

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	EPR/JP3632ZH/V002	
Name of operator	Engie FM Limited	
Location of Facility	Barry Cogeneration Plant	
Time and date of the detection	18/06/2017 15:36pm	

(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 immediately		
Date and time of the event	18/06/2017 15:36pm	
Reference or description of the location of the event	HRSG A black smoke from chimney	
Description of where any release into the environment took place	Main chimney stack for CHP Emission point A1	
Substance(s) potentially released	Carbon Monoxide	
Best estimate of the quantity or rate of release of substances	105mg/Nm3 for the duration of 1hr and 40min	
Measures taken, or intended to be taken, to stop any emission	Unit was stopped after this period as it had not come back into control.	
Description of the failure or accident.	O2 trim feature, was inactive and manual trim was unsuccessful	

(b) Notification requirements for the breach of a limit	
To be notified immediately unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

(b) Notification requirements for the breach of a limit	
To be notified immediately unless otherwise specified below	
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 immediately	
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.	See Attachment A.
Measures taken, or intended to be taken, to prevent a recurrence of the incident	Initial steps were to modify the local instruction with the lessons learnt. O2 sensor value locked, faulty components replaced.
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	As per above, unit tested in different conditions and recent trips have shown that procedure and process controls in place are working as intended.
The dates of any unauthorised emissions from the facility in the preceding 24 months.	Non.

Name*	Paul Searle
Post	Engineer
Signature	
Date	04 th September 2017

* authorised to sign on behalf of the operator

PERMIT: EPR/JP3632ZH/V002

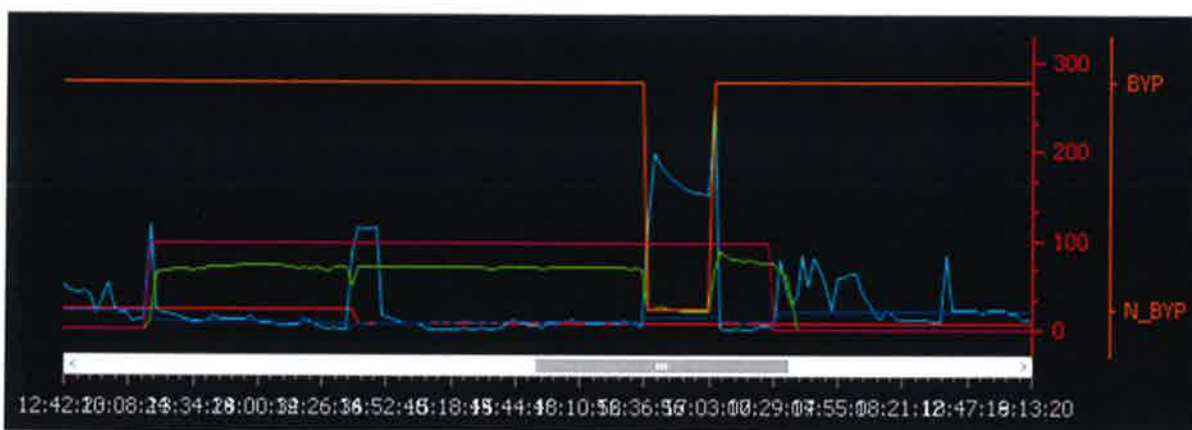
REF: Schedule 5 Notification 18th June 2017

Supplementary Information to support Part B of Schedule 5

The Boiler O2 sensor replacement part was received w/c 19th June, it has been fitted but no calibration gas is yet available to complete the calibration.

The initial fault causing the GT to trip was the oil temperature, this is cooled through an external heat exchanger in a closed loop. A temporary cooling hose has been fitted to both GT's and proven to keep oil temperature within normal conditions on a hot day. Further maintenance of these coolers is required and planned to be undertaken.

The boiler has been tested to run from TEG fired to FD and back with the new temporary memorandum and values locked into the control system.



The graph above shows the operation of the boiler from TEG to FD and back (Top orange line indicating position of the bypass valve (TEG or FD). Flame intensity (Purple) can be seen as consistent across this time period. Nox (Green) drops and CO (Cyan) rises then falls, another rise during the reverting to TEG stage and back to low levels. Land sensor O2 (Turquoise) and Boiler O2 (Red) are consistent with each other.

This test has proven to be repeatable during subsequent GT trips where emission control is good. The main difference is that previously the O2 sensor was in fault and a forced reading was not affecting the controls, currently the sensor, whilst uncalibrated, is reading O2 and a temporary value can be used.

Calibration Gas required is 0.3% O2 in nitrogen, this is a specialty gas that subsequently has a long delivery time. Current estimated delivery is beginning of October.

