

# Generation and Reservoirs Statistics

July 16, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

## 1. Daily Generation Mix in MWh

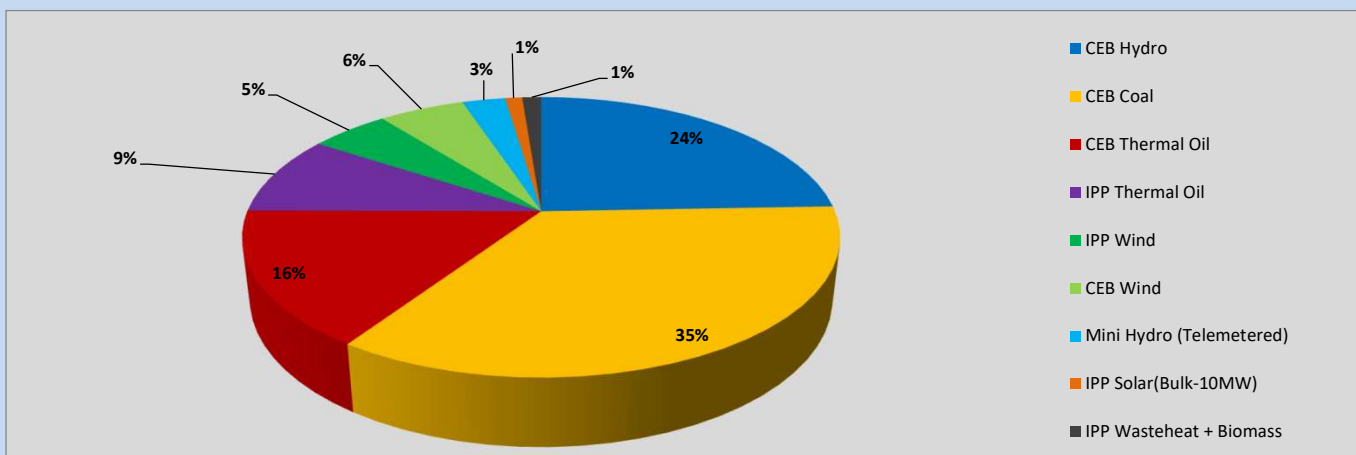


Table 01

CEB Hydro	8,572	MWh
CEB Coal	12,284	MWh
CEB Thermal Oil	5,506	MWh
IPP Thermal Oil	3,217	MWh
IPP Wind	1,786	MWh
CEB Wind	1,943	MWh
Mini Hydro (Telemetered)	980	MWh
IPP Solar (Bulk)	386	MWh
IPP Wasteheat + Biomass	432	MWh
<b>Total Generation (Excluding estimated figures)</b>	<b>35,106</b>	<b>MWh</b>
* Estimated unserved energy	0	MWh
* Estimated Mini Hydro (Non telemetered)	2530	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>39,590</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

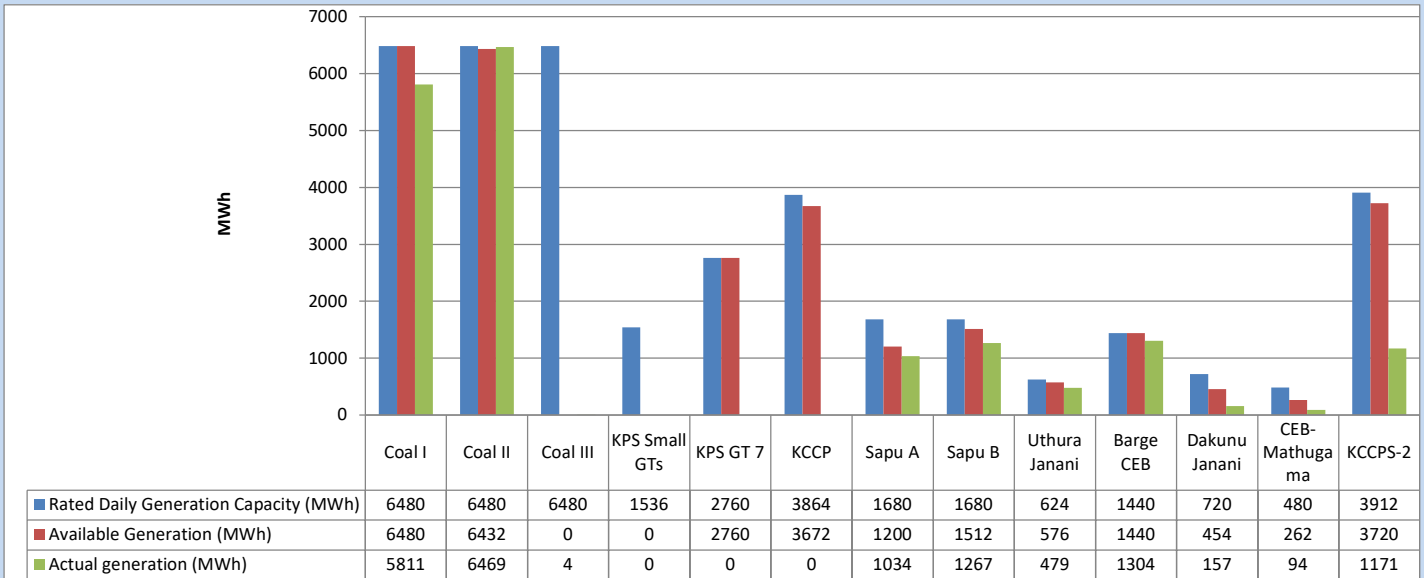
Category	Dispatch (GWh)	
CEB Hydro	176	29.41%
CEB Coal	183	30.53%
CEB Thermal Oil	84	14.07%
IPP Thermal	66	11.01%
SPP Wind	29	4.81%
CEB Wind	27	4.43%
Mini Hydro (Telemetered)	24	3.96%
IPP Solar (Bulk-10MW)	5	0.82%
IPP Wasteheat + BMP	6	0.97%
<b>Total</b>	<b>599</b>	

Table 03 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	1,914	25.35%
CEB Coal	3,066	40.60%
CEB Thermal Oil	1,168	15.46%
IPP Thermal	720	9.53%
SPP Wind	180	2.38%
CEB Wind	191	2.52%
Mini Hydro (Telemetered)	190	2.51%
IPP Solar (Bulk-10MW)	58	0.77%
IPP Wasteheat	66	0.87%
<b>Total</b>	<b>7,552</b>	

