



**ENVIRONMENT  
AGENCY**

## **Variation Notice with introductory note**

Pollution Prevention and Control (England & Wales) Regulations 2000

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Aberthaw Power Station

RWE npower plc  
Aberthaw  
near Barry  
Vale of Glamorgan  
CF62 4ZW

Variation Notice Number  
GP3635XF

Permit number  
RP3133LD

# Aberthaw Power Station

## Permit Number RP3133LD

### Introductory note

#### ***This introductory note does not form a part of the permit***

The following notice is issued under regulation 17 of The Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I.2000 No. 1973 (as amended) (the Regulations) to vary the conditions of a permit issued under the Regulations to operate an installation. The notice comprises schedule 1 containing conditions to be deleted, schedule 2 conditions to be amended and schedule 3 conditions to be added.

This variation notice introduces an administrative change to the permit enabling the operator to use the “low load factor derogation” for sulphur dioxide emission limit values under Article 5(1) of the Large Combustion Plant Directive during the commissioning of flue gas desulphurisation abatement.

Status Log of the permit		
Detail	Date	Response Date
Application RP3133LD	Duly made 31/03/06	
Schedule 4 Notice/Additional Information Received	Issued 26/07/06	4/10/06, 1/11/06, 10/11/06, 5/12/06, 1/03/07, 16/3/07, 8/08/07, 10/08/07, 22/08/07, 5/09/07 and 11/09/07
Public Participation Directive consultation	30/10/07	27/11/07
Permit determined	21/12/07	
Variation notice GP3635XF issued	9/01/08	

Other PPC permits relating to this installation		
Operator	Permit Number	Date of Issue
RWE npower	DP3432SW	30/03/07
RWE npower	BP3339BH	4/05/07

Superseded or Partially Superseded Licences/Authorisations/Consents relating to this installation			
Holder	Reference Number	Date of Issue	Fully or Partially Superseded
RWE npower	AA2682	8/04/93	Fully superseded
RWE Innogy plc	EAWML30067	22/08/91	Partially superseded

Other existing Licences/Authorisations/Registrations relating to this site		
Holder	Reference Number	Date of issue
RWE Innogy plc	21/57/31/0040	16/09/99

End of Introductory Note

## Variation Notice

Pollution Prevention and Control  
(England and Wales) Regulations 2000

# Variation Notice

Permit number

**RP3133LD**

Variation number

**GP3635XF**

The Environment Agency (the Agency) in exercise of its powers under Regulation 17 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No 1973) hereby varies the permit held by you

**RWE npower plc** ("the operator"),

whose registered office is

**Windmill Business Park**

**Whitehill Way**

**Swindon**

**Wiltshire**

**SN5 6PB**

company registration number 3892782

to operate an installation at

**Aberthaw Power Station**

**Aberthaw**

**Nr. Barry**

**Vale of Glamorgan**


**CF62 4ZW**

to the extent set out in schedules 1 to 3 of this variation notice .

The notice shall take effect from 14<sup>th</sup> January 2008

Signed

Date

	9 <sup>th</sup> January 2008
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A Gibbs

Authorised to sign on behalf of the Agency

## SCHEDULE 1 – CONDITIONS TO BE DELETED

1. None

## SCHEDULE 2 – CONDITIONS TO BE AMENDED

2. The following conditions are amended as follows:

2.1 The due date for improvement condition reference IC2, Table S1.2 in **Schedule 1 – Operations** shall be amended from 31<sup>st</sup> October 2008 to 1<sup>st</sup> April 2009.

2.2 Table S4.1 and associated footnotes in **Schedule 4 – Emissions and monitoring** shall be amended by the inclusion of replacement footnote “c” and the removal of requirements that applied until 31/12/07

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit <sup>a</sup> (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Windshield A1 [153 metre high 3 flue stack located at NGR ST023663]	Particulate Matter	Large Combustion Plant designed to operate on low volatile content coal	55 mg/m <sup>3</sup>	48hour mean as 97%ile	Continuous	BS EN13284-2 <sup>1,2</sup>
Windshield A1 [153 metre high 3 flue stack located at NGR ST023663]	Particulate Matter	Large Combustion Plant designed to operate on low volatile content coal	50 mg/m <sup>3</sup> <sup>d</sup>	Calendar monthly average	Continuous	BS EN13284-2 <sup>1,2</sup>
Windshield A1 [153 metre high 3 flue stack located at NGR ST023663]	Particulate Matter	Large Combustion Plant with FGD designed to operate on low volatile content coal	25 mg/m <sup>3</sup> <sup>d</sup>	Calendar monthly average	Continuous	BS EN13284-2 <sup>1,2</sup>
Windshield A1 [153 metre high 3 flue stack located at NGR ST023663]	Sulphur dioxide	Large Combustion Plant designed to operate on low volatile content coal	400 mg/m <sup>3</sup> <sup>b, c</sup>	Calendar monthly average	Continuous	BS EN 14181 <sup>1,2</sup>
Windshield A1 [153 metre high 3 flue stack located at NGR ST023663]	Sulphur dioxide	Large Combustion Plant designed to operate on low volatile content coal	440 mg/m <sup>3</sup> <sup>b, c</sup>	48hour mean as 97%ile	Continuous	BS EN 14181 <sup>1,2</sup>
Windshield A1 [153 metre high 3 flue stack located at NGR ST023663]	Oxides of nitrogen	Large Combustion Plant designed to operate on low volatile content coal	1200 mg/m <sup>3</sup>	Calendar monthly average	Continuous	BS EN 14181 <sup>1,2</sup>
Windshield A1 [153 metre high 3 flue stack located at NGR ST023663]	Oxides of nitrogen	Large Combustion Plant designed to operate on low volatile content coal	1320 mg/m <sup>3</sup>	48hour mean as 95%ile	Continuous	BS EN 14181 <sup>1,2</sup>

