05 July 2024

MINERALS COUNCIL
SOUTH AFRICA

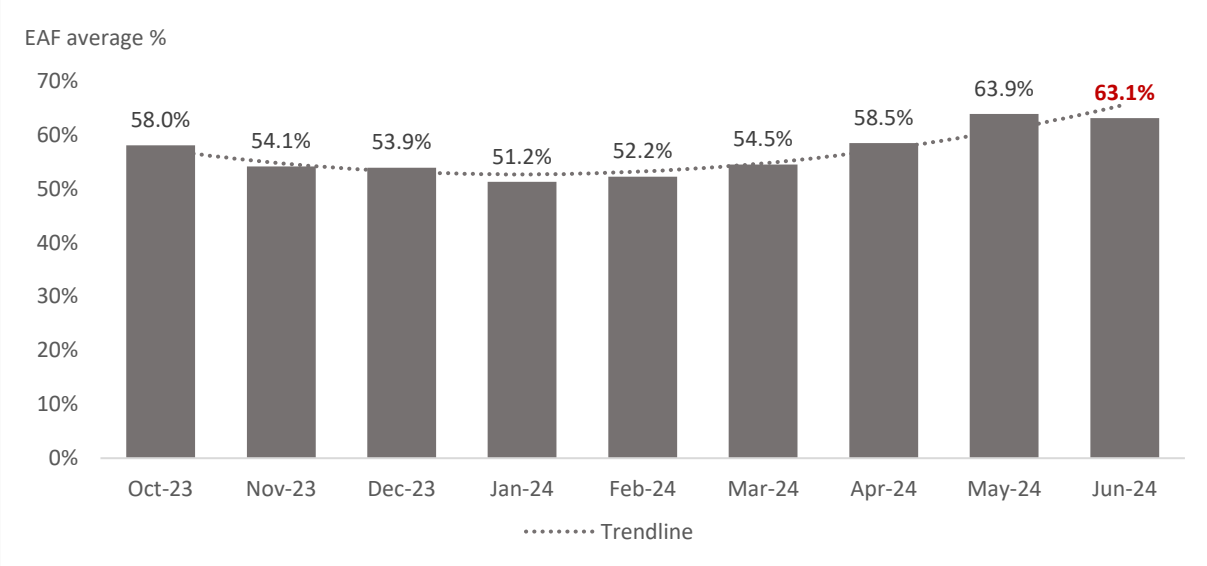
Eskom Update: **May to June 2024**

Metric	May	June	Unit
Energy Availability Factor (EAF)	63.9%	63.1%	Percentage
Loadshedding (all stages)	0	0	Hours
OCGT[1] Usage			Megawatt-Hours
- Average	56	264	
- Maximum	1,739	1,880	
Planned Maintenance (average)	4,301	5,454	Megawatts
Unplanned Outages (average)	12,344	11,410	
Other Maintenance (average)	225	373	
- Total	16,871	17,237	

Source: Eskom & Minerals Council

Below, we illustrate Eskom's power plant performance using the Energy Availability Factor (EAF). The improvement in the trend is reflected in the country reaching the milestone of 100 days without load-shedding on 4 July. Eskom maintained the EAF above 60% in June[2], with a slight decrease from 63.9% in May to 63.1% in June. This marks the second consecutive month with an EAF above 60%, indicating a potential sustained improvement in Eskom's power plant performance.