### 3. CEB owned Thermal Plant Dispatch

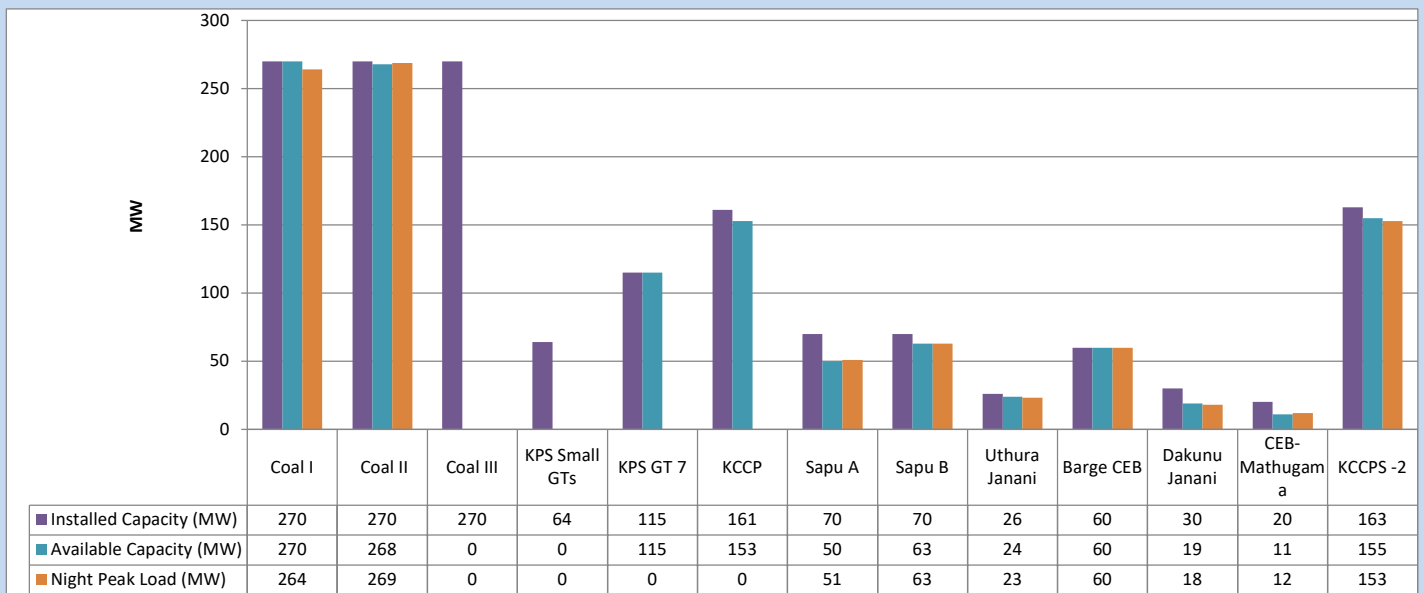
July 16, 2023



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

July 17, 2023

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

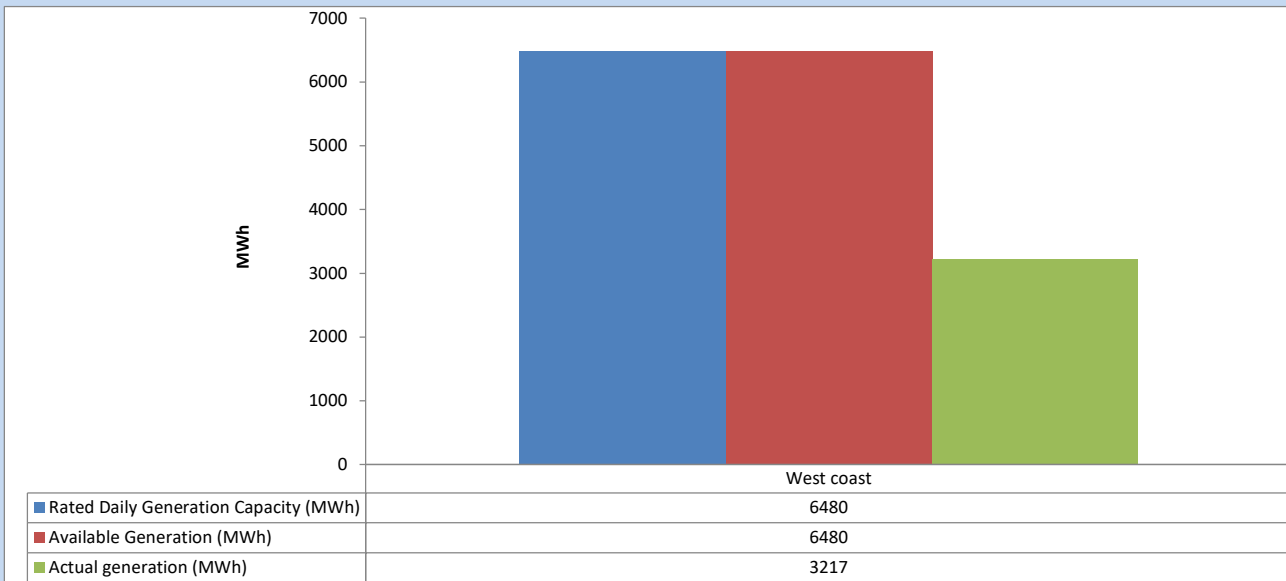


Plant availability is recorded at 6.00 am on

July 17, 2023

## 5. IPP owned Thermal Plant Dispatch

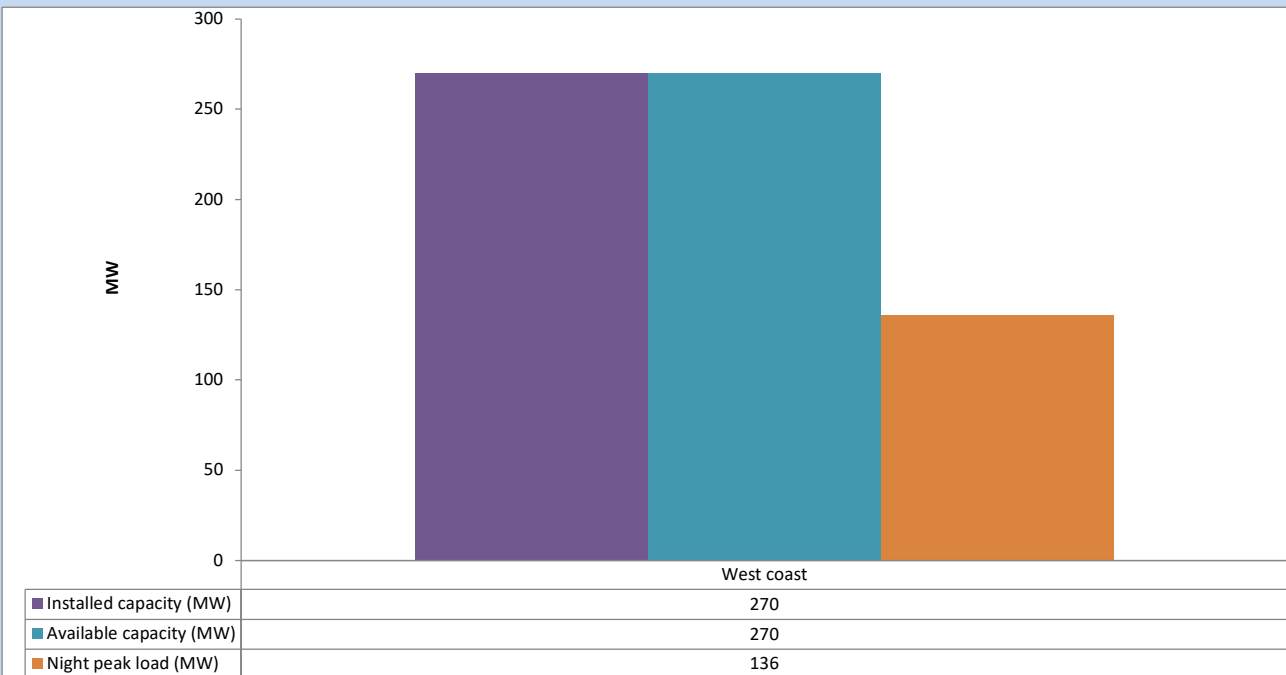
July 16, 2023



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

July 17, 2023

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

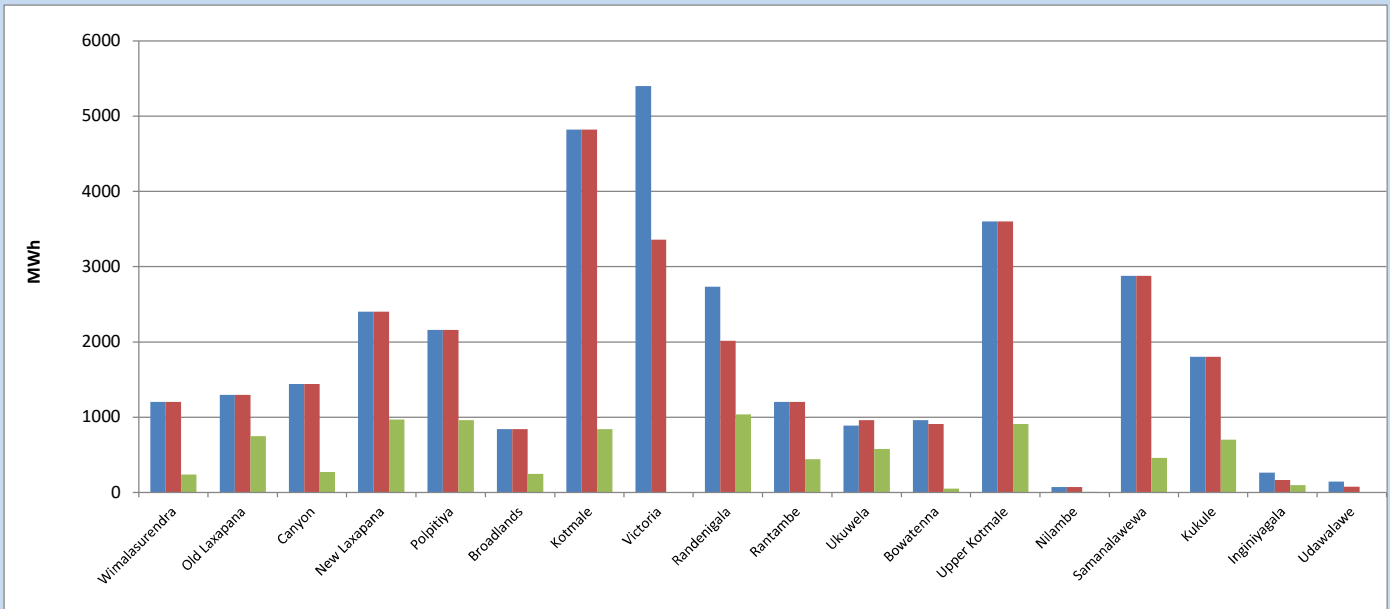


Plant availability is recorded at 6.00 am on

July 17, 2023

## 7. Major Hydro Plant Dispatch

July 16, 2023

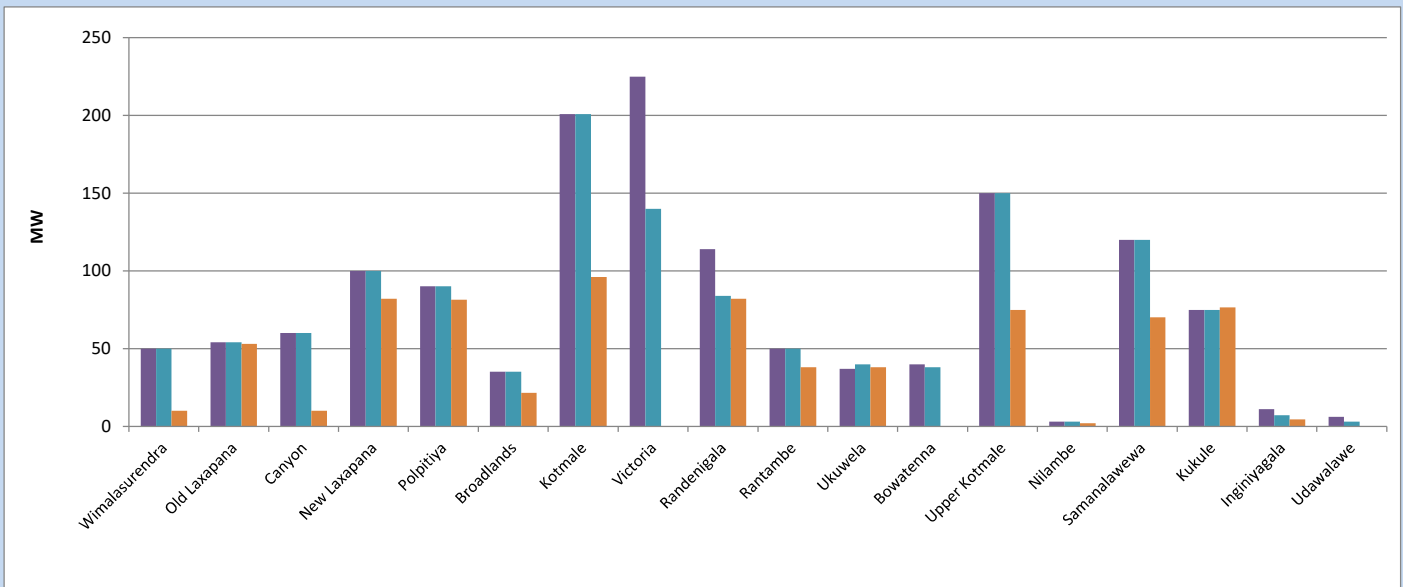


Available Generation is estimated based on plant availability at 6.00am on  
