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Dear Ian

## ANKERLIG POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF JULY 2025

This serves as the monthly report required in terms of Section 9 in Ankerlig Power Station's Atmospheric Emission License (WCCT036). The emissions are for the month of July, these being SO<sub>2</sub>, CO<sub>2</sub>, PM and NO<sub>x</sub> (as NO<sub>2</sub>).

### 1 Raw Materials and Products

Table 1: Quantity of Raw Materials and Products used/produced for the month of July 2025

|                            |                            |                                                    |                                      |                                    |
|----------------------------|----------------------------|----------------------------------------------------|--------------------------------------|------------------------------------|
| Raw Materials and Products | Raw Material Type          | Units                                              | Max Permitted Consumption Rates/unit | Station Consumption Rate July 2025 |
|                            | Diesel                     | Litres                                             | 40 000                               | 17 555 165.35                      |
|                            | LPG                        | Kg                                                 | 19 per start/unit                    |                                    |
|                            |                            |                                                    |                                      |                                    |
| Hours of operation         | Permitted Hrs of operation | Total No of hours operated under normal conditions |                                      |                                    |
|                            | 24/7                       | 313                                                |                                      |                                    |
|                            |                            |                                                    |                                      |                                    |
| Production Rates           | Product/By-product         | Units                                              | Max Production Capacity Permitted    | Production Rate: July 2025         |
|                            | Energy                     | MW                                                 | 150                                  | 53 769.81                          |
|                            |                            |                                                    |                                      |                                    |

NB: Figures reported are station figures while the limits are unit based (x9)

Table 2: Fuel usage per unit and efficiency

| Fuel Usage Per Unit/Hour  | Fuel Efficiency        |
|---------------------------|------------------------|
| <i>Unit 11:</i> 30 909.96 | <i>Unit 11:</i> 327.93 |
| <i>Unit 12:</i> N/A       | <i>Unit 12:</i> N/A    |
| <i>Unit 21:</i> 31 771.05 | <i>Unit 21:</i> 318.57 |
| <i>Unit 22:</i> 33 076.51 | <i>Unit 22:</i> 331.73 |
| <i>Unit 31:</i> 34 250.70 | <i>Unit 31:</i> 321.09 |
| <i>Unit 32:</i> 34.170.22 | <i>Unit 32:</i> 333.74 |
| <i>Unit 41:</i> 32 363.88 | <i>Unit 41:</i> 321.43 |
| <i>Unit 42:</i> 31 960.53 | <i>Unit 42:</i> 326.19 |
| <i>Unit 43:</i> 33 060.11 | <i>Unit 43:</i> 328.27 |

## 2 Hours of Operation

Table 3: Each unit and respective days operating under normal operation (Please note the units rarely run for the entire day)

| Unit         | Hours operating under normal operation | Test-run hours | Total      |
|--------------|----------------------------------------|----------------|------------|
| 11           | 34                                     | 24             | 58         |
| 12           | 0                                      | 0              | 0          |
| 21           | 29                                     | 18             | 47         |
| 22           | 36                                     | 45             | 58         |
| 31           | 29                                     | 22             | 46         |
| 32           | 46                                     | 56             | 79         |
| 41           | 49                                     | 38             | 87         |
| 42           | 46                                     | 41             | 87         |
| 43           | 44                                     | 31             | 75         |
| <i>Total</i> | <i>313</i>                             | <i>224</i>     | <i>537</i> |
|              |                                        |                |            |

### 3 Abatement Technology

Table 4: Abatement Equipment Control Technology availability for the month of July

| Associated Unit | Technology Type | Actual Utilisation (%) for the month of July |
|-----------------|-----------------|----------------------------------------------|
| Unit 11         | Low NOx burners | 100%                                         |
| Unit 12         | N/A             | N/A                                          |
| Unit 21         | Low NOx burners | 100%                                         |
| Unit 22         | Low NOx burners | 100%                                         |
| Unit 31         | Low NOx burners | 100%                                         |
| Unit 32         | Low NOx burners | 100%                                         |
| Unit 41         | Low NOx burners | 100%                                         |
| Unit 42         | Low NOx burners | 100%                                         |
| Unit 43         | Low NOx burners | 100%                                         |

