

Ms Nompumelelo Simelane
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PO Box 437
Middleburg
1050

Date:
August 2025

Enquiries: Lesiba Kgobe
Tel: +27 13 699 7817

Ref: *Kusile Power Station AEL (17/4/AEL/MP311/12/01)*

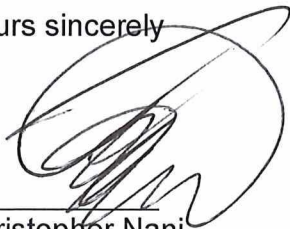
Dear Ms. Simelane

KUSILE POWER STATION'S MONTHLY EMISSIONS REPORT FOR JULY 2025

This serves as the monthly report required in terms of Section 7.6 in Kusile Power Station's Atmospheric Emission License: 17/4/AEL/MP311/12/01. The emissions are for the month of July 2025.

Hoping the above will meet your satisfaction.

Yours sincerely



Christopher Nani

GENERAL MANAGER

DATE: *24/08/2025*

1. KUSILE POWER STATION MONTHLY EMISSIONS REPORT: Atmospheric Emission License 17/4/AEL/MP311/12/01



2. Raw Materials and Products

Raw Materials and Products	Raw Material Type	Units	Max Permitted Consumption Rate	Consumption Rate July-2025
	Coal	Tons	1 818 083	968 044
	Fuel Oil	Tons	5 533	1 111
	Limestone	Tons	72 017	37 734
Production Rates	Product / By-Product Name	Units	Max Production Capacity Permitted	Indicative Production Rate July-2025
	Energy	GWh	3 321.216	1 851.72
	Ash	Tons	796 300	323 597
	Gypsum	Tons	155 100	21 131
	RE PM	kg/MWh	not specified	0.02
	RE SOx	kg/MWh	not specified	1.03

Note: Maximum energy rate is as per the maximum capacity stated in the AEL: [4 464 MW] x 24 hrs x days in Month/1000 to convert to GWh

3. Energy source characteristics

KUSILE POWER STATION'S MONTHLY EMISSIONS REPORT FOR JULY 2025 - 17/4/AEL/MP311/12/01

Fuel Characteristic	Units	Stipulated Range	Monthly Average Content
Coal Sulphur	%	1.3	0.89
Ash in Coal	%	38	33.43
Fuel Oil Sulphur	%	3.5	2.34

4. Emissions Limits (mg/Nm³)

Associated Unit/Stack	PM	SO ₂	NO _x
North Stack	50	1000	750
South Stack	50	1000	750

5. Abatement Technology (%)

Associated Unit/Stack	Technology Type	Efficiency July-2025	Technology Type	Efficiency July-2025
Unit 1	FFP	99.99%	FGD	99.85%
Unit 2	FFP	99.99%	FGD	99.87%
Unit 3	FFP	99.99%	FGD	99.85%
Unit 4	FFP	99.97%	FGD	99.96%
Unit 5	FFP	99.99%	FGD	99.95%

Note: The FFP and FGD plant does not have a bypass mode; therefore, it operates at 100% utilization.

6. Monitoring reliability (%)

Associated Unit/Stack	PM	SO ₂	NO
Unit 1	100.0	100.0	100.0
Unit 2	100.0	100.0	100.0
Unit 3	100.0	100.0	100.0
Unit 4	100.0	98.3	99.8
Unit 5	100.0	96.8	99.7

Note: NO_x emissions are measured as NO in PPM. The final NO_x value is expressed as total NO₂ equivalent.

7. Emissions Performance

Table 7.1: Monthly tonnages for the month of July - 2025

Associated Unit/Stack	PM	SO ₂	NO _x
Unit 1	5.0	505	943
Unit 2	6.1	636	870
Unit 3	4.2	515	1 002
Unit 4	15.5	115	642
Unit 5	4.0	133	691
SUM	34.91	1 904	4 148

KUSILE POWER STATION'S MONTHLY EMISSIONS REPORT FOR JULY 2025 - 17/4/AEL/MP311/12/01

Table 7.2: PM AEL Daily Compliance - July 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Mnth Avg (mg/Nm³)
Unit 1	31	0	0	0	0	2.8
Unit 2	28	0	0	0	0	2.7
Unit 3	31	0	0	0	0	1.5
Unit 4	25	0	0	0	0	7.7
Unit 5	24	0	0	0	0	2.9
SUM	139	0	0	0	0	