Broadlands power plant is operating in the Commissioning Stage

July 17, 2023

## 8. Major Hydro Plant Loading at Night Peak

July 16, 2023



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

July 17, 2023

## 9. Summary of Major Plant performance

Table 04

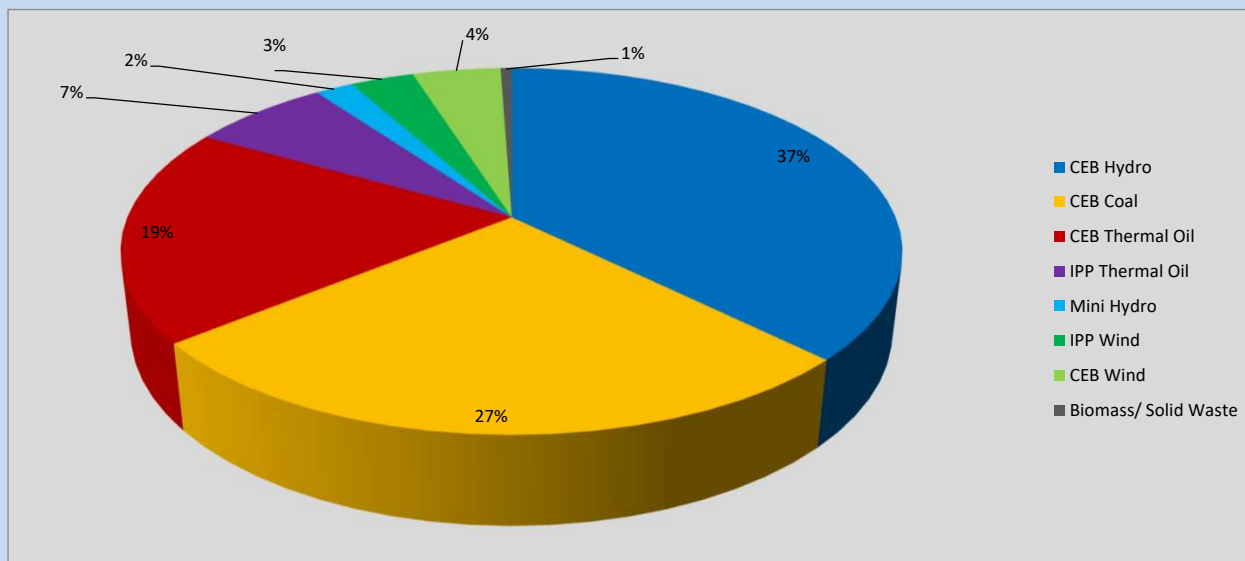
Plant	Installed Capacity	Plant Availability	Night peak Load	Plant Dispatch
	(MW)	(MW)	(MW)	(MWh)
Wimalasurendra	50	50	10	241
Old Laxapana	54	54	53	749
Canyon	60	60	10	275
New Laxapana	100	100	82	968
Polpitiya	90	90	81	960
Broadlands	35	35	22	245
Kotmale	201	201	96	840
Victoria	225	140	0	0
Randenigala	114	84	82	1,037
Rantambe	50	50	38	442
Ukuwela	37	40	38	578
Bowatenna	40	38	0	51
Upper Kotmale	150	150	75	911
Nilambe	3	3	2	11
Samanalawewa	120	120	70	462
Kukule	75	75	76	702
Inginiyagala	11	7	4	100
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	264	5,811
Puttalam Coal II	270	268	269	6,469
Puttalam Coal III	270	0	0	4
KPS Small GTs	64	0	0	0
KPS GT 7	115	115	0	0
KCCP	161	153	0	0
Sapugaskanda A	70	50	51	1,034
Sapugaskanda B	70	63	63	1,267
Uthura Janani	26	24	23	479
Barge CEB	60	60	60	1,304
CEB-Hambantota	30	19	18	157
CEB-Mathugama	20	11	12	94
ACE Matara	24	0	0	0
Asia Power	50	0	0	0
KCCPS -2	163	155	153	1,171
West Coast	270	270	136	3,217
Nothern Power	36	0	0	0
ACE Embilipitiya	93	0	0	0
<b>Total</b>	<b>3,483</b>	<b>2,758</b>	<b>1,987</b>	<b>35,106</b>

Plant availability is the availability recorded at 6 am on

July 17, 2023

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

July 16, 2023



**Table 05**

CEB Hydro	744 MW
CEB Coal	533 MW
CEB Thermal Oil	380 MW
IPP Thermal Oil	136 MW
Mini Hydro (Telemetered)	38 MW
IPP Wind	62.5 MW
CEB Wind	86.7 MW
Biomass/ Solid Waste	11 MW

