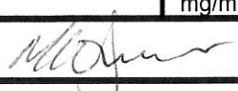
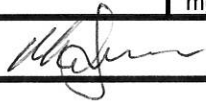
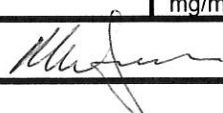
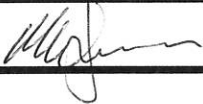


Transitional National Plan Annual Verification Report (v1.0)				TNP YEAR	1 (2016)		
TNP Species: NO _x or SO ₂ or Dust	Nox	ELV¹: (mg/m ³)	550	LCP: (TNP ref.)	LCP312		
Process Operator:			Permit No:		EPR/LP3131SW/V002		
Address: SIMEC Uskmouth Power, West Nash Road, Newport. NP18 2BZ			TNP Contact:		Mr Michael James		
			Tel No:		01633 292734		
			Email:		michael.james@simec.com		
EN 15259 (Representative Sampling)							
EN 15259: (PASS/FAIL)		Pass		Test Date(s):		09/12/2010	
Non-Compliances: (including stratification factors if applied in addition to QAL2 factors)							
QAL1 (Instrument Suitability)							
Make/Model: OPSIS AB AR600				MCERTS: (Y/N)			
Manufacturer: OPSIS				Sample In-situ (cross-duct) Type ² :			
QAL2 (Calibration)³							
LCP unit within windshield or Instrument number:	-	Unit 13 10	Unit 13 20	Unit 14 10	Unit 14 20	Unit 15 10	Unit 15 20
QAL2 Factors: b (gradient) ⁴	-	1.555	1.651	1.117	1.054	1.147	1.15
a (offset)	mg/m ³	-6.491	-2.072	1.98	-3.9	-7.05	-2.67
Test date	-	03/02/16	03/02/16	06/08/13	06/08/13	06/08/13	06/08/13
Date applied ⁵	-	01/01/16	01/01/16	01/01/16	01/01/16	01/01/16	01/01/16
Variability ⁶	mg/m ³	11.329	17.501	6.22	16.38	55.08	55.02
VCR from test data ^{7a}	mg/m ³	0-473.72	0-556.06	0-386.1	0-347.1	0-370.8	0-419.8
VCR extended (if applicable) ^{7b}	mg/m ³						
Second QAL2 (Calibration) (if applicable)							
QAL2 Factors: b (gradient) ⁴	-						
a (offset)	mg/m ³						
Test date	-						
Date applied ⁵	-						
Variability ⁶	mg/m ³						
VCR from test data ^{7a}	mg/m ³						
VCR extended (if applicable) ^{7b}	mg/m ³						
AST (Annual Surveillance Test)							
LCP units within windshield:	-	Unit 13 10	Unit 13 20	Unit 14 10	Unit 14 20	Unit 15 10	Unit 15 20
Test date	-	30/10/12	30/10/12	26/3/15	26/3/15	12/02/13	12/02/13
Variability ⁶	mg/m ³	42.16	28.02	6.577	11.123	57.1	20.89
Validity (Mean Deviation) ⁶	mg/m ³	92.74	54.35	25.27	48.45	120.44	54.02
VCR extended (if applicable) ^{7c}	mg/m ³						
QAL3 (Ongoing Drift Checks)							
Frequency ⁸ :	Every						
Alarm (Action) Limit:	mg/m ³						
Warning Limit:	mg/m ³						
Signature: 						Date: 15 3 17	

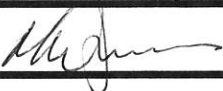
Transitional National Plan Annual Verification Report (v1.0)				TNP YEAR	1 (2016)		
TNP Species: NO _x or SO ₂ or Dust	SO_x	ELV¹: (mg/m ³)	440	LCP: (TNP ref.)	LCP312		
Process Operator:			Permit No:	EPR/LP3131SW/V002			
Address: SIMEC Uskmouth Power, West Nash Road, Newport. NP18 2BZ			TNP Contact:	Mr Michael James			
			Tel No:	01633 292734			
			Email:	michael.james@simec.com			
EN 15259 (Representative Sampling)							
EN 15259: (PASS/FAIL)	Pass	Test Date(s):		09/12/2010			
Non-Compliances: (including stratification factors if applied in addition to QAL2 factors)							
QAL1 (Instrument Suitability)							
Make/Model: OPSIS AB AR600				MCERTS: (Y/N)	Y		
Manufacturer: OPSIS				Sample Type ² :	In-situ (cross-duct)		
QAL2 (Calibration)³							
LCP unit within windshield or Instrument number:	-	Unit 13 10	Unit 13 20	Unit 14 10	Unit 14 20	Unit 15 10	Unit 15 20
QAL2 Factors: b (gradient) ⁴	-	1.092	1.282	3.02	0.664	0.995	0.894
a (offset)	mg/m ³	-6.873	1.288	1.004	0.44	-1.37	2.65
Test date	-	03/02/16	03/02/16	06/08/13	06/08/13	06/08/13	06/08/13
Date applied ⁵	-	01/01/16	01/01/16	01/01/16	01/01/16	01/01/16	01/01/16
Variability ⁶	mg/m ³	9.637	4.661	27.63	13.1	44.01	44.06
VCR from test data ^{7a}	mg/m ³	0.260.97	0-279.63	0-804.9	0-82.1	0-283	0-757.4
VCR extended (if applicable) ^{7b}	mg/m ³						
Second QAL2 (Calibration) (if applicable)							
QAL2 Factors: b (gradient) ⁴	-						
a (offset)	mg/m ³						
Test date	-						
Date applied ⁵	-						
Variability ⁶	mg/m ³						
VCR from test data ^{7a}	mg/m ³						
VCR extended (if applicable) ^{7b}	mg/m ³						
AST (Annual Surveillance Test)							
LCP units within windshield:	-	Unit 13 10	Unit 13 20	Unit 14 10	Unit 14 20	Unit 15 10	Unit 15 20
Test date	-	30/10/12	30/10/12	26/3/15	26/3/15	12/02/13	12/02/13
Variability ⁶	mg/m ³	133.22	101.67	7.743	7.486	10.93	58.26
Validity (Mean Deviation) ⁶	mg/m ³	53.13	176.92	24.55	103.73	4.05	89.74
VCR extended (if applicable) ^{7c}	mg/m ³						
QAL3 (Ongoing Drift Checks)							
Frequency ⁸ :	Every						
Alarm (Action) Limit:	mg/m ³						
Warning Limit:	mg/m ³						
Signature: 						Date: 15 3 17	

Transitional National Plan Annual Verification Report (v1.0)				TNP YEAR	1 (2016)		
TNP Species: NO _x or SO ₂ or Dust	PM	ELV¹: (mg/m ³)	35	LCP: (TNP ref.)	LCP312		
Process Operator:				Permit No:	EPR/LP3131SW/V002		
Address: SIMEC Uskmouth Power, West Nash Road, Newport. NP18 2BZ				TNP Contact:	Mr Michael James		
				Tel No:	01633 292734		
				Email:	michael.james@simec.com		
EN 15259 (Representative Sampling)							
EN 15259: (PASS/FAIL)	Pass		Test Date(s):		09/12/2010		
Non-Compliances: (including stratification factors if applied in addition to QAL2 factors)							
QAL1 (Instrument Suitability)							
Make/Model: DURAG DR800				MCERTS: (Y/N)			
Manufacturer: DURAG				Sample Type ² : In-situ (Probe)			
QAL2 (Calibration)³							
LCP unit within windshield or Instrument number:	-	Unit 13 10	Unit 13 20	Unit 14 10	Unit 14 20	Unit 15 10	Unit 15 20
QAL2 Factors: b (gradient) ⁴	-	1.786	No cal	1.368	1.416	1.217	1.578
a (offset)	mg/m ³	6.11	No cal	0.00	0.00	0.00	0.00
Test date	-	03/02/16	03/02/16	06/08/13	06/08/13	06/08/13	06/08/13
Date applied ⁵	-	01/01/16	01/01/16	01/01/16	01/01/16	01/01/16	01/01/16
Variability ⁶	mg/m ³	15.848	16.507	0.54	0.84	8.23	8.22
VCR from test data ^{7a}	mg/m ³	0-66.67	No cal	0-14.16	0-12.63	0-22.71	0-3.92
VCR extended (if applicable) ^{7b}	mg/m ³						
Second QAL2 (Calibration) (if applicable)							
QAL2 Factors: b (gradient) ⁴	-						
a (offset)	mg/m ³						
Test date	-						
Date applied ⁵	-						
Variability ⁶	mg/m ³						
VCR from test data ^{7a}	mg/m ³						
VCR extended (if applicable) ^{7b}	mg/m ³						
AST (Annual Surveillance Test)							
LCP units within windshield:	-	Unit 13 10	Unit 13 20	Unit 14 10	Unit 14 20	Unit 15 10	Unit 15 20
Test date	-	30/10/12	30/10/12	26/3/15	26/3/15	12/02/13	12/02/13
Variability ⁶	mg/m ³	8.27	2.84	0.381	1.199	3.06	5.51
Validity (Mean Deviation) ⁶	mg/m ³	10.72	0.77	0.4	0.424	5.54	4.08
VCR extended (if applicable) ^{7c}	mg/m ³						
QAL3 (Ongoing Drift Checks)							
Frequency ⁸ :	Every						
Alarm (Action) Limit:	mg/m ³						
Warning Limit:	mg/m ³						
Signature: 						Date: 15 3 17	

Transitional National Plan Annual Verification Report (v1.0)				TNP YEAR	1 (2016)		
TNP Species: O2	O2	ELV¹: (mg/m ³)	NA	LCP: (TNP ref.)	LCP312		
Process Operator:			Permit No:	EPR/LP3131SW/V002			
Address: SIMEC Uskmouth Power, West Nash Road, Newport. NP18 2BZ			TNP Contact:	Mr Michael James			
			Tel No:	01633 292734			
			Email:	michael.james@simec.com			
EN 15259 (Representative Sampling)							
EN 15259: (PASS/FAIL)	Pass	Test Date(s): 09/12/2010					
Non-Compliances: (including stratification factors if applied in addition to QAL2 factors)							
QAL1 (Instrument Suitability)							
Make/Model: OPSIS O2000				MCERTS: (Y/N)	Y		
Manufacturer: OPSIS				Sample Type ² :	In-situ (cross-duct)		
QAL2 (Calibration)³							
LCP unit within windshield or Instrument number:	-	Unit 13 10	Unit 13 20	Unit 14 10	Unit 14 20	Unit 15 10	Unit 15 20
QAL2 Factors: b (gradient) ⁴	-	1.011	1.158	1.429	1.424	1.037	1.065
a (offset)	%	0.814	-0.059	-8.844	-8.33	0.45	-1.23
Test date	-	03/02/16	03/02/16	6/8/13	6/8/13	6/8/13	6/8/13
Date applied ⁵	-	01/01/16	01/01/16	01/01/16	01/01/16	01/01/16	01/01/16
Variability ⁶	%	0.561	0.112	0.19	0.15	0.17	0.3
VCR from test data ^{7a}	%	0-9.64	0-9.66	0-23.46	0-23.47	0-23.31	0-23.32
VCR extended (if applicable) ^{7b}	%						
Second QAL2 (Calibration) (if applicable)							
QAL2 Factors: b (gradient) ⁴	-	Unit 13 10	Unit 13 20	Unit 14 10	Unit 14 20	Unit 15 10	Unit 15 20
a (offset)	%						
Test date	-						
Date applied ⁵	-						
Variability ⁶	%						
VCR from test data ^{7a}	%						
VCR extended (if applicable) ^{7b}	%						
AST (Annual Surveillance Test)							
LCP units within windshield:	-	Unit 13 10	Unit 13 20	Unit 14 10	Unit 14 20	Unit 15 10	Unit 15 20
Test date	-						
Variability ⁶	%						
Validity (Mean Deviation) ⁶	%						

VCR extended (if applicable) ^{7c}	%						
QAL3 (Ongoing Drift Checks)							
Frequency ⁸ :	Every	Unit 13 10	Unit 13 20	Unit 14 10	Unit 14 20	Unit 15 10	Unit 15 20
Alarm (Action) Limit:	%						
Warning Limit:	%						
Signature: 						Date: 15 3 17	

Transitional National Plan Annual Verification Report (v1.0)				TNP YEAR	1 (2016)		
STACK FLOW	Flow	ELV¹: (m³/s)	Na	LCP: (TNP ref.)	LCP312		
Process Operator:			Permit No:		EPR/LP3131SW/V002		
Address: SIMEC Uskmouth Power, West Nash Road, Newport. NP18 2BZ			TNP Contact:		Mr Michael James		
			Tel No:		01633 292734		
			Email:		michael.james@simec.com		
EN 15259: (PASS/FAIL)		Pass		Test Date(s):		09/12/2010	
Non-Compliances: (Including stratification factors if applied in addition to QAL2 factors)							
QAL1 (Instrument Suitability)							
Make/Model:				MCERTS: (Y/N)			
Manufacturer:				Sample Type ² :			
QAL2 (Calibration)³							
LCP unit within windshield or Instrument number:	-	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
QAL2 Factors: b (gradient) ⁴	-						
a (offset)	m ³ /s						
Test date	-						
Date applied ⁵	-						
Variability ⁶	m ³ /s						
VCR from test data ^{7a}	m ³ /s						
VCR extended (if applicable) ^{7b}	m ³ /s						
Second QAL2 (Calibration) (if applicable)							
QAL2 Factors: b (gradient) ⁴	-						
a (offset)	m ³ /s						
Test date	-						
Date applied ⁵	-						
Variability ⁶	m ³ /s						
VCR from test data ^{7a}	m ³ /s						
VCR extended (if applicable) ^{7b}	m ³ /s						
AST (Annual Surveillance Test)							
LCP units within windshield:	-	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Test date	-						
Variability ⁶	m ³ /s						
Validity (Mean Deviation) ⁶	m ³ /s						
VCR extended (if applicable) ^{7c}	m ³ /s						

