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Date:
2025.09.23

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Dear Mrs Simelane

ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST 2025

This serves as the monthly report required in terms of Section 6 in Arnot Power Station's Atmospheric Emission License. The emissions are for August 2025, verified emissions of particulates; SO₂ and NO_x (as NO₂) are also included.

Raw Materials and Products

Table1: Quantity of Raw Materials and Products used/produced for the Month of August 2025

Raw Materials and Products used	Raw Material Type	Unit	Maximum Permitted Consumption/ Rate (Quantity)	Consumption/ Rate in Month of August 2025
	Coal	Tons/month	1 050 330	329 470.19
	Fuel Oil	Tons/month	10 000	4147.54
Production Rates	Product/ By-Product Name	Unit	Maximum Production Capacity Permitted (Quantity)	Production Rate in Month of August 2025
	Energy	GWh	1 785 600	591 002
	Ash	Tons/month	421 000	19 375

ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST 2025

Abatement Technology

Table 2.1 (a) Abatement Equipment Efficiency Control Technology for month of August 2025

Associated Unit/Stack	Technology Type	Actual Efficiency (%) for the month of August 2025
North Stack	Fabric Filter Bags	99.3%
South Stack	Fabric Filter Bags	99.6%

Table 2.1 (b) Abatement Equipment Utilisation (%) for the month of August 2025

Associated Unit/Stack	Technology Type	Utilisation August 2025
North	<i>Fabric Filter Plant (FFP)</i>	100 %
South	<i>Fabric Filter Plant (FFP)</i>	100 %

Table 2.1 (c) Monitor Reliability (%)

Associated Unit/Stack	PM	SO ₂	NO
Stack 1	100.0	98.8	98.9
Stack 2	59.7	89.8	90.1

Energy Source Characteristics

Table 3: Energy Source Material Characteristics for the month of August 2025

Characteristic	Stipulated Range (Unit)	Monthly Average Content
Sulphur Content	0.5 to < 1 (%)	0.498
Ash Content	17 to < 40 (%)	22.30
Calorific Value (Dry base)	≥ 22.76 (MJ/kg)	22.95

Table 4 Operating days in compliance to PM AEL Limit – August 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm ³)
North	30	0	0	0	0	28.5
South	30	0	0	0	0	23.4
	60	0	0	0	0	

ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST 2025

Table 5: Operating days in compliance to NOx AEL Limit –August 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
North	28	0	0	2	2	478.9
South	30	0	0	0	0	767.4
SUM	58	0	0	2	2	

Table 6: Operating days in compliance to SOx AEL Limit –August 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
North	30	0	0	0	0	1828.6
South	29	0	0	1	1	1815.6
SUM	59	0	0	1	1	

