

Mr. Mcebo Mkhathswa
Air Quality Officer
Fezile Dabi District Municipality
P.O Box 10
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Date:

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LRP01PLA000 _0471/2025/07/09

Dear Mr. Mkhathswa

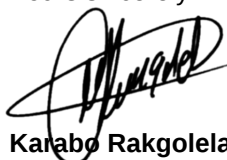
LETHABO POWER STATION EMISSION MONTHLY REPORT FOR JUNE 2025

Please find attached Lethabo Power Station emission report for the month of June 2025.

Also attached are the Ambient Air Quality Monitoring Report, Complaints Register and the Fugitive Dust Fallout Monitoring Report for June 2025.

For any additional information please do not hesitate to contact us.

Yours sincerely



Karabo Rakgolela
GENERAL MANAGER

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Eskom Holdings SOC Ltd Reg No 2002/015527/30



Report

Lethabo Power Station

Report name: **Lethabo Power Station**
June 2025
Emission Report

Reference number: **LRP01PLA000 _0471/2025/07/09**
Document Type: **Report**
Area of Applicability: **Environment**
Report Date: **July-2025**
Classification: **Controlled Disclosure**

Signatures:

Compiled by:


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Boiler Engineer

Verified by :

pp. 
W de Klerk
Senior Advisor

Reviewed by:

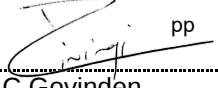

N. Mazibuko
BPE Manager

Date: 22/07/2025

Date: 2025/07/22

Date: 2025/07/25

Reviewed by:


C Govinden
PE Manager

Reviewed by:


L Nel
C&I Manager

Reviewed by:

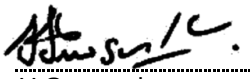

L Moreoane
Act. Environmental Manager

Date: 28/07/2025

Date: 2025-07-28

Date: 2025-07-28

Approved by:


H Sewsunker
Technical Manager

Reviewed by:


T. Njapha
Engineering Manager

Date: 2025/07/30

Date: 2025-07-28

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LETHABO POWER STATION MONTHLY EMISSIONS REPORT

Atmospheric Emission License FDDM-MET-2011-08-P1


1. RAW MATERIALS AND PRODUCTS

Raw Materials and Products	Raw Material Type	Units	Maximum Permitted Consumption Rate	Consumption Rate Jun-2025
	Coal	Tons	2 000 000	1 063 418
	Fuel Oil	Tons	1 700	1113.030
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Indicative Production Rate Jun-2025
	Energy	GWh	2 743.200	1 539.302
	Ash	Tons	770 000	396 548.412
	RE Ash	kg/MWh	Not Specified	257.616

Note: Maximum energy rate is as per the maximum capacity stated in the AEL: $[3\,810\text{ MW}] \times 24\text{ hrs} \times \text{days in Month}/1000$ to convert to GWh.

2. ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
Sulphur Content	%	0.656 (Standard)	0.710
Ash Content	%	37.37 (Standard)	37.290

Note: The "standard" is not necessary a limit, but merely a optimum indication, it will fluctuate as the coal quality changes. The Stipulated Range are the Station acceptance test values.

3. EMISSION LIMITS (mg/Nm³)

Associated Unit/Stack	PM	SO ₂	NO _x
Unit 1	100	2600	1100
Unit 2	100	2600	1100
Unit 3	100	2600	1100
Unit 4	100	2600	1100
Unit 5	100	2600	1100
Unit 6	50	2600	1100

4. ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	Technology Type	Efficiency Jun-2025	Technology Type	SO ₃ Utilization Jun-2025
Unit 1	Electrostatic Precipitator (ESP)	99.76%	SO ₃	99.9%
Unit 2	Electrostatic Precipitator (ESP)	Unit Off-line	SO ₃	Off-line
Unit 3	Electrostatic Precipitator (ESP)	99.80%	SO ₃	99.3%
Unit 4	Electrostatic Precipitator (ESP)	99.79%	SO ₃	99.8%
Unit 5	Electrostatic Precipitator (ESP)	99.74%	SO ₃	98.2%
Unit 6	Electrostatic Precipitator (ESP)	99.88%	SO ₃	99.2%

Note: ESP plant does not have bypass mode operation, hence plant 100% Utilised.

5. MONITOR RELIABILITY (%)

Associated Unit/Stack	PM	SO ₂	NO
Unit 1	96.9	99.9	99.9
Unit 2	Off	Off	Off
Unit 3	98.1	96.0	96.0
Unit 4	99.5	99.8	99.8
Unit 5	98.4	99.7	99.6
Unit 6	99.2	99.6	99.8

Note: NO_x emissions is measured as NO in PPM. Final NO_x value is expressed as total NO₂

6. EMISSION PERFORMANCE

Table 6.1: Monthly tonnages for the month of June 2025

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
Unit 1	223.7	3 620	1 737
Unit 2	Off	Off	Off
Unit 3	136.8	3 721	1 531
Unit 4	141.5	3 493	1 519
Unit 5	186.2	4422	1219
Unit 6	69.6	3 153	1 351
SUM	757.8	18 408	7 358

Table 6.2: Operating days in compliance to PM AEL Limit - June 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contra- vention	Total Exceedance	Average PM (mg/Nm ³)
Unit 1	22	8	0	0	8	110.9
Unit 2	Off	Off	Off	Off	Off	Off
Unit 3	21	2	0	0	2	80.1
Unit 4	20	4	0	0	4	87.1
Unit 5	23	5	0	0	5	91.5
Unit 6	21	1	0	0	1	276.8
SUM	107	20	0	0	20	

Table 6.3: Operating days in compliance to SO₂ AEL Limit - June 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contra- vention	Total Exceedance	Average SO ₂ (mg/Nm ³)
Unit 1	30	0	0	0	0	1 739.2
Unit 2	Off	Off	Off	Off	Off	Off
Unit 3	26	0	0	0	0	1 889.5
Unit 4	25	0	0	0	0	1 980.8
Unit 5	29	0	0	0	0	2 081.9
Unit 6	23	0	0	0	0	2 035.4
SUM	133	0	0	0	0	

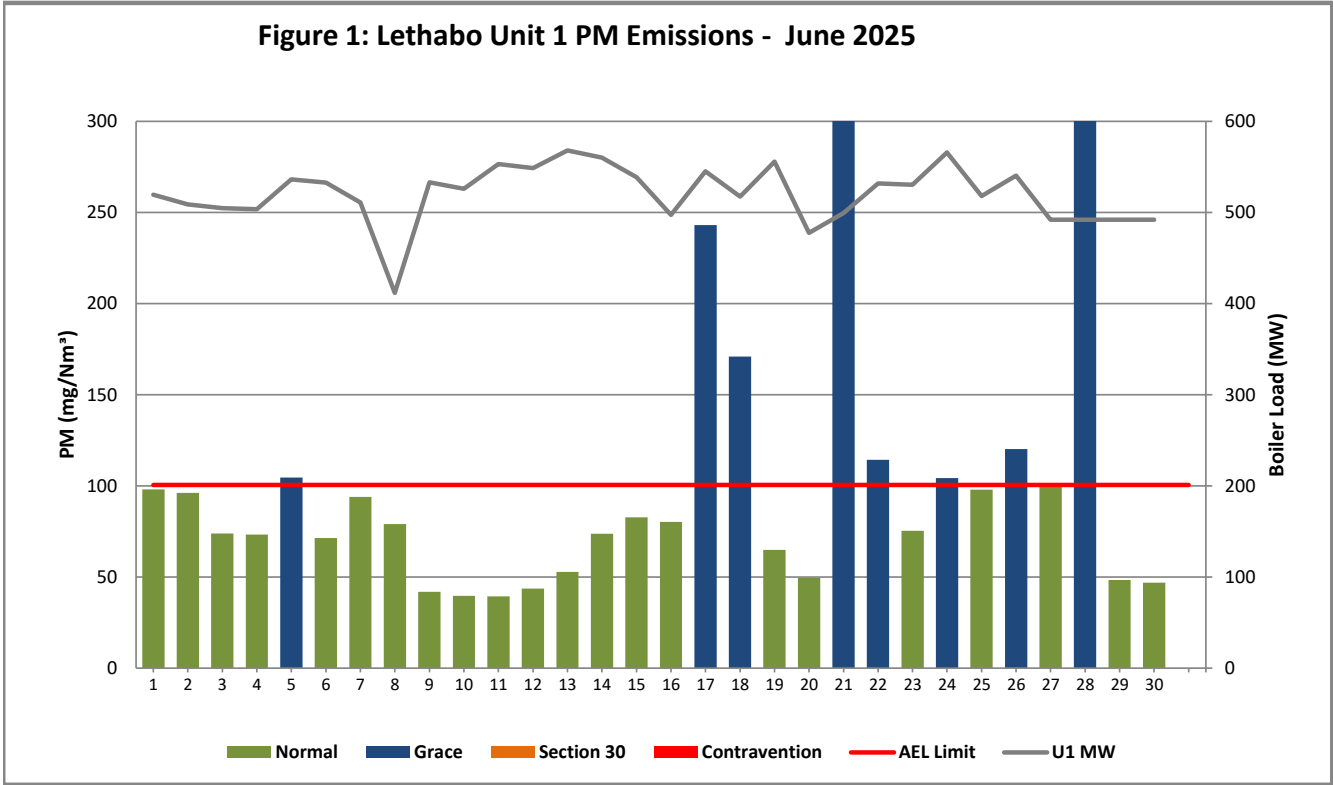
Table 6.4: Operating days in compliance to NO_x AEL Limit - June 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contra- vention	Total Exceedance	Average NO _x (mg/Nm ³)
Unit 1	30	0	0	0	0	832.8
Unit 2	Off	Off	Off	Off	Off	Off
Unit 3	26	0	0	0	0	775.2
Unit 4	25	0	0	0	0	842.0
Unit 5	29	0	0	0	0	572.3
Unit 6	23	0	0	0	0	860.1
SUM	133	0	0	0	0	

Note: NO_x emissions is measured as NO in PPM. Final NO_x value is expressed as total NO₂

Table 6.5: 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



Reasons:	
Date	Description
05-Jun	Poor ESP casing performance.SO3 Plant tripped.High hopper levels.
17-Jun	Poor ESP casing performance.High hopper level.
18-Jun	Poor ESP casing performance.High hopper level.LHI ESP casing outage.
21-Jun	Poor ESP casing performance.RHI ESP casing outage.
22-Jun	Poor ESP LHI casing performance.Manual rapping done.
24-Jun	Poor ESP LHI casing performance.Optimisation test conducted.
26-Jun	Poor ESP LHI casing performance.Optimisation test conducted.
28-Jun	Poor ESP casing performance.LHI ESP casing outage.LHI rappers on test.

