



Ms Nompumelelo Simelane
Nkangala District Municipality
PO Box 437
Middleburg
1050

Date:

September 2025

Enquiries: Lesiba Kgobe
Tel: +27 13 699 7817

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

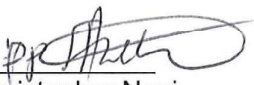
Dear Ms. Simelane

KUSILE POWER STATION'S MONTHLY EMISSIONS REPORT FOR AUGUST 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 August 2025.

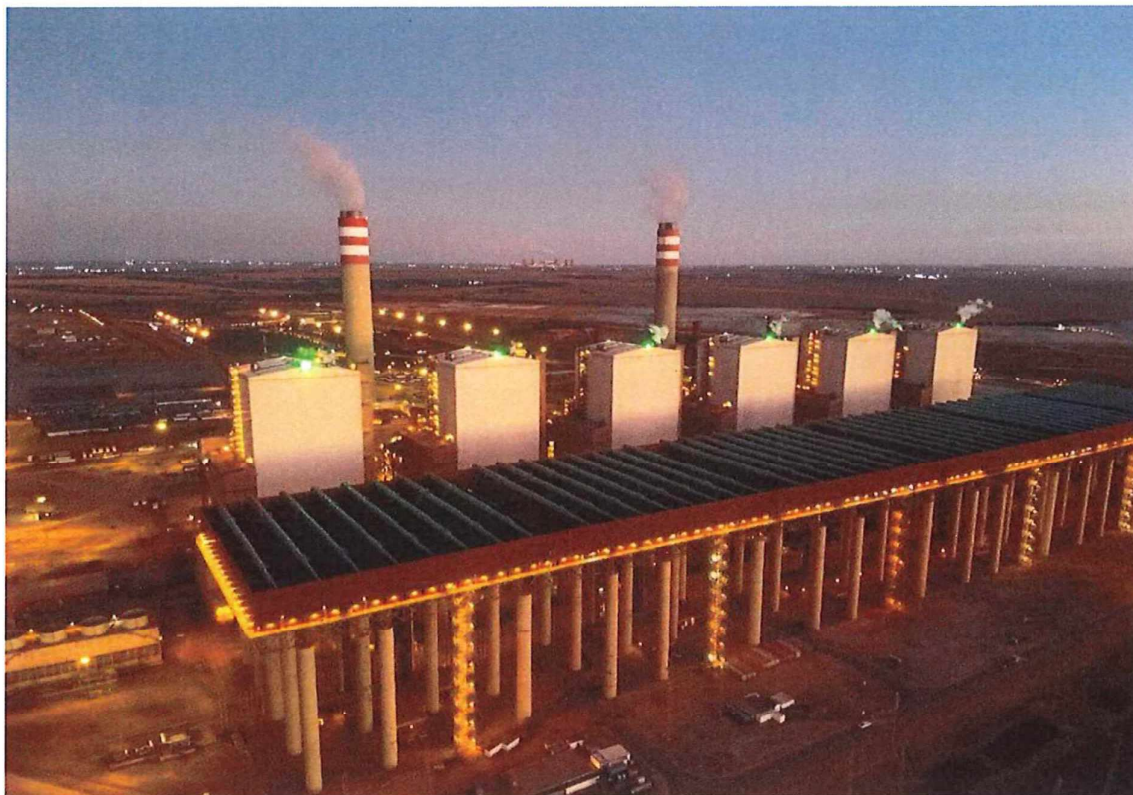
Hoping the above will meet your satisfaction.

Yours sincerely


Christopher Nani
GENERAL MANAGER
DATE: 26/09/2025

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

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 Aug-2025
	Coal	Tons	1 818 083	1 100 574
	Fuel Oil	Tons	5 533	1 091.41
	Limestone	Tons	72 017	38 147
Production Rates	Product / By-Product Name	Units	Max Production Capacity Permitted	Indicative Production Rate Aug-2025
	Energy	GWh	3 321.216	1 680.60
	Ash	Tons	796 300	349 542
	Gypsum	Tons	155 100	21 362
	RE PM	kg/MWh	not specified	0.03
	RE SOx	kg/MWh	not specified	0.89