### Recorded Peak Demand Data

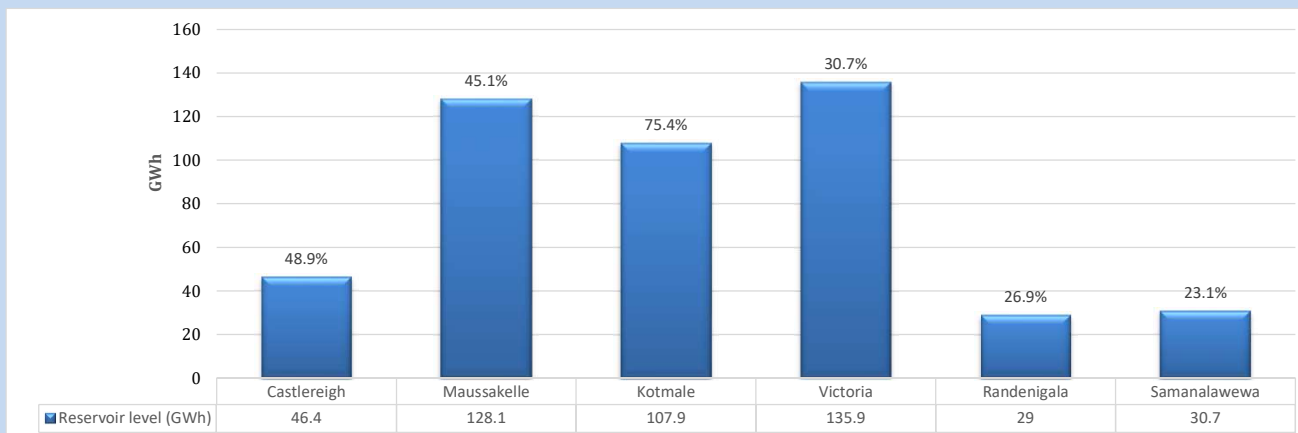
**Table 06**

Night Peak*	1,991 MW
Day Peak Maximum Demand	1,390 MW
Day Peak Minimum Demand	1,191 MW
Off Peak Minimum Demand	1,239 MW

