



Generation

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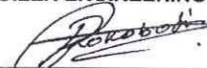
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MATLA POWER STATION

Atmospheric Emission License 17/4/AEL/MP312/11/14



BOILER ENGINEERING MANAGER



ENVIRONMENTAL MANAGER



ENGINEERING MANAGER

01/09/2022
DATE

01/09/2022
DATE

02 September 2022
DATE

MATLA POWER STATION MONTHLY EMISSIONS REPORT

Atmospheric Emission License 17/4/AEL/MP312/11/14


1 RAW MATERIALS AND PRODUCTS

Raw Materials and Products	Raw Material Type	Units	Max Permitted Consumption Rate	Consumption Rate Jul-2022
	Coal	Tons	1 475 000	893 372
	Fuel Oil	Tons	3 500	2 176
Production Rates	Product / By-Product Name	Units	Max Production Capacity Permitted	Production Rate Jul-2022
	Energy	GWh	2 567	1 459
	Ash	Tons	471 000	252 378
	RE PM	kg/MWh	not specified	2.543

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
Sulphur Content	%	0.8-1.1	1.00
Ash Content	%	21-40	28.25

3 EMISSION LIMITS (mg/Nm³)

Associated Unit/Stack	PM	SO ₂	NO
South	200	3500	1200
Unit 4	200	3500	1200
Unit 5	100	3500	1200
Unit 6	100	3500	1200

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

4 ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	Technology Type	Efficiency Jul-2022
South	<i>Electro Static Precipators (ESP)</i>	<i>98.957%</i>
Unit 4	<i>Electro Static Precipators (ESP)</i>	<i>97.911%</i>
Unit 5	<i>Electro Static Precipators (ESP)</i>	<i>97.468%</i>
Unit 6	<i>Electro Static Precipators (ESP)</i>	<i>98.616%</i>

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

5 DATA RELIABILITY (%)

Associated Unit/Stack	PM	SO ₂	NO	O ₂
South	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
Unit 4	<i>61.0</i>	<i>75.0</i>	<i>100.0</i>	<i>100.0</i>
Unit 5	<i>68.5</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
Unit 6	<i>86.8</i>	<i>100.0</i>	<i>100.0</i>	<i>78.9</i>

6 EMISSION PERFORMANCE

Table 6.1: Monthly tonnages for the month of July-2022

Associated Unit/Stack	PM	SO _x	NO _x
Unit 1	36.6	618.2	148.2
Unit 2	538.3	3 489.8	836.8
Unit 3	455.0	3 398.8	815.0
Unit 4	947.2	3 154.1	1 073.9
Unit 5	1 285.0	3 001.3	1 546.5
Unit 6	447.2	2 488.3	1 179.4
SUM	3 709.3	16 150.6	5 599.9

Table 6.2: Operating days in compliance to PM AEL Limit - July 2022

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm ³)
South	6	2	23	0	25	330.0
Unit 4	8	4	16	0	20	568.0
Unit 5	4	5	22	0	27	865.8
Unit 6	3	7	21	0	28	386.9
SUM	21	18	82	0	100	

Table 6.3: Operating days in compliance to SO₂ AEL Limit - July 2022

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO ₂ (mg/Nm ³)
South	31	0	0	0	0	2 396.8
Unit 4	28	0	0	0	0	2 124.4
Unit 5	31	0	0	0	0	2 156.5
Unit 6	31	0	0	0	0	2 109.8
SUM	121	0	0	0	0	

Table 6.4: Operating days in compliance to NO_x AEL Limit - July 2022

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NO _x (mg/Nm ³)
South	31	0	0	0	0	574.8
Unit 4	28	0	0	0	0	730.5
Unit 5	31	0	0	0	0	1 111.8
Unit 6	31	0	0	0	0	1 000.0
SUM	121	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		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

