

**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	Maximum Permitted Consumption Rate	Consumption Rate Apr-2020
	Coal	Tons	1 475 000	891 587
	Fuel Oil	Tons	2 500	284
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Production Rate Apr-2020
	Energy	GWh	2 484	1 435
	Ash	Tons	471 000	251 695
	RE PM	kg/MWh	not specified	0,470

**2 ENERGY SOURCE CHARACTERISTICS**

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
Sulphur Content	%	0.8-1.1	1,00
Ash Content	%	21-40	28,23

### 3 EMISSION LIMITS (mg/Nm³)

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

### 4 ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	Technology Type	Efficiency Apr-2020
South	<i>Electro Static Precipators (ESP)</i>	<i>99,653%</i>
Unit 4	<i>Electro Static Precipators (ESP)</i>	<i>99,720%</i>
Unit 5	<i>Electro Static Precipators (ESP)</i>	<i>99,834%</i>
Unit 6	<i>Electro Static Precipators (ESP)</i>	<i>99,710%</i>

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

### 4 ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	PM	SO <sub>2</sub>	NO	O <sub>2</sub>
South	<i>98,5</i>	<i>0,0</i>	<i>0,6</i>	<i>0,0</i>
Unit 4	<i>86,7</i>	<i>99,8</i>	<i>99,9</i>	<i>68,0</i>
Unit 5	<i>39,6</i>	<i>46,3</i>	<i>46,0</i>	<i>80,4</i>
Unit 6	<i>94,5</i>	<i>54,5</i>	<i>53,1</i>	<i>31,5</i>

### 6 EMISSION PERFORMANCE

Table 6.1: Monthly tonnages for the month of April-2020

Associated Unit/Stack	PM	SO <sub>x</sub>	NO <sub>x</sub>
Unit 1	160,8	1 137,3	526,5
Unit 2	83,3	552,9	256,0
Unit 3	176,6	1 291,6	597,7
Unit 4	116,6	3 167,2	1 285,8
Unit 5	64,8	2 396,4	780,2
Unit 6	71,9	2 499,2	763,9
SUM	673,8	11 044,6	4 210,1

Table 6.2: Operating days in compliance to PM AEL Limit - April 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
South	28	2	0	0	2	106,3
Unit 4	26	1	0	0	1	75,9
Unit 5	23	3	0	0	3	47,8
Unit 6	21	2	0	0	2	62,2
SUM	98	8	0	0	8	

Table 6.3: Operating days in compliance to SOx AEL Limit - April 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
South	30	0	0	0	0	755,2
Unit 4	27	0	0	0	0	2 079,7
Unit 5	27	0	0	0	0	1 716,8
Unit 6	23	0	0	0	0	2 219,0
SUM	107	0	0	0	0	

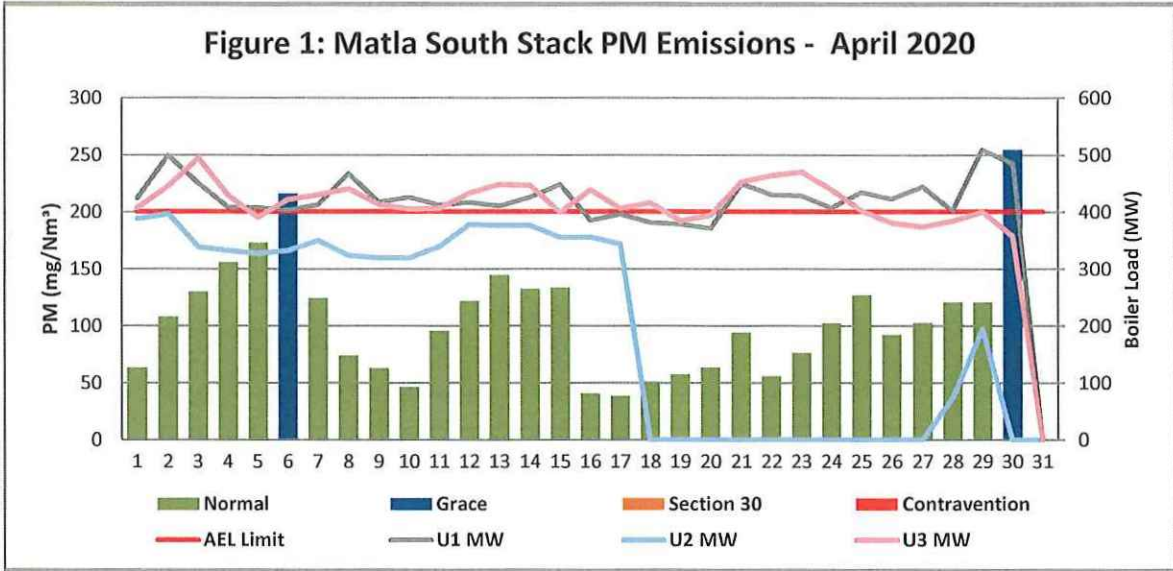
Table 6.4: Operating days in compliance to NOx AEL Limit - April 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
South	30	0	0	0	0	349,6
Unit 4	27	0	0	0	0	824,3
Unit 5	27	0	0	0	0	559,0
Unit 6	23	0	0	0	0	683,9
SUM	107	0	0	0	0	

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 1: Matla South Stack PM Emissions - April 2020**



**Figure 2: Matla Unit 4 PM Emissions - April 2020**

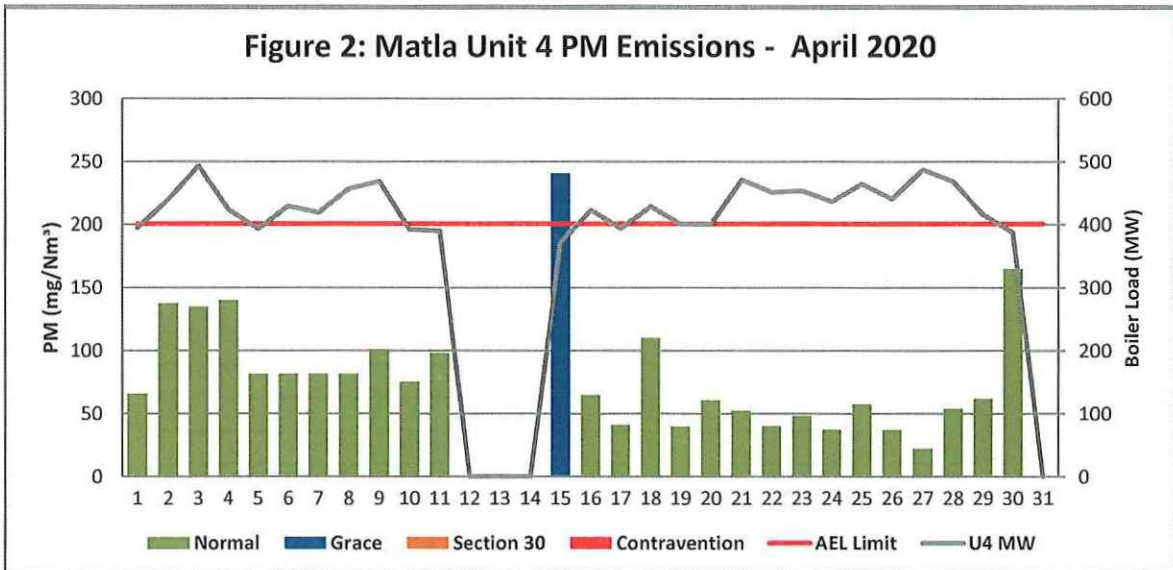


Figure 3: Matla Unit 5 PM Emissions - April 2020

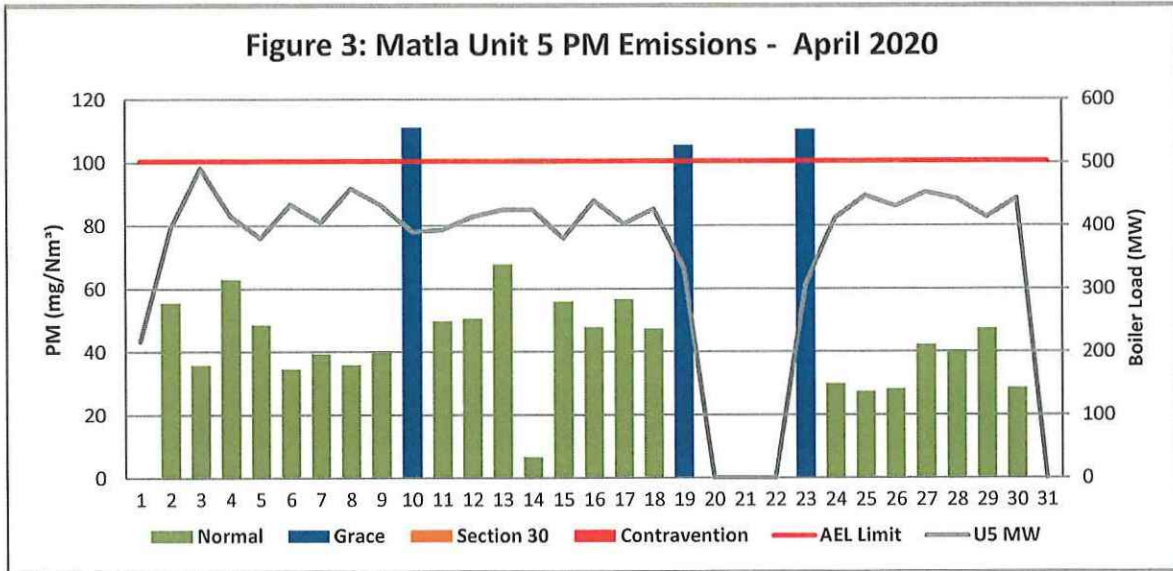
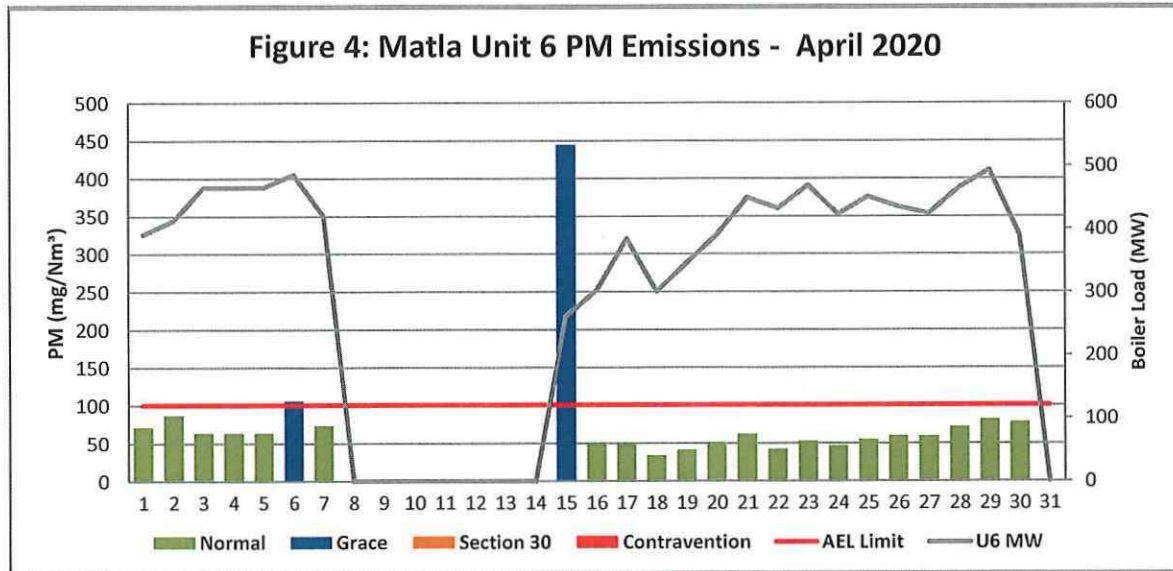
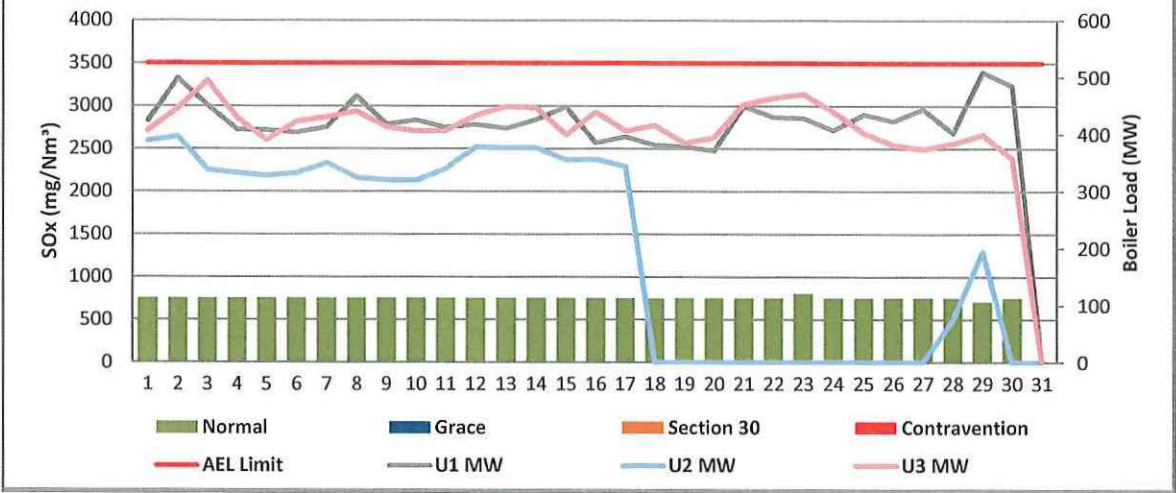


Figure 4: Matla Unit 6 PM Emissions - April 2020



**Figure 5: Matla South Stack SOx Emissions - April 2020**



**Figure 6: Matla Unit 4 SOx Emissions - April 2020**

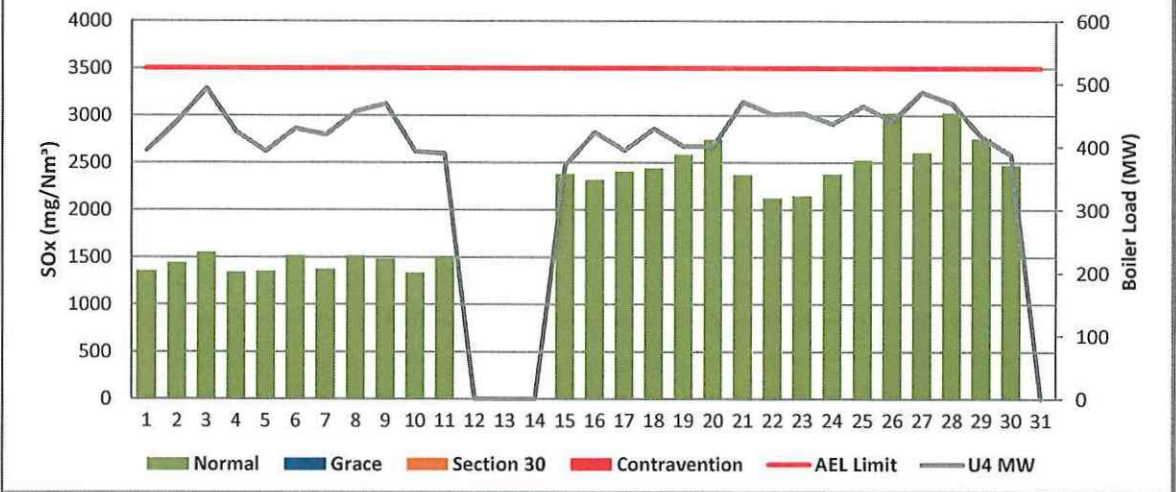


Figure 7: Matla Unit 5 SOx Emissions - April 2020

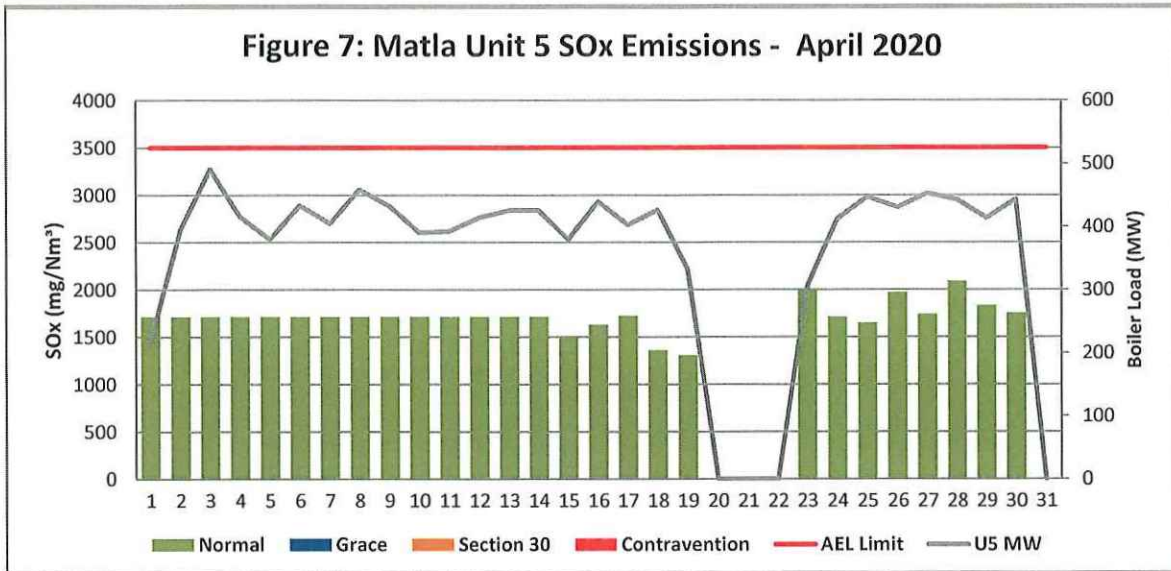


Figure 8: Matla Unit 6 SOx Emissions - April 2020

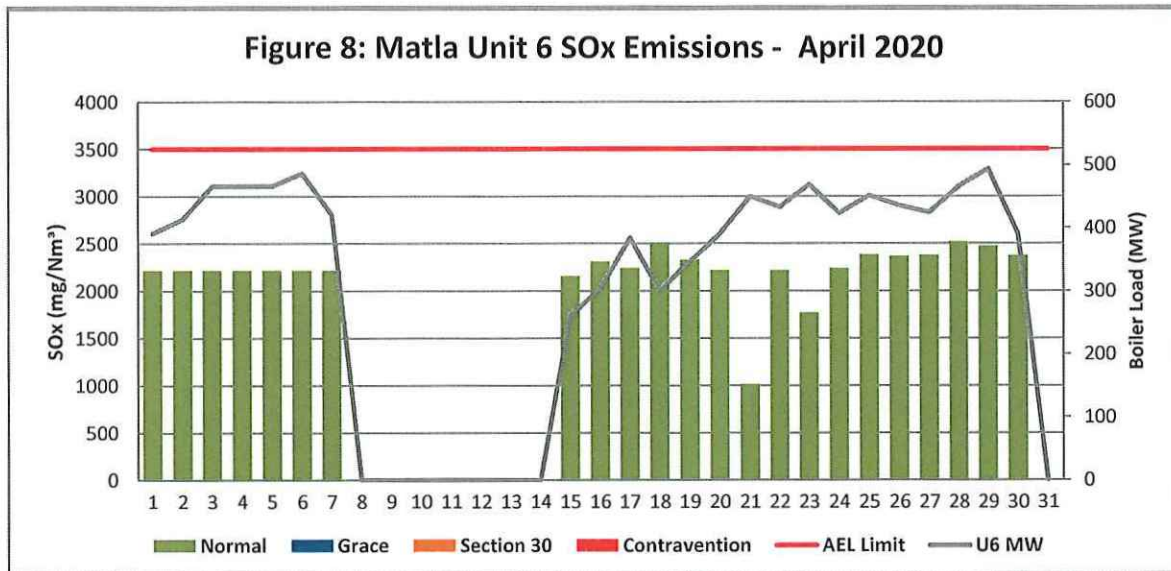


Figure 9: Matla South Stack NOx Emissions - April 2020

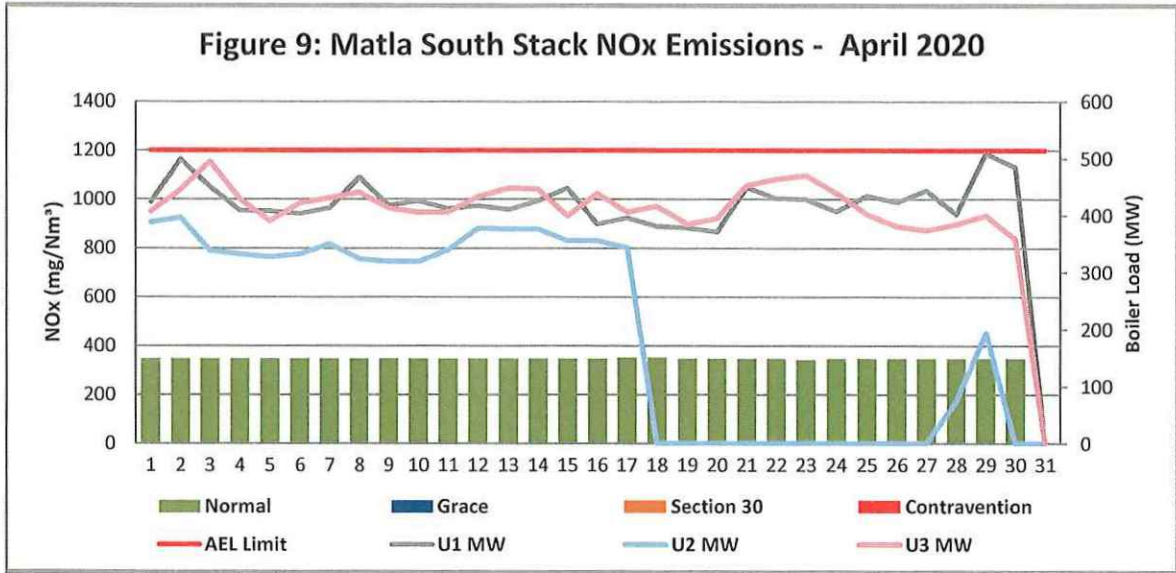


Figure 10: Matla Unit 4 NOx Emissions - April 2020

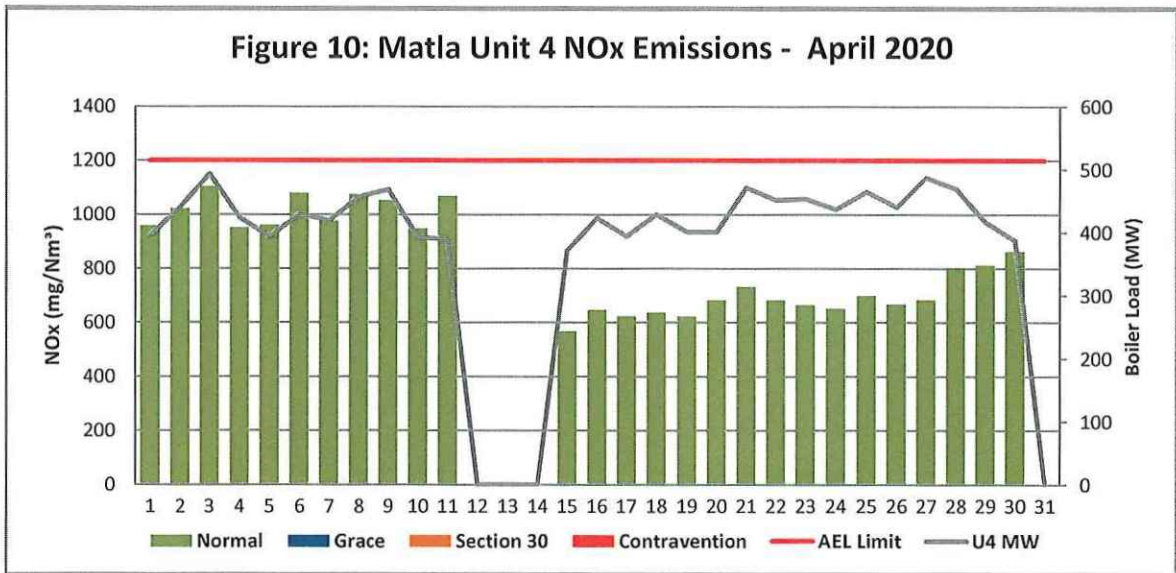




Figure 11: Matla Unit 5 NOx Emissions - April 2020

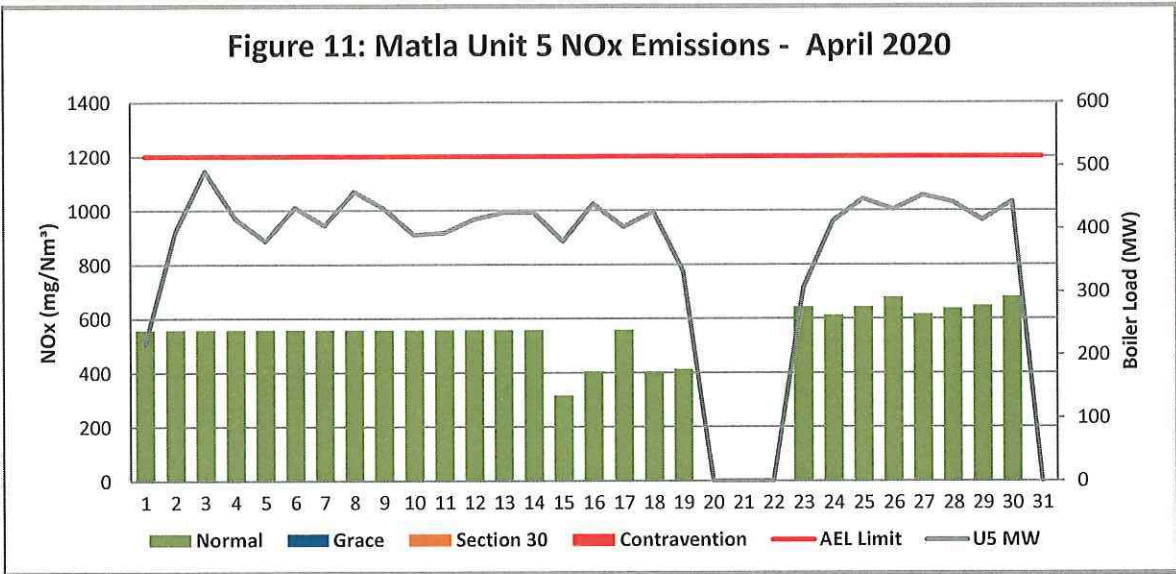
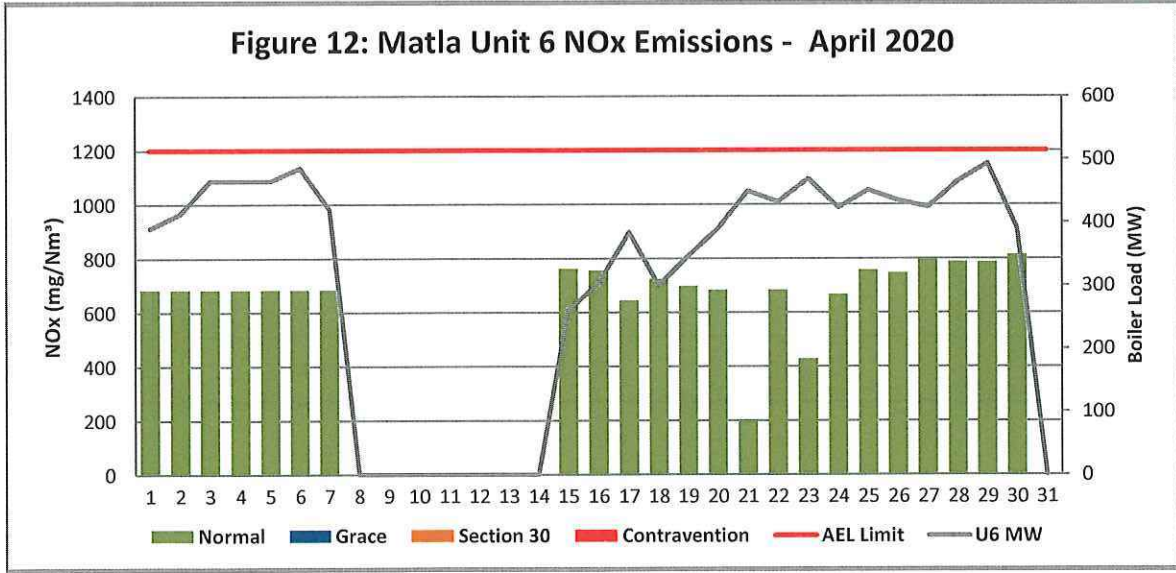


Figure 12: Matla Unit 6 NOx Emissions - April 2020



## 7 SHUT DOWN AND LIGHT UP INFORMATION

Table 7.1. PM Start-up information for the month of April-2020

South Stack	<i>Event 1</i>		<i>Event 2</i>		<i>Event 3</i>		<i>Event 4</i>	
Unit No.	<i>Unit 2</i>		<i>Unit 3</i>		<i>no event</i>		<i>no event</i>	
Breaker Open (BO)	<i>3:30 AM</i>	<i>2020/04/17</i>	<i>12:25 PM</i>	<i>2020/04/30</i>				
Draught Group (DG) Shut Down (SD)	<i>7:40 AM</i>	<i>2020/04/18</i>	<i>DG did not trip or SD</i>	<i>DG did not trip or SD</i>				
BO to DG SD (duration)	<i>01:04:10</i>	DD:HH:MM	<i>n/a</i>	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

South Stack ...cont.	<i>Event 5</i>		<i>Event 6</i>		<i>Event 7</i>		<i>Event 8</i>	
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)		DD:HH:MM		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. 4	Event 1		Event 2		Event 3		Event 4	
Breaker Open (BO)	10:20 PM	2020/04/11						
Draught Group (DG) Shut Down (SD)	10:20 PM	2020/04/11						
BO to DG SD (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Fires in time	6:40 PM	2020/04/14						
Synch. to Grid (or BC)	6:15 AM	2020/04/15						
Fires in to BC (duration)	00:11:35	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. 5	Event 1		Event 2		Event 3		Event 4	
Breaker Open (BO)	12:40 PM	2020/04/19	9:45 PM	2020/04/30				
Draught Group (DG) Shut Down (SD)	12:40 PM	2020/04/19	9:45 PM	2020/04/30				
BO to DG SD (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Fires in time	1:35 AM	2020/04/01	11:00 PM	2020/04/22	10:45 PM	2020/05/04		
Synch. to Grid (or BC)	7:35 AM	2020/04/01	9:20 AM	2020/04/23				
Fires in to BC (duration)	00:06:00	DD:HH:MM	00:10:20	DD:HH:MM		DD:HH:MM		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		DD:HH:MM		DD:HH:MM

Unit No. 6	Event 1		Event 2		Event 3		Event 4	
Breaker Open (BO)	10:10 PM	2020/04/07						
Draught Group (DG) Shut Down (SD)	10:10 PM	2020/04/07						
BO to DG SD (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Fires in time	2:50 AM	2020/04/15						
Synch. to Grid (or BC)	2:10 PM	2020/04/15						
Fires in to BC (duration)	00:11:20	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 April-2020 in mg/Nm<sup>3</sup>

[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