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

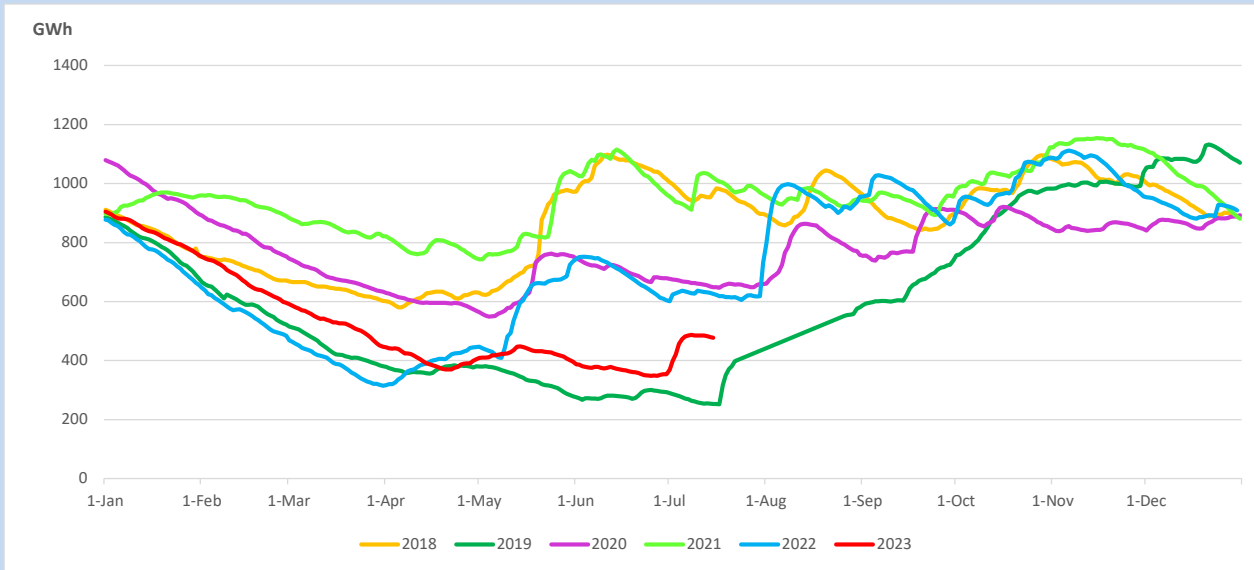
### Reservoir Levels -

as at 06.00 Hr on July 17, 2023

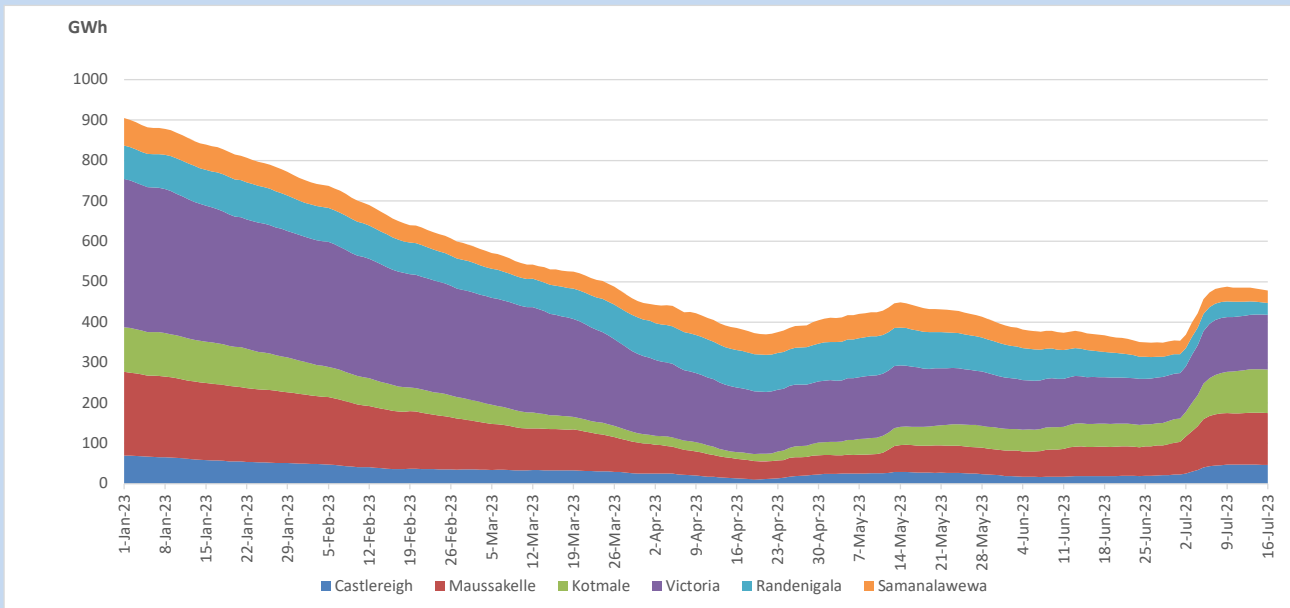


Total Reservoir Level 478 GWh  
 % of Total capacity 39.7%

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

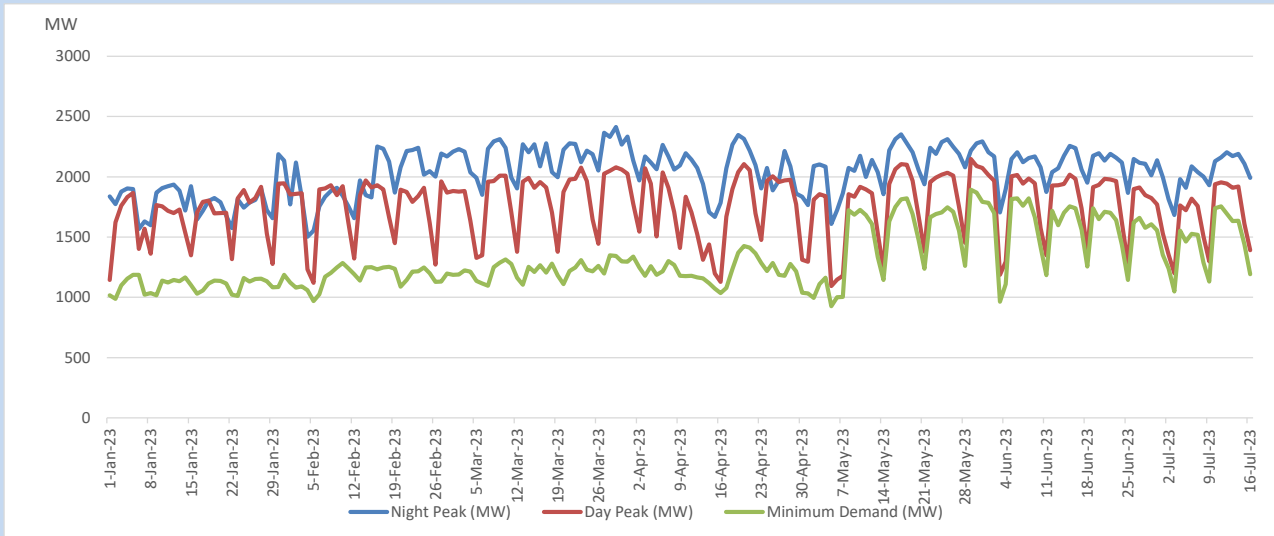


## 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





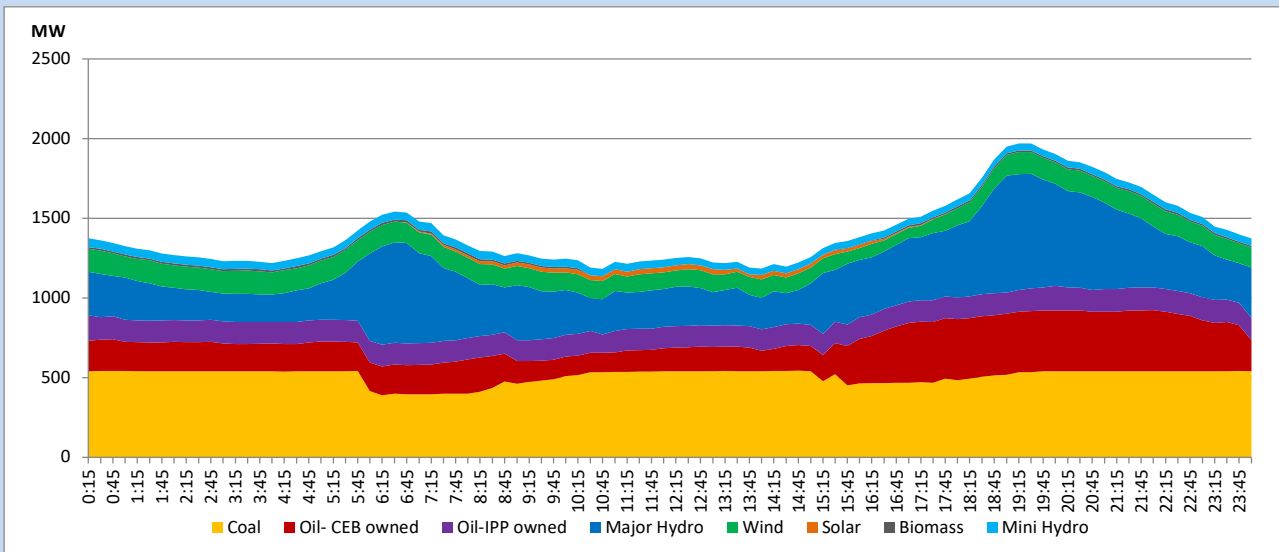
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