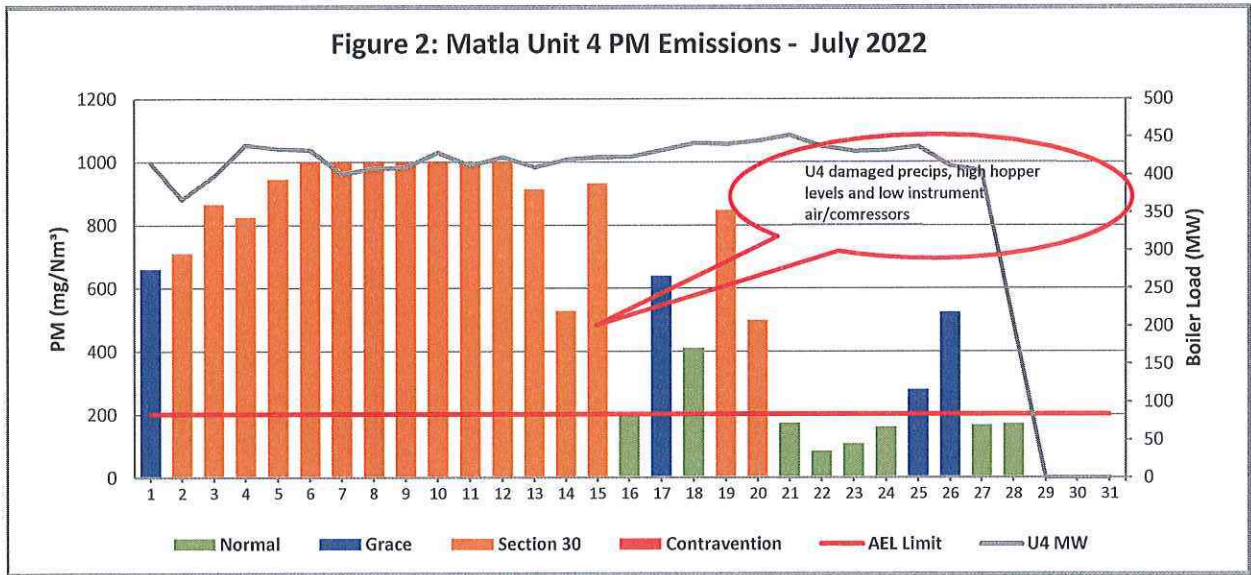
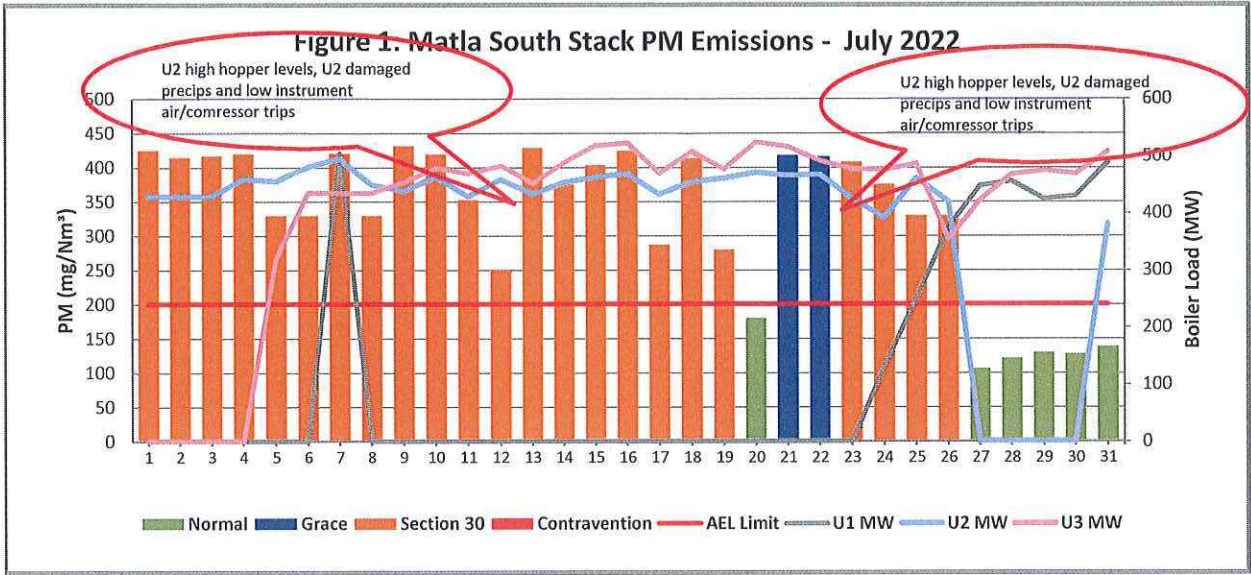


