

RELEASES TO AIR

QUARTERLY RETURN

MONTHLY MEAN, MAXIMUM DAILY MEAN AND ANNUAL PERCENTILE CONCENTRATIONS <sup>(4,5),(2)</sup>

Operator: RWE Generation UK Form: IED CON1 (Utility boilers)  
 Location: Aberthaw Power Station Version/date: V.10.9  
 Permit/Variation Number: EPR/RP3133LD

| Year: 2019<br>LCP: LCP 283                        | SO <sub>2</sub> (mg/m <sup>3</sup> ) |                | NO <sub>2</sub> (mg/m <sup>3</sup> ) |                | Dust (mg/m <sup>3</sup> ) |                               | Monthly  |                          |
|---|--------------------------------------|----------------|--------------------------------------|----------------|---------------------------|-------------------------------|----------|--------------------------|
| Month   | Monthly Mean                         | Max Daily Mean | Monthly Mean                         | Max Daily Mean | Monthly Mean              | Max Daily Mean <sup>(1)</sup> | Fuel S % | FGD Eff <sup>(4)</sup> % |
| January   | 46.84                                | 77.05          | 346.23                               | 431.76         | 11.68                     | 22.09                         |          |                          |
| February  | 53.78                                | 148.58         | 368.02                               | 406.65         | 10.92                     | 21.24                         |          |                          |
| March   | #N/A                                 | 22.77          | #N/A                                 | 200.55         | #N/A                      | 16.35                         |          |                          |
| April   | #N/A                                 | #N/A           | #N/A                                 | #N/A           | #N/A                      | #N/A                          |          |                          |
| May   | #N/A                                 | #N/A           | #N/A                                 | #N/A           | #N/A                      | #N/A                          |          |                          |
| June  | #N/A                                 | #N/A           | #N/A                                 | #N/A           | #N/A                      | #N/A                          |          |                          |
| July  |                                      |                |                                      |                |                           |                               |          |                          |
| August  |                                      |                |                                      |                |                           |                               |          |                          |
| September   |                                      |                |                                      |                |                           |                               |          |                          |
| October   |                                      |                |                                      |                |                           |                               |          |                          |
| November  |                                      |                |                                      |                |                           |                               |          |                          |
| December  |                                      |                |                                      |                |                           |                               |          |                          |
| Monthly ELV/Daily ELV <sup>(4)</sup>              | 350.00                               | #N/A           | 500.00                               | #N/A           | 20.00                     | #N/A                          |          |                          |
| Annual 95 <sup>th</sup> Percentile <sup>(5)</sup> | Annual Only                          | 108.02         | Annual Only                          | 427.19         | Annual Only               | 21.24                         |          |                          |
| Annual Percentile ELV <sup>(4)</sup>              | #N/A                                 | 440.00         | #N/A                                 | 605.00         | #N/A                      | 35.00                         |          |                          |

NOTES:

- (a) All concentration data are based on validated hourly average concentrations excluding start-up and shut-down and periods of malfunction or breakdown of abatement equipment  
 (b) Annual percentiles of hourly average concentrations are submitted with the final return (Quarter 4)  
 (c) Reference conditions. Solid fuel: 6% O<sub>2</sub> (dry) Liquid fuel: 3% O<sub>2</sub> (dry) at 273.15K, 101.325 kPa  
 (d) Required for indigenous fuel derogation only - state target removal efficiency as the ELV (if applicable)  
 (e) Leave the Daily ELV blank if this is applied as a 95<sup>th</sup> percentile ELV within the Permit  
 (f) For each pollutant, report the Annual 95<sup>th</sup> percentile of hourly averages in the first column and, if applicable, Annual 95<sup>th</sup> percentile of daily means in the second column  
 (g) For each pollutant, report Annual 95<sup>th</sup> percentile ELV for hourly averages in the first column and, if applicable, Annual 95<sup>th</sup> percentile ELV for daily means in the second column

Signed on behalf of the Operator by:

*R.T. Powell*

Date of return:

03 July 2019

**RELEASES TO AIR**

**QUARTERLY RETURN**

**MAXIMUM 48H MEAN AND ANNUAL PERCENTILE CONCENTRATIONS** (48/14/00)

Operator: RWE Generation UK

Form: IED CON1 (Utility boilers)

Location: Aberthaw Power Station

Permit/Variation Number: EPR/RP3133LD

Insufficient Hourly Data For Calculation

| Year: 2019<br>LCP: LCP 283                        |  | NO <sub>2</sub> (mg/m <sup>3</sup> ) |              |  |  |  |  |
|---|--|--------------------------------------|--------------|--|--|--|--|
| Month   |  |                                      | Max 48h Mean |  |  |  |  |
| January   |  |                                      | 415.89       |  |  |  |  |
| February  |  |                                      | 383.99       |  |  |  |  |
| March   |  |                                      | 200.55       |  |  |  |  |
| April   |  |                                      | #N/A         |  |  |  |  |
| May   |  |                                      | #N/A         |  |  |  |  |
| June  |  |                                      | #N/A         |  |  |  |  |
| July  |  |                                      |              |  |  |  |  |
| August  |  |                                      |              |  |  |  |  |
| September   |  |                                      |              |  |  |  |  |
| October   |  |                                      |              |  |  |  |  |
| November  |  |                                      |              |  |  |  |  |
| December  |  |                                      |              |  |  |  |  |
| Monthly ELV/48h ELV <sup>(a)</sup>                |  |                                      |              |  |  |  |  |
| Annual 95 <sup>th</sup> Percentile <sup>(b)</sup> |  |                                      | 383.99       |  |  |  |  |
| Annual Percentile ELV <sup>(c)</sup>              |  |                                      | 550.00       |  |  |  |  |

**NOTES:**

- (a) All concentration data are based on validated hourly average concentrations excluding start-up and shut-down and periods of malfunction or breakdown of abatement equipment
- (b) Annual percentiles of hourly average concentrations are submitted with the final return (Quarter 4)
- (c) Reference conditions. Solid fuel: 6% O<sub>2</sub> (dry) Liquid fuel: 3% O<sub>2</sub> (dry) at 273.15K, 101.325 kPa
- (d) Required for indigenous fuel derogation only - state target removal efficiency as the ELV (if applicable)
- (e) Leave the 48h ELV blank if this is applied as a 95<sup>th</sup> percentile ELV within the Permit
- (f) For each pollutant, report the Annual 95<sup>th</sup> percentile of hourly averages in the first column and, if applicable, Annual 95<sup>th</sup> percentile of 48h means in the second column
- (g) For each pollutant, report Annual 95<sup>th</sup> percentile ELV for hourly averages in the first column and, if applicable, Annual 95<sup>th</sup> percentile ELV for 48h means in the second column

Signed on behalf of the Operator by:

*R.T. Powell*

Date of return:

03 July 2019

**RELEASES TO AIR**

**QUARTERLY RETURN**



**CUMULATIVE ROLLING MALFUNCTION AND BREAKDOWN HOURS (12 MONTH PERIOD)<sup>(a)</sup>**

**Operator:** RWE Generation UK

**Form:** IED 3D1

**Location:** Aberthaw Power Station

Version: 2.0

Valid to: 31 Dec 2019

**Permit/Variation Number:** EPR/RP3133LD

| Year: 2019           | SO <sub>2</sub>     |                   | NO <sub>x</sub>     |                   | Dust                |                   |
|----------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|
| LCP: LCP 283         |                     |                   |                     |                   |                     |                   |
| Month <sup>(b)</sup> | Malfunction (hours) | Breakdown (hours) | Malfunction (hours) | Breakdown (hours) | Malfunction (hours) | Breakdown (hours) |
| Jan 2019             | 0                   | 0                 | 0                   | 0                 | 0                   | 1                 |
| Feb 2019             | 0                   | 0                 | 0                   | 0                 | 0                   | 1                 |
| Mar 2019             | 0                   | 0                 | 0                   | 0                 | 0                   | 1                 |
| Apr 2019             | 0                   | 0                 | 0                   | 0                 | 0                   | 1                 |
| May 2019             | 0                   | 0                 | 0                   | 0                 | 0                   | 1                 |
| Jun 2019             | 0                   | 0                 | 0                   | 0                 | 0                   | 1                 |
| Month 7              |                     |                   |                     |                   |                     |                   |
| Month 8              |                     |                   |                     |                   |                     |                   |
| Month 9              |                     |                   |                     |                   |                     |                   |
| Month 10             |                     |                   |                     |                   |                     |                   |
| Month 11             |                     |                   |                     |                   |                     |                   |
| Month 12             |                     |                   |                     |                   |                     |                   |
| Annual cap (hours)   | 120                 | 120               | 120                 | 120               | 120                 | 120               |

**NOTES:**

- (a) Cumulative rolling malfunction and breakdown hours (12 month period) updated monthly
- (b) Insert the relevant months for the preceding 12 month period, e.g., starting with March 2016
- (c) Gas turbines with CO abatement only (columns may be deleted)

Signed on behalf of the Operator by:

*R.T. Powell*

Date of return:

03 July 2019