Figure 2: Lethabo Unit 2 PM Emissions - June 2025

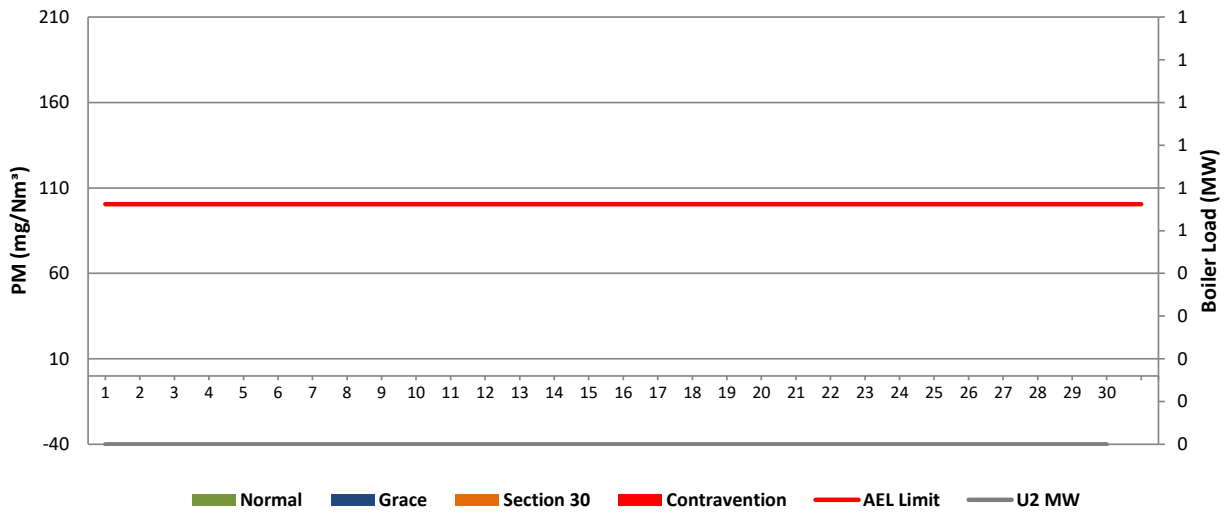
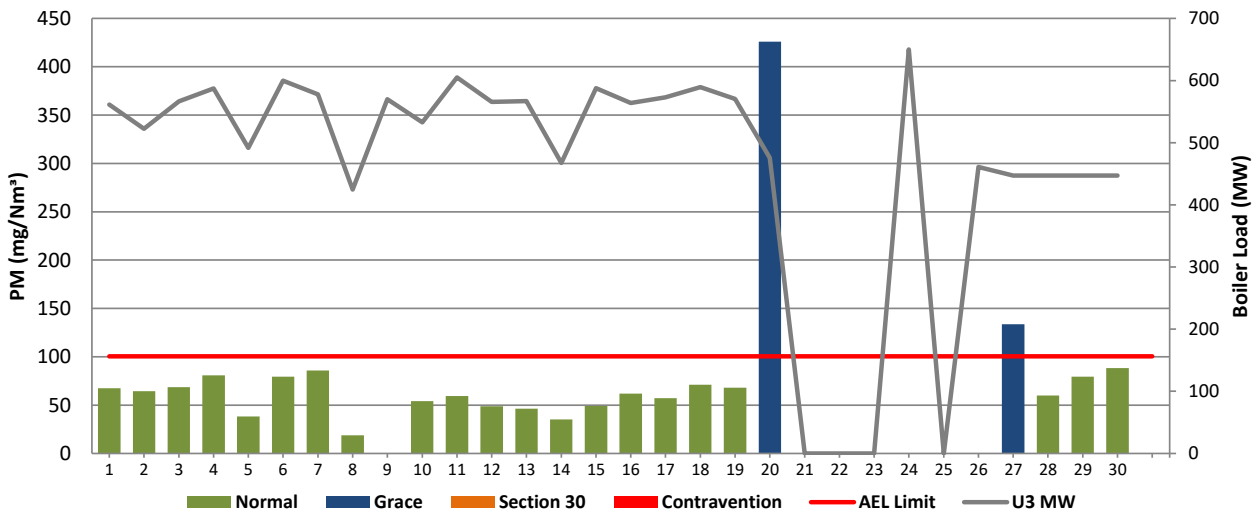
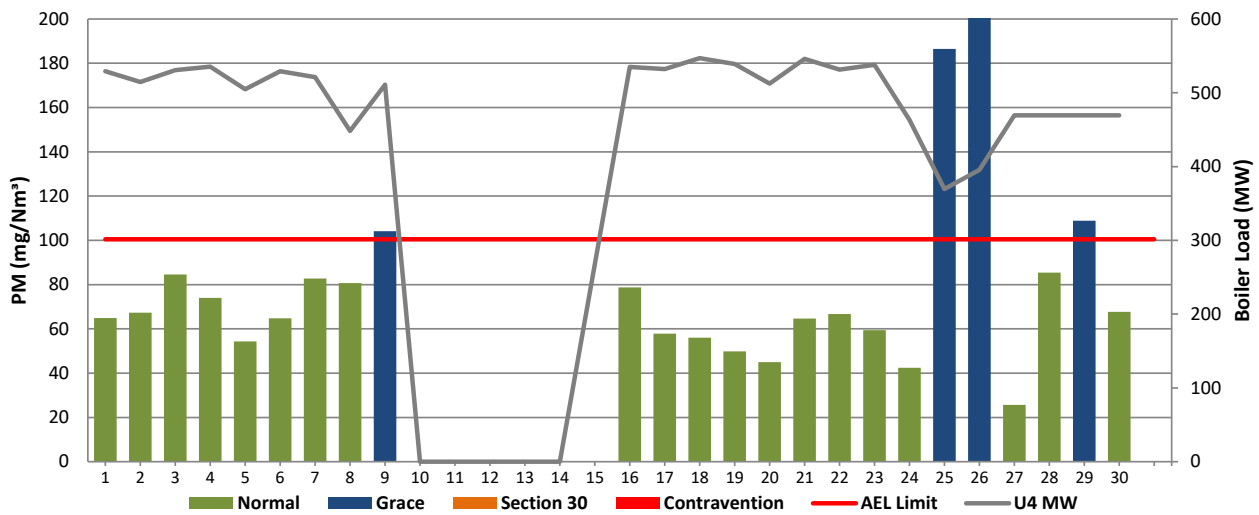


Figure 3: Lethabo Unit 3 PM Emissions - June 2025



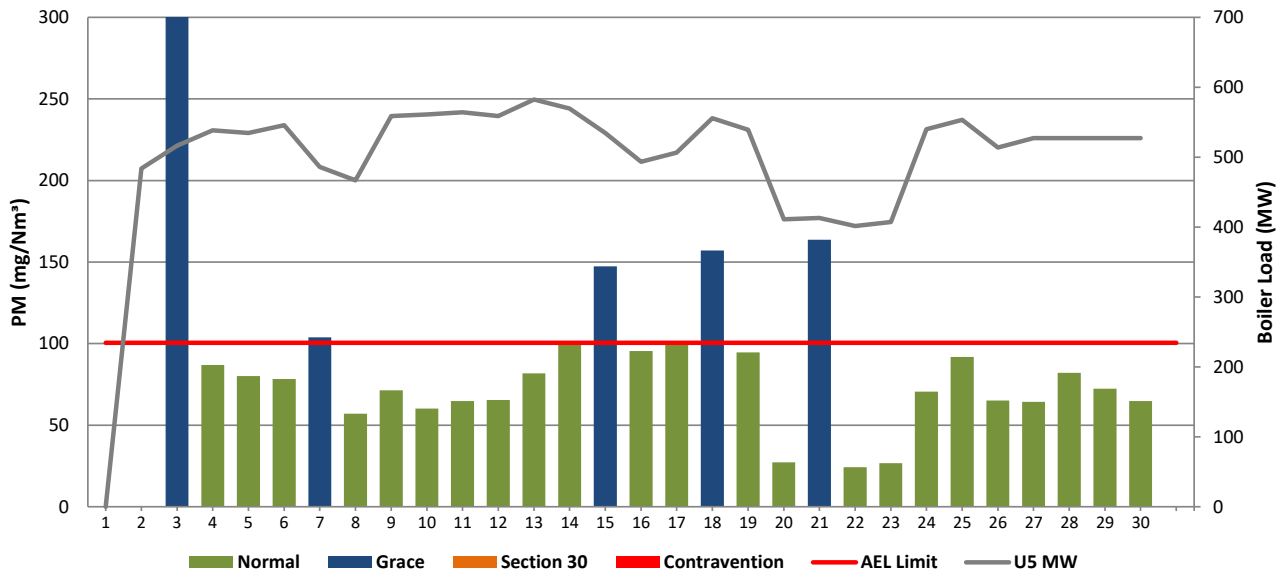
Reasons:	
Date	Description
10-Jun	The unit synchronised on 2025/06/09, and should be below the limit by 2025/06/12 @ 01:08
21-Jun	Unit 3 shutdown.
27-Jun	ESP Casing poor performance.Manual rapping done.High hopper level.