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

Fuel Characteristic	Units	Stipulated Range	Monthly Average Content
Coal Sulphur	%	1.3	0.88
Ash in Coal	%	38	31.76
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 Aug-2025	Technology Type	Efficiency Aug-2025
Unit 1	FFP	99.99%	FGD	99.83%
Unit 2	FFP	99.99%	FGD	99.92%
Unit 3	FFP	99.99%	FGD	99.85%
Unit 4	FFP	99.96%	FGD	99.95%
Unit 5	FFP	99.99%	FGD	99.97%

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	88.9
Unit 2	100.0	100.0	100.0
Unit 3	100.0	98.7	100.0
Unit 4	100.0	98.7	99.6
Unit 5	100.0	98.3	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 August - 2025

Associated Unit/Stack	PM	SO ₂	NO _x
Unit 1	2.4	361	575
Unit 2	8.0	290	747
Unit 3	3.8	525	875
Unit 4	30.8	181	679
Unit 5	6.3	138	757
SUM	51.38	1 494	3 634

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

Table 7.2: PM AEL Daily Compliance - August 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Mnth Avg (mg/Nm³)
Unit 1	14	0	0	0	0	2.7
Unit 2	31	0	0	0	0	3.6
Unit 3	26	0	0	0	0	2.0
Unit 4	30	0	0	0	0	12.9
Unit 5	30	0	0	0	0	3.1
SUM	131	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Mnth Avg (mg/Nm³)
Unit 1	18	0	0	0	0	281.4
Unit 2	31	0	0	0	0	126.5
Unit 3	27	0	0	0	0	256.9
Unit 4	31	0	0	0	0	72.1
Unit 5	31	0	0	0	0	60.8
SUM	138	0	0	0	0	

