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Date:  
2025.04.14

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Dear Mrs Simelane

## ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF JANUARY 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 January 2025, verified emissions of particulates; SO<sub>2</sub> and NO<sub>x</sub> (as NO<sub>2</sub>) are also included.

### Raw Materials and Products

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

Raw Materials and Products used	Raw Material Type	Unit	Maximum Permitted Consumption/ Rate (Quantity)	Consumption/ Rate in Month of January 2025
	Coal	Tons/month	1 050 330	273 261.05
	Fuel Oil	Tons/month	10 000	5808.72
Production Rates	Product/ By-Product Name	Unit	Maximum Production Capacity Permitted (Quantity)	Production Rate in Month of January 2025
	Energy	GWh	1 785 600	445 900
	Ash	Tons/month	421 000	59 735

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## Abatement Technology

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

Associated Unit/Stack	Technology Type	Actual Efficiency (%) for the month of January 2025
North Stack	Fabric Filter Bags	99.8%
South Stack	Fabric Filter Bags	99.8%

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

Associated Unit/Stack	Technology Type	Utilisation January 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 <sub>2</sub>	NO
Stack 1	96.0	82.9	81.9
Stack 2	92.2	85.0	84.2

## Energy Source Characteristics

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

Characteristic	Stipulated Range (Unit)	Monthly Average Content
Sulphur Content	0.5 to < 1 (%)	0.64
Ash Content	17 to < 40 (%)	21.86

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm <sup>3</sup> )
North	30	1	0	0	1	31.9
South	30	1	0	0	1	31.1
SUM	60	2	0	0	2	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
North	31	0	0	0	0	576.4
South	31	0	0	0	0	416.3
SUM	62	0	0	0	0	

Table 6: Operating days in compliance to Sox AEL Limit –January 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
North	31	0	0	0	0	1247.4
South	31	0	0	0	0	968.7
SUM	62	0	0	0	0	

