P78 PRODUCTION SHIFT REPORT

Date : **04 Maret 2025 (Tuesday)**
Reported by : **Banariyanto / Hariyanto / Iwan Priyanto**

TIME	DESCRIPTION	REMARK
	Process Safety and Environment Information	
20-Nov 10:00	Reading accumulation CEMS at DCS is higher than accumulation at CEMS dashboard. It will evaluate calculation at DCS and comparison Flue gas flow rate Unit7 Perform RPT Electric Fire Pump, Diesel Fire Pump, Emergency Diesel Generator.	Update calculation on DCS Waiting Unit Shutdown Completed

Limit	NOX		CO	SO2		Particulate	Mercury (Hg)
	550 mg/Nm³	35,500 kg/d	44,000 kg/d	550 mg/Nm³	5,064 kg/d	100 mg/Nm³	0.03 mg/Nm³
Unit 7	486.5	**9908.8**	**793.0**	124.4	**2163.9**	5.94	0.00164
Unit 8	347.7	**14868.4**	**6512.9**	30.0	**1025.7**	17.21	0.00050

Discharge Canal Temperature at DC max= 38.9°C
Scrubber basin Outlet PH (DCS) Min/Mx: 6.76 / 7.01
WWTP equalization basin: level A/B: 16% / 33%

U 7 Technical Generation Losses	***U 8 Technical Generation Losses***
Total: 0 MWH	**Total: 0 MWH**

27-Feb — Declare U7: 640 NMW, Declare U8: 630 MW (Station: 1270 MW)

Unit # 7: ***Days of continues operation: 52 Days.***
Last Maintenance Outage (MO) 10-Jan 2025, @14:54 SWGR-A 13.8 trip

Last Sync Sunday, 10-Jan-2025 @19:56

U7 load Max: 635 MW(GROSS) ; Min: 368 MW(GROSS) ; Average: 525 MW(GROSS)
U7 load Max: 601 MW(NET) ; Min: 339 MW(NET) ; Average: 492 MW(NET)
NPHR Target / Achieved: 2567 / 2738 (Loss: 6.67%), Eta Pro:2569/ 2665 kcal/kWh (Loss: 3.73%)
Un-burn carbon Fly ash and Bottom ash= 0.17% (25-Feb) and 2.80% (25-Feb)
Furnace temperature at load 672 MW(Gross) average 1026 °C (max: 1054 °C at inspect. hole #13)
Minimize R/H spray. Average MS/RH steam temperature 536 / 532 °C
Turbine 8X vibration max 31 µm at MS/RHT 536 / 525 °C load 439 GMW at 03:04
Average vibration 8x / 7X for 24 hours were: 24 / 62 µm
U7 Frequency of transfer: A:8;B: 2 ;C: 1;D: 3;E: 0;F: 9
500KV GSUT DGA max / average was 16.8 / 16.8 ppm
Make up: **908** tons (open continuous blowdown valve 5 turns).Soot blower: **158** tons,
SW pyrites: **340** tons. Soot blower skip*:* -
Sootblowers special operations: 420, 421, 422 / 470, 471, 472 (Screen tube), 427/477-428/478-429/479-430/480 (LTSH Cavity) run every 1st and 15th days of the month (2 times/month).
Clinker Condition at Hole No. –

C1	C2	W	10	11	12	13	14	15	16	17	18	E	C3	C4
UC	UC	1	-	C	C	1	3	4	2	1	-	C	UC	UC

***1**: Spotty, **2**:<5 cm, **3**: 5>10 cm, **4**: >10<15 cm, **5**: >15cm, **C**: Clean*

Coal Burn IOL

23:00	05:00	11:00	17:00
CLHV+CMHV+ CH3SF+KJA	CLHV+CMHV+ CH3SF+KJA	CLHV+CMHV+ CH3SF+KJA	CLHV+CMHV+ CH3SF+KJA
4736	4736	4736	4736
27.41	27.41	27.41	27.41
5.74	5.74	5.74	5.74
0.37	0.37	0.37	0.37
49	49	49	49