Table 5: Tonnages and mg/Nm<sup>3</sup> for the month of July

|                                               | Date       | CO (mg/Nm <sup>3</sup> ) | NO <sub>x</sub> (mg/Nm <sup>3</sup> ) | PM (mg/Nm <sup>3</sup> ) | SO <sub>2</sub> (mg/Nm <sup>3</sup> ) |
|-----------------------------------------------|------------|--------------------------|---------------------------------------|--------------------------|---------------------------------------|
| <b>Hourly Licence Limit mg/Nm<sup>3</sup></b> |            |                          | 250                                   | 50                       | 500                                   |
| <b>Unit 11</b>                                | 2025/07/05 | 0.4                      | 114.5                                 | 0                        | 25.6                                  |
|                                               | 2025/07/06 | 0.4                      | 136.5                                 | 0                        | 30.95                                 |
|                                               | 2025/07/07 | 0.4                      | 120.7                                 | 0                        | 33.97                                 |
|                                               | 2025/07/08 | 0.4                      | 122                                   | 0                        | 43.5                                  |
|                                               | 2025/07/12 | 0.4                      | 147.5                                 | 0                        | 69.45                                 |
|                                               | 2025/07/14 | 0.4                      | 125.6                                 | 0                        | 75.2                                  |
|                                               | 2025/07/15 | 0.4                      | 137.5                                 | 0                        | 79.3                                  |
|                                               | 2025/07/22 | 0.4                      | 144.5                                 | 0                        | 1                                     |
|                                               |            |                          |                                       |                          |                                       |
|                                               |            |                          |                                       |                          |                                       |
| <b>Unit 12</b>                                | N/A        |                          |                                       |                          |                                       |
|                                               |            |                          |                                       |                          |                                       |
|                                               |            |                          |                                       |                          |                                       |
| <b>Unit 21</b>                                | 2025/07/05 | 2.9                      | 114                                   | 0                        | 0.15                                  |
|                                               | 2025/07/06 | 3.2                      | 139.5                                 | 0                        | 0.2                                   |
|                                               | 2025/07/07 | 3.77                     | 128.17                                | 0                        | 1.12                                  |
|                                               | 2025/07/08 | 4.52                     | 113.2                                 | 0                        | 0.48                                  |
|                                               | 2025/07/12 | 4                        | 135.5                                 | 0                        | 0.25                                  |
|                                               | 2025/07/14 | 3.64                     | 110.6                                 | 0                        | 0.34                                  |
|                                               | 2025/07/15 | 3.8                      | 124                                   | 0                        | 0.52                                  |
|                                               | 2025/07/22 | 3.5                      | 129.5                                 | 0                        | 0.55                                  |
|                                               |            |                          |                                       |                          |                                       |
|                                               |            |                          |                                       |                          |                                       |
| <b>Unit 22</b>                                | 2025/07/05 | 0.4                      | 115                                   | 0                        | 0                                     |
|                                               | 2025/07/06 | 0.33                     | 140.67                                | 0                        | 0                                     |
|                                               | 2025/07/07 | 0.43                     | 124.6                                 | 0                        | 0.08                                  |
|                                               | 2025/07/08 | 0.34                     | 117.8                                 | 0                        | 0.32                                  |
|                                               | 2025/07/09 | 0.65                     | 133                                   | 0                        | 0.3                                   |

