



**Ms Nompumelelo Simelane**  
Nkangala District Municipality  
PO Box 437  
Middleburg  
1050

Date:

*December 2025*

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

Dear Ms. Simelane

**KUSILE POWER STATION'S MONTHLY EMISSIONS REPORT FOR NOVEMBER 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 November 2025.

Hoping the above will meet your satisfaction.

Yours sincerely

Christopher Nani  
**GENERAL MANAGER**

DATE: *2025-12-22*.

KUSILE POWER STATION'S MONTHLY EMISSIONS REPORT FOR NOVEMBER 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 Nov-2025
	Coal	Tons	1 818 083	963 524
	Fuel Oil	Tons	5 533	1 880.35
	Limestone	Tons	72 017	36 692
Production Rates	Product / By-Product Name	Units	Max Production Capacity Permitted	Indicative Production Rate Nov-2025
	Energy	GWh	3 321.216	1 771.72
	Ash	Tons	796 300	296 779
	Gypsum	Tons	155 100	20 548
	RE PM	kg/MWh	not specified	0.03
	RE SOx	kg/MWh	not specified	1.45

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	0.85
Ash in Coal	%	38	30.80
Fuel Oil Sulphur	%	3.5	2.31

### 4. Emissions Limits (mg/Nm<sup>3</sup>)

Associated Unit/Stack	PM	SO <sub>2</sub>	NO <sub>x</sub>
North Stack	50	1000	750
South Stack	50	1000	750

### 5. Abatement Technology (%)

Associated Unit/Stack	Technology Type	Efficiency Nov-2025	Technology Type	Efficiency Nov-2025
Unit 1	FFP	99.99%	FGD	99.66%
Unit 2	FFP	99.96%	FGD	99.80%
Unit 3	FFP	99.99%	FGD	99.82%
Unit 4	FFP	99.98%	FGD	99.93%
Unit 5	FFP	99.99%	FGD	99.93%

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 <sub>2</sub>	NO
Unit 1	100.0	92.9	86.4
Unit 2	100.0	92.9	89.0
Unit 3	100.0	90.3	83.1
Unit 4	99.8	100.0	99.5
Unit 5	100.0	99.3	99.2

Note: NO<sub>x</sub> emissions are measured as NO in PPM. The final NO<sub>x</sub> value is expressed as total NO<sub>2</sub> equivalent.

### 7. Emissions Performance

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

Associated Unit/Stack	PM	SO <sub>2</sub>	NO <sub>x</sub>
Unit 1	6.4	1 137	1 294
Unit 2	22.1	614	797
Unit 3	4.3	420	689
Unit 4	10.3	189	575
Unit 5	5.3	217	953
<b>SUM</b>	<b>48.33</b>	<b>2 577</b>	<b>4 309</b>

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Table 7.2: PM AEL Daily Compliance - November 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Mnth Avg (mg/Nm <sup>3</sup> )
Unit 1	28	0	0	0	0	3.1
Unit 2	30	0	0	0	0	10.8
Unit 3	19	0	0	0	0	2.6
Unit 4	24	0	0	0	0	5.2
Unit 5	30	0	0	0	0	2.6
<b>SUM</b>	<b>131</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