Table 7.3: SO₂ AEL Daily & Monthly Compliance - July 2025

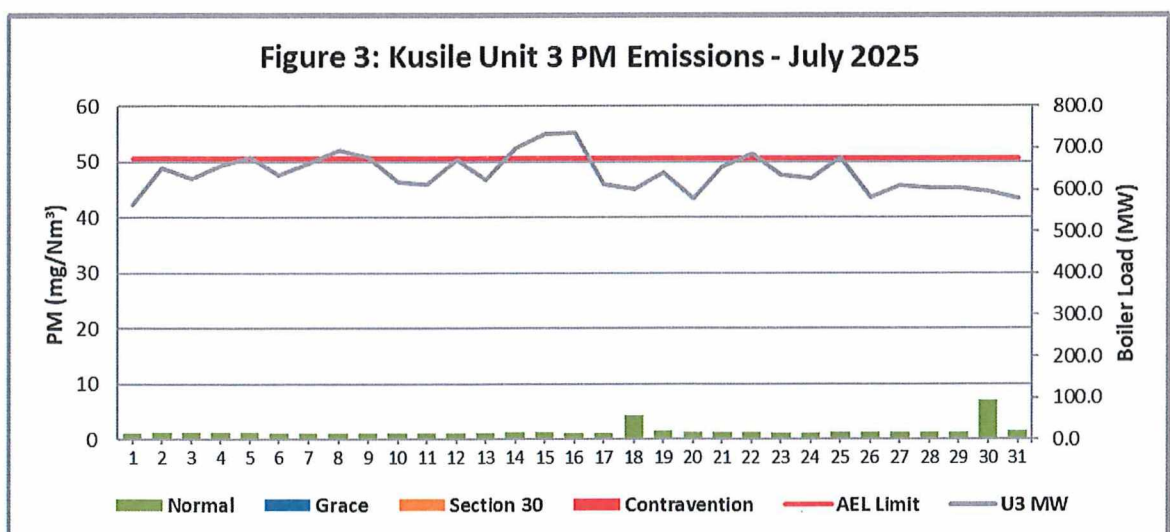
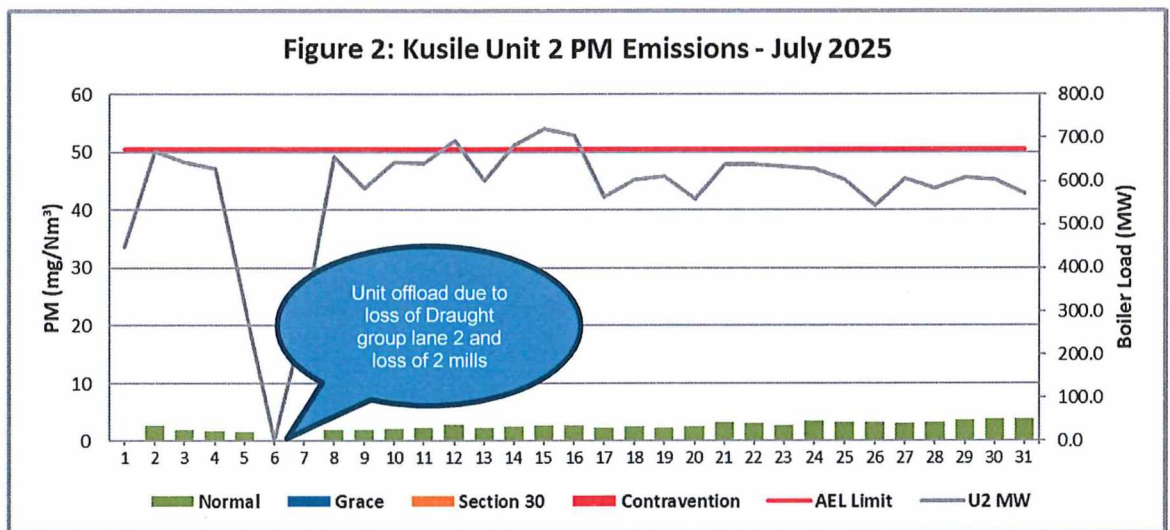
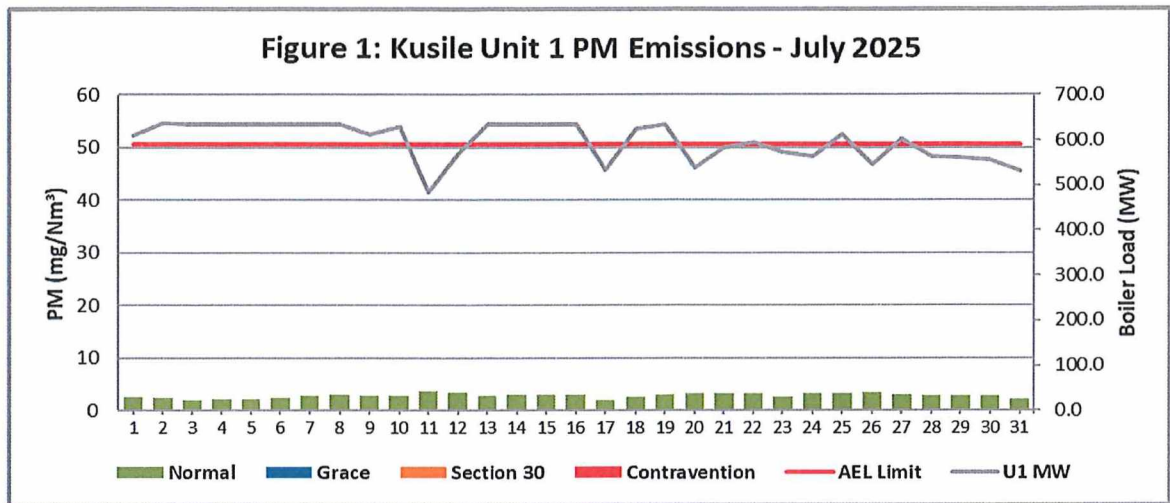
Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Mnth Avg (mg/Nm³)
Unit 1	31	0	0	0	0	276.1
Unit 2	30	0	0	0	0	262.5
Unit 3	31	0	0	0	0	178.6
Unit 4	27	0	0	0	0	53.2
Unit 5	26	0	0	0	0	78.6
SUM	145	0	0	0	0	