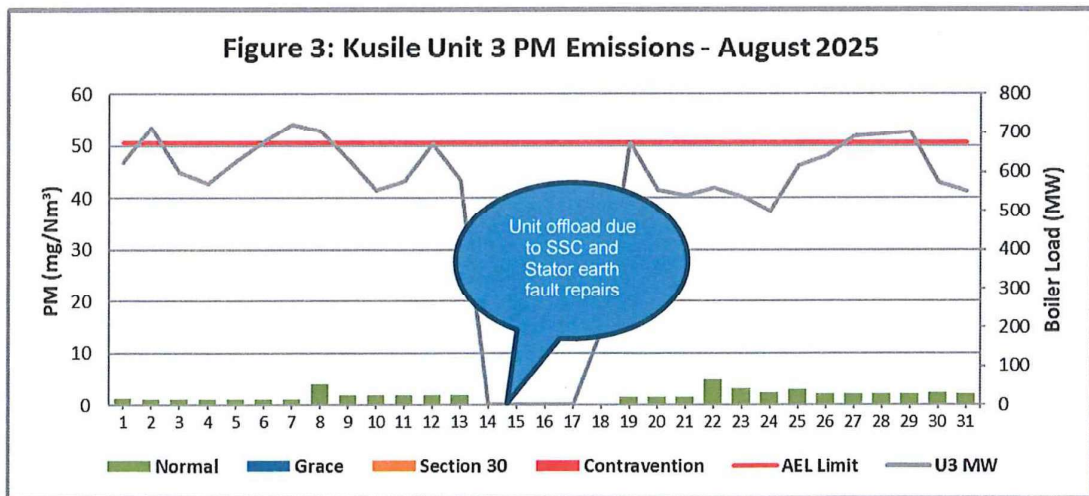
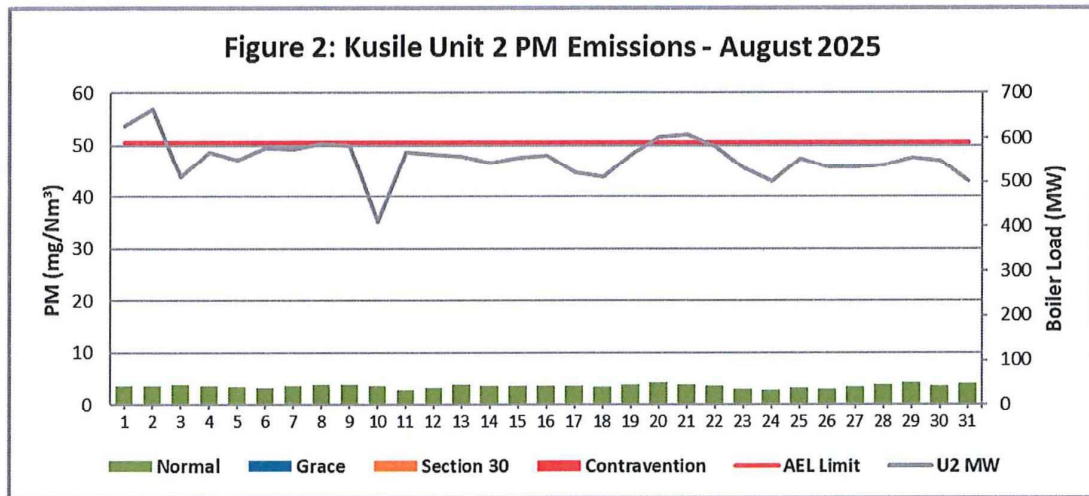
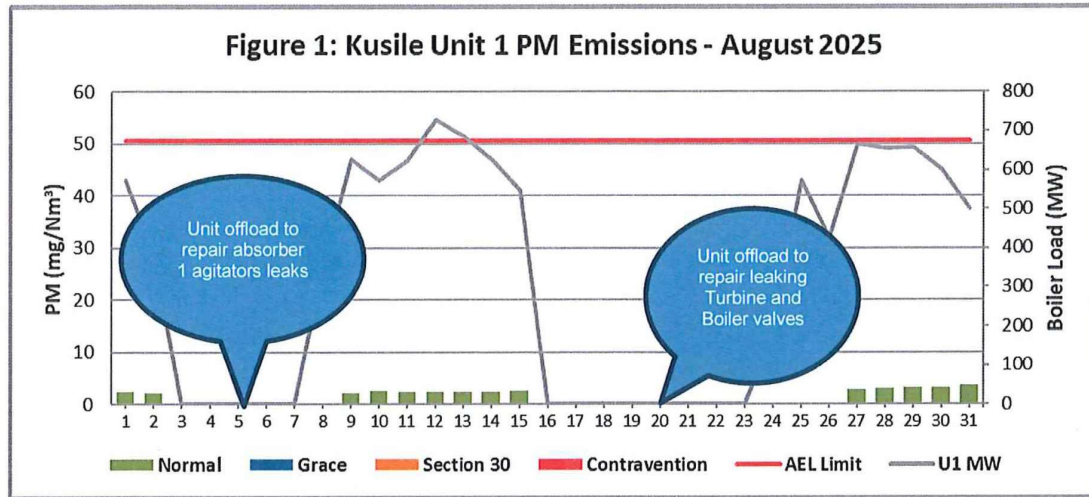
Table 7.4: NO_x AEL Daily Compliance - August 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Mnth Avg (mg/Nm³)
Unit 1	18	0	0	0	0	519.9
Unit 2	31	0	0	0	0	327.3
Unit 3	27	0	0	0	0	443.3
Unit 4	31	0	0	0	0	271.4
Unit 5	31	0	0	0	0	345.7
SUM	138	0	0	0	0	

