

CAMDEN POWER STATION MONTHLY EMISSIONS REPORT

Atmospheric Emission License CPS/0012/2019/F03


1 RAW MATERIALS AND PRODUCTS

Raw Materials and Products	Raw Material Type	Units	Maximum Permitted Consumption Rate	Consumption Rate Oct-2020
	Coal	Tons	550 000	254 576.50
	Fuel Oil	Tons	5 000	2 968.38
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Production Rate Oct-2020
	Energy	GWh	1600	462.56
	Ash	Tons	not specified	60 029
	RE PM	kg/MWh	not specified	0.052

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19.56	22.59
Sulphur Content	%	< 2	0.90
Ash Content	%	25 to 35	23.58

3 EMISSION LIMITS (mg/Nm³)

Associated Unit/Stack	PM	SO _x	NO _x
Stack 1	50	3500	1100
Stack 2	50	3500	1100
Stack 3	50	3500	1100
Stack 4	50	3500	1100

4 ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	Technology Type	Efficiency Oct-2020
Unit 1	Fabric Filter Plant (FFP)	100.0%
Unit 2	Fabric Filter Plant (FFP)	99.98%
Unit 3	Fabric Filter Plant (FFP)	Unit Off-line
Unit 4	Fabric Filter Plant (FFP)	99.92%
Unit 5	Fabric Filter Plant (FFP)	99.97%
Unit 6	Fabric Filter Plant (FFP)	99.97%
Unit 7	Fabric Filter Plant (FFP)	99.96%
Unit 8	Fabric Filter Plant (FFP)	99.93%

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

5 MONITOR RELIABILITY (%)

Associated Unit/Stack	PM	SO ₂	NO	CO ₂
Stack 1	100.0	97.0	98.8	95.0
Stack 2	100.0	99.9	99.9	98.9
Stack 3	100.0	94.5	98.1	91.3
Stack 4	100.0	95.7	98.4	86.5

6 EMISSION PERFORMANCE

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

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)	CO ₂ (tons)
1	1.2	711	316	95 512
2	1.6	942	419	132 288
3	0.0	0	0	0
4	9.0	1 857	862	261 416
5	1.7	832	389	112 327
6	2.6	1 358	623	187 663
7	0.5	120	53	20 771
8	7.7	977	461	171 869
SUM	24.3	6 797	3 123	981 846

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	28	0	0	0	0	2.8
Stack 2	30	0	0	0	0	7.9
Stack 3	31	0	0	0	0	3.0
Stack 4	31	0	0	0	0	7.9
SUM	120	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
Stack 1	30	0	0	0	0	0.0
Stack 2	31	0	0	0	0	0.0
Stack 3	31	0	0	0	0	0.0
Stack 4	31	0	0	0	0	0.0
SUM	123	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
Stack 1	30	0	0	0	0	0.0
Stack 2	31	0	0	0	0	0.0
Stack 3	31	0	0	0	0	0.0
Stack 4	31	0	0	0	0	0.0
SUM	123	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: Camden Stack 1 PM Emissions - October 2020

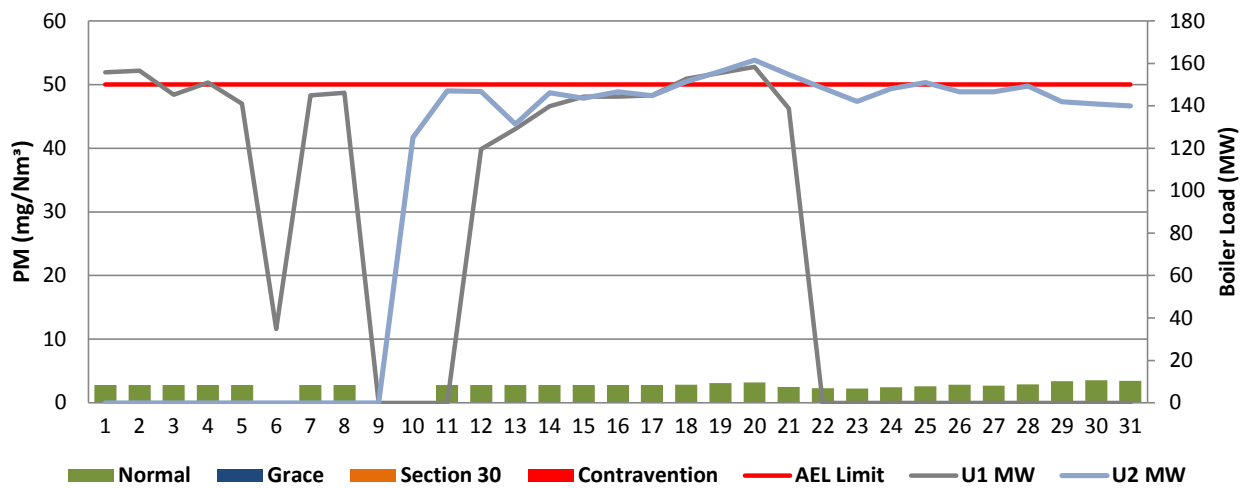


Figure 2: Camden Stack 2 PM Emissions - October 2020

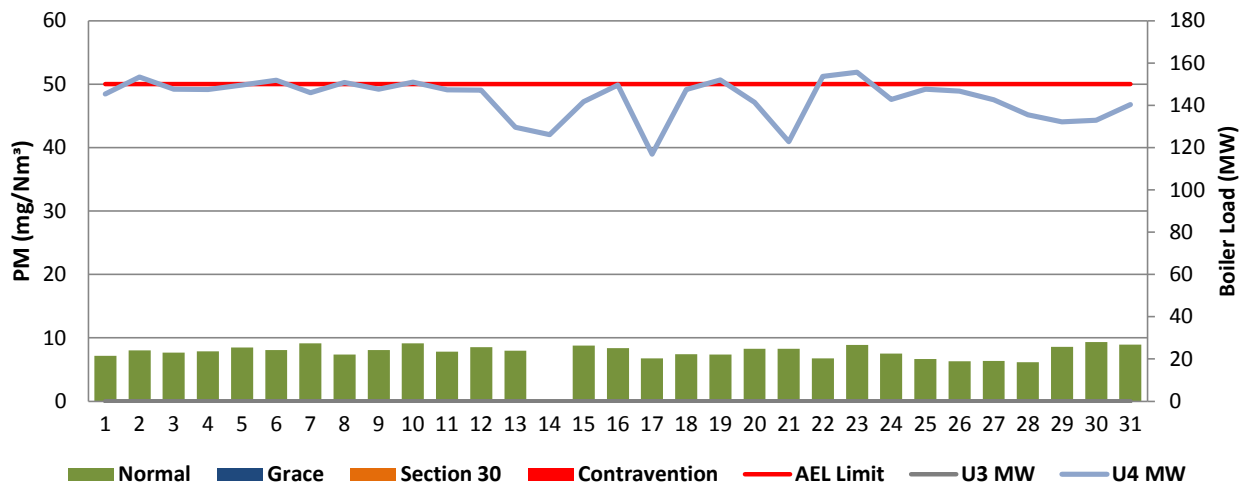


Figure 3: Camden Stack 3 PM Emissions - October 2020

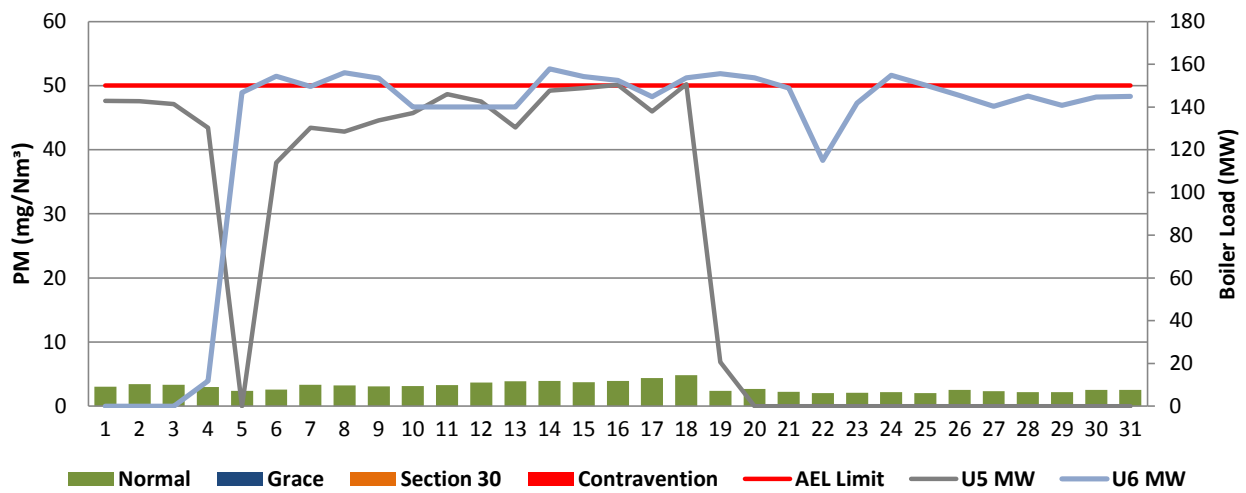


Figure 4: Camden Stack 4 PM Emissions - October 2020

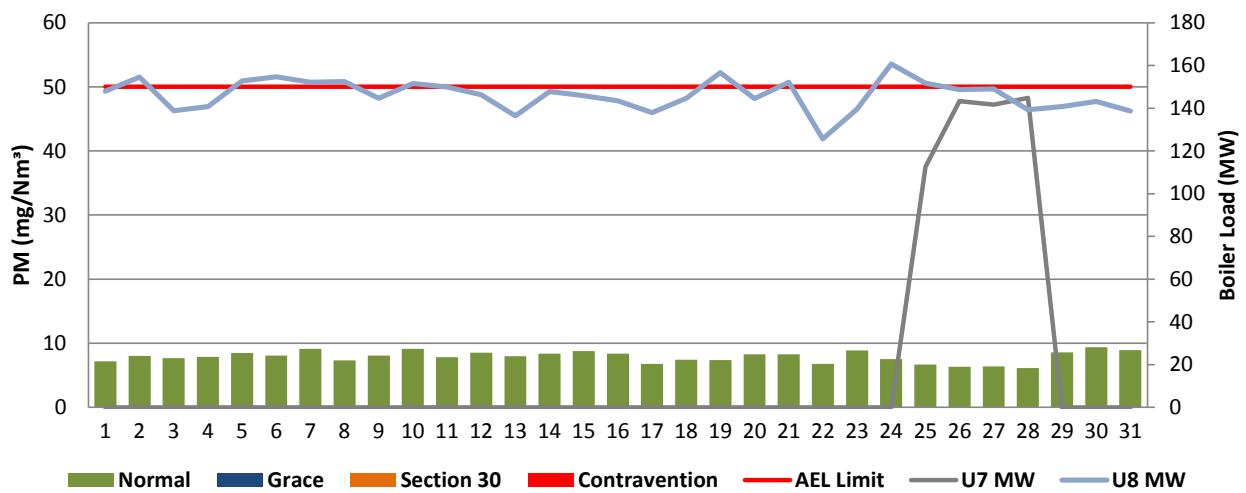


Figure 5: Camden Stack 1 SOx Emissions - October 2020

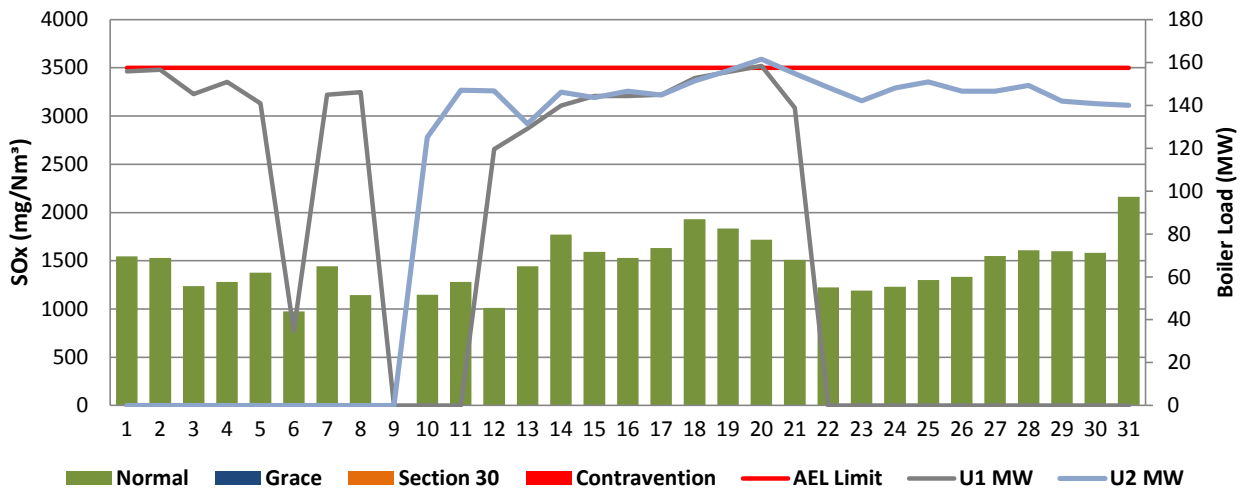


Figure 6: Camden Stack 2 SOx Emissions - October 2020

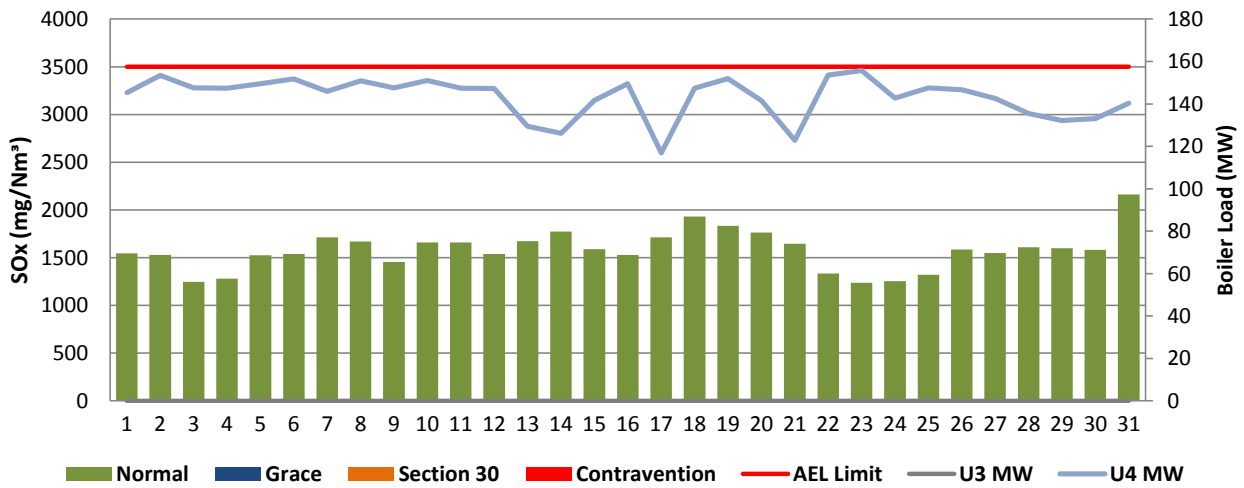


Figure 7: Camden Stack 3 SOx Emissions - October 2020

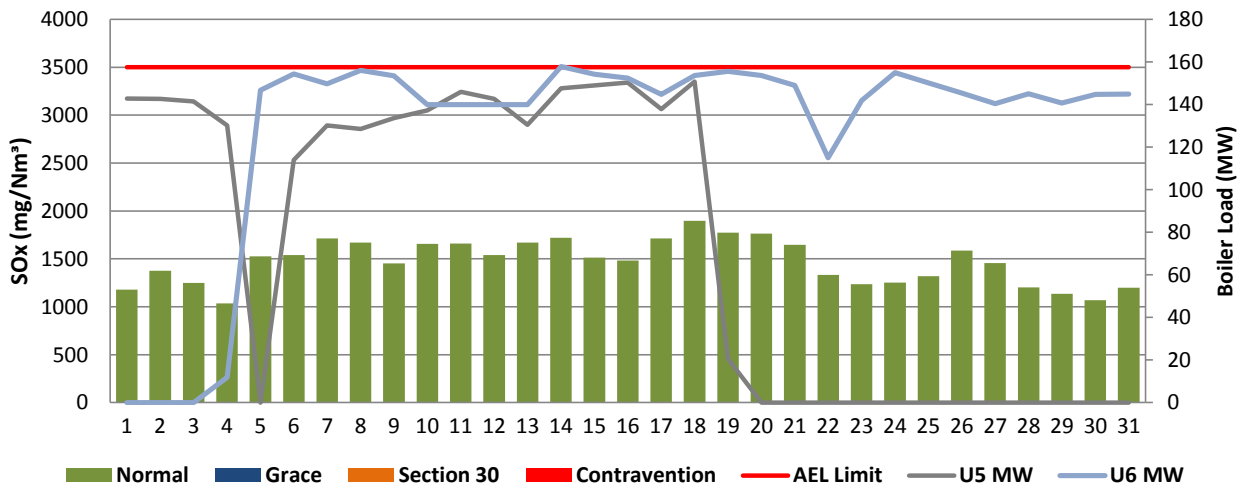


Figure 8: Camden Stack 4 SOx Emissions - October 2020

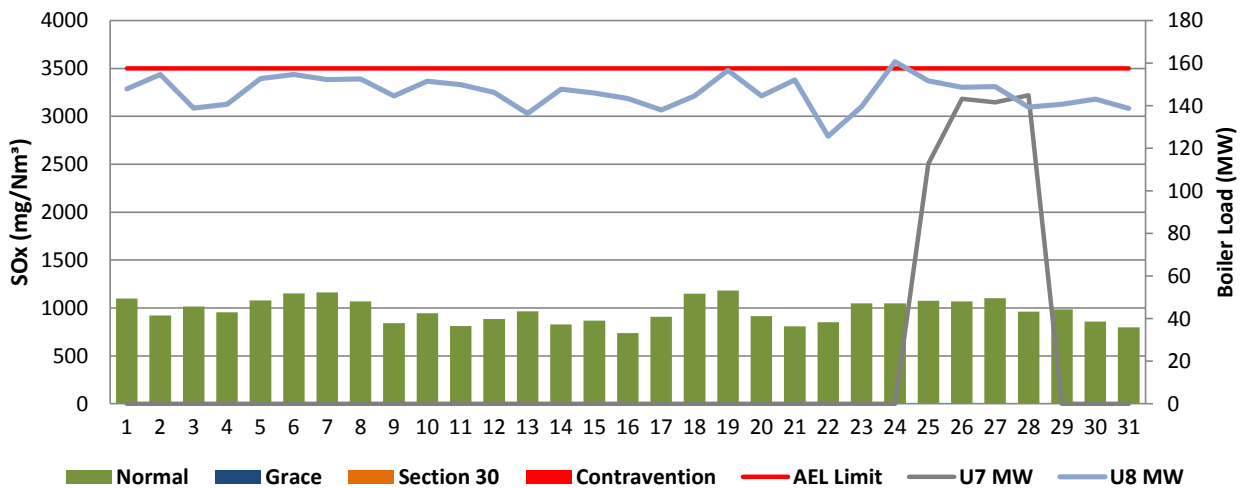


Figure 9: Camden Stack 1 NOx Emissions - October 2020

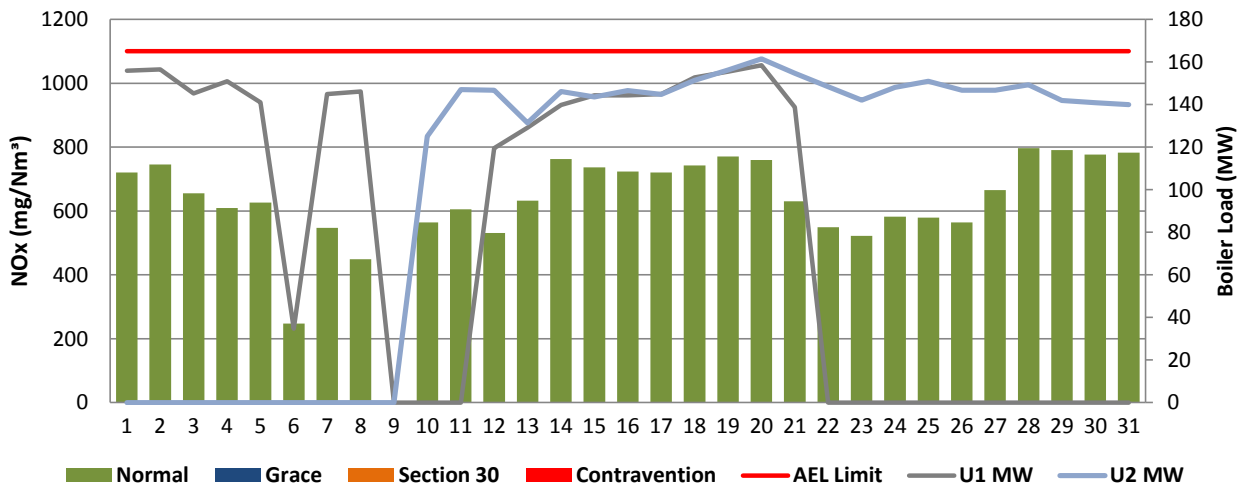


Figure 10: Camden Stack 2 NOx Emissions - October 2020

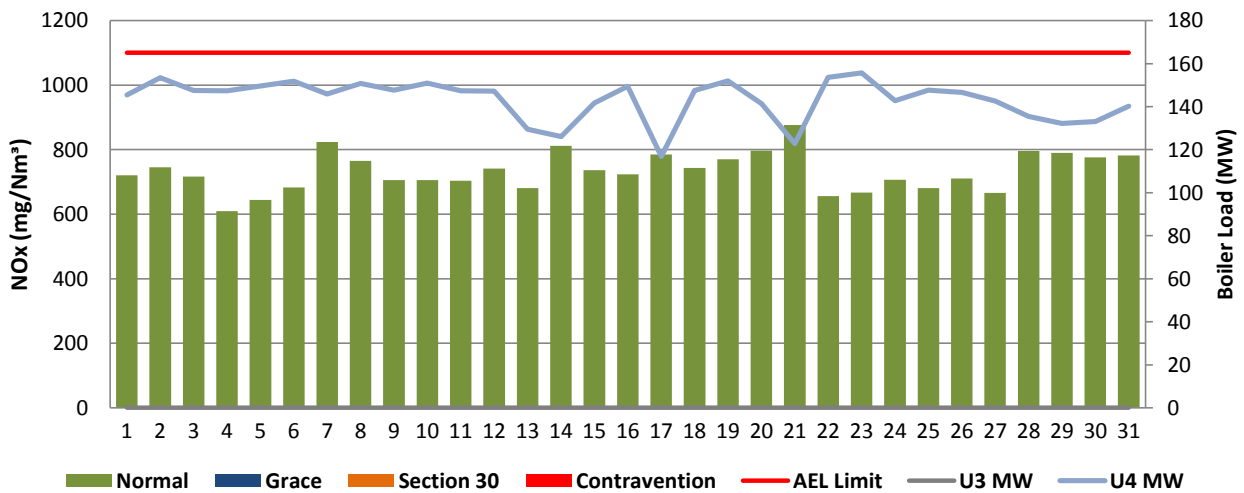


Figure 11: Camden Stack 3 NOx Emissions - October 2020

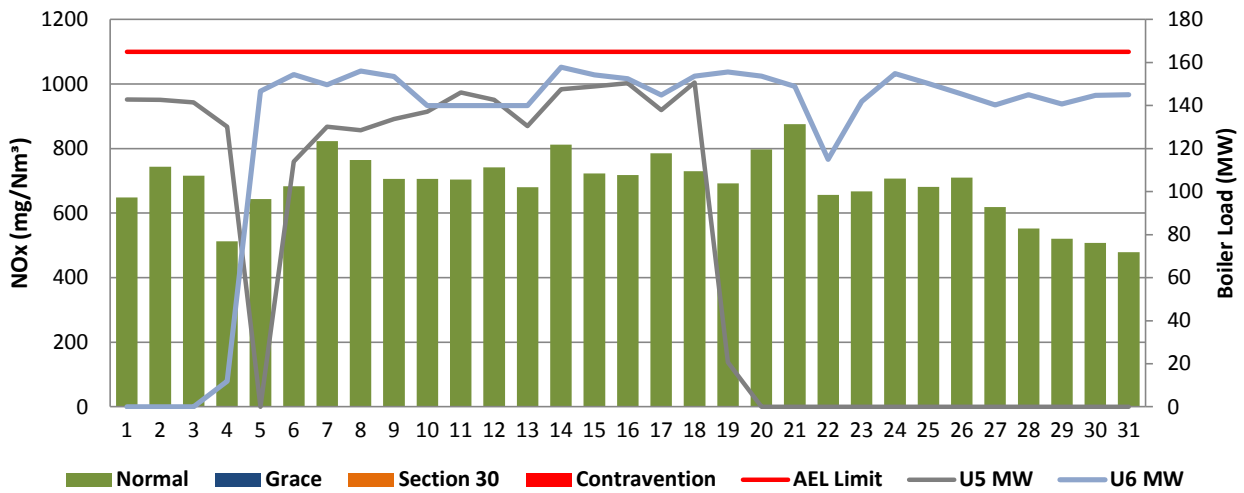
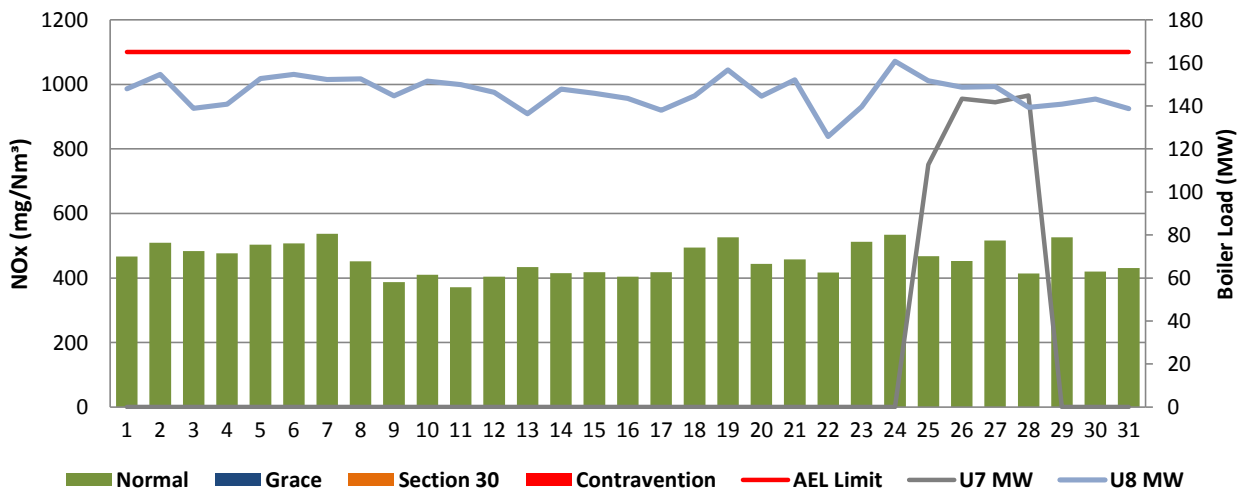


Figure 12: Camden Stack 4 NOx Emissions - October 2020



10 GENERAL / ABNORMALITIES

Unit 1:

None

Unit 2:

None

Unit 3:

The unit was off-load for the month.

Unit 4:

None

Unit 5:

None

Unit 6:

None

Unit 7:

None

Unit 8:

None

Stack 2 repairs have been completed. Correlation/Spot Tests were completed on the 22nd & 23rd Oct. The draft report was received and is being reviewed after which the necessary implementations will be performed.

	20/11/2020		20/11/2020
Engineering Manager	Date	Environmental Manager	Date

Compiled by: Environmental Department&verified by Boiler Eng

Env. Practitioner & System Eng

For: Department of Environment, Forestry & Fisheries

Chief Air Pollution Control Officer

Copies: Eskom Environmental Management

D Herbst
B Mccourt

Compliance Management
Asset Management

R Rampiar
E Patel

Camden Power Station:

Engineering Manager
Operating Manager
Maintenance Manager
Production Managers
Boiler Engineering Manager
System Engineer
Environmental Manager
Environmental Officer
P&T and Process Engineering Manager