Table 7.3: SO<sub>2</sub> AEL Daily & Monthly Compliance – November 2025

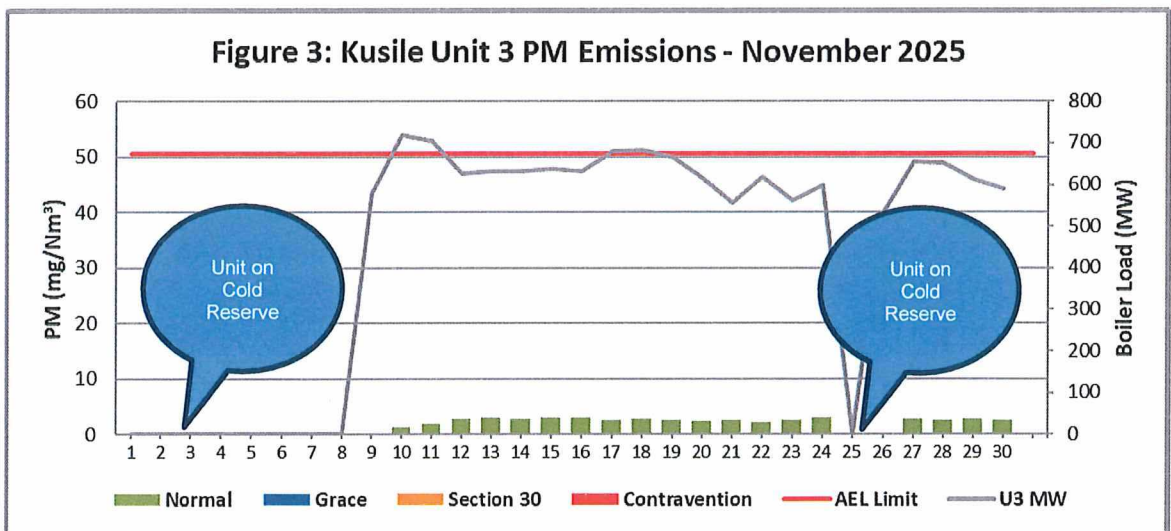
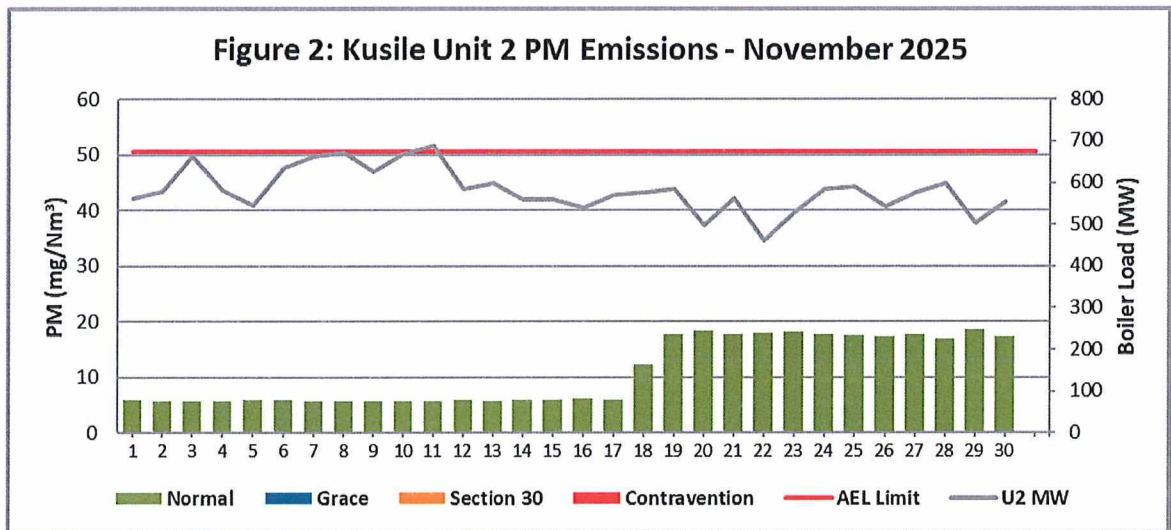
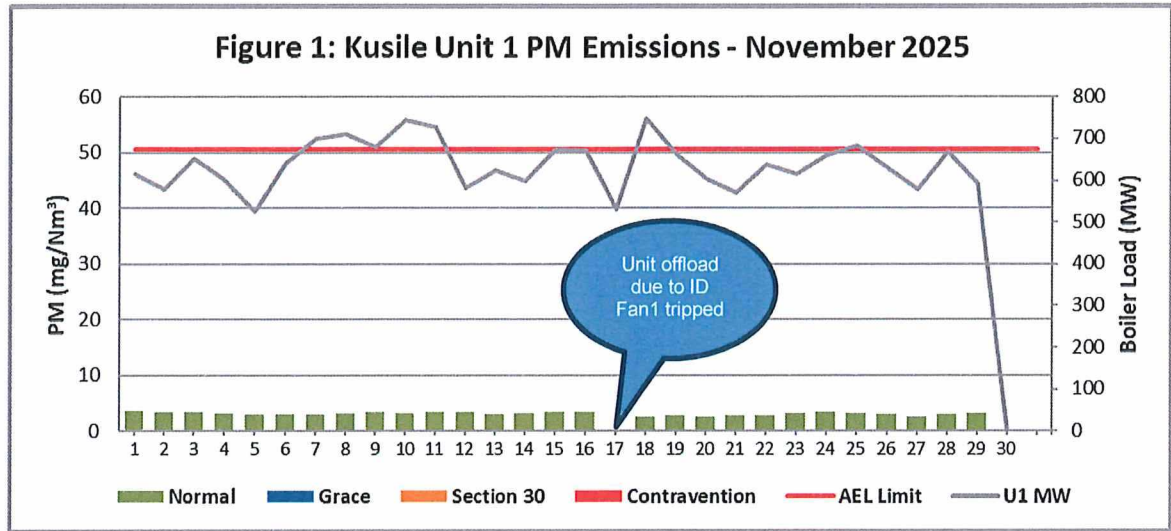
Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Mnth Avg (mg/Nm <sup>3</sup> )
Unit 1	29	0	0	0	0	498.9
Unit 2	30	0	0	0	0	268.6
Unit 3	21	0	0	0	0	226.3
Unit 4	27	0	0	0	0	80.7
Unit 5	30	0	0	0	0	96.9
<b>SUM</b>	<b>137</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