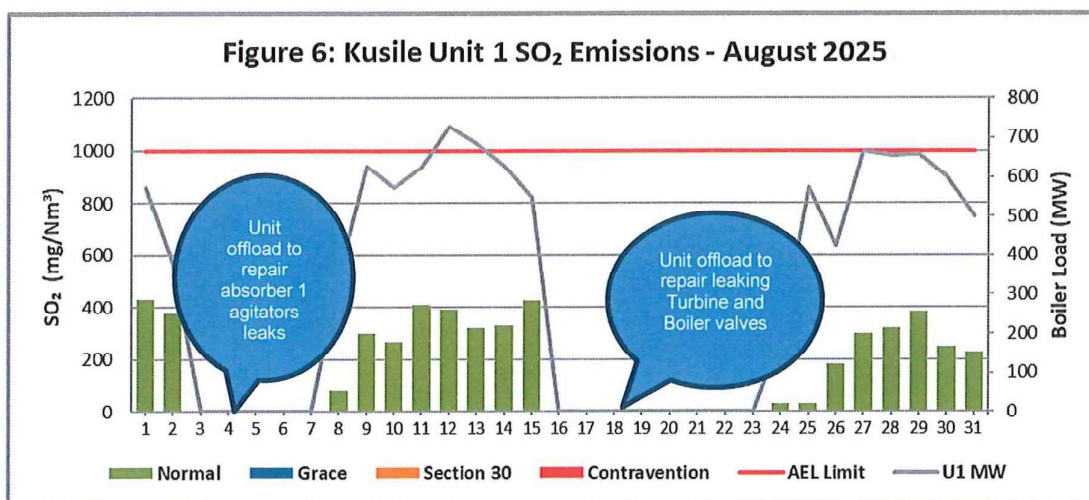
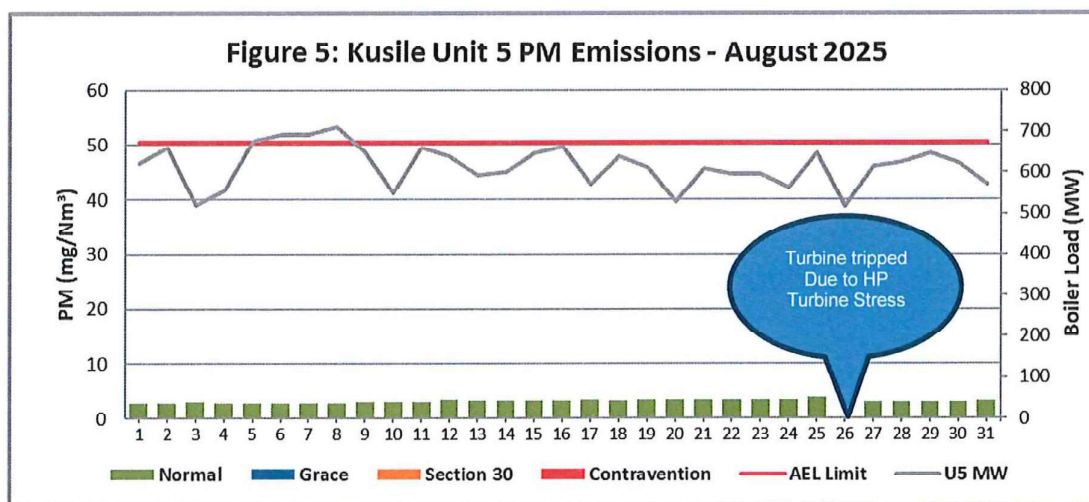
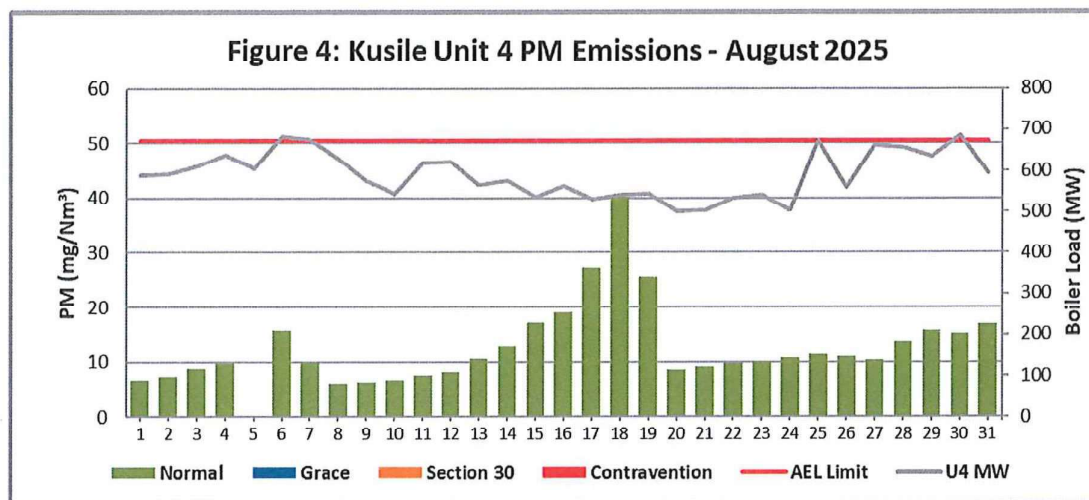
Table 7.5: Legend Description

