

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

NPower Cogen Limited

Cheshire CHP North Road Ellesmere Port South Wirral CH65 1AF

Variation application number

EPR/BK6505IL/V002

Permit number

EPR/BK6505IL

Cheshire CHP Permit number EPR/BK6505IL

Introductory note

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

Under the Environmental Permitting (England & Wales) Regulations 2010 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies that all the conditions of the permit have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made and contains all conditions relevant to this permit.

The requirements of the Industrial Emissions Directive (IED) 2010/75/EU are given force in England through the Environmental Permitting (England and Wales) Regulations 2010 (the EPR) (as amended).

This Permit, for the operation of large combustion plant (LCP), as defined by articles 28 and 29 of the Industrial Emissions Directive (IED), is varied by the Environment Agency to implement the special provisions for LCP given in the IED, by the 1 January 2016 (Article 82(3)). The IED makes special provisions for LCP under Chapter III, introducing new Emission Limit Values (ELVs) applicable to LCP, referred to in Article 30(2) and set out in Annex V.

As well as implementing Chapter III of IED, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issued. It also modernises all conditions to reflect the conditions contained in our current generic permit template.

The Operator has chosen to operate this LCP under the 500 hour compliance route.

The net thermal input of the LCP is as follows: LCP 274 consists of one 124 MWth Open Cycle Gas TurbineOCGT.

The variation notice uses an updated LCP number in accordance with the most recent DEFRA LCP reference numbers. The LCP reference has changed as follows:

LCP 425 is changed to LCP 274

The rest of the installation is unchanged and continues to be operated as follows:

The installation originally consisted of a Combined Heat and Power (CHP) system providing electricity and steam to an adjacent paper mill. The system incorporated a 124 MWth input natural gas fired turbine with a Heat Recovery Steam Generator (HRSG). The HRSG was arranged for intermittent supplementary firing using natural gas. Two high pressure steam boilers were used to provide steam to the paper mill when the CHP system was out of action.

The paper mill went into administration and has now been demolished. Since 2010 the installation has operated in OCGT mode, providing power to the National Grid through the Short Term Operating Reserve (STOR) market. The HRSG and auxiliary boilers are no longer operational, nor is the effluent treatment plant which treated the discharge from the boiler water treatment plant. These changes, agreed in writing with the Environment Agency on 20/08/10 have been included in this variation. A change of operator name and site name has also been included.

A diesel generator is used to provide a black start facility for the gas turbine.

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 received (EPR/BK6505IL/A001)	Duly made 27/02/2001	Application for permit to operate CHP plant to provide electricity and steam to adjacent paper mill.			
Permit determined EPR/BK6505IL	29/04/2002	Permit issued to Innogy Cogen Limited			
Regulation 60 Notice sent to the Operator	31/10/14	Issue of a Notice under Regulation 60(1) of the EPR. Environment Agency Initiated review and variation to vary the permit under IED to implement the special provisions for LCP under Chapter III, introducing new Emission Limit Values (ELVs) applicable to LCP, referred to in Article 30(2) and set out in Annex V. The permit is also updated to modern conditions			
Regulation 60 Notice response	31/03/15	Response received from the Operator.			
Additional information received	03/07/15	Response to request for further information (RFI) dated 12/05/2015.			
Additional information received	15/12/15	Confirmation of compliance route chosen.			
Variation determined EPR/BK6505IL/V002 (Billing ref: BP3432AY)	24/12/15	Varied and consolidated permit issued to NPower Cogen Limited in modern condition format. Variation effective from 01/01/2016.			

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

Permit number

EPR/BK6505IL

Issued to

NPower Cogen Limited ("the operator")

whose registered office is

Windmill Hill Business Park Whitehill Way Swindon Wiltshire SN5 6PB

company registration number 02624987

to operate a regulated facility at

Cheshire CHP North Road Ellesmere Port South Wirral CH65 1AF

to the extent set out in the schedules.

The notice shall take effect from 01/01/2016

Name	Date
Anne Nightingale	24/12/2015

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/BK6505IL

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BK6505IL/V002 authorising,

NPower Cogen Limited ("the operator"),

whose registered office is

Windmill Hill Business Park Whitehill Way Swindon Wiltshire SN5 6PB

company registration number 02624987

to operate an installation at

Cheshire CHP North Road Ellesmere Port South Wirral CH65 1AF

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

Name	Date
Anne Nightingale	24/12/2015

Authorised on behalf of the Environment Agency

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, 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.