Coal Transfer Plan

23:00	5:00	11:00	17:00
KJA50% + JMB50%	KJA50% + JMB50%	KJA50% + JMB50%	KJA50% + JMB50%
4853	4853	4853	4853
26.27	26.27	26.27	26.27
4.23	4.23	4.23	4.23
0.2	0.2	0.2	0.2
50	50	50	50

UNIT 7 PROBLEMS

16-Sep	1. Analyzer Transmitter (OXYGEN) A, 7BG-AT-562A often Alarm Deviation (XMTR A < B deviation more than 1.5%).	Under Investigation by performance team
18-Sep	2. **Found load decrease disruption when conducted closure test at CRV#2**. Load drop from 628 GWM to 407 GWM due to IV#1 & RSV#1 suddenly closing when test completed for RSV#2 & IV #2	**SR113756** (under investigation Engineering) CRV#2 **postpone** when RPT TG01
06-Nov	3. 7ID-MOV-729A Dilution Pump MOV found gear box crack	Waiting material/WO. 2409051037 -->PO 94216/PE/POMI/24, PO Waiting approval from SM
06-Nov	4. Found SAH 7A motor drive vibration IB axial side show increase indication. Info by CBM team Replace Fluid Coupling and perform Motor solo run test during unit shutdown.	Monitoring WPCOND/WO.2411071521
22-Nov	5. **PA fan 7B vibration motor I-B bearing has increasing value (1,7 Mils), the event is same time with U8 trip**. @**12:00 (01-Jan)**, try to Bias PAF 7B until (-60%) at Load 250 NMW, the Demand of PAF 7A/B still (85/22 %); air Flow (109/43); air Press (8,4/8,7 kPa, **trip point** = 6,25 kPa); PA to furnace DP = 8,8 kPa, **trip point** = 5 kPa, delay 5 sec; with Coal Properties TM=27.3%, and CV=4803 kcal/kg. (70% CMHV + 30% CHHV). @09-Jan Fan bearing inspections	Monitoring **Trip point**: 3.0 Mils
05-Jan	6. **Found Net MW indication on DCS intermittently hunting.** @**please also monitor CV#1 ripple when Low Load (350 NMW) at position 35% opening (last LVDT CV-1 cleaning 8-Jan-2025).** 05-Feb Perform closure test, stop the test due to Found CV#1&2 ripple, CV#1 effect load drop until 30 MW CV#2 effect Fuel master drop 62 to 55 % and load decrease 594 Nmw to 531 Nmw 19-Feb Replace LVDT CV-1 done, If CV test give interval until press stable.(monitoring)	WO.2412171022
04-Jan	7. **Sea water leaks at condenser outer loop inletside**. **@ Daily check the leaks rate by Chemist. Leak rate: 4.16 liter per hour at load 382 GMW.** @ **11:40 (22-Feb)** Open continuous blowdown valve 5 turns (as Req. Chemist), BB cation conductivity 1.30 Us/cm.	Monitoring, Closed Blowdown valve when BB cation cond 0.5 uS/cm
24-Dec	8. **FGD Operation issue:** • 26-Jan Restart U7 FGD use Absorber Pump C Flow FGD max 6500t/h (suspect pump performance has degraded). • *26-Jan.CFC-MOV-802 hard to open during Absorber pump B start (SR117345)*	Monitoring/Waiting plant condition WO.2501281011