Figure 3: Matla Unit 5 PM Emissions - July 2022

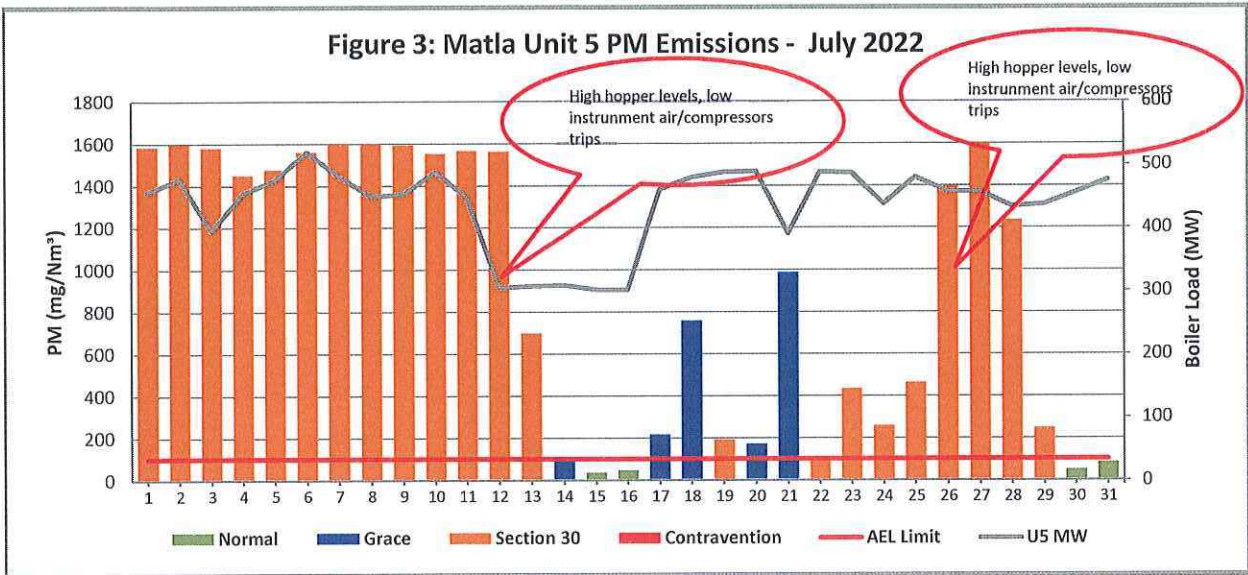


Figure 4: Matla Unit 6 PM Emissions - July 2022

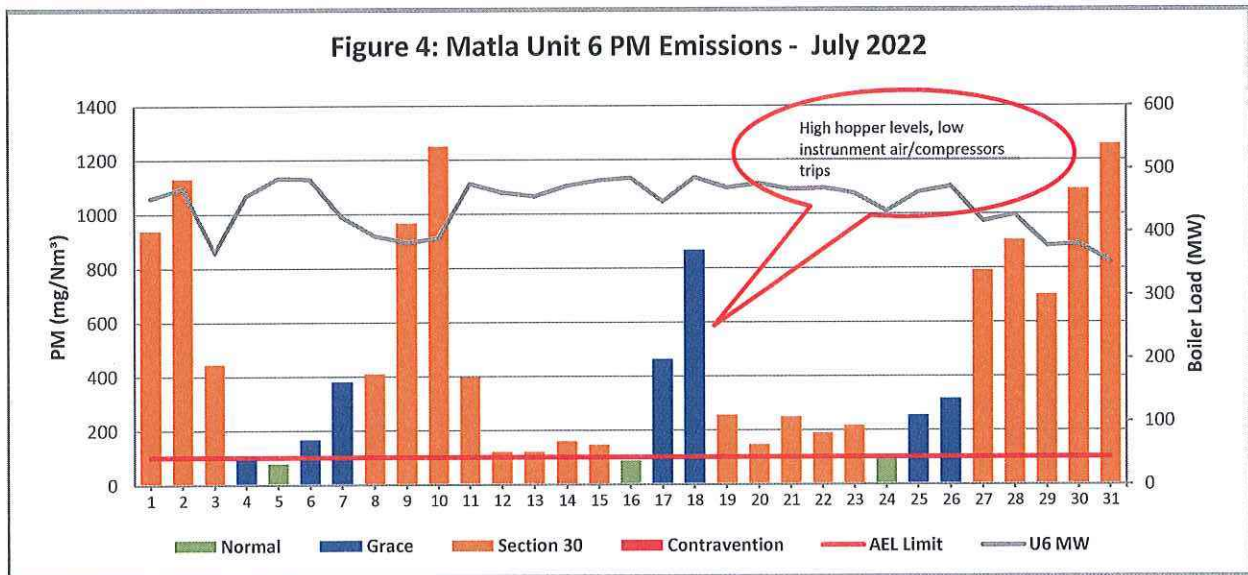