## Emissions Reporting

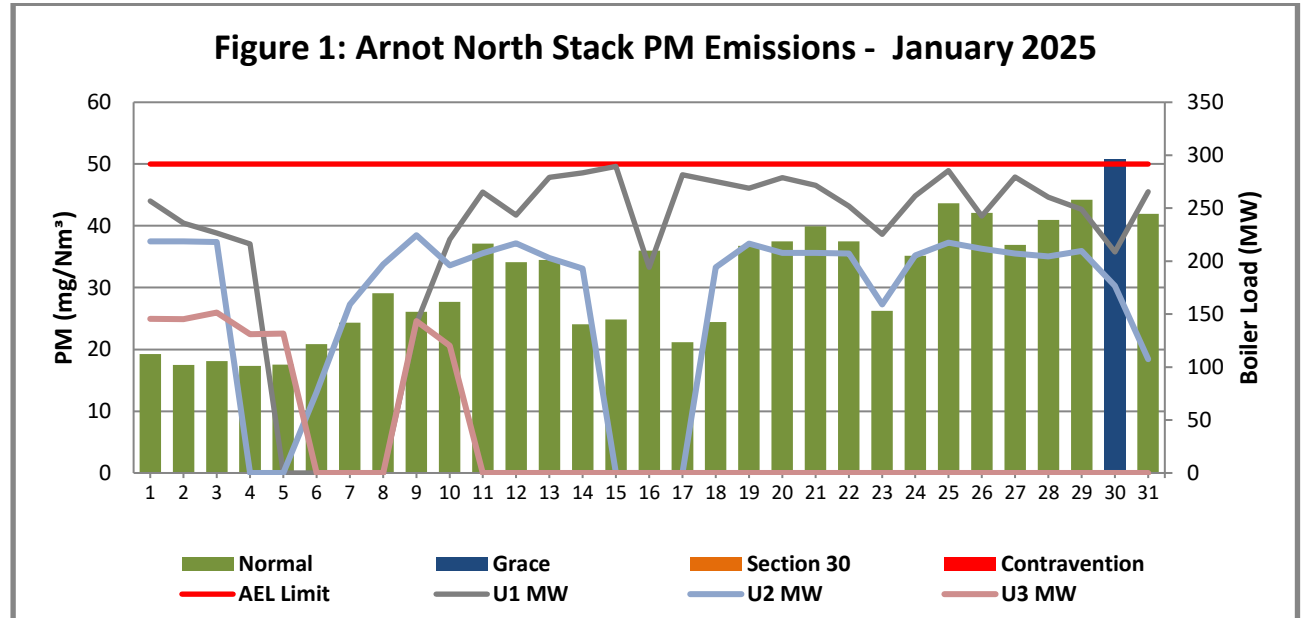
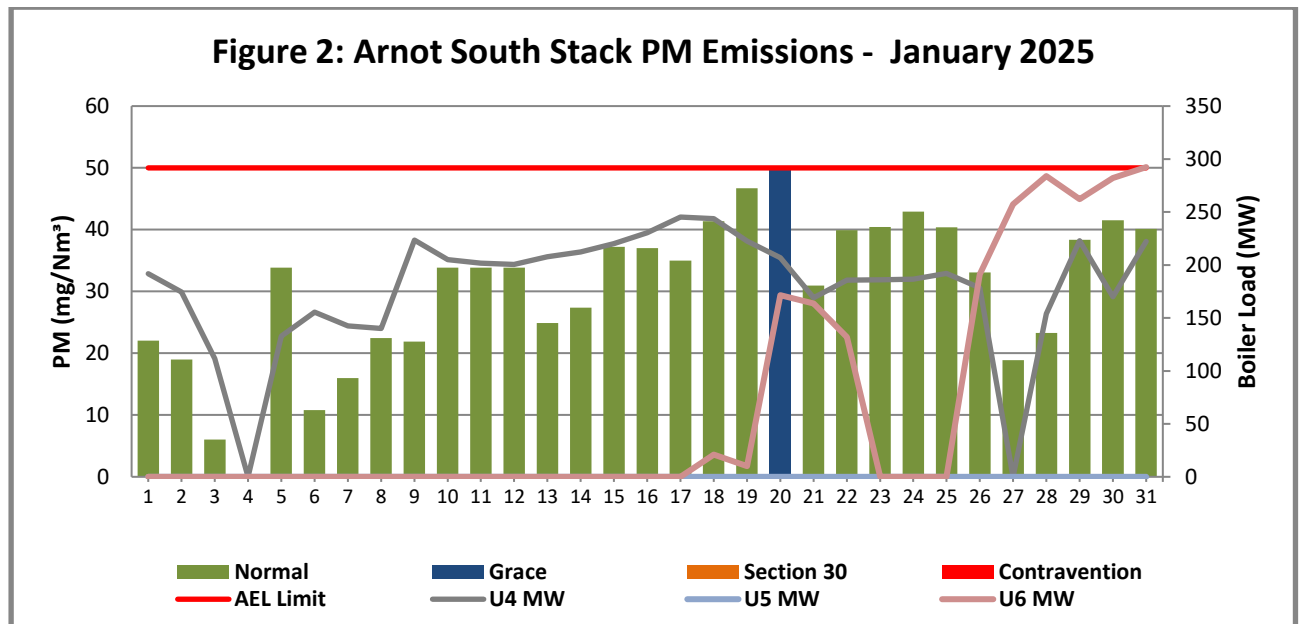
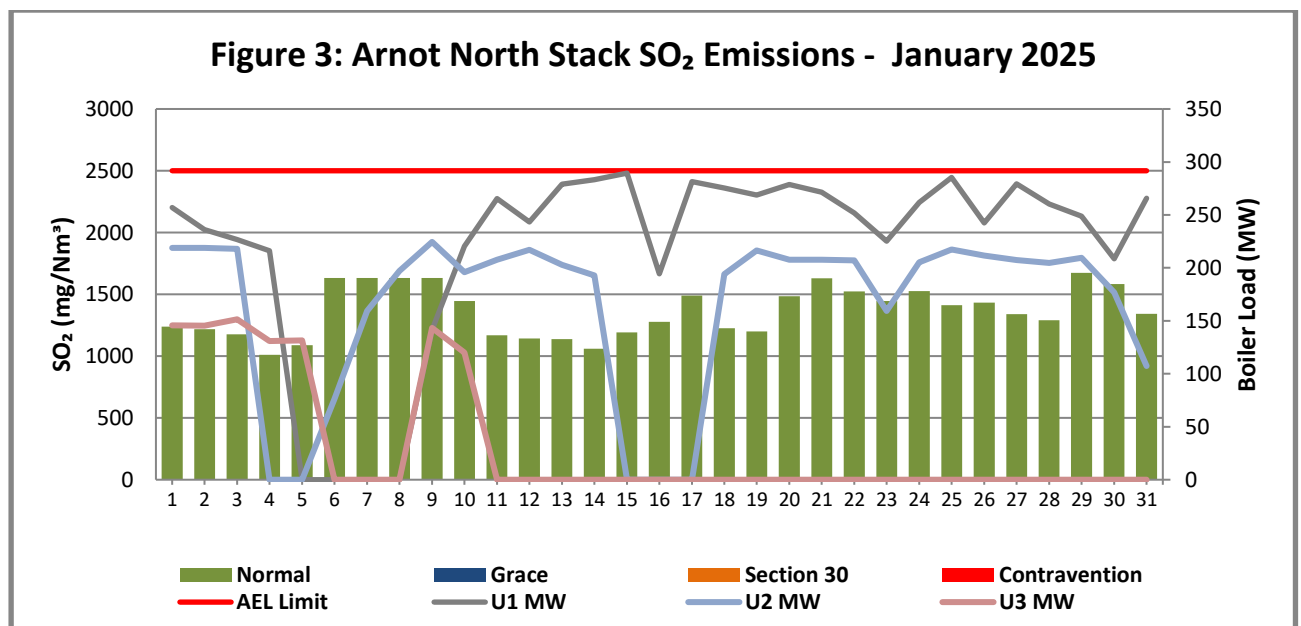


