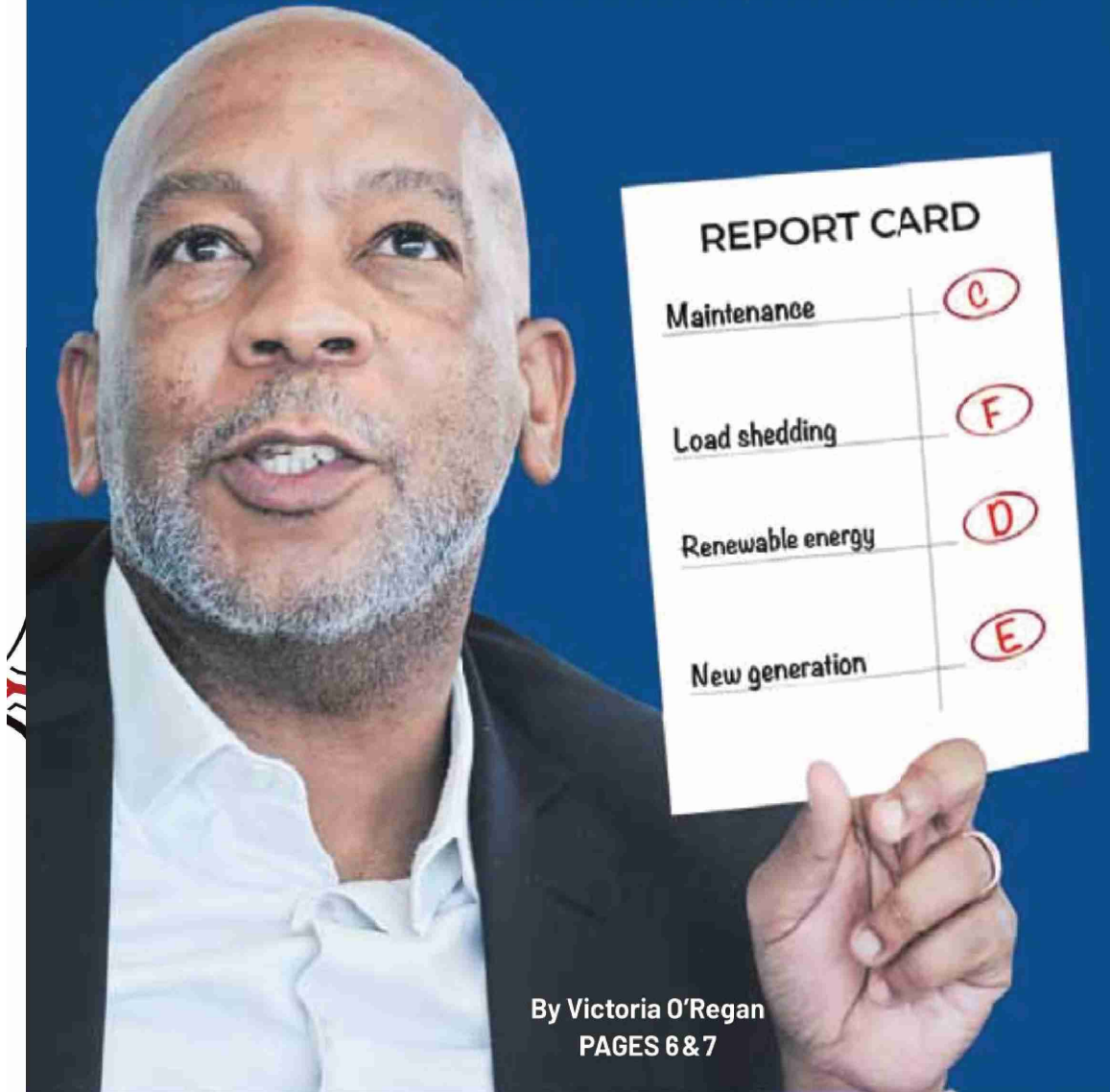


Ramokgopa's report card: **NOT ELECTRIFYING**

There has not been much progress in eliminating load shedding under Minister of Electricity over the past six months but there is greater unity of purpose



Ramokgopa's effect on Eskom

Some experts think the new electricity minister's leadership has improved the utility behind the scenes, but others point to worsening tangible results – and no addition of new generating capacity.