Figure 4: Lethabo Unit 4 PM Emissions - June 2025



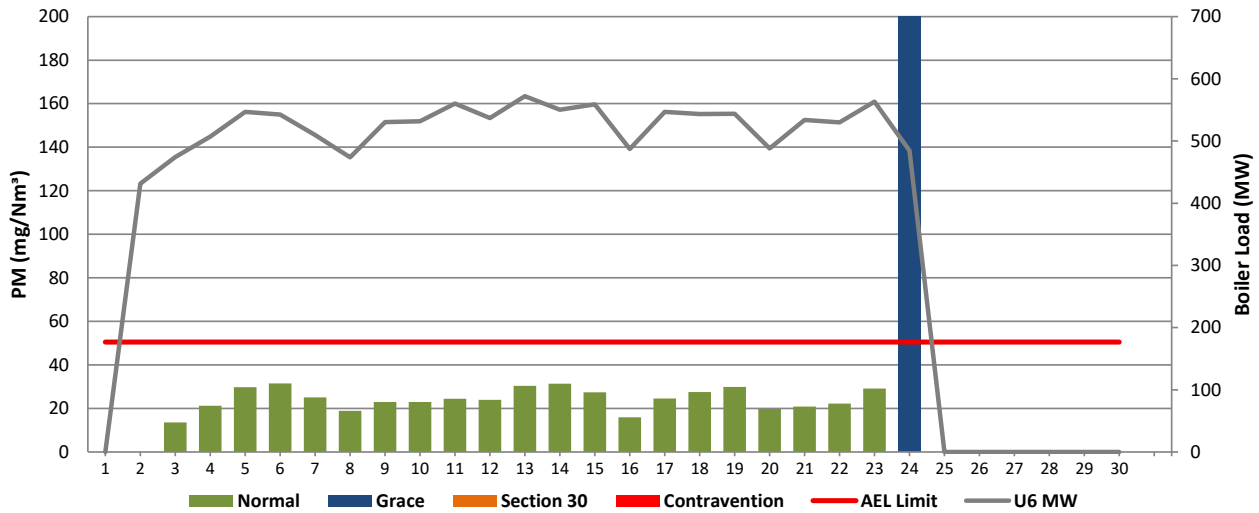
Reasons:	
Date	Description
09-Jun	Poor ESP casing performance.Unit 4 off for BTL repairs.
25-Jun	Poor ESP casing performance.High hopper levels.DHP issues.
26-Jun	Poor ESP casing performance.High hopper levels.Manual rapping done.
29-Jun	Poor ESP casing performance.High hopper levels.

Figure 5: Lethabo Unit 5 PM Emissions - June 2025



Reasons:	
Date	Description
03-Jun	Unit start up.SO3 plant still heating up.
07-Jun	Poor ESP Casing performance.LHO ESP casing outage.
15-Jun	Poor ESP casing performance.Bucket elevator issues.
18-Jun	Poor ESP casing performance.
21-Jun	Poor ESP casing performance.LHO ESP casing outage.

Figure 6: Lethabo Unit 6 PM Emissions - June 2025



Reasons:	
Date	Description
24-Jun	Boiler shutdown for electrical generator repairs.