31-Jan	9. **Found Pulverizer seal air Fan 7A (7BF-FAN-620A) high vibration.** Running test result after regreasing and adding shim between Outer and house bearing, the fan vibration is still high. (put as Emergency Standby). Bearing spare available, plan repair on unit shutdown due damper passing.	*Runtest* Vibration (RMS)(mm/s) 6/1/2025 / 31-01-2025 Fan IBV 3.8 3.4 Fan IBH 3.1 3.8 Fan OBV 9.2 8.1 Fan OBH 6.4 5.7 Fan OBAX 8.7 10.5
10:26 (02-Feb)	10. **Generator Hydrogen Leakage** Shut Valve 7HG-ISV-120A/B, 7HG-ISV-130 to check leak rate H2 (Initial Pressure Generator 5.094 Bar, Purity 98.457%) & CHG-V-537 Initial Press H2 Vessel 6.2 Bar. @ **20:00** found H2 leakage at **7GH-RV-300** waiting material expected end of April 2025 (**WO : 2502071118**, ST014412)	SR117476 (RTV-310B)
17:00 (11-Feb)	11. **Mill-7C HAG passing** Stop Mill 7C for PdM but fail isolation due to HAG fail to shut. Found suspect HAG passing. Temporary action force opening of CAD from 5% to 19% for additional cooling when mill in standby (currently reading MOT decrease from 111 degC to 89 degC) @13:30 join observation result: HAG passing @14:02 restart Mill 7C after ensure no Blockage from feed pipe, see from Light glass @15:30 Strategic Operation, recommended to Standby Mill 7C (as result Meeting – 13 Feb)	Information
01-Mar	12. Found Valve 7CM-MOV-455 discrepancy alarm, Status WPCond for repair.	WO.2501141017/ WPCond
	13. **Unit 7 High Priority Alarm:** •	
	U7 HEAT RATE OPTIMIZATION	
	1. Opening sofa damper C# 1&2 wider than C#3&4 for direct the combustion to the center.	
	2. Condenser Vacuum improvement and leak investigation (drain valve inspection).	PIC: pak Sapto PPE
	3. Supply seal water U#7SSCC Bottom Ash some reuse Effluent Water.	
	UNIT 7 ACTIVITIES	
23:00 (03-Mar)	1. Found 7TL-PV-292 Aux Steam Seal Feed Pressure Control V/V uncontrolled pressure till 3000 kpa due suddenly pv open. temporary: shut ia supply but the valve not fully closed. Replace card positioner, completed. Found Gland packing leaks. And repair DONE.	Call out
09:00	2. Chemical injection to boiler furnace unit #7 in 3rd floor with doses 50 ppm = 23 pails	
10:00	3. Found Valve Pyrite 7BA-SHV-310 was passing. Replace Done	
16:02	4. RPT main turbine lube oil pumps auto change over	Completed
03:00 (05-Mar)	5. 500 KV phase A (0%), B (0%) and C (0%) arching.	Information
05:00 (05-Mar)	6. Fill all of Coal Silo with KJA50% + JMB50%	Information
	Unit # 8: ***Days of continues operation: 07 Days*** *Last forced/ Planned outage/ Trip: 24-Feb-2025. @ 21:44 Unit Trip due to Furnace Draft press High High active, due to FGD Trip, all Damper Closed and Hydraulic Oil Skid Trip at Load 550 NMW found all FGD instrument bad quality indication.Investigation result found Digital Output Module fuse was blown.*	*Last Sync Tuesday, 25-Feb-2025 @02:13*
	U8 load Max: 651 MW(GROSS) ; Min: 367 MW(GROSS) ; Average: 526 MW(GROSS) U8 load Max: 620 MW(NET) ; Min: 340 MW(NET) ; Average: 497 MW(NET) NPHR Target / Achieved: 2565 / 2654 (Loss:3.47 %), Eta Pro:2564 / 2563 kcal/kWh (Save: 0.07%) Un-burn carbon Fly ash and Bottom ash= 0.17% (25-Feb) and 2.20% (25-Feb) Furnace temperature at load 635 MW(Gross) average 1074 °C (max: 1152 °C at inspect. hole #13) Minimize R/H spray. Average MS/RH steam temperature 529 / 531 °C Turbine 3X vibration max 83 µm at MS/RHT 529 / 531 °C load 594 GMW at 11:45 Average vibration 3X for 24 hours were: 76 µm U8 Frequency of transfer: A:2;B: 4 ;C: 4;D: 3;E: 6;F: 0 500KV GSUT DGA max / average was 32.2 / 32.1 ppm Make up: **532** tons, Soot blower: **183 t**ons, SW pyrites: **331** tons. **Sootblowers special operations:** 420, 421, 422 / 470, 471, 472 (Screen tube), 427/477-428/478-429/479-430/480 (LTSH Cavity) run every 1st and 15th days of the month (2 times/month). Clinker Condition at Hole No. –	**Coal Burn IOL** 23:00 / 05:00 / 11:00 / 17:00 CLHV+CMHV+CH3SF+KJA 4736 / 4736 / 4736 / 4736 27.41 / 27.41 / 27.41 / 27.41 5.74 / 5.74 / 5.74 / 5.74 0.37 / 0.37 / 0.37 / 0.37 49 / 49 / 49 / 49 **Coal Transfer Plan** 23:00 / 5:00 / 11:00 / 17:00 KJA50% + JMB50% 4853 / 4853 / 4853 / 4853 26.27 / 26.27 / 26.27 / 26.27 4.23 / 4.23 / 4.23 / 4.23 0.2 / 0.2 / 0.2 / 0.2 50 / 50 / 50 / 50

C1	C2	W	10	11	12	13	14	15	16	17	18	E	C3	C4
UC	UC	C	-	C	C	1	1	1	1	1	-	C	UC	UC

1*: Spotty,* ***2****:<5 cm,* ***3****: 5>10 cm,* ***4****: >10<15 cm,* ***5****: >15cm,* ***C****: Clean*

	UNIT 8 PROBLEMS
24-Peb	1. Unit Trip due to Furnace Draft press High High active, due to FGD Trip, all Damper Closed and Hydraulic Oil Skid Trip at Load 550 NMW found all FGD instrument bad quality indication.Investigation result found Digital Output Module fuse was blown, replace DO module and Fuse.done (apply trap logic). >>Monitoring @ 26-PEB/ 10:07 Drop5 FGD fuse blown, some of FGD status fail.
25-Feb	2. 8FW-ISV-130A handwheel gearbox was broken.WO.2502251044 Status WAMTL.
27-Feb	3. Main filter Stator cooling dp:16.6 kPa (High/HH sp alarm:8/20 kPa) Wo.2502271046
28-Feb	4. 8BS-TI-241A 2ry Superheater outlet temperature element < than 8BS-TI-240 A (deviation >14 degC). SR118223
28-Feb	5. 500 KV SF6 gas leak at)ring gasket phase B 8GD4B1. (Rate leak 0.01 MPa/day, (current Press: 0.49 MPa) SR118224
28-Feb	6. Put bias demand FD Fan 8A to -5% for balance flow with FD Fan 8B (Re-adjusting blade waiting plant condition).
	7. Unit 8 High Priority alarm • -
	UNIT 8 HEAT RATE OPTIMIZATION
	1. Improve vacuum condenser with survey & check tightness of valve drain to condenser.(Perf Team) — Inprogress
	2. Preparation U8 Boiler Tuning.(Perf Team) — Inprogress
	UNIT 8 ACTIVITIES
01-Mar	1. Found TR/RECT 845A overcurrent trip, back restart trip again. 09:00 Replace SCR & Restart. — Completed