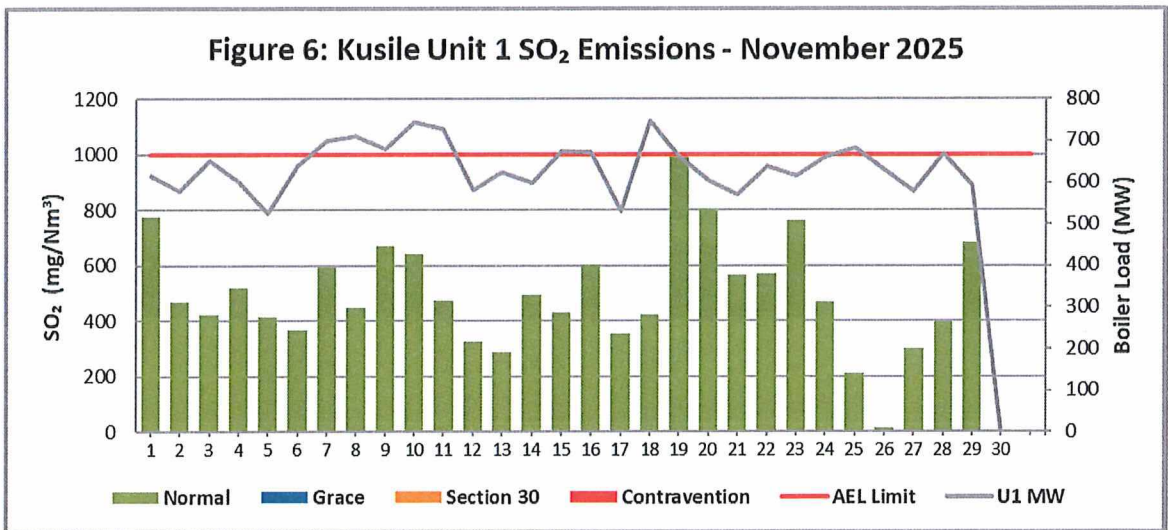
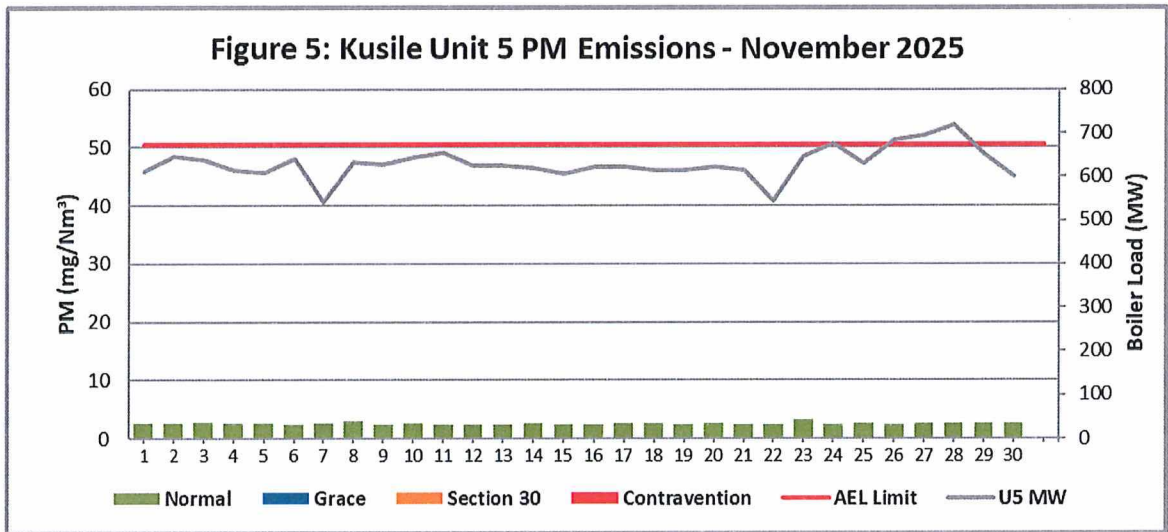
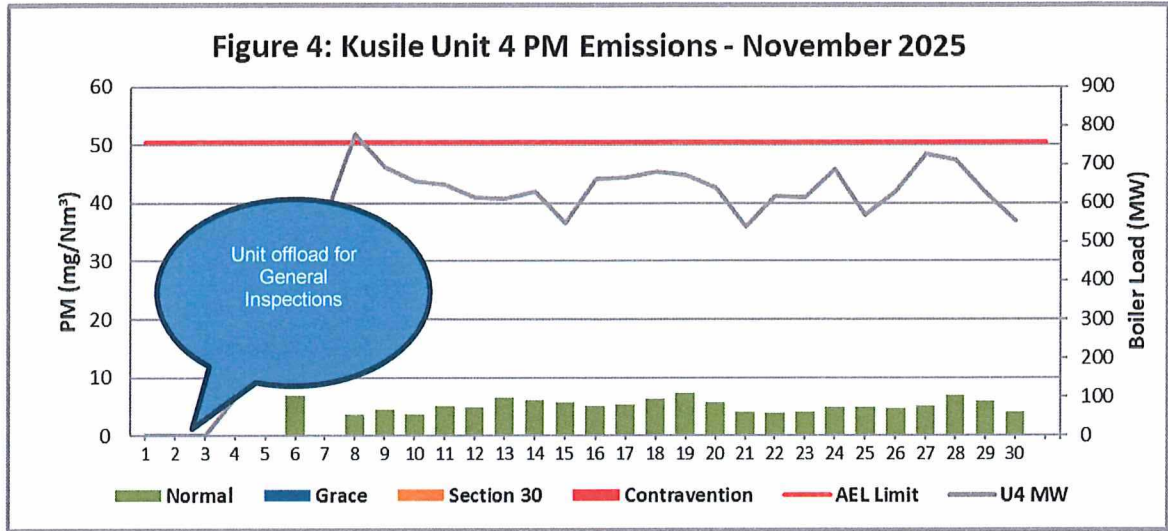
Table 7.4: NO<sub>x</sub> AEL Daily Compliance - November 2025