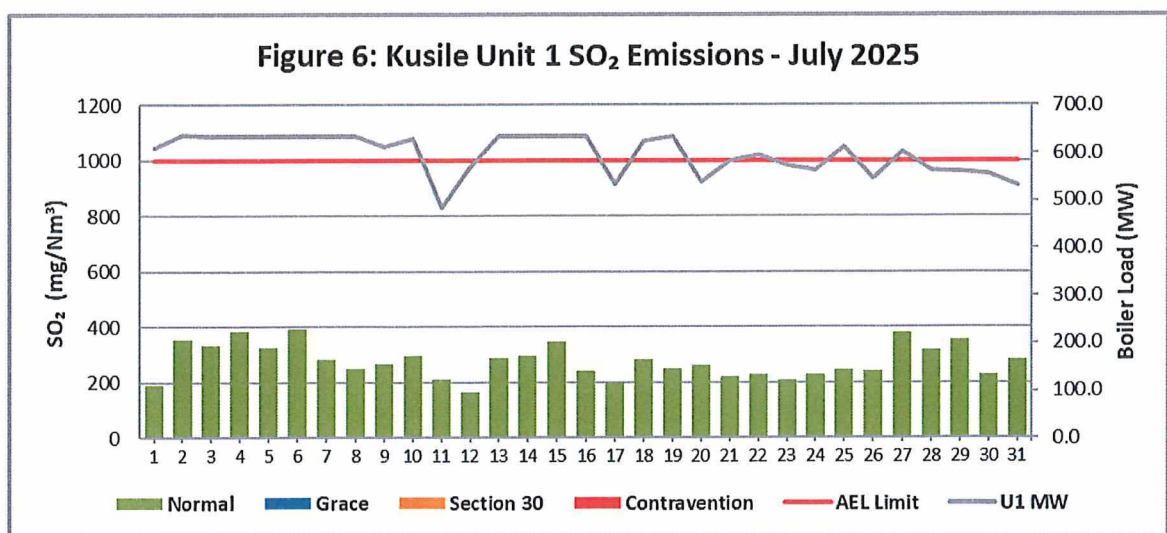
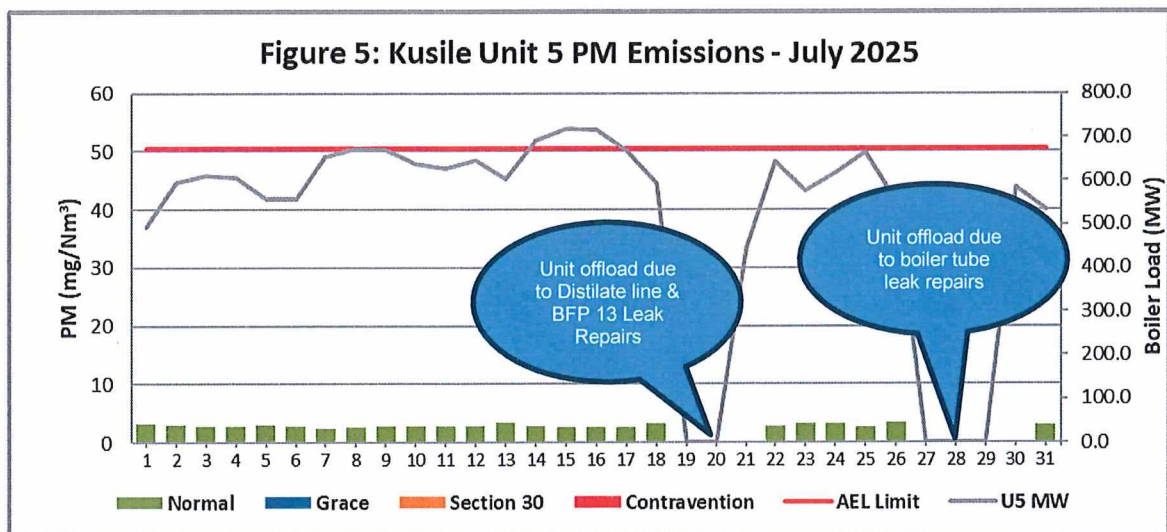
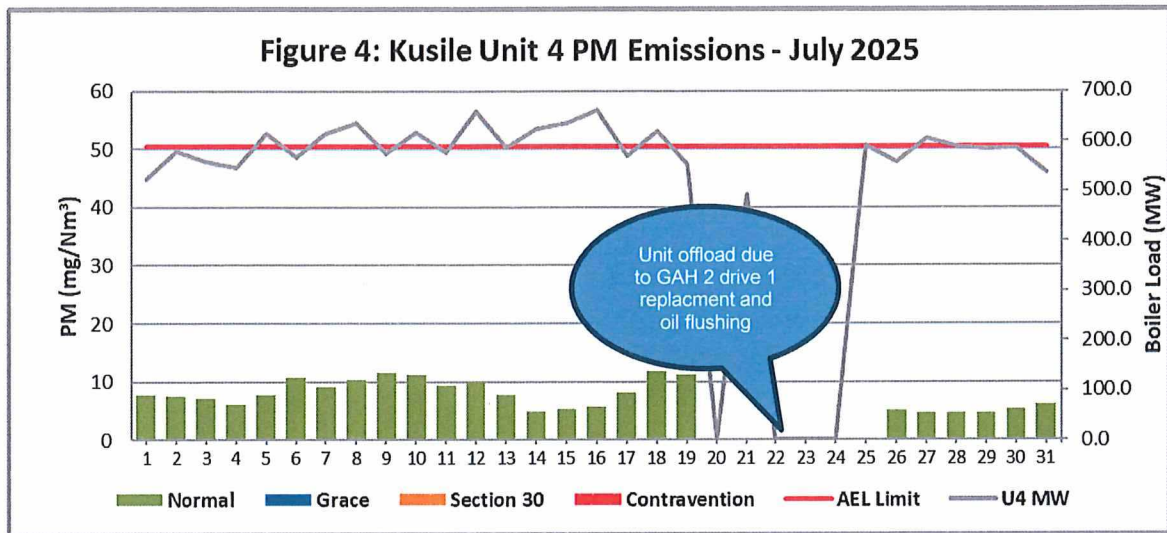
Table 7.4: NO_x AEL Daily Compliance - July 2025