|                |            |      |        |      |      |
|----------------|------------|------|--------|------|------|
|                | 2025/07/12 | 0.5  | 137.5  | 0    | 0.45 |
|                | 2025/07/14 | 0.26 | 114.8  | 0    | 0.52 |
|                | 2025/07/15 | 0.8  | 125.6  | 0    | 0.86 |
|                | 2025/07/22 | 0.3  | 131    | 0    | 0.4  |
|                |            |      |        |      |      |
|                |            |      |        |      |      |
|                |            |      |        |      |      |
| <b>Unit 31</b> | 2025/07/05 | 2.7  | 132    | 0    | 0.8  |
|                | 2025/07/06 | 1.9  | 164.5  | 0    | 0    |
|                | 2025/07/07 | 2.12 | 145.33 | 0    | 1.13 |
|                | 2025/07/08 | 2.7  | 150    | 0    | 0.56 |
|                | 2025/07/12 | 2.7  | 132.5  | 0    | 0    |
|                | 2025/07/14 | 2.42 | 129.6  | 0    | 2.36 |
|                | 2025/07/15 | 2.82 | 127.8  | 0    | 2.74 |
|                | 2025/07/22 | 3.35 | 140.5  | 0    | 1.45 |
|                |            |      |        |      |      |
|                |            |      |        |      |      |
|                |            |      |        |      |      |
| <b>Unit 32</b> | 2025/07/05 | 0.2  | 140.5  | 0    | 0    |
|                | 2025/07/06 | 2.97 | 167.67 | 0    | 6.5  |
|                | 2025/07/07 | 1.63 | 148.62 | 0    | 4.4  |
|                | 2025/07/08 | 2.06 | 161.4  | 0    | 7.96 |
|                | 2025/07/09 | 1.2  | 144.5  | 0    | 3.4  |
|                | 2025/07/10 | 0    | 8      | 0    | 6.8  |
|                | 2025/07/12 | 2.55 | 148    | 0    | 7.75 |
|                | 2025/07/14 | 1.32 | 145.2  | 0    | 0.36 |
|                | 2025/07/15 | 0.82 | 141    | 0    | 0.53 |
|                | 2025/07/16 | 3.8  | 151    | 0    | 8.2  |
|                | 2025/07/17 | 0.7  | 148    | 0    | 0.9  |
|                | 2025/07/21 | 1.85 | 152.5  | 0    | 3.45 |
|                | 2025/07/22 | 2.8  | 151.5  | 0    | 8.4  |
|                |            |      |        |      |      |
|                |            |      |        |      |      |
|                |            |      |        |      |      |
| <b>Unit 41</b> | 2025/07/05 | 2.35 | 141    | 0    | 4.9  |
|                | 2025/07/06 | 2.85 | 171    | 0    | 5.68 |
|                | 2025/07/07 | 4.11 | 149.93 | 0    | 8.99 |
|                | 2025/07/08 | 4.06 | 161    | 0    | 6.62 |
|                | 2025/07/09 | 4.2  | 145    | 0    | 7.75 |
|                | 2025/07/10 | 3.85 | 152.5  | 0    | 5.1  |
|                | 2025/07/12 | 3.17 | 140    | 0    | 7.8  |
|                | 2025/07/14 | 3.14 | 140.2  | 0    | 5.72 |
|                | 2025/07/15 | 3.52 | 139.67 | 0    | 6.58 |
|                | 2025/07/16 | 3.2  | 157    | 0    | 4.4  |
|                | 2025/07/17 | 2.2  | 141    | 0    | 4.9  |
|                | 2025/07/21 | 2.9  | 155    | 0    | 7.55 |
|                | 2025/07/22 | 3.8  | 152    | 0    | 6.4  |
|                |            |      |        |      |      |
|                |            |      |        |      |      |
|                |            |      |        |      |      |
| <b>Unit 42</b> | 2025/07/05 | 2.8  | 160    | 0.1  | 0.75 |
|                | 2025/07/06 | 3.2  | 186.33 | 0.1  | 0.83 |
|                | 2025/07/07 | 3.81 | 157    | 0.09 | 1.15 |
|                | 2025/07/08 | 0.3  | 1      | 0.04 | 0.6  |
|                | 2025/07/09 | 0.3  | 1      | 0    | 0.6  |

