

# Generation and Reservoirs Statistics

July 26, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

## 1. Daily Generation Mix in MWh

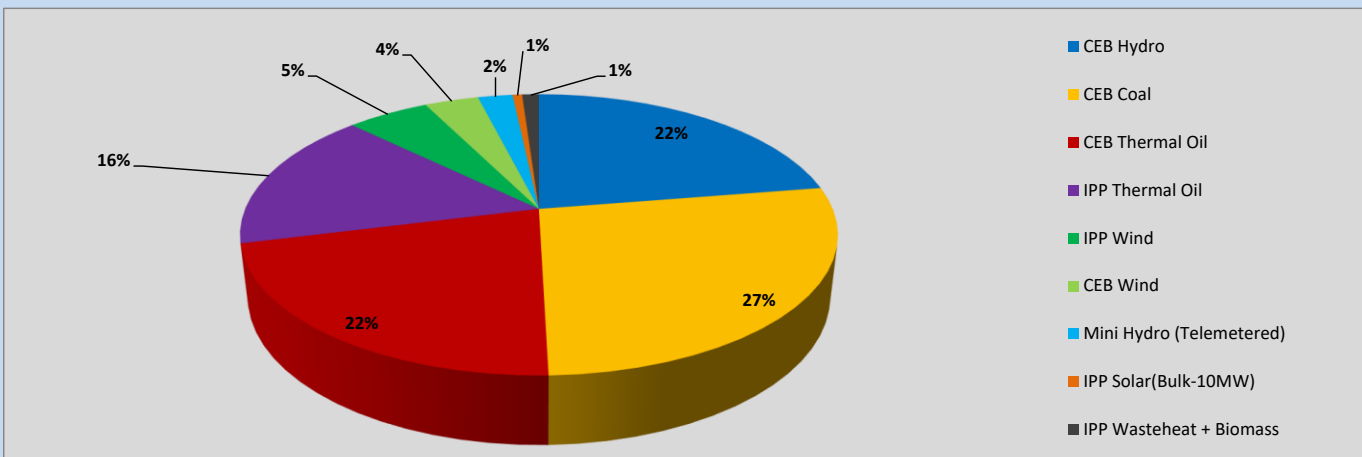


Table 01

CEB Hydro	9,323	MWh
CEB Coal	11,240	MWh
CEB Thermal Oil	8,930	MWh
IPP Thermal Oil	6,695	MWh
IPP Wind	2,208	MWh
CEB Wind	1,449	MWh
Mini Hydro (Telemetered)	932	MWh
IPP Solar (Bulk)	255	MWh
IPP Wasteheat + Biomass	449	MWh
<b>Total Generation (Excluding estimated figures)</b>	<b>41,481</b>	<b>MWh</b>
* Estimated unserved energy	0	MWh
* Estimated Mini Hydro (Non telemetered)	2578	MWh
* Estimated IPP Solar PV (Bulk 1-10MW)	304	MWh
* Estimated Solar Roof Top PV	1650	MWh
<b>Total Generation (Including estimated figures)</b>	<b>46,013</b>	<b>MWh</b>

\* Estimated figures of CEB generation report

## 2. Cumulative Dispatch

Following data excludes the contribution from roof top solar, non telemetered solar and mini hydro plants

Table 02 - Current Month

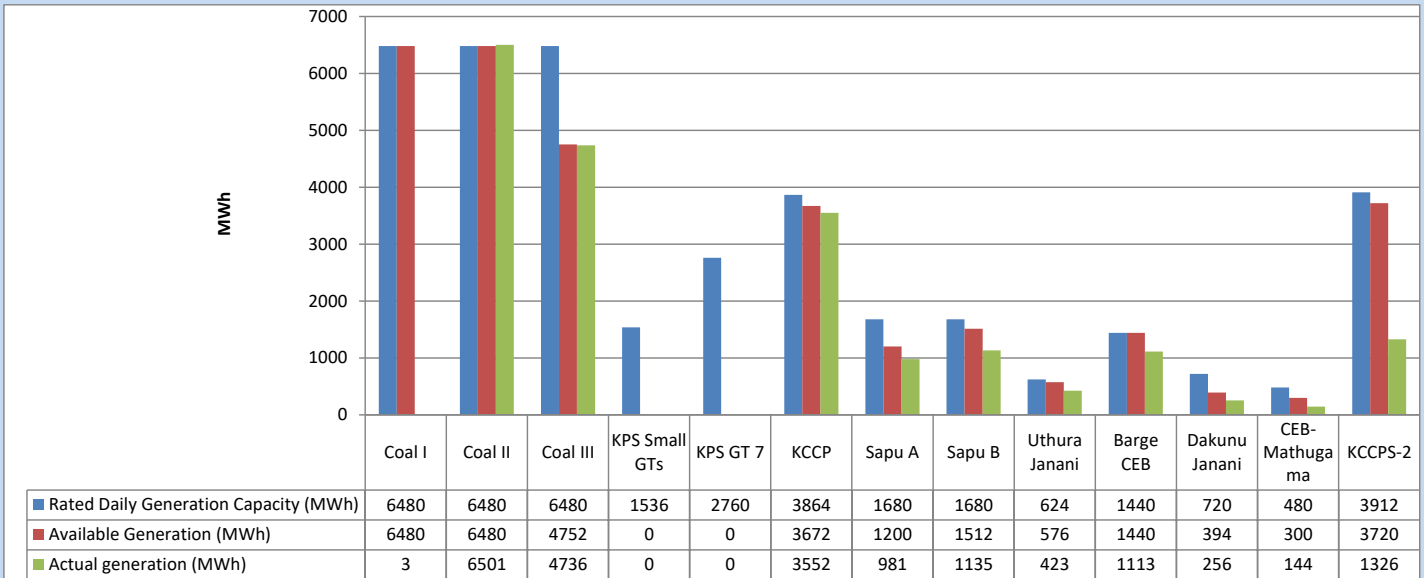
Category	Dispatch (GWh)	
CEB Hydro	271	26.72%
CEB Coal	294	28.98%
CEB Thermal Oil	177	17.48%
IPP Thermal	123	12.17%
SPP Wind	52	5.13%
CEB Wind	45	4.44%
Mini Hydro (Telemetered)	33	3.21%
IPP Solar (Bulk-10MW)	8	0.82%
IPP Wasteheat + BMP	11	1.05%
<b>Total</b>	<b>1,013</b>	

Table 03 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,009	25.22%
CEB Coal	3,176	39.88%
CEB Thermal Oil	1,261	15.83%
IPP Thermal	777	9.76%
SPP Wind	203	2.55%
CEB Wind	209	2.62%
Mini Hydro (Telemetered)	198	2.49%
IPP Solar (Bulk-10MW)	61	0.77%
IPP Wasteheat	71	0.89%
<b>Total</b>	<b>7,966</b>	