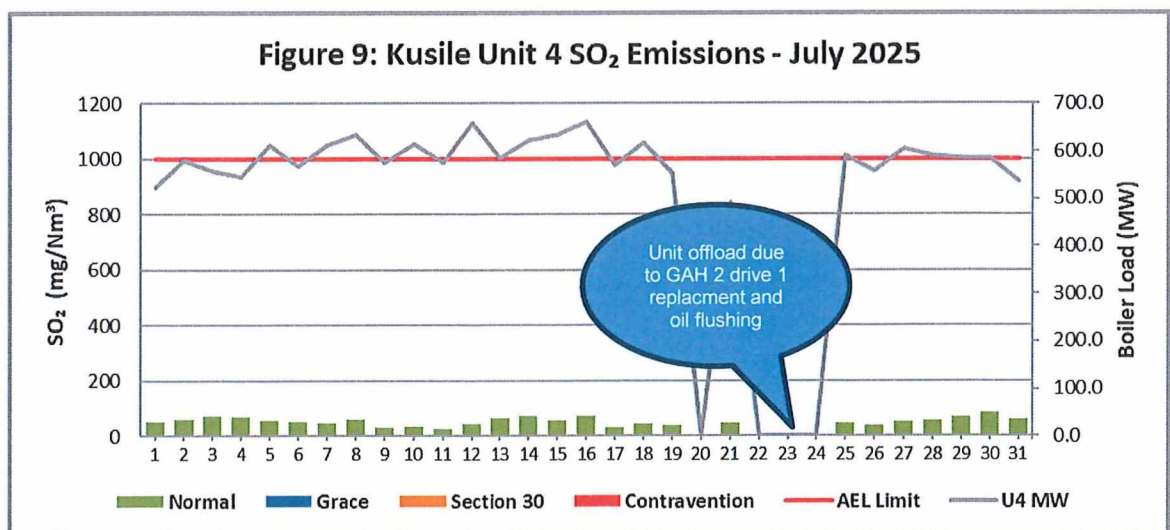
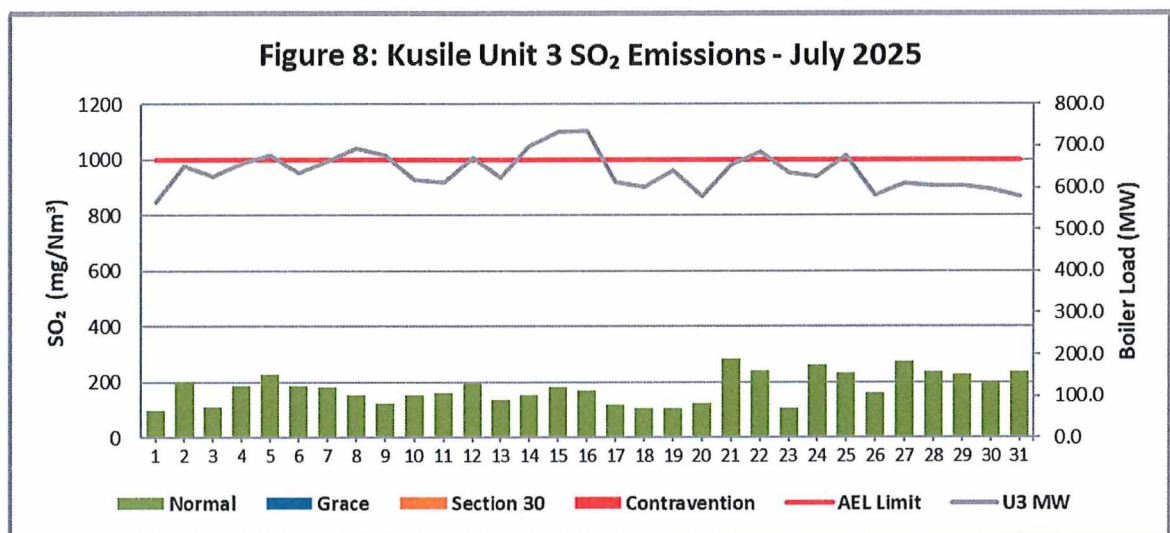
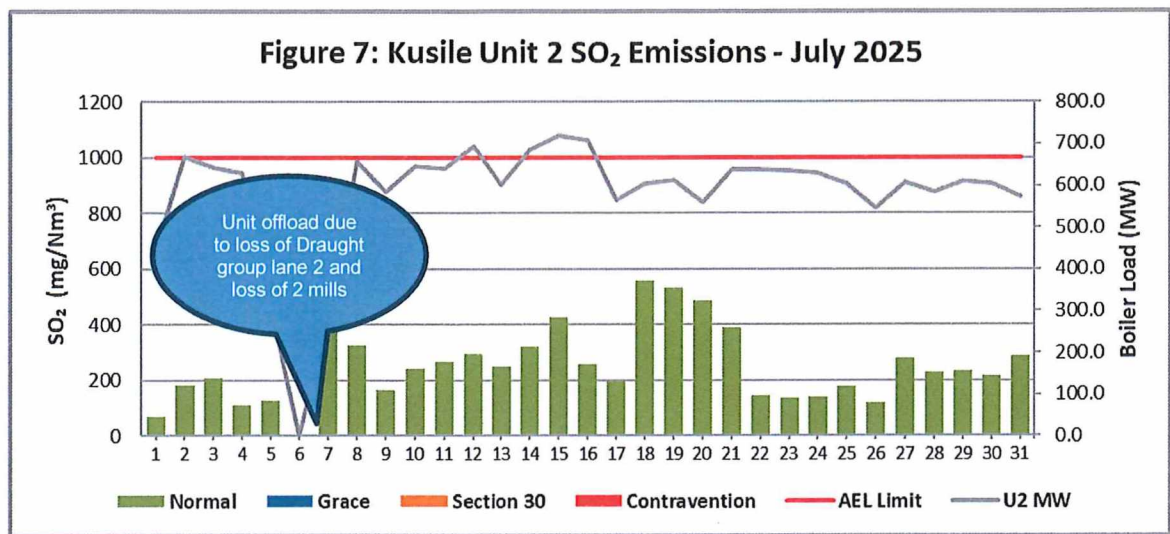
Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Mnth Avg (mg/Nm³)
Unit 1	31	0	0	0	0	521.3
Unit 2	30	0	0	0	0	364.3
Unit 3	31	0	0	0	0	362.6
Unit 4	27	0	0	0	0	299.6
Unit 5	26	0	0	0	0	414.7
SUM	145	0	0	0	0	

