

Weekly System Status Report – 2025 Week 05 (27/01/2025 – 02/02/2025)

Introduction

This document is intended to provide a general picture of the Adequacy of the National Electricity Supply System in the medium term. The Report will be updated weekly, on Tuesdays and circulated Wednesdays, thereafter, published on the Eskom website, updated on Wednesdays. The values contained in this report are unverified and not official yet and can change at any time.

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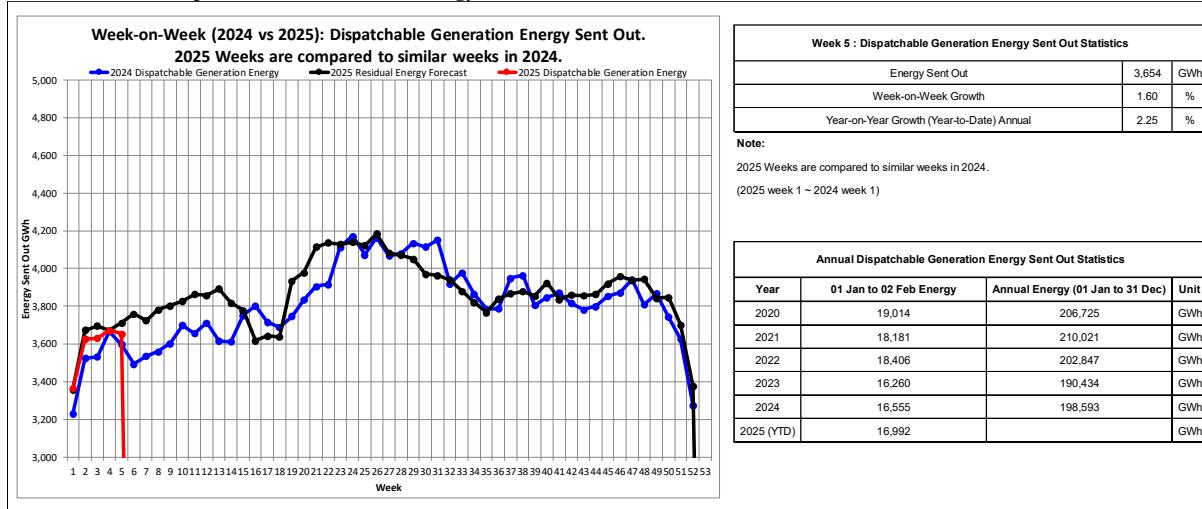
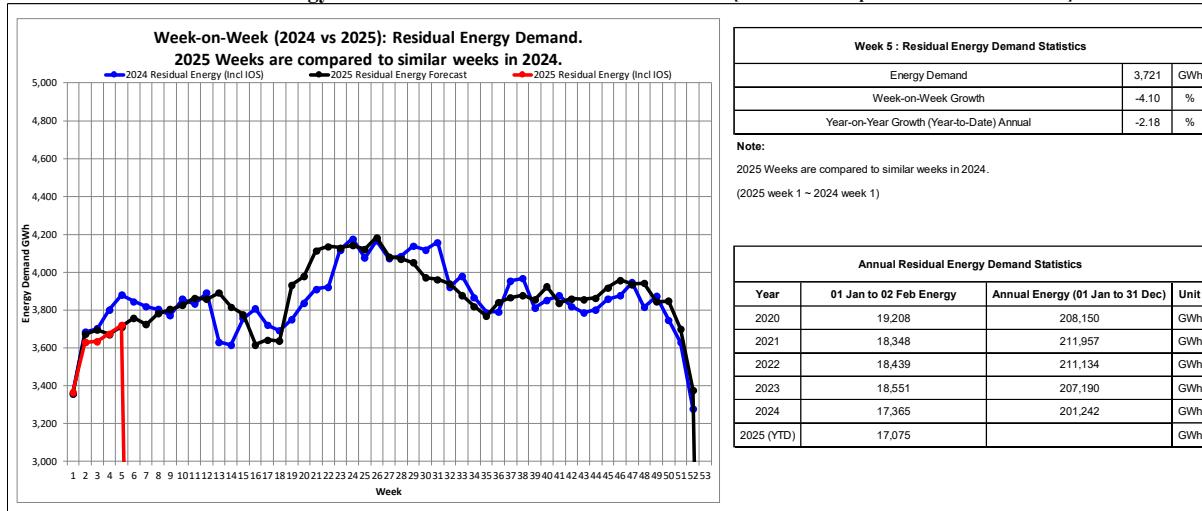
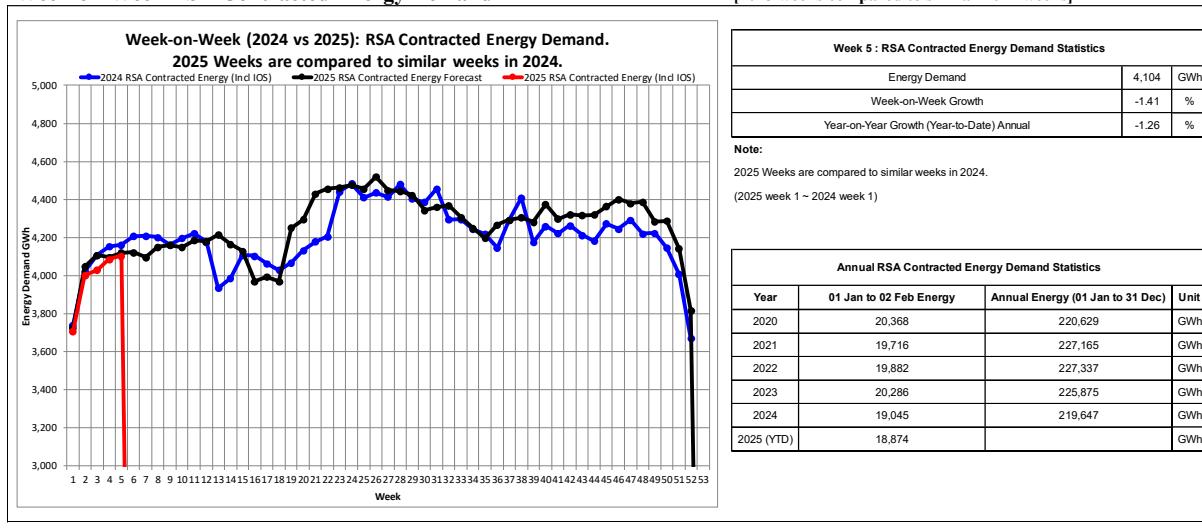
Historic Daily Peak System Capacity/Demand

Date	Available Dispatchable Generation (MW)	Non-commercial Generation (MW)	Residual Load Forecast (MW)	Actual Residual Demand (MW) Incl IOS	Operating Reserve Margin (Excl Non-Commercial Units)	Operating Reserve Margin (Incl Non-Commercial Units)	Forecast vs. Actual (Residual Demand)
Mon 27/Jan/2025	27,551	0	25,431	25,050	10.0%	10.0%	1.5%
Tue 28/Jan/2025	28,604	0	25,510	26,245	9.0%	9.0%	-2.8%
Wed 29/Jan/2025	27,875	0	26,068	26,210	6.4%	6.4%	-0.5%
Thu 30/Jan/2025	27,259	0	25,902	26,088	4.5%	4.5%	-0.7%
Fri 31/Jan/2025	28,960	0	24,612	24,493	18.2%	18.2%	0.5%
Sat 01/Feb/2025	28,800	0	24,550	24,115	19.4%	19.4%	1.8%
Sun 02/Fe/2025	28,919	0	24,456	23,569	22.7%	22.7%	3.8%

Date	Total Available Generation Incl Renewables (MW)	Non-commercial Generation (MW)	RSA Contracted Load Forecast (MW)	Actual RSA Contracted Demand (MW) Incl IOS	Operating Reserve Margin (Excl Non-Commercial Units)	Operating Reserve Margin (Incl Non-Commercial Units)	Forecast vs. Actual (RSA Contracted Demand)
Mon 27/Jan/2025	30,436	0	28,437	27,935	9.0%	9.0%	1.8%
Tue 28/Jan/2025	30,964	0	28,090	28,605	8.2%	8.2%	-1.8%
Wed 29/Jan/2025	29,684	0	28,150	28,018	5.9%	5.9%	0.5%
Thu 30/Jan/2025	29,381	0	27,867	28,210	4.1%	4.1%	-1.2%
Fri 31/Jan/2025	30,165	0	26,678	26,778	12.6%	12.6%	-0.4%
Sat 01/Fe/2025	31,375	0	27,060	26,690	17.6%	17.6%	1.4%
Sun 02/Fe/2025	31,190	0	27,012	25,840	20.7%	20.7%	4.5%

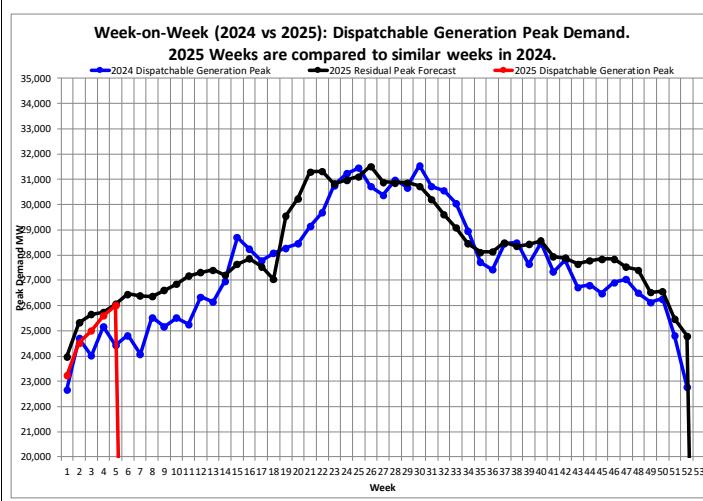
Notes:

1. Available Dispatchable Generation means **all generation resources** that can be dispatched by Eskom and includes capacity available from all emergency generation resources.
 2. RSA Contracted Load Forecast is the total official day-ahead hourly forecast. Residual Load Forecast excludes the expected generation from renewables.
 3. Actual Residual Demand is the aggregated metered hourly sent-out generation and imports from dispatchable resources and includes demand reductions. The Actual RSA Contracted Demand includes renewable generation.
 4. Net Maximum Dispatchable Capacity (including imports and emergency generation resources) = 49 389 MW.
 5. These figures do not include any demand side products.
 6. The peak hours for the residual demand can differ from that of the RSA contracted demand, depending on renewable generation.
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Week-on-Week Dispatchable Generation Energy Sent Out
[2025 weeks compared to similar 2024 weeks]

Week-on-Week Residual Energy Demand
[2025 weeks compared to similar 2024 weeks]

Week-on-Week RSA Contracted Energy Demand
[2025 weeks compared to similar 2024 weeks]


Week-on-Week Dispatchable Generation Peak Demand

[2025 weeks compared to similar 2024 weeks]



Week 5 : Dispatchable Generation Peak Demand Statistics		
Peak Demand	26,010	MW
Week-on-Week Growth	6.48	%
Year-on-Year Growth (Year-to-Date) Annual	3.34	%

Note:

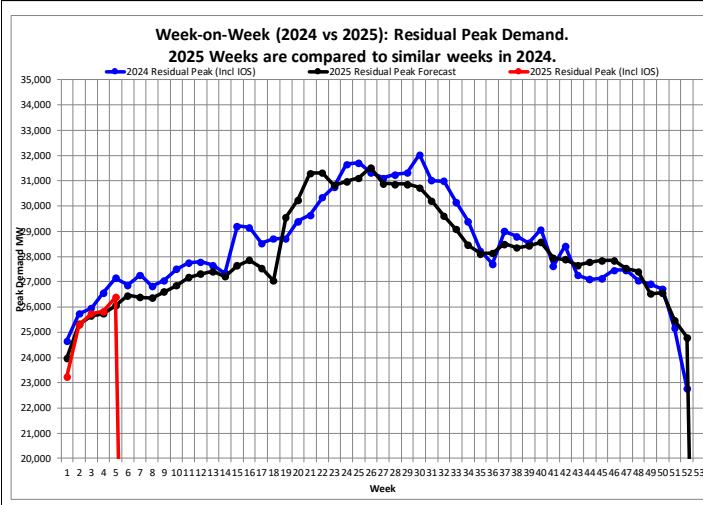
2025 Weeks are compared to similar weeks in 2024.

(2025 week 1 ~ 2024 week 1)

Annual Dispatchable Generation Peak Demand Statistics			
Year	Peak Date	Annual Peak	Unit
2020	Wed 17-Jun-2020	32,384	MW
2021	Thu 15-Jul-2021	32,292	MW
2022	Thu 02-Jun-2022	31,756	MW
2023	Mon 10-Jun-2023	28,937	MW
2024	Mon 22-Jun-2024	31,547	MW
2025 (YTD)	Thu 30-Jan-2025	26,010	MW

Week-on-Week Residual Peak Demand

[2025 weeks compared to similar 2024 weeks]



Week 5 : Residual Peak Demand Statistics		
Peak Demand	26,394	MW
Week-on-Week Growth	-2.77	%
Year-on-Year Growth (Year-to-Date) Annual	-2.77	%

Note:

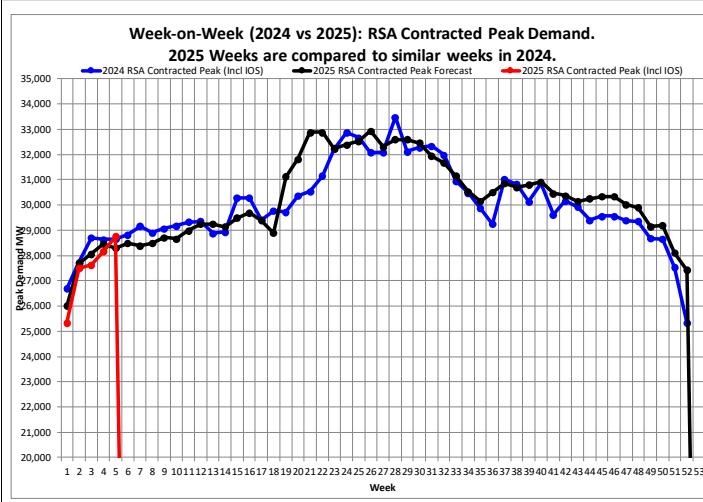
2025 Weeks are compared to similar weeks in 2024.

(2025 week 1 ~ 2024 week 1)

Annual Residual Peak Demand Statistics			
Year	Peak Date	Annual Peak	Unit
2020	Wed 15-Jul-2020	32,756	MW
2021	Tue 08-Jun-2021	34,029	MW
2022	Thu 23-Jun-2022	33,136	MW
2023	Tue 30-May-2023	33,016	MW
2024	Mon 22-Jun-2024	32,043	MW
2025 (YTD)	Tue 28-Jan-2025	26,394	MW

Week-on-Week RSA Contracted Peak Demand

[2025 weeks compared to similar 2024 weeks]



Week 5 : RSA Contracted Peak Demand Statistics		
Peak Demand	28,754	MW
Week-on-Week Growth	0.37	%
Year-on-Year Growth (Year-to-Date) Annual	0.16	%

Note:

2025 Weeks are compared to similar weeks in 2024.

(2025 week 1 ~ 2024 week 1)

Annual RSA Contracted Peak Demand Statistics			
Year	Peak Date	Annual Peak	Unit
2020	Tue 01-Sep-2020	34,155	MW
2021	Thu 22-Jul-2021	35,005	MW
2022	Thu 23-Jun-2022	34,666	MW
2023	Mon 10-Jun-2023	33,873	MW
2024	Tue 09-Jul-2024	33,485	MW
2025 (YTD)	Tue 28-Jan-2025	28,754	MW

Weekly Generation Availability

	Week													Annual (Jan - Dec)		
	44	45	46	47	48	49	50	51	52	1	2	3	4	5	2025	2024
Energy Availability Factor (Eskom EAF)	65.20	63.39	61.24	62.19	58.81	57.80	57.40	56.50	55.44	54.41	57.03	57.79	58.60	55.89	57.11	59.79
Planned Outage Factor	14.63	13.00	14.57	15.83	17.68	15.48	16.51	19.37	19.63	17.81	12.43	11.40	15.18	14.25	13.85	13.25
Unplanned Outage Factor	19.78	23.12	23.49	21.61	22.11	25.88	25.81	23.95	24.78	27.25	29.68	30.18	25.54	29.15	28.35	26.36
Other Outage Factor	0.39	0.49	0.70	0.37	1.40	0.84	0.28	0.18	0.15	0.53	0.86	0.63	0.68	0.71	0.69	0.60

EAF: Ratio of the available energy generation over a given time period to the maximum amount of energy which could be produced over the same time period.

Outage Factors: Ratio of energy losses over a given time period to the maximum amount of energy which could be produced over the same time period.

YTD: Year-to-Date (01 January of current year to current week)

52 Week Outlook

This is the forecast demand vs. available generating capacity for each week for 52 weeks ahead. Colour codes ranging from Green (no shortage) to Red (worst case) are used to indicate the absence or presence of a capacity constraint.

Week Start	Week	MW RSA Contracted Forecast	MW Residual Forecast	MW Available Dispatchable Capacity	MW Available Capacity (Less OR and UA)	MW Planned Maintenance	MW Unplanned Outage Assumption (UA)	MW Planned Risk Level (-15200 MW)	MW Likely Scenario (-17200 MW)
03-Feb-25	6	28560	26461	42805	27605	6584	13000		
10-Feb-25	7	28388	26386	42733	27533	6656	13000		
17-Feb-25	8	28481	26360	42292	27092	7097	13000		
24-Feb-25	9	28723	26601	42887	27687	6502	13000		
03-Mar-25	10	28658	26847	43527	28327	5862	13000		
10-Mar-25	11	28988	27176	43450	28250	5939	13000		
17-Mar-25	12	29242	27310	43785	28585	5604	13000		
24-Mar-25	13	29251	27406	42257	27057	7132	13000		
31-Mar-25	14	29139	27207	42260	27060	7129	13000		
07-Apr-25	15	29489	27647	42980	27780	6409	13000		
14-Apr-25	16	29704	27863	41907	26707	7482	13000		
21-Apr-25	17	29389	27548	43302	28102	6087	13000		
28-Apr-25	18	28890	27049	44022	28822	5367	13000		
05-May-25	19	31134	29557	44597	29397	4792	13000		
12-May-25	20	31823	30246	45977	30777	3412	13000		
19-May-25	21	32885	31308	47172	31972	2217	13000		
26-May-25	22	32889	31312	47362	31212	2027	13000		
02-Jun-25	23	32249	30834	47047	31847	2342	13000		
09-Jun-25	24	32393	30978	46900	31700	2489	13000		
16-Jun-25	25	32525	31110	46545	31345	2844	13000		
23-Jun-25	26	32936	31521	46545	31345	2844	13000		
30-Jun-25	27	32306	30891	46545	31345	2844	13000		
07-Jul-25	28	32600	30872	45970	30770	3419	13000		
14-Jul-25	29	32594	30666	45950	30750	3439	13000		
21-Jul-25	30	32463	30735	46098	30898	3291	13000		
28-Jul-25	31	31945	30217	45128	29928	4261	13000		
04-Aug-25	32	31674	29599	44364	29164	5025	13000		
11-Aug-25	33	31158	29903	43800	28600	5589	13000		
18-Aug-25	34	30538	28463	43670	28470	5719	13000		
25-Aug-25	35	30150	28124	43212	28012	6177	13000		
01-Sep-25	36	30496	28136	43539	28339	5850	13000		
08-Sep-25	37	30861	28501	43529	28329	5860	13000		
15-Sep-25	38	30712	28352	43927	28727	5462	13000		
22-Sep-25	39	30795	28435	44447	29247	4942	13000		
29-Sep-25	40	30924	28564	43572	28372	5817	13000		
06-Oct-25	41	30454	27941	42713	27513	6676	13000		
13-Oct-25	42	30372	27891	43373	28173	6016	13000		
20-Oct-25	43	30141	27660	43563	28363	5826	13000		
27-Oct-25	44	30261	27780	42765	27565	6624	13000		
03-Nov-25	45	30339	27650	43173	27973	6216	13000		
10-Nov-25	46	30339	27650	43173	27973	6216	13000		
17-Nov-25	47	30027	27538	43423	28223	5966	13000		
24-Nov-25	48	28986	27407	43688	28488	5701	13000		
01-Dec-25	49	29160	26528	43688	28488	5701	13000		
08-Dec-25	50	29195	26563	43688	28488	5701	13000		
15-Dec-25	51	28111	25479	43113	27913	6276	13000		
22-Dec-25	52	27429	24797	44236	29038	5151	13000		
29-Dec-25	1	25743	23111	45026	29826	4363	13000		
05-Jan-26	2	27939	25168	44788	29588	4601	13000		
12-Jan-26	3	28859	26088	45930	30730	3459	13000		
19-Jan-26	4	28817	26046	44614	29414	4775	13000		
26-Jan-26	5	29393	26622	44532	29332	4857	13000		
02-Feb-26	6	29692	27161	43475	28275	5914	13000		
09-Feb-26	7	29910	27379	44437	29237	4952	13000		

Notes - Assumptions critical:

The maintenance plan included in these assumptions includes a base scenario of outages (planned risk level). As there is opportunity for further outages, these will be included. This "likely risk scenario" includes an additional 1500 MW of outages on the base plan.

The expected imports at Apollo is included.

Avon and Dedisa is also included.

The forecast used is the latest operational weekly residual peak forecast, which excludes the expected renewable generation.

Operating Reserve (OR) from Generation: 2 200 MW

Unplanned Outage Assumption (UA): 13 000 MW

Reserves: OR + UA = 15 200 MW

Eskom Installed Capacity: 48 234 MW.

Installed Dispatchable Capacity: 49 389 MW (Incl. Avon and Dedisa).

Key:

Risk Level	Description
Green	Adequate Generation to meet Demand and Reserves.
Yellow	< 1 000MW Possibly short to meet Reserves
Orange	1 001MW – 2 000MW Definitely short to meet Reserves and possibly Demand
Red	> 2 001MW Short to meet Demand and Reserves

Medium Term Peak Demand/Capacity Forecast

Please go to the link below for the Medium-term System Adequacy Outlook - 2025 to 2029. (Published 30 October 2024).

<https://www.ntcsa.co.za/wp-content/uploads/2024/10/Medium-Term-System-Adequacy-Outlook-2025-2029.pdf>

or download the medium-term system adequacy outlook 2025 – 2029 from

<https://www.ntcsa.co.za/energy-market-services/> or <https://www.ntcsa.co.za/system-status-reports/>

Renewable Energy Statistics

Note: Times are expressed as hour beginning

Current Installed Capacity (MW)	
CSP	500.0
PV	2,287.1
Wind (Eskom+IPP)	3,442.6
Hybrid	150.0
Total (Incl other REs)	6,430.2
Estimated Rooftop PV	6,165.2

Maximum Contribution (MW) - based on System Operator data (subject to metering verification)					
Cal Year	Indicator	CSP	PV	Wind (Eskom+IPP)	Total (Incl other REs)
All Time	Maximum	506.2	2,155.7	3,102.2	5,129.8
	Max Date	15-Mar-2022 15:00	28-Nov-2024 12:00	25-Aug-2023 20:00	15-Sep-2023 13:00
2016	Maximum	200.9	1,350.5	1,229.8	2,576.3
	Max Date	11-Aug-2016 14:00	16-Dec-2016 12:00	23-Dec-2016 13:00	23-Dec-2016 13:00
2017	Maximum	302.0	1,432.5	1,708.2	3,142.7
	Max Date	07-Nov-2017 10:00	27-Oct-2017 12:00	25-Dec-2017 18:00	13-Dec-2017 13:00
2018	Maximum	399.7	1,392.1	1,902.3	3,298.9
	Max Date	04-Dec-2018 16:00	03-Oct-2018 12:00	02-Oct-2018 16:00	28-Sep-2018 11:00
2019	Maximum	502.1	1,375.6	1,872.0	3,530.6
	Max Date	24-Sep-2019 11:00	19-Jan-2019 12:00	14-Dec-2019 15:00	27-Oct-2019 13:00
2020	Maximum	504.5	1,929.2	2,113.9	4,050.0
	Max Date	25-Nov-2020 12:00	25-Nov-2020 12:00	01-Dec-2020 19:00	24-Nov-2020 13:00
2021	Maximum	504.9	2,099.5	2,639.3	4,784.7
	Max Date	30-Nov-2021 16:00	24-Oct-2021 12:00	15-Dec-2021 17:00	01-Nov-2021 13:00
2022	Maximum	506.2	2,048.8	3,028.1	5,126.1
	Max Date	15-Mar-2022 15:00	20-Nov-2022 11:00	02-Dec-2022 16:00	05-Sep-2022 12:00
2023	Maximum	505.8	2,047.8	3,102.2	5,129.8
	Max Date	21-Feb-2023 13:00	12-Nov-2023 11:00	25-Aug-2023 20:00	15-Sep-2023 13:00
2024	Maximum	502.2	2,155.7	3,049.9	4,995.7
	Max Date	30-Sep-2024 15:00	28-Nov-2024 12:00	15-Feb-2024 18:00	15-Feb-2024 15:00
2025	Maximum	491.9	2,061.5	2,959.4	4,873.3
	Max Date	15-Jan-2025 16:00	08-Jan-2025 12:00	14-Jan-2025 18:00	14-Jan-2025 15:00

Annual Energy Contribution (MWh) - based on System Operator data (subject to metering verification)					
Cal Year	Indicator	CSP	PV	Wind (Eskom+IPP)	Total (Incl other REs)
All Time	Annual Energy	1,656,017	5,290,019	11,613,364	18,241,202
2016	Total Energy	529,522	2,630,141	3,730,771	6,951,261
2017	Total Energy	687,703	3,324,857	5,081,023	9,198,632
2018	Total Energy	1,031,288	3,282,124	6,467,095	10,887,902
2019	Total Energy	1,557,151	3,324,989	6,624,642	11,586,945
2020	Total Energy	1,626,049	4,140,212	6,625,830	12,478,704
2021	Total Energy	1,656,017	5,069,146	8,359,224	15,208,327
2022	Total Energy	1,448,276	4,844,736	9,692,373	16,202,974
2023	Total Energy	1,375,349	5,014,845	11,613,364	18,241,202
2024	Total Energy	1,305,230	5,290,019	11,138,230	17,980,569
2025	Total Energy	229,020	727,136	1,242,976	2,228,779

Maximum Difference between Consecutive Evening Peaks (MW) - based on System Operator data (subject to metering verification)		
Cal Year	Indicator	Total (Incl other REs)
All Time	Maximum	2,573
	Max Date	12-Aug-2024 to 13-Aug-2024
2016	Maximum	828
	Max Date	30-Aug-2016 to 31-Aug-2016
2017	Maximum	1,038
	Max Date	19-Jun-2017 to 20-Jun-2017
2018	Maximum	1,336
	Max Date	01-Sep-2018 to 02-Sep-2018
2019	Maximum	1,464
	Max Date	05-Jul-2019 to 06-Jul-2019
2020	Maximum	1,488
	Max Date	31-Aug-2020 to 01-Sep-2020
2021	Maximum	1,744
	Max Date	07-Aug-2021 to 08-Aug-2021
2022	Maximum	1,523
	Max Date	07-Aug-2022 to 08-Aug-2022
2023	Maximum	2,148
	Max Date	20-Apr-2023 to 21-Apr-2023
2024	Maximum	2,573
	Max Date	12-Aug-2024 to 13-Aug-2024
2025	Maximum	1,350
	Max Date	13-Jan-2025 to 14-Jan-2025

Maximum proportion that Renewables contributed towards actual hourly energy supplied (%) - based on System Operator data (subject to metering verification)		
Cal Year	Indicator	Total (Incl other REs)
All Time	Maximum	21.8%
	Max Date	20-Feb-2023 15:00
2016	Maximum	9.8%
	Max Date	23-Dec-2016 13:00
2017	Maximum	12.7%
	Max Date	25-Dec-2017 15:00
2018	Maximum	13.1%
	Max Date	01-Jan-2018 14:00
2019	Maximum	13.9%
	Max Date	14-Dec-2019 14:00
2020	Maximum	16.1%
	Max Date	27-Dec-2020 15:00
2021	Maximum	19.1%
	Max Date	01-Nov-2021 13:00
2022	Maximum	19.3%
	Max Date	05-Sep-2022 12:00
2023	Maximum	21.8%
	Max Date	20-Feb-2023 15:00
2024	Maximum	19.8%
	Max Date	15-Feb-2024 15:00
2025	Maximum	19.2%
	Max Date	14-Jan-2025 15:00

Estimated Rooftop PV

Maximum/Installed Rooftop PV (MW):	Eastern Cape	Free State	Gauteng	KwaZulu-Natal	Limpopo	Mpumalanga	Northern Cape	North-West	Western Cape	Total
Dec-24	368.2	343.1	1,798.80	810.9	413.3	704.9	334.9	681.2	710.1	6,165.20
Nov-24	368.2	343.1	1,798.80	810.9	413.3	704.9	334.9	681.2	710.1	6,165.20
Oct-24	368.2	343.1	1,798.80	810.9	413.3	704.9	334.9	681.2	710.1	6,165.20
Sep-24	368.2	319.2	1,798.80	810.9	413.3	704.9	334.9	681.2	710.1	6,141.40
Aug-24	368.2	319.2	1,798.80	810.9	413.3	516.1	334.9	681.2	710.1	5,952.60
Jul-24	368.2	319.2	1,798.80	810.9	413.3	516.1	334.9	681.2	710.1	5,952.60
Jun-24	368.2	319.2	1,636.80	810.9	413.3	516.1	334.9	681.2	710.1	5,790.50
May-24	368.2	319.2	1,503.70	810.9	413.3	516.1	310.4	681.2	642.4	5,565.30
Apr-24	368.2	319.2	1503.7	810.9	413.3	516.1	247	669.3	642.4	5,490.00
Mar-24	368.2	307.7	1503.7	810.9	413.3	516.1	208.4	669.3	642.4	5,439.90
Feb-24	368.2	307.7	1503.7	810.9	413.3	516.1	208.4	669.3	642.4	5,439.90
Jan-24	368.2	280.2	1503.7	810.9	413.3	516.1	208.4	669.3	642.4	5,412.30
Dec-23	368.2	280.2	1295	810.9	413.3	516.1	208.4	669.3	642.4	5,203.70
Nov-23	368.2	280.2	1216.6	810.9	413.3	509.3	129.5	669.3	642.4	5,039.60
Oct-23	368.2	280.2	1207.8	810.9	413.3	509.3	129.5	669.3	616.8	5,005.00
Sep-23	368.2	280.2	1207.8	810.9	413.3	476.6	129.5	669.3	527.4	4,883.00
Aug-23	368.2	280.2	1207.8	810.9	345.6	474.1	129.5	669.3	527.4	4,812.80
Jul-23	368.2	280.2	1207.8	810.9	296.6	450.7	129.5	669.3	527.4	4,740.40
Jun-23	284.3	280.2	1207.8	565.8	296.6	450.7	129.5	669.3	527.4	4,411.50
May-23	190	204.9	1072.1	565.8	296.6	450.7	129.5	669.3	457.9	4,036.80
Apr-23	163.2	160.5	917.5	417.5	226.8	326.7	117.5	669.3	369	3,368.00
Mar-23	163.2	160.5	917.5	417.5	189.8	317.9	117.5	669.3	289.7	3,242.80
Feb-23	163.2	160.5	917.5	417.5	189.8	305.6	117.5	669.3	198	3,138.80
Jan-23	143.1	160.5	917.5	417.5	189.8	298.8	82.6	669.3	198	3,077.10
Dec-22	130.2	160.3	848.3	356.6	189.8	298.8	82	310.4	198	2,574.30
Nov-22	130.2	160.3	848.3	356.6	189.8	298.8	79.1	184.8	156.6	2,404.50
Oct-22	130.2	160.3	848.3	296.9	189.8	298.8	79.1	184.8	145.5	2,333.60
Sep-22	130.2	160.3	848.3	296.9	189.8	298.8	79.1	184.8	145.5	2,333.60
Aug-22	130.2	160.3	848.3	296.9	189.8	298.8	79.1	184.8	145.5	2,333.60
Jul-22	130.2	148.8	790.6	296.9	189.8	298.8	79.1	184.8	145.5	2,264.50

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.

*Rooftop PV includes ground-mounted as well as all other PV installations that do not have contracts with NTCSA.