



Ms Mpho Nembilwi
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Date:
May 2020

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

Dear Ms. Nembilwi

KUSILE POWER STATION'S MONTHLY EMISSIONS REPORT FOR MARCH 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 Mar 2020.

Hoping the above will meet your satisfaction.

Yours sincerely

Justice Bore
GENERAL MANAGER: KUSILE POWER STATION
DATE: *2020-05-06*

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1 Raw Materials and Products

Raw Materials and Products	Raw Material Type	Units	Maximum Permitted Consumption Rate	Consumption Rate Mar-2020
	Coal	Tons	1 818 083	139 614
	Fuel Oil	Tons	5 533	1818.17
	Limestone	Tons	72 917	17160

Production Rates	Product / By-Product Name	Units	Max. Production Capacity Permitted	Production Rate Mar-2020
	Energy	GWh	3321.216	221.29
	Ash	Tons	663 583	38 491.5
	Gypsum	Tons	129 250	9 609.6
	RE PM	kg/MWh	not specified	0.023
	RE SOx	kg/MWh	not specified	1.197

2 Abatement Technology

Associated Unit/Stack	Technology Type	Efficiency Mar-2020	Technology Type	Efficiency Mar-2020
Unit 1	FFP	99.985%	FGD	85.565%
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 ₂	NO	CO ₂	O ₂
Unit 1	100.0	100.0	100.0		100.0
Unit 2					
Unit 3					
Unit 4					
Unit 5					
Unit 6					

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5. Emissions Performance

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

Associated Unit/Stack	PM	SO ₂	NO _x	CO ₂
Unit 1	5.2	265	732	
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	
SUM	5.2	265	732	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm ³)
Unit 1	24	0	0	0	0	4.7
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	
SUM	24	0	0	0	0	

Table 3: Operating days in compliance to SO₂ AEL Limit - March 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO ₂ (mg/Nm ³)
Unit 1	25	0	0	0	0	174.1
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	
SUM	25	0	0	0	0	

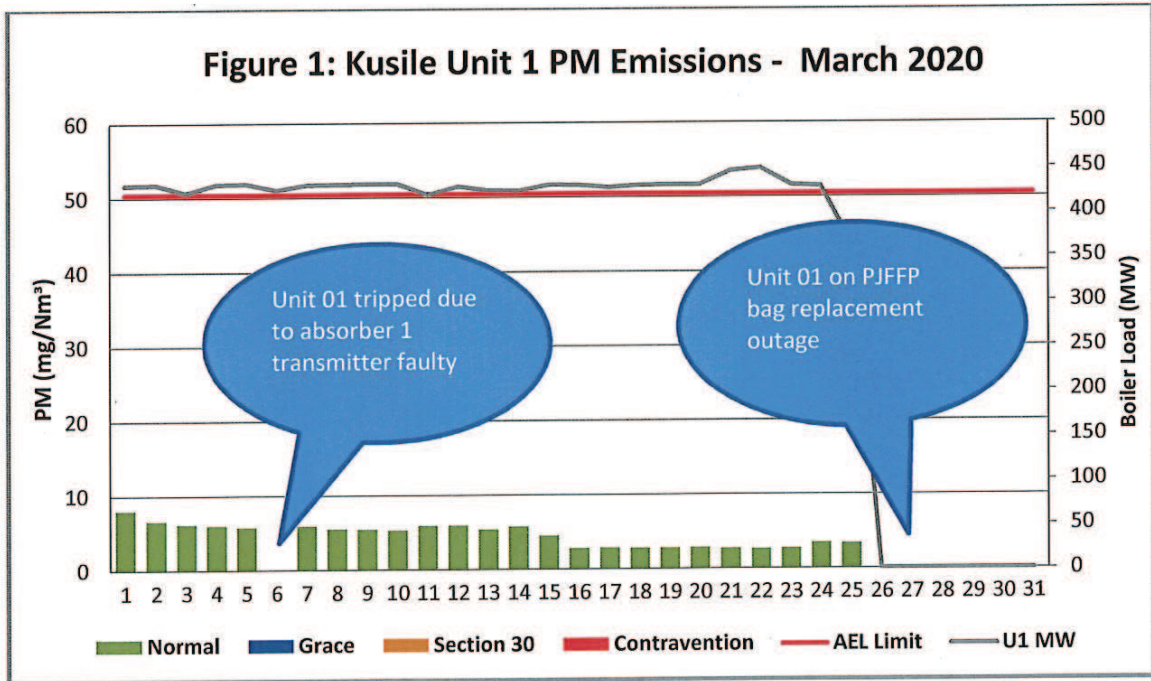
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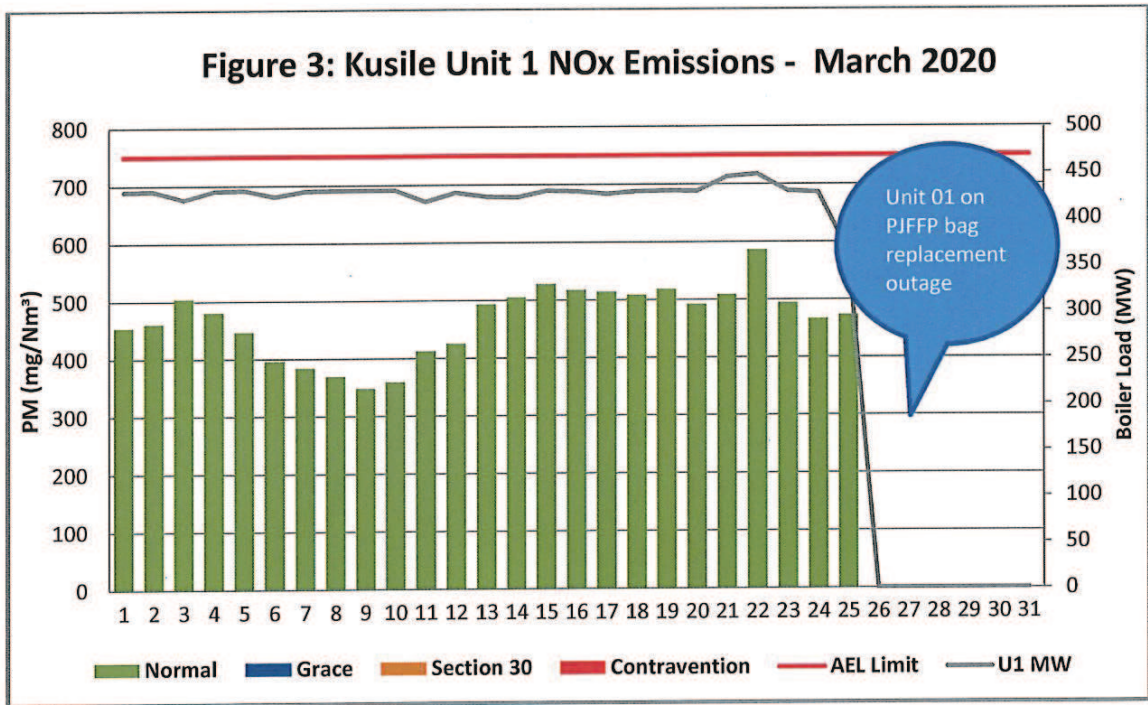
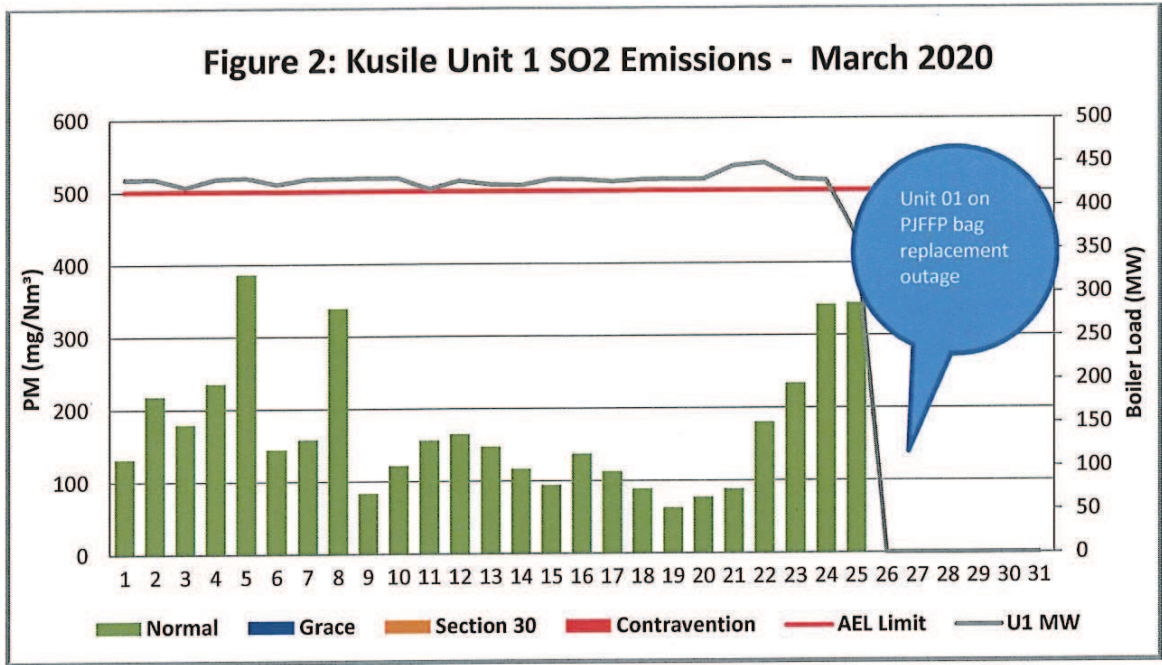
Table 4: Operating days in compliance to NOx AEL Limit - March 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm ³)
Unit 1	25	0	0	0	0	466.1
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	
SUM	25	0	0	0	0	

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





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6. Shut down and Light up information

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

Unit No. 1	Event 1		Event 2	
Breaker Open (BO)	08:05 PM	2020/03/05	12:05 PM	2020/03/25
Draught Group (DG) Shut Down (SD)	08:10 PM	2020/03/05	01:05 PM	2020/03/25
BO to DG SD (duration)	00:00:05	DD:HH:MM	00:01:00	DD:HH:MM
Fires in time	02:55 PM	2020/03/05		
Synch. to Grid (or BC)	04:55 AM	2020/03/06		
Fires in to BC (duration)	00:13:59	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

7. Emergency Generation

Table 7. Emergency generation per unit for the month of March - 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 March- 2020