Figure 7: Lethabo Unit 1 SO₂ Emissions - June 2025

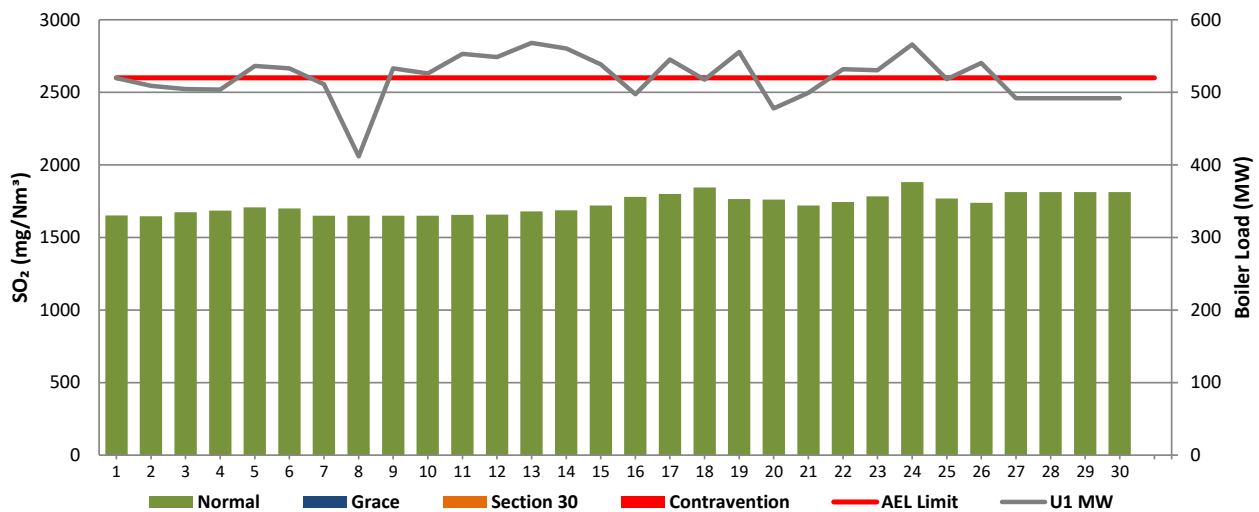


Figure 8: Lethabo Unit 2 SO₂ Emissions - June 2025

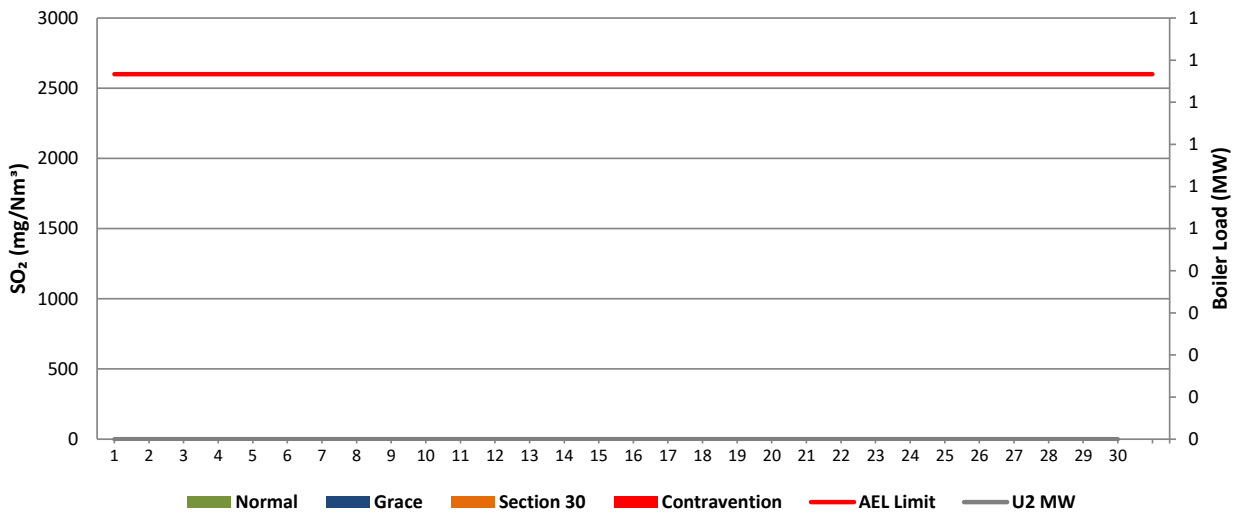


Figure 9: Lethabo Unit 3 SO₂ Emissions - June 2025

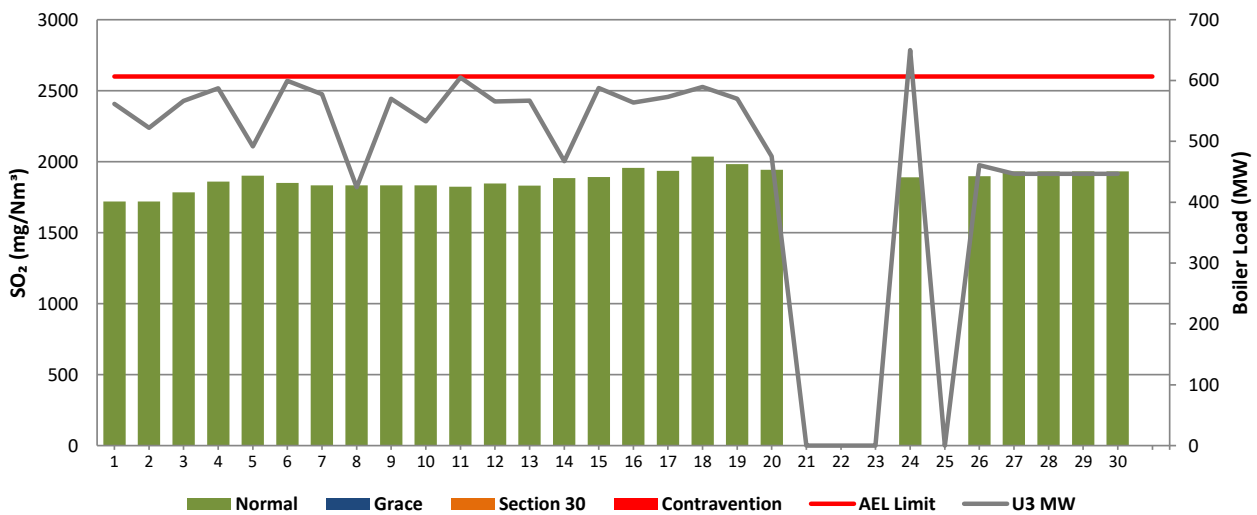


Figure 10: Lethabo Unit 4 SO₂ Emissions - June 2025

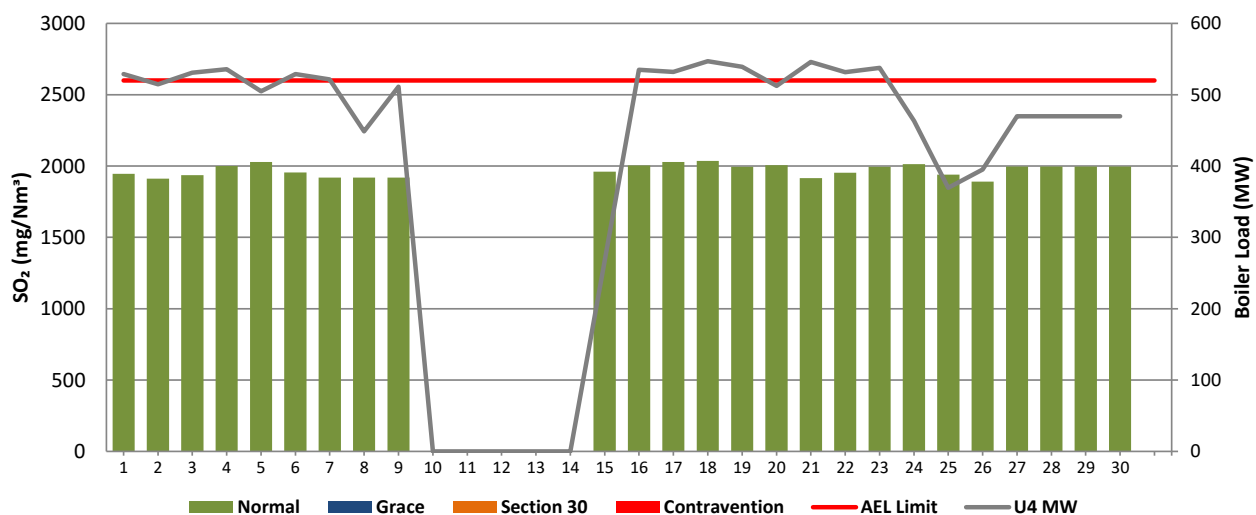


Figure 11: Lethabo Unit 5 SO₂ Emissions - June 2025

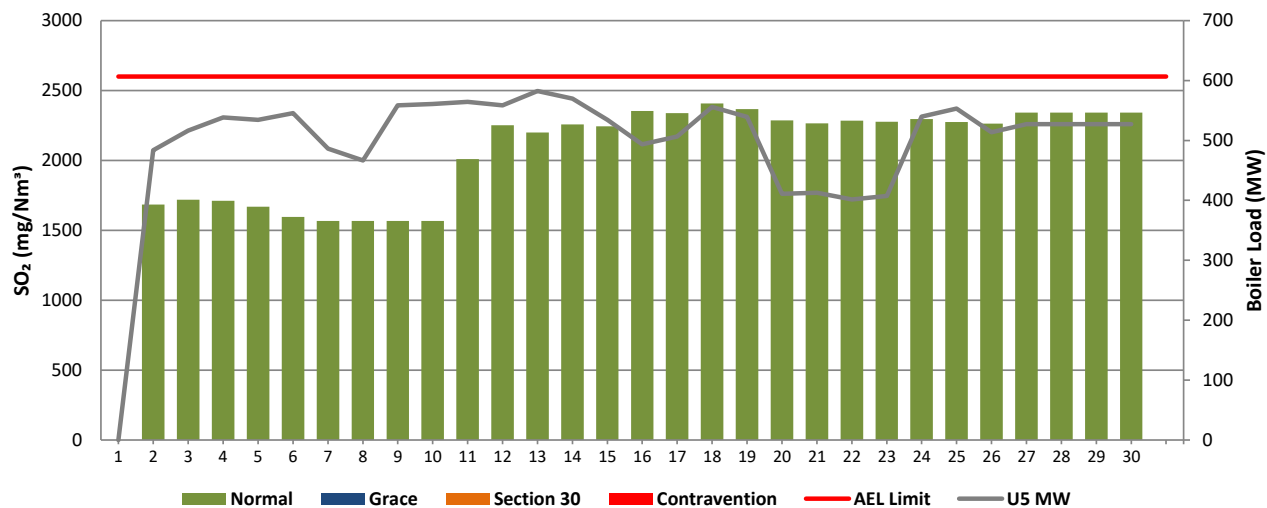


Figure 12: Lethabo Unit 6 SO₂ Emissions - June 2025