Figure 1: PM emissions (daily averages) for the month of January 2025 against the emission limit for the North Stack

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



**Figure 3: SO<sub>2</sub> emissions (daily averages) for the month of January 2025 against emission limit for the North Stack**

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

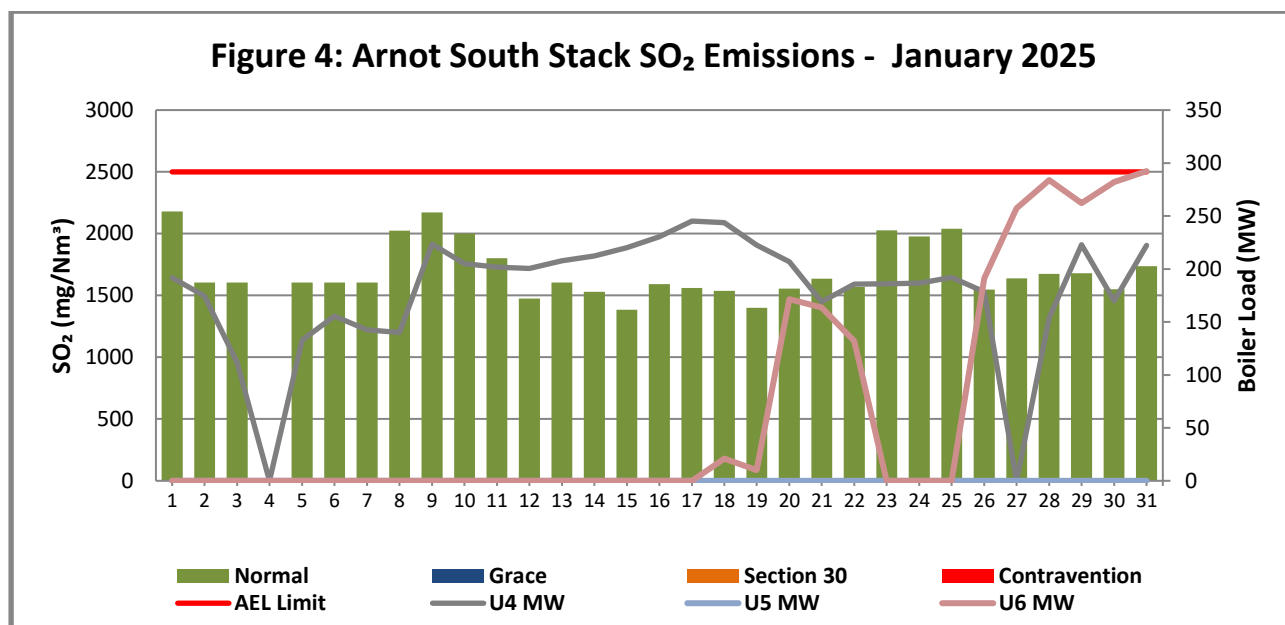


Figure 4: SO<sub>2</sub> emissions (daily averages) for the month of January 2025 against emission limit for the South Stack

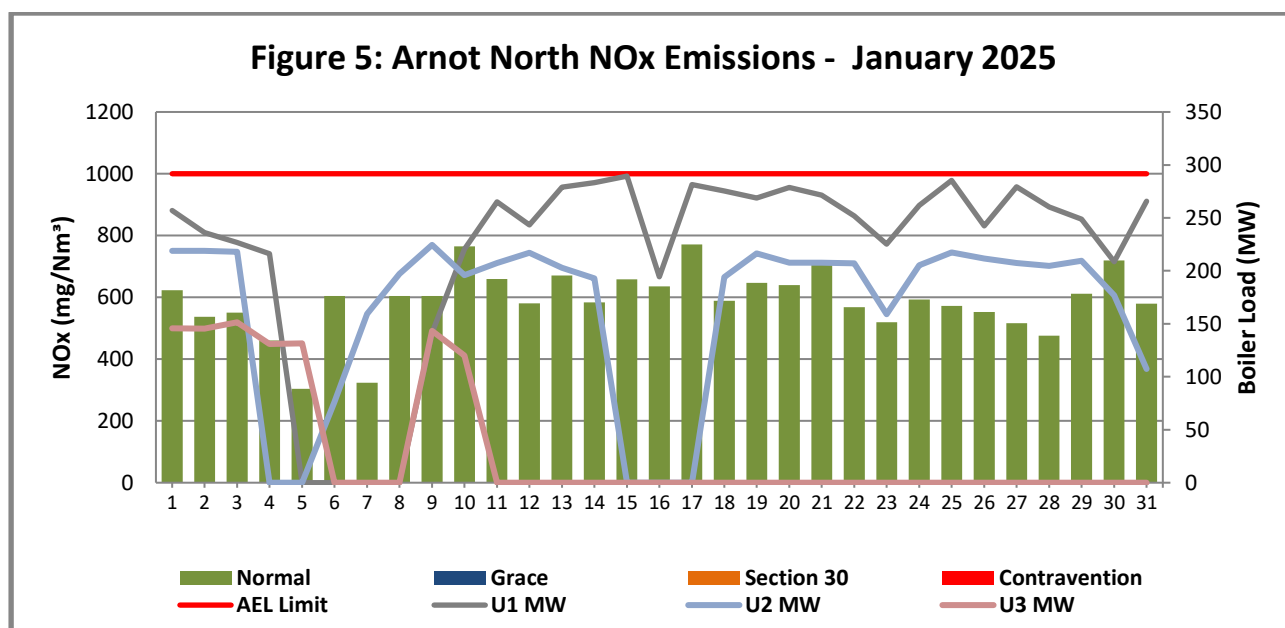
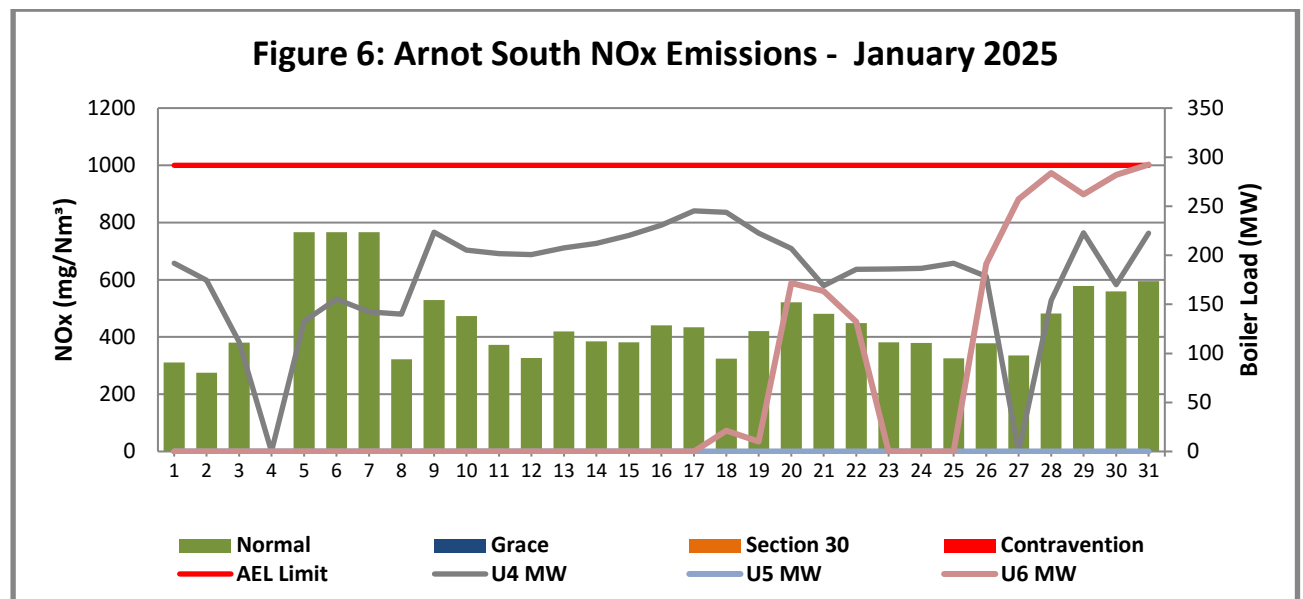