Emissions Reporting

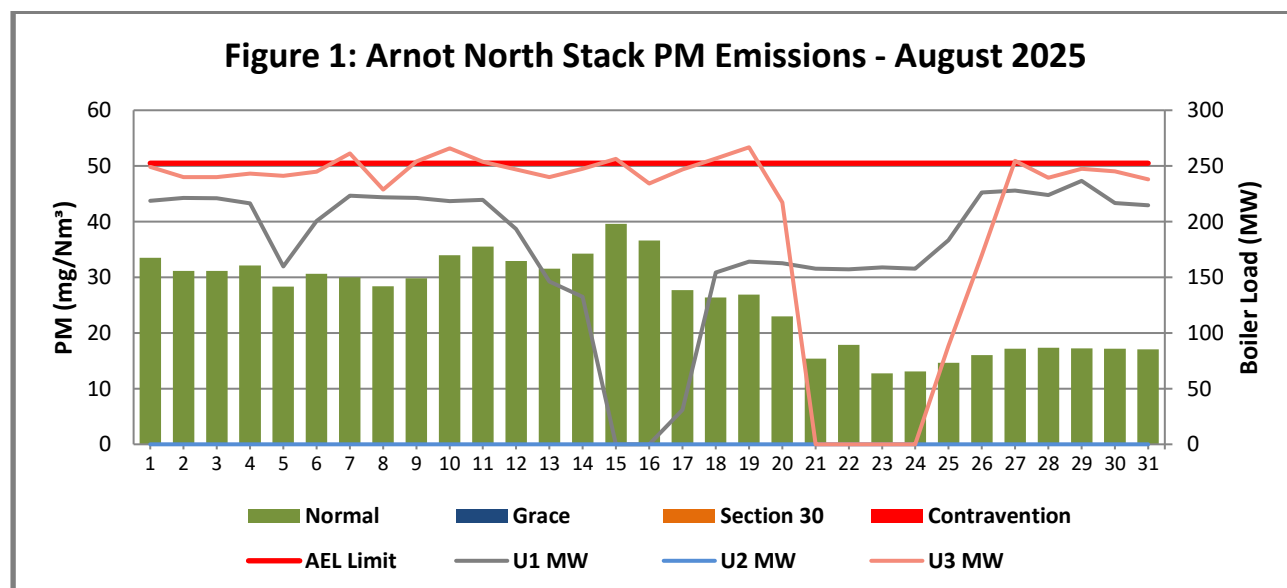


Figure 1: PM emissions (daily averages) for the month of August 2025 against the emission limit for the North Stack

ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST 2025

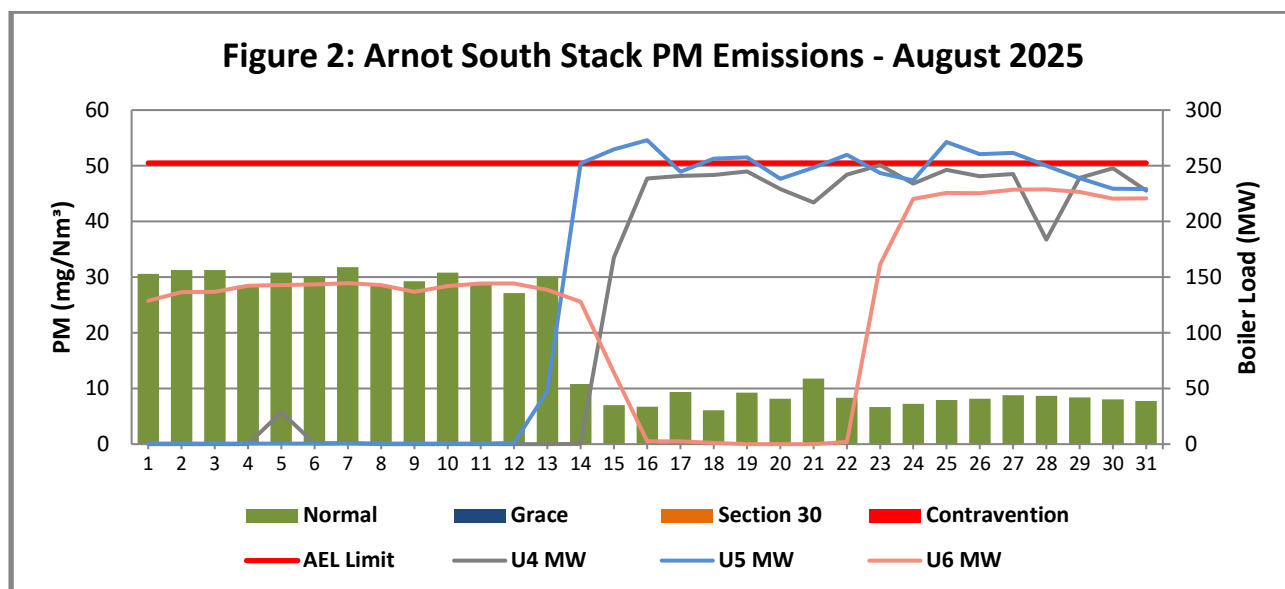


Figure 2: PM emissions (daily averages) for the month of August 2025 against emission limit for the South Stack

