



## Monthly Report

Matla Power Station

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**Matla Power Station October Monthly Emissions  
Report**

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## 1. Introduction

### **MATLA POWER STATION MONTHLY EMISSIONS REPORT FOR THE MONTH OF OCTOBER 2025**

This document serves as the monthly emissions report required in terms of Section 7.6 of Matla Power Station Provisional Atmospheric Emission License (AEL), **17/4/AEL/MP312/11/14**

This report reflects Unit 1 to Unit 6 gaseous and particulate emissions performance against the AEL limit for the month of October 2025 only.

## 2. Raw Materials and Products

**Table 1- Quantity of Raw Materials and Products Consumption in 10/2025**

Raw Materials and Products used	Raw Material Type	Unit	Maximum Permitted Consumption/ Rate (Quantity)	Consumption – 10/2025
			1 475 000	
	Fuel Oil	Tons/month	3 500	
Production Rates	Product/ By-Product Name	Unit	Maximum Production Capacity Permitted (Quantity)	Production Rate in Month of 10/2025
			2 745	
	Ash Produced	Tons/month	471 000	

## 3. Abatement Technology

**Table 2-Abatement Equipment Control Technology Efficiency in 10/2025**

Associated Unit/Stack	Technology Type	Efficiency	ESP Utilization
South Stack (Unit 1, 2 and 3)	Electrostatic Precipitators (ESP)	99.757%	100%
	Electrostatic Precipitators (ESP)	99.721%	
	Electrostatic Precipitators (ESP)	99.656%	
Unit 4	Electrostatic Precipitators (ESP)	99.693%	100%
Unit 5	Electrostatic Precipitators (ESP)	Off-line	100%
Unit 6	Electrostatic Precipitators (ESP)	Off-line	Off

**Note: Abatement plant does not have bypass mode operation, hence plant 100% Utilised.**

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#### 4. Energy Source Characteristics

Table 3: Energy Source Material Characteristics for 10/2025

Characteristic	Stipulated Range (% by weight on a dry basis)	Monthly Average Content (% by weight on a dry basis)
<b>Coal</b>		
Sulphur Content	0.8-1.1	0.850
Ash Content	21-40	26.930

#### 5. Emissions Reporting

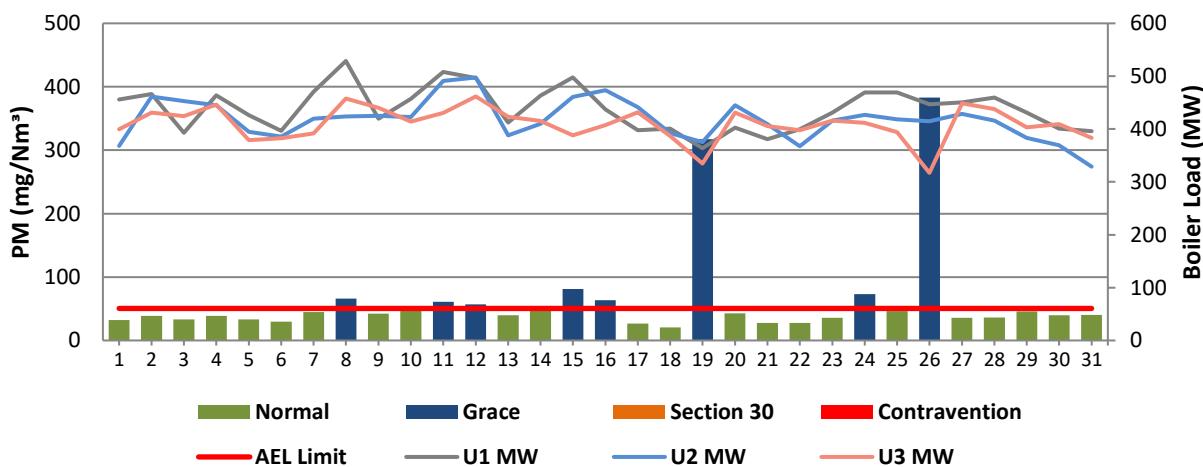
In terms of Section 59 of National Environmental Management: Air Quality Act (Act no.39 of 2004) a decision made by the Minister of DFFE, in respect of the Eskom exemption applications for new Minimum Emission Standards (MES) were granted and effective as of 01<sup>st</sup> April 2025.