|                            |            |      |        |      |       |
|----------------------------|------------|------|--------|------|-------|
|                            | 2025/07/10 | 3.05 | 163    | 0.1  | 0.5   |
|                            | 2025/07/12 | 3.83 | 153.67 | 0.1  | 2.27  |
|                            | 2025/07/14 | 1.96 | 153.4  | 0.1  | 0.5   |
|                            | 2025/07/15 | 2.15 | 75.5   | 0.08 | 0.98  |
|                            | 2025/07/16 | 2.5  | 168    | 0    | 0.5   |
|                            | 2025/07/17 | 3    | 166    | 0.1  | 0.5   |
|                            | 2025/07/21 | 1.75 | 169    | 0    | 0.75  |
|                            | 2025/07/22 | 3.65 | 170.5  | 0.1  | 0.75  |
|                            |            |      |        |      |       |
|                            |            |      |        |      |       |
|                            |            |      |        |      |       |
| Unit 43                    | 2025/07/05 | 1.35 | 124    | 0    | 6     |
|                            | 2025/07/06 | 1.7  | 147.67 | 0    | 2.4   |
|                            | 2025/07/07 | 1.22 | 125.5  | 0    | 4.98  |
|                            | 2025/07/08 | 1.38 | 142.2  | 0    | 5.54  |
|                            | 2025/07/09 | 3.05 | 125.5  | 0    | 6.65  |
|                            | 2025/07/10 | 2.65 | 129.5  | 0    | 4.95  |
|                            | 2025/07/12 | 1.8  | 146    | 0    | 6.3   |
|                            | 2025/07/14 | 1.72 | 115.6  | 0    | 4.54  |
|                            | 2025/07/15 | 2    | 118.67 | 0    | 4.25  |
|                            | 2025/07/16 | 2.9  | 144    | 0    | 3.3   |
|                            | 2025/07/17 | 3.7  | 136    | 0    | 5.4   |
|                            | 2025/07/22 | 2.45 | 139    | 0    | 6.05  |
|                            |            |      |        |      |       |
|                            |            |      |        |      |       |
|                            |            |      |        |      |       |
| Total Emission mass (Tons) |            | 6.44 | 55.835 | 0    | 1.997 |

Units 11,22, 32 & 42's NOx and SOx monitor read abnormal at times during the month due to the cooler leak. Spares have been ordered, and delivery is eminent

**COMMENT:** All pollutants measured were within allowed limits and no non-conformances were registered for the month under review.

#### 4 Monitoring Equipment: Continuous Emission Monitoring System (CEMS) availability

Table 6: Actual Utilisation (%) for the month

| Associated Unit | Technology Type | Actual Utilisation (%) for the month of July |
|-----------------|-----------------|----------------------------------------------|
| Unit 11         | CEMS            | 100% CO read 0.4 throughout the month        |
| Unit 12         | CEMS            | N/A                                          |
| Unit 21         | CEMS            | 100%                                         |
| Unit 22         | CEMS            | 100%                                         |
| Unit 31         | CEMS            | 100%                                         |
| Unit 32         | CEMS            | 95.65%                                       |
| Unit 41         | CEMS            | 100%                                         |
| Unit 42         | CEMS            | 78.27%                                       |
| Unit 43         | CEMS            | 100%                                         |

Continuous Emissions Monitoring System (CEMS) at GT42's availability was below 80%. Please note that the unit is not operating under any "upset" combustion process and does not pose a risk to the environment.

#### 5 Monitoring Equipment Calibration

Continuous Emission Monitoring System (CEMS) is always online unless a fault is reported. The system auto calibrates every four (4) hours and raises an alarm if auto calibration is out of spec. Onsite technicians calibrate the system with calibration gas annually.

## 6 Ambient Monitoring Station

The station's new AEL does not require operation of an ambient monitoring station until decommissioning of Acacia Power Station.

**7 Load Factor:** 5.52%

## 8 Leak Detection and Repair programme

No leaks were reported during July 2025

## 9 Complaints Register

Table 7. Complaints for the month of July 2025

| Source Code/ Name | Root Cause Analysis | Calculation of Impacts/ emissions associated with the incident | Dispersion modelling of pollutants where applicable | Measures implemented to prevent reoccurrence | Date by which measure will be implemented |
|-------------------|---------------------|----------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------|-------------------------------------------|
| None              | N/A                 | N/A                                                            | N/A                                                 | N/A                                          | N/A                                       |

## 10 General

The rest of the information demonstrating compliance with the emission license conditions is supplied in the annual emission reports sent to your office.

Trusting the above meets the reporting requirements specified within the stations' Atmospheric Emission License.

Do not hesitate to contact Maureen Dzulisa on 021 573 6162 for any related queries.

Yours sincerely



Pamela Mrubata

**ANKERLIG POWER STATION**