QAL3 (Ongoing Drift Checks)							
Frequency ⁸ :	Every						
Alarm (Action) Limit:	m ³ /s						
Warning Limit:	m ³ /s						
Signature: 						Date: 15 3 17	

Notes:

1 Specify the Daily Emission Limit Value (ELV) used for QA purposes (this may be a percentile daily ELV for some plant). For plant subject to the JEP Protocol, including power plant, the oxygen ELV is 6% by volume, or 10% for a gas turbine, and the water ELV (if applicable) is 6% by volume. For other plant, the oxygen and water 'ELV' are 21% and 30% by volume respectively, as specified by the Environment Agency in TGN M20 (refer to the most recent version). For flow, specify the surrogate ELV defined in EN ISO 16911-2, i.e., 120% of the maximum flow rate measured during the QAL2 (or 120% of the base load flow if QAL2 data not yet available), noting that the flow reference condition are the actual duct conditions (when flow is measured continuously) or the reporting conditions (when the flow is calculated). The units on the form may be changed to m/s when the flow is measured continuously if this is more appropriate.

2 Sample type. Specify from the following options: In-situ (probe); In-situ (cross-duct); Extractive (hot/wet); Extractive (chiller/dry); Extractive (permeation drier).

3 The QAL2/AST must be compliant with PASS status on Variability/Validity Test as applicable using the current value of the Daily Emission Limit Value (see also Note 6). Report both the QAL2 and the most recent AST (if available). For oxygen, water vapour and verification of a flow calculation, the QAL2 factors are not usually applied but still enter the QAL2 factors (if available) and enter 'N/A' in the 'Date applied'. If these QAL2 factors are not available in the Test Laboratory report, note this in the Justification box below. For verification of a plant flow calculation the AST Validity test result (mean deviation) must also be reported (test applied to the QAL2 data). If calibration of a flue gas flow meter or verification of a flow calculation not yet performed, record the plan for completing this by 31 Dec 2106 in the justification box below.

4 If $b < 0.90$ provide a justification or schedule for repeat testing in the space below. If the QAL2 factor is changed in-year, there is space for two sets of factors - create another page if more required.

5 In Year 1 this is 1 Jan 2016; only change the date if a repeat QAL2 is conducted.

6 Variability (scatter) and the average Deviation between the CEM and the Test Laboratory results are defined in EN14181:2014 Section 8.5 (AST) and Section 6.6 (QAL2) and these are reported by the Test Laboratory in the specified concentration or flow units. The Variability and Deviation must be less than pre-defined levels in order to pass.

7a Valid Calibration Range (VCR) is defined in EN14181:2014 Section 6.5 and is reported by the Test Laboratory in the specified concentration or flow units.

7b The VCR may be extended using reference materials by agreement with the Regulatory Authority. Report the most VCR as extended by reference materials here (in addition to the VCR obtained from the test data -see 5a).

7c The VCR may be extended using AST data by up to 50% of the daily ELV. Report the extended VCR from the AST (in addition to the VCR obtained from the test data - see 5a).

8 Specify the frequency of QAL3 checks, e.g., weekly. QAL3 is the control chart approach defined in EN 14181 for monitoring zero and span drift. Two thresholds for monitoring drift are defined - the Warning limit and the Alarm (Action) limit. Action must be taken when the drift exceeds the Action limit. For flow, the units may be changed to reflect the use of a flow surrogate for the QAL3, e.g., % deviation from span.

9 For flow, report the results of the pre-investigation flow survey (if applicable) in the space provided for recording non-compliances. Report the Reproducibility, crest factor and skewness as defined in EN ISO 16911-2.

Justification for QAL2 gradient being less than 0.90 and/or schedule for additional QAL2 testing: Uskmouth uses OPSIS equipment for measuring emissions, this equipment does not lend itself to the QAL3 process. A QAL2 on Unit 14 was planned for late 2016 but had to be rescheduled due to operational issues, the retest on Unit 13 dust was also rescheduled at this time. QAL 2 testing has been undertaken for Units 13 and 14 In February 2017 (awaiting results), an assessment of flow will also be provided in these reports.

In the above justification, consider the following factors as a minimum requirement. Consult with the Test Laboratory in relation to: the sampling locations for the CEM and the test probes (are these both representative and do they interfere with one another?); uncertainty of the test method (there may be loss of SO₂ in test methods that use a chiller to dry the sample for analysis); functional test results for the CEM (has it been set up and checked properly prior to testing?); leakage in either the CEM or the test equipment (compare oxygen levels in the first instance); functional check history (has the instrument performance degraded?).