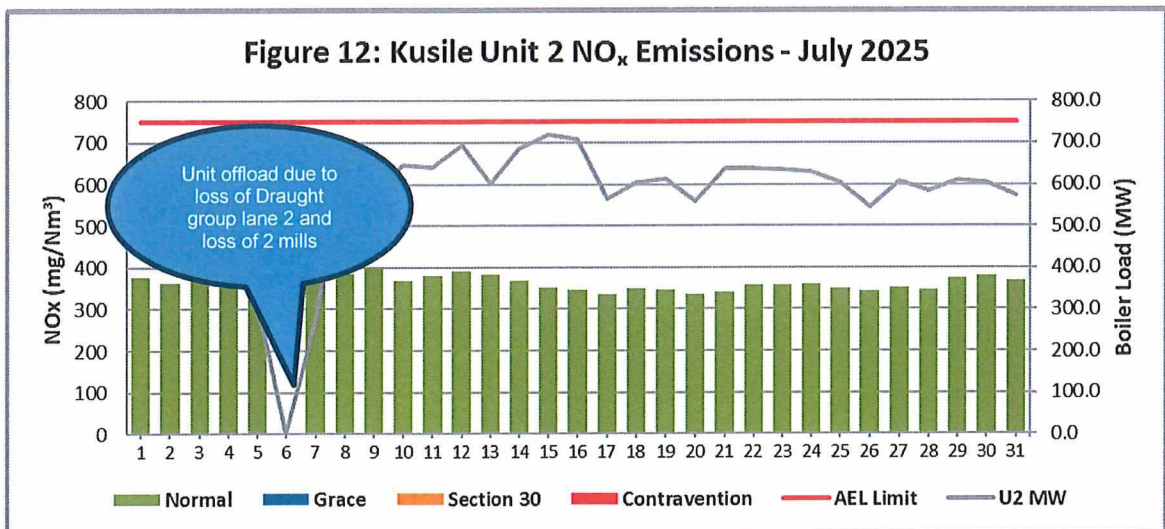
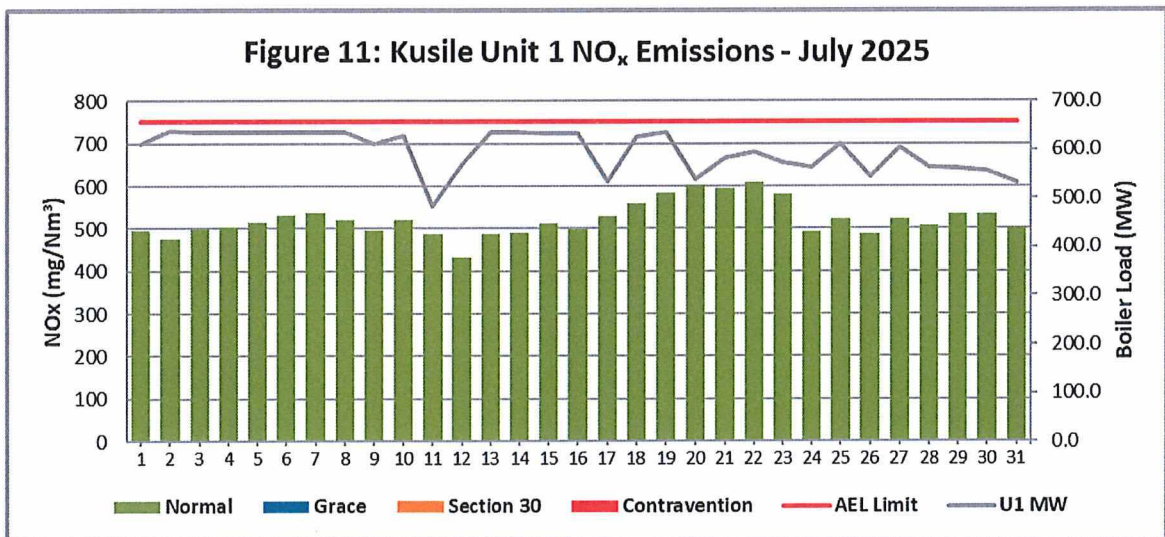
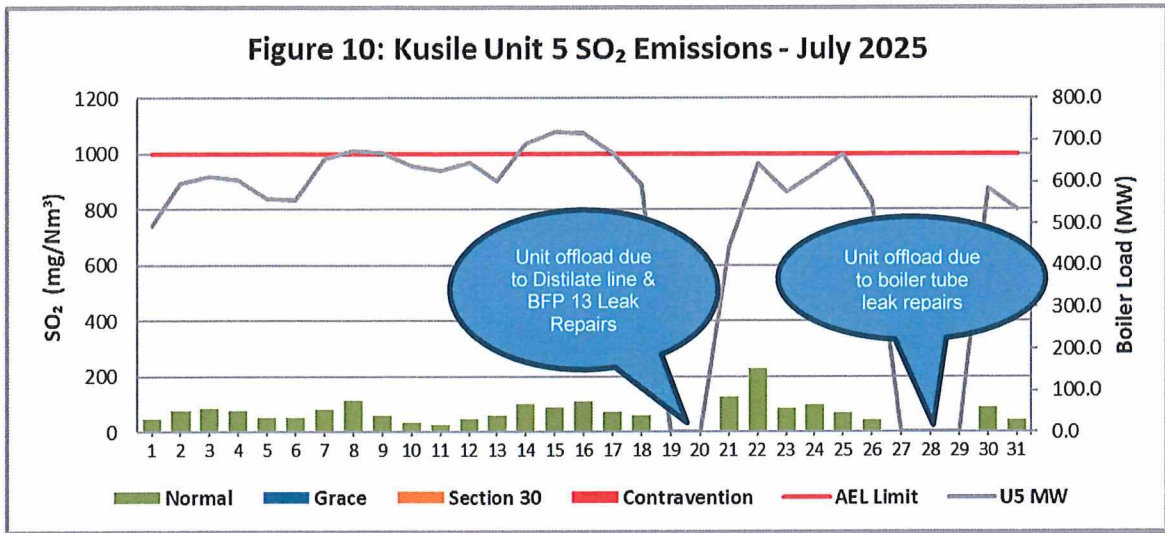
Table 7.5: Legend Description