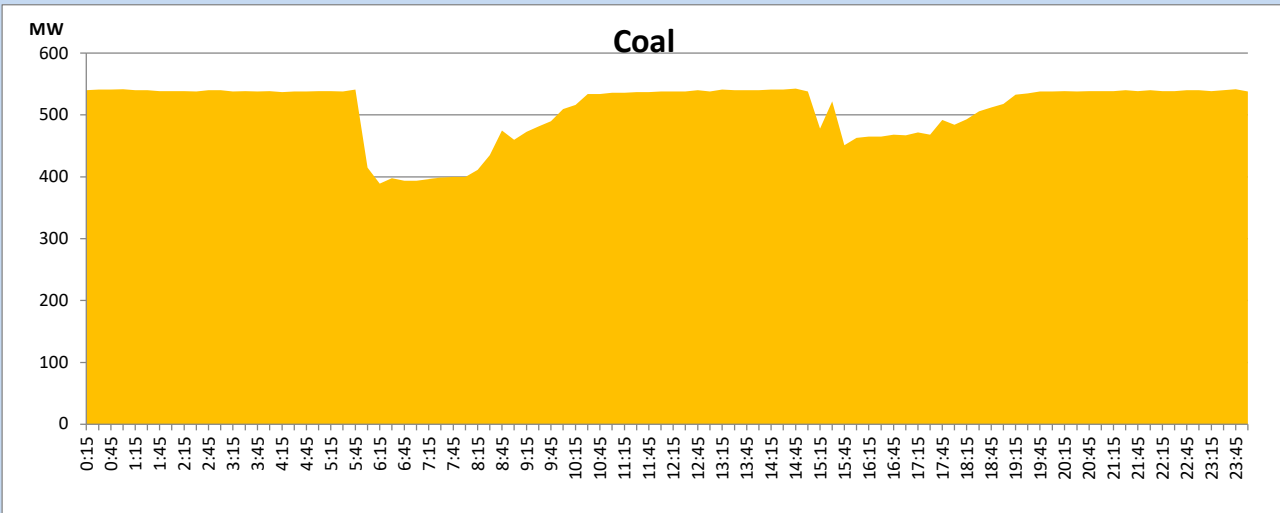
July 16, 2023



Solar and wind data is based on Telemetered Power Stations only

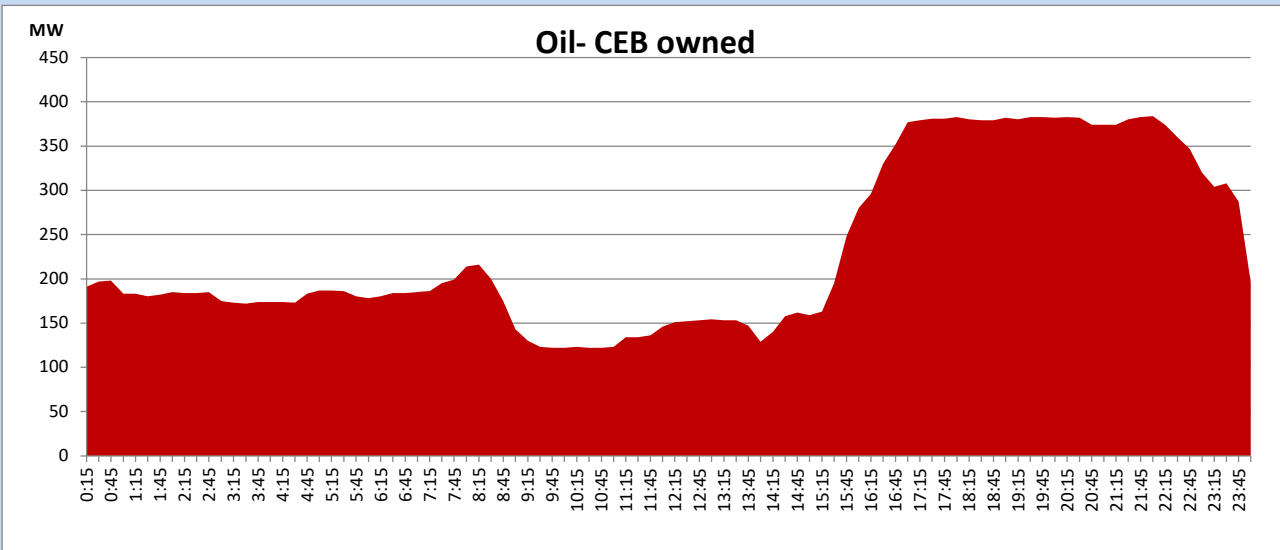
## Coal Generation during

July 16, 2023



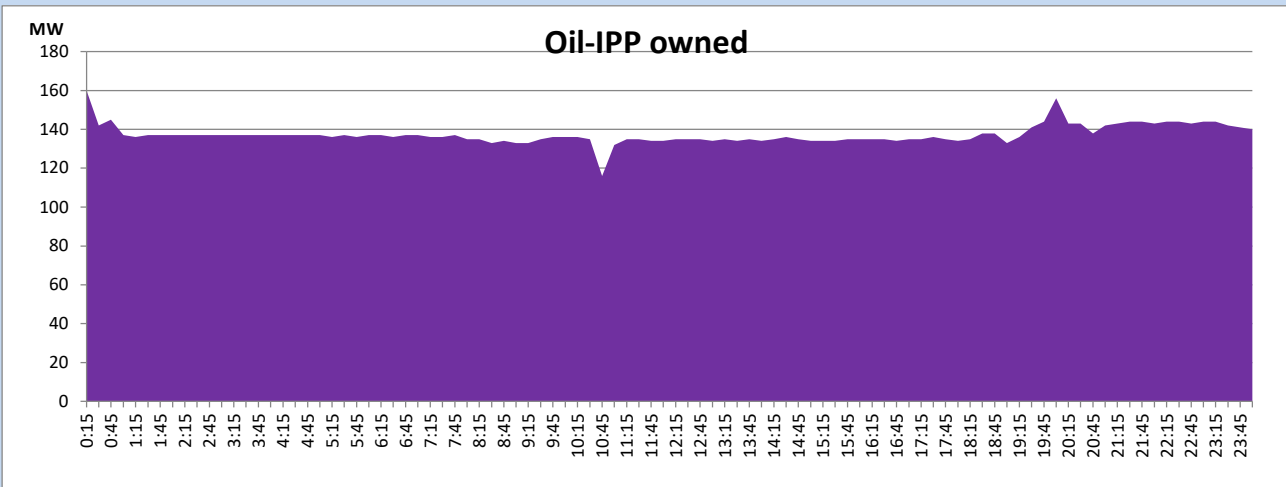
## CEB Oil Plant Generation during

July 16, 2023



