

| Metric | Jan | Feb | Unit |
|---------------------------------------|--------|--------|----------------|
| Electricity Availability Factor (EAF) | 51.2% | 52.2% | Percentage |
| Loadshedding (all stages) | 576 | 637 | Hours |
| OCGT Usage | | | Megawatt-Hours |
| - Average | 251 | 427 | |
| - Maximum | 1,588 | 1,687 | |
| Planned Maintenance (average) | 8,223 | 7,677 | Megawatts |
| Unplanned Outages (average) | 13,969 | 14,130 | |
| Other Maintenance (average) | 572 | 508 | |
| - Total | 22,764 | 22,315 | |
| Total Installed Capacity | 48,186 | 48,186 | Megawatts |
| Total Renewable Installed Capacity | 6,280 | 6,280 | |
| - Of which Wind | 3,442 | 3,442 | |
| - Of which Solar | 2,287 | 2,287 | |

Eskom Update: January and February 2024

Source: Eskom & Minerals Council

The following graphs depict Eskom's power plant performance through their Electricity Availability Factor (EAF). Since June 2023, with the exception of October, there has been a noticeable decline in the EAF, although there was a slight uptick observed in February 2024 compared to January. In February, aside from the average, the EAF ranged from a low of 45.8% to a high of 55.7%.



Figure 1: Eskom Energy Availability Factor (EAF)

Source: Eskom & Minerals Council

The availability of Eskom electricity is closely linked with mining production. A sustained low EAF correlates with reduced mining output. Therefore, the monthly electricity statistics for January serve as a possible leading indicator of mining output performance for the same month, which will be released on Thursday (14 March). Throughout 2024, Eskom's EAF has

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consistently lagged behind the average recorded since 2019. While January 2024 mirrored the performance of January 2023, there was a slight downturn in February of this year relative to February 2023.



Figure 2: Historical Eskom EAF

Source: Eskom & Minerals Council

According to Stats SA data published yesterday, economy-wide, seasonally adjusted electricity generation (production) **increased by 0.9% year-on-year** in **January** 2024. **Month-on-month**, seasonally adjusted electricity production was **1.7% lower in January** than in December 2023. Overall, electricity production in January 2024 is still around 11% below pre-COVID levels.



Figure 3: Variation in Electricity Produced (%, seasonally adjusted)

Source: Statistics SA, Minerals Council



Figure 4 below illustrates the downward trend in total electricity production in South Africa.



Figure 4: Electricity Produced and Available for Distribution – All Producers

The downward trajectory in overall production is worrisome. While Eskom's generation decline is considered the sole driver, renewable energy initiatives by the private sector appear to be mitigating some of this decline.



Figure 5: Eskom Electricity Available for Distribution and Mining Output

Source: Statistics SA, Minerals Council

Source: Statistics SA, Minerals Council



Unplanned outages have intensified during the initial two months of 2024 compared to December 2023. However, they remain at approximately 14,000 MW, less than the average for 2023. In a proactive response, Eskom has significantly increased planned maintenance, nearly doubling the planned maintenance capacity from 2023 levels to around 8,000 MW currently. The effectiveness of this heightened and riskier maintenance strategy in bolstering longer-term electricity production output remains to be seen, particularly in light of the current EAF.



Figure 6: Eskom Unplanned (UCLF), Planned (PCLF) and Other (OCLF) Capability Loss Factor MW per hour

Source: Eskom & Minerals Council

Eskom has continued to rely heavily on open-cycle gas turbines (OCGTs) to bolster the power system and minimise the occurrence of load-shedding. Notably, these plants are being utilised beyond the loading factor approved by NERSA. Their usage saw a significant increase in February compared to January 2024, and their average utilisation has increased throughout the year.



Figure 7: Eskom - Open Cycle Gas Turbine Electricity Generation

Source: Eskom & Minerals Council



Finally, the most critical measure of improvement in Eskom's performance is the reduction of load-shedding hours. Regrettably, in February 2024, the hours of load shedding increased to 637, despite a shorter month. Additionally, there was a shift in the intensity of load shedding. While January 2024 mostly experienced stages one and two, February witnessed an average of stages 2-3.



Figure 8: Eskom – Hours and Stages of Loadshedding

Source: Eskom & Minerals Council

Conclusion:

Eskom's performance indicators paint a mixed picture for the start of 2024. While there has been an escalation in unplanned outages and an increased reliance on open-cycle gas turbines beyond approved levels, there has also been a concerted effort to ramp up planned maintenance activities. There is no question that enduring short-term maintenance disruptions is preferred to ensure long-term benefits in electricity production. February 2024 saw a notable increase in both the duration and intensity of load shedding compared to January, reflecting ongoing strain on the power system.

- End -

Yours sincerely,

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