Table 4- New Minimum Emission Limits are as follows:

SO <sub>2</sub> Monthly = 2600 mg/Nm <sup>3</sup>	Dust Daily= 50 mg/Nm <sup>3</sup> (South Stack) Dust Daily= 100 mg/Nm <sup>3</sup> (Unit 4, 5 and 6)	NO <sub>2</sub> Daily= 1100 mg/Nm <sup>3</sup>
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##### 5.1 PM Daily Averages

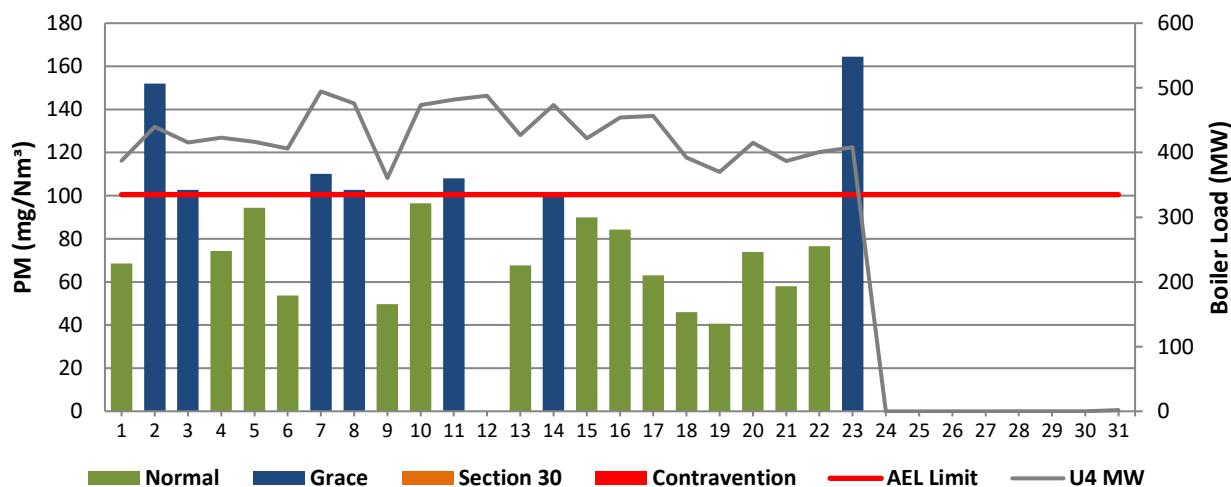
Figure 1: Matla South Stack PM Emissions - October 2025



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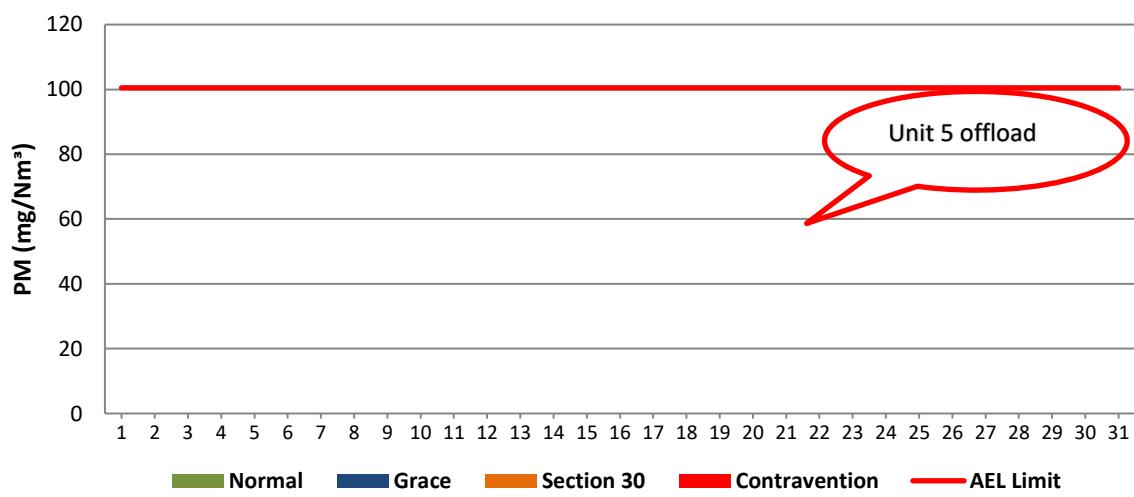
Matla PS South Stack exceeded PM AEL Limit of 50mg/Nm<sup>3</sup> on the 08<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, of October 2025 due to Unit 1 poorly performing precip fields and inadequate rapping. The exceedance on the 19<sup>th</sup> and 26<sup>th</sup> of October 2025, were due to condenser flushing activities, which requires the unit/s to operate at min-gen and the abatement technology (ESP's) is therefore isolated. The exceedance on the 24<sup>th</sup> of October 2025, was due to SO3 common plant supply pump A switched off due to low steam temperature, which affected the abatement technology.

