



**Ms Mpho Nembilwi**  
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PO Box 437  
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Date:  
*April 2020*

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Ref: *Kusile Power Station AEL (17/4/AEL/MP312/11/12)*

Dear Mr. Mahlangu

**KUSILE POWER STATION'S MONTHLY EMISSIONS REPORT FOR FEB 2020**

This serves as the monthly report required in terms of Section 7.6 in Kusile Power Station's Atmospheric Emission License: 17/4/AEL/MP311/12/01. The emissions are for the month of Feb 2020.

Hoping the above will meet your satisfaction.

Yours sincerely

Justice Bore  
**GENERAL MANAGER: KUSILE POWER STATION**  
DATE: *30/04/2020*

**1 Raw Materials and Products**

Raw Materials and Products	Raw Material Type	Units	Maximum Permitted Consumption Rate	Consumption Rate Feb-2020
	Coal	Tons	1 818 083	161 559
	Fuel Oil	Tons	5 533	1542.12
	Limestone	Tons	72 917	23294
Production Rates	Product / By-Product Name	Units	Max. Production Capacity Permitted	Production Rate Feb-2020
	Energy	GWh	3106.944	253.54
	Ash	Tons	663 583	45 262.4
	Gypsum	Tons	129 250	13 044.6
	RE PM	kg/MWh	not specified	0.041
	RE SOx	kg/MWh	not specified	1.556

**2 Abatement Technology**

Associated Unit/Stack	Technology Type	Efficiency Feb-2020	Technology Type	Efficiency Feb-2020
Unit 1	FFP	99.975%	FGD	81.469%
Unit 2	FFP		FGD	
Unit 3	FFP		FGD	
Unit 4	FFP		FGD	
Unit 5	FFP		FGD	
Unit 6	FFP		FGD	

Note: Both the FFP and FGD does not have bypass mode operation, hence plant 100% Utilised.

**4. Monitoring reliability**

Associated Unit/Stack	PM	SO <sub>2</sub>	NO	CO <sub>2</sub>	O <sub>2</sub>
Unit 1	99.8	100.0	100.0		100.0
Unit 2					
Unit 3					
Unit 4					
Unit 5					
Unit 6					

5. Emissions Performance

Table 1: Monthly tonnages for the month of Feb-2020

Associated Unit/Stack	PM	SO <sub>2</sub>	NO <sub>x</sub>	CO <sub>2</sub>
Unit 1	10.3	394	803	
Unit 2	0.0	0	0	
Unit 3	0.0	0	0	
Unit 4	0.0	0	0	
Unit 5	0.0	0	0	
Unit 6	0.0	0	0	
<b>SUM</b>	10.3	394	803	

Table 2: Operating days in compliance to PM AEL Limit - February 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm <sup>3</sup> )
Unit 1	27	0	0	0	0	8.5
Unit 2	0	0	0	0	0	
Unit 3	0	0	0	0	0	
Unit 4	0	0	0	0	0	
Unit 5	0	0	0	0	0	
Unit 6	0	0	0	0	0	
<b>SUM</b>	27	0	0	0	0	

Table 3: Operating days in compliance to SO<sub>x</sub> AEL Limit - February 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO <sub>2</sub> (mg/Nm <sup>3</sup> )
Unit 1	28	1	0	0	1	232.3
Unit 2	0	0	0	0	0	
Unit 3	0	0	0	0	0	
Unit 4	0	0	0	0	0	
Unit 5	0	0	0	0	0	
Unit 6	0	0	0	0	0	
<b>SUM</b>	28	1	0	0	1	