Figure 1: Eskom EAF, average per month



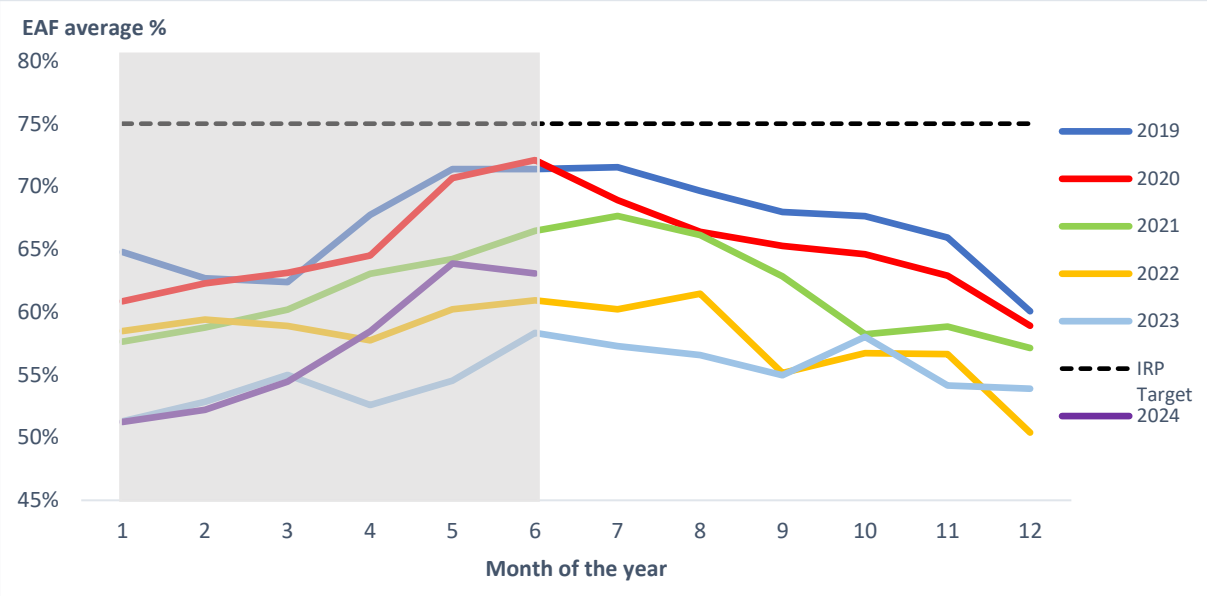
Source: Eskom & Minerals Council

Comparing the EAF over the years in Figure 2 below, it is evident that Eskom's performance showed a notable improvement starting in March 2024. Although 2024 began with a low EAF of around 50%, it increased steadily to approximately 65% by mid-year. However, this level is still below the peaks observed in 2019, 2020, and 2021. Across all years, the EAF typically peaks between May and July before declining towards the end of the year. This mid-year

[1] Open Cycle Gas Turbine
[2] In June, the EAF ranged from a low of 57.9% to a high of 68.1%.

improvement in efficiency can partly be attributed to better performance of coal plants during winter months, when cooling requirements are more favourable. Despite the recent improvements, sustained efforts are essential to further enhance the EAF and achieve the IRP Target of 75%. Historical data clearly shows a significant gap between current performance and the target, underscoring the need for continued focus and strategic initiatives.

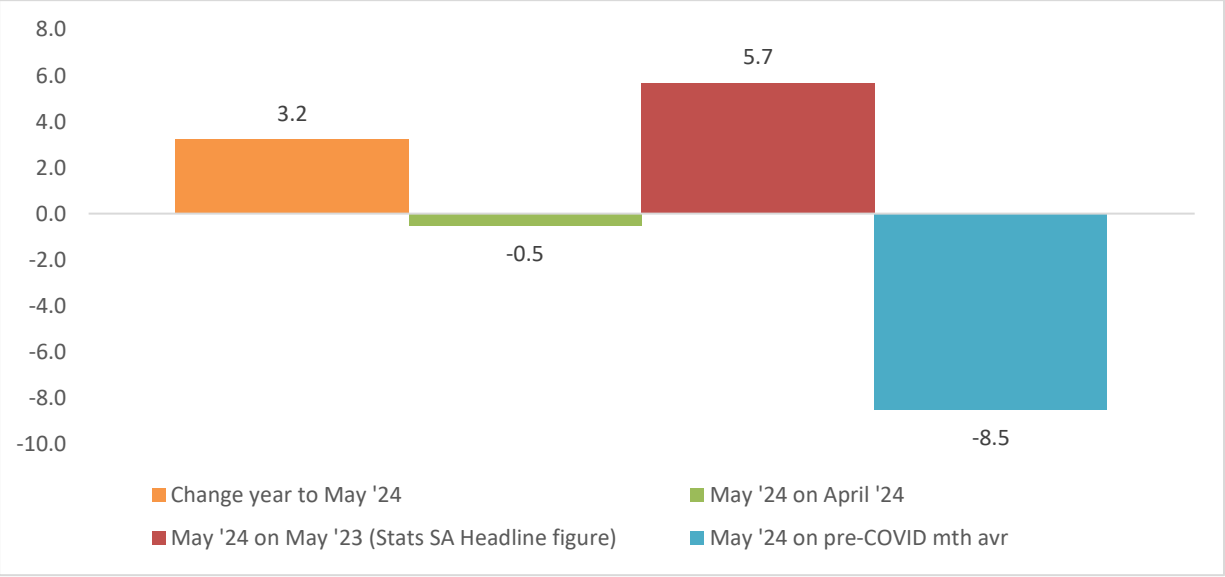
Figure 2: Historical Eskom EAF



Source: Eskom & Minerals Council

According to Stats SA data published yesterday, real (seasonally adjusted) electricity generation (production) **increased** by **5.7% year-on-year** in **May** 2024. However, **month-on-month**, seasonally adjusted electricity production was **0.5% lower** than in April. Overall, electricity production in May 2024 was about 8.5% below pre-COVID average levels, though this is a significant improvement from the 11% deficit reported in January of this year.