By Victoria O'Regan

South Africa's first Minister of Electricity, Kgosietshe Ramokgopa, hit six months on the job this week – a period marked by unprecedented levels of blackouts, which is contributing to another year of lacklustre economic growth.

President Cyril Ramaphosa's announcement of an electricity minister in his State of the Nation Address in February, alongside the now abandoned state of disaster for electricity, was met with scepticism.

Ramokgopa was handed the herculean task of easing the pain of rolling blackouts which, at Stage 6, are leaving households and businesses languishing with no power for up to 11 and a half hours a day.

Ramokgopa was to oversee efforts to fix Eskom and ensure that new capacity is connected to the national grid.

Almost three months after he was appointed, Ramokgopa finally received his officially delegated powers in May – but they are not quite what they seem.

Public Enterprises Minister Pravin Gordhan is still the key custodian responsible for overseeing the governance affairs of Eskom, and Energy Minister Gwede Mantashe retains the powers to organise tenders and enter into contracts for adding megawatts to the grid.

The gazetted powers of the electricity minister may have further muddied governance between the now five Cabinet ministers who deal with electricity, energy policy and Eskom. They are Ramokgopa, Gordhan and Mantashe, along with Finance Minister Enoch Godongwana and Environment Minister Barbara Creecy.

Unlike other Cabinet Ministers, Ramokgopa doesn't have clearly defined performance targets – "making it difficult to track his progress", says energy analyst Lungile Mashale.

"When he was appointed, I was one of the people who asked what exactly is he going to do? What are his performance agreement targets? And the government has not provided this... All that they said is that he must end load shedding," she says.

"So I'm not sure what he was hired to do, but if it was to end load shedding, then, no [there are no indications that load shedding has improved under his watch]."

Ramokgopa reached his six-month mark as electricity minister against the backdrop of the resurgence of Stage 5 and 6 power cuts in the past week, which, Eskom says, was because of an uptick in planned maintenance coinciding with the breakdown of generating units.

The return of Stage 6, energy experts say, is not surprising, and shows that the grid remains vulnerable and susceptible to plunges in available capacity.

"The occurrence of Stage 5 and 6 load shedding this week is not surprising given

the challenges that Eskom faces... In the context of Eskom's ongoing efforts to improve its fleet's condition and the unpredictability of incidents such as equipment failures, load shedding remains a possibility," says Bertha Dlamini, founding president of African Women in Energy and Power.

Daily Maverick canvassed the views of several energy analysts, some of whom, like Dlamini and Prof Mark Swilling, a big-picture thinker who is codirector of the Centre for Sustainability Transitions at Stellenbosch University, take the view that Ramokgopa's leadership has improved Eskom's performance.

Swilling says: "I think overall things are getting better. But that is not reflected in the everyday experience of households and businesses.

"So from the perspective of South African households and businesses, nothing really is changing because [there are] still high levels of load shedding. So from that perspective, things are getting worse because there's been more Stage 6 than any previous year.

"However, I would say things are improving overall because there's a much greater unity of purpose among the key political and bureaucratic elites, and that's largely because of Ramokgopa.

"It is quite remarkable to say that a politician can change the ballgame in such a short space of time – and I think he has."

To oversee the power crisis response, Ramokgopa is responsible for the Energy Action Plan, announced by Ramaphosa in July 2022, which has chalked up some wins.

The plan targets, among other things, improving the performance of Eskom's power plants and ramping up their maintenance to prevent breakdowns.

In the year since Ramaphosa launched the Energy Action Plan, 16% of the steps laid out in it have been completed and 40% are on track, Ramokgopa announced at a press conference last month.

The minister gave little information about the actions that were off track or had not yet started.

In a list of questions that Daily Maverick sent to Ramokgopa's media team on Tuesday, 5 September, we asked for more detail on the actions that had been completed and the 12 that were "delayed but progressing well", and the eight that were "off track". However, Ramokgopa's media team did not respond to our questions.