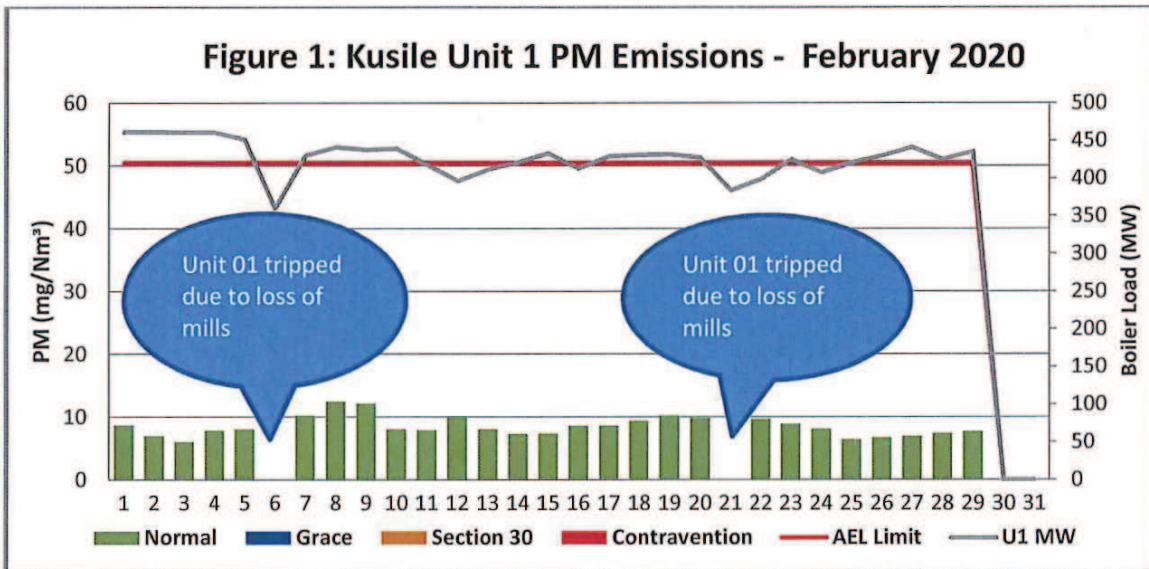
KUSILE POWER STATION'S MONTHLY EMISSIONS REPORT FOR FEBRUARY 2020

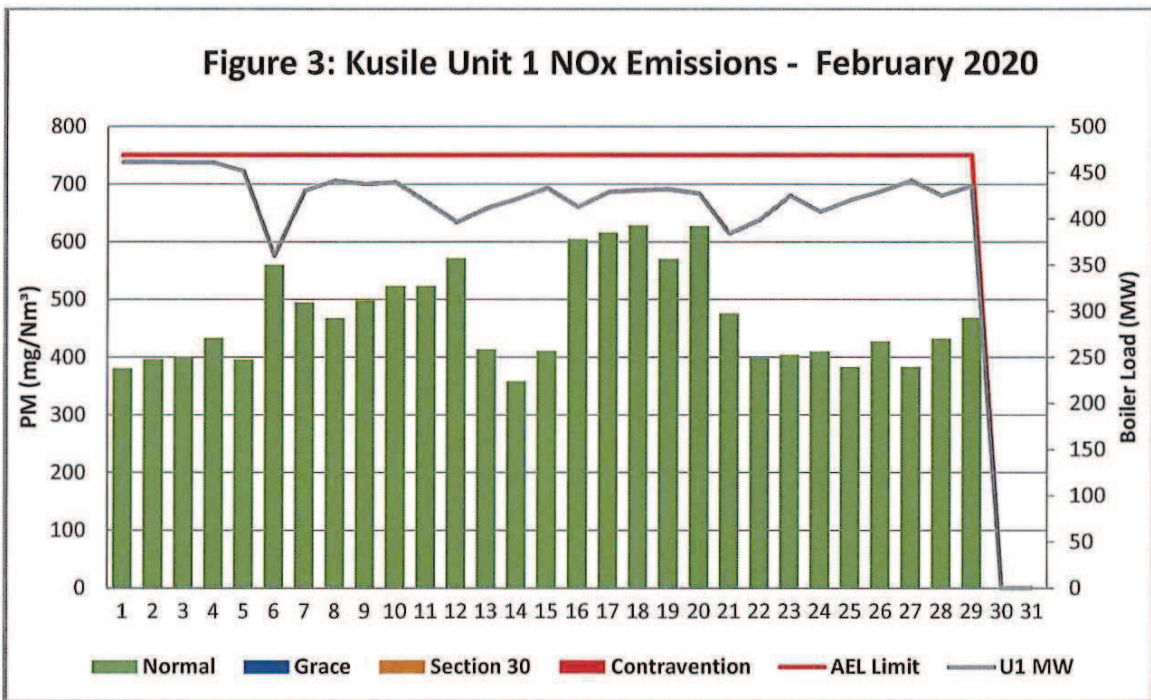
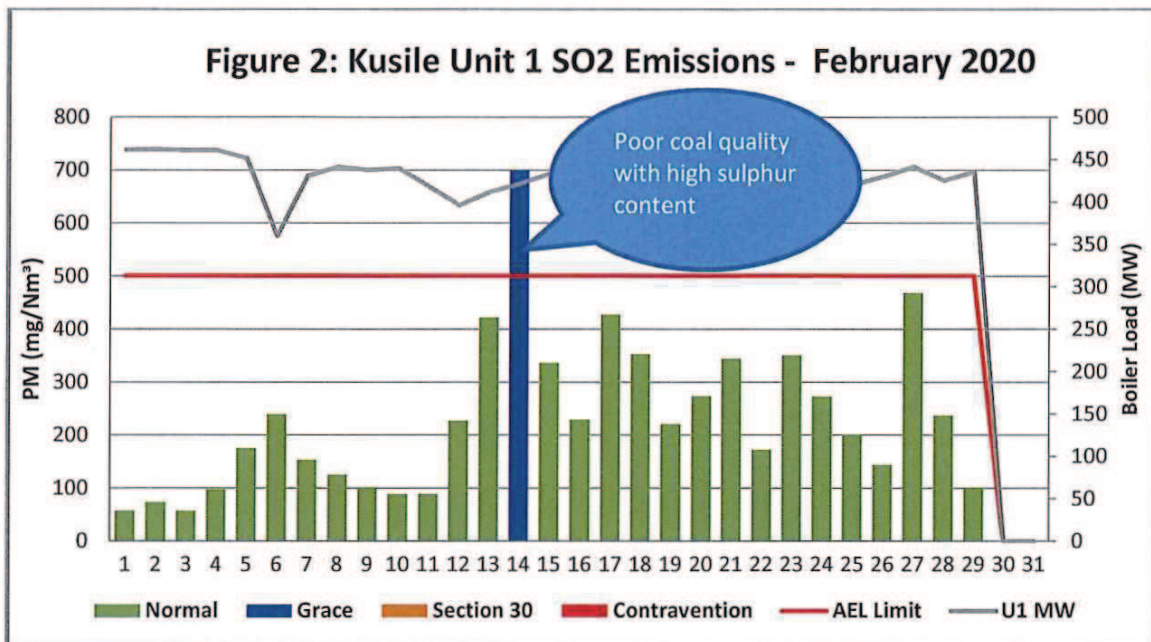
Table 4: Operating days in compliance to NOx AEL Limit - February 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm <sup>3</sup> )
Unit 1	29	0	0	0	0	471.2
Unit 2	0	0	0	0	0	
Unit 3	0	0	0	0	0	
Unit 4	0	0	0	0	0	
Unit 5	0	0	0	0	0	
Unit 6	0	0	0	0	0	
<b>SUM</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

Table 5: Legend Description

Condition	Colour	Description
Normal	Green	Emissions below Emission Limit Value (ELV)
Grace	Blue	Emissions above the ELV during grace period
Section 30	Orange	Emissions above ELV during a NEMA S30 incident
Contravention	Red	Emissions above ELV but outside grace or S30 incident conditions





**6. Shut down and Light up information**

**Table 6. PM Start-up information for the month of Feb-2020**

Unit No. 1	Event 1		Event 2	
Breaker Open (BO)	01:40 PM	2020/02/05	07:00 PM	2020/02/20
Draught Group (DG) Shut Down (SD)	11:15 PM	2020/02/05	08:15 PM	2020/02/20
BO to DG SD (duration)	00:09:35	DD:HH:MM	00:01:15	DD:HH:MM
Fires in time	01:31 PM	2020/02/06	09:25 PM	2020/02/20
Synch. to Grid (or BC)	06:20 PM	2020/02/06	07:25 AM	2020/02/21
Fires in to BC (duration)	00:04:48	DD:HH:MM	00:10:00	DD:HH:MM
Emissions below limit from BC (end date)	not > limit	not > limit	not > limit	not > limit
Emissions below limit from BC (duration)	n/a	DD:HH:MM	n/a	DD:HH:MM

**7. Emergency Generation**

**Table 6. Emergency generation per unit for the month of Feb- 2020**

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Emergency Generation hours declared by national Control						
Emergency Hours declared including hours after stand down						
Hours over the Limit during Emergency Generation						

**8. Complaints**

No complaints received during the month of Feb- 2020