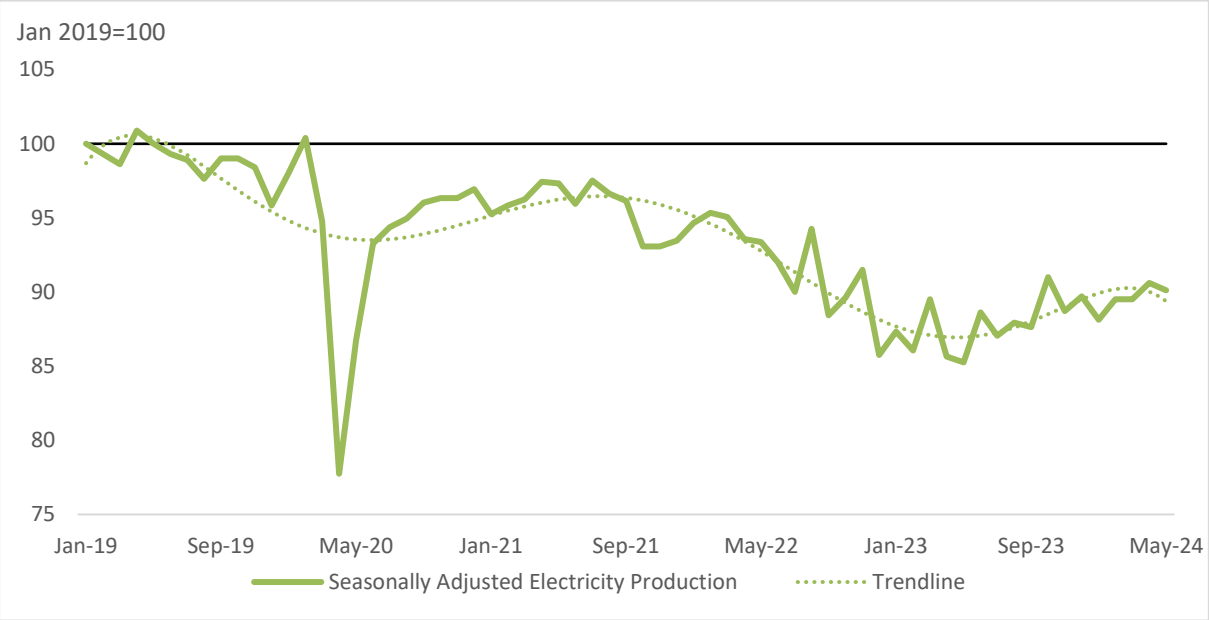
Figure 3: Variation in Electricity Produced (%, seasonally adjusted) – All Producers



Source: Statistics SA, Minerals Council

Figure 4 below illustrates the trend in total electricity production in South Africa. Production remains significantly below January 2019 levels, but there are clear signs that it has hit a low point.

