

 Eskom	Monthly Report	Kendal Power Station
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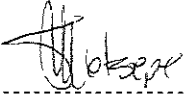
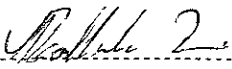
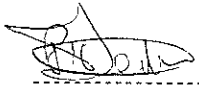
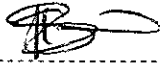
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Compiled by	Verified by	Verified by	Supported by
Pfarelo Tshidzumba 	Jacob Zwane 	Langa Ngcobo 	Solly Chokoe 
Officer Environmental	Boiler System Engineer	C&I System Engineer	Environmental Manager
Date: 26/03/26	Date: 26/03/2026	Date: 26/03/2026	Date: 26/03/26

Validated by	Validated by	Supported by	Authorized by
Yolisa Motsepe 	Tendani Rasivhetshele 	Phindile Takane 	Tshepiso Temo 
C&I Engineering Manager	Boiler Engineering Manager	Engineering Group Manager	General Manager
Date: 26/3/26	Date: 26/03/2026	Date: 27/3/26	Date: 2026/03/27

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1. Introduction

KENDAL POWER STATION MONTHLY EMISSIONS REPORT FOR THE MONTH OF FEBRUARY 2026

This document serves as the monthly emissions report required in terms of Section 7.4 of Kendal Power Station Provisional Atmospheric Emission License (AEL), 17/4/AEL/MP312/11/15.

This report reflects Unit 1 to Unit 6 gaseous and particulate emissions performance against the AEL limit for the month of February 2026 only

2. Raw Materials and Products

Table 1- Quantity of Raw Materials and Products Consumption in February 2026

Raw Materials and Products	Raw Material Type	Units	Max Permitted Consumption Rate	Consumption Rate Feb-2026
	Coal	Tons	2 260 000	562 490
	Fuel Oil	Tons	5 000	7205 150

Production Rates	Product / By-Product Name	Units	Max Production Capacity Permitted	Indicative Production Rate Feb-2026
	Energy	GWh	2 765 952	1 006 366
	Ash	Tons	770 000	162 334 614
	RE Ash	kg/MWh	not specified	0 175

Note Max energy rate = AEL capacity [4,116 MW] × 24 hrs × days in month – 1,000 (to convert to GWh)

The station is exceeding the fuel oil consumption limit due to milling plant failures. Most units do not have standby mills because of defective girth gears and pinions that are awaiting spare-part delivery. Worn girth gears and pinions are causing high drive train vibrations, resulting in a high failure rate of mill motors and gearboxes. Consequently, Kendal's cumulative fuel oil consumption has increased, mainly because units are running on fuel oil support while ongoing maintenance is in progress. The station is actively working to resolve the milling plant issues through the milling plant recovery plan.

3. Abatement Technology

Table 2-Abatement Equipment Control Technology Efficiency in February 2026

Associated Unit/Stack	Technology Type	ESP Efficiency	Technology Type	SO ₃ Plant Utilization
Unit 1	ESP + SO ₃	Off-line	SO ₃	Off-line
Unit 2	ESP + SO ₃	99.852%	SO ₃	28.6%
Unit 3	ESP + SO ₃	99.833%	SO ₃	64.3%
Unit 4	ESP + SO ₃	99.953%	SO ₃	100.0%
Unit 5	ESP + SO ₃	99.781%	SO ₃	96.4%
Unit 6	ESP + SO ₃	99.881%	SO ₃	75.0%

Note: The ESP plant does not have a bypass mode, therefore, it operates at 100% utilization. There is no Sulphur value for SO₃ utilization due to switch failure on the server, however DCS signals used for its tripping alarms were used to get its utilization values. Sulphur flow will be available once we have commissioned the new PI system.

To achieve the required operational dust removal efficiency based on measured values, several assumptions such as:

- Coal ash content (%) and burnt rate mass
- Fly Coarse ash ratio of 80/20 - 80% of fly-ash mass obtained from burnt coal goes to ESP
- Measurement of dust emission by Dust Monitor over a period (monthly)

Operational Dust Removal Efficiency

$$\eta = (1 - (\text{Output}/\text{Input})) \times 100$$

$$\eta = 1 - \frac{(\text{Dust Emission From AQR Report Dust Monitor (tons)} \times 100)}{(\text{Coal Burnt (tons)} \times \% \text{ Ash Content} \times 80\%)}$$

4. Energy Source Characteristics

Table 3 Energy Source Material Characteristics for February 2026

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	16-24 (MJ/kg)	19.840
Sulphur Content	%	<1 (%)	0.810
Ash Content	%	40 (%)	28.860

5. Emissions Reporting

In terms of Section 59 of National Environmental Management: Air Quality Act (Act no.39 of 2004) and decision made by the Minister of DFFE, in respect of the Eskom exemption applications for new Minimum Emission Standards (MES) were granted and effective as of 01 April 2025 and 01 October 2025.

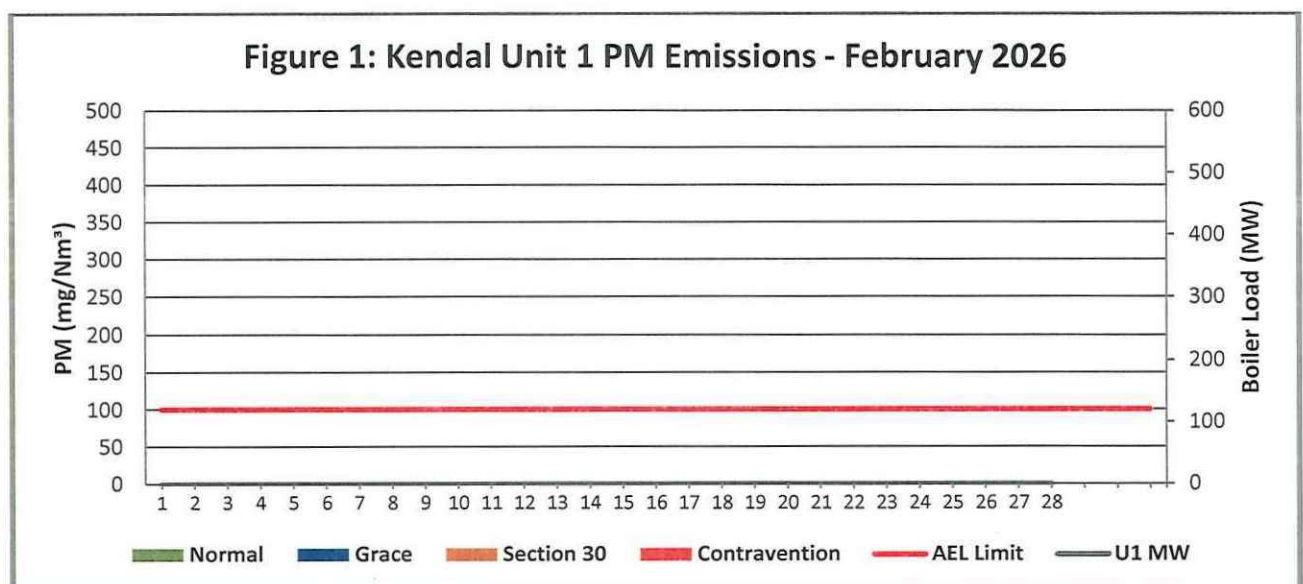
Table 4- New Minimum Emission Limits are as follows:

SO ₂ Monthly = 3000 mg/Nm ³	Dust Daily= 50 mg/Nm ³ (Unit 3, 4 and 6) Dust Daily= 100 mg/Nm ³ (Unit 1, 2 and 5)	NO ₂ Daily=750 mg/Nm ³
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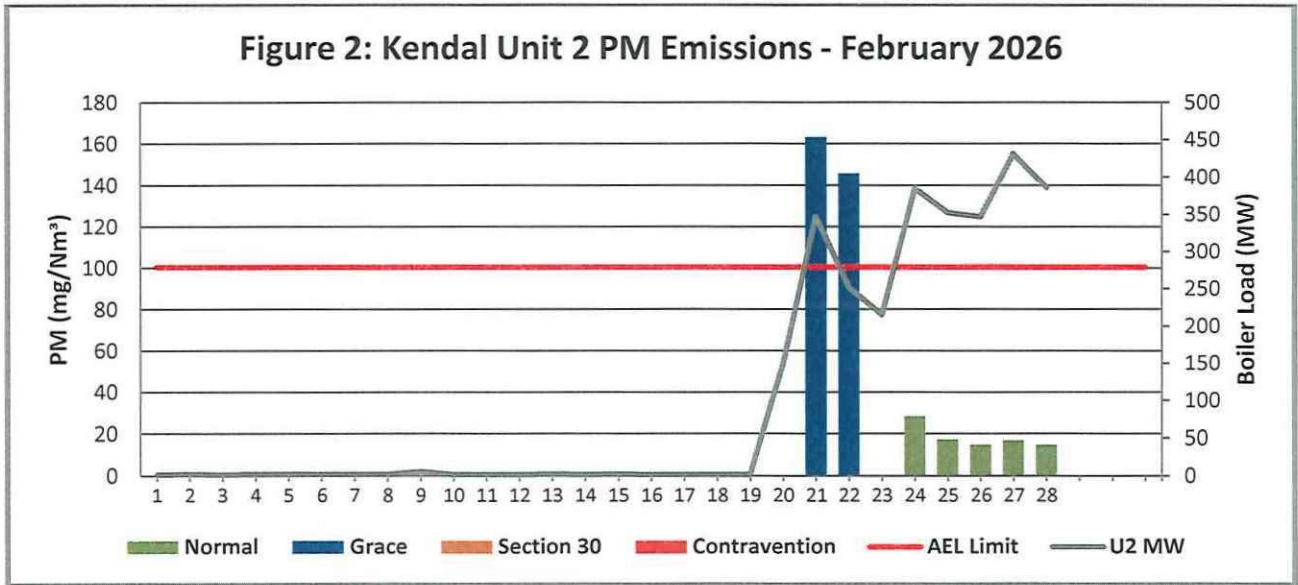
Table 5- Legend Description:

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

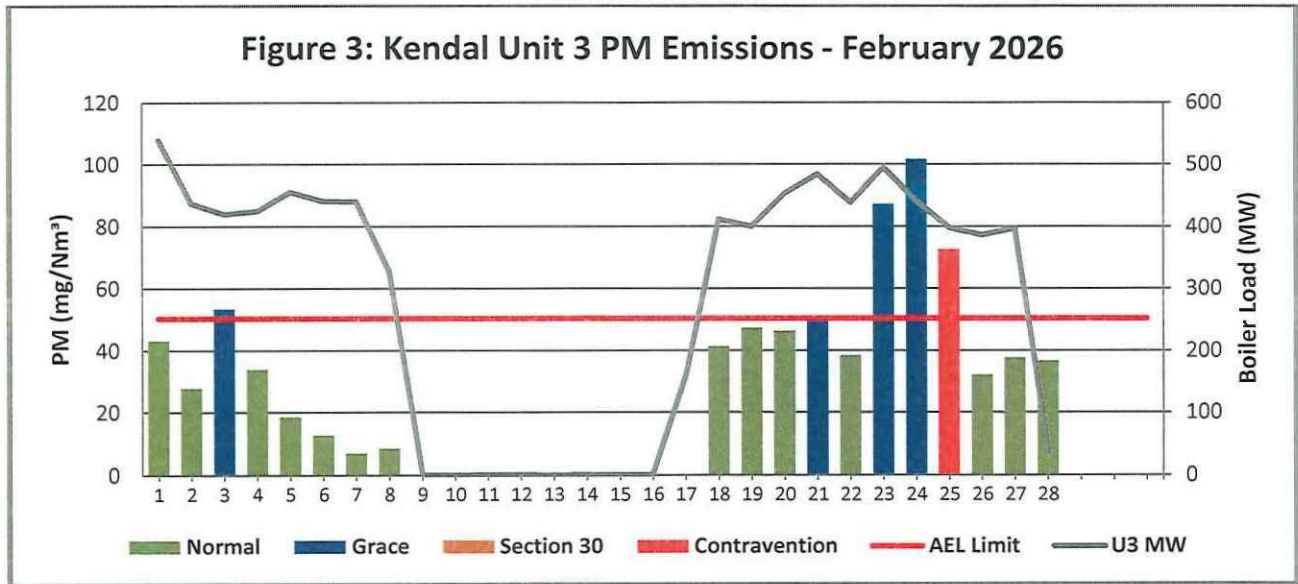
5.1 PM Daily Averages



Note: Kendal Power Station unit 1 was off load.

