

MINISTRY IN THE PRESIDENCY FOR ELECTRICITY



MINISTERIAL ENERGY ACTION PLAN BRIEFING

DR KGOSIENTSHO RAMOKGOPA

Minister in the Presidency for Electricity

09 April 2024



GENERATION PERFORMANCE





GENERATION: 10 FOCUS AREAS

Plant Condition

Increased maintenance within limitations. Establish War room, accelerated spares sourcing. Establish long term contracts.

Inadequate Capacity

Optimise maintenance planning. Engaged to expedite IPPs, Risk Mitigation, etc. Planned repowering of stations shutting.

Skills & Experience

Stability in GE & PSGMS. Appointing Plant Managers. Engaging experienced external experts. Ramping up training and development. Skills/competency audit. Culture of accountability & consequence management. Incentivise & reward staff. Crowdsourcing, Project management.

Fraud & Corruption



Eskom has increased governance controls and performs trending analyses on volumes and prices. Investment in technology, QSs, training.

Policies & Procedures

Engaged government (DPE, NT) for relaxation of some requirements.

Funding



Aggressive cost cutting. Making funds available for outage and midlife refurb

Environmental Compliance

Proposed an emission reduction plan that is achievable. Appealed DFFE decision

Coal



Engaging mines re quality & quantity. Renegotiating agreements. Investing in cost-plus mines. Increasing verification and monitoring.

New Build Defects



Solutions for some areas developed and tested on Medupi 3. Rolled out to other units. Additional solutions to be rolled out to achieve desired performance.

Eskom Rotek Industries



OEM engineering support and oversight on turbine centerline. Improved Quality Assurance process. De-scoping ERI contracts and approach OEMs on specific plant areas, e.g., Kusile FGD



GENERATION: SUCCESS ACHIEVED THUS FAR



- 1. National Treasury has relaxed some requirements, which will **speed up procurement.**
- 2. The allocation of **Outage budgeting has improved**, seeing signs of improved Outage Readiness.,
- 3. Receiving a lot of **collaboration among external stakeholders** with a willingness to assist Eskom
- 4. On the **9 Point plan**, we have seen success in the following areas:
 - I. The new build defect repair. Medupi's performance is improving
 - II. Achieving coal stock days and a rain readiness program in place

- Additional focus to prioritise maintenance at the Top Six Stations; Duvha, Kendal, Kusile, Majuba, Matla & Tutuka,
- These stations where specifically selected as they are amongst the highest contributors to unplanned load losses. Any improvement in these stations will result in massive gains in EAF for Generation as a whole



GENERATION: HIGHLIGHTS

Y-ON-Y REDUCTION IN INTENSITY OF LOAD SHEDDING

	01 to 31 Mar 2023	01 to 31 Mar 2024
Stage 1	2	1
Stage 2	3	12
Stage 3	7	9
Stage 4	12	4
Stage 5	6	0
Stage 6	0	0
Total	30	26



SUSPENSION OF LOADSHEDDING

The **suspension of load shedding** over the past 12 days as of 08 April has been due to the improvement in the generation capacity available. This gradual, and sustained improvement has allowed emergency reserves to be fully replenished which in turn has resulted in suspension of load shedding.

PCLF IMPACT ON EAF

The preliminary EAF at year end for FY2024 is 54.6%. This is slightly down on the figure of 56.0% for FY2023. However, this difference is predominantly due to an increase in planned maintenance (PCLF) which is essential for a performance turnaround. PCLF increased from 9.3% in FY2023 to 12.0% in FY2024 reinforcing the commitment to execute the recovery plans and reduce plant risks;



GENERATION: HIGHLIGHTS

MEDUPI UNIT 4 – UPDATE

Medupi U4, 800 MW recovery milestone: The second-hand generator stator had been delivered to Medupi Power Station on 5 March 2024. The unloading from the multi-axle vehicle was successfully executed on 11 March 2024; Medupi unit 4 is on track to be commissioned in August 2024.

KOEBERG UNIT 2

Koeberg unit 2, 932 MW on track to return to service in September 2024.



KUSILE

Kusile unit 6, 800 MW planned to synchronize in September 2024.

Kusile permanent stack projects remain on track With units synchronising between Nov 2024 and April 2025

UNIT TRIP DOWN Y-ON-Y

FY2024 Unit trips were down from previous financial year performance;

COAL STOCK PILES

Coal stockpiles are all at healthy levels with none of the stations below compliance or required levels;



NTCSA OPERATIONALISATION

3 SUSPENSIVE CONDITIONS MET

The operationalisation of the NTCSA has reached a further significant milestone with the achievement of three suspensive conditions, which include:

- □ Consent from relevant lenders and creditors,
- Passing of resolutions by the government and the Boards of NTCSA and Eskom, as well as the;
- Approvals for electricity licenses and other regulatory requirements by the National Energy Regulator of South Africa (NERSA).



NEXT STEPS

The fulfilment of the Companies Act requirements. It is anticipated that the NTCSA will commence trade about two months from the completion of these requirements.

Once all assets, systems, and employees have been transferred to the NTCSA, and trade commences, the NTCSA will be a wholly owned Eskom Holdings subsidiary.



GENERATION PERFORMANCE

Review period: 25-29 March and 01-05 April 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)
25-Mar-24	26461	4481	17014	7080	27782	2606	5140	Stage 2
26-Mar-24	28642	5066	14282	5819	27728	2796	3945	Stage 2
27-Mar-24	28749	5403	13827	5364	27465	2606	3945	No LS
28-Mar-24	27959	5554	14519	5991	26485	2606	4560	No LS
29-Mar-24								
Weekly Avg	27953	5126	14911	6064	27365	2654	4398	
01-Apr-24								
02-Apr-24	28265	4513	15231	5198	27167	2156	5200	No LS
03-Apr-24	27650	4590	15804	5335	27613	2819	5200	No LS
04-Apr-24	28136	4393	15379	5555	27567	3404	4480	No LS
05-Apr-24	28850	5107	14005	5266	26445	3381	3840	No LS
Weekly Avg	28225	4651	15105	5339	27198	2940	4680	
May-23 Baseline	27410	3120	17369	6793	31135	6579	3478	May-23 Baseline



RENEWABLE PROFILE





CURRENT INSTALLED CAPACITY (RENEWABLE)





WIND GENERATION CHARACTERISTICS





During the summer months, the wind generation aligns almost perfectly to the high evening peak demand and the low night minimum demand.

However, in winter, when the cold front passes through the Western and Eastern Cape, the wind generation increases significantly.

As the cold front arrives in densely populated Gauteng, the cold weather drives demand for electricity up and at the same time the wind generation reduces significantly due to the low trough behind the front.

This double whammy requires 1000's of MW of generation to be dispatched in a short period of time to compensate for the reduced generation and increased demand.



ROOFTOP SOLAR

If there is a big jump from month to month it is mainly due to the high number of cloudy days during the latter month, not necessarily due to the number of installations in that month. It would very likely have been distributed in the preceding few months.

Maximum/Inst alled Rooftop PV (MW):	Eastern Cape	Free State	Gauteng	KwaZulu- Natal	Limpopo	Mpumalan ga	Northern Cape	North- West	Western Cape	Total
Feb 2024	368.2	307.7	1,503.7	810.9	413.3	516.1	208.4	669.3	642.4	5,439.9
Jan 2024	368.2	280.2	1,503.7	810.9	413.3	516.1	208.4	669.3	642.4	5,412.3
Dec 2024	368.2	280.2	1,295.0	810.9	413.3	516.1	208.4	669.3	642.4	5,203.7
Nov 2023	368.2	280.2	1,216.6	810.9	413.3	509.3	129.5	669.3	642.4	5,039.6
Oct 2023	368.2	280.2	1,207.8	810.9	413.3	509.3	129.5	669.3	616.8	5,005.0
Sep 2023	368.2	280.2	1,207.8	810.9	413.3	476.6	129.5	669.3	527.4	4,883.0
Aug 2023	368.2	280.2	1,207.8	810.9	357.4	490.4	129.5	669.3	527.4	4,841.0
Jul 2023	368.2	280.2	1,207.8	810.9	296.6	450.7	129.5	669.3	527.4	4,740.4
Jun 2023	284.3	280.2	1,207.8	565.8	296.6	450.7	129.5	669.3	527.4	4,411.5
May 2023	190.0	204.9	1,072.1	565.8	296.6	450.7	129.5	669.3	457.9	4,036.8
Apr 2023	163.2	160.5	917.5	417.5	226.8	326.7	117.5	669.3	369.0	3,368.0
Mar 2023	163.2	160.5	917.5	417.5	189.8	317.9	117.5	669.3	289.7	3,242.8
Feb 2023	163.2	160.5	917.5	417.5	189.8	305.6	117.5	669.3	198.0	3,138.8
Jan 2023	143.1	160.5	917.5	417.5	189.8	298.8	82.6	669.3	198.0	3,077.1
Dec 2022	130.2	160.3	848.3	368.7	189.8	298.8	82.0	310.4	198.0	2,586.4
Nov 2022	130.2	160.3	848.3	368.7	189.8	298.8	79.1	184.8	161.9	2,421.9
Oct 2022	130.2	160.3	848.3	296.9	189.8	298.8	79.1	184.8	150.0	2,338.1
Sep 2022	130.2	160.3	848.3	296.9	189.8	298.8	79.1	184.8	145.5	2,333.6
Aug 2022	130.2	160.3	848.3	296.9	189.8	298.8	79.1	184.8	145.5	2,333.6
Jul 2022	130.2	148.8	790.6	296.9	189.8	298.8	79 1	184 8	145.5	2 264 5



THANK YOU