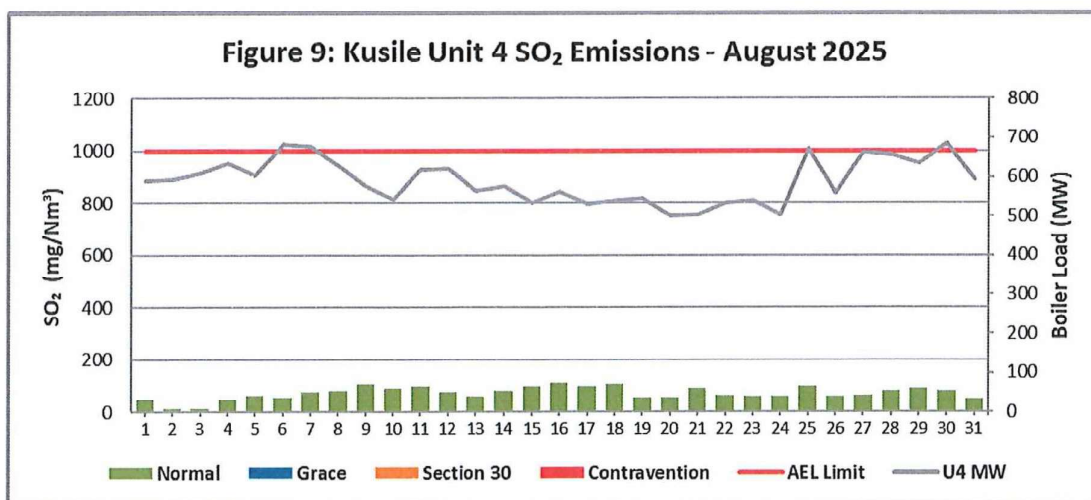
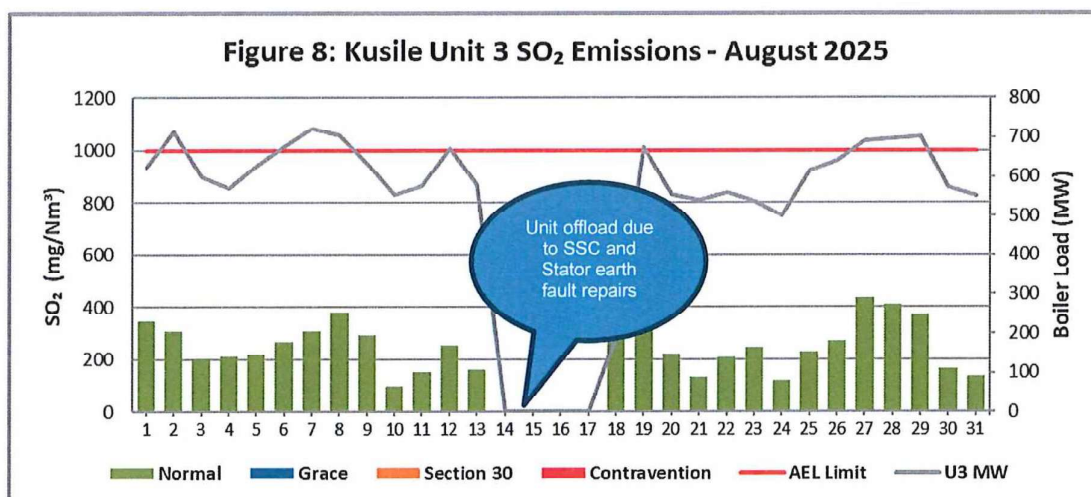
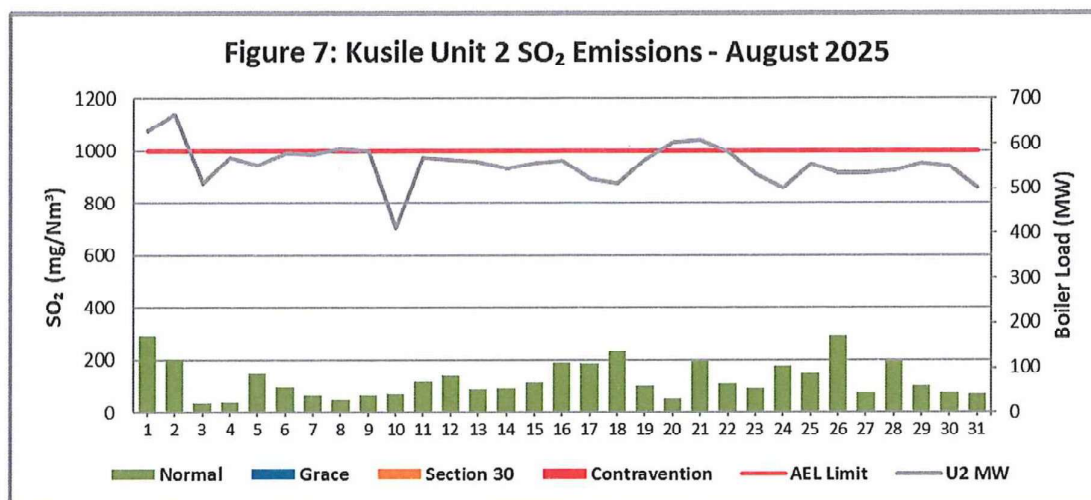
Condition	Colour	Description
Normal		Emissions below Emission Limit Value (ELV)
Grace		Emissions above the ELV during grace period
Section 30		Emissions above ELV during a NEMA S30 incident
Contravention		Emissions above ELV but outside grace or S30 incident conditions