**Figure 2: Matla Unit 4 PM Emissions - October 2025**



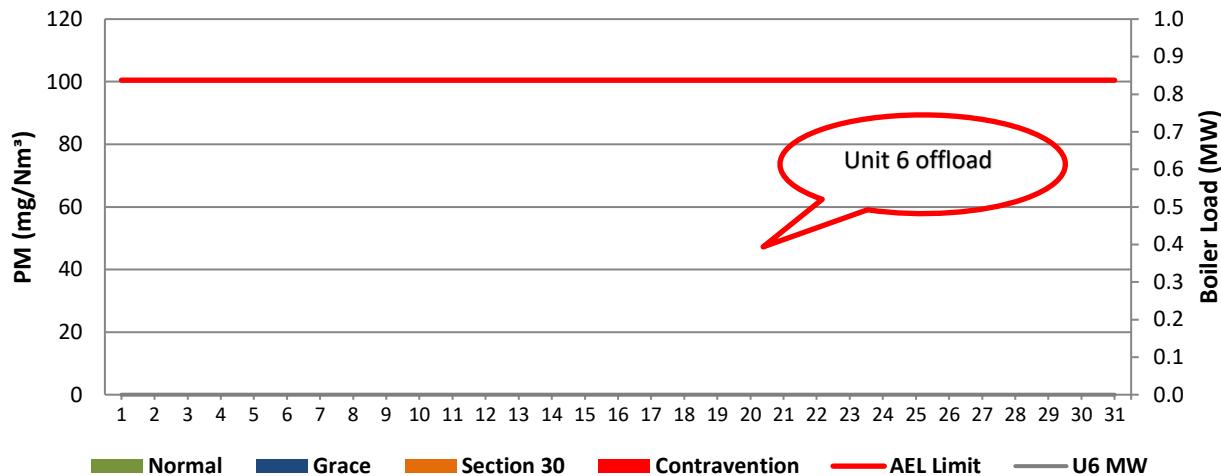
Matla PS Unit 4 exceeded PM AEL Limit of 100mg/Nm<sup>3</sup> on the 02<sup>nd</sup>, 03<sup>rd</sup>, 07<sup>th</sup>, 08<sup>th</sup>, 11<sup>th</sup> and 14<sup>th</sup> of October 2025 due to poorly performing precip fields, especially when the unit operates at full load. On the 23<sup>rd</sup> of October 2025, the exceedance was due to Unit shutdown for precip repairs outage.

