

Eskom improves performance despite challenges

The risk of load shedding will be significantly reduced after the completion of the reliability maintenance by September 2021, but until then the power grid remains volatile and vulnerable to disruptions.



Image source: Getty/Gallo

"The unreliability of the ageing fleet, with an uncertainty of about 6,000MW of capacity at any given time, will remain until the reliability maintenance programme can address the historical maintenance backlog."

"Recovering the operational performance is our top priority and we will not compromise on reliability maintenance and midlife refurbishment," Eskom chief operating officer Jan Oberholzer, said in a media briefing

Eskom group chief executive, André de Ruyter, said the status of the system on Monday comes against the backdrop of significantly improved performance by Eskom on several aspects.

These include progress in the implementation of the reliability maintenance programme as well as the implementation of the generation recovery programme, also known as the nine-point plan.

According to the power utility, despite the initial challenges posed by Covid-19 lockdown, high levels of maintenance have been sustained with planned maintenance gradually increasing to between 5,500MW and 7,000MW or about 12%.

Planned maintenance

"Today as we speak, we have 15% of our capacity out on planned maintenance. Of course, as we take these units out on planned maintenance that reduces our energy availability factor and increases the risk of load shedding."

However, according to De Ruyter, properly maintained units are brought back, the risk of power cuts will abate over time, even though they will not entirely disappear.

Also, owing to the nine-point plan, the availability and reliability of the synchronised units at Medupi are showing steady improvement.

The plan places correcting new build defects top out of the list of the agenda, he said

Meanwhile, major defects at Ingula Pumped Storage Scheme have been addressed, with now all four units operating at the full capacity of 331MW since February 2021 from 245MW.

Also, coal stock levels continue to improve, with the average coal stock at 52 days by the end of February, excluding Medupi and Kusile.

"There is currently no power station below the grid code minimum requirement of 20 days," he said.

Shifting to rain readiness preparedness, De Ruyter said the resilience of the power system during heavy rains and the cyclone storm Eloise is also a clear indication that this has paid off.

Going forward, the power utility said it will address emissions as a key challenge.

"The new minimum emissions standards now in effect, meaning there is a lot of work still to be done to fully meet compliance levels. This is because some of the electrostatic precipitators on the older facilities are incapable of meeting the new minimum emissions standards."

Kusile and Medupi power stations

De Ruyter also confirmed that the build programme is progressing well, with Kusile Unit 2 having successfully achieved commercial operation in October last year, adding 720MW to the national grid.

Kusile Unit 3 and Medupi Unit 1 are also on track to achieve commercial operation during the next few months.

"The addition of Medupi Unit 1 to the grid will bring the number of units in commercial operation at the power station to six, meaning this entire power station has now reached commercial operation and the construction project at Medupi has been completed."

Koeberg Nuclear Power Station continues to operate efficiently and within the required safety parameters and at the lowest primary energy cost of baseload stations.

He said work is progressing well in Unit 1 is currently on a refuelling and maintenance outage, which is set to return to service in time for the higher demand expected during winter months.