Figure 5: Matla South Stack SO₂ Emissions - July 2022

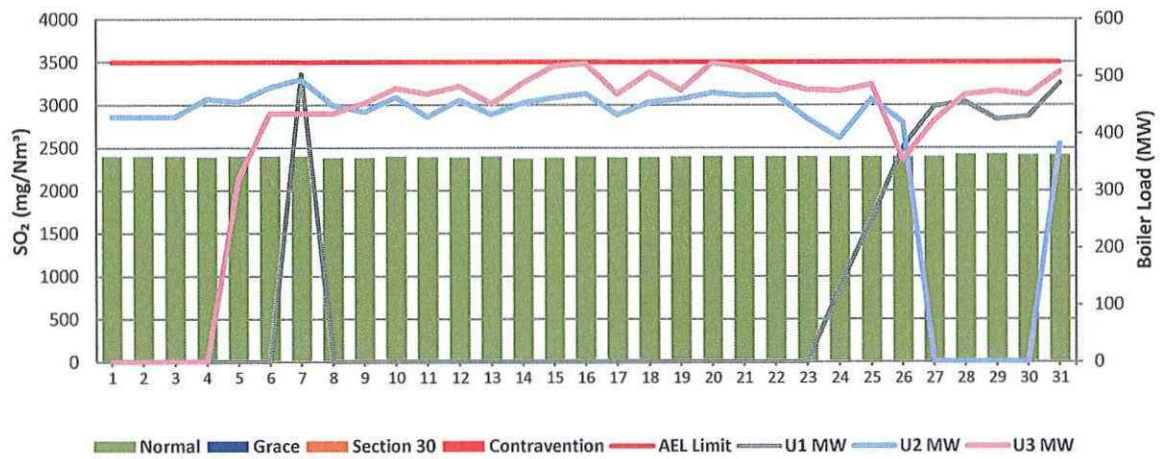


Figure 6: Matla Unit 4 SO₂ Emissions - July 2022

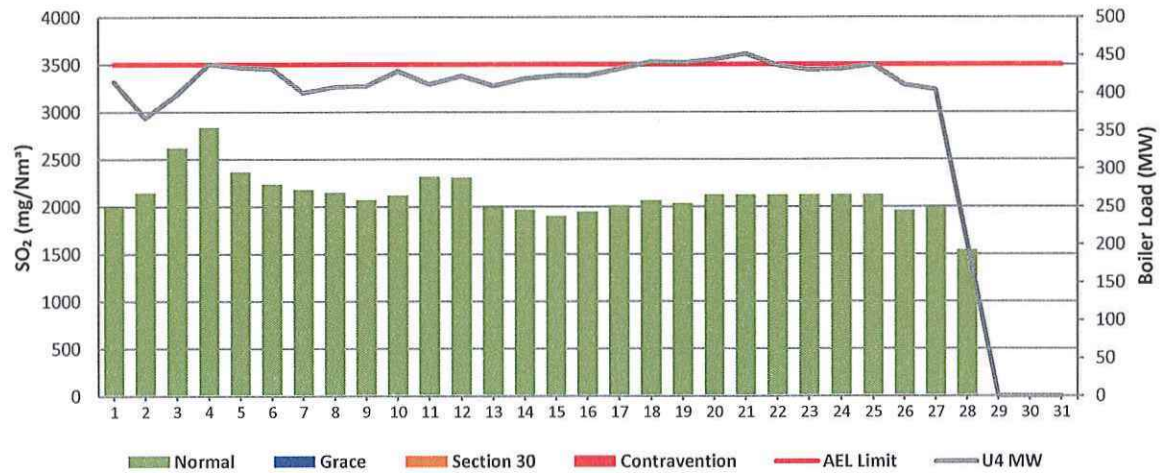