09:00	2. Inject Coal Additive to Furnace 50 ppm (23 pails)	Completed
09:00	3. Found spool pipe Pyrite common line AB was leaks during transfer Pyrite A or B.	Completed
13:04-20:00	4. U8 Reliability test on high load (NC).	In Progress
03:00 (05-Mar)	5. 500 KV phase A (0%), B (0%) and C (0%) arching.	Information
05:00 (05-Mar)	6. Fill all of Coal Silo with KJA50% + JMB50%	Information
	Balance of Plant	
	CSW / CST (U7/8) Tank Level: 96% (96% / 96%) SWRO A/B product water flow: A/B: 110 m³ - 107 m3 Total caustic soda consumption: 0 ton	
	Balance of Plant Problem	
06-Jan	1. **Retention Basin Pump.** CPD-P- 910A, Pump Unbalance. Recondition submersible pump (Waiting material ST038054 Victaulic ridged coupling 6" è Lead time 40 days.**12-Dec** Install retention basin pump CPD-P-910A (refurbish pump), but motor current still high while first start. 07-jan CPD-P-910C External power cable was burn (SR116712) **>> apply logic for back up pump mode due to pump A&C are not available.**	Progress installation & testing
	2. **U78 Fly Ash System:** ***CFA-CMP-103*** ✅ **Inservice to U7&8 (02-Mar)** *Last update @10:40 (02-Mar): Resetting Trip Overload current of Breaker done.(trip due to loss of power)* **7FA-CMP-104** ☂ **Standby** @10:40 (02-Mar): *Last Trip due to High Air temperature SR118243* **Station compressor**: ☂**Standby** **8FA-CMP-103** 🚫**N/A** Knocking on drive gear, not accepted for running. SR116521. **7FA-CMP-103** 🚫**N/A** due to High vibration ~ PR189023 **Temporary Rental compressor:** 🚫**N/A** not available	Information
	3. **7FA-DRY-107**: ✅**Inservice to U7&8.** **8FA-DRY-106:** ☂ **Standby** **CFA-DRY-106:** ☂ **Standby.** **7FA-DRY-106:** 🚫 **N/A** not available (compressor, fan cooler no spare) SR116542	Information
26-Aug	4. **CRO-P-100A SWRO supply pump, (Last Condition No Motor)** 28-Aug Solo run test by EIC & CBM, result motor side Normal. Suspect vibration from pump side. ***@ 19-Oct, Remove and replace motor of CRO-P-100A to C done***	Information
27-Nov	5. Need monitoring during CRO-P-910A in service (oil motor leaks) still investigation	WAMTL
7-Jan	6. Aeration Fan A not available due to motor swap to Aeration fan C (bearing fan looseness) need bearing replacement. Motor under refurbishment.	PO 88855 ETA.09-Mar
25-Jan	7. Station air compressor A low speed Vibration alarm active after running about 5 minutes. 30-Jan Run Test Air Compressor A still vibration 04-Feb Solo run test and impeller inspection result Ok. Need further discussion between maint & eng team.	WO.2501281044/ PR.189713 PR.189713 --> 95604/PE/POMI/25 (Status : PO raised)
01-Mar	8. Make up DWRO train A reject discharge flow indicator transmitter CDW-FIT-502A is bad quality. Temporary force logic and put manual flow control valve. SR118205.	WAMTL
	UNIT BOP ACTIVITIES	
19-Feb	1. Found CRO-FV-549 inlet DAF flow CV tracking to close and cause pre-treatment tripped. Temp.action: put manual control operation.	WO.2502171020
10:00	2. Found line Bisulphite calibration cylinder was Blocked, already perform unblocking but unsuccessfully, need repair waiting shutdown SWRO Plant.	
	Load scheduled and Activity for next 24 hours:	
	1. U78 Maintain load as PLN requested. U7 Full Load (**≥ 595 NMW)** = 5.5 hrs. TML = 0 hrs. (350 NMW ≤ 590NMW) = 18.5 hrs. U8 Full Load (**≥ 595 NMW)** = 13.5 hrs. TML = 0 hrs. (350 NMW ≤ 590NMW) = 10.5 hrs.	
08:00-20:00	2. Unit-8 Reliability Test at 610 NMW (phase-3)	3-7 Maret 2025

500 KV BUS-B SF6