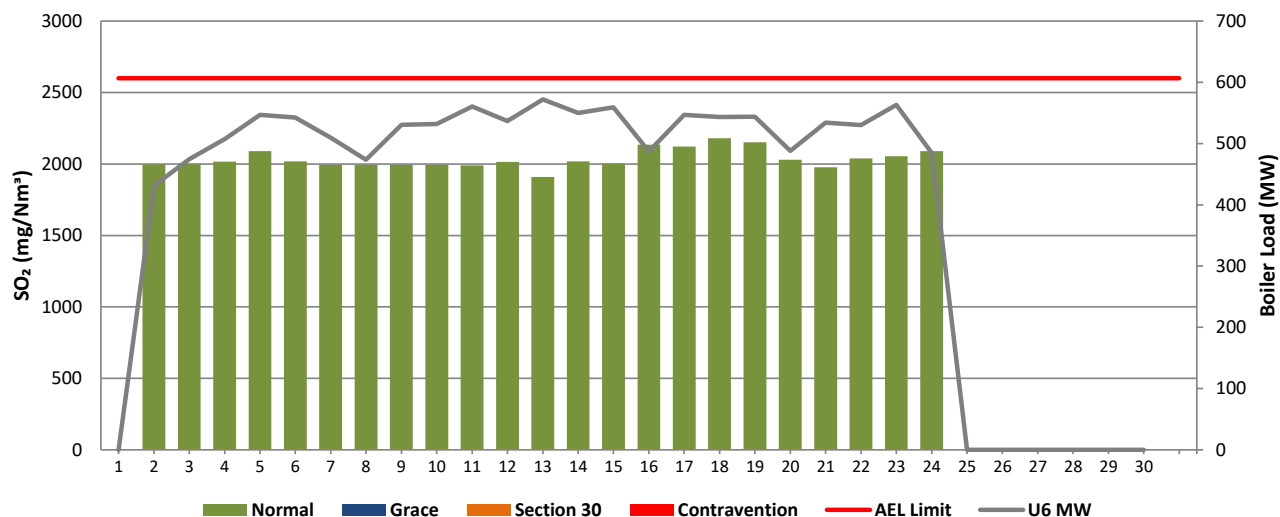


Figure 13: Lethabo Unit 1 NO_x Emissions - June 2025

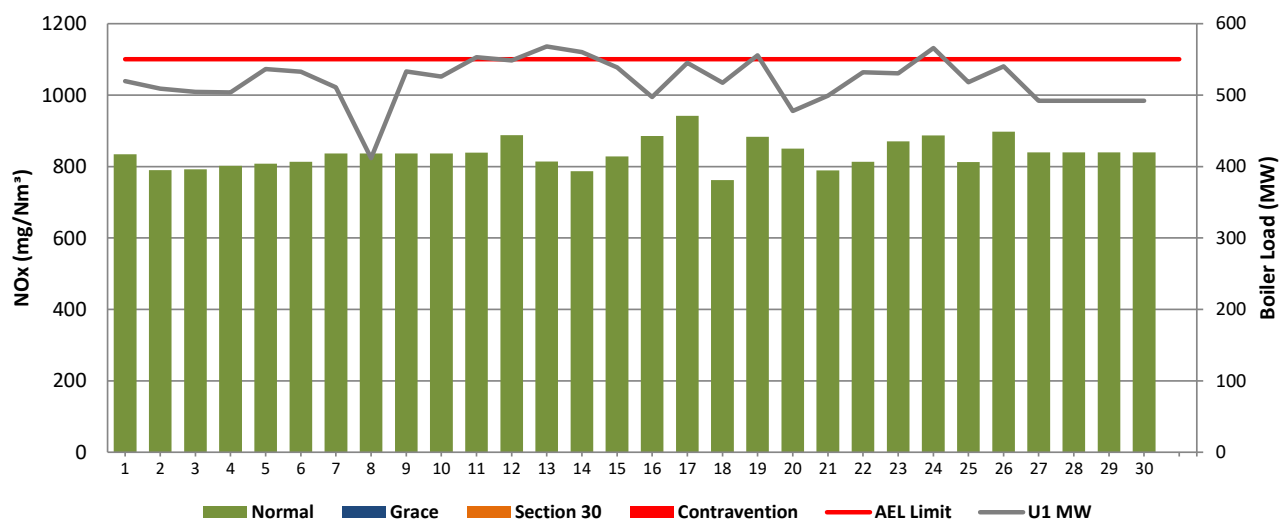


Figure 14: Lethabo Unit 2 NOx Emissions - June 2025

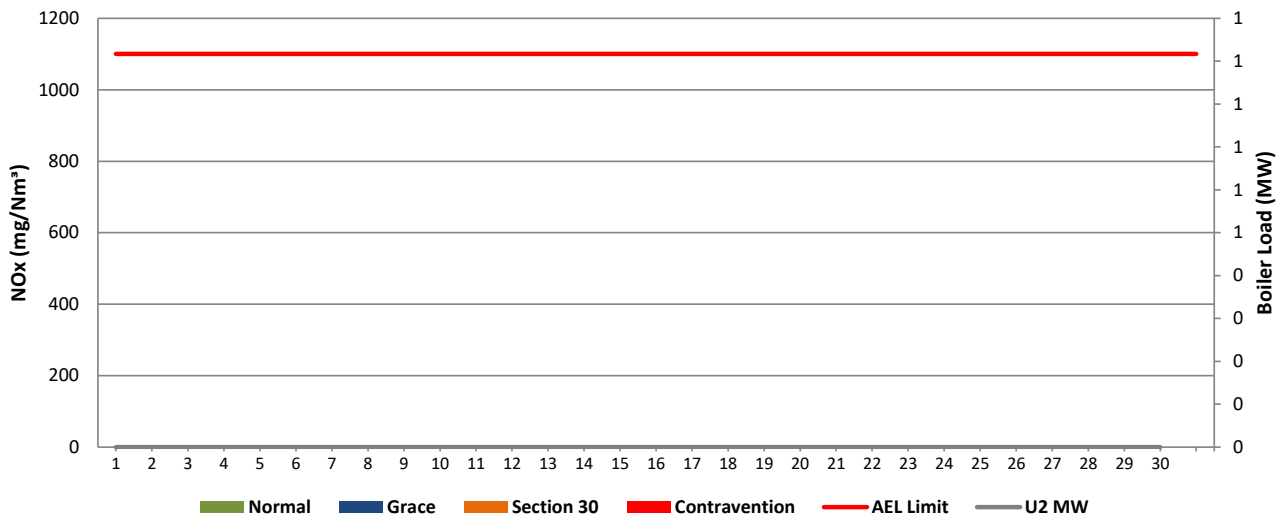


Figure 15: Lethabo Unit 3 NOx Emissions - June 2025

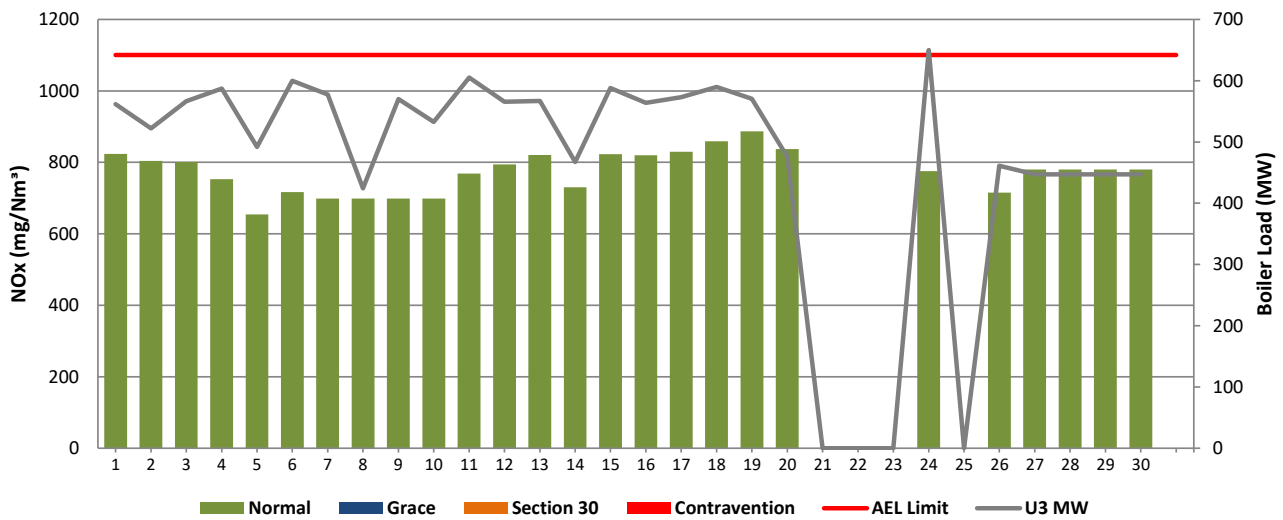


Figure 16: Lethabo Unit 4 NOx Emissions - June 2025

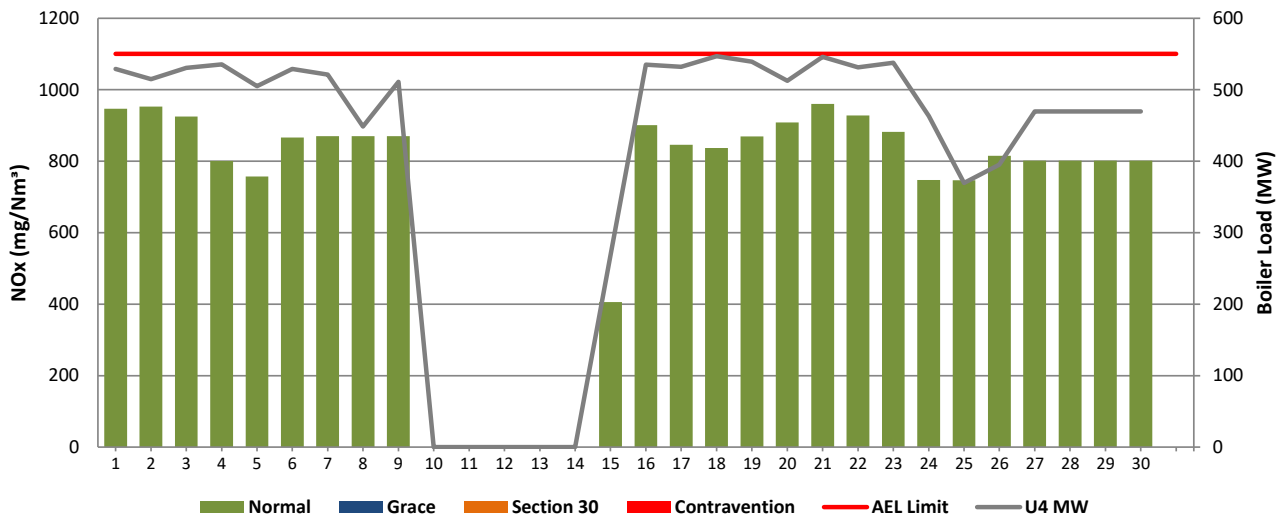


Figure 17: Lethabo Unit 5 NOx Emissions - June 2025

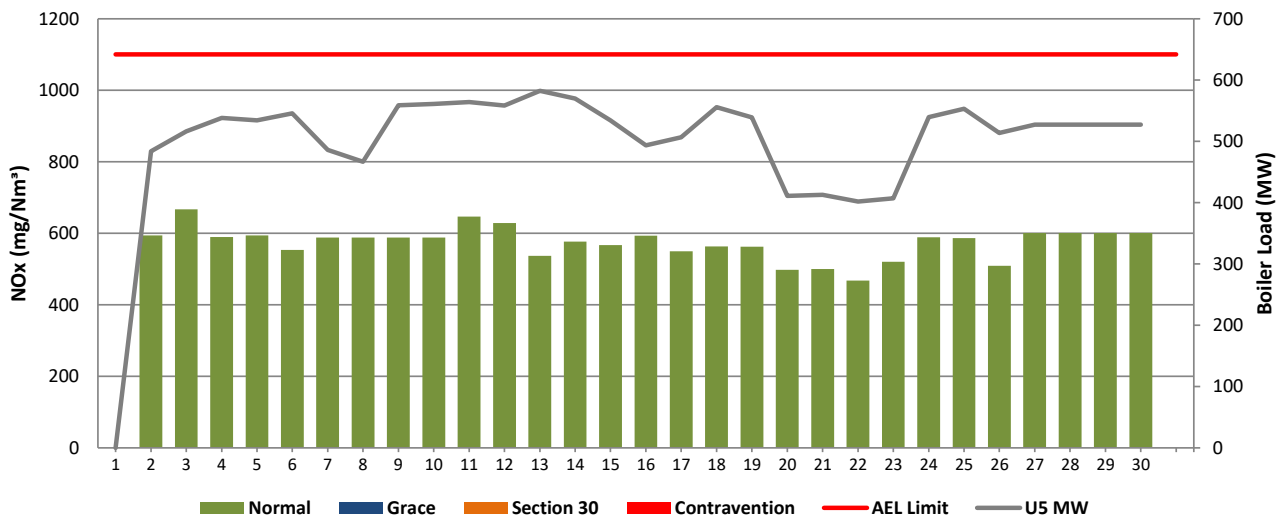
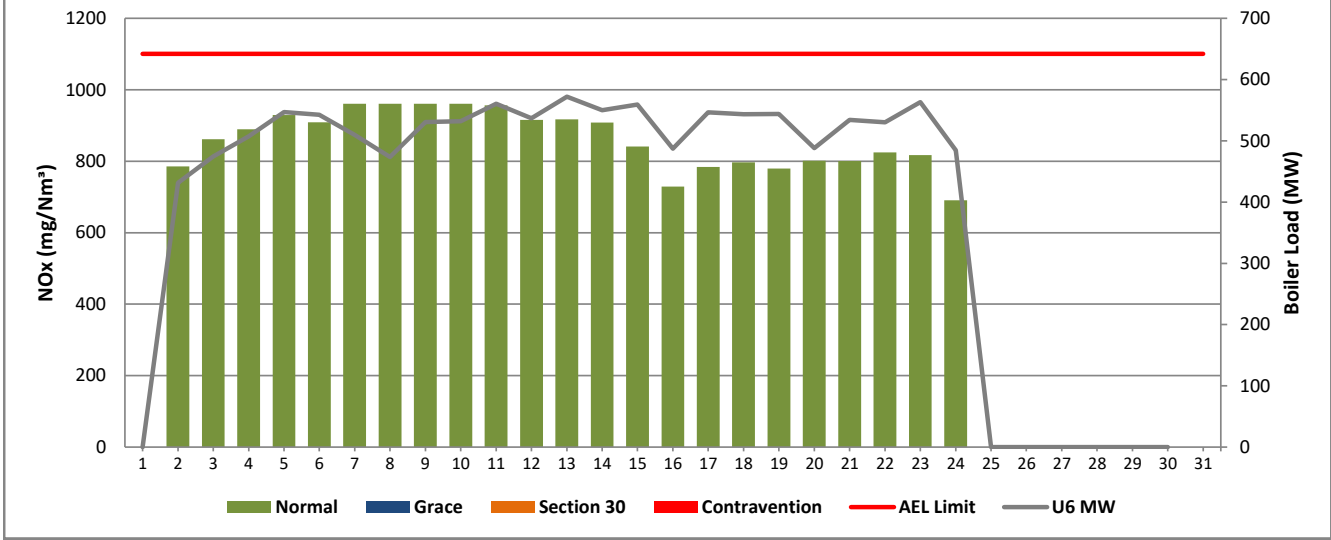