**Table S4.1 Point source emissions to air – emission limits and monitoring requirements**

Emission point ref. & location	Parameter	Source	Limit <sup>a</sup> (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Windshield A2 [96 metre high flue located at NGR ST024 662]	-	Large Combustion Plant (Black start open cycle gas turbine unit 7)	-	-	-	-
Windshield A3 [96 metre high flue located at NGR ST024 662]	-	Large Combustion Plant (Black start open cycle gas turbine unit 8)	-	-	-	-
Windshield A4 [96 metre high flue located at NGR ST024 662]	-	Large Combustion Plant (Black start open cycle gas turbine unit 9)	-	-	-	-
A5 [25 metre high single flue stack located at NGR ST03058 65958]	Particulate Matter and entrained droplets	PFA recycling plant seawater scrubber	No visible release	-	-	-
A5 [25 metre high single flue stack located at NGR ST03058 65958]	Ammonia	PFA recycling plant seawater scrubber	2 mg/m <sup>3</sup>	As per extractive method	Annual extractive test	US EPA Method 26
A7, A8, A9 [Biomass handling]	Particulate Matter	Biomass milling plant cyclone exhausts	No visible release	-	-	-
A10 [Ash handling across the installation]	Particulate Matter	Ash silo and recovery process vents	No visible release	-	-	-
A11 [Utilities]	Particulate Matter	Domestic boiler and waste wood burner flues	No visible release	-	-	-
A12 [Storage tank vents across the installation]	-	Displacement and pressure relief vents associated with liquid fuel and raw material storage	-	-	-	-

<sup>1</sup> Subject to the detailed requirements and interpretations agreed with the Environment Agency in the Joint Environmental Programme, Joint Industry/Environment Agency Working Group In stack monitoring, publication **“Monitoring SO<sub>2</sub> and NO<sub>x</sub> and Dust Emissions from Power Stations – A Guide to Current Best Practice for the Operators of Coal and Oil Fired Boilers”** PT/06/BE1916/R, D.P.Graham, December 2006 (or any subsequent revision to this agreed in writing with the Environment Agency)

<sup>2</sup> Subject to the detailed requirements and interpretations agreed with the Environment Agency in the Joint Environmental Programme, Joint Industry/Environment Agency Working Group In stack monitoring publication **“Use of CEMs for Reporting Emissions of SO<sub>2</sub>, NO<sub>x</sub> and Dust under PPC and the LCPD. A Guide to Current Best Practice for the Operators of Coal and Oil Fired Boilers ”Graham, D.P., Salway, G, PT/06/BE1917/R, December 2006 “** (or any subsequent revision to this agreed in writing with the Environment Agency)

<sup>a</sup> Excludes start up and shut down.

<sup>b</sup> A desulphurisation rate of **94%** will replace the ELV where the LCP cannot meet the ELV due to characteristics of the fuel as set out in the application or as a result of an unforeseeable fluctuation in fuel quality.

<sup>c</sup> Until 31 December 2015 plants of a rated thermal input greater than 400MW, which from 1<sup>st</sup> January 2008 onwards do not operate more than 2 000 hours a year (rolling average measured over a period of 5 years), shall be subject to a monthly limit value for sulphur dioxide of 800mg/m<sup>3</sup> and a 48 hourly mean as a 97<sup>th</sup>ile of 880mg/m<sup>3</sup>.

<sup>d</sup> The monthly average particulate matter emission limit value for LCP operating temporarily with both FGD abated and non-FGD abated units will be 50 mg/m<sup>3</sup>. The monthly average particulate matter emission limit value of 25 mg/m<sup>3</sup> will apply upon completion of commissioning of all FGD abated units.

### **SCHEDULE 3 – CONDITIONS TO BE ADDED**

3. None