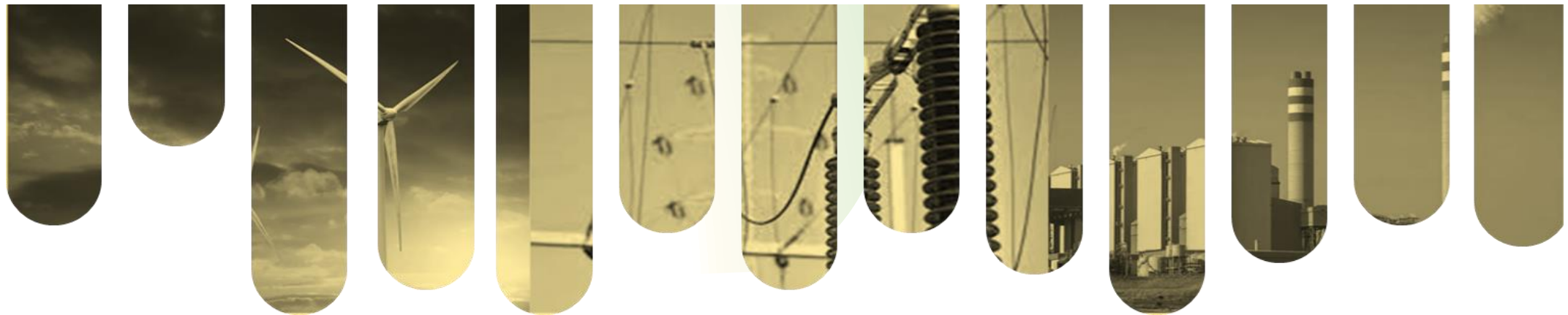




MINISTRY IN THE PRESIDENCY FOR ELECTRICITY



MINISTERIAL ENERGY ACTION PLAN BRIEFING

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Minister in the Presidency for Electricity

26 February 2024



GENERATION PERFORMANCE

12-Month trend assessment (January 2023 – January/February 2024)

❑ The **improvement of the EAF and unplanned outages** is as a result of concerted efforts focusing on **priority power stations** (Kusile, Kendal, Majuba, Matla, Tutuka and Duvha) where each power station has its detailed recovery plan. A **total of 3 510MW was recovered by January 2024** through these interventions.

❑ The **highest level of planned maintenance** was performed between December 2023 and January 2024, reaching an **average of 18% of the generation capacity**.

❑ Although **heightened maintenance negated the EAF**, the deliberate spike in planned maintenance is aimed at **improving the reliability of the generation fleet to deliver long-term benefits** and ensure security of energy supply.

❑ A comparison of loadshedding between December 2022 and February 2023 (from 1 December 2022 to 16 February 2023) and in the same period (1 December 2023 to 16 February 2024), indicates that there was a **reduction of loadshedding hours from 1 801.25 hours to 1 217.98 hours, which is about 600 hours less**.

❑ The **reduction in the intensity and frequency of loadshedding as well as the positive EAF trajectory** are the real signs that there is some **improvement in the performance of the generation fleet**. The focus remains on **sustaining this trajectory**.



GENERATION PERFORMANCE

Generation performance: Month to Date (12-23 February 2024)

Date (08:00 daily)	Capacity Available (MW)	Planned outages (MW)	UCLF, Partial Losses & outage delays (MW)	Partial Load Losses (MW)	p.m. peak forecasted (MW)	Units at Risk (MW)	Outage Slip (MW)	Load Shedding Stages (range)
12-Feb-24	24890	5933	17183	5652	26902	4619	3122	Stage 5
13-Feb-24	25932	7329	14688	6373	26727	4619	2205	Stage 3/4
14-Feb-24	26342	6518	15118	6678	26701	5194	2205	stage 3/4
15-Feb-24	26357	6461	15096	6728	26099	4601	2262	Stage 3
16-Feb-24	26828	6931	14069	6991	25555	4601	2205	stage 3&2
Average	26070	6634	15231	6484	26397	4727	2400	
19-Feb-24	26960	7811	13215	6045	26769	3451	2605	Stage 2
20-Feb-24	26446	7233	14351	6918	26375	4276	2605	Stage 2
21-Feb-24	26231	7236	14334	5800	26127	5632	2605	Stage 2
22-Feb-24	23883	7876	16103	5228	26639	4451	2030	Stage 4
23-Feb-24	24488	7291	15990	5704	25193	5026	1415	Stage 4
Average	25602	7489	14799	5939	26221	4567	2252	
May-23 Baseline	27410	3120	17369	6793	31135	6579	3478	