Figure 18: Lethabo Unit 6 NOx Emissions - June 2025



7 SHUT DOWN AND LIGHT UP INFORMATION

Table 7.1: PM Start-up information for the month of June 2025

Unit No.1	Main Condenser. Poor vacuum.		Unit tripped on Delta T's					
Breaker Open (BO)	12:21 pm	2025/06/08	3:49 pm	2025/06/08				
Draught Group (DG) Shut Down (SD)	1:00 pm	2025/06/08	5:25 pm	2025/06/08				
BO to DG SD (duration)	00:00:39	DD:HH:MM	00:01:36	DD:HH:MM				
Fires in time	1:00 pm	2025/06/08	4:00 pm	2025/06/08				
Synch. to Grid (or BC)	3:15 pm	2025/06/08	5:02 pm	2025/06/08				
Fires in to BC (duration)	00:02:15	DD:HH:MM	00:01:02	DD:HH:MM				
Emissions below limit from BC (end date)	not > limit	not > limit	not > limit	not > limit				
Emissions below limit from BC (duration)	n/a	DD:HH:MM	n/a	DD:HH:MM				

Unit No.2	U2 MGO (ESP &SO3)							
Breaker Open (BO)								
Draught Group (DG) Shut Down (SD)								
BO to DG SD (duration)		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						

Unit No.3	Condenser protection trip operated.		Super heater safety valve repairs		Unit tripped on low drum level			
Breaker Open (BO)	12:16 pm	2025/06/08	9:08 pm	2025/06/20	4:41 pm	2025/06/30		
Draught Group (DG) Shut Down (SD)	1:21 pm	2025/06/08	2:25 am	2025/06/22	5:41 pm	2025/06/30		
BO to DG SD (duration)	00:01:05	DD:HH:MM	01:05:17	DD:HH:MM	00:01:00	DD:HH:MM		
Fires in time	10:00 pm	2025/06/08	3:00 am	2025/06/26	6:30 pm	2025/06/30		
Synch. to Grid (or BC)	1:08 am	2025/06/09	12:28 pm	2025/06/26	9:19 pm	2025/06/30		
Fires in to BC (duration)	00:03:08	DD:HH:MM	00:09:28	DD:HH:MM	00:02:49	DD:HH:MM		
Emissions below limit from BC (end date)	not > limit	not > limit	not > limit	not > limit	not > limit	not > limit		
Emissions below limit from BC (duration)	n/a	DD:HH:MM	n/a	DD:HH:MM	n/a	DD:HH:MM		

Unit No.4	Boiler tube leak repairs		Generator front shaft vibrations.					
Breaker Open (BO)	11:19 pm	2025/06/09	3:53 pm	2025/06/14				
Draught Group (DG) Shut Down (SD)	12:00 pm	2025/06/10	4:30 pm	2025/06/14				
BO to DG SD (duration)	00:12:41	DD:HH:MM	00:00:37	DD:HH:MM				
Fires in time	4:30 am	2025/06/14	6:00 pm	2025/06/14				
Synch. to Grid (or BC)	3:53 pm	2025/06/14	10:32 pm	2025/06/15				
Fires in to BC (duration)	00:11:23	DD:HH:MM	01:04:32	DD:HH:MM				
Emissions below limit from BC (end date)	not > limit	not > limit	not > limit	not > limit				
Emissions below limit from BC (duration)	n/a	DD:HH:MM	n/a	DD:HH:MM				

Unit No.5	T8F coal conveyor O/C							
Breaker Open (BO)								
Draught Group (DG) Shut Down (SD)								
BO to DG SD (duration)		DD:HH:MM						
Fires in time	11:51 pm	2025/06/01						
Synch. to Grid (or BC)	2:34 am	2025/06/02						
Fires in to BC (duration)	00:02:43	DD:HH:MM						
Emissions below limit from BC (end date)	not > limit	not > limit						
Emissions below limit from BC (duration)	n/a	DD:HH:MM						

Unit No.6	T8F coal conveyor O/C							
Breaker Open (BO)								
Draught Group (DG) Shut Down (SD)								
BO to DG SD (duration)		DD:HH:MM						
Fires in time	11:12 pm	2025/06/01						
Synch. to Grid (or BC)	1:05 am	2025/06/02						
Fires in to BC (duration)	00:01:53	DD:HH:MM						
Emissions below limit from BC (end date)	not > limit	not > limit						
Emissions below limit from BC (duration)	n/a	DD:HH:MM						

7.2: Point Source emissions released during start-up (fires-in) and Shut-down (SD) for the month of June 2025 in mg/Nm³

8. MAINTENANCE

Unit 1				
Beginning of Maintenance	2025/06/18 10:41:00	2025/06/21 00:00:00	2025/06/28 00:00:00	
Reason for Maintenance	LHI precip casing repairs	RHI precip casing repairs	LHI precip casing repairs	
End (Time):	2025/06/18 22:24:00	2025/06/21 18:33:00	2025/06/28 23:53:00	
Duration	11:43:00	18:33:00	23:53:00	

Unit 2				
Beginning of Maintenance				
Reason for Maintenance				
End (Time):				
Duration				

Unit 3				
Beginning of Maintenance				
Reason for Maintenance				
End (Time):				
Duration				

Unit 4				
Beginning of Maintenance				
Reason for Maintenance				
End (Time):				
Duration				

Unit 5				
Beginning of Maintenance	2025/06/06 22:59:00			
Reason for Maintenance	LHO precip casing repairs			
End (Time):	2025/06/07 23:08:00			
Duration	24:09:00			

Unit 6				
Beginning of Maintenance				
Reason for Maintenance				
End (Time):				
Duration				

9. GENERAL

CO2 and Velocity Monitors Low Reliability Units 1-6:

Due to correction of bad data as per internal emission data integrity review actions in 2021 and 2022. Bad Velocity data and Bad CO2 data were corrected/removed as per the review actions and findings.

Unit 1 Monitor Reliability

08/06/2025: PM monitor Reliability low due to monitor max out.

Unit 3 Monitor Reliability

08/06/2025: PM monitor Reliability low due to monitor max out.

ADDENDUM TO MONTHLY EMISSIONS REPORT

10. S30 INCIDENT OR LEGAL CONTRAVENTION REGISTER

To be completed in the case of a S30 incident or a legal contravention:

Unit no	Incident Start Date	Incident End Date	Incident Cause	Remedial action	S30 initial notification sent	Date S30 investigation report sent	Date DEA Acknowledgment	Date DEA Acceptable	Comments / Reference No.

11. PARTICULATE EMISSIONS

EMISSION RATE (ACTUAL EMISSION/MWh GENERATED - kg/MWh)

MONTH	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	UNIT 6	STATION
Jun-24	0.30	1.03	0.45	0.68	0.54	OFF	0.60
Jul-24	0.43	2.04	0.55	0.75	0.68	1.28	0.87
Aug-24	0.48	0.91	0.69	0.47	0.53	0.18	0.54
Sep-24	0.61	0.70	0.69	0.67	0.76	0.24	0.60
Oct-24	0.34	0.62	OFF	0.61	0.78	0.33	0.57
Nov-24	0.42	0.50	OFF	0.90	0.75	0.26	0.56
Dec-24	0.56	0.57	OFF	0.88	0.63	0.24	0.54
Jan-25	1.08	0.51	OFF	0.82	1.47	0.71	0.90
Feb-25	1.50	0.56	7.43	0.49	1.94	0.50	1.47
Mar-25	1.38	0.67	1.83	0.58	2.33	0.46	1.25
Apr-25	16.13	OFF	1.50	6.27	2.31	0.40	5.12
May-25	16.16	OFF	1.28	0.81	0.57	0.25	3.33
Jun-25	0.60	OFF	0.45	0.49	0.52	0.25	0.47

ADDENDUM TO MONTHLY EMISSIONS REPORT

12. DAILY EMISSIONS FIGURES

Final Dust Concentration (mg/Nm³)

Date	U1	U2	U3	U4	U5	U6	Limit (U1-U5)	Limit (U6)
31-May	95	OFF	88	70	212	32	100	50
01-Jun	98	OFF	67	65	OFF	OFF	100	50
02-Jun	96	OFF	64	67	OFF	OFF	100	50
03-Jun	74	OFF	68	85	365	14	100	50
04-Jun	73	OFF	81	74	87	21	100	50
05-Jun	105	OFF	38	54	80	30	100	50
06-Jun	71	OFF	79	65	78	31	100	50
07-Jun	94	OFF	86	83	104	25	100	50
08-Jun	79	OFF	19	81	57	19	100	50
09-Jun	42	OFF	OFF	104	71	23	100	50
10-Jun	40	OFF	54	OFF	60	23	100	50
11-Jun	39	OFF	59	OFF	65	24	100	50
12-Jun	44	OFF	49	OFF	65	24	100	50
13-Jun	53	OFF	46	OFF	82	30	100	50
14-Jun	74	OFF	35	OFF	100	31	100	50
15-Jun	83	OFF	49	OFF	147	27	100	50
16-Jun	80	OFF	62	79	95	16	100	50
17-Jun	243	OFF	57	58	99	25	100	50
18-Jun	171	OFF	71	56	157	27	100	50
19-Jun	65	OFF	68	50	95	30	100	50
20-Jun	49	OFF	426	45	27	20	100	50
21-Jun	480	OFF	OFF	65	164	21	100	50
22-Jun	114	OFF	OFF	67	24	22	100	50
23-Jun	75	OFF	OFF	59	27	29	100	50
24-Jun	104	OFF	OFF	42	71	5577	100	50
25-Jun	98	OFF	OFF	186	92	OFF	100	50
26-Jun	120	OFF	OFF	418	65	OFF	100	50
27-Jun	99	OFF	134	26	64	OFF	100	50
28-Jun	468	OFF	60	85	82	OFF	100	50
29-Jun	48	OFF	80	109	72	OFF	100	50
30-Jun	47	OFF	88	68	65	OFF	100	50