**Figure 3: Matla Unit 5 PM Emissions - October 2025**



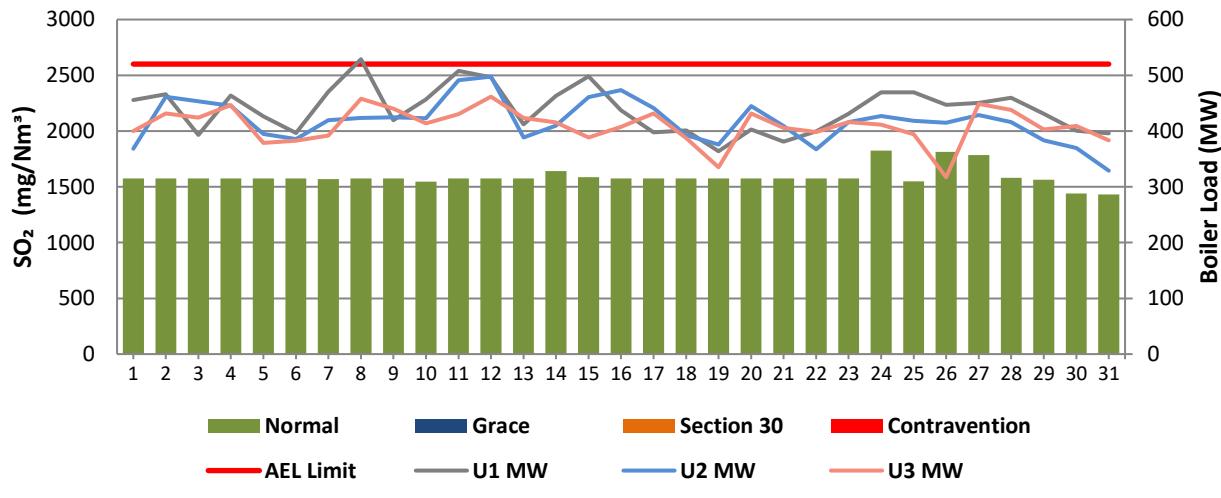
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Figure 4: Matla Unit 6 PM Emissions - October 2025



## 5.2 SOx Daily Averages

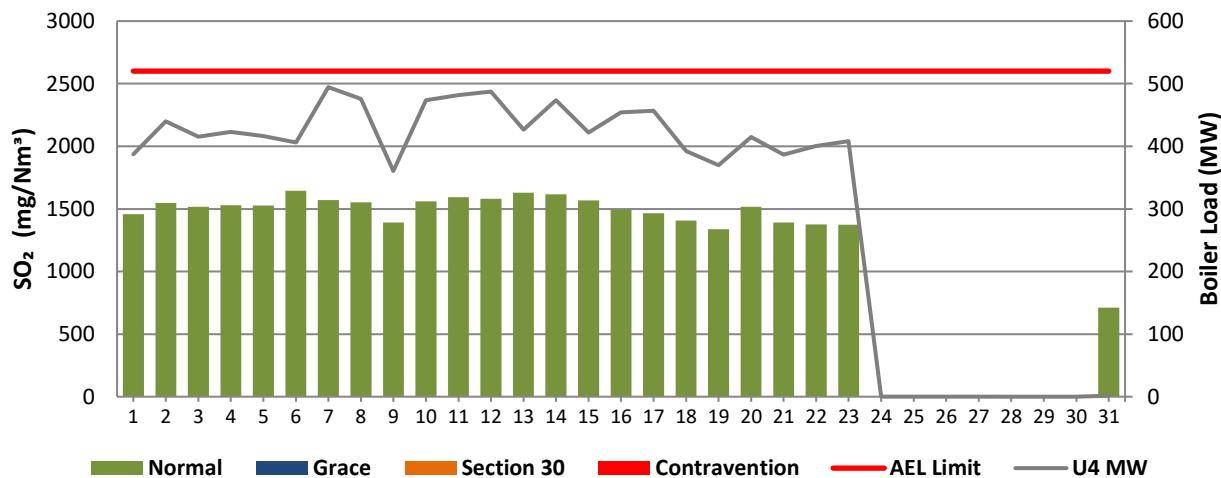
Figure 5: Matla South Stack SO<sub>2</sub> Emissions - October 2025



Note: Matla Power Station South Stack did not exceed SOx limit.