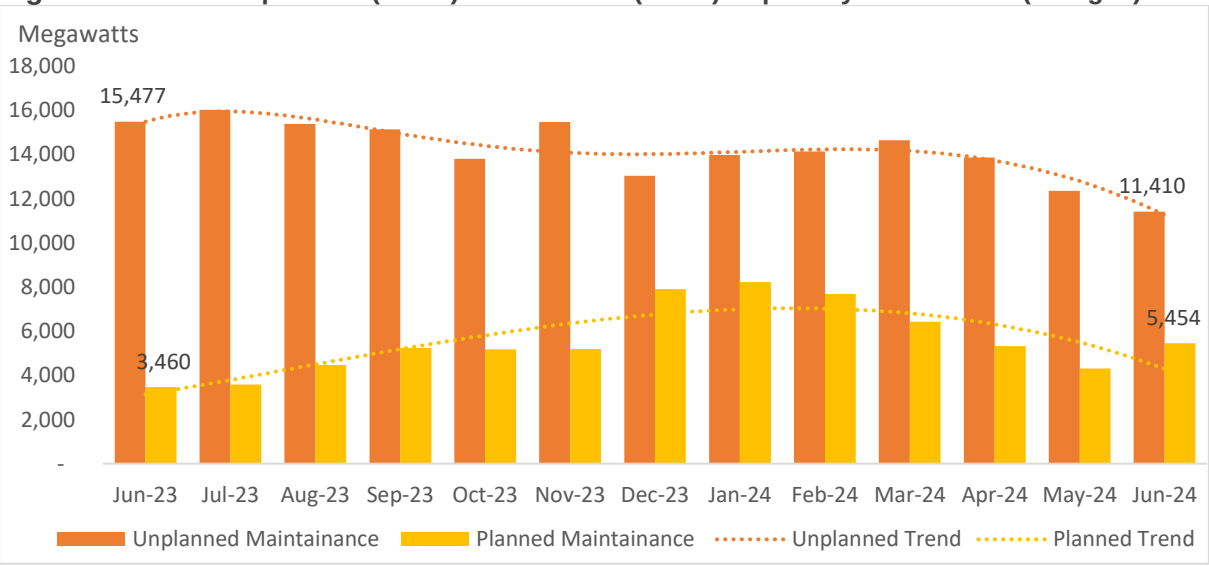
Figure 4: Electricity Produced and Available for Distribution – All Producers



Source: Statistics SA, Minerals Council

In June, there was an increase of approximately 1,100 MW in planned Eskom maintenance compared to May (see below). This rise in planned maintenance, along with the reduction in unplanned maintenance, suggests that Eskom is effectively identifying and addressing potential issues before they result in unexpected failures. The decrease in unplanned breakdowns is particularly encouraging, as these pose the greatest risk to the loadshedding outlook. This shift indicates a positive move towards improved maintenance planning to enhance the overall efficiency and stability of Eskom's power plants.

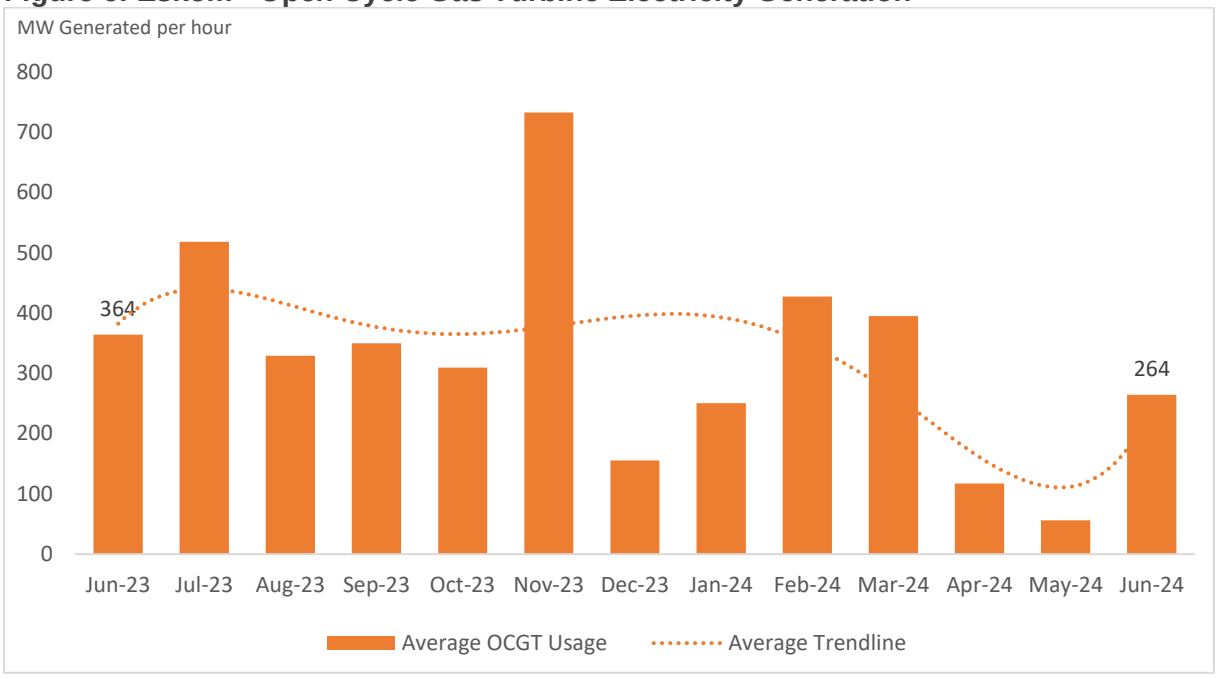
Figure 5: Eskom Unplanned (UCLF) and Planned (PCLF) Capability Loss Factor (outages)