ADDENDUM TO MONTHLY EMISSIONS REPORT

Final SOx Concentration (mg/Nm³)

Date	U1	U2	U3	U4	U5	U6	Limit
31-May	1607	OFF	1746	1986	1589	1941	2600
01-Jun	1651	OFF	1719	1945	OFF	OFF	2600
02-Jun	1646	OFF	1719	1912	1683	1998	2600
03-Jun	1674	OFF	1783	1936	1719	2001	2600
04-Jun	1685	OFF	1859	2000	1712	2017	2600
05-Jun	1708	OFF	1902	2029	1669	2090	2600
06-Jun	1700	OFF	1850	1954	1596	2018	2600
07-Jun	1650	OFF	1834	1919	1566	1994	2600
08-Jun	1650	OFF	1834	1919	1566	1994	2600
09-Jun	1650	OFF	1834	1919	1566	1994	2600
10-Jun	1650	OFF	1834	OFF	1566	1994	2600
11-Jun	1655	OFF	1823	OFF	2009	1990	2600
12-Jun	1658	OFF	1847	OFF	2251	2014	2600
13-Jun	1680	OFF	1831	OFF	2200	1910	2600
14-Jun	1687	OFF	1885	OFF	2258	2019	2600
15-Jun	1721	OFF	1893	1960	2244	2004	2600
16-Jun	1780	OFF	1957	2004	2353	2135	2600
17-Jun	1800	OFF	1936	2028	2338	2123	2600
18-Jun	1844	OFF	2036	2036	2407	2180	2600
19-Jun	1764	OFF	1982	1995	2367	2152	2600
20-Jun	1762	OFF	1942	2005	2286	2030	2600
21-Jun	1721	OFF	OFF	1915	2265	1977	2600
22-Jun	1745	OFF	OFF	1954	2284	2039	2600
23-Jun	1783	OFF	OFF	1994	2277	2054	2600
24-Jun	1882	OFF	1889	2014	2296	2090	2600
25-Jun	1769	OFF	OFF	1940	2275	OFF	2600
26-Jun	1738	OFF	1898	1892	2264	OFF	2600
27-Jun	1814	OFF	1932	1997	2342	OFF	2600
28-Jun	1836	OFF	2031	2046	2341	OFF	2600
29-Jun	1836	OFF	1992	2023	2291	OFF	2600
30-Jun	2040	OFF	2083	2183	2382	OFF	2600

ADDENDUM TO MONTHLY EMISSIONS REPORT

Final NOx Concentration (mg/Nm³)

Date	U1	U2	U3	U4	U5	U6	Limit
31-May	910	OFF	825	1010	574	610	1100
01-Jun	834	OFF	823	947	OFF	OFF	1100
02-Jun	790	OFF	804	953	594	785	1100
03-Jun	792	OFF	801	925	667	861	1100
04-Jun	802	OFF	753	801	590	889	1100
05-Jun	808	OFF	654	757	594	930	1100
06-Jun	813	OFF	717	867	554	909	1100
07-Jun	836	OFF	699	870	588	961	1100
08-Jun	836	OFF	699	870	588	961	1100
09-Jun	836	OFF	699	870	588	961	1100
10-Jun	836	OFF	699	OFF	588	961	1100
11-Jun	839	OFF	769	OFF	647	956	1100
12-Jun	887	OFF	794	OFF	628	916	1100
13-Jun	814	OFF	821	OFF	537	917	1100
14-Jun	787	OFF	730	OFF	577	908	1100
15-Jun	828	OFF	823	406	567	841	1100
16-Jun	886	OFF	820	901	594	729	1100
17-Jun	942	OFF	829	846	550	784	1100
18-Jun	762	OFF	859	837	563	797	1100
19-Jun	883	OFF	887	869	562	779	1100
20-Jun	850	OFF	837	909	498	801	1100
21-Jun	789	OFF	OFF	961	501	801	1100
22-Jun	813	OFF	OFF	928	468	824	1100
23-Jun	871	OFF	OFF	882	521	817	1100
24-Jun	887	OFF	775	748	589	690	1100
25-Jun	812	OFF	OFF	747	587	OFF	1100
26-Jun	897	OFF	716	815	509	OFF	1100
27-Jun	840	OFF	780	802	601	OFF	1100
28-Jun	815	OFF	787	855	583	OFF	1100
29-Jun	855	OFF	773	833	595	OFF	1100
30-Jun	742	OFF	805	851	569	OFF	1100

ADDENDUM TO MONTHLY EMISSIONS REPORT

13. AVAILABILITY

ESP utilisation

Availability												
Month	Unit 1	Days Affected	Unit 2	Days Affected	Unit 3	Days Affected	Unit 4	Days Affected	Unit 5	Days Affected	Unit 6	Days Affected
Jun-24	100.00%	0.00	99.17%	1.00	98.09%	2.29	98.32%	2.01	100.00%	0.00	100.00%	0.00
Jul-24	100.00%	0.0	100.00%	0.0	100.00%	0.0	100.00%	0.0	100.00%	0.0	100.00%	0.00%
Aug-24	98.59%	1.8	100.00%	0.0	99.21%	1.0	100.00%	0.0	99.84%	0.2	100.00%	0.00%
Sep-24	98.55%	1.74	99.84%	0.19	100.00%	0.00	99.12%	1.06	99.16%	1.01	100.00%	0.00
Oct-24	99.19%	1.0	100.00%	0.0	100.00%	0.0	100.00%	0.0	97.67%	2.9	100.00%	0.00%
Nov-24	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Dec-24	99.39%	0.76	99.24%	0.95	100.00%	0.00	99.18%	1.01	99.96%	0.05	99.27%	0.91
Jan-25	98.99%	1.3	100.00%	0.0	100.00%	0.0	100.00%	0.0	98.40%	2.0	100.00%	0.0
Feb-25	99.18%	0.9	99.84%	0.2	100.00%	0.0	100.00%	0.0	100.00%	0.0	98.90%	1.2
Mar-25	98.08%	2.4	99.27%	0.9	98.99%	1.3	100.00%	0.0	95.52%	5.6	100.00%	0.0
Apr-25	98.21%	2.15	100.00%	0.00	100.00%	0.00	100.00%	0.00	97.50%	3.00	98.48%	1.82
May-25	99.33%	0.84	100.00%	0.00	97.26%	3.39	100.00%	0.00	100.00%	0.00	100.00%	0.00
Jun-25	98.12%	2.26	100.00%	0.00	100.00%	0.00	100.00%	0.00	99.16%	1.01	100.00%	0.00

SO₃ plant utilisation

Availability												
Month	Unit 1	Days Affected	Unit 2	Days Affected	Unit 3	Days Affected	Unit 4	Days Affected	Unit 5	Days Affected	Unit 6	Days Affected
Jun-24	97.08%	0.88	69.03%	9.29	100.00%	0.00	99.34%	0.20	99.77%	0.07	Off-line	Off-line
Jul-24	98.30%	0.5	41.43%	18.2	99.73%	0.1	99.58%	0.1	98.39%	0.5	53.66%	14.37
Aug-24	99.46%	0.2	91.70%	2.6	100.00%	0.0	97.98%	0.6	99.59%	0.1	96.68%	1.03
Sep-24	100.00%	0.0	89.45%	3.2	99.33%	0.2	99.84%	0.0	99.58%	0.1	99.92%	0.02
Oct-24	99.85%	0.0	95.65%	1.3	Off-line	Off-line	98.92%	0.3	93.82%	1.9	99.59%	0.13
Nov-24	99.99%	0.0	96.60%	1.0	Off-line	Off-line	99.17%	0.3	97.46%	0.8	99.21%	0.24
Dec-24	52.80%	14.6	27.08%	22.6	Off-line	Off-line	77.33%	7.0	66.67%	10.3	60.94%	12.11
Jan-25	95.59%	1.4	93.50%	2.0	Off-line	Off-line	96.18%	1.2	90.28%	3.0	94.33%	1.8
Feb-25	91.37%	2.4	95.28%	1.3	67.36%	913.89%	95.45%	1.3	91.35%	2.4	97.77%	0.6
Mar-25	98.52%	0.5	96.36%	1.1	85.05%	463.48%	98.61%	0.4	99.91%	0.0	88.42%	3.6
Apr-25	95.63%	1.3	Off-line	Offline	91.27%	261.90%	85.62%	4.3	88.61%	3.4	99.78%	0.1
May-25	96.57%	1.1	Off-line	Offline	98.12%	58.33%	99.01%	0.3	100.00%	0.0	99.03%	0.3
Jun-25	99.86%	0.0	Off-line	Offline	99.25%	22.37%	99.83%	0.1	98.19%	0.5	99.22%	0.2

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Particulate Emission Monitors

Availability						
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Jun-24	98%	87%	97%	97%	99%	OFF
Jul-24	90.95%	73.05%	97.04%	95.37%	98.85%	61.98%
Aug-24	95.70%	91.44%	99.38%	99.60%	98.95%	99.58%
Sep-24	98.11%	94.42%	100.00%	98.42%	96.20%	99.64%
Oct-24	99.65%	94.32%	OFF	98.75%	96.51%	98.18%
Nov-24	99.43%	99.40%	OFF	99.31%	94.41%	98.54%
Dec-24	100.00%	96.61%	OFF	98.22%	96.26%	99.60%
Jan-25	96.64%	98.67%	OFF	87.85%	92.93%	99.02%
Feb-25	98.72%	97.70%	85.64%	99.62%	93.53%	98.72%
Mar-25	93.15%	96.04%	96.08%	99.85%	92.61%	97.36%
Apr-25	71.99%	OFF	99.17%	87.49%	94.03%	99.11%
May-25	67.27%	OFF	98.66%	99.17%	98.40%	99.86%
Jun-25	96.88%	OFF	98.09%	99.48%	98.44%	99.22%