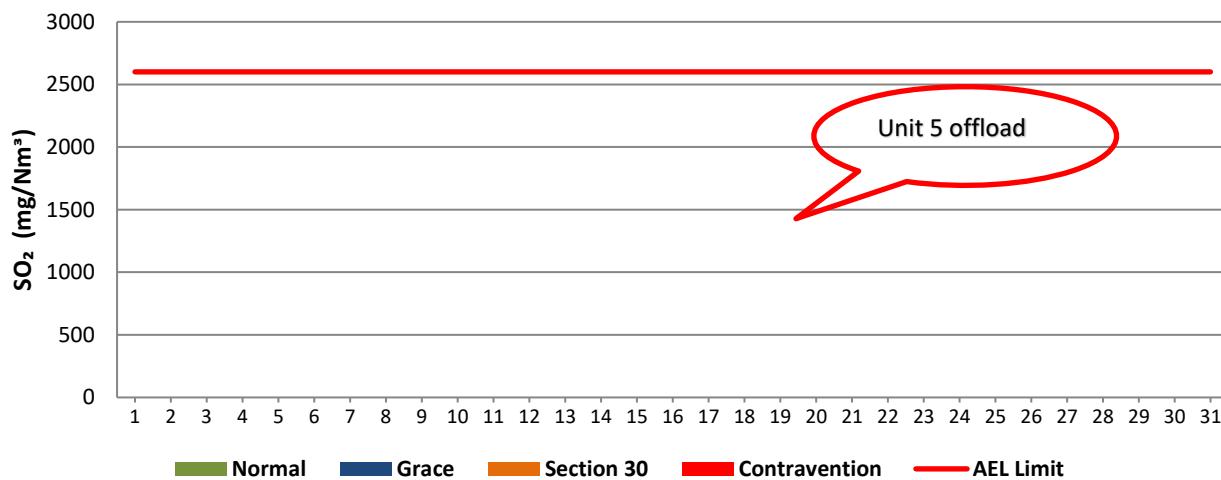
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Figure 6: Matla Unit 4 SO<sub>2</sub> Emissions - October 2025



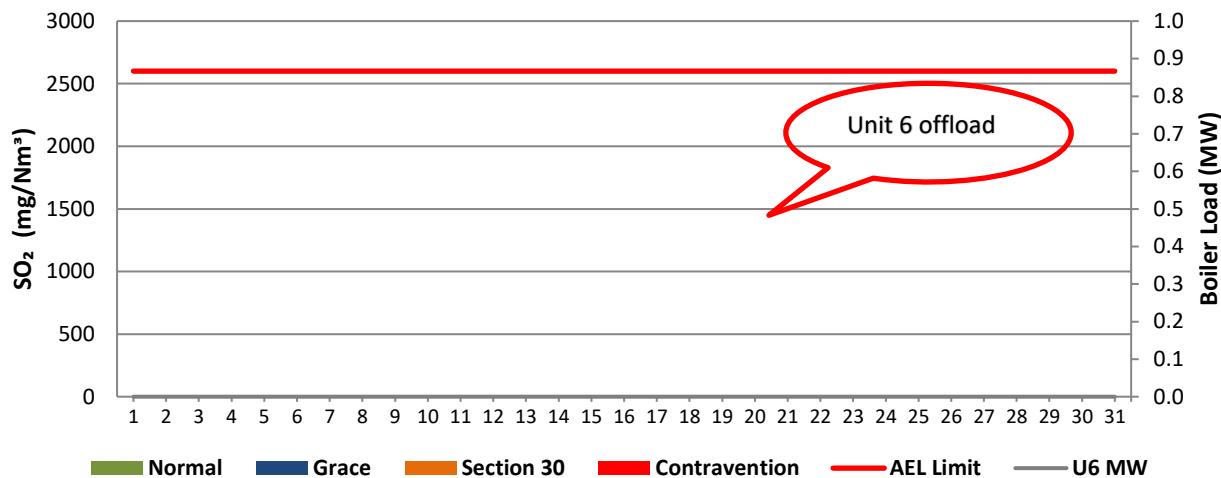
Note: Matla Power Station Unit 4 did not exceed SO<sub>x</sub> limit