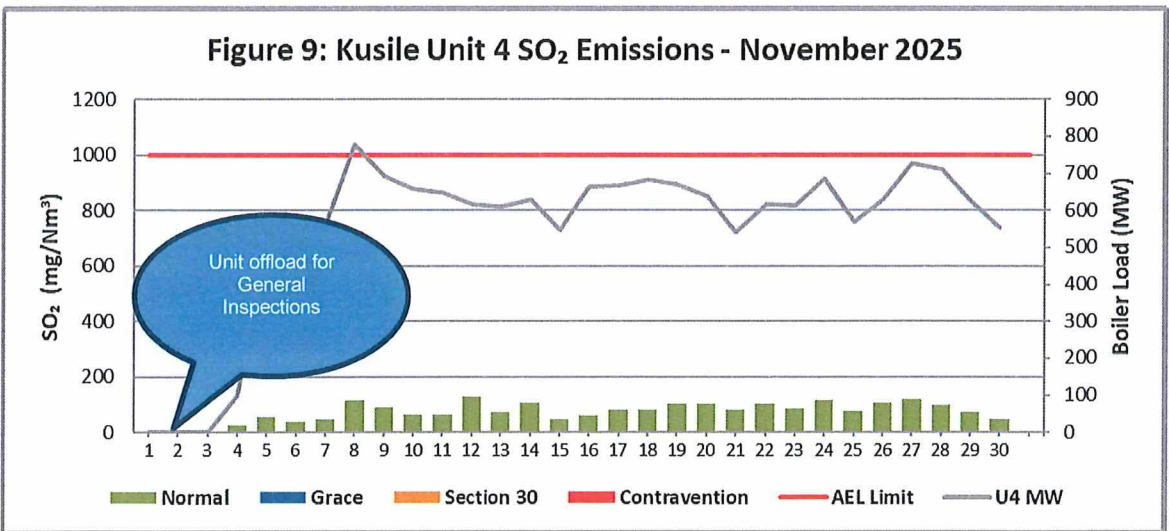
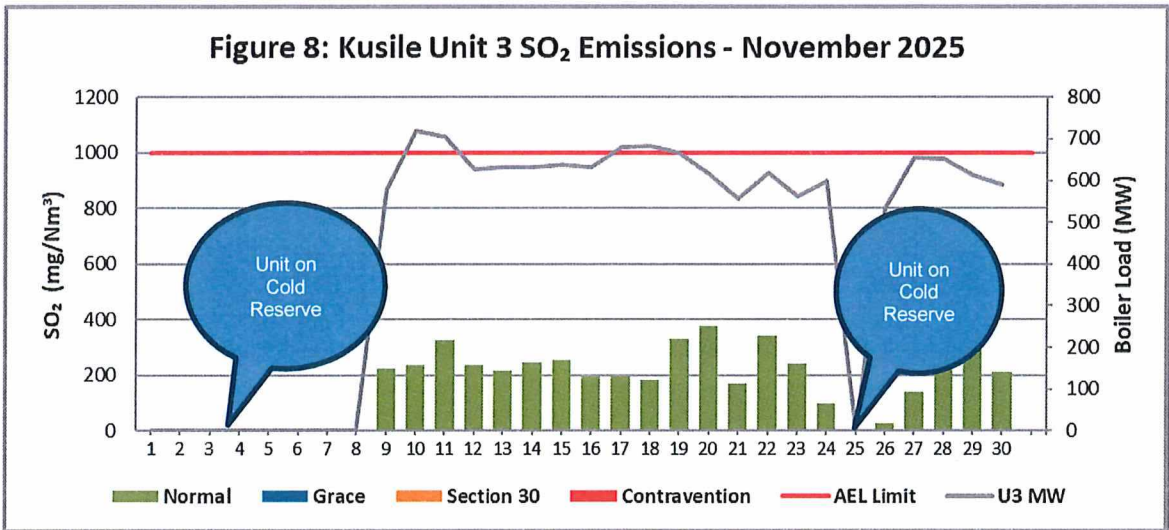
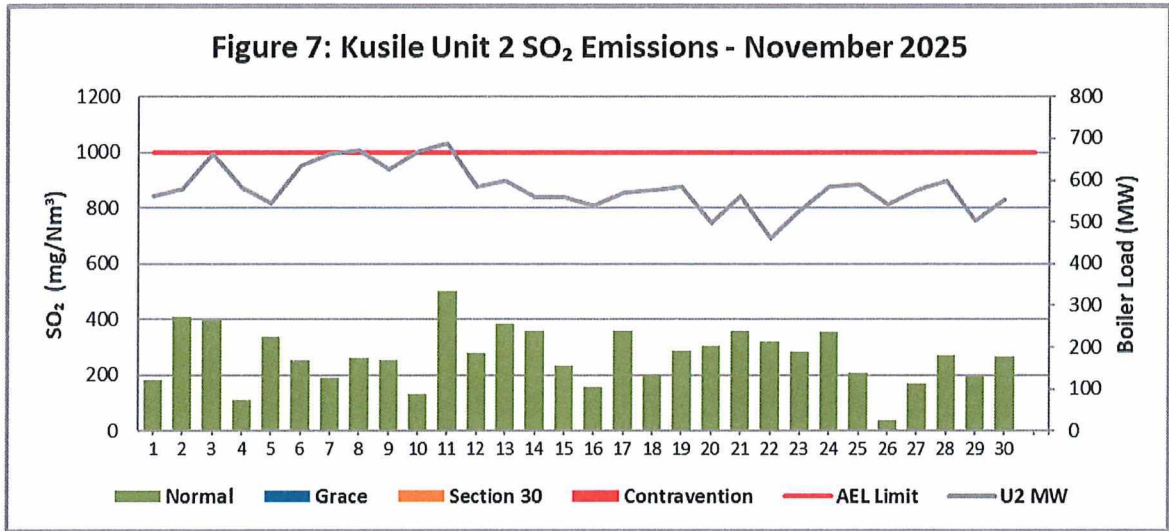
Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Mnth Avg (mg/Nm <sup>3</sup> )
Unit 1	29	0	0	0	0	576.5
Unit 2	30	0	0	0	0	352.2
Unit 3	21	0	0	0	0	377.9
Unit 4	27	0	0	0	0	254.1
Unit 5	30	0	0	0	0	427.7
<b>SUM</b>	<b>137</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