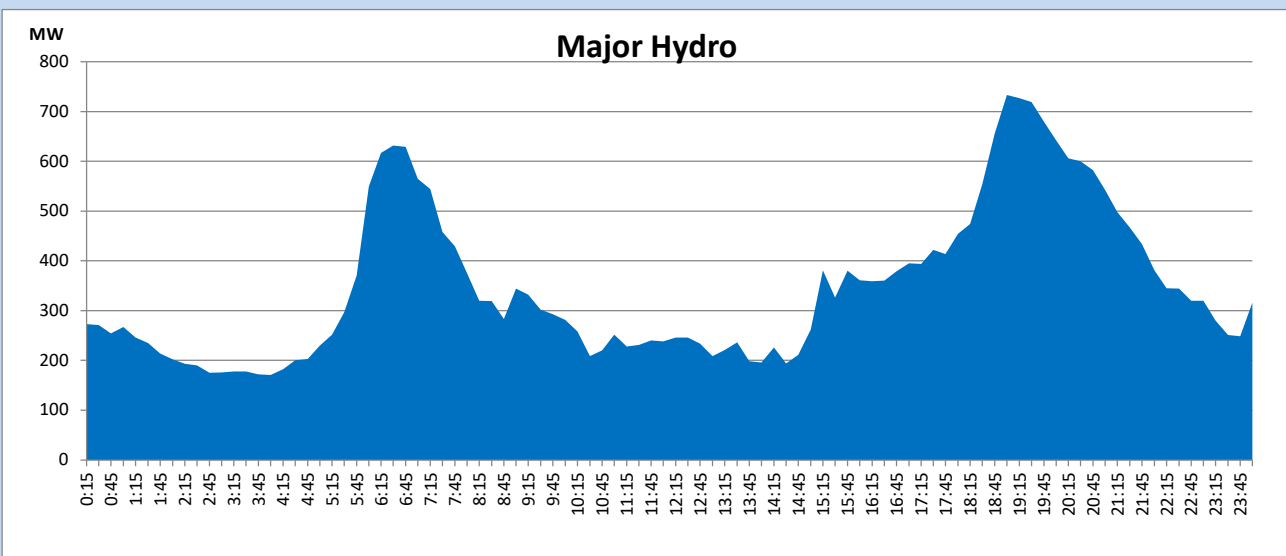
IPP Oil Plant Generation during

July 16, 2023



Major Hydro Generation during

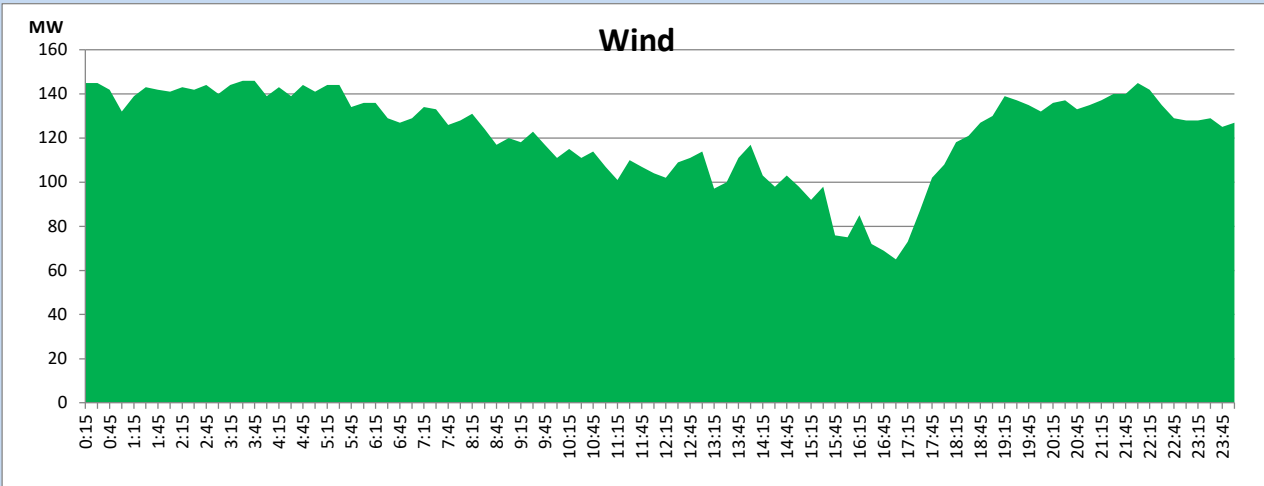
July 16, 2023



## Wind Generation during

July 16, 2023

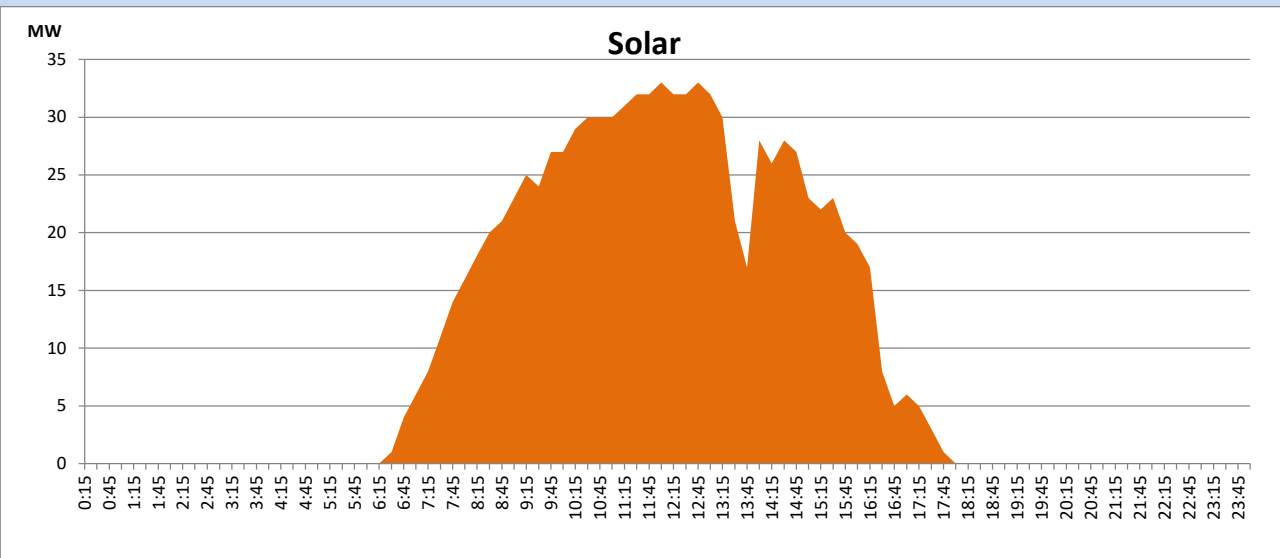
Based on Telemetered Power Stations only