Questions were also sent to Eskom and went unanswered.

No tangible progress

Ramokgopa's performance on his primary tasks – keeping the lights on, overseeing the overhaul of Eskom and bringing new capacity on to the grid – is not exactly stellar.

Data on Eskom's power generation and energy availability for the first half of 2023, provided to Daily Maverick by researchers at the Council for Scientific and Industrial Research (CSIR), shows that the performance of Eskom's fleet has continued to



The sun rises behind Eskom's Lethabo coal-fired power station in the Free State in April, the month after the new Minister of Electricity, Kgosietshe Ramokgopa, was appointed. Energy experts disagree about whether his efforts will bring about a new dawn for South Africa's faltering electricity supply. Photo: Kim Ludbrook/EPA-EFE

decline. The CSIR used publicly available data from Eskom, the app EskomSePush and the National Energy Regulator of South Africa for its analysis.

Speaking to Daily Maverick this week, the principal researcher at the CSIR's Energy Research Centre, Warrick Pierce, and Monique le Roux, who recently joined Stellenbosch University's Centre for Renewable and Sustainable Energy Studies, both agreed that, based on the data and their analysis, there was no evidence that more megawatts had been added to the national

grid, or that it was in better shape than it had been in January.

Eskom's declining energy availability factor (EAF) trend continued in the first half of 2023, according to Le Roux.

The EAF refers to the average percentage of power stations available to dispatch energy at any given time. A higher EAF percentage would end load shedding, but the average EAF for the period 1 January to 30 June 2023 was languishing at 53.8%, compared with 59.4% for the same period last year.

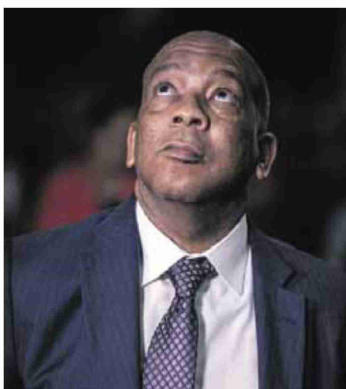
Last year, 419MW of wind and 75MW of solar photovoltaic capacity were added to the national grid, according to the CSIR's annual statistics on power generation and energy availability data for 2022.

But Le Roux says no new generation has been added to the grid so far this year.

"They haven't added any new generation – not even any new renewables – which is shocking. CSP [concentrating solar power] is still at 500MW, wind is still at 3,443MW, [solar] PV is still at 2,287MW. Total renewables are still at 6,230MW," says Le Roux.

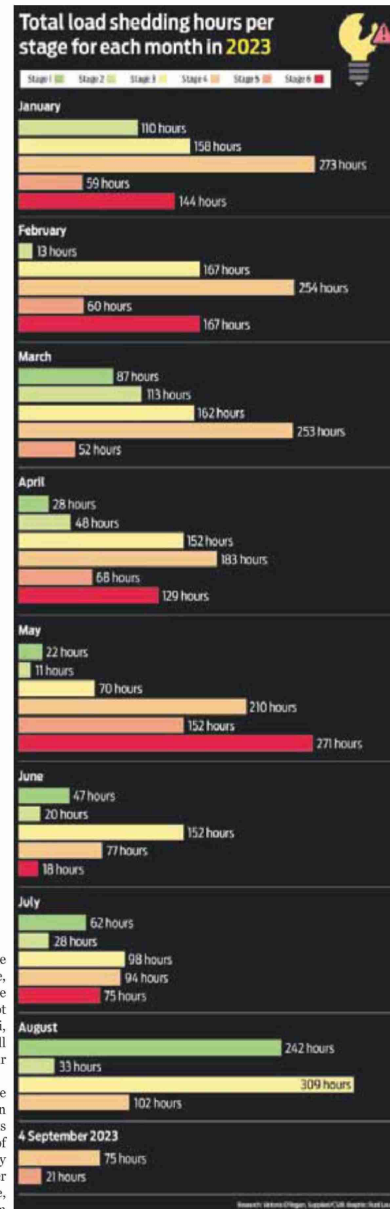
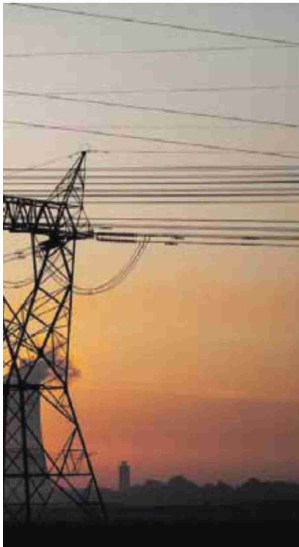
"They haven't added any new capacity, the energy availability factor is down, load shedding has increased exponentially this year.