Figure 7: Matla Unit 5 SO<sub>2</sub> Emissions - October 2025



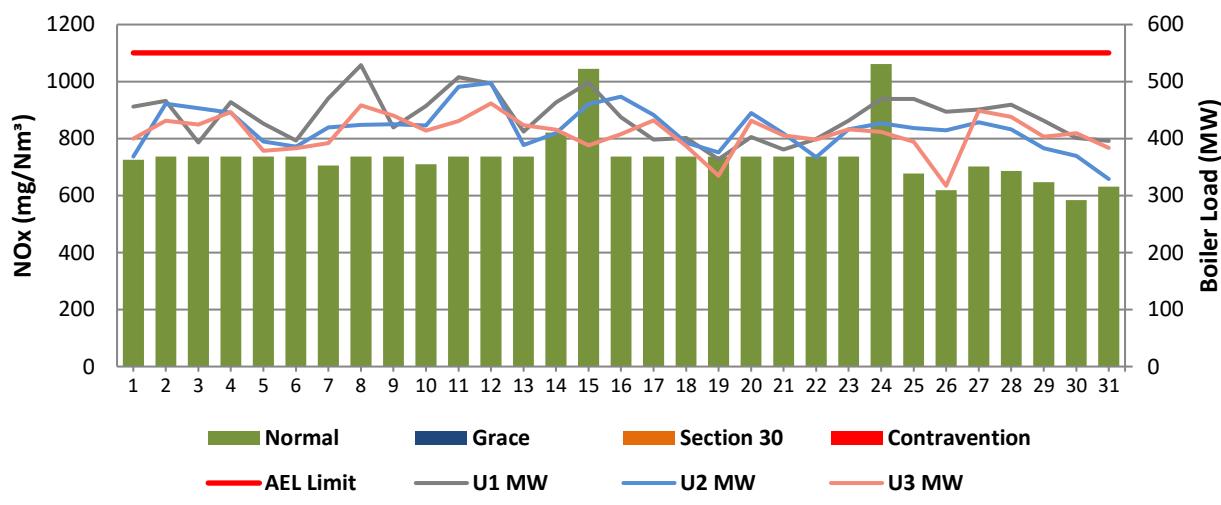
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Figure 8: Matla Unit 6 SO<sub>2</sub> Emissions - October 2025



### 5.3 NOx Daily Averages

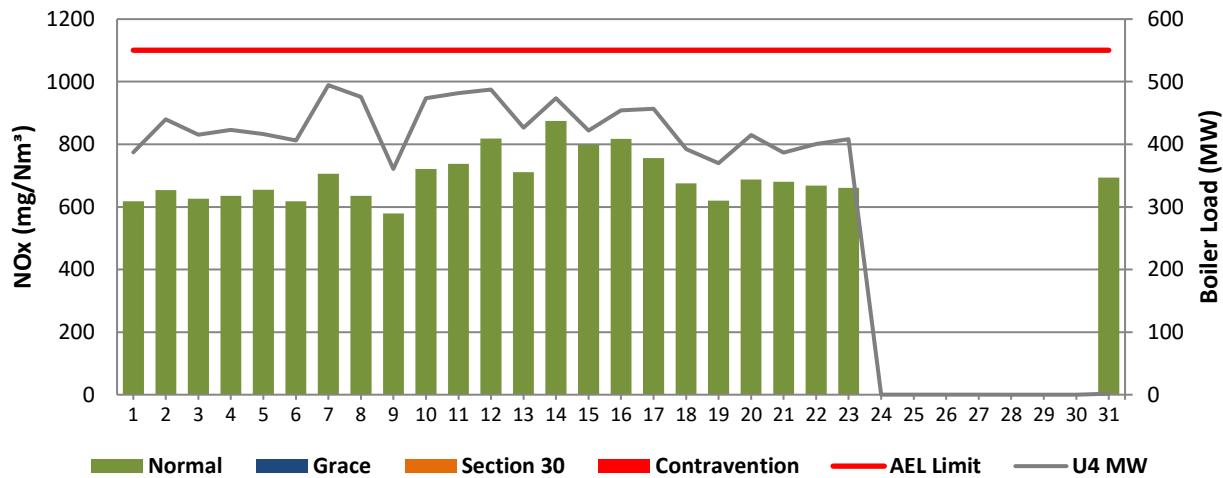
Figure 9: Matla South Stack NO<sub>x</sub> Emissions - October 2025



