

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 Nov-2020
	Coal	Tons	550 000	248 188.00
	Fuel Oil	Tons	5 000	1 865.09
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Production Rate Nov-2020
	Energy	GWh	1600	304.35
	Ash	Tons	not specified	60 310
	RE PM	kg/MWh	not specified	0.046

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19.56	22.11
Sulphur Content	%	< 2	0.90
Ash Content	%	25 to 35	24.30

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 Nov-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)	99.94%
Unit 5	Fabric Filter Plant (FFP)	Unit Off-line
Unit 6	Fabric Filter Plant (FFP)	99.99%
Unit 7	Fabric Filter Plant (FFP)	99.98%
Unit 8	Fabric Filter Plant (FFP)	99.96%

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	92.6	96.8	91.8
Stack 2	100.0	100.0	98.7	98.7
Stack 3	92.9	91.0	91.5	89.2
Stack 4	100.0	89.3	98.1	95.8

6 EMISSION PERFORMANCE

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

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)	CO ₂ (tons)
1	1.1	834	343	109 393
2	3.0	1 614	672	210 288
3	0.0	0	0	0
4	0.9	242	95	30 397
5	0.0	0	0	0
6	0.9	474	186	53 774
7	4.0	947	432	181 787
8	4.2	687	311	110 533
SUM	14.0	4 799	2 038	696 172

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	29	0	0	0	0	4.0
Stack 2	3	0	0	0	0	8.4
Stack 3	14	0	0	0	0	2.3
Stack 4	31	0	0	0	0	4.8
SUM	77	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
Stack 1	31	0	0	0	0	0.0
Stack 2	3	0	0	0	0	0.0
Stack 3	14	0	0	0	0	0.0
Stack 4	31	0	0	0	0	0.0
SUM	79	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
Stack 1	31	0	0	0	0	0.0
Stack 2	3	0	0	0	0	0.0
Stack 3	14	0	0	0	0	0.0
Stack 4	31	0	0	0	0	0.0
SUM	79	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 - November 2020

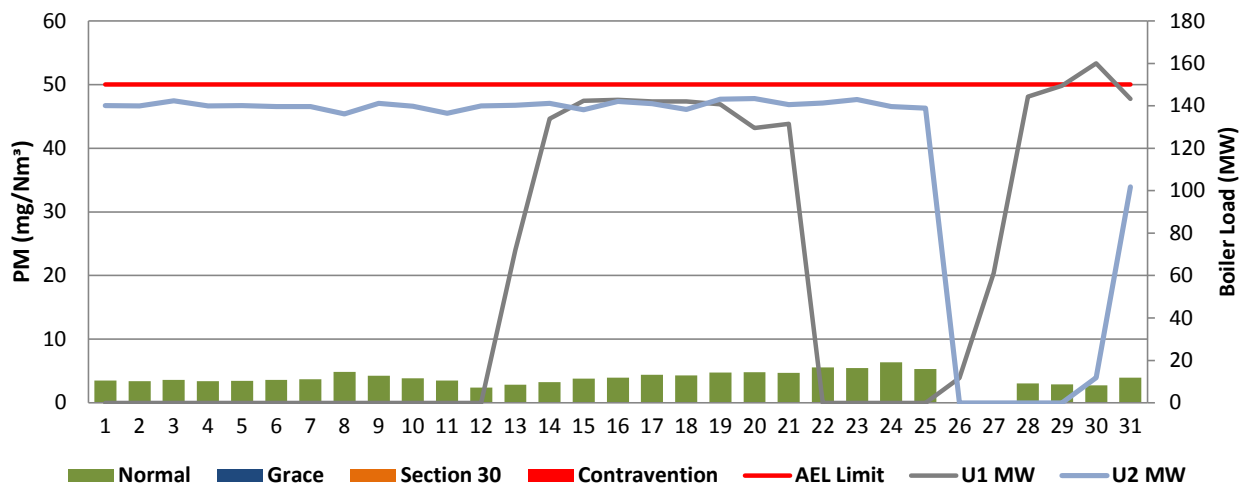


Figure 2: Camden Stack 2 PM Emissions - November 2020

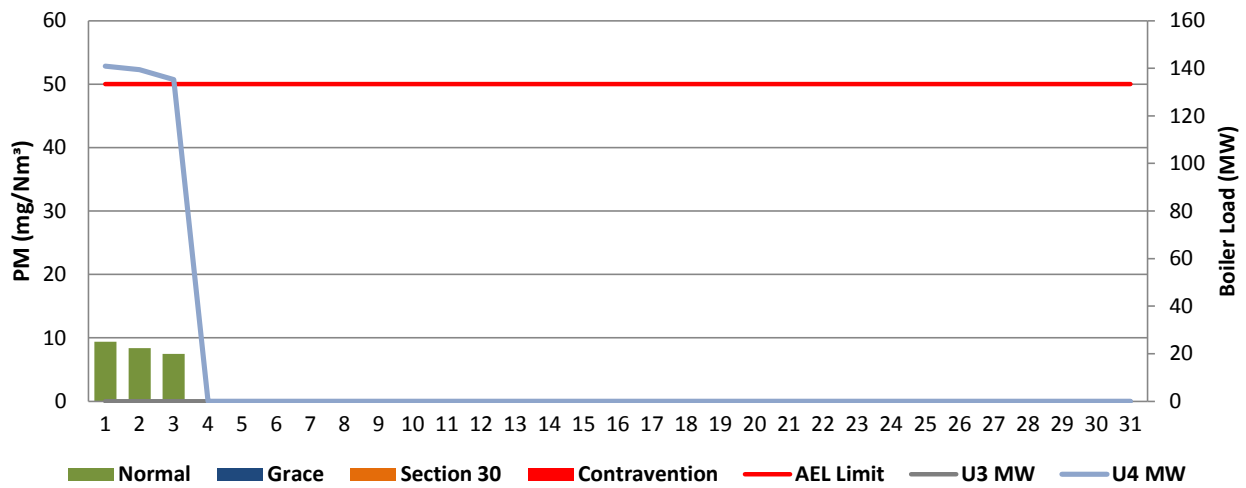


Figure 3: Camden Stack 3 PM Emissions - November 2020

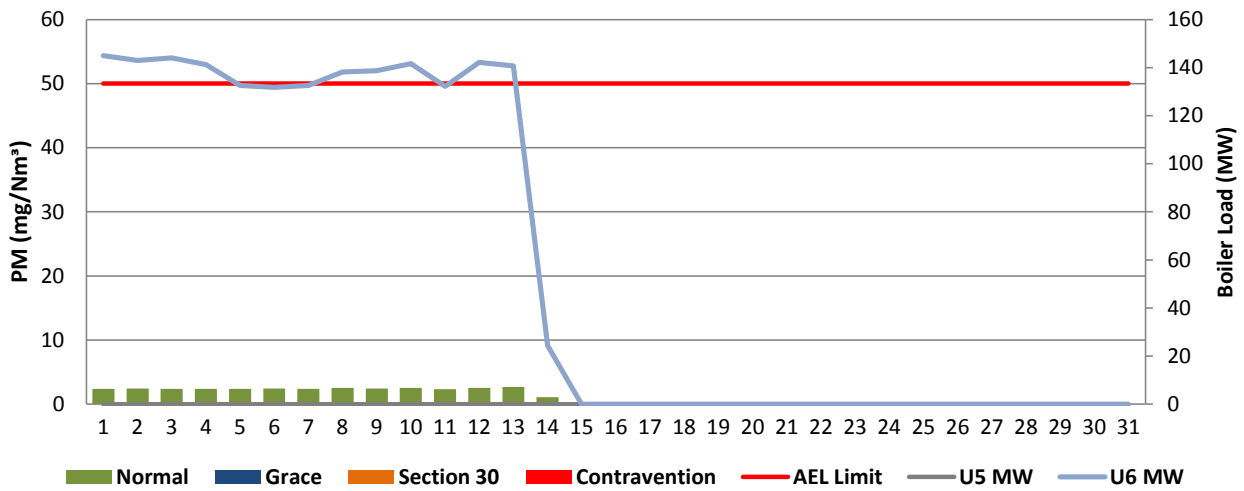


Figure 4: Camden Stack 4 PM Emissions - November 2020

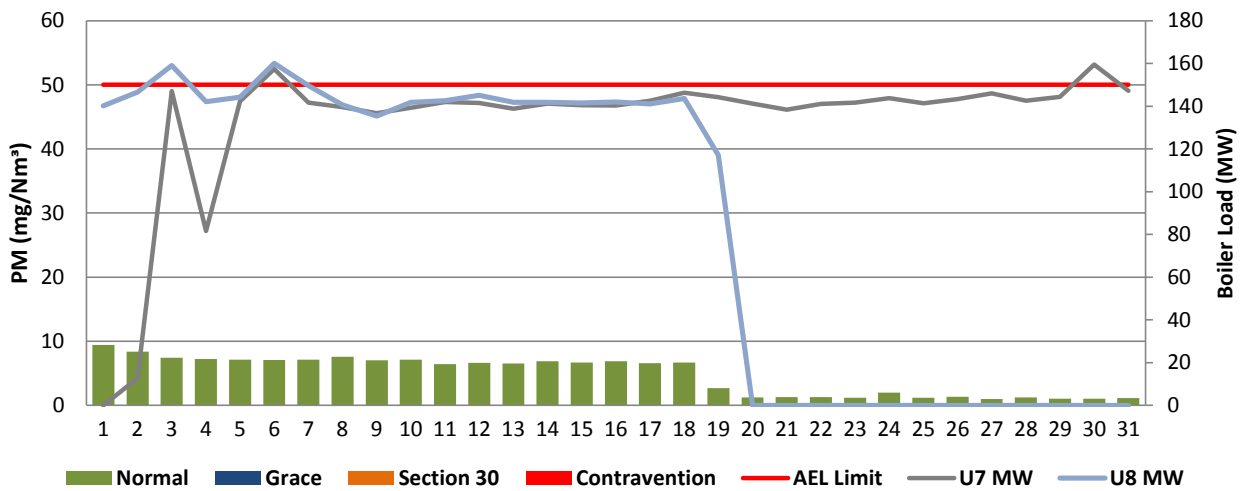


Figure 5: Camden Stack 1 SOx Emissions - November 2020

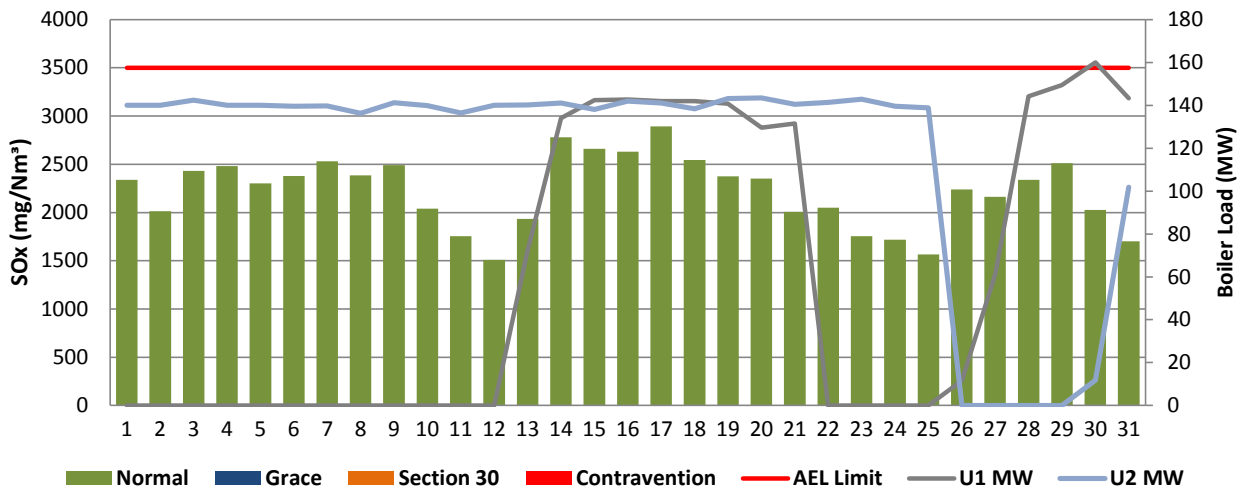


Figure 6: Camden Stack 2 SOx Emissions - November 2020

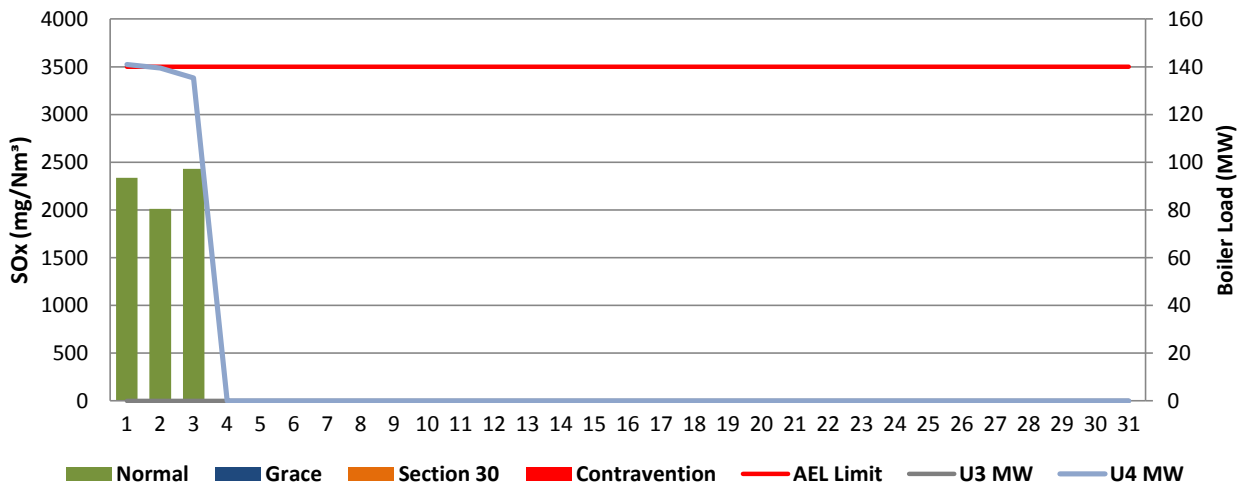


Figure 7: Camden Stack 3 SOx Emissions - November 2020

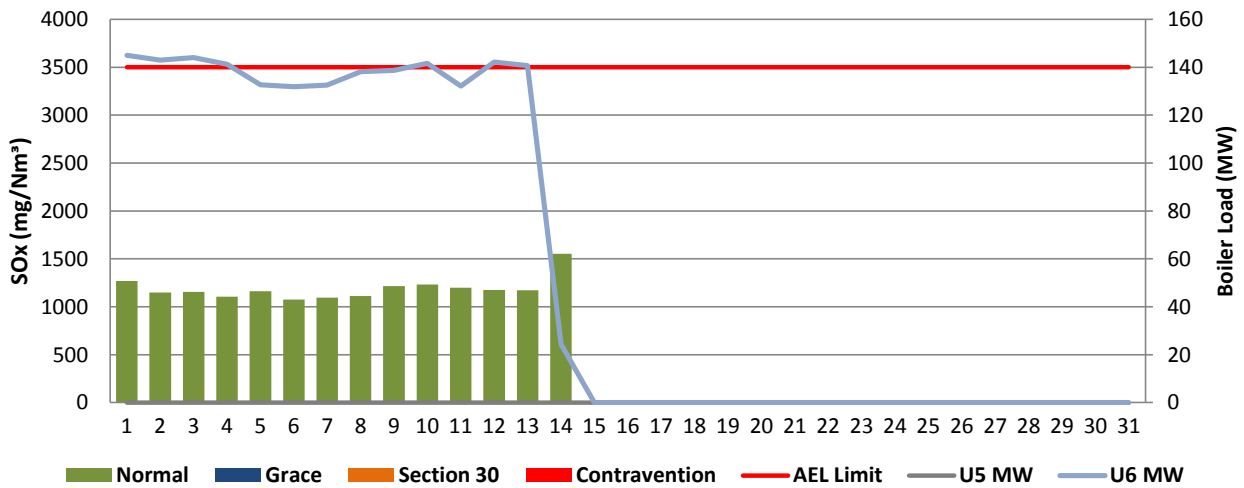


Figure 8: Camden Stack 4 SOx Emissions - November 2020

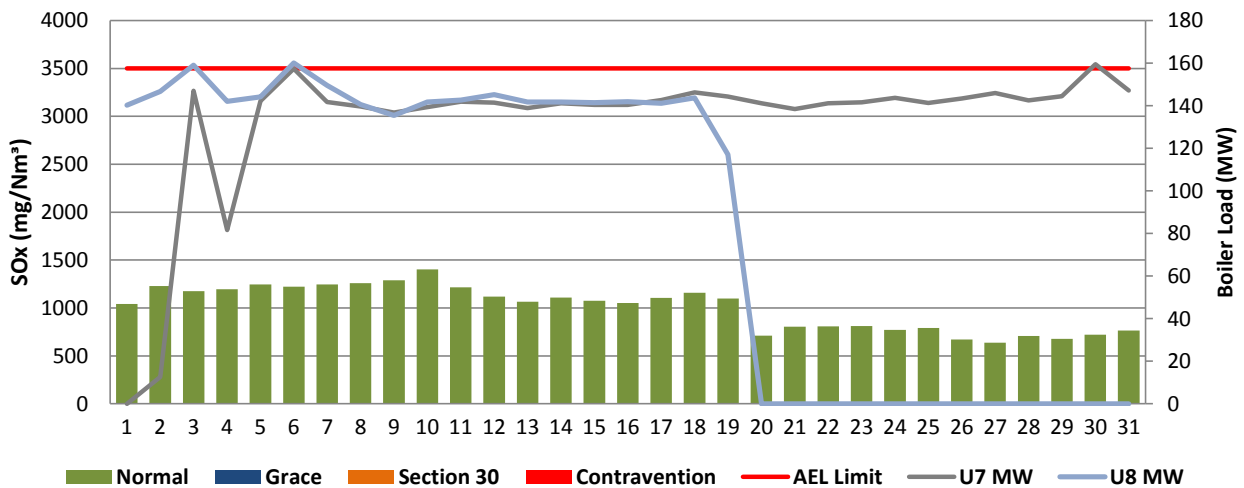


Figure 9: Camden Stack 1 NOx Emissions - November 2020

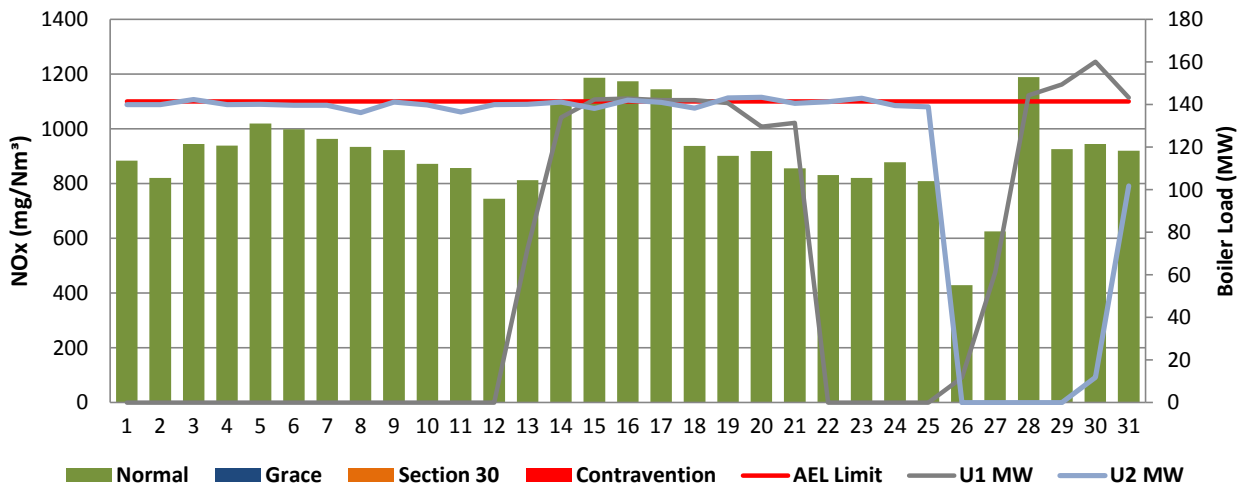


Figure 10: Camden Stack 2 NOx Emissions - November 2020

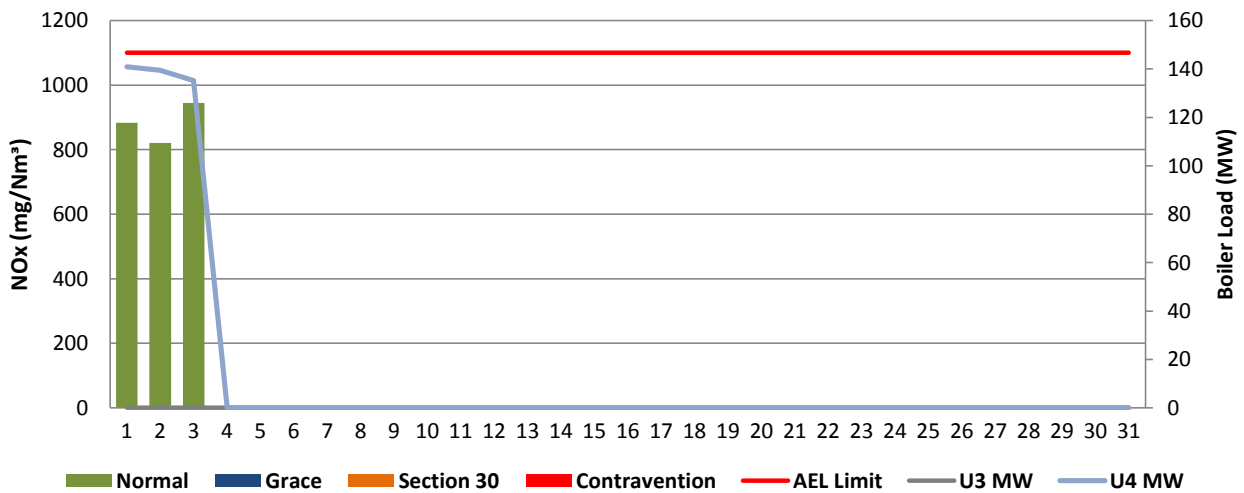


Figure 11: Camden Stack 3 NOx Emissions - November 2020

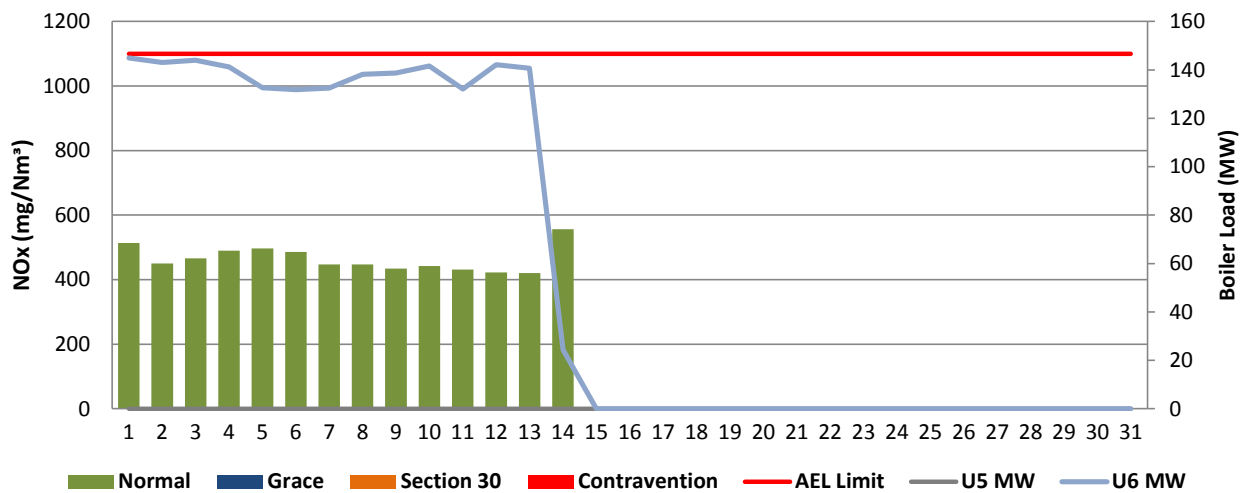
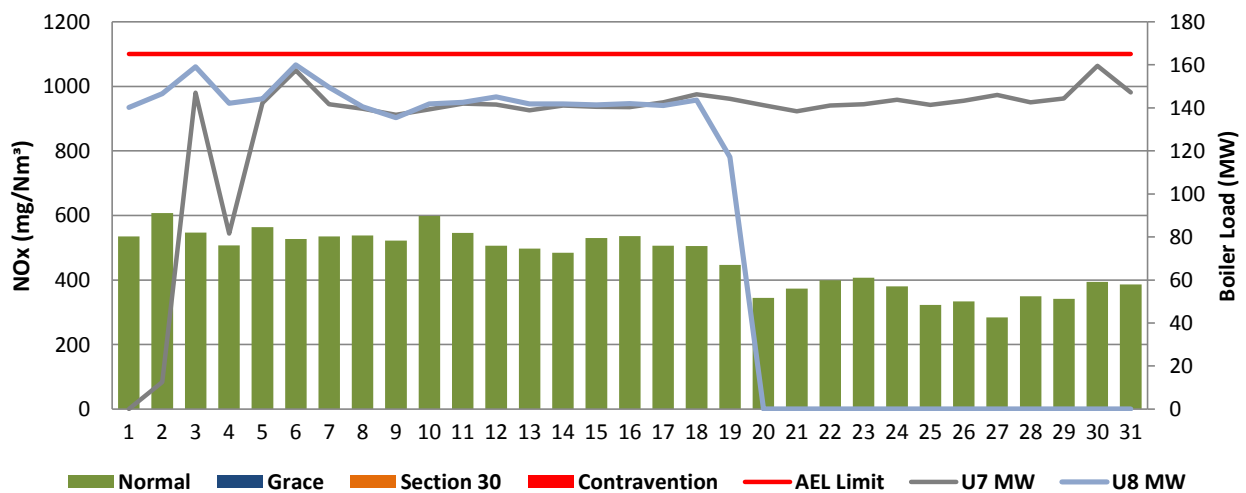


Figure 12: Camden Stack 4 NOx Emissions - November 2020



10 GENERAL / ABNORMALITIES

Unit 1:

None

Unit 2:

None

Unit 3:

The unit was off-load for the month.

Unit 4:

None

Unit 5:

The unit was off-load for the month.

Unit 6:

None

Unit 7:

None

Unit 8:

None

Stack 2 repairs have been completed. Correlation Tests have been completed on Stacks 1, 3 and 4 as well. Full Correlation Tests on Stack 2 will take place from the 6-9 Jan 2021. Please note the Stack 1 NOx exceedances from 15-17 Nov & 28 Nov due to faulty O2 analyzer.

	<u>18/12/2020</u>		<u>17/12/2020</u>
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

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D Herbst
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Compliance Management
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R Rampiar
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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