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17/4/AEL/MP311/12/01

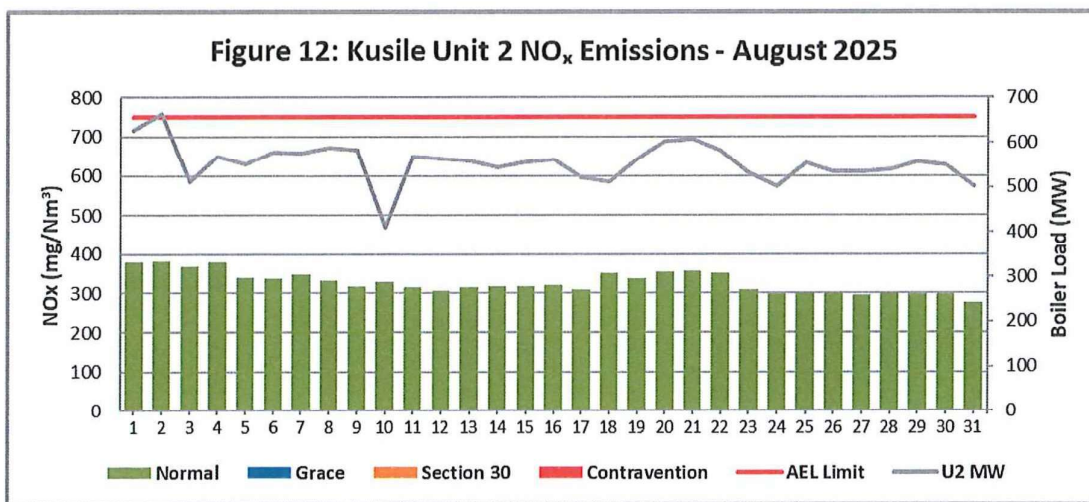
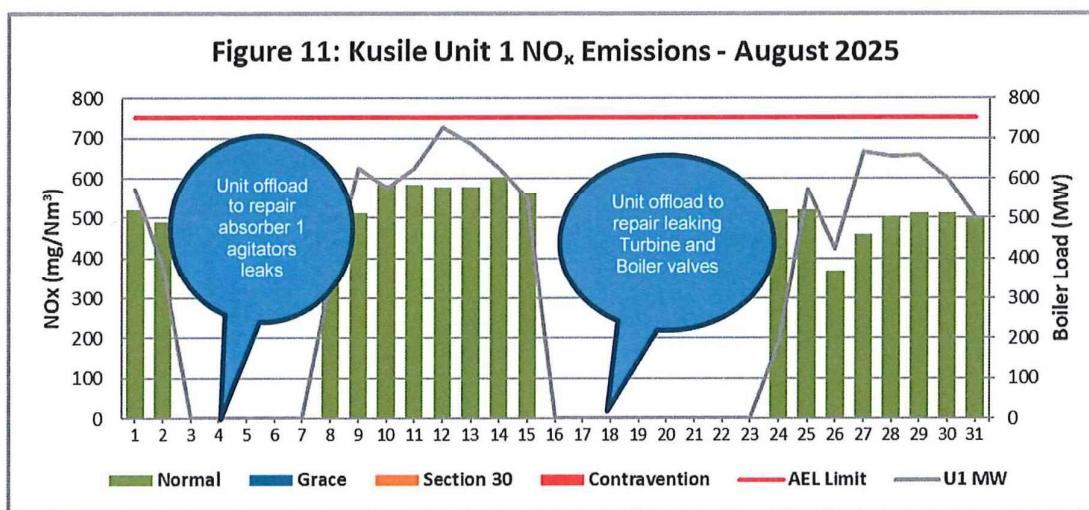
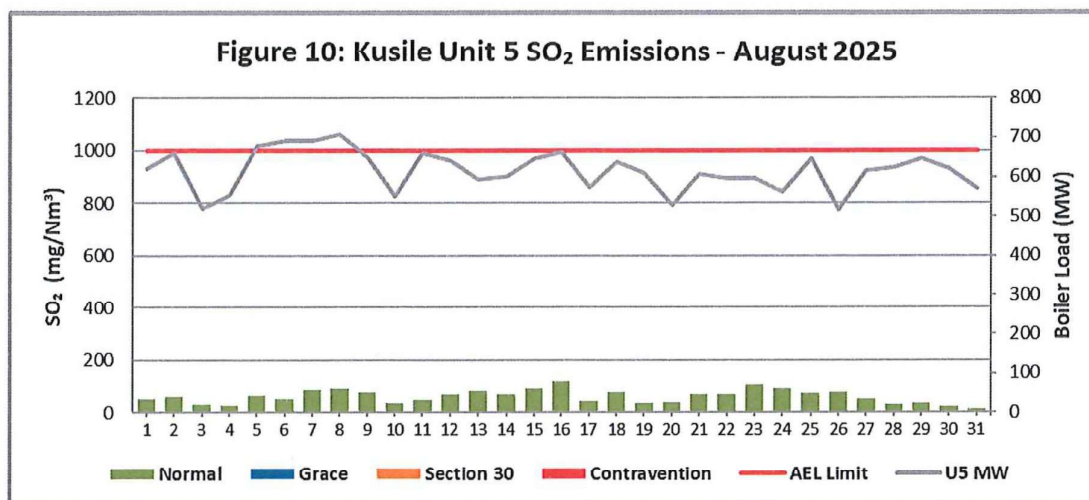