Note: Matla Power Station South Stack did not exceed NOx limit

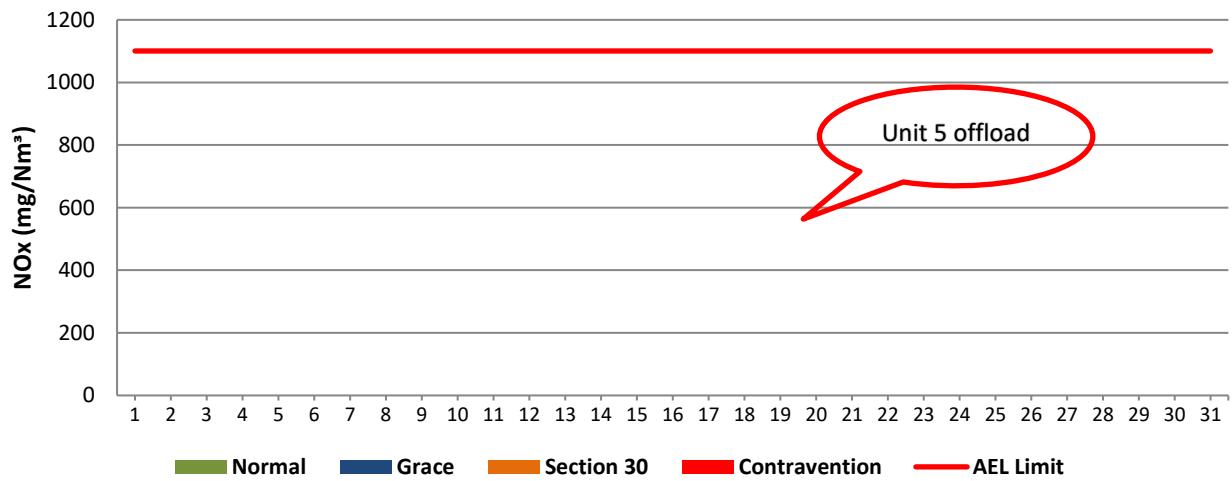
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Figure 10: Matla Unit 4 NO<sub>x</sub> Emissions - October 2025



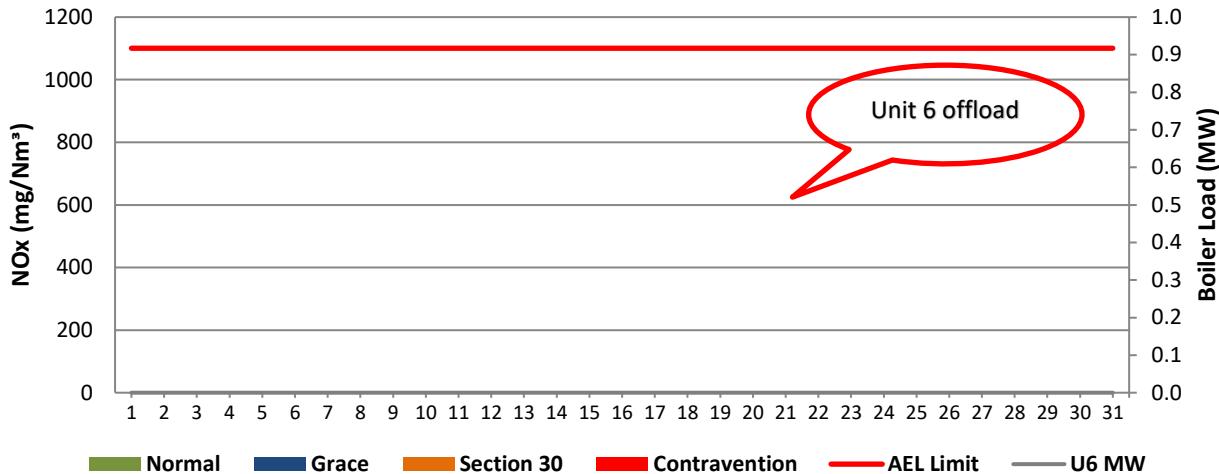
Note: Matla Power Station Unit 4 did not exceed NO<sub>x</sub> limit

Figure 11: Matla Unit 5 NO<sub>x</sub> Emissions - October 2025



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**Figure 12: Matla Unit 6 NO<sub>x</sub> Emissions - October 2025**



