

# RELEASES TO AIR

## QUARTERLY RETURN

### MONTHLY MEAN, MAXIMUM DAILY MEAN AND ANNUAL PERCENTILE CONCENTRATIONS <sup>(a),(b),(c)</sup>

Operator: RWE Generation UK Form: IED COM1 (Utility boilers)

Location: Aberthaw Power Station

Permit/Variation Number: EPR/RP3133LD

| Year: 2018<br>LCP: LCP 283                        |             | SO <sub>2</sub> (mg/m <sup>3</sup> ) |                | NO <sub>x</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>(f)</sup> | Fuel S % | FGD Eff <sup>(g)</sup> % |
| January   |             | 188.15                               | 285.78         | 397.49                               | 486.57         | 9.76                      | 19.44                         |          |                          |
| February  |             | 147.14                               | 275.92         | 445.95                               | 482.44         | 14.90                     | 17.55                         |          |                          |
| March   |             | 154.60                               | 304.93         | 427.45                               | 477.91         | 17.58                     | 21.70                         |          |                          |
| 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>(a)</sup>              |             | 350.00                               | #N/A           | 500.00                               | #N/A           | 20.00                     | #N/A                          |          |                          |
| Annual 95 <sup>th</sup> Percentile <sup>(b)</sup> | Annual Only | 288.78                               |                | 482.44                               | Annual Only    | 19.44                     |                               |          |                          |
| Annual Percentile ELV <sup>(c)</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. Powell*

Date of return:

04 July 2018

**RELEASES TO AIR**

**QUARTERLY RETURN**

**MAXIMUM 48H MEAN AND ANNUAL PERCENTILE CONCENTRATIONS <sup>(a),(b),(c)</sup>**

**Operator:** RWE Generation UK

**Form:**

**IED CON1 (Utility boilers)**

**Location:** *Aberthaw Power Station*

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

*Insufficient Hourly Data For Calculation*

| Year: 2018<br>LCP: LCP 283                        |  | NO <sub>x</sub> (mg/m <sup>3</sup> ) |              |  |  |
|---|--|--------------------------------------|--------------|--|--|
| Month   |  |                                      | Max 48h Mean |  |  |
| January   |  |                                      | 486.57       |  |  |
| February  |  |                                      | 474.99       |  |  |
| March   |  |                                      | 469.49       |  |  |
| April   |  |                                      | #N/A         |  |  |
| May   |  |                                      | #N/A         |  |  |
| June  |  |                                      | #N/A         |  |  |
| July  |  |                                      |              |  |  |
| August  |  |                                      |              |  |  |
| September   |  |                                      |              |  |  |
| October   |  |                                      |              |  |  |
| November  |  |                                      |              |  |  |
| December  |  |                                      |              |  |  |
| Monthly ELV/48h ELV <sup>(d)</sup>                |  |                                      |              |  |  |
| Annual 95 <sup>th</sup> Percentile <sup>(e)</sup> |  |                                      | 474.99       |  |  |
| Annual Percentile ELV <sup>(f)</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. Powell*

Date of return:

04 July 2018

# RELEASES TO AIR

## QUARTERLY RETURN

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

Operator: RWE Generation UK

Form:

IED BD1

Location: Aberthaw Power Station

Permit/Variation Number: EPR/RP3133LD

| Year: 2018<br>LCP: LCP 283 | SO <sub>2</sub>     |                   | NO <sub>x</sub>     |                   | Dust                |                   |
|----------------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|
| Month <sup>(b)</sup>       | Malfunction (hours) | Breakdown (hours) | Malfunction (hours) | Breakdown (hours) | Malfunction (hours) | Breakdown (hours) |
| Jan 2018                   | 0                   | 0                 | 0                   | 0                 | 0                   | 0                 |
| Feb 2018                   | 0                   | 0                 | 0                   | 0                 | 0                   | 0                 |
| Mar 2018                   | 0                   | 0                 | 0                   | 0                 | 0                   | 0                 |
| Apr 2018                   | 0                   | 0                 | 0                   | 0                 | 0                   | 0                 |
| May 2018                   | 0                   | 0                 | 0                   | 0                 | 0                   | 0                 |
| Jun 2018                   | 0                   | 0                 | 0                   | 0                 | 0                   | 0                 |
| 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 2018
- (c) Gas turbines with CO abatement only (columns may be deleted)

Signed on behalf of the Operator by:

R. Powell

Date of return:

04 July 2018