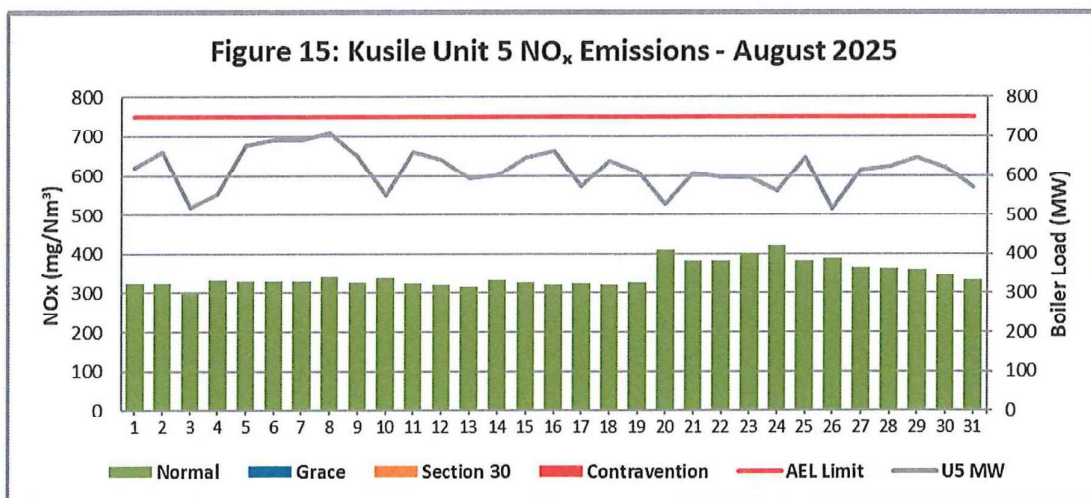
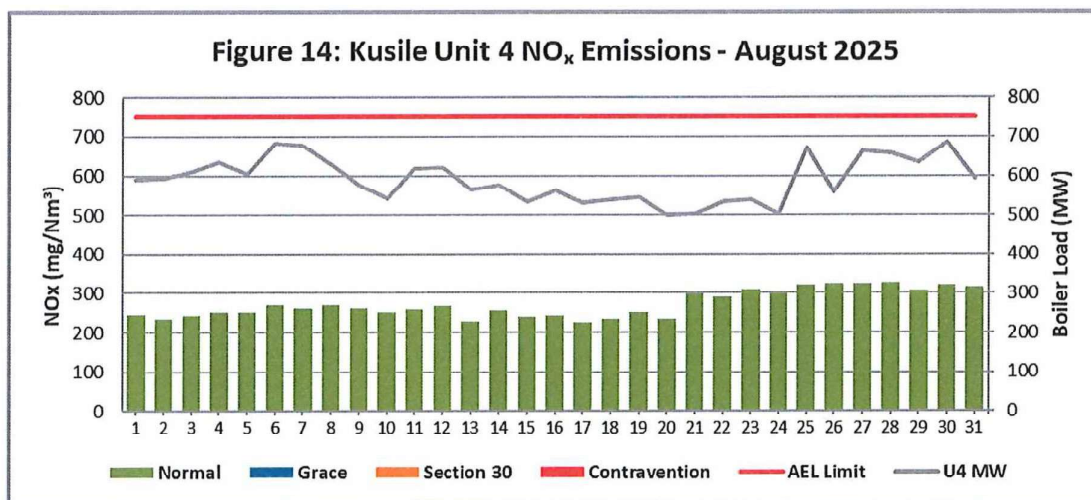
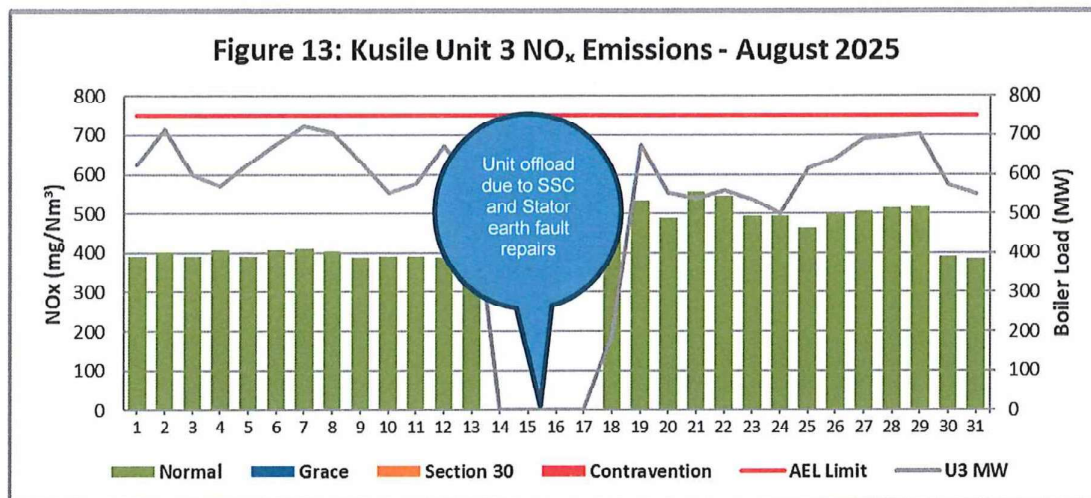
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8. Correlation and Parallel test status