**Table 5-Monthly Tonnages for 10/2025**

Associated Unit/Stack	PM	SO <sub>2</sub>	NO <sub>2</sub>
Unit 1	118.3	2 818	1 311
Unit 2	116.0	2 754	1 281
Unit 3	115.5	2 873	1 334
Unit 4	124.5	2 281	1 050
Unit 5	Off	Off	Off
Unit 6	Off	Off	Off
SUM	474.37	10 727	4 977

**Table 6-Monthly Averages Concentration for 10/2025 in mg/Nm<sup>3</sup>**

Associated Unit/Stack	PM	SO <sub>2</sub>	NO <sub>2</sub>
South Stack	66.7	1 588.7	737.9
Unit 4	85.4	1 473.5	693.7
Unit 5	Off	Off	Off
Unit 6	Off	Off	Off

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**Table 7 – The No of hours, over a period of 24 hours, for which PM emissions exceeded limit**

Associated Unit/Stack	Dates	Number of hours	Reasons of PM exceedances
South Stack	08/10/2025	22 hours	PM emission exceedances were due to Unit 1 poorly performing precip fields and inadequate rapping, the rapping system was placed back into service. precip fields off.
	10/10/2025	13 hours	
	11/10/2025	21 hours	
	12/10/2025	16 hours	
	15/10/2025	19 hours	
	16/10/2025	17 hours	
	19/10/2025	21 hours	PM emission exceedances were due to condenser flushing activities, which requires the unit/s to operate at min-gen and the abatement technology is therefore isolated
	26/10/2025	14 hours	
Unit 4	24/10/2025	14 hours	PM emission exceedances were due to SO3 common plant supply pump A switched off due to low steam temperature, which affected the abatement technology.
	02/10/2025	16 hours	PM emission exceedances were due to poorly performing precip fields, especially when the unit operates at full load.
	03/10/2025	9 hours	
	07/10/2025	16 hours	
	08/10/2025	13 hours	
	11/10/2025	12 hours	
	14/10/2025	14 hours	
	23/10/2025	14 hours	The exceedance was due to Unit 4 shutdown for precip repairs outage.

## 6. Continuous Emissions Monitoring System (CEMS)

**Table 7- Periods during which was inoperative/malfunctioning.**

Date	CEMS status	Comments
October 2025	Malfunctioning	<p>The station gas monitors have been reading inaccurately for South Stack and Unit 4 even after the calibration and maintenance attempts due to the control interface power board failure on the stacks. However, parallel tests averages were used for the purpose of accurate reporting of the gases during this reporting period.</p> <p>The station has placed a long-term contract (3 years) for spares and Maintenance of the gas monitors. Currently C&amp;I Eng and Maintenance are outsourcing the required gas monitor spares.</p>

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**Table 8-CEMS Monitor Reliability Percentage**

Associated Unit/Stack	PM	SO <sub>2</sub>	NO <sub>2</sub>	O <sub>2</sub>
South Stack	98.4	32.6	32.6	100
Unit 4	99.8	95.1	91.0	100
Unit 5	Off	Off	Off	Off
Unit 6	Off	Off	Off	Off

## 7 CEMS Calibration and Equipment Used for Calibration

Calibration certificates to be made available upon request.

## 8 Validity of Correlation and Parallel Test

**Table 8-Validity of Correlation and Parallel Test.**

Associated Unit/Stack	Correlation Test (PM)	Parallel Test (NO <sub>2</sub> , CO <sub>2</sub> , O <sub>2</sub> , SO <sub>2</sub> )
South Stack	Valid until 27 February 2027	Valid until 30 October 2025
Unit 4	Valid until 11 August 2025 (Spot check curve). Full correlation test couldn't be performed due to plant performance	Valid until 11 May 2027
Unit 5	Valid Until 25 August 2026	Valid until 29 May 2027
Unit 6	Valid until 02 August 2026	Valid until 30 June 2025 (Unit offload)

## 9 Complaint Register

**Table 9-Complaints for the month of 10/2025**

Source Code/ Name	Air pollution complaints received	Calculation of Impacts/ emissions associated with the incident	Date of complaint and date of response by the license holder	Action taken to resolve the complaint	Date when the action was implemented.
N/A	N/A	N/A	N/A	N/A	N/A

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