

CONTINUOUS MEASUREMENT SYSTEMS INVALIDATION LOG**QUARTERLY RETURN**

Operator:	Severn Power
Monitor positioned on release point/LCP Number:	A1/
Permit/Variation Number: EPR/HP3737UE/V005	

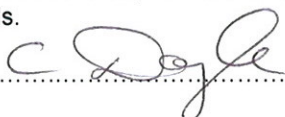
Form: IED CEM1
Version/date: V.2.1 31 Dec 2015

Year: 2016 Month: April to June	Period of Invalidation (hours)	Cumulated Invalidated Days in a Year	Comments
Date:			
7th June	2		2 hours lost due to Maintenance/Malfunction
24th June	1		1 hours lost due to Maintenance/Malfunction

NOTES:

(a) Compliance in Chapter III of the IED is on the basis of validated hourly averages, measured by continuous monitors (except where discontinuous exemption applies). And confidence intervals are incorporated to convert the measured hourly value into a validated measurement for the purpose of compliance assessment. However, any day in which more than 3 hourly average values are invalid (due to malfunction or maintenance of the continuous measurement system) shall be invalidated for the purpose of compliance assessment. If more than 10 days are invalid over a year the operator shall, within 28 days of becoming aware of this fact, review the causes of the invalidations and submit to the Environment Agency for approval, proposals for measures to improve the reliability of the continuous measurement systems, including a timetable for the implementation of those measures; and implement the approved proposals.

Signed on behalf of the Operator by:

 Ciara Doyle

Date of return:

28th July 2016

Ciara Doyle

28 JUL 2016

Plant Engineer

CONTINUOUS MEASUREMENT SYSTEMS INVALIDATION LOG**QUARTERLY RETURN**

Operator:	Severn Power
Monitor positioned on release point/LCP Number:	A2/
Permit/Variation Number: EPR/HP3737UE/V005	

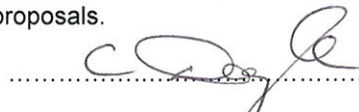
Form: IED CEM1

Version/date: V.2.1 31 Dec 2015

Year: 2016 Month: April to June	Period of Invalidation (hours)	Cumulated Invalidated Days in a Year	Comments
Date:			
16th April	3	1	3 hours lost due to Maintenance/Malfunction resulting in 1 invalid day
8th June	2		2 hours lost due to Maintenance/Malfunction
24th June	1		1 hours lost due to Maintenance/Malfunction

NOTES:

(a) Compliance in Chapter III of the IED is on the basis of validated hourly averages, measured by continuous monitors (except where discontinuous exemption applies). And confidence intervals are incorporated to convert the measured hourly value into a validated measurement for the purpose of compliance assessment. However, any day in which more than 3 hourly average values are invalid (due to malfunction or maintenance of the continuous measurement system) shall be invalidated for the purpose of compliance assessment. If more than 10 days are invalid over a year the operator shall, within 28 days of becoming aware of this fact, review the causes of the invalidations and submit to the Environment Agency for approval, proposals for measures to improve the reliability of the continuous measurement systems, including a timetable for the implementation of those measures; and implement the approved proposals.

Signed on behalf of the Operator by:  Ciara Doyle

Date of return: 28th July 2016

Ciara Doyle**28 JUL 2016****Plant Engineer**

RELEASES TO AIR
QUARTERLY RETURN

MONTHLY MEAN, MAXIMUM DAILY MEAN AND ANNUAL PERCENTILE CONCENTRATIONS ^{(a),(b),(c)}

OPERATING MODE:

Operator: Siemens O&M for Calon Energy Form: IED CON 2 (Gas Turbines)
Location: Severn CCGT A1 Unit 10
Permit/Variation Number: EPR/HP3737UE/V005

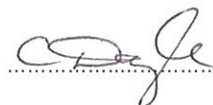
Version/date: V.2.1 31 Dec 2015

Year:	LCP:							
	NO _x (mg/m ³)				CO (mg/m ³)			
	Monthly Mean Hrly avg (d)	Max Daily Hrly Mean (d)	Part Load Max Daily Hrly Mean (e)	Max Hrly average (d)	Monthly Mean Hrly avg (d)	Max Daily Hrly Mean (d)	Part Load Max Daily Hrly Mean (e)	95% Hrly average (d)
January	25.07	27.64	39.99	31.08	0.67	6.50	9.40	1.88
February	27.96	34.91	37.11	41.88	0.91	2.14	2.65	4.36
March	26.61	34.14	37.45	44.03	0.44	1.57	5.05	1.74
April	27.23	31.77	35.81	40.80	0.76	2.69	2.51	2.41
May	28.38	33.63	33.44	42.60	0.57	1.66	2.71	2.57
June	25.11	30.89	31.29	36.63	0.78	1.52	2.48	2.37
July								
August								
September								
October								
November								
December								
Monthly ELV/Daily ELV ^(f)	50	50	50	100	100	110	110	N/A
Annual 95 th Percentile ^(g)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	200
Annual Percentile ELV ^(h)				34.87				2.43

NOTES:

- (a) All data based on validated hourly average concentrations, excluding start-up and shut-down and periods of malfunction or
(b) Annual percentiles are submitted with the final return (Quarter 4)
(c) Extend report to cover the required number of LCP on each site and repeat report for each separately regulated Operating Mode as
(d) Averages determined at loads in the range 70% < Load ≤ 100% ISO base load and above
(e) Averages determined at loads in the range MSUL* < Load ≤ 100% ISO base load and above
(* For a 3 parameter approach, from the point of Start-Up to the point of Shut-down)
(f) Leave the Daily ELV blank if this is applied as a 95th percentile ELV within the Permit
(g) For each pollutant, report the Annual 95th percentile ELV for hourly averages in the first column and, if applicable, the Annual 95th percentile ELV for daily means in the second column
(h) For each pollutant, report the Annual 95th percentile of hourly averages in the first column and, if applicable, the Annual 95th percentile of daily means in the second column

Signed on behalf of the Operator by:

 Ciara Doyle

Date of return:

28th July 2016

Ciara Doyle

28 JUL 2016

Plant Engineer

RELEASES TO AIR
QUARTERLY RETURN

MONTHLY MEAN, MAXIMUM DAILY MEAN AND ANNUAL PERCENTILE CONCENTRATIONS ^{(a),(b),(c)}

OPERATING MODE:

Operator: Siemens O&M for Calon Energy Form: IED CON 2 (Gas Turbines)
Location: Severn CCGT A2 Unit 20 Version/date: V.2.1 31 Dec 2015
Permit/Variation Number: EPR/HP3737UE/V005

Year:		LCP:							
		NO _x (mg/m ³)				CO (mg/m ³)			
Month		Monthly Mean Hrly avg (d)	Max Daily Hrly Mean (d)	Part Load Max Daily Hrly Mean (e)	Max Hrly average (d)	Monthly Mean Hrly avg (d)	Max Daily Hrly Mean (d)	Part Load Max Daily Hrly Mean (e)	95% Hrly average (d)
January		24.56	30.84	30.84	31.79	0.10	2.92	8.23	1.34
February		23.38	29.24	31.13	30.48	0.64	6.62	9.70	4.00
March		22.45	26.98	32.40	29.72	0.51	1.62	8.79	1.62
April		23.96	27.98	31.03	31.43	0.49	1.32	2.83	1.45
May		23.42	27.25	26.84	36.20	0.52	1.19	9.65	1.75
June		20.86	25.02	24.27	31.28	0.41	2.77	2.75	1.49
July									
August									
September									
October									
November									
December									
Monthly ELV/Daily ELV ^(f)		50	50	50	100	100	110	110	N/A
Annual 95 th Percentile ^(g)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	200
Annual Percentile ELV ^(h)					28.08				1.72

NOTES:

- (a) All data based on validated hourly average concentrations, excluding start-up and shut-down and periods of malfunction or
(b) Annual percentiles are submitted with the final return (Quarter 4)
(c) Extend report to cover the required number of LCP on each site and repeat report for each separately regulated Operating Mode as
(d) Averages determined at loads in the range 70% < Load ≤ 100% ISO base load and above
(e) Averages determined at loads in the range MSUL* < Load ≤ 100% ISO base load and above
(* For a 3 parameter approach, from the point of Start-Up to the point of Shut-down)
(f) Leave the Daily ELV blank if this is applied as a 95th percentile ELV within the Permit
(g) For each pollutant, report the Annual 95th percentile ELV for hourly averages in the first column and, if applicable, the Annual 95th percentile ELV for daily means in the second column
(h) For each pollutant, report the Annual 95th percentile of hourly averages in the first column and, if applicable, the Annual 95th percentile of daily means in the second column

Signed on behalf of the Operator by:

 Ciara Doyle

Date of return:

28th July 2016

Ciara Doyle

28 JUL 2016

Plant Engineer

**RELEASES TO AIR
RETURN OF DISCONTINUOUS MONITORING RESULTS**

Location:

Form:

IED PM1

Permit/Variation Number:

Version:

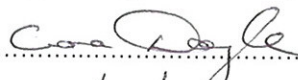
V.2.1 31 Dec 2015

Year:	LCP				
Six months to -					
Measurement approach	NO_x	SO₂	CO	Hg	Dust
Time					
Date					
Measurement 1 (mg/m ³) ^(b)					
Measurement 2 (mg/m ³) ^(b)					
Measurement 3 (mg/m ³) ^(b)					
Alternative approach ^(c)					
Method ^(d)		FS			DF
Calculation (mg/m ³)		0.24			0
Operational data ^(a)					
Load (%MCR)					
Fuel 1 name (%)					
Fuel 2 name (%)					
Fuel 3 name (%)					
Daily Emission Limit Value					
(mg/m ³)					

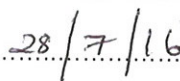
NOTES:

- (a) Operational data for the test period (measurement approach) or the six month period to date (Alternative approach)
 (b) Reference conditions for mg/m³ are 15% O₂ CCGT, 6% O₂ solid fuels, 3% O₂ for oil and gas, dry, 0°C, 101.325 kPa
 (c) Alternative approach to discontinuous monitoring by agreement with the Competent Authority
 (d) Use abbreviation: NF for agreed NO_x factor, FS for fuel sulphur content, CS for agreed CO factor, DF for agreed dust factor

Signed on behalf of the Operator by:

 Ciara Doyle

Date of return:



Ciara Doyle

28 JUL 2016

Plant Engineer