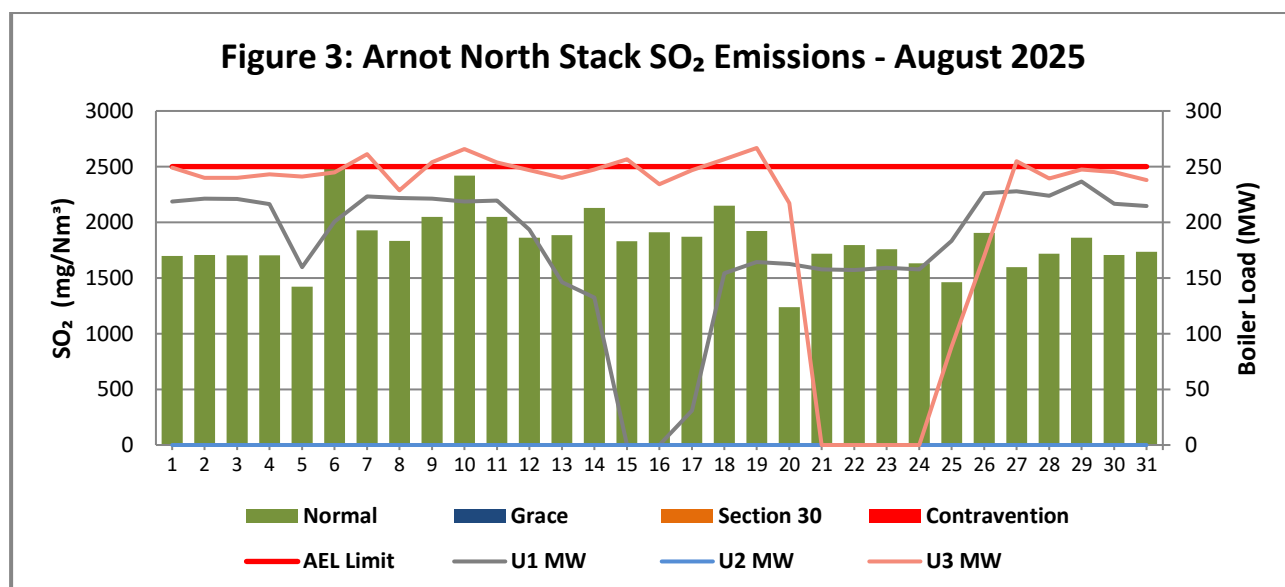


Figure 3: SO₂ emissions (daily averages) for the month of August 2025 against emission limit for the North Stack

ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST 2025

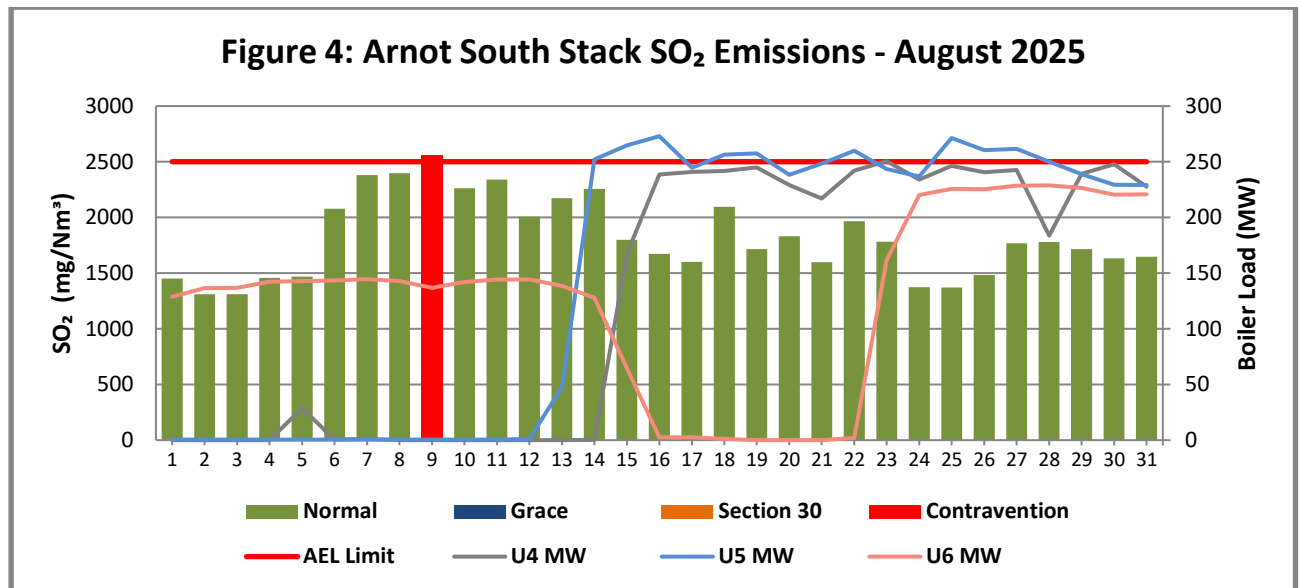


Figure 4: SO₂ emissions (daily averages) for the month of August 2025 against emission limit for the South Stack

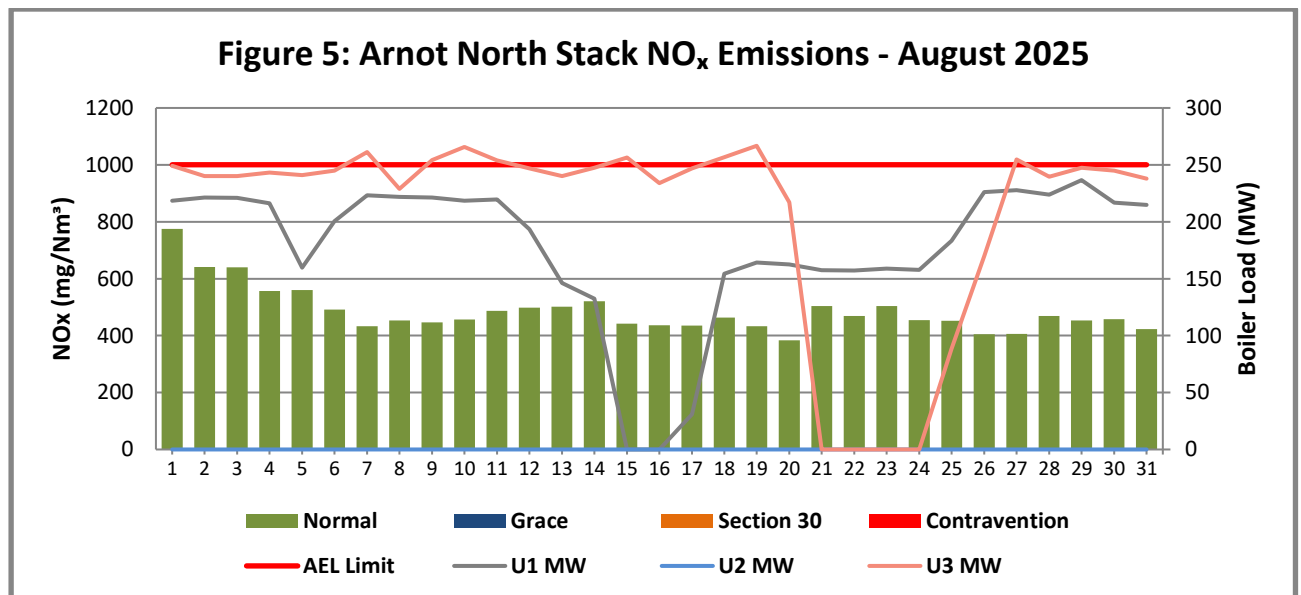


Figure 5: NO₂ emissions (daily averages) for the month of August 2025 against emission limit for the North Stack

ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST 2025

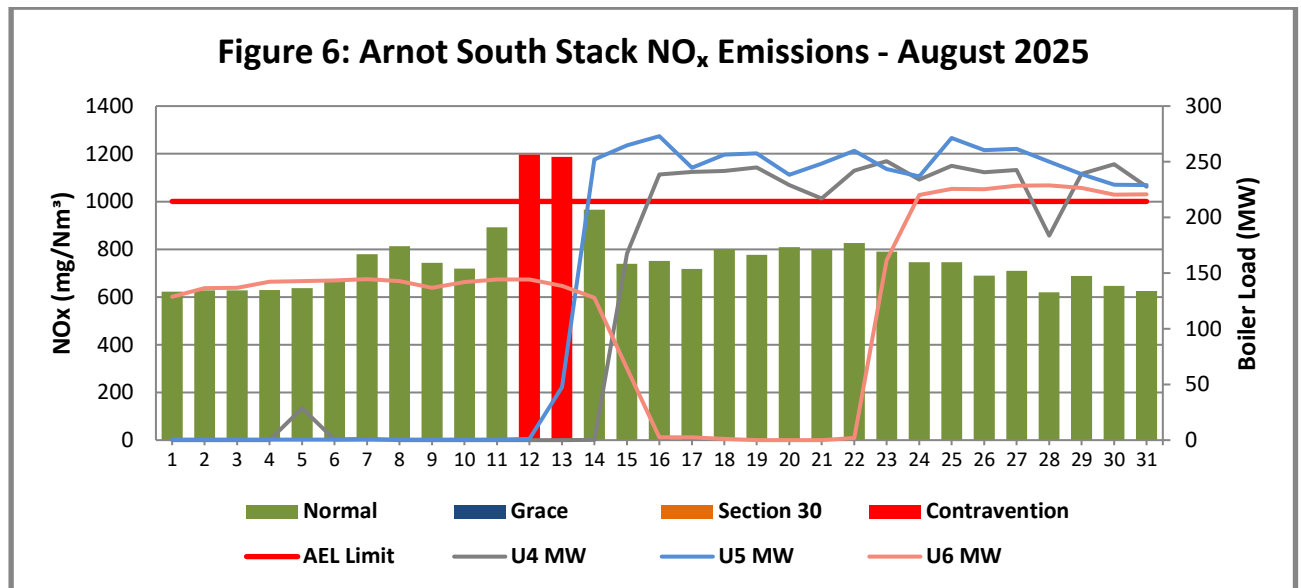


Figure 6: NO₂ emissions (daily averages) for the month of August 2025 against emission limit for the South Stack

Table 7: Monthly tonnages for the month of August 2025

Unit	PM (tons)	SO ₂ (tons)	NO ₂ (tons)
Total Tons (North & South Stack)	77.82	7372	2492

Table 8: Each unit and respective days operating under normal operation, days in grace period, and section 30 days respectively.

Unit	Days operating under normal operation	Days operating in grace period	Days operating under S30
1	30	0	0
2	30	0	0
3	30	0	0
4	30	0	0
5	30	0	0
6	30	0	0

ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST 2025

Light up information

Continuous reporting is being done even during start-ups emissions were not affected.

Complaints Register

Table 9. Complaints for the month of August 2025

No Noise, dust and offensive odors complaints registered in the month of August 2025.

Source Code/ Name	Root Cause Analysis	Calculation of Impacts/ emissions associated with the incident and dispersion modelling of pollutants, where applicable	Dispersion modeling of pollutants where applicable	Measures implemented to prevent reoccurrence	Date by which measure will be implemented
None	0	0	0	0	0

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General

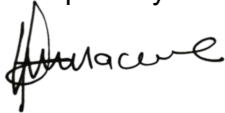
The rest of the information demonstrating compliance with the emission license conditions is supplied in the annual emission reports sent to your office.

Both North and South stack SOx exceedances are attributed to poor coal qualities as per Figure 3 and Figure 4: *Energy Source Material Characteristics for the month of August 2025*. PED and coal management engaged to improve the overall quality of coal burnt.

Hoping the above will meet your satisfaction.

Compiled by

Date: 2025.10.01



Lawrence Machebe

ENVIRONMENTAL OFFICER: ARNOT POWER STATION

Verified by

Date: 2025.10.01

P.P. 

Jan-Louis Human

SYSTEM ENGINEER: ARNOT POWER STATION

Supported by:

Date: 2025.10.01



Rofhiwa Tshikovha

SENIOR ENVIRONMENTAL ADVISOR: ARNOT POWER STATION

Yours sincerely

pp 

Marcus Nemadodzi

Date: 01 October 2025

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2025**

GENERAL MANAGER: ARNOT POWER STATION