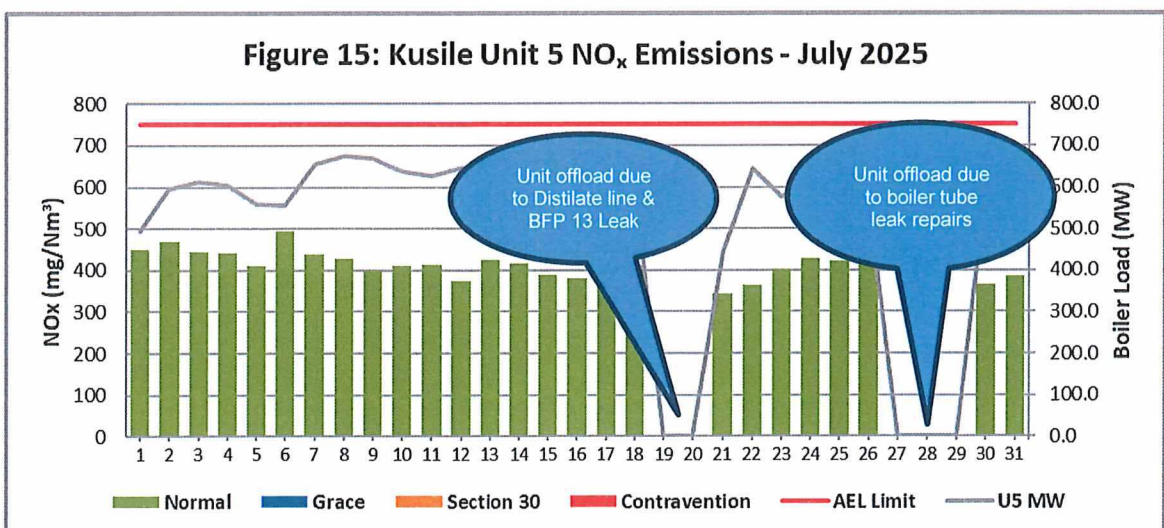
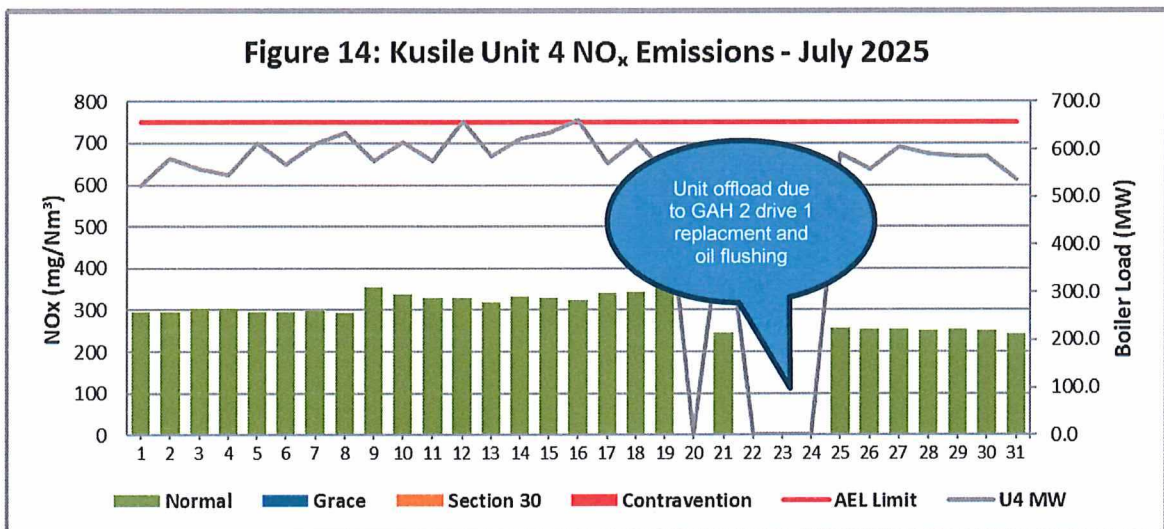
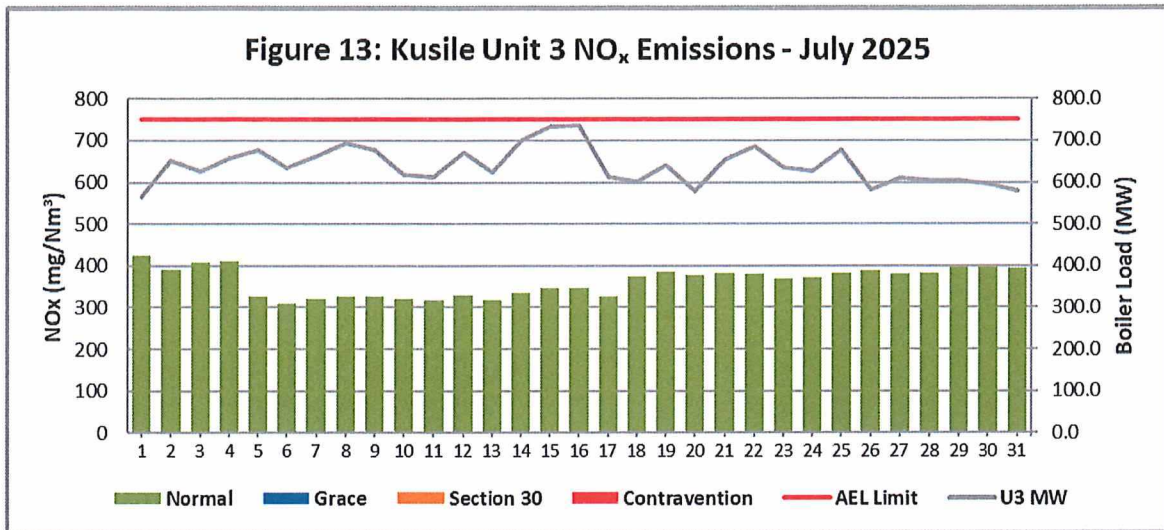
Condition	Colour	Description
Normal		Emissions below Emission Limit Value (ELV)
Grace		Emissions above the ELV during grace period
Section 30		Emissions above ELV during a NEMA S30 incident
Contravention		Emissions above ELV but outside grace or S30 incident conditions