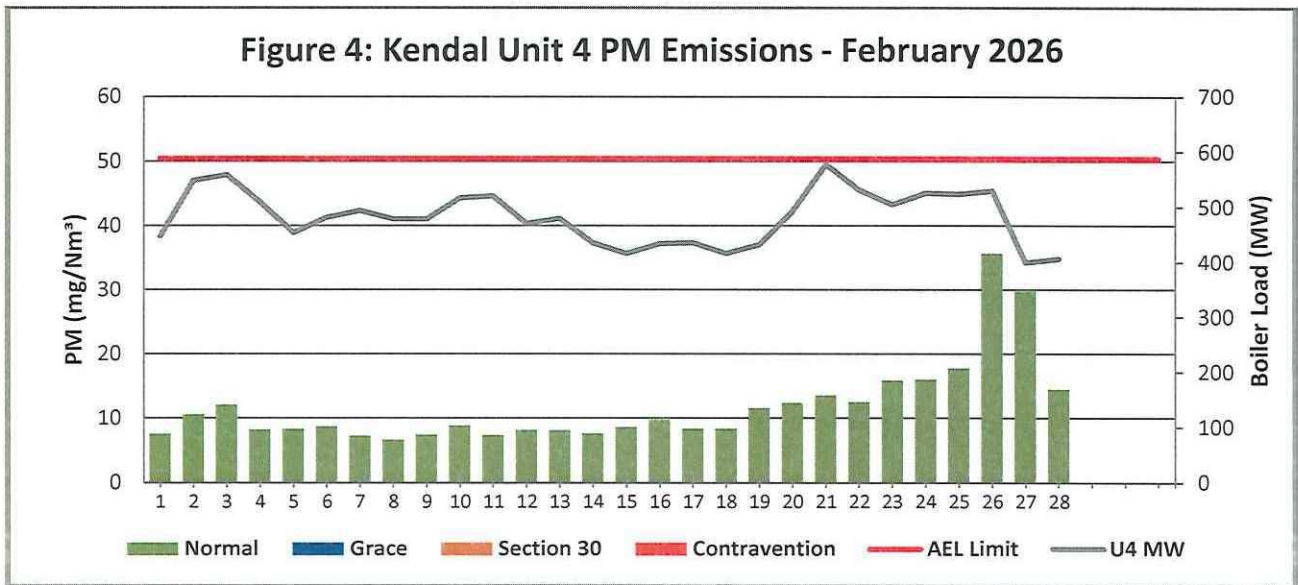


Note: Kendal Power Station Unit 2 exceeded the Particulate Matter (PM) limit of 100 mg/Nm³ for a cumulative period of one hour on 21 February 2026, and 18 hours on 22 February 2026 due to unit light up and communication failures on Electrostatic Precipitator fields F25, F44, and F47, CE rapper signal faults on fields F42 and F43, and ash backlogs, these has affected electrostatic precipitator performance and reduced particulate removal efficiency, all these issues contributed to elevated particulate matter emissions.

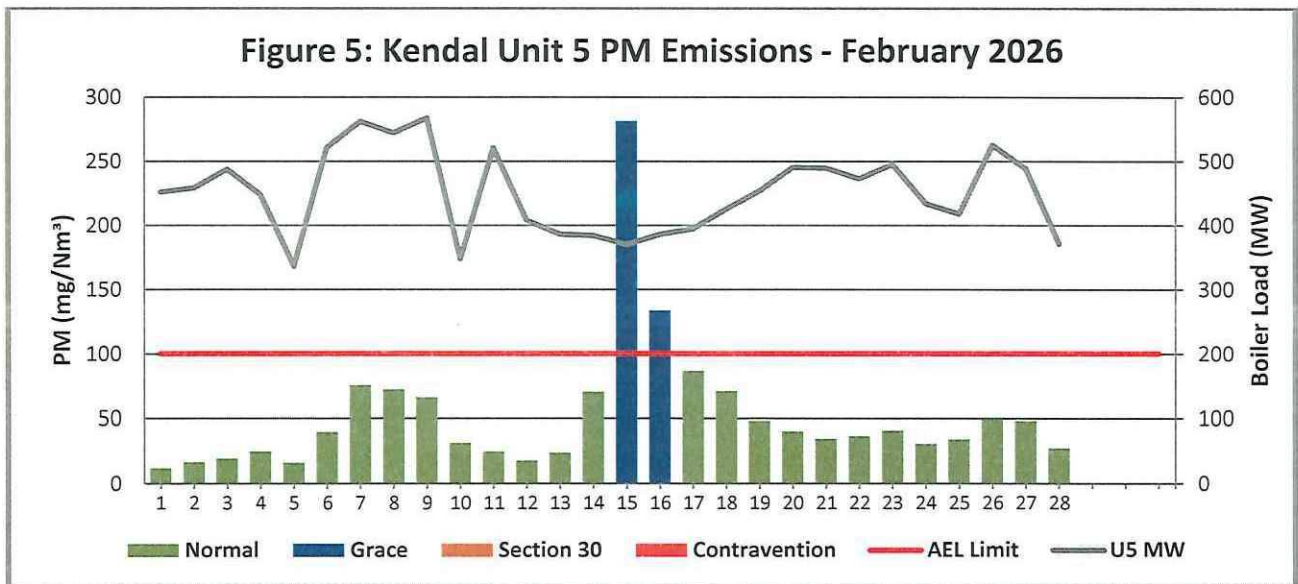


Note: Kendal Power Station Unit 3 exceeded the Particulate Matter (PM) limit of 50 mg/Nm³ on 03 February 2026 due to a faulty transmitter on Field F23, a High Voltage fault on Field F24 with blown 125 A fuses, and underperformance of Fields F13, F22, F41, and F42. The unit further exceeded the limit on 21 February 2026 for 15 hours, on 23 February 2026 for 11 hours, and on 24 February 2026 for 24 hours due to ash backlogs affecting Fields F13, F22, F25, F27, F32, and F41, elevated back-end temperatures, and a faulty SO₃ plant converter air dilution valve. On 25 February 2026,

the same unit exceeded the limit again for 24 hours due to high compartment dust levels, the FAB 2 conditioner (Conv 02ETK11) tripping with no alternative conditioner available, and the DHP standing with all knife gates closed, all these issues contributed to elevated particulate matter emissions.

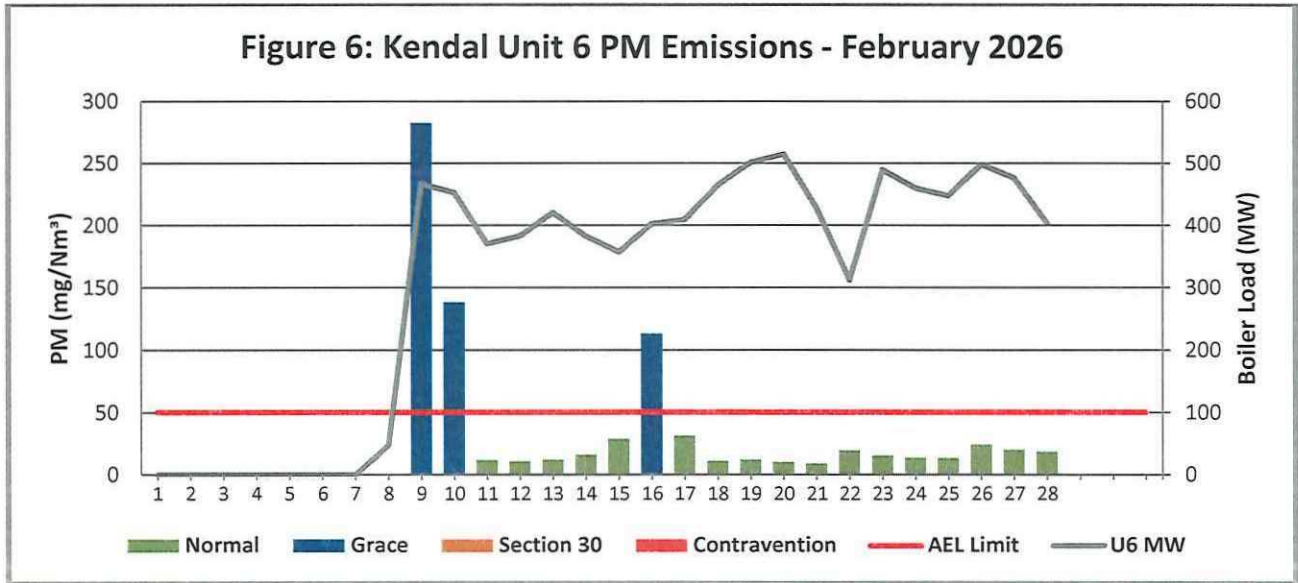


Note: Kendal Power Station unit 4 did not exceed PM limit of 50 mg/Nm³.