Figure 7: Matla Unit 5 SO₂ Emissions - July 2022

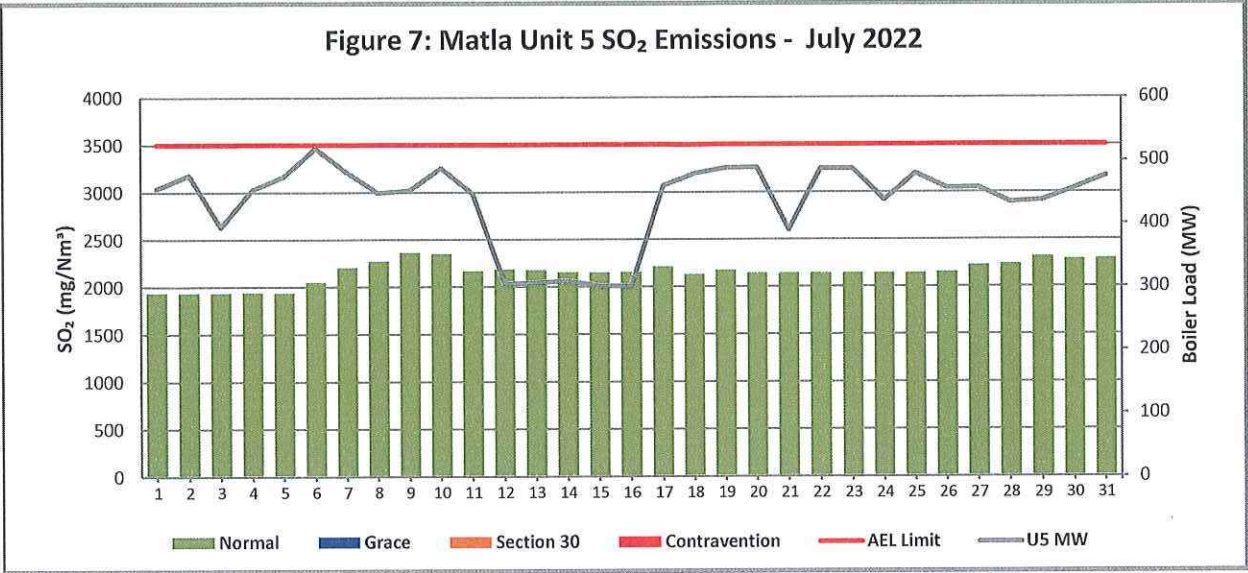


Figure 8: Matla Unit 6 SO₂ Emissions - July 2022

