

Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

Magnox Limited

Wylfa Power Station
Cemaes Bay
Anglesey
LL67 0DH

Variation application number
EPR/QP3035LY/V002

Permit number
EPR/QP3035LY

Wylfa Power Station

Permit number EPR/QP3035LY

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 removes the annual mass emission limits associated with Auxiliary Boiler 4 and replaces them with concentration based emission limits for oxides of nitrogen and sulphur dioxide. This change is necessary to enable Auxiliary Boiler 4 to provide safety critical heating and hot water during maintenance outages of Reactor 1. This role was formerly undertaken by Reactor 2, which was permanently shut down in April 2012.

In addition, this variation permits the operation of a 3.5MW gas-oil fired temporary boiler which will provide a back up source of heating in the event of Auxiliary Boiler 4 being unavailable. The temporary boiler is being brought on site for a planned maintenance outage on Reactor 1 in January 2014 and it is anticipated that it will remain on site for 3 months. The temporary boiler is a similar size to Auxiliary Boiler 4 and uses the same fuel. It will not be operated at the same time as Auxiliary Boiler 4, so there will be no significant change to air emissions from the site as a result of its operation.

The schedules specify the changes made to the original 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 QP3035LY	Duly made 22/02/06	
Additional information received	20/11/06	
Additional information received	03/04/07	
Permit determined	05/04/07	
Variation application EPR/QP3035LY/V002	Duly made 17/10/13	Application to replace annual mass emission limits with concentration based emission limits for Auxiliary Boiler 4. Operation of a temporary boiler.
Variation determined EPR/QP3035LY/V002	18/12/13	Varied permit issued

End of introductory note

Notice of variation

Environmental Permitting (England and Wales) Regulations 2010

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 2010 varies

Permit number
EPR/QP3035LY

issued to:
Magnox Limited ("the operator")

whose registered office is:

Berkeley Centre
Berkeley
Gloucestershire
GL13 9PB

Company registration number: **02264251**

to operate a regulated facility at:

Wylfa Power Station
Cemaes Bay
Anglesey
LL67 0DH

to the extent set out in the schedules.

The notice shall take effect from **01/01/2014**

Name

Date

	18/12/2013
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Eirian Macdonald, Principal Permitting Team Leader

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 3.1.3 shall be amended to:

- 3.1.3 Total annual emissions from emission points A1-A5 set out in table S4.1 of a substance listed in table S4.3 shall not exceed the relevant limit in table S4.3 of this variation notice.

Table S1.1 shall be amended to:

Table S1.1 activities		
Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
S1.1 A1 (a) – Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more	Five gas turbines Four auxiliary boilers Three diesel generators Tertiary feed diesels, Back-up feed systems, standby generators and emergency diesel fire-water pump engine. Temporary boiler (emission point at NGR SH 35147 94112) All units fired by gas oil.	From receipt and transfer of oil and other raw materials, including relevant secondary containment, to discharge of combustion products to air, liquid effluent to site drainage system and solid waste disposal. The temporary boiler shall not be operated at the same time as Auxiliary Boiler 4. (The only exception to this shall be during initial commissioning and availability checks on the temporary boiler). The temporary boiler shall be operational until 31 st March 2014, unless otherwise agreed in writing with Natural Resources Wales.

Table S1.2 shall be amended to:

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The responses to questions B2.1 and B2.2, given in Appendix A in the Application.	22 February 2006
Variation application EPR/QP3035LY/V002	Document entitled "Combustion Plant Permit QP3035LY Variation Justification" describing the new operating regime for Auxiliary Boiler 4 and associated burner modifications to meet BAT.	9 October 2013
Variation application EPR/QP3035LY/V002	Email from Magnox Ltd confirming specification and operating regime for the temporary boiler.	7 November 2013

Table S1.3 shall be amended to:

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IP1 – IP4 have been completed		
IP5	The operator shall conduct the annual emissions monitoring for Auxiliary Boiler 4 (specified in Table S4.1), within the first 3 months of Auxiliary Boiler 4 being operated to provide heating and hot water to the site. The monitoring results shall be submitted to Natural Resources Wales in the form of a written report, which compares the results for sulphur dioxide and oxides of nitrogen (NO and NO₂ expressed as NO₂) against the revised emission limits of 110mg/m³ and 250 mg/m³ respectively.	30/06/14

Table S4.1 shall be amended to:

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref.	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 – A5 # As shown on Drg. 0016099 \ 002 in application	Sulphur dioxide	Gas Turbines 1-5	7 kg/hour (in any one release point)	Mean spot measurement at stable conditions \$	Annually	BS6069 Section 4.4: 1993 (ISO 7935)
A6 # As shown on Drg. 0016099 \ 002 in application		Auxiliary Boiler No 4	110 mg/m ³	Mean spot measurement at stable conditions \$	Annually	BS6069 Section 4.4: 1993 (ISO 7935)
A1 – A5 # As shown on Drg. 0016099 \ 002 in application	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	Gas Turbines 1-5	400 mg/m ³ *	Mean spot measurement at stable conditions \$	Annually	ISO 10849:1996
A6 # As shown on Drg. 0016099 \ 002 in application		Auxiliary Boiler No 4	250 mg/m ³ *	Mean spot measurement at stable conditions \$	Annually	ISO 10849:1996
A1 – A6 # As shown on Drg. 0016099 \ 002 in application	Carbon monoxide	Gas Turbines 1-5 and Auxiliary Boiler No 4	No limits set	Mean spot measurement at stable conditions \$	Annually	ISO 12039
A7 – A9 As shown on Drg. 0016099 \ 002 in application	No parameters set	Auxiliary Boiler Nos 1 - 3	No limits set	No monitoring requirements set		
A10 – A12 As shown on Drg. 0016099 \ 002 in application		Diesel Generator Nos 1 - 3				
A13 As shown on Drg. 0016099 \ 002 in application		Tertiary Feed Diesel Nos 1 – 4				
A14 - A15 As shown on Drg. 0016099 \ 002 in application		Back-up Feed Systems 1 – 2				

Table S4.1 Point source emissions to air – emission limits and monitoring requirements (cont.)

Emission point ref.	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A16 – A17		Emergency back-up generators				
A18	No parameters set	Emergency diesel fire-water pump engine	No limits set		No monitoring requirements set	

Notes to accompany Table S4.1

* See Schedule 7 for appropriate reference conditions

Permanent means of access to enable sampling / monitoring to be carried out is required in respect of A1 to A4. For A5 and A6, permanent access is not required, provided that the facility is maintained to allow access by temporary scaffolding when required.

\$ Conditions should be stable for a minimum of ten minutes.

Table S4.3 of the permit QP3035LY, as it relates to amended condition 3.1.3, has been unchanged as part of this variation but incorporated into this notice for clarity:

Table S4.3 Annual limits

Substance	Medium	Limit (including unit)
Sulphur dioxide	Air	3,500 kg (as SO ₂) in a year
Oxides of nitrogen	Air	12,000 kg (as NO ₂) in a year

Table S5.3 shall be amended to:

Table S5.3 Reporting forms

Media / parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Agency	18/12/2013
Performance parameters	Form performance 1 or other form as agreed in writing by the Agency	18/12/2013

Schedule 6 Notification shall be amended to:

Schedule 6 - 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 PPC Regulations.

Part A

Permit Number	
Name of operator	
Location of Installation	
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission 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
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To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference / source	
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 installation in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of Magnox Limited.

Schedule 3 – conditions to be added

None