"There is absolutely no indication that they have done better except that they have burnt more diesel – at a massive cost, but at least it's saving us some load shedding.



Electricity Minister Kgosietshe Ramokgopa waits to be interviewed by journalists during the BRICS Summit after signing a memorandum of cooperation with China to help to solve South Africa's electricity problems. China donated power equipment worth R170-million and made available a grant of about R500-million. Photo: Per-Anders Pettersson/Getty Images

has been less than electrifying



"That's the only thing that has really contributed to lower levels of load shedding at certain periods this year," said Le Roux.

Burning diesel to run Eskom's open cycle gas turbines (OCGTs) – intended only for dire emergencies or for use during peak demand periods – was a centrepiece of Ramokgopa's short-term plan touted in May to stave off higher stages of power cuts during winter.

Eskom burnt diesel like there's no tomorrow, blowing R12.4-billion in four months.

"Eskom had, at the beginning of the year, anticipated that it would be burning diesel, but that it would be at a 12% load factor. Instead, what we saw was on average 24%," Mashele told Daily Maverick.

She said that when a brutal cold front struck the country in July and caused snow to fall in Johannesburg for the first time in more than a decade, "there were days where [Eskom] had an [OCGT] load factor of 60%".

"They were burning a lot of diesel so that we didn't experience very extreme load shedding," she said.

But the lower stages of load shedding in June and August, Mashele says, "were not as a result of the minister's interventions, but as a result of how the system functioned".

"First of all, there was a reduction in industrial demand; second, Eskom's fleet does perform better during winter due to ambient temperatures; and, third, there was a 50% reduction in planned maintenance," she said.

Power cuts have been a part of life in South Africa for nearly 16 years, but the past several months have been our darkest yet. In early May, we exceeded the total load shedding hours clocked in 2022, according to Pierce. The CSIR's analysis shows there have been 5,192 hours of blackouts in 2023 so far, compared with 3,751 in the whole of 2022.

"Depending on how things go, we're looking at about twice as much load shedding as we had last year," said Pierce.

Where to now?

This week, Ramokgopa said Eskom had begun to ramp up planned maintenance "to build a degree of resilience in the system", after it had been cut during winter because of increased demand for electricity. He said that part of the reason Eskom had seen a deterioration in generating capacity was that it had not been sticking to planned maintenance over the years.

He said that, in the short term, this would probably mean "more intensified load shedding". Pierce and Swilling agreed that part of fixing the problem lies in increasing planned maintenance – which would increase blackouts.

Additionally, in the short term, if Eskom can stick to schedules for the return to service of generating units at Kusile and Medupi power stations, it could add 3,200MW to the grid by the end of this year and another 800MW next year, according to Mashele.

"If we look at the short term, the only thing that's going to get megawatts online in

the next year is ... the three units at Kusile, which need to come back, [and] you've got the one unit at Medupi, which we're told will come back next year April," she said.

Power Purchase Agreements have been signed with 19 projects from Bid Window 5 of the Renewable Energy Independent Power Producer Programme, and six projects from Bid Window 6 are expected to reach commercial close by September this year.

The last two bid windows should result in a total of 2,300MW of new capacity being added.

Le Roux said: "It does seem like with those Kusile units returning and with the Medupi

unit coming back, and with the Koeberg unit coming back, that there might be a little bit of a gap in the next year or two where we might be able to breathe a little bit easier.

"But then, after that, we're really in deep trouble if they don't start adding new capacity to the grid." DM