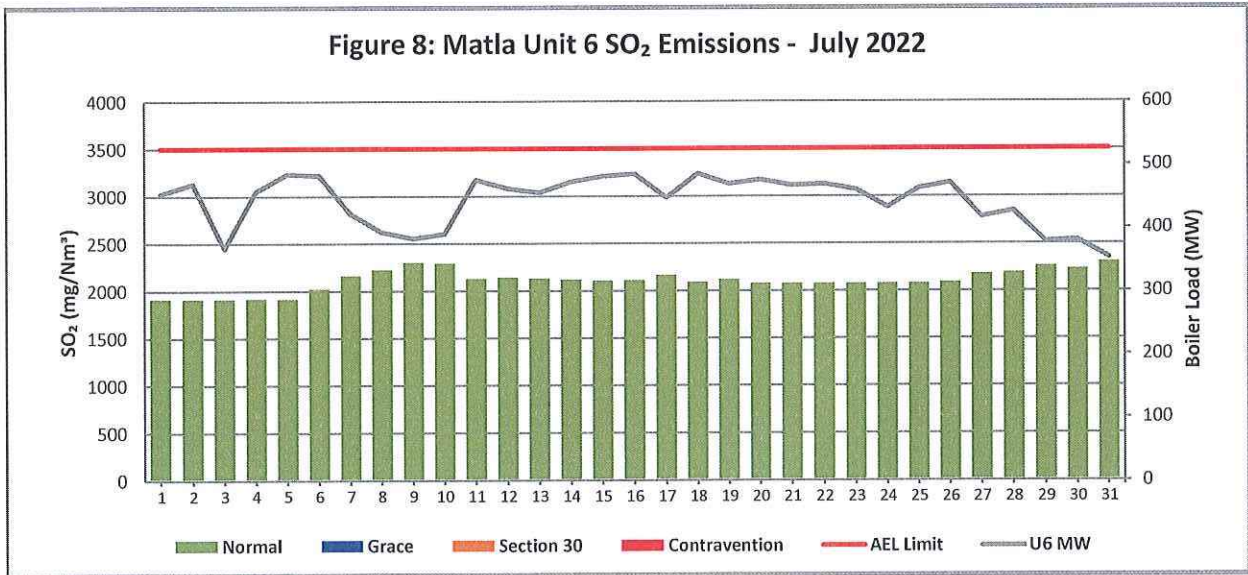


Figure 9: Matla South Stack NOx Emissions - July 2022

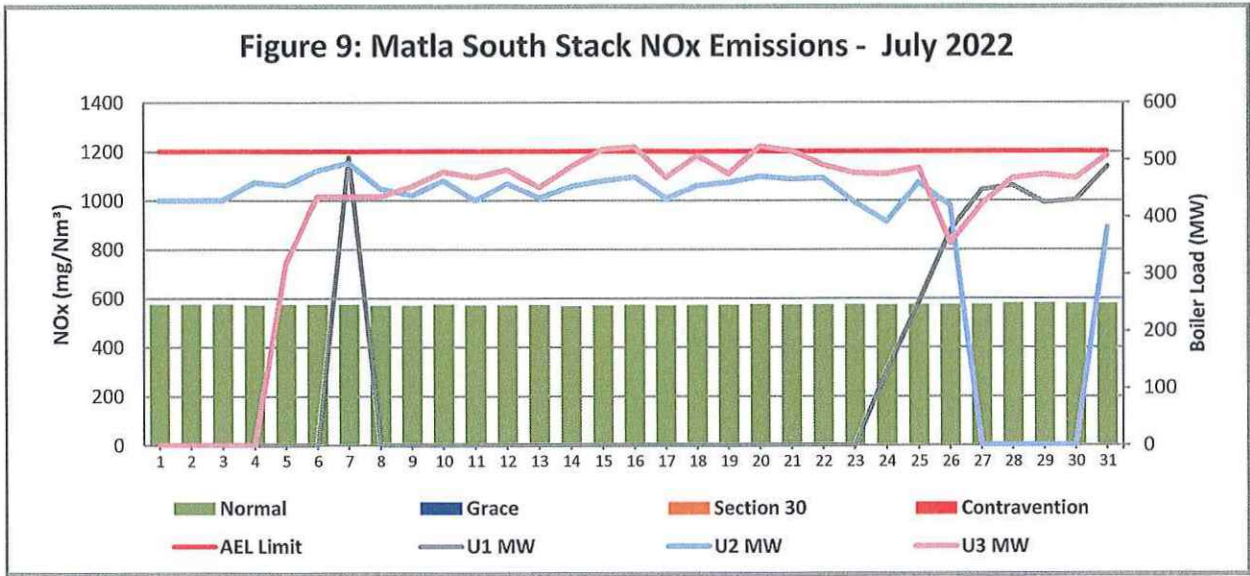


Figure 10: Matla Unit 4 NOx Emissions - July 2022

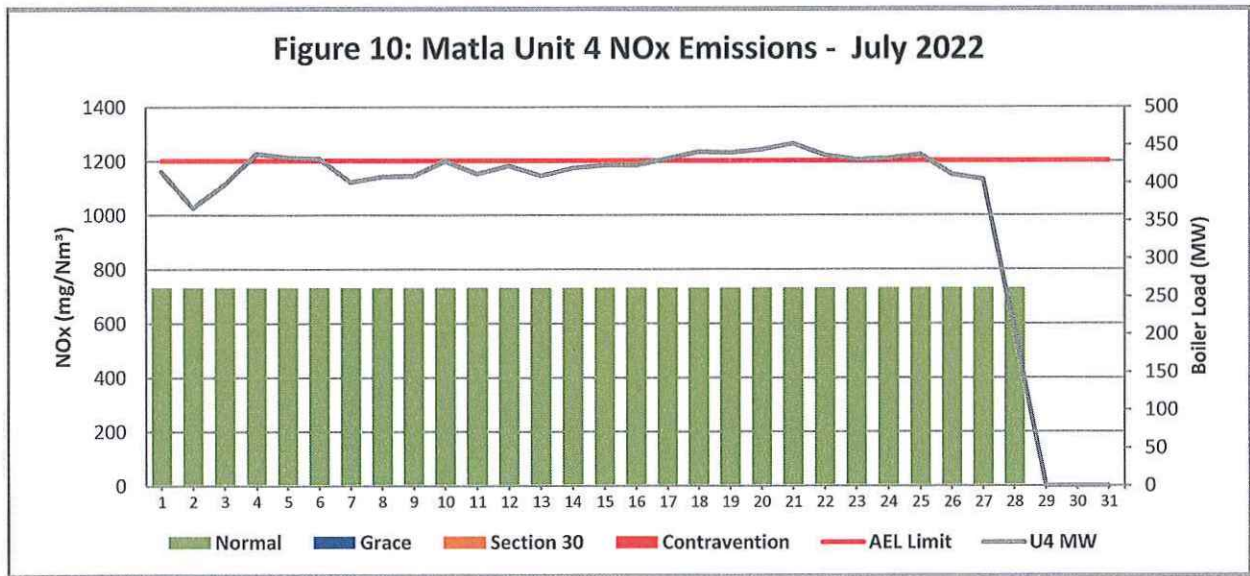


Figure 11: Matla Unit 5 NOx Emissions - July 2022

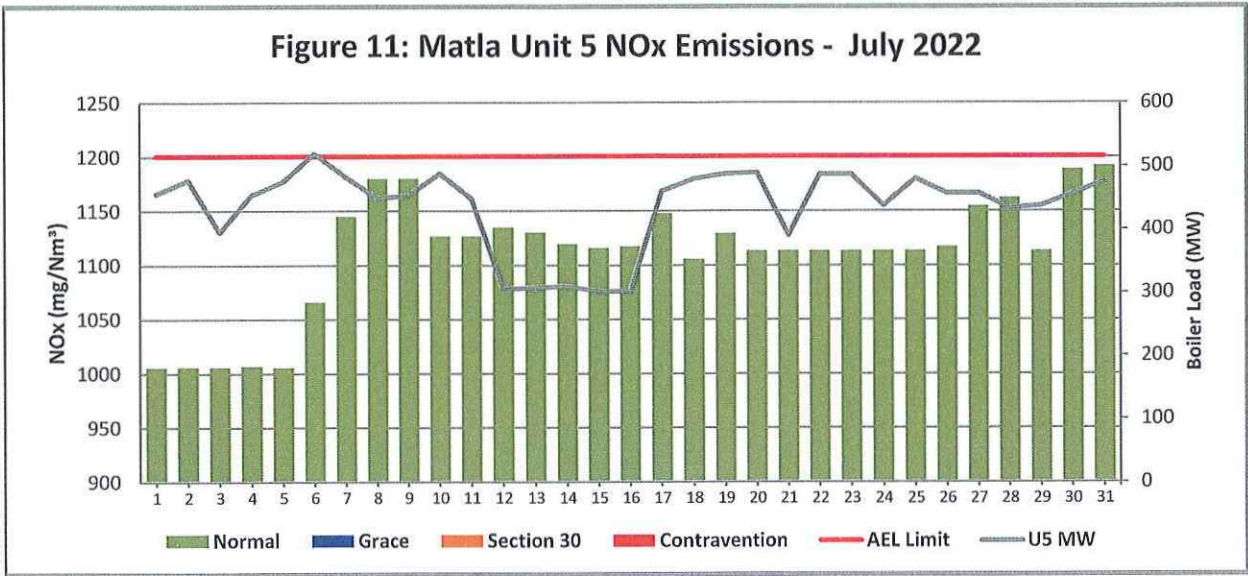
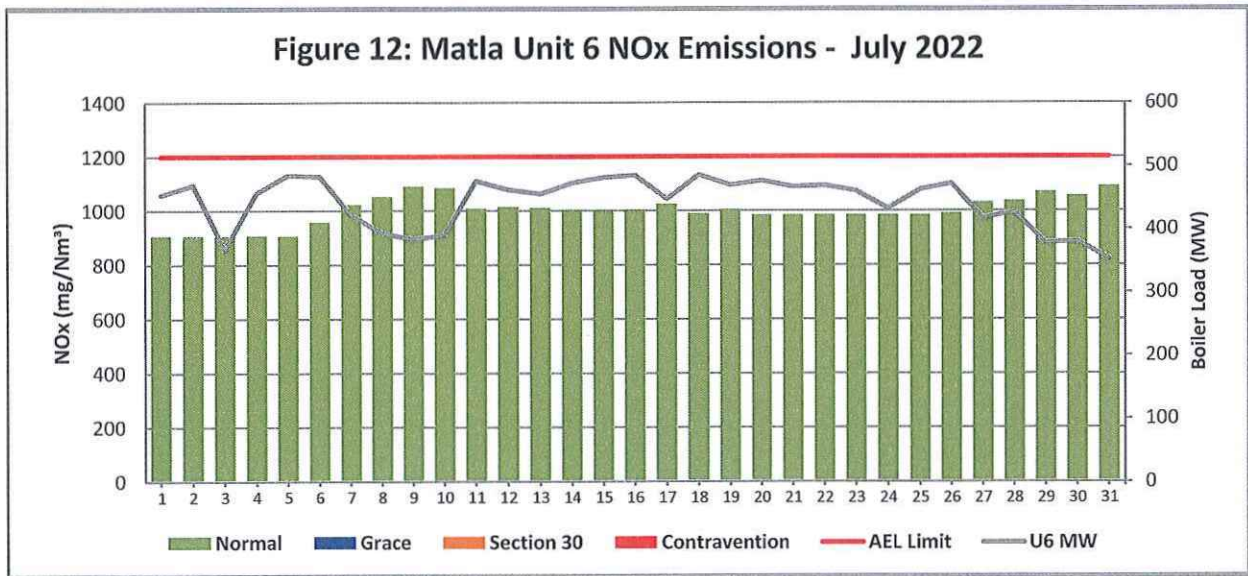


Figure 12: Matla Unit 6 NOx Emissions - July 2022



7 SHUT DOWN AND LIGHT UP INFORMATION

Table 7.1. PM Start-up information for the month of July-2022

South Stack	Event 1		Event 2		Event 3		Event 4	
Unit No.	Unit 1		Unit 2		Unit 3		Unit 3	
Breaker Open (BO)	<i>BO previously</i>	<i>BO previously</i>	<i>11:40 PM</i>	<i>2022/07/26</i>	<i>BO previously</i>	<i>BO previously</i>	<i>10:10 AM</i>	<i>2022/07/26</i>
Draught Group (DG) Shut Down (SD)	<i>n/a</i>	<i>n/a</i>	<i>8:10 PM</i>	<i>2022/07/27</i>	<i>n/a</i>	<i>n/a</i>	<i>DG did not trip or SD</i>	<i>DG did not trip or SD</i>
BO to DG SD (duration)	<i>n/a</i>	<i>DD:HH:MM</i>	<i>00:20:30</i>	<i>DD:HH:MM</i>	<i>n/a</i>	<i>DD:HH:MM</i>	<i>n/a</i>	<i>DD:HH:MM</i>
Fires in time	<i>6:20 AM</i>	<i>2022/07/24</i>	<i>12:35 AM</i>	<i>2022/07/31</i>	<i>12:25 PM</i>	<i>2022/07/04</i>	<i>10:10 AM</i>	<i>2022/07/26</i>
Synch. to Grid (or BC)	<i>10:50 AM</i>	<i>2022/07/25</i>	<i>12:10 PM</i>	<i>2022/07/31</i>	<i>11:00 AM</i>	<i>2022/07/05</i>	<i>3:45 PM</i>	<i>2022/07/26</i>
Fires in to BC (duration)	<i>01:04:30</i>	<i>DD:HH:MM</i>	<i>00:11:35</i>	<i>DD:HH:MM</i>	<i>00:22:35</i>	<i>DD:HH:MM</i>	<i>00:05:35</i>	<i>DD:HH:MM</i>
Emissions below limit from BC (end date)	<i>not > limit</i>	<i>not > limit</i>	<i>not > limit</i>	<i>not > limit</i>	<i>not > limit</i>	<i>not > limit</i>	<i>not > limit</i>	<i>not > limit</i>
Emissions below limit from BC (duration)	<i>n/a</i>	<i>DD:HH:MM</i>	<i>n/a</i>	<i>DD:HH:MM</i>	<i>n/a</i>	<i>DD:HH:MM</i>	<i>n/a</i>	<i>DD:HH:MM</i>

South Stack ...cont.	Event 5		Event 6		Event 7		Event 8	
Unit No.	<i>no event</i>		<i>no event</i>		<i>no event</i>		<i>no event</i>	
Breaker Open (BO)								
Draught Group (DG) Shut Down (SD)								
BO to DG SD (duration)		<i>DD:HH:MM</i>		<i>DD:HH:MM</i>		<i>DD:HH:MM</i>		<i>DD:HH:MM</i>
Fires in time								
Synch. to Grid (or BC)								
Fires in to BC (duration)		<i>DD:HH:MM</i>		<i>DD:HH:MM</i>		<i>DD:HH:MM</i>		<i>DD:HH:MM</i>
Emissions below limit from BC (end date)								
Emissions below limit from BC (duration)		<i>DD:HH:MM</i>		<i>DD:HH:MM</i>		<i>DD:HH:MM</i>		<i>DD:HH:MM</i>

Unit No. 4	Event 1		Event 2		Event 3		Event 4	
Breaker Open (BO)			12:50 AM	2022/07/28				
Draught Group (DG) Shut Down (SD)			11:25 AM	2022/07/29				
BO to DG SD (duration)		DD:HH:MM	01:10:35	DD:HH:MM		DD:HH:MM		DD:HH:MM
Fires in time								
Synch. to Grid (or BC)								
Fires in to BC (duration)		DD:HH:MM		DD:HH:MM		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		DD:HH:MM		DD:HH:MM

Unit No. 5	Event 1		Event 2		Event 3		Event 4	
Breaker Open (BO)	4:50 PM	2022/07/20						
Draught Group (DG) Shut Down (SD)	4:50 PM	2022/07/20						
BO to DG SD (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Fires in time	4:51 PM	2022/07/20						
Synch. to Grid (or BC)	7:25 AM	2022/07/21						
Fires in to BC (duration)	00:14:34	DD:HH:MM		DD:HH:MM		DD:HH:MM		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		DD:HH:MM		DD:HH:MM		DD:HH:MM

Unit No. 6	Event 1		Event 2		Event 3		Event 4	
Breaker Open (BO)	3:35 PM	2022/07/25						
Draught Group (DG) Shut Down (SD)	8:30 AM	2022/07/26						
BO to DG SD (duration)	00:16:55	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Fires in time	3:20 PM	2022/08/04						
Synch. to Grid (or BC)	10:05 PM	2022/08/04						
Fires in to BC (duration)	00:06:45	DD:HH:MM		DD:HH:MM		DD:HH:MM		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		DD:HH:MM		DD:HH:MM		DD:HH:MM

7.2: Point Source emissions released during start-up (fires-in) and Shut-down (SD) for the month of July-2022 in mg/Nm³

[Include reference to once off test showing typical emissions rates during fires in and SD]

Remember to add attachments here; see ReportAddendum Tab

Reserved for Addendum XXXX