### 3. CEB owned Thermal Plant Dispatch

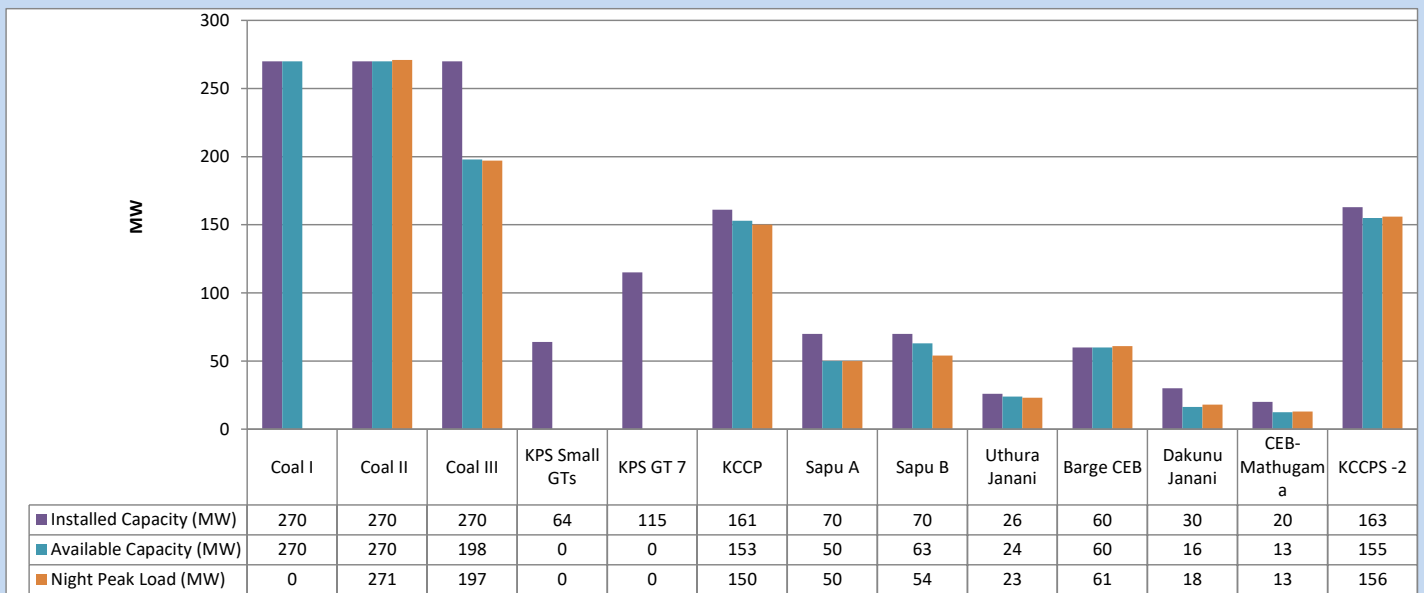
July 26, 2023



Available Generation is estimated based on plant availability at 6.00am on

July 27, 2023

### 4. CEB owned Thermal Plant Loading at the Night Peak

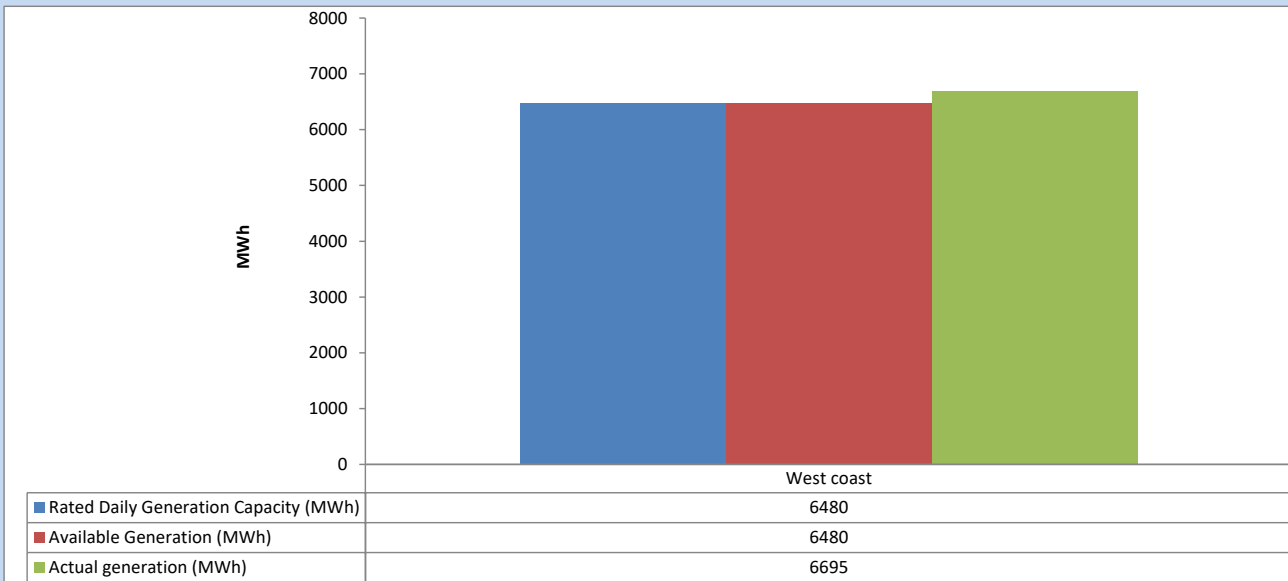


Plant availability is recorded at 6.00 am on

July 27, 2023

## 5. IPP owned Thermal Plant Dispatch

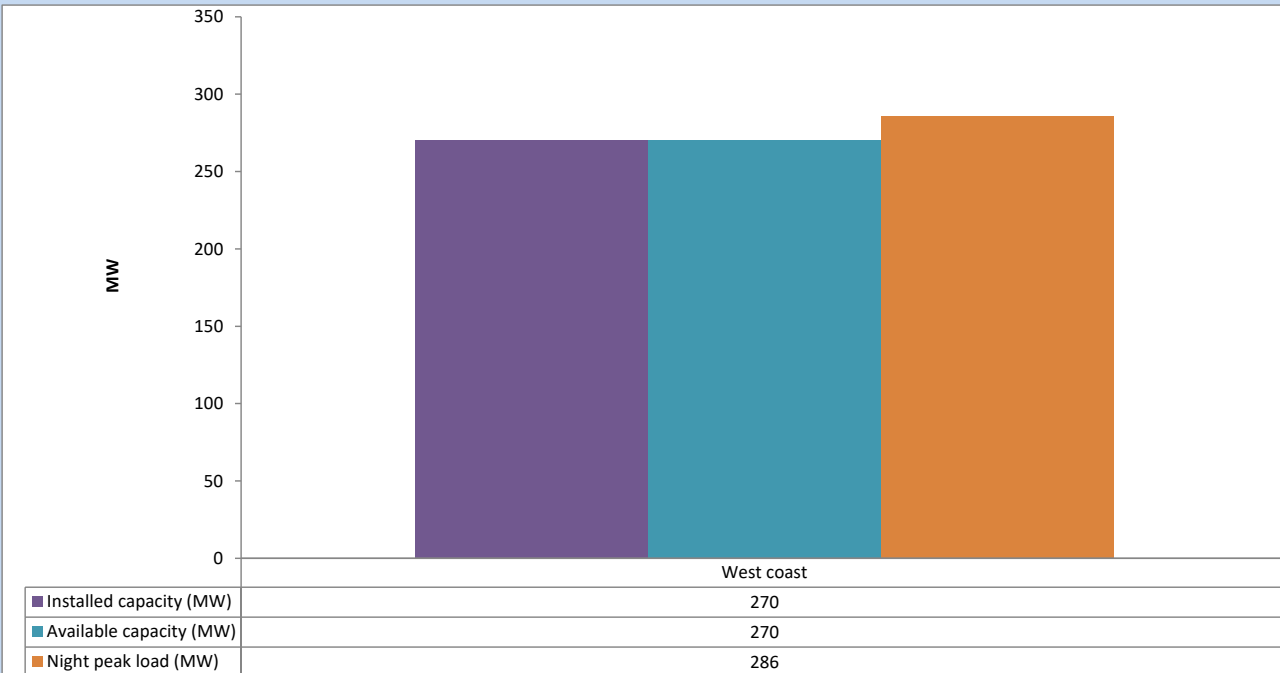
July 26, 2023



Available Generation is estimated based on plant availability at 6.00am on

July 27, 2023