Gaseous Emission Monitors

Availability												
	Unit 1		Unit 2		Unit 3		Unit 4		Unit 5		Unit 6	
Month	SO _x	NO _x	SO _x	NO _x	SO _x	NO _x	SO _x	NO _x	SO _x	NO _x	SO _x	NO _x
Jun-24	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	OFF	OFF
Jul-24	99.75%	99.89%	100.00%	100.00%	100.00%	100.00%	99.46%	99.73%	100.00%	100.00%	73.40%	70.78%
Aug-24	99.87%	100.00%	99.80%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Sep-24	100.00%	100.00%	100.00%	99.68%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Oct-24	99.85%	100.00%	99.58%	99.72%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.65%	99.65%
Nov-24	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.86%	100.00%
Dec-24	57.50%	57.50%	37.50%	37.50%	0.00%	0.00%	79.71%	79.71%	66.67%	66.67%	65.65%	65.73%
Jan-25	99.26%	99.09%	99.33%	99.33%	0.00%	0.00%	100.00%	96.43%	100.00%	100.00%	100.00%	100.00%
Feb-25	98.21%	100.00%	100.00%	99.60%	86.08%	85.19%	96.01%	96.01%	94.55%	94.55%	96.18%	96.18%
Mar-25	93.82%	99.87%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Apr-25	98.61%	98.61%	OFF	OFF	98.61%	98.61%	92.56%	91.94%	99.17%	99.17%	99.17%	99.17%
May-25	97.64%	97.64%	OFF	OFF	98.12%	98.12%	97.53%	97.53%	97.82%	97.82%	98.12%	98.12%
Jun-25	99.86%	99.86%	OFF	OFF	95.99%	95.99%	99.83%	99.83%	99.71%	99.57%	99.64%	99.82%

Oxygen Monitor Availability						
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Jun-24	100.00%	100.00%	100.00%	99.55%	36.78%	OFF
Jul-24	99.89%	100.00%	100.00%	100.00%	99.84%	50.17%
Aug-24	99.87%	99.80%	99.87%	99.87%	100.00%	99.48%
Sep-24	100.00%	99.90%	100.00%	99.86%	99.72%	99.70%
Oct-24	99.23%	99.55%	0.00%	99.87%	94.89%	99.28%
Nov-24	100.00%	100.00%	0.00%	99.86%	84.89%	99.15%
Dec-24	57.50%	37.50%	0.00%	79.71%	66.67%	65.73%
Jan-25	99.55%	99.50%	0.00%	98.40%	99.43%	82.47%
Feb-25	99.70%	99.24%	85.19%	95.83%	94.39%	60.94%
Mar-25	100.00%	100.00%	100.00%	100.00%	99.81%	99.87%
Apr-25	98.74%	OFF	98.44%	92.56%	99.03%	99.00%
May-25	97.27%	OFF	97.98%	97.53%	97.52%	97.98%
Jun-25	99.72%	OFF	95.83%	99.83%	99.57%	99.64%

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14. EFFICIENCY

ESP Efficiency (%)						
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Jun-24	99.89%	99.55%	99.82%	99.62%	99.75%	Unit Off
Jul-24	99.848%	99.125%	99.796%	99.588%	99.735%	99.450%
Aug-24	99.845%	99.625%	99.749%	99.755%	99.769%	99.907%
Sep-24	99.789%	99.660%	99.775%	99.644%	99.675%	99.896%
Oct-24	99.866%	99.716%	Unit Off	99.669%	99.637%	99.856%
Nov-24	99.838%	99.782%	Unit Off	99.515%	99.662%	99.888%
Dec-24	99.773%	99.722%	Unit Off	99.513%	99.695%	99.891%
Jan-25	99.573%	99.764%	Unit Off	99.650%	99.408%	99.613%
Feb-25	99.455%	99.758%	97.777%	99.804%	99.266%	99.787%
Mar-25	99.510%	99.690%	97.280%	99.770%	99.010%	99.780%
Apr-25	94.94%	Unit Off-line	99.46%	97.85%	99.12%	99.83%
May-25	93.94%	Unit Off-line	99.44%	99.67%	99.74%	99.86%
Jun-25	99.76%	Unit Off-line	99.80%	99.79%	99.74%	99.88%

15. REMARKS

UNIT	MWLOSS	REASON	ACTUALSTARTDATE	ACTUALENDDATE
1	80	High stack emissions	2025/06/01 20:13:00	2025/06/02 00:13:00
1	80	high stack emissions.	2025/06/07 19:18:00	2025/06/07 19:53:00
1	130	high stack emissions.	2025/06/07 19:53:00	2025/06/07 21:21:00
1	179	High stack emissions	2025/06/07 21:21:00	2025/06/08 00:00:00
1	593	Main Condenser. Poor vaccuum.	2025/06/08 12:21:00	2025/06/08 15:15:00
1	593	Unit tripped on Delta T's	2025/06/08 15:49:00	2025/06/08 17:02:00
1	90	LHI precip casing repairs	2025/06/18 10:41:00	2025/06/18 22:24:00
1	90	RHI casing repairs	2025/06/21 00:00:00	2025/06/21 18:33:00
1	90	High stack emissions	2025/06/25 20:15:00	2025/06/26 04:42:00
1	37	Emissions optimization test.	2025/06/26 09:38:00	2025/06/26 13:44:00
1	87	High stack emissions.	2025/06/27 19:53:00	2025/06/28 00:00:00
1	90	LH Inner precip casing repairs	2025/06/28 00:00:00	2025/06/28 23:53:00
2	593	MGO ESP & SO3	2025/06/01 00:00:00	2025/06/30 23:59:59
3	593	Condenser protection trip operated.	2025/06/08 12:16:00	2025/06/09 01:08:00
3	593	Super heater safety valve repairs	2025/06/20 21:08:00	2025/06/26 12:28:00
3	593	Unit tripped on low drum level	2025/06/30 16:41:00	2025/06/30 21:19:00
3	297	System Generated Ramp Event for Event id : 2075907	2025/06/30 21:19:00	2025/06/30 22:49:00
4	593	Boiler tube leak repairs	2025/06/09 23:19:00	2025/06/14 15:53:00
4	593	Generator front shaft vibrations.	2025/06/14 15:53:00	2025/06/15 22:32:00
4	179	Dust plant standing.	2025/06/24 10:07:00	2025/06/25 09:39:00
4	229	High hopper levels-(back-logging recovery)	2025/06/25 09:39:00	2025/06/26 16:15:00
4	194	High hopper levels-back-logging in progress	2025/06/26 16:15:00	2025/06/26 17:16:00
4	96	High hopper levels-back-logging in progress.	2025/06/26 17:16:00	2025/06/26 18:14:00
4	71	High hopper levels-Back-logging in progress.	2025/06/26 18:14:00	2025/06/27 05:30:00
4	75	High hoppers level	2025/06/27 09:09:00	2025/06/27 10:45:00
4	176	High hopper levels	2025/06/27 10:45:00	2025/06/27 15:33:00
4	96	High hopper levels	2025/06/27 15:33:00	2025/06/27 15:50:00
4	120	High hopper levels.	2025/06/27 20:08:00	2025/06/28 06:39:00
5	593	T8F coal conveyor O/C	2025/06/01 00:00:00	2025/06/02 02:34:00
5	100	High stack emissions	2025/06/04 19:16:00	2025/06/04 21:20:00
5	100	Correlation test	2025/06/05 22:01:00	2025/06/06 04:25:00
5	100	LHO precip casing repairs.	2025/06/06 22:59:00	2025/06/07 23:08:00
5	200	Correlation test	2025/06/16 22:40:00	2025/06/17 04:32:00
5	196	High stack emissions.	2025/06/17 20:32:00	2025/06/18 00:45:00
5	100	High stack emissions	2025/06/19 18:11:00	2025/06/20 00:00:00
6	593	T8F coal conveyor O/C	2025/06/01 00:00:00	2025/06/02 01:05:00
6	593	Gen Rotor Earth fault alarm received and sustained.	2025/06/24 02:25:00	2025/06/30 23:59:59

PM Exceedances		
U1.	Poor ESP casing performance. SO3 Plant tripped. High hopper levels.	05-Jun
U1.	Poor ESP casing performance. High hopper level.	17-Jun
U1.	Poor ESP casing performance. High hopper level. LHI ESP casing outage.	18-Jun
U1.	Poor ESP casing performance. RHI ESP casing outage.	21-Jun
U1.	Poor ESP LHI casing performance. Manual rapping done.	22-Jun
U1.	Poor ESP LHI casing performance. Optimisation test conducted.	24-Jun
U1.	Poor ESP LHI casing performance. Optimisation test conducted.	26-Jun
U1.	Poor ESP casing performance. LHI ESP casing outage. LHI rappers on test.	28-Jun
U3.	The unit synchronised on 2025/06/09, and should be below the limit by 2025/06/12 @ 01:08	10-Jun
U3.	Unit 3 shutdown.	21-Jun
U3.	ESP Casing poor performance. Manual rapping done. High hopper level.	27-Jun
U4.	Poor ESP casing performance. Unit 4 off for BTL repairs.	09-Jun
U4.	Poor ESP casing performance. High hopper levels. DHP issues.	25-Jun
U4.	Poor ESP casing performance. High hopper levels.	26-Jun
U4.	Poor ESP casing performance. High hopper levels.	29-Jun
U5.	Unit start up. SO3 plant still heating up.	03-Jun

PM Exceedances		
U5.	Poor ESP Casing performance. LHO ESP casing outage.	07-Jun
U5.	Poor ESP casing performance. Bucket elevator issues.	15-Jun
U5.	Poor ESP casing performance.	18-Jun
U5.	Poor ESP casing performance. LHO ESP casing outage.	21-Jun
U6.	Boiler shutdown for electrical generator repairs.	24-Jun