Unit 1:

- Unit 1 is operating with valid PM correlation curves.
- Unit 1 is operating with unity curves gaseous emissions. The full gaseous correlation tests was 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		Event 2	
Unit 1	Breaker Open (BO)	12:50 am	2025/08/02	10:30 pm	2025/08/15
	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
	BO to DG SD (duration)	n/a	DD:HH:MM	n/a	DD:HH:MM
	Fires in time				
	Synch. to Grid (or BC)	3:50 pm	2025/08/08		
	Fires in to BC (duration)		DD:HH:MM		DD:HH:MM
	Emissions below limit from BC (end date)				
	Emissions below limit from BC (duration)		DD:HH:MM		DD:HH:MM

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Event Description		Event 1	
Unit 2	Breaker Open (BO)	7:05 pm	2025/08/10
	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	
Unit 3	Breaker Open (BO)	9:05 pm	2025/08/13
	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

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Event Description		Event 1	
Unit 4	Breaker Open (BO)	11:30 pm	2025/08/04
	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	
Unit 5	Breaker Open (BO)	2:40 am	2025/08/12	4:30 pm	2025/08/25
	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
	BO to DG SD (duration)	n/a	DD:HH:MM	n/a	DD:HH:MM
	Fires in time				
	Synch. to Grid (or BC)				
	Fires in to BC (duration)		DD:HH:MM		DD:HH:MM
	Emissions below limit from BC (end date)				
	Emissions below limit from BC (duration)		DD:HH:MM		DD:HH:MM

10.Complaints

There were no complaints for the month of August 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 August 2025.				