Figure 5: NO<sub>2</sub> emissions (daily averages) for the month of January 2025 against emission limit for the North Stack

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**Figure 6: NO<sub>2</sub> emissions (daily averages) for the month of January 2025 against emission limit for the South Stack**

**Table 4: Monthly tonnages for the month of January 2025**

Unit	PM (tons)	SO <sub>2</sub> (tons)	NO <sub>2</sub> (tons)
<b>Total Tons (North &amp; South Stack)</b>	99.4	3 897	1 765

**Table 5: 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	1	0
2	30	0	0
3	30	0	0
4	30	1	0
5	30	0	0
6	30	0	0

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## Light up information

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

## Complaints Register

Table 6. Complaints for the month of January 2025

No Noise, dust and offensive odors complaints registered in the month of January 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

## General

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

North and South stack operating for 1 day under PM emissions grace. One day grace for Unit 1 and one grace for Unit 4 due to leaking bag replacement during this time. 02 reliability unreliable at 20% and replaced by QAL2 value of 8.1.

Hoping the above will meet your satisfaction.

Compiled by

Date: 2025.04.16



Lawrence Machebe

**ENVIRONMENTAL OFFICER: ARNOT POWER STATION**

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

Verified by

Date:

17-04-2025



Jan-Louis Human

**SYSTEM ENGINEER: ARNOT POWER STATION**

Supported by:


Date: 2025.04.17



Rofhiwa Tshikovha

**SENIOR ENVIRONMENTAL ADVISOR: ARNOT POWER STATION**

Yours sincerely



Marcus Nemadodzi

P.P

**GENERAL MANAGER: ARNOT POWER STATION**

Date: 2025/04/22