshire YO8 8PH Hirwaun OCGT Plant Main Avenue Hirwaun Industrial Estate Hirwaun Aberdare CF44 9UP

END OF VARIATION NOTICE