## 6. IPP owned Thermal Plant Loading at the Night Peak

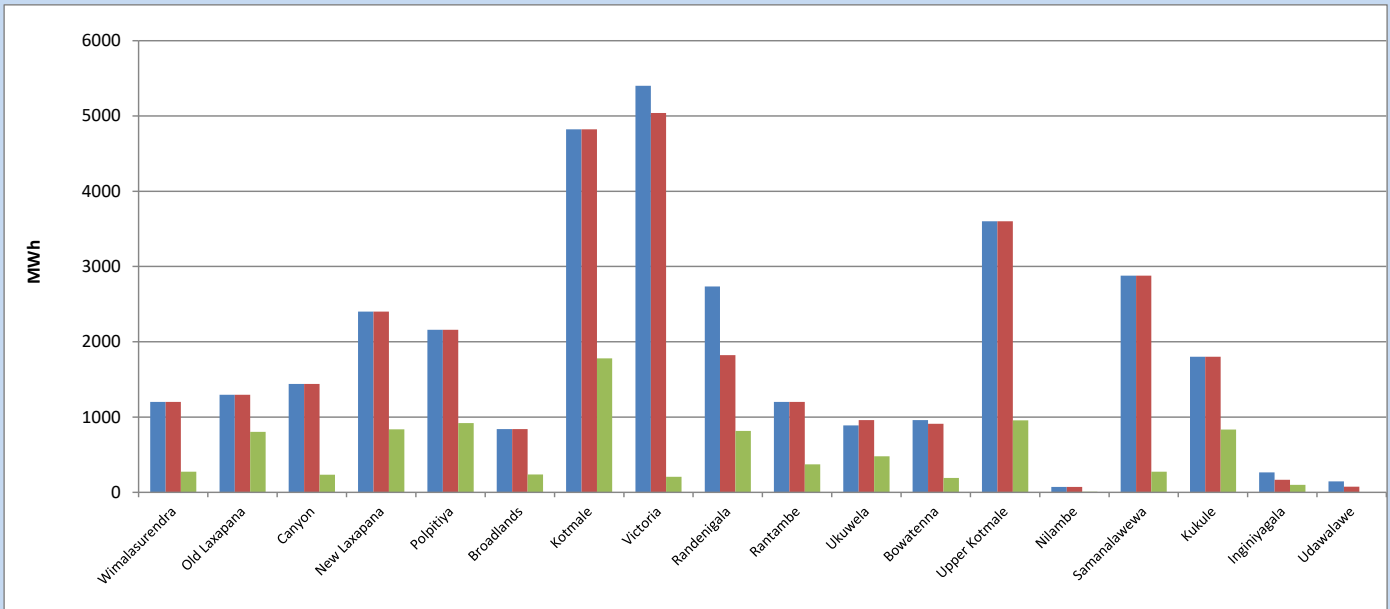


Plant availability is recorded at 6.00 am on

July 27, 2023

## 7. Major Hydro Plant Dispatch

July 26, 2023

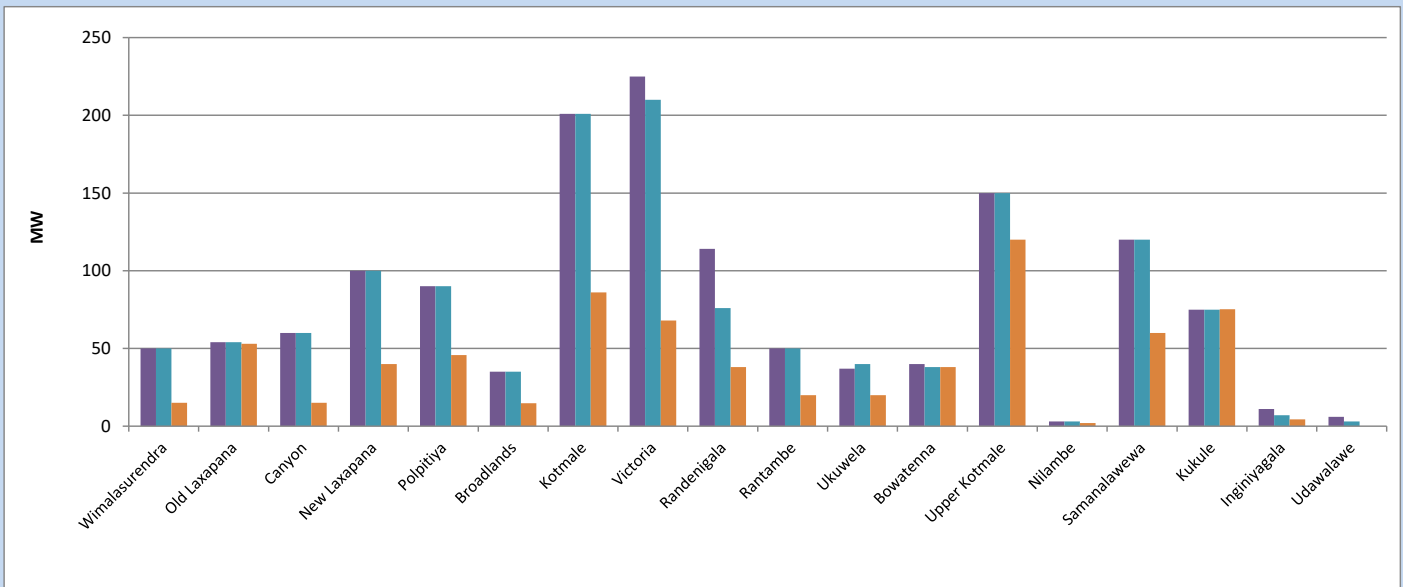


Available Generation is estimated based on plant availability at 6.00am on  
Broadlands power plant is operating in the Commissioning Stage

July 27, 2023

## 8. Major Hydro Plant Loading at Night Peak

July 26, 2023



Plant availability is recorded at 6.00 am on  
Broadlands power plant is operating in the Commissioning Stage

July 27, 2023

## 9. Summary of Major Plant performance

**Table 04**

Plant	Installed Capacity	Plant Availability	Night peak Load	Plant Dispatch
	(MW)	(MW)	(MW)	(MWh)
Wimalasurendra	50	50	15	273
Old Laxapana	54	54	53	803
Canyon	60	60	15	235
New Laxapana	100	100	40	836
Polpitiya	90	90	46	920
Broadlands	35	35	15	237
Kotmale	201	201	86	1,780
Victoria	225	210	68	207
Randenigala	114	76	38	817
Rantambe	50	50	20	373
Ukuwela	37	40	20	479
Bowatenna	40	38	38	191
Upper Kotmale	150	150	120	958
Nilambe	3	3	2	7
Samanalawewa	120	120	60	274
Kukule	75	75	75	834
Inginiyagala	11	7	4	99
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	0	3
Puttalam Coal II	270	270	271	6,501
Puttalam Coal III	270	198	197	4,736
KPS Small GTs	64	0	0	0
KPS GT 7	115	0	0	0
KCCP	161	153	150	3,552
Sapugaskanda A	70	50	50	981
Sapugaskanda B	70	63	54	1,135
Uthura Janani	26	24	23	423
Barge CEB	60	60	61	1,113
CEB-Hambantota	30	16	18	256
CEB-Mathugama	20	13	13	144
ACE Matara	24	0	0	0
Asia Power	50	0	0	0
KCCPS -2	163	155	156	1,326
West Coast	270	270	286	6,695
Nothern Power	36	0	0	0
ACE Embilipitiya	93	0	0	0
<b>Total</b>	<b>3,483</b>	<b>2,904</b>	<b>2,175</b>	<b>41,481</b>

Plant availability is the availability recorded at 6 am on

July 27, 2023

### 10. Contribution to the Night Peak in MW

July 26, 2023

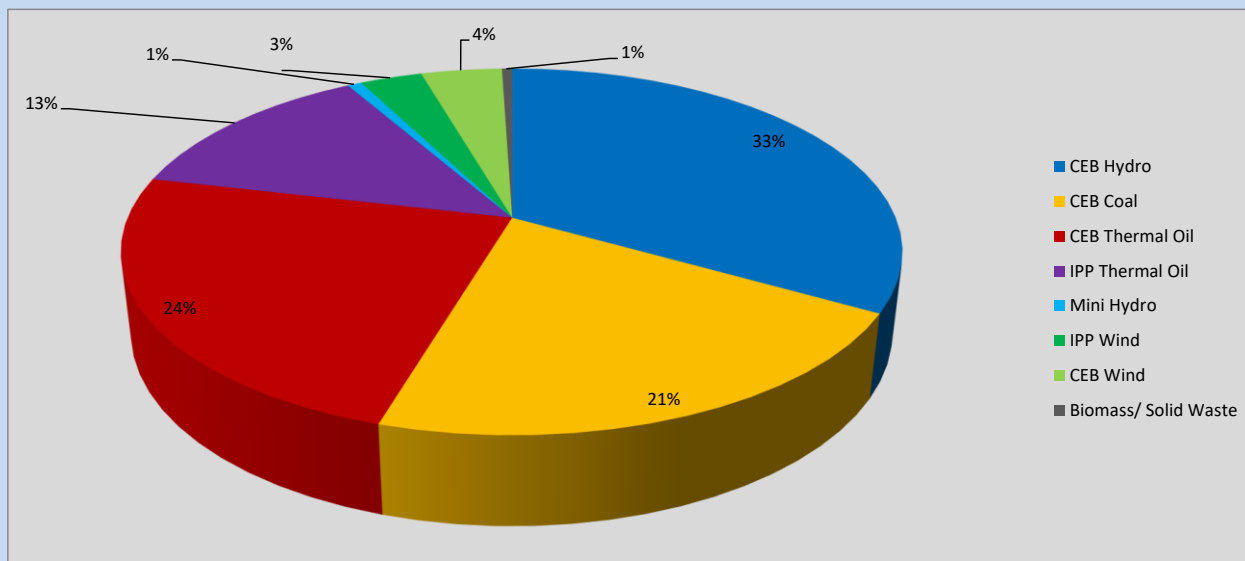


Table 05

CEB Hydro	725 MW
CEB Coal	468 MW
CEB Thermal Oil	525 MW
IPP Thermal Oil	286 MW
Mini Hydro (Telemetered)	15 MW
IPP Wind	67 MW
CEB Wind	87.4 MW
Biomass/ Solid Waste	11 MW

### Recorded Peak Demand Data

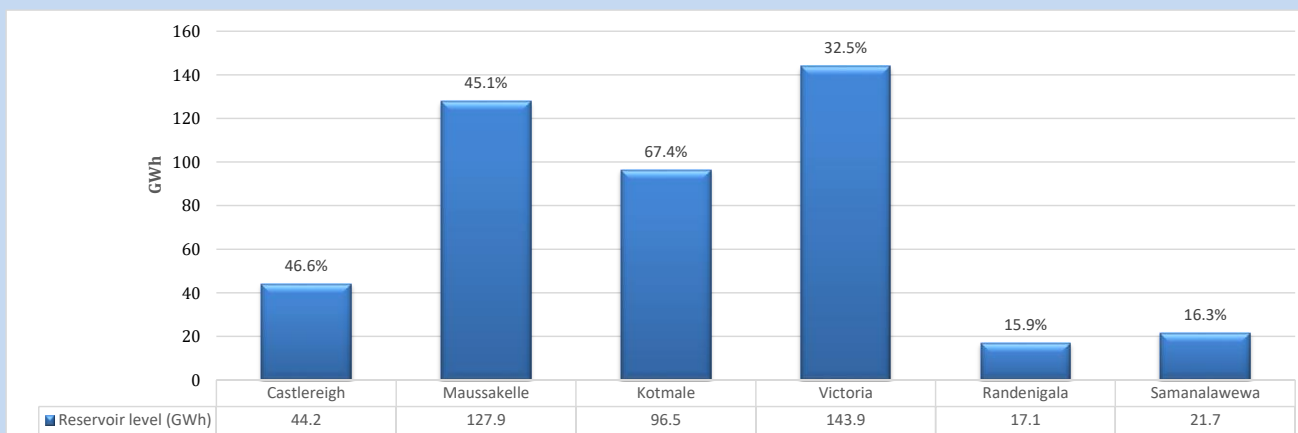
Table 06

Night Peak*	2,185 MW
Day Peak Maximum Demand	1,881 MW
Day Peak Minimum Demand	1,696 MW
Off Peak Minimum Demand	1,214 MW

Above figures are excluding contribution from roof top solar, non telemetered solar and mini hydro plants

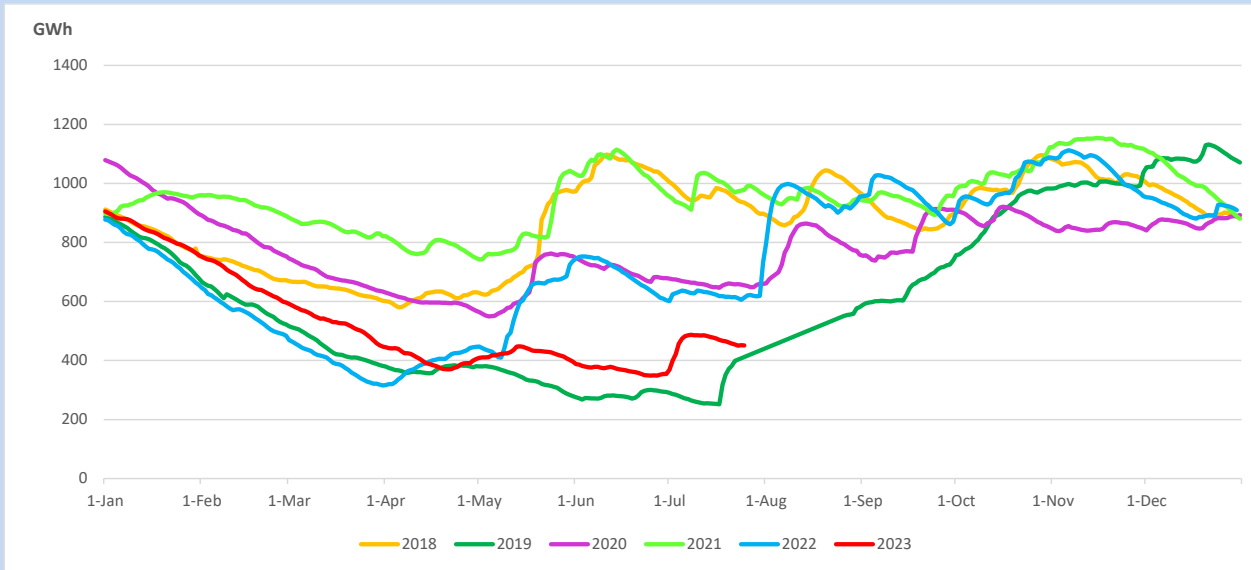
### Reservoir Levels -

as at 06.00 Hr on July 27, 2023

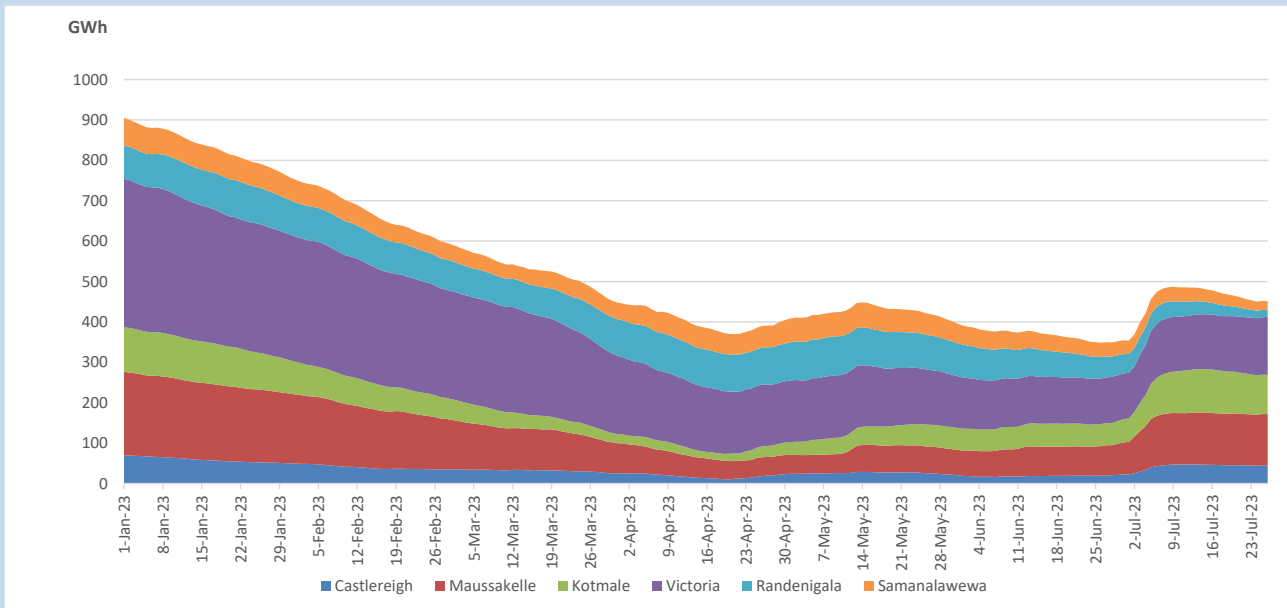


Total Reservoir Level 451.3 GWh  
 % of Total capacity 37.5%

## 11. Comparison of Total Reservoir Storage Levels with Past Years

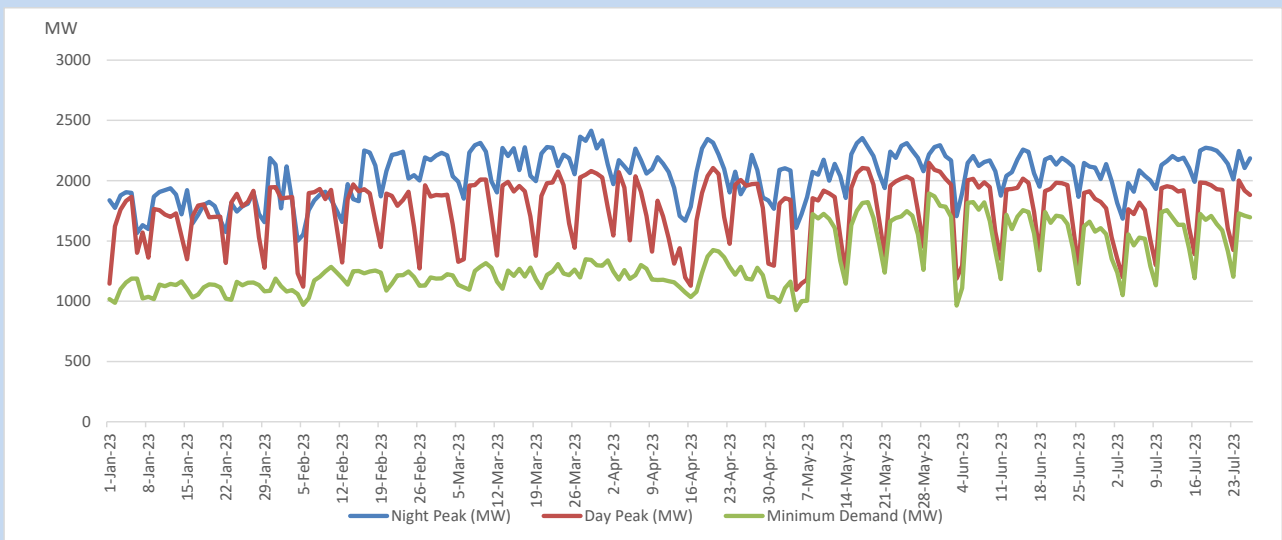


## 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





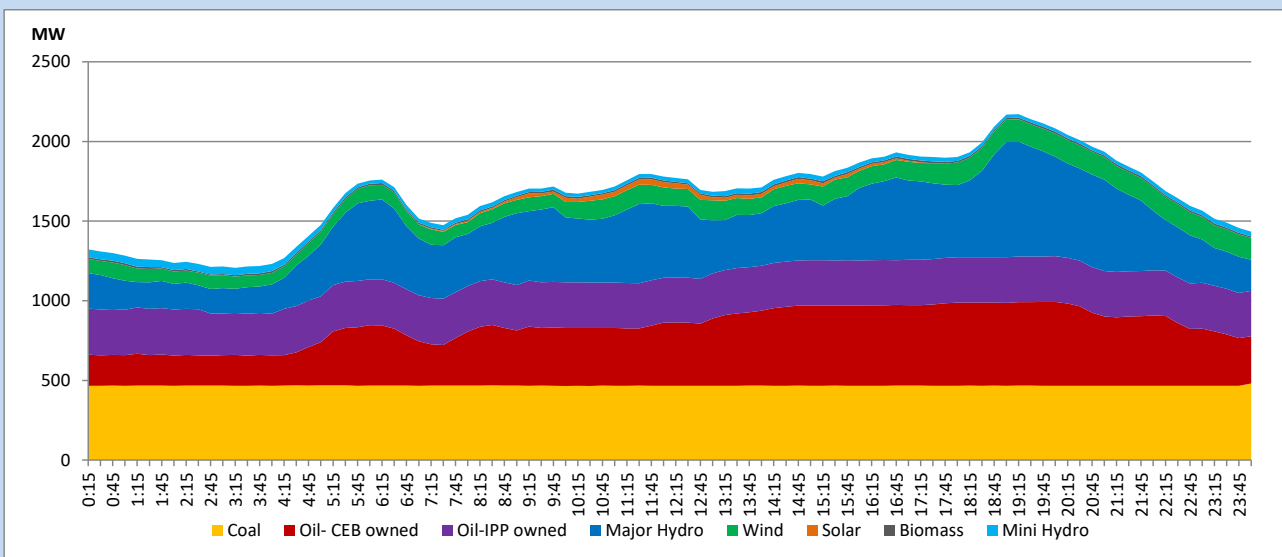
### 13. Variation of Demand during the current year



The above figures are excluding contribution from roof top solar, non telemetered solar and mini hydro plants

### 14. Daily Load Curve

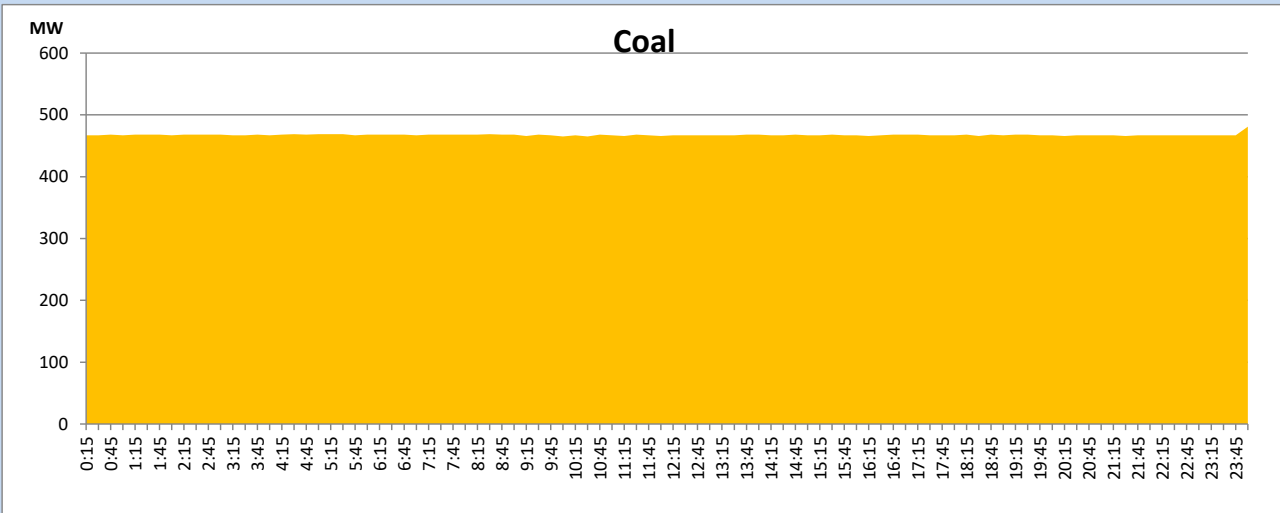
July 26, 2023



Solar and wind data is based on Telemetered Power Stations only

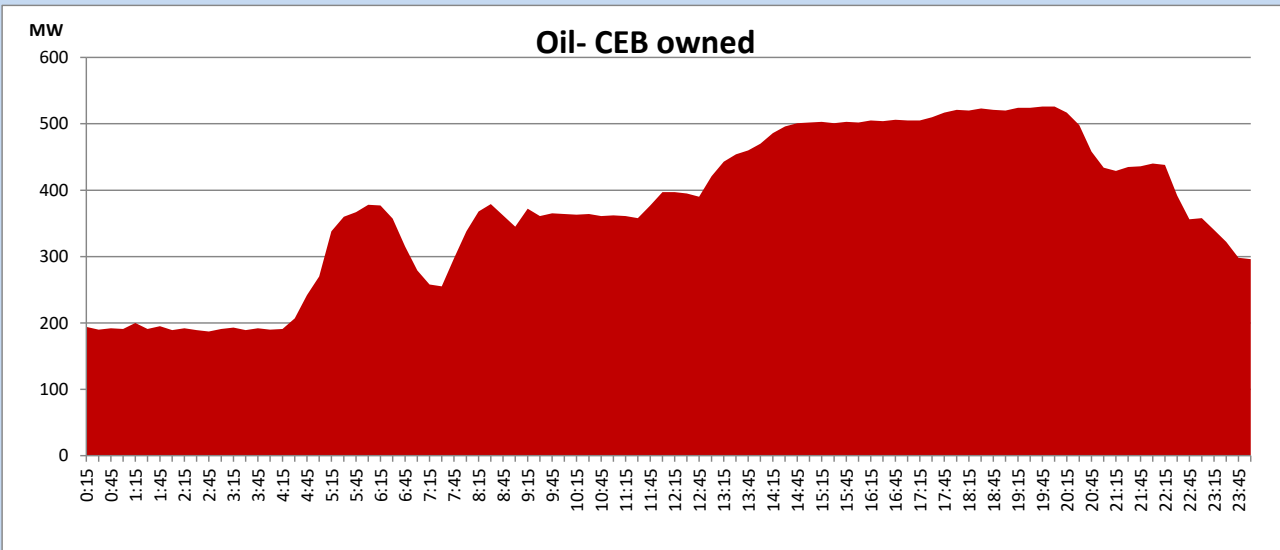
## Coal Generation during

July 26, 2023



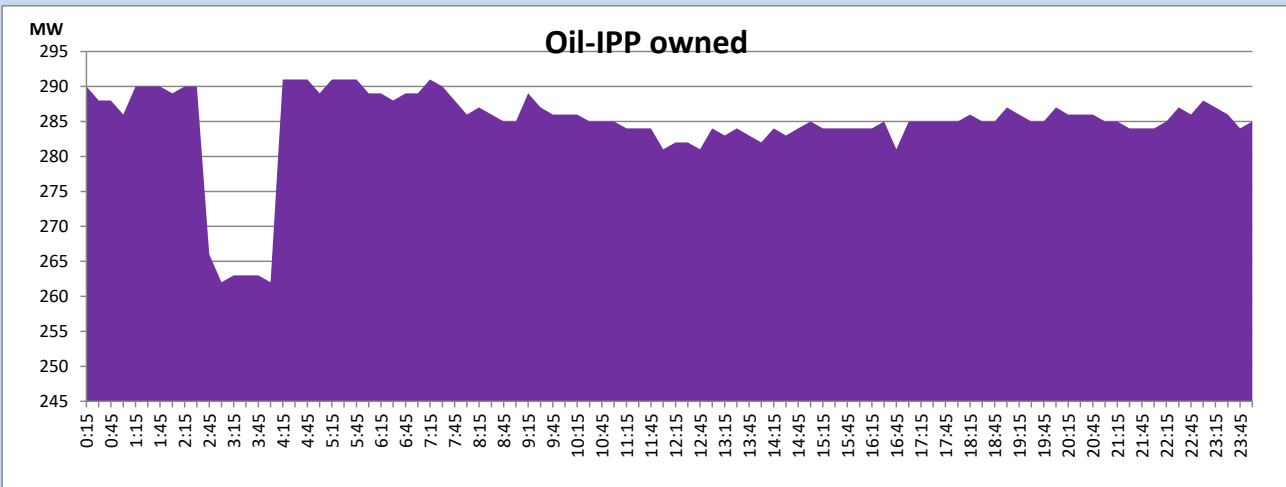
## CEB Oil Plant Generation during

July 26, 2023



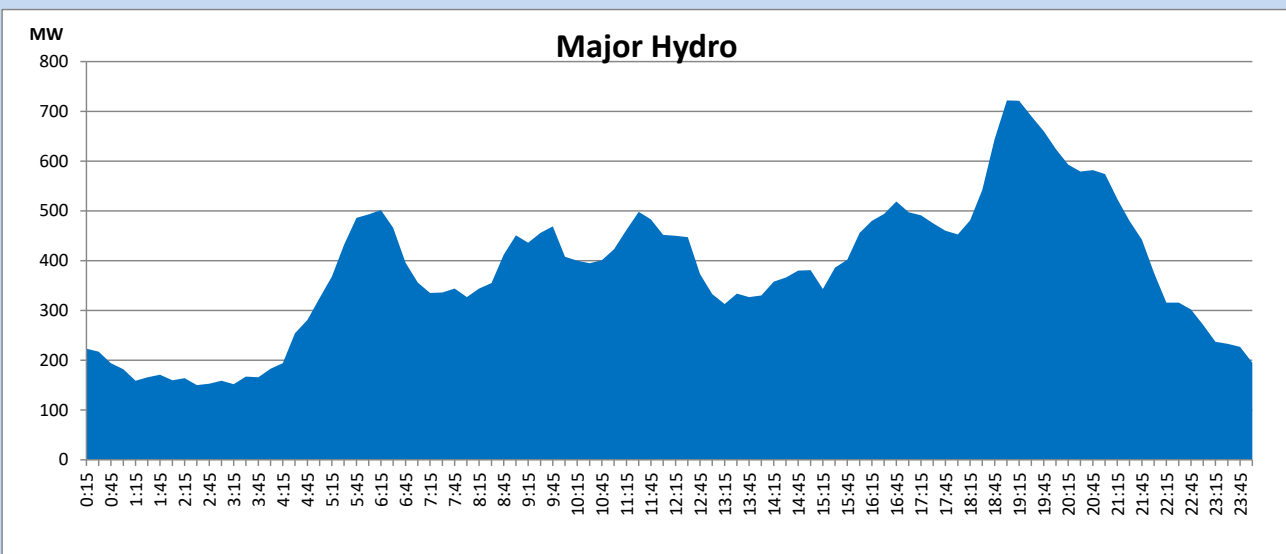
IPP Oil Plant Generation during

July 26, 2023



Major Hydro Generation during

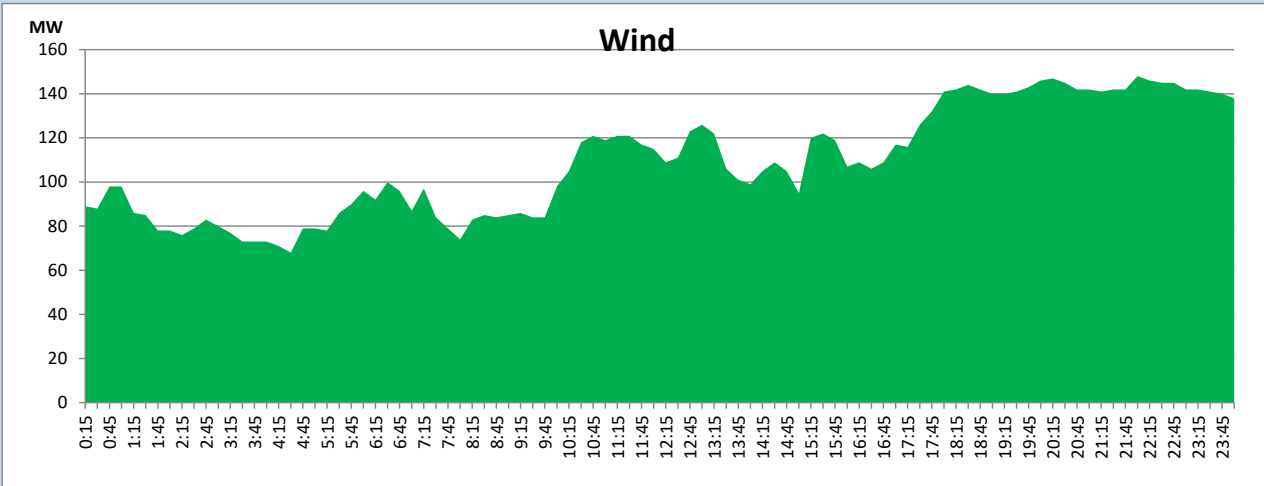
July 26, 2023



## Wind Generation during

July 26, 2023

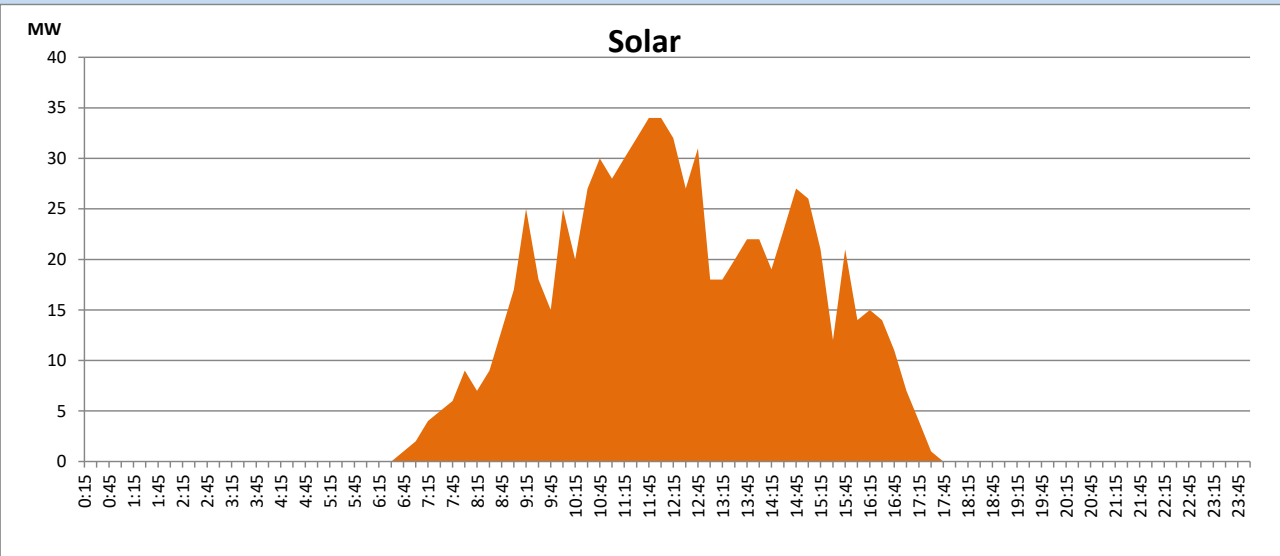
Based on Telemetered Power Stations only



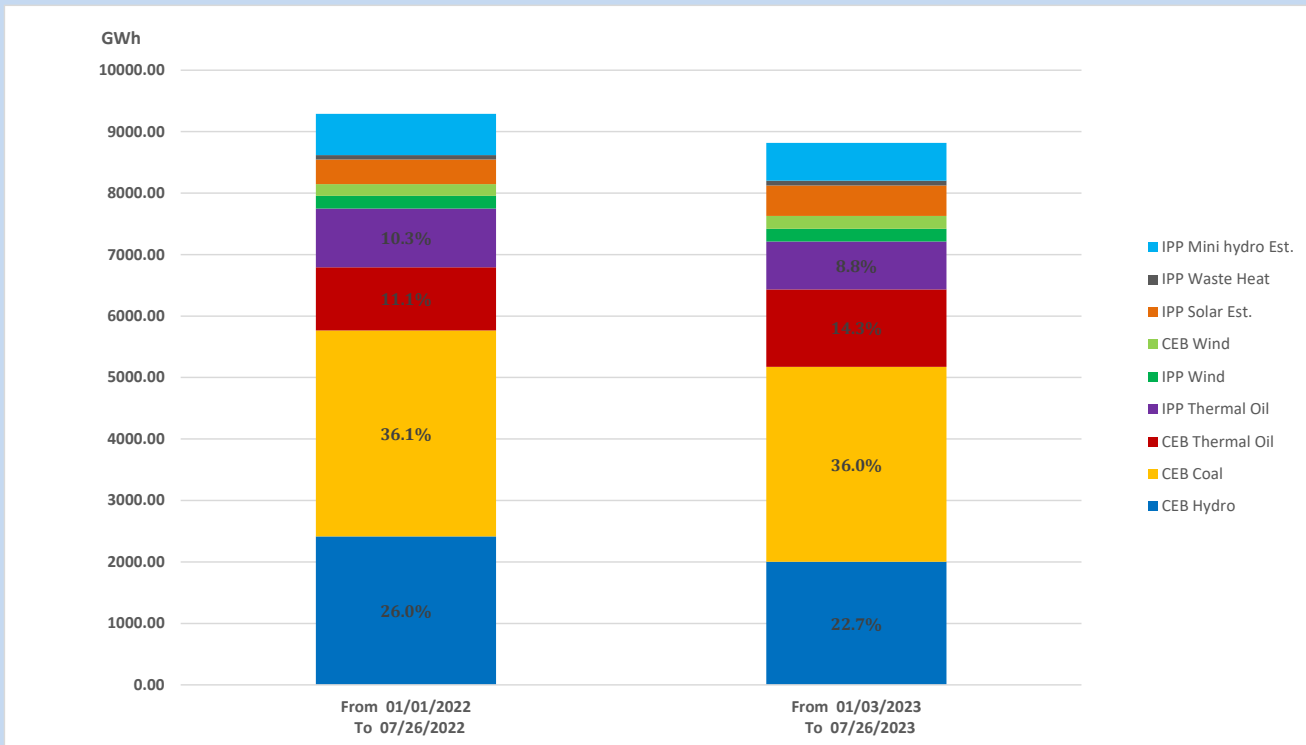
## Solar Generation during

July 26, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 07/26/2022

9289 GWh

From 01/01/2023 To 07/26/2023

8818 GWh

The above figures are including contribution from roof top solar, non telemetered solar and mini hydro plants

**Thermal Plant Fuel types**

Power Station	Primary Fuel
<b>CEB Thermal</b>	
<b>Sapugaskanda 1</b>	Heavy Fuel
<b>Sapugaskanda 2</b>	Heavy Fuel
<b>Kelanitissa Small Gas Turbines</b>	Auto Diesel
<b>GT 7 - Kelanitissa</b>	Auto Diesel
<b>Kelanitissa CCY</b>	Naphtha or Diesel
<b>Lakvijaya 1</b>	Coal
<b>Lakvijaya 2</b>	Coal
<b>Lakvijaya 3</b>	Coal
<b>Uthuru Janani</b>	Heavy Fuel
<b>Barge CEB</b>	Heavy Fuel
<b>KCCPS -2</b>	Auto Diesel

Power Station	Primary Fuel
<b>Private Thermal</b>	
<b>West Coast</b>	Auto Diesel / Heavy Fuel

**Major Incidents reported during the day**

July 26, 2023

- 1) KCCPS2 made a forced shutdown at 8:48hrs due to a stator earth fault. The plant resumed generation at 11:43hrs and reached full load at 14:32hrs.
- 2) Kukula – Mathugama 132kV cct 01 tripped from both ends at 11:13hrs rejecting 38MW of Kukula P/S generation from the system due to the operation of differential protection while Kukula – Mathugama 132kV cct 02 had been released for maintenance. The cct normalized at 11:24hrs and Kukula P/S resumed generation at 11:28hrs.
- 3) Kukula – Mathugama 132kV cct 01 tripped from both ends at 11:37hrs due to the operation of O/C, E/F protection, rejecting 38MW from the system, while Kukula – Mathugama 132kV cct 02 had been released for maintenance. At the same time, Athurugiriya – Polpitiya 132kV cct tripped and A/R only from Polpitiya end due to the operation of distance protection. At the same time, Athurugiriya – Padukka 132kV cct tripped only from Athurugiriya end due to the operation of distance protection, causing Padukka GSS to be dead. Kukula – Mathugama 132kV cct 01 normalized at 12:44hrs and Athurugiriya – Padukka cct and Padukka GSS normalized at 13:16hrs.
- 4) New Laxapana Unit 02 made a forced shutdown at 20:50hrs due to a governor fault. The Unit resumed generation at 04:21hrs(27.07.2023).
- 5) LVPS unit 01 synchronized at 23:50hrs and reached full load 270MW(net) at 06:00hrs(27.07.23).