1.2 Energy efficiency

- 1.2.1 The operator shall:
 - (a) take appropriate measures to ensure that energy is used efficiently in the activities;
 - (b) take appropriate measures to ensure the efficiency of energy generation at the permitted installation is maximised;
 - (c) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
 - (d) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

- 1.3.1 The operator shall:
 - (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
 - (b) maintain records of raw materials and water used in the activities;
 - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
 - (d) take any further appropriate measures identified by a review.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

- 1.4.1 The operator shall take appropriate measures to ensure that:
 - (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities;
 - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
 - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

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 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, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 Without prejudice to condition 2.3.1, the activities shall be operated in accordance with the "Electricity Supply Industry IED Compliance Protocol for Utility Boilers and Gas Turbines" revision 1 dated February 2015 or any later version unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.4 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.5 For the following activities referenced in schedule 1, table S1.1: LCP 274. The activities shall not operate for more than 500 hours per year.
- 2.3.6 The end of the start up period and the start of the shutdown period shall conform to the specifications set out in Schedule 1, tables S1.2 and S1.4.
- 2.3.7 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
 - (a) the nature of the process producing the waste;
 - (b) the composition of the waste;
 - (c) the handling requirements of the waste;
 - (d) the hazardous property associated with the waste, if applicable; and
 - (e) the waste code of the waste.
- 2.3.8 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
 - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.4 Noise and vibration

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
 - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
 - (a) point source emissions specified in tables S3.1and S3.2.
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continuous), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1 and S3.2, unless otherwise agreed in writing by the Environment Agency.

3.6 Monitoring for the purposes of the Industrial Emissions Directive Chapter III

- 3.6.1 All monitoring required by this permit shall be carried out in accordance with the provisions of Annex V of the Industrial Emissions Directive.
- 3.6.2 If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall be used, as agreed in writing with the Environment Agency.

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 the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) off-site environmental effects; and
 - (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
 - (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
 - (b) the resource efficiency metrics set out in schedule 4 table S4.2; .
 - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule; and
 - (d) where condition 2.3.5, applies the hours of operation in any year.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, 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 S4.4; and
 - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.3 Notifications

- 4.3.1 In the event:
 - (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
 - (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
 - (b) of a breach of any permit condition the operator must immediately—
 - (i) inform the Environment Agency, and

- take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i), 4.3.1 (b)(i) where the information relates to the breach of a condition specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency 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.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
 - (a) the Environment Agency shall be notified at least 14 days before making the change; and
 - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
 - (a) a decision by the Secretary of State not to re-certify the agreement;
 - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
 - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.
- 4.3.8 The operator shall inform the Environment Agency in writing of the closure of any LCP within 28 days of the date of closure.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 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 a	activities		
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
A1	Section 1.1 A(1) (a): Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more	LCP274: OCGT for production of electricity with a thermal input of 124MW.	From receipt of natural gas to discharge of exhaust gases, and the generation of electricity for export.
	Directly Associated Activity		
A2	Directly associated activity	Oil storage	From receipt of raw materials to dispatch for use
A3	Directly associated activity	Discharge of surface water drainage from plant area via silt trap and oil water separator	Handling and storage of site drainage until discharge to the site surface water system at Manisty Culvert, Point W1 on site drawing CGD/BPC/0040/A
A4	Directly associated activity	Diesel generator "black start" facility	Operation of diesel generator to provide black start facility for GT

Description	Parts	Date Received
Application	The response to question 2.1 given in BPC/CHP/Supp Doc/Section 3	27/02/01
	The response given to question 2.2 given in BPC/CHP/Supp Doc/SS4,5,6	
	The response given to question 2.3 given in BPC/CHP/Supp Doc/SS 7, 8, 9, 10, 11, 12	
	The response given to question 2.4 given in BPC/CHP/Supp Doc/S13	
	The response given to question 2.5 given in BPC/CHP/Supp Doc/S S 4, 14	
	The response given to question 2.6 given in BPC/CHP/Supp Doc/ S15	
	The response given to question 2.7 given in BPC/CHP/Supp Doc/ S16	
	The response given to question 2.8 given in BPC/CHP/Supp Doc/ S17	
	The response given to question 2.9 given in BPC/CHP/Supp Doc/ SS18, 19	
	The response given to question 2.10 given in BPC/CHP/Supp Doc/ SS20, 21, 22, 23, 24	
	The response given to question 2.11 given in BPC/CHP/Supp Doc/ S25	
	The response given to question 2.12 given in BPC/CHP/Supp Doc/ S26	
Receipt of additional information to the application	Review of air dispersion model for OCGT operation	05/08/10
Receipt of additional information to the application	Temporary suspension of water discharge monitoring	05/08/10
Response to regulation 60(1) Notice – request for information dated	Compliance routes and operating techniques identified in response to questions 2(compliance route), 4(configuration), 5(net rated thermal input), 6(MSUL/MSDL), 9i(ELVs).	Received 31/03/15
31/10/14	Excluding compliance routes TNP and LLD for LCP274 and related operating techniques	
Receipt of additional information to the regulation 60(1) Notice.	Compliance routes and operating techniques identified in response to questions 4(configuration), 5(net rated thermal input), 9i(ELVs) of the regulation 60 notice.	Received 03/07/15
requested by letter dated 13/05/15	Excluding compliance routes TNP and LLD for LCP274 and related operating techniques	
Receipt of additional information to the regulation 60(1) Notice.	Confirmation of the compliance routes chosen for LCP 274	15/12/15