GENERATION PERFORMANCE

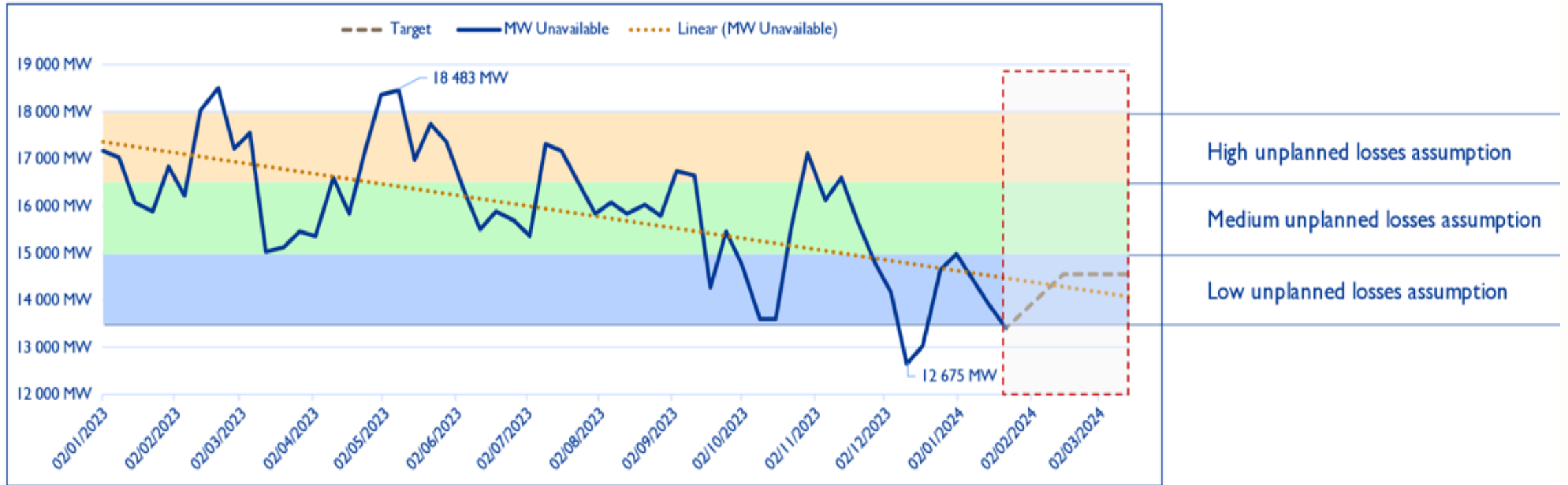
Generation performance: Month to Date (MTD) Trend Analysis against May 2023 Baseline – Feb 2024

period (08:00 daily)	Capacity Available (MW)	Planned outages (MW)	UCLF, Partial Losses & outage delays (MW)	Partial Load Losses (MW)	p.m. peak forecasted (MW)	Units at Risk (MW)	Outage Slip (MW)
05 - 07 Feb 2024	26078	6989	14803	6099	26354	4935	3266
12 - 16 Feb 2024	26070	6634	15231	6484	26397	4727	2400
19 - 23 Feb 2024	25602	7489	14799	5939	26221	4567	2252
MTD Average	25916	7038	14944	6174	26324	4743	2639
May-23 Baseline	27410	3120	17369	6793	31135	6579	3478



GENERATION PERFORMANCE

A downward trend in Unplanned Outages over 12 months (Jan 2023-Feb 2024)



□ There has been a **declining trend in unplanned losses** since mid-winter 2023, with monthly unplanned unavailability stabilisation followed by a sustained reduction.



GENERATION PERFORMANCE

Events Leading to stage 4 load shedding 23 February 2024



- ❑ Last Thursday, generation capacity was lost from five generating units at Kendal. This (together with a unit loss at Duvha) resulted in the need to ramp up loadshedding to Stage 4 from 4:00



- ❑ Kendal Unit 1 was taken offline on Wednesday at 20:00 due to leaking safety valves, which caused the capacity of the demineralised water storage tanks to run low. While recovering the storage water tanks, a contamination incident occurred in the water treatment plant, necessitating the isolation of the plant to investigate the root cause.



- ❑ During this period of investigation, the level of auxiliary cooling water, which also uses demineralised water, ran low. This led to capacity loss from four generating units at 2:00 in the morning



- ❑ Returned to service
 - ❑ Kendal 4 (returned 23 Feb)
 - ❑ Kendal 3 (returned 25 Feb)
 - ❑ Kendal 5 (26-Feb 13:00)
 - ❑ Kendal 2 (Midweek)
 - ❑ Kendal 1 (Planned Maintenance)