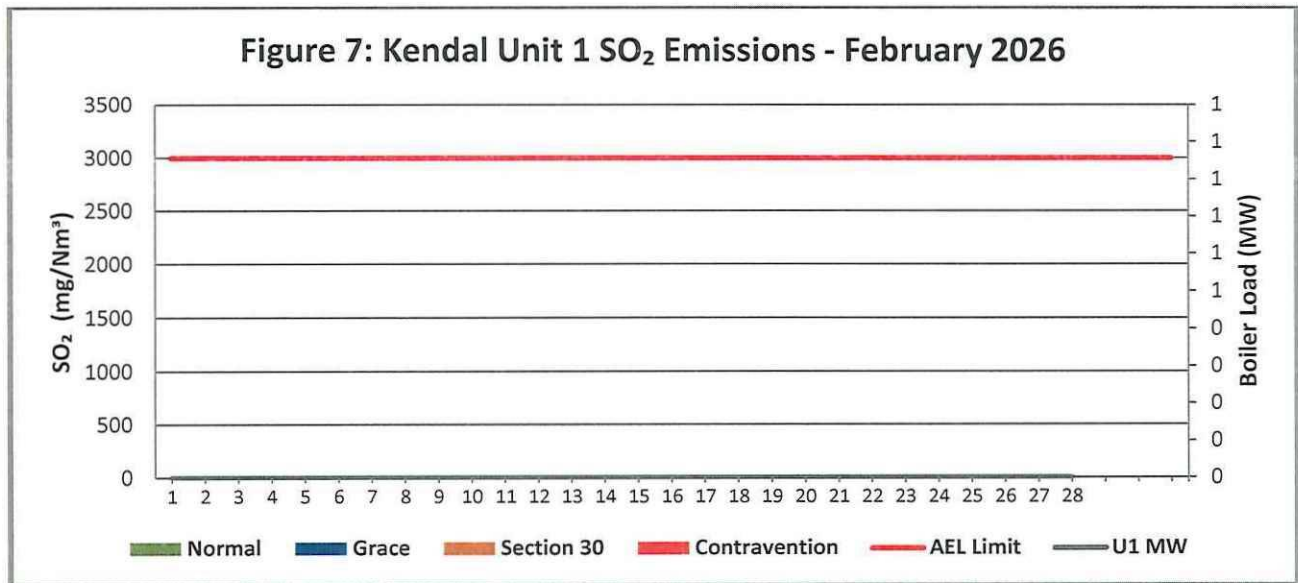
Kendal Power Station Unit 5 exceeded the Particulate Matter (PM) limit of 100 mg/Nm³ on 15 February 2026 for a period of 17 hours and again on 16 February 2026 for 14 hours, due to defective thermocouples on one SO₃ plant injector lance and burnt cable. Additional contributing factors includes electrical faults on Fields F16 and F35 and underperformance of Fields F12, F15, F33, F34, F35, F43, and F44, which reduced overall ESP efficiency. Furthermore, the SO₃ plant was tripping

on high converter outlet temperature due to insufficient blower flow, all these issues contributed to elevated particulate emissions.

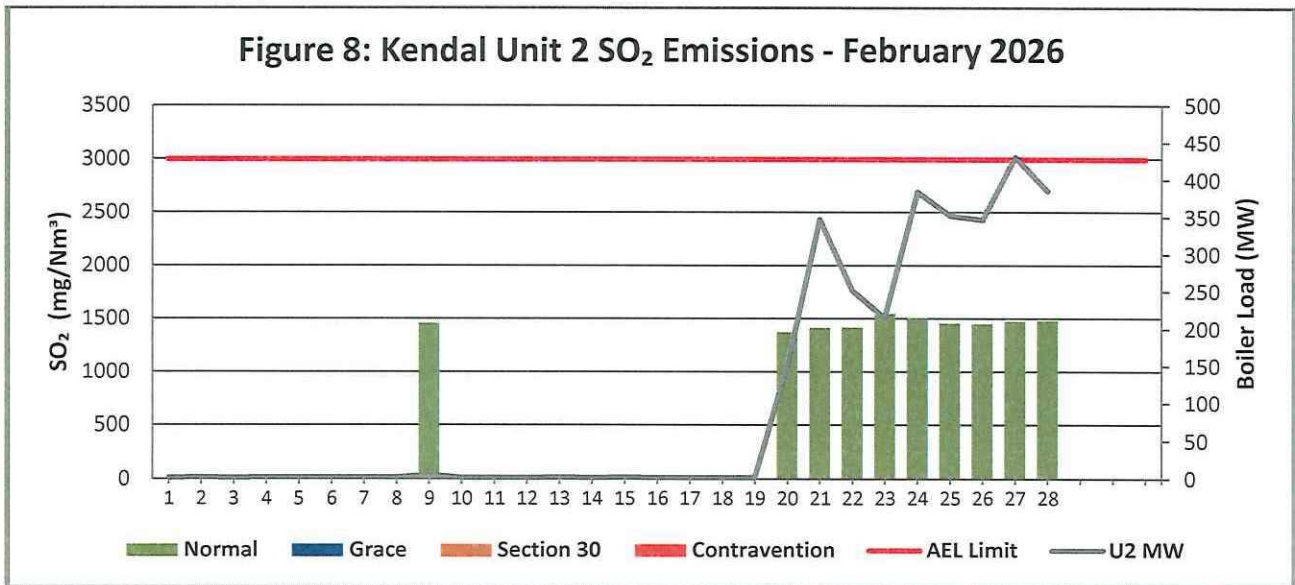


Note: Kendal Power Station Unit 6 exceeded the Particulate Matter (PM) limit of 50 mg/Nm³ on 9 and 10 February 2026 for periods of 24 hours and 13 hours, respectively, due to unit light-up conditions. The unit again exceeded the limit on 16 February 2026 for seven hours due to CE Rapper No. 1 tripping on Fields F31, F41, F17, F37, and F47, as well as SO₃ injector lance showing signs of blockages, all these issues contributed to elevated particulate emissions.

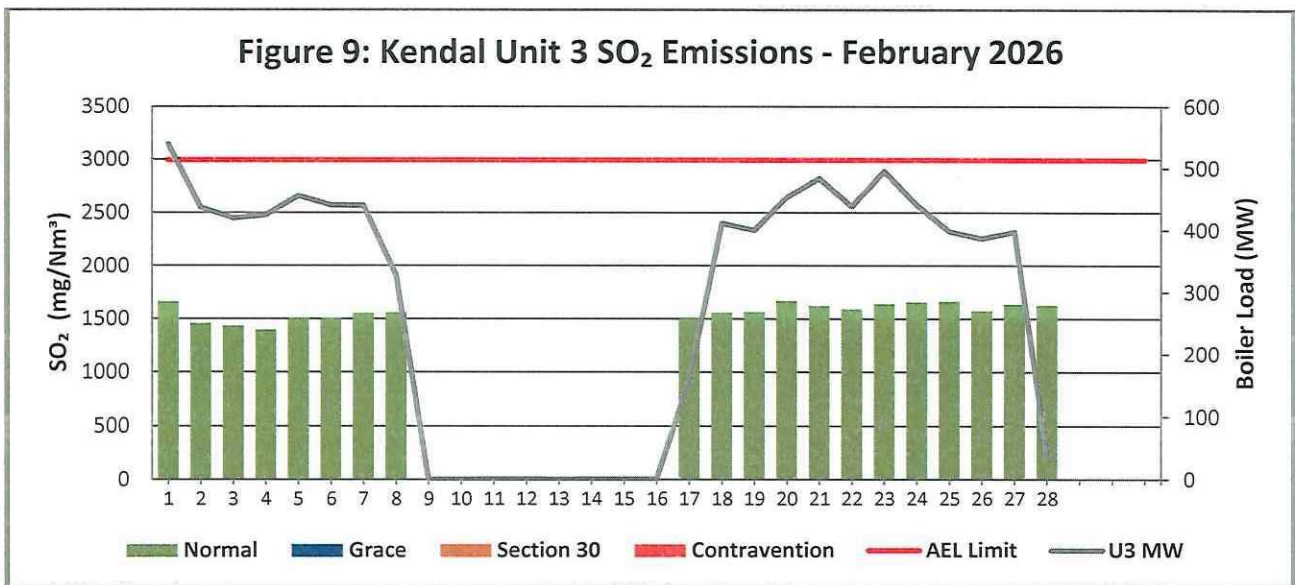
5.2 Sox Daily Averages



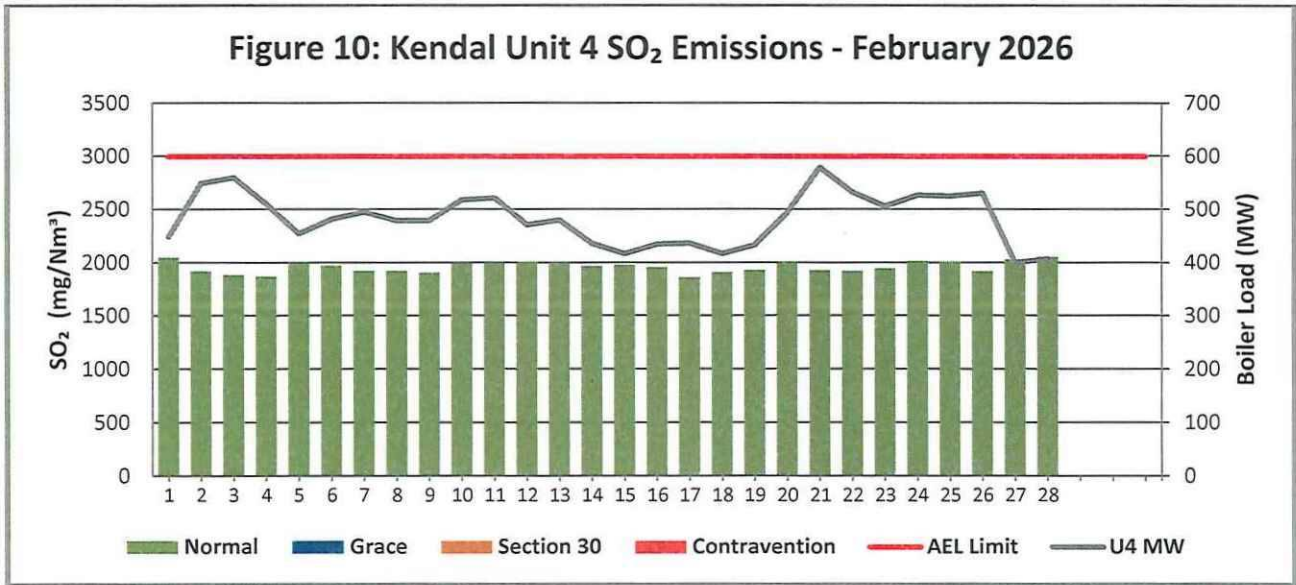
Note: Kendal Power Station unit 1 was off load.



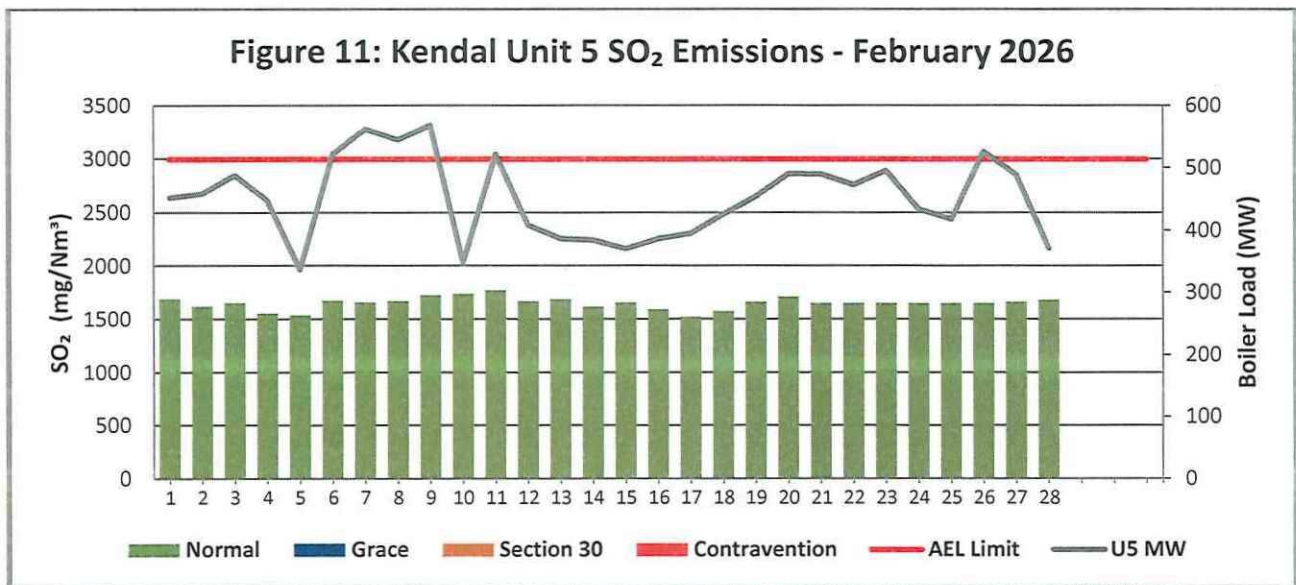
Note: Kendal Power Station unit 2 did not exceed SO_x limit of 3000 mg/Nm³.



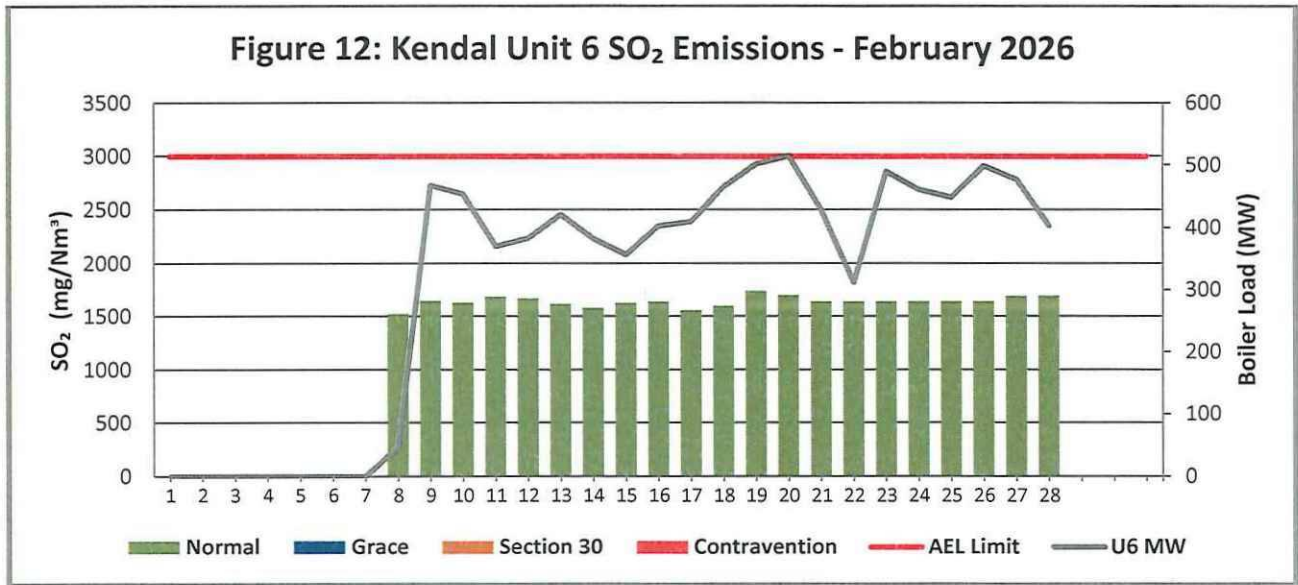
Note: Kendal Power Station unit 3 did not exceed SO_x limit of 3000 mg/Nm³.



Note: Kendal Power Station unit 4 did not exceed SO_x limit of 3000 mg/Nm³.

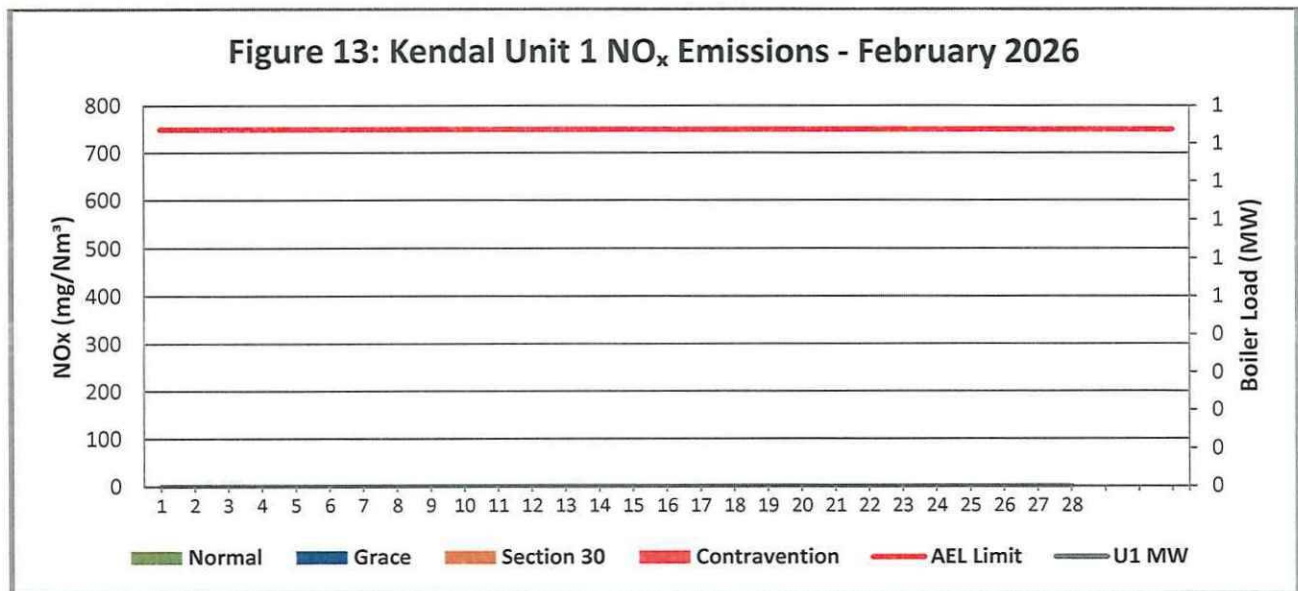


Note: Kendal Power Station unit 5 did not exceed SO_x limit of 3000 mg/Nm³.

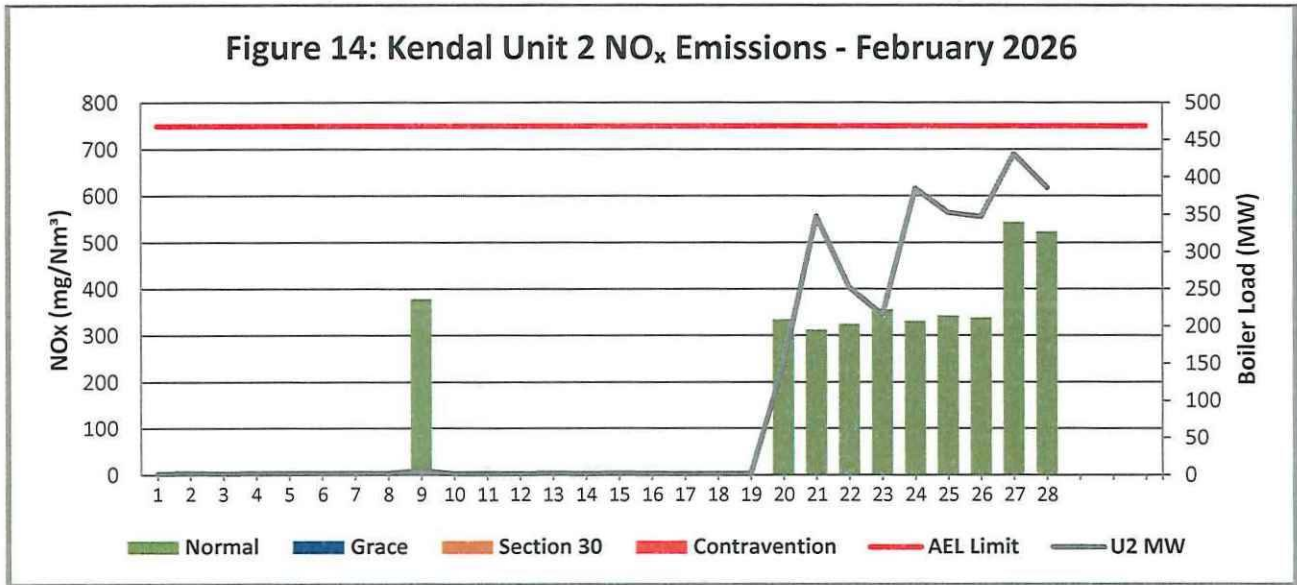


Note: Kendal Power Station unit 6 did not exceed SO_x limit of 3000 mg/Nm³.

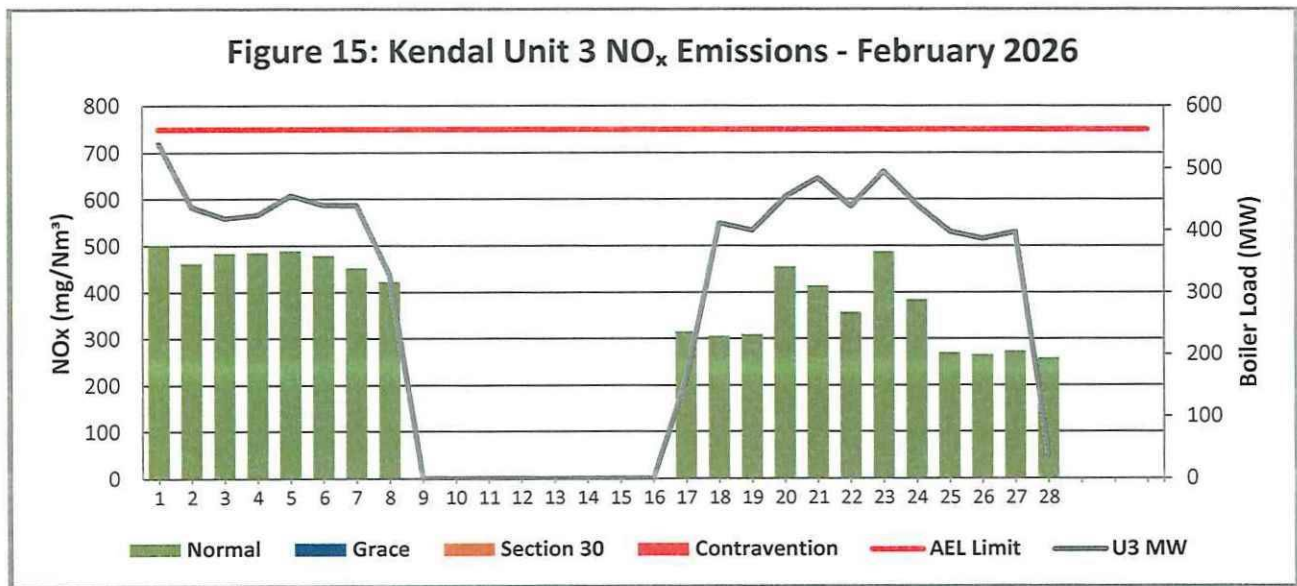
5.3 NO_x Daily Averages



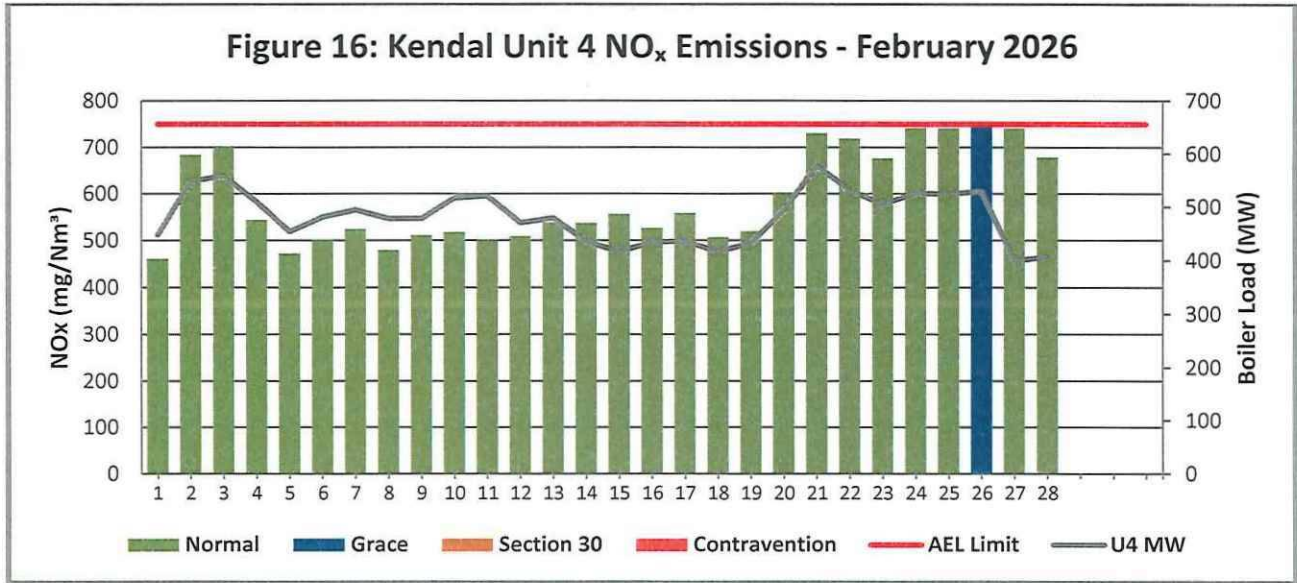
Note: Kendal Power Station unit 1 was off load.



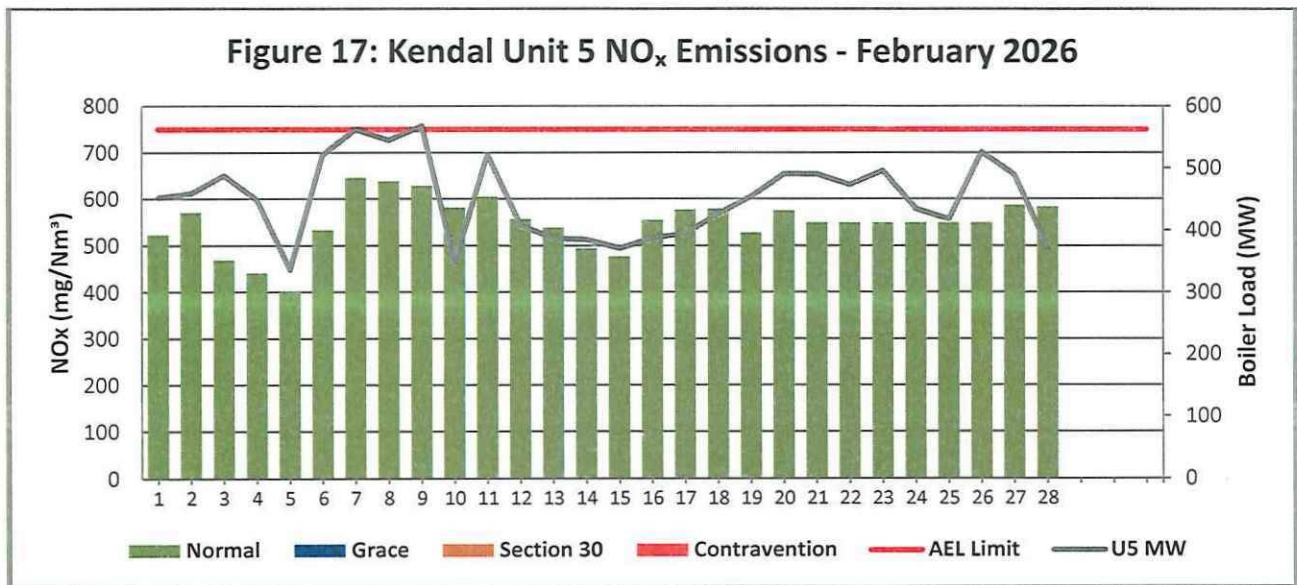
Note: Kendal Power Station unit 2 did not exceed NO_x limit of 750 mg/Nm³.



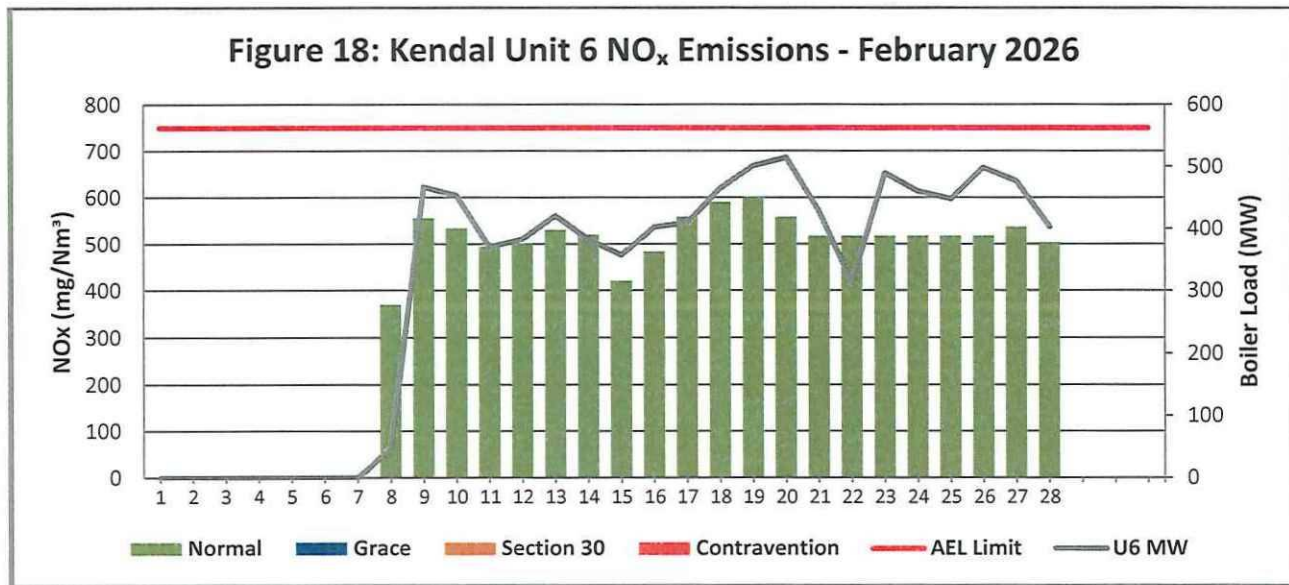
Note: Kendal Power Station unit 3 did not exceed NO_x limit of 750 mg/Nm³.



Note: Kendal Power Station Unit 4 exceeded the NO_x limit of 750 mg/Nm³ on 26 February 2026 for a period of 19 hours due to milling plant issues. Milling plant underperformance and overproduction from the B and C mills caused the NO_x exceedances.



Note: Kendal Power Station unit 5 did not exceed NO_x limit of 750 mg/Nm³.



Note: Kendal Power Station unit 6 did not exceed NO_x limit of 750 mg/Nm³.

Table 6-Monthly Tonnages for February 2026

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
Unit 1	Off	Off	Off
Unit 2	12.1	533	142
Unit 3	37.9	1 452	384
Unit 4	18.1	3 160	966
Unit 5	78.4	2 594	872
Unit 6	29.3	1 556	500
SUM	175.93	9 295	2 863

Table 7-Monthly Averages Concentration for February 2026 in mg/Nm³

Associated Unit/Stack	PM	SO ₂	NO ₂
Unit 1	Off	Off	Off
Unit 3	57.5	1 459.8	379.0
Unit 2	42.1	1 574.1	394.5
Unit 4	11.9	1 958.8	591.1
Unit 5	53.0	1 653.2	550.3
Unit 6	40.8	1 642.8	517.9

6. Continuous Emissions Monitoring System (CEMS)

Table 8- Periods during which was inoperative/malfunctioning

Date	CEMS status	Comments
February 2026	Malfunctioning	The station gas monitors for Units 2, 3, and 5 have been reading CO ₂ and O ₂ inaccurately, while Unit 6 has been reading O ₂ inaccurately. To ensure accurate reporting for this period, the QAL2 average (parallel test) values were used. In cases where the monitors experienced errors, surrogate values were used to the raw data.

Table 9-CEMS Monitor Reliability Percentage

Associated Unit/Stack	PM	SO ₂	NO ₂	O ₂
Unit 1	Off	Off	Off	Off
Unit 2	100.0	90.0	90.0	100.0
Unit 3	100.0	100.0	99.1	100.0
Unit 4	99.7	100.0	100.0	100.0
Unit 5	95.7	74.4	72.3	100.0
Unit 6	99.8	65.9	65.9	100.0

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

In terms of the minimum emissions standard, the requirement is that a monitor should be 80% reliable on a monthly average. The monitor reliability refers to data reliability because the assumed value of 99.325% reliability is compared to the dust concentration signal. If the dust concentration signal is above 99.325% opacity, the data information is no longer reliable because the monitor reading is out of its maximum reading range. The data reliability looks at how many times the dust concentration signal goes above 98% over a period e.g. 24 hours.

The formula is as follows:

$$= (1 - (\text{count hours above } 99.325\%/24\text{hours})) \times 100$$

7. CEMS Calibration and Equipment Used for Calibration

Calibration certificates to be made available upon request.

8. Validity of Correlation and Parallel Test

Table 10-Validity of Correlation and Parallel Test.

Associated Unit/Stack	Correlation Test (PM)	Parallel Test (NO ₂ , CO ₂ , O ₂ , SO ₂)
Unit 1	Valid until March 2027	Valid until September 2027
Unit 2	Valid until May 2025	Valid until August 2027
Unit 3	Valid Until February 2027	Valid until October 2027
Unit 4	Valid until March 2026	Valid until January 2028
Unit 5	Valid until January 2026 (Spot check curve)	Valid until March 2027
Unit 6	Valid until March 2027	Valid until September 2027

Note: Unit 2 correlation test has not been completed, as the unit has been on outage for electrostatic precipitators (ESP) repairs. The unit returned to service on 20 February 2026, and the test has commenced from 26 March 2026. Correlation testing has been completed on both unit 4 & 5. Awaiting Unit 4 & 5 report from the service provider.

9. Complaint Register

Table 11-Complaints for the month of February 2026

Source Code / Name	Root Cause Analysis	Calculation of Impacts / emissions associated with the incident	Dispersion modelling of pollutants where applicable	Measures implemented to prevent reoccurrence
N/A	N/A	N/A	N/A	N/A