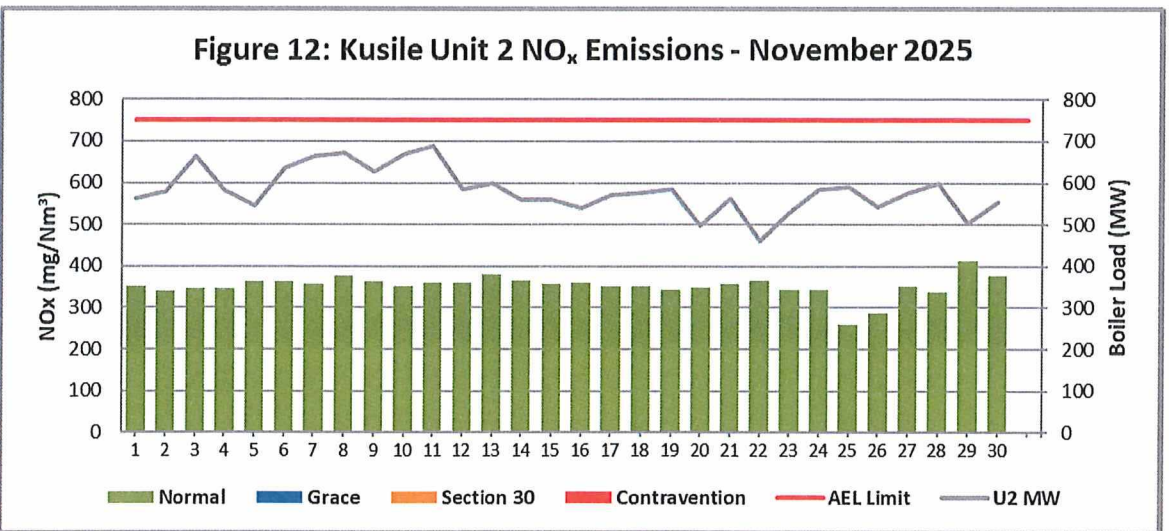
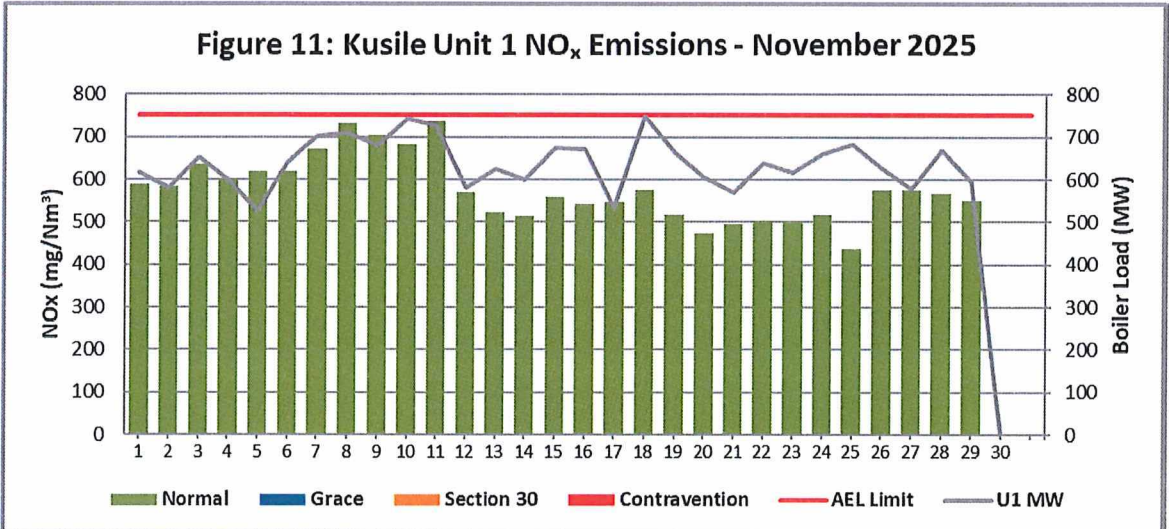
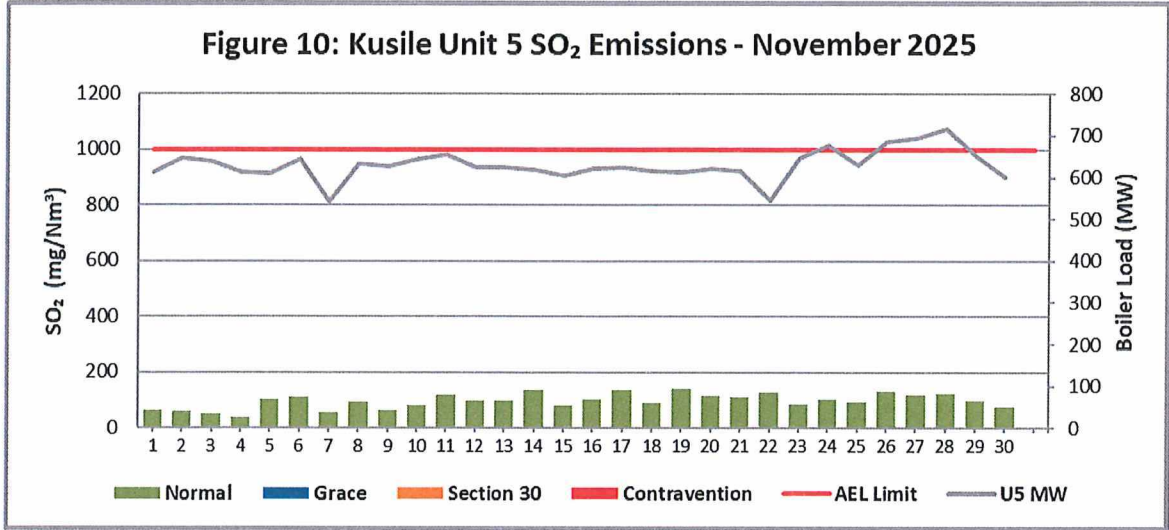
Table 7.5: Legend Description

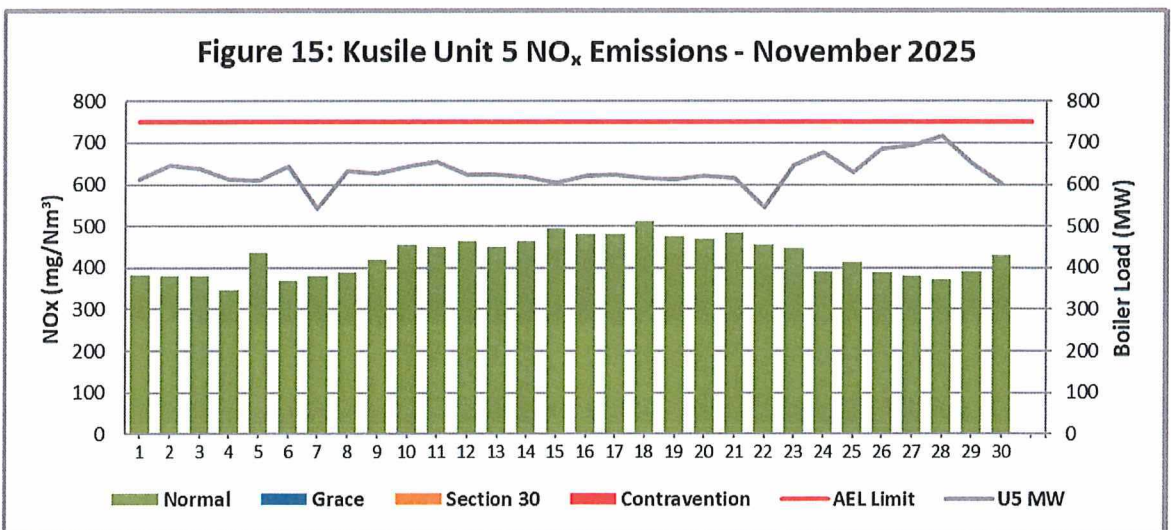
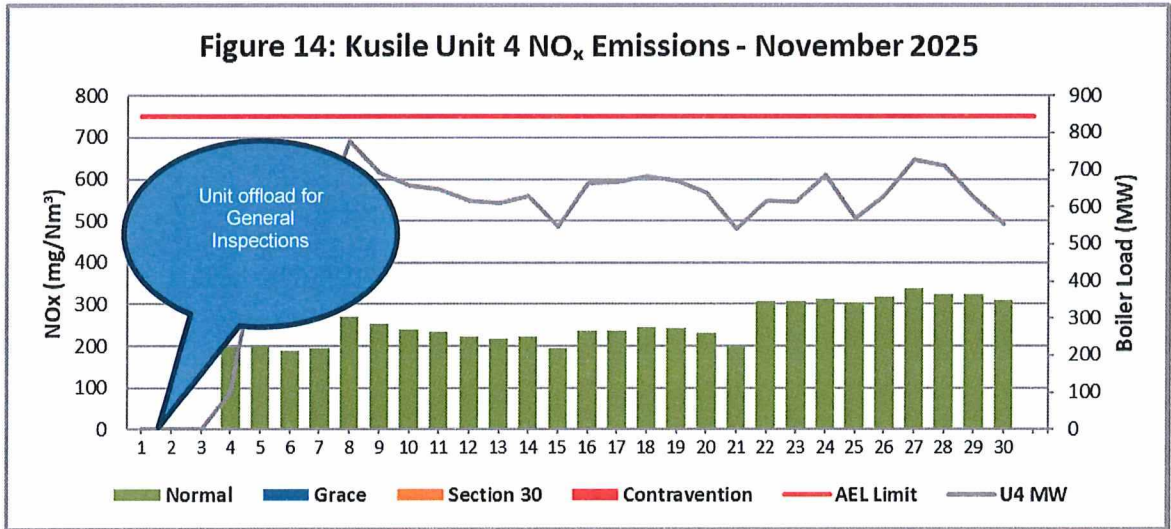
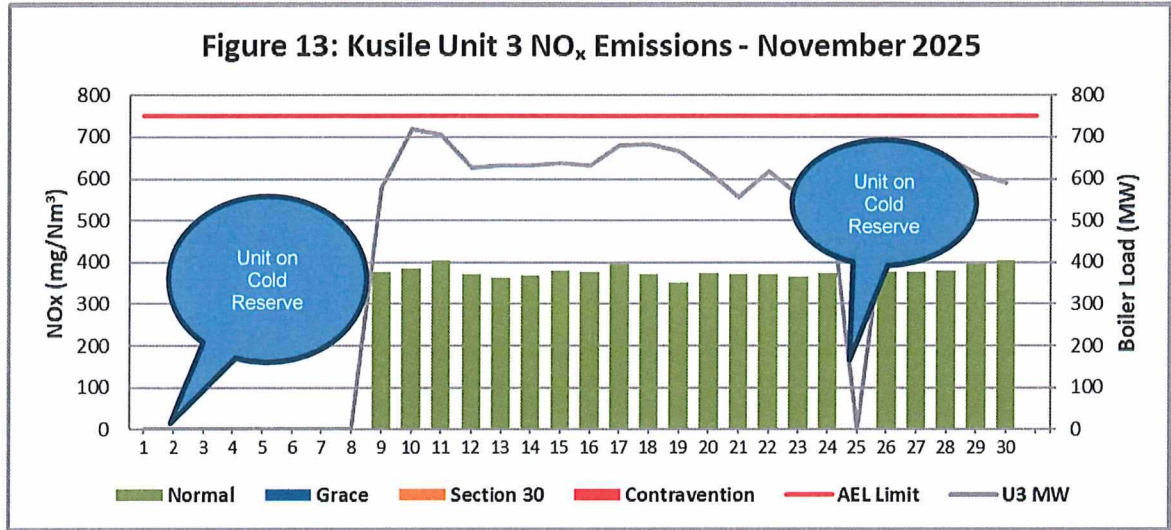
Condition	Colour	Description
Normal		Emissions below Emission Limit Value (ELV)
Grace		Emissions above the ELV during grace period
Section 30		Emissions above ELV during a NEMA S30 incident
Contravention		Emissions above ELV but outside grace or S30 incident conditions











### 8. Correlation and Parallel test status

Unit 1:

- Unit 1 is operating with valid correlation curves and parallel factors.

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		Event 3	
Unit 1	Breaker Open (BO)	10:05 am	2025/11/16	11:10 am	2025/11/19	9:55 pm	2025/11/29
	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	11:00 pm	2025/11/29
	BO to DG SD (duration)	n/a	DD:HH:MM	n/a	DD:HH:MM	00:01:05	DD:HH:MM
	Fires in time	10:05 am	2025/11/16				
	Synch. to Grid (or BC)	11:25 am	2025/11/17				
	Fires in to BC (duration)	01:01:20	DD:HH:MM		DD:HH:MM		DD:HH:MM
	Emissions below limit from BC (end date)	12:00 am	2025/11/19				
	Emissions below limit from BC (duration)	01:12:35	DD:HH:MM		DD:HH:MM		DD:HH:MM

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Event Description		Event 1		Event 2	
<b>Unit 2</b>	Breaker Open (BO)	10:10 am	2025/11/16	12:15 am	2025/11/22
	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			12:15 am	2025/11/22
	Synch. to Grid (or BC)			4:10 am	2025/11/22
	Fires in to BC (duration)		DD:HH:MM	00:03:55	DD:HH:MM
	Emissions below limit from BC (end date)			12:00 am	2025/11/24
	Emissions below limit from BC (duration)		DD:HH:MM	01:19:50	DD:HH:MM

Event Description		Event 1		Event 2	
<b>Unit 3</b>	Breaker Open (BO)	10:20 am	2025/10/31	11:30 pm	2025/11/24
	Draught Group (DG) Shut Down (SD)	12:45 am	2025/11/01	5:20 am	2025/11/25
	BO to DG SD (duration)	00:14:25	DD:HH:MM	00:05:50	DD:HH:MM
	Fires in time	3:35 am	2025/11/09	9:05 pm	2025/11/25
	Synch. to Grid (or BC)	11:15 am	2025/11/09	2:10 am	2025/11/26
	Fires in to BC (duration)	00:07:40	DD:HH:MM	00:05:05	DD:HH:MM
	Emissions below limit from BC (end date)	12:00 am	2025/11/11	12:00 am	2025/11/28
	Emissions below limit from BC (duration)	01:12:45	DD:HH:MM	01:21:50	DD:HH:MM

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Event Description		Event 1		Event 2	
Unit 4	Breaker Open (BO)	8:30 am	2025/11/06	BO previously	BO previously
	Draught Group (DG) Shut Down (SD)	DG did not trip or SD	DG did not trip or SD	n/a	n/a
	BO to DG SD (duration)	n/a	DD:HH:MM	n/a	DD:HH:MM
	Fires in time	3:35 am	2025/11/04	8:30 am	2025/11/06
	Synch. to Grid (or BC)	1:45 am	2025/11/05	3:05 pm	2025/11/07
	Fires in to BC (duration)	00:22:10	DD:HH:MM	01:06:35	DD:HH:MM
	Emissions below limit from BC (end date)	12:00 am	2025/11/07	12:00 am	2025/11/09
	Emissions below limit from BC (duration)	01:22:15	DD:HH:MM	01:08:55	DD:HH:MM

Event Description		Event 1		Event 2	
Unit 5	Breaker Open (BO)	11:55 am	2025/11/07	5:05 pm	2025/11/22
	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			5:05 pm	2025/11/22
	Synch. to Grid (or BC)			7:55 pm	2025/11/22
	Fires in to BC (duration)		DD:HH:MM	00:02:50	DD:HH:MM
	Emissions below limit from BC (end date)			12:00 am	2025/11/24
	Emissions below limit from BC (duration)		DD:HH:MM	01:04:05	DD:HH:MM

## 10. Complaints

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