8. Correlation and Parallel test status

Unit 1:

- Unit 1 is operating with unity curves for particulate matter and gaseous emissions. The full PM correlation test and gaseous emissions parallel tests completed on the 13th of August 2025. Awaiting for reports from service provider.

Unit 2:

- Unit 2 is operating with valid correlation curves and parallel factors.

Unit 3

- Unit 3 is operating with valid correlation curves and parallel factors.

Unit 4:

- Unit 4 is operating with valid correlation curves and parallel factors.

Unit 5

- Unit 5 is operating with valid correlation curves and parallel factors.

9. Shut down and Light up information

Event Description		Event 1	
Unit 2	Breaker Open (BO)	1:50 pm	2025/07/05
	Draught Group (DG) Shut Down (SD)	DG did not trip or SD	DG did not trip or SD
	BO to DG SD (duration)	n/a	DD:HH:MM
	Fires in time		
	Synch. to Grid (or BC)		
	Fires in to BC (duration)		DD:HH:MM
	Emissions below limit from BC (end date)		
	Emissions below limit from BC (duration)		DD:HH:MM

KUSILE POWER STATION'S MONTHLY EMISSIONS REPORT FOR JULY 2025 - 17/4/AEL/MP311/12/01

Event Description		Event 1	
Unit 4	Breaker Open (BO)	10:20 pm	2025/07/19
	Draught Group (DG) Shut Down (SD)	DG did not trip or SD	DG did not trip or SD
	BO to DG SD (duration)	n/a	DD:HH:MM
	Fires in time		
	Synch. to Grid (or BC)		
	Fires in to BC (duration)		DD:HH:MM
	Emissions below limit from BC (end date)		
	Emissions below limit from BC (duration)		DD:HH:MM

Event Description		Event 1		Event 2		Event 3		Event 4	
Unit 5	Breaker Open (BO)	1:10 pm	2025/07/06	9:00 pm	2025/07/18	5:20 pm	2025/07/24	11:50 pm	2025/07/26
	Draught Group (DG) Shut Down (SD)	DG did not trip or SD	DG did not trip or SD	DG did not trip or SD	DG did not trip or SD	DG did not trip or SD	DG did not trip or SD	DG did not trip or SD	DG did not trip or SD
	BO to DG SD (duration)	n/a	DD:H H:M M	n/a	DD:HH: MM	n/a	DD:H H:MM	n/a	DD:H H:MM
	Fires in time								
	Synch. to Grid (or BC)								
	Fires in to BC (duration)		DD:H H:M M		DD:HH: MM		DD:H H:MM		DD:H H:MM
	Emissions below limit from BC (end date)								
	Emissions below limit from BC (duration)		DD:H H:M M		DD:HH: MM		DD:H H:MM		DD:H H:MM

10.Complaints

There were no complaints for the month of July 2025

Source Code / Name	Root Cause Analysis	Calculation of Impacts / emissions associated with the incident	Dispersion modeling of pollutants where applicable	Measures implemented to prevent reoccurrence
No complaints reported for the month of July 2025.				