Table S1.3 I	Table S1.3 Improvement programme requirements				
Reference	Requirement	Date			
9.1.1.1	The operator shall provide a report in writing to the Agency on the quantity of water used in the CHP.	Completed			
9.1.1.2	The operator shall provide a report in writing to the Agency of its plans for decommissioning the CHP. The operator shall provide the Agency with an update of the report at a frequency no less than five-yearly	Commencing 31/12/09			
9.1.1.3	For LCPD LCP 425 (now LCP 274 under IED). Annual emissions of dust, sulphur dioxide and oxides of nitrogen including energy usage for the year 01/01/2015 to 31/12/2015 shall be submitted to the Environment Agency using form AAE1 via the NERP Registry. If the LPCD LCP was a NERP plant the final quarter submissions shall be provided on the RTA 1 form to the NERP Registry.	28/01/16			

Table S1.4 Start-up and Shut-down thresholds				
Emission Point and Unit Reference	"Minimum start up load" Load in MW and as percent of rated power output (%)	"Minimum shut-down load" Load in MW and as percent of rated power output (%)		
A4 LCP274	30MW; 75%	30MW; 75%		

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Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels		
Raw materials and fuel description	Specification	
Natural gas	From National Grid	
Gas oil	Not exceeding 0.1% w/w sulphur content	

Schedule 3 – Emissions and monitoring

Emission point ref. & location	Parameter	Source	Limit (including unit)-these limits do not apply during start up or shut down.	Reference Period	Monitoring frequency	Monitoring standard or method
A4 [Point A4 on site plan in schedule 7]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	LCP No. 274 Gas turbine fired on natural gas	-	-	Concentration by calculation, every 4380 operational hours or 2 years, whichever is sooner.	Agreed in writing with the Environment Agency
A4 [Point 41 on site plan in schedule 7]	Sulphur dioxide	LCP No. 274 Gas turbine fired on natural gas	-	-	Concentration by calculation, every 4380 operational hours or 2 years, whichever is sooner.	Agreed in writing with the Environment Agency
A4 [Point A4 on site plan in schedule 7]	Carbon monoxide	LCP No. 274 Gas turbine fired on natural gas	-	-	Concentration by calculation, every 4380 operational hours or 2 years, whichever is sooner.	Agreed in writing with the Environment Agency
A5 [Point A5 on site plan in schedule 7]	No parameters	Diesel Generator "Black start" facility	_	-	-	Agreed in writing with the Environment Agency

Table S3.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference period	Monitoring frequency	Monitoring standard or method
W1 on site plan in schedule 7. Emission to Manisty Culvert, to Manchester Ship Canal	Oil or grease	Surface drainage	No visible emission	Instantaneous visual check	Daily	Not applicable
W1 on site plan in schedule 7. Emission to Manisty Culvert, to Manchester Ship Canal	Flow rate	Surface drainage	750m ³ /hr	Hourly	Continuous	Agreed in writing with the Environment Agency

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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		
Oxides of nitrogen	A4	Every 2 years for periodic monitoring	1 January		
Carbon Monoxide	A4	Every 2 years for periodic monitoring	1 January		
Sulphur dioxide	A4	Every 2 years for periodic monitoring	1 January		
Surface water monitoring Parameters as required by condition 3.5.1	W1	Every 3 months	1 January, 1 April, 1 July, 1 October		

Table S4.2: Resource Efficiency Metrics				
Parameter	Units			
Electricity Exported	GWhr			
Heat Exported	GWhr			
Mechanical Power Provided	GWhr			
Fossil Fuel Energy Consumption	GWhr			
Non-Fossil Fuel Energy Consumption	GWhr			
Annual Operating Hours	hr			
Water Abstracted from Fresh Water Source	m ³			
Water Abstracted from Borehole Source	m ³			
Water Abstracted from Estuarine Water Source	m ³			
Water Abstracted from Sea Water Source	m ³			
Water Abstracted from Mains Water Source	m ³			
Gross Total Water Used	m ³			
Net Water Used	m ³			
Hazardous Waste Transferred for Disposal at another installation	t			
Hazardous Waste Transferred for Recovery at another installation	t			
Non-Hazardous Waste Transferred for Disposal at another installation	t			
Non-Hazardous Waste Transferred for Recovery at another installation	t			
Waste recovered to Quality Protocol Specification and transferred off-site	t			
Waste transferred directly off-site for use under an exemption / position statement	t			

Table S4.3 Chapter III Performance parameters for reporting to DEFRA		
Parameter	Frequency of assessment	Units
Thermal Input Capacity for each LCP	Annually	MW
Annual Fuel Usage for each LCP	Annually	TJ
Total Emissions to Air of NO_x for each LCP	Annually	t
Total Emissions to Air of SO ₂ for each LCP	Annually	t
Total Emissions to Air of Dust for each LCP	Annually	t
Operating Hours for each LCP	Annually	hr

Table S4.4 Reporting forms				
Media/ parameter	Reporting format	Starting Point	Agency recipient	Date of form
Air & Energy	Form IED AR1 – SO ₂ , NO _x and dust mass emission and energy	01/01/16	National	31/12/15
LCP	Form IED HR1 – operating hours	01/01/16	National	31/12/15
Air	Form IED PM1 - discontinuous monitoring and load.	01/01/16	Area Office	31/12/15
Resource Efficiency	Form REM1 – resource efficiency annual report	01/01/16	National	31/12/15
Water	Form S3/W1 or other form as agreed in writing by the Environment Agency	01/01/16	Area Office	29/04/02

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	

(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	
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		
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 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.

"Air Quality Risk Assessment" has the meaning given in Annex D of IED Compliance Protocol for Utility Boilers and Gas Turbines.

"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 the Environment Agency 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.

"Black Start" means the procedure to recover from a total or partial shutdown of the UK Transmission System which has caused an extensive loss of supplies. This entails isolated power stations being started individually and gradually being reconnected to other power stations and substations in order to form an interconnected system again.

"calendar monthly mean" means the value across a calendar month of all validated hourly means.

"CEN" means Commité Européen de Normalisation.

"Combustion Technical Guidance Note" means IPPC Sector Guidance Note Combustion Activities, version 2.03 dated 27th July 2005 published by Environment Agency.

"disposal". Means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"emissions to land" includes emissions to groundwater.

"Energy efficiency" the annual net plant energy efficiency means the value calculated from the operational data collected over the year.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"emissions of substances not controlled by emission limits" means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

"groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"Industrial Emissions Directive" means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions.

"large combustion plant" or "LCP" is a combustion plant or group of combustion plants discharging waste gases through a common windshield or stack, where the total thermal input is 50 MW or more, based on net calorific value. The calculation of thermal input, excludes individual combustion plants with a rated thermal input below 15MW.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"MCR" means maximum continuous rating.

"MSDL" means minimum shut-down load as defined in Implementing Decision 2012/249/EU.

"MSUL" means minimum start-up load as defined in Implementing Decision 2012/249/EU.

"Natural gas" means naturally occurring methane with no more than 20% by volume of inert or other constituents.

"ncv" means net calorific value.

"operational hours" are whole hours commencing from the first unit ending start up and ending when the last unit commences shut down.

"quarter" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

"recovery" means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"SI" means site inspector.

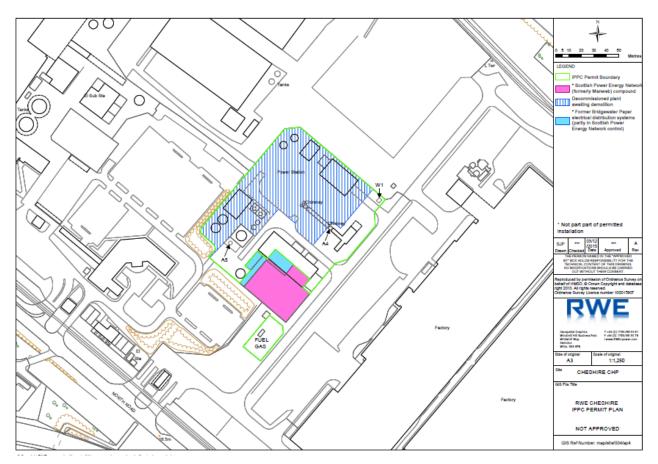
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from gas turbine or compression ignition engine combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3kPa and with an oxygen content of 15% dry for liquid and gaseous fuels; and/or
- in relation to emissions from combustion processes comprising a gas turbine with a waste heat boiler, the concentration in dry air at a temperature of 273K, at a pressure of 101.3kPa and with an oxygen content of 15% dry, unless the waste heat boiler is operating alone, in which case, with an oxygen content of 3% dry for liquid and gaseous fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

"year" means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT