

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 Apr-2020
	Coal	Tons	550 000	154 708.00
	Fuel Oil	Tons	5 000	1 870.91
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Production Rate Apr-2020
	Energy	GWh	1600	290.01
	Ash	Tons	not specified	38 770
	RE PM	kg/MWh	not specified	0.212

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19.56	21.68
Sulphur Content	%	< 2	0.90
Ash Content	%	25 to 35	25.06

3 EMISSION LIMITS (mg/Nm³)

Associated Unit/Stack	PM	SO _x	NO _x
Stack 1	50	3500	750
Stack 2	50	3500	750
Stack 3	50	3500	750
Stack 4	50	3500	750

4 ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	Technology Type	Efficiency Apr-2020
Unit 1	Fabric Filter Plant (FFP)	100.0%
Unit 2	Fabric Filter Plant (FFP)	99.97%
Unit 3	Fabric Filter Plant (FFP)	99.73%
Unit 4	Fabric Filter Plant (FFP)	Unit Off-line
Unit 5	Fabric Filter Plant (FFP)	Unit Off-line
Unit 6	Fabric Filter Plant (FFP)	Unit Off-line
Unit 7	Fabric Filter Plant (FFP)	99.70%
Unit 8	Fabric Filter Plant (FFP)	99.72%

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	99.9	97.6	99.6	92.0
Stack 2	99.9	98.0	0.0	0.0
Stack 3	Both units off	Both units off	Both units off	Both units off
Stack 4	99.9	95.9	97.9	79.2

6 EMISSION PERFORMANCE

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

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)	CO ₂ (tons)
1	2.3	1 000	412	127 200
2	1.7	835	346	106 066
3	25.5	1 221	508	160 329
4	0.0	0	0	0
5	0.0	0	0	0
6	0.0	0	0	0
7	6.9	217	99	35 749
8	25.0	860	378	139 380
SUM	61.4	4 132	1 743	568 724

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)
Stack 1	25	0	0	0	0	3.4
Stack 2	27	0	0	0	0	30.7
Stack 3	0	0	0	0	0	
Stack 4	27	0	0	0	0	30.7
SUM	79	0	0	0	0	

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)
Stack 1	25	0	0	0	0	0.0
Stack 2	28	0	0	0	0	0.0
Stack 3	0	0	0	0	0	0.0
Stack 4	27	0	0	0	0	0.0
SUM	80	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)
Stack 1	25	0	0	0	0	0.0
Stack 2	28	0	0	0	0	0.0
Stack 3	0	0	0	0	0	0.0
Stack 4	27	0	0	0	0	0.0
SUM	80	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 - April 2020

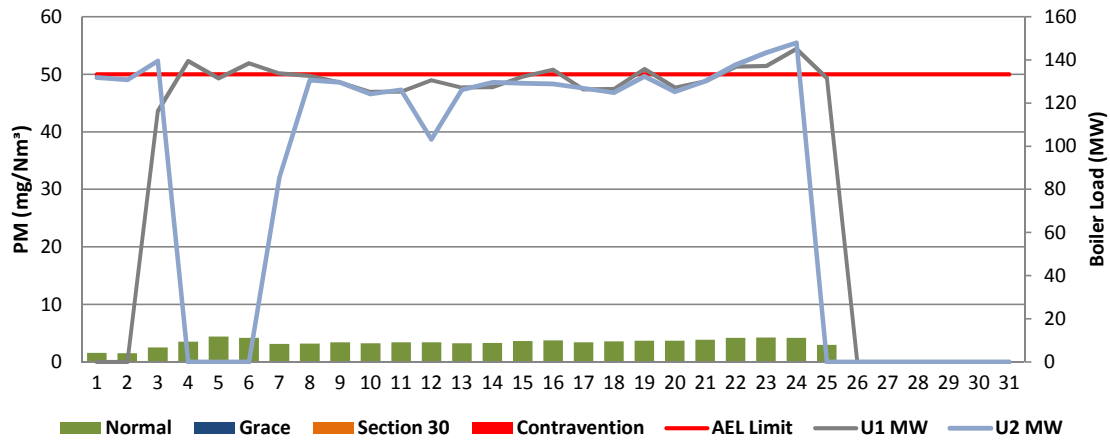


Figure 2: Camden Stack 2 PM Emissions - April 2020

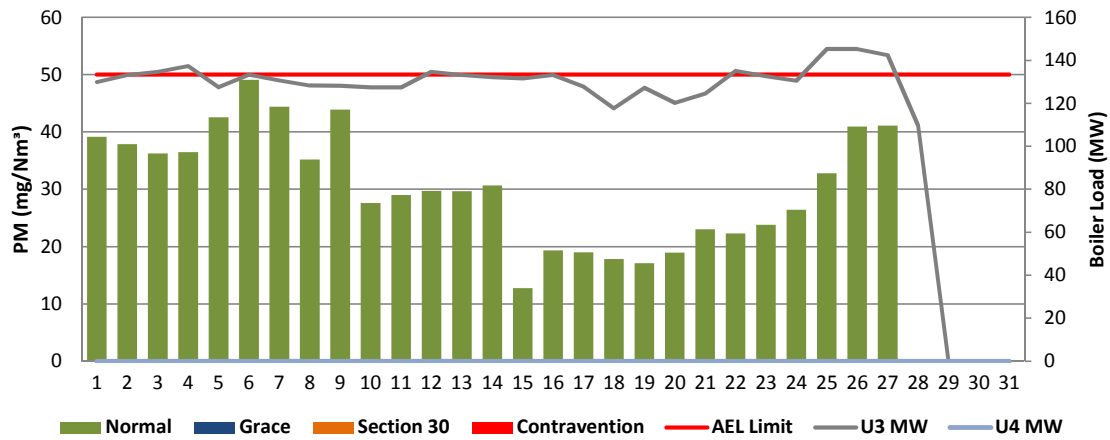


Figure 3: Camden Stack 3 PM Emissions - April 2020

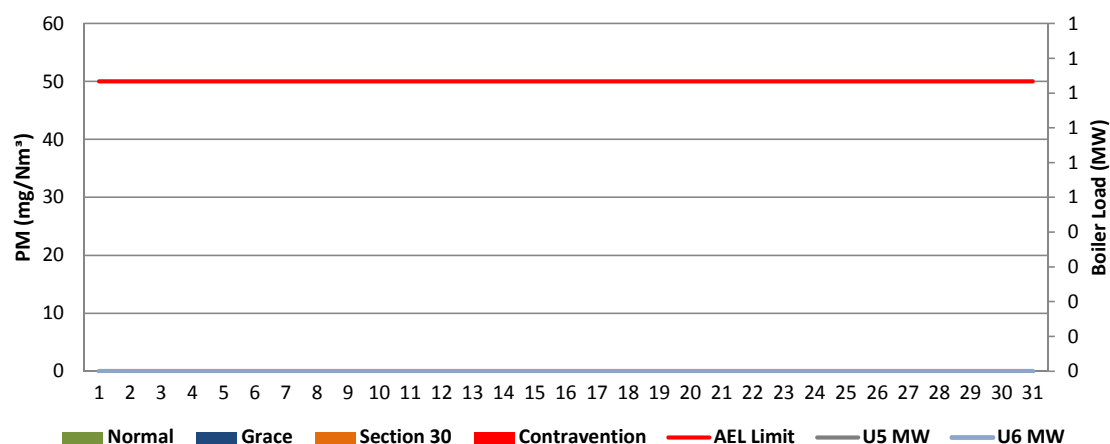


Figure 4: Camden Stack 4 PM Emissions - April 2020

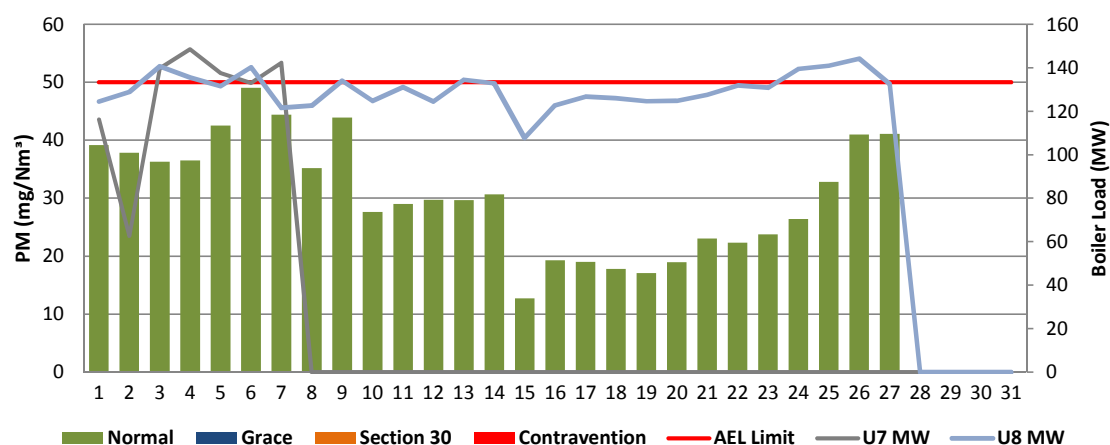


Figure 5: Camden Stack 1 SOx Emissions - April 2020

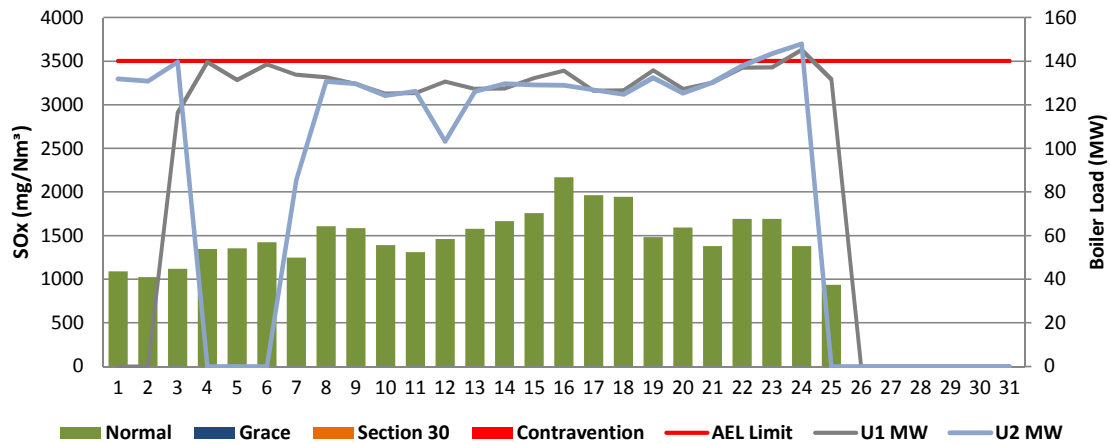


Figure 6: Camden Stack 2 SOx Emissions - April 2020

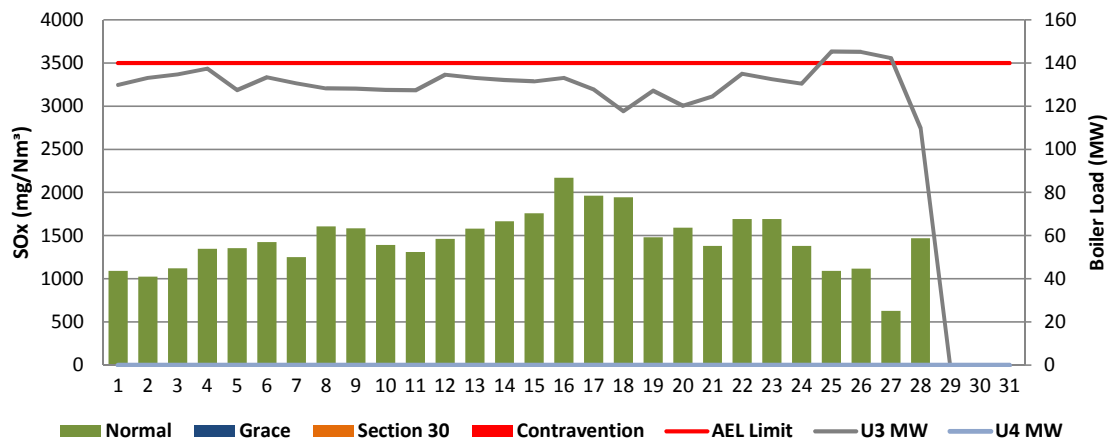


Figure 7: Camden Stack 3 SOx Emissions - April 2020

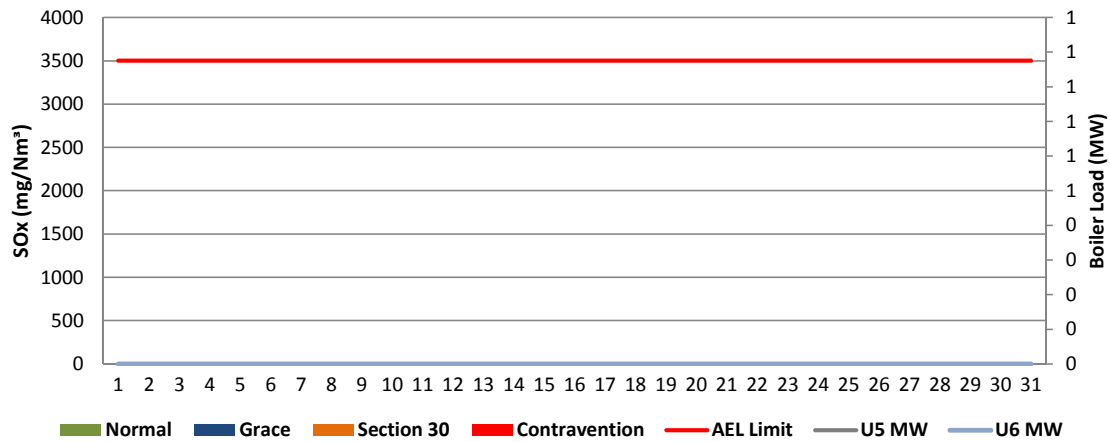


Figure 8: Camden Stack 4 SOx Emissions - April 2020

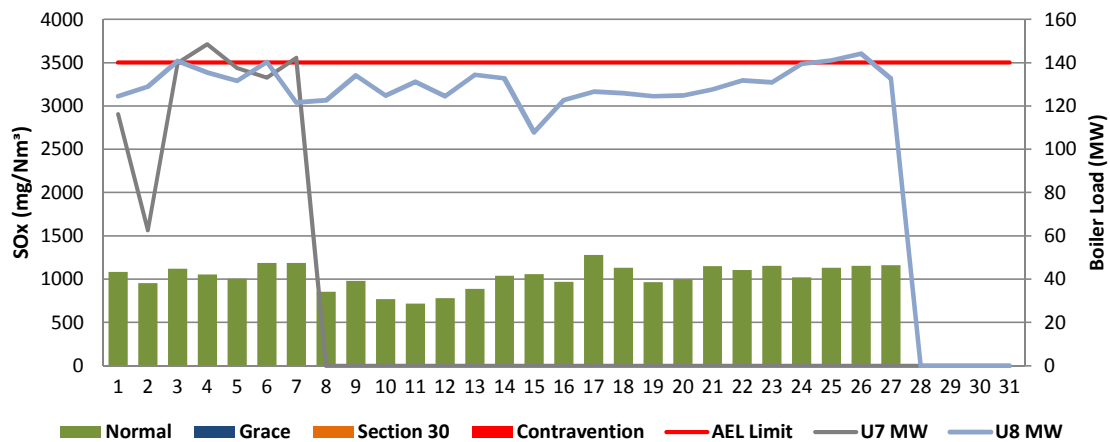


Figure 9: Camden Stack 1 NOx Emissions - April 2020

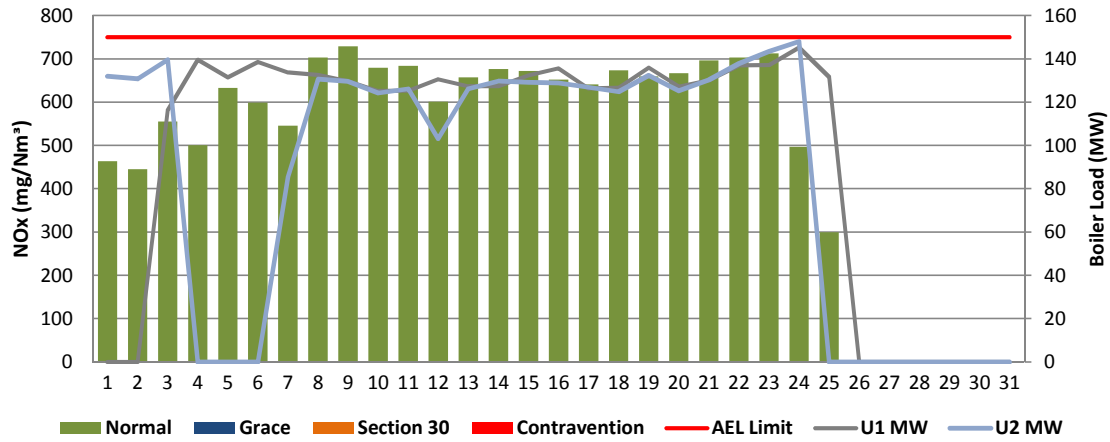


Figure 10: Camden Stack 2 NOx Emissions - April 2020

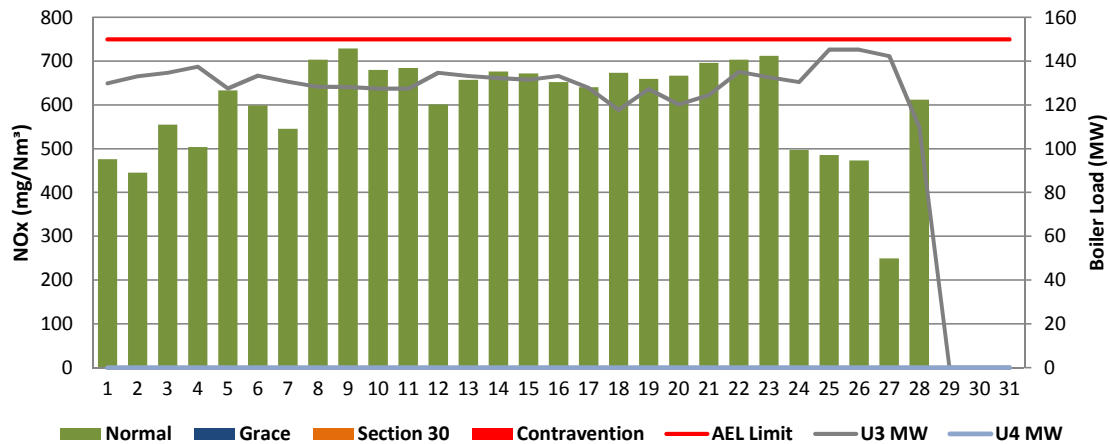


Figure 11: Camden Stack 3 NOx Emissions - April 2020

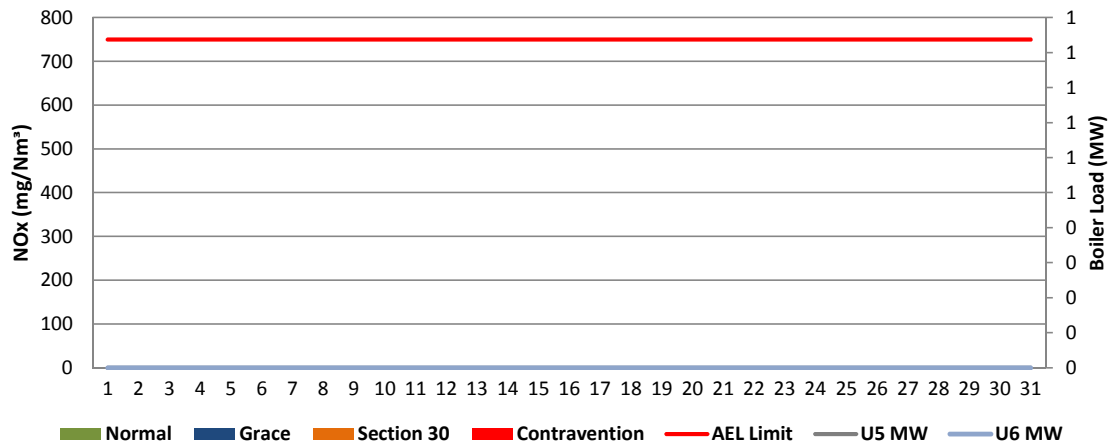
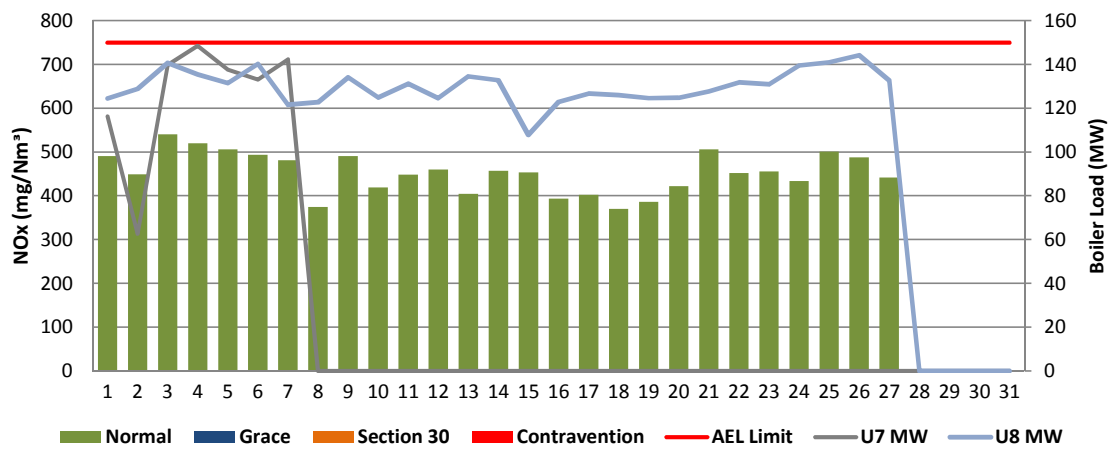


Figure 12: Camden Stack 4 NOx Emissions - April 2020



10 GENERAL / ABNORMALITIES

Unit 1:

None

Unit 2:

None

Unit 3:

None

Unit 4:

The unit was off-load for the month.

Unit 5:

The unit was off-load for the month.

Unit 6:

The unit was off-load for the month.

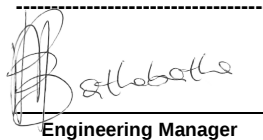
Unit 7:

None

Unit 8:

None

Please note that the issues on Stack 2 still exist as indicated previously. Also note the Stack 1 O2 monitor malfunction as stated in the attached letter.



Engineering Manager

27/05/2020
Date



Environmental Manager

27/05/2020
Date

Compiled by: Environmental Department & verified by Boiler Eng

Env. Practitioner & System Eng

For: Department of Environment, Forestry & Fisheries

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Camden Power Station:

Engineering Manager
Operating Manager
Maintenance Manager
Unit Production Manager
Boiler Engineering Manager
System Engineer
Environmental Officer
Performance and Test
Production Manager