Source: Eskom & Minerals Council

In June 2024, OCGT usage picked up compared to May as Eskom utilised these to smooth out peak demand during the winter days. Primary data, however, still shows that OCGT usage remains minimal compared to 2023 monthly averages.

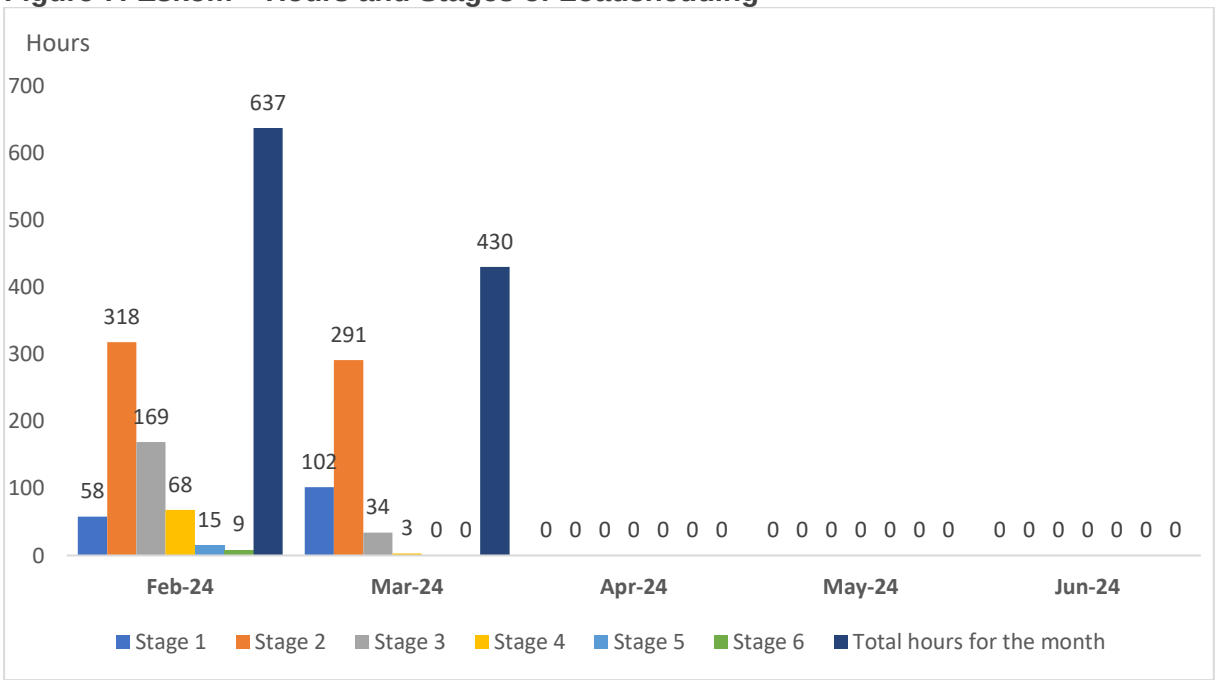
Figure 6: Eskom - Open Cycle Gas Turbine Electricity Generation



Source: Eskom & Minerals Council

The graph below illustrates the positive trend in loadshedding, showing a significant decrease in both the duration and intensity of power outages.

Figure 7: Eskom – Hours and Stages of Loadshedding



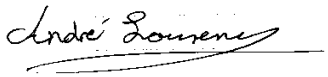
Source: Eskom & Minerals Council

Conclusion:

Eskom demonstrated consistent performance with its EAF remaining above 60% for the second consecutive month in June. There were no power outages reported in either May or June. By early July, Eskom marked 100 straight days without power outages, reflecting significant progress in stabilising power supply. Planned maintenance increased by approximately 1,100 MW in June, while unplanned outages decreased compared to May, indicating more effective maintenance planning and operational efficiency. Electricity production has improved year-on-year, though May's production was lower than in April and remains about 8.5% below pre-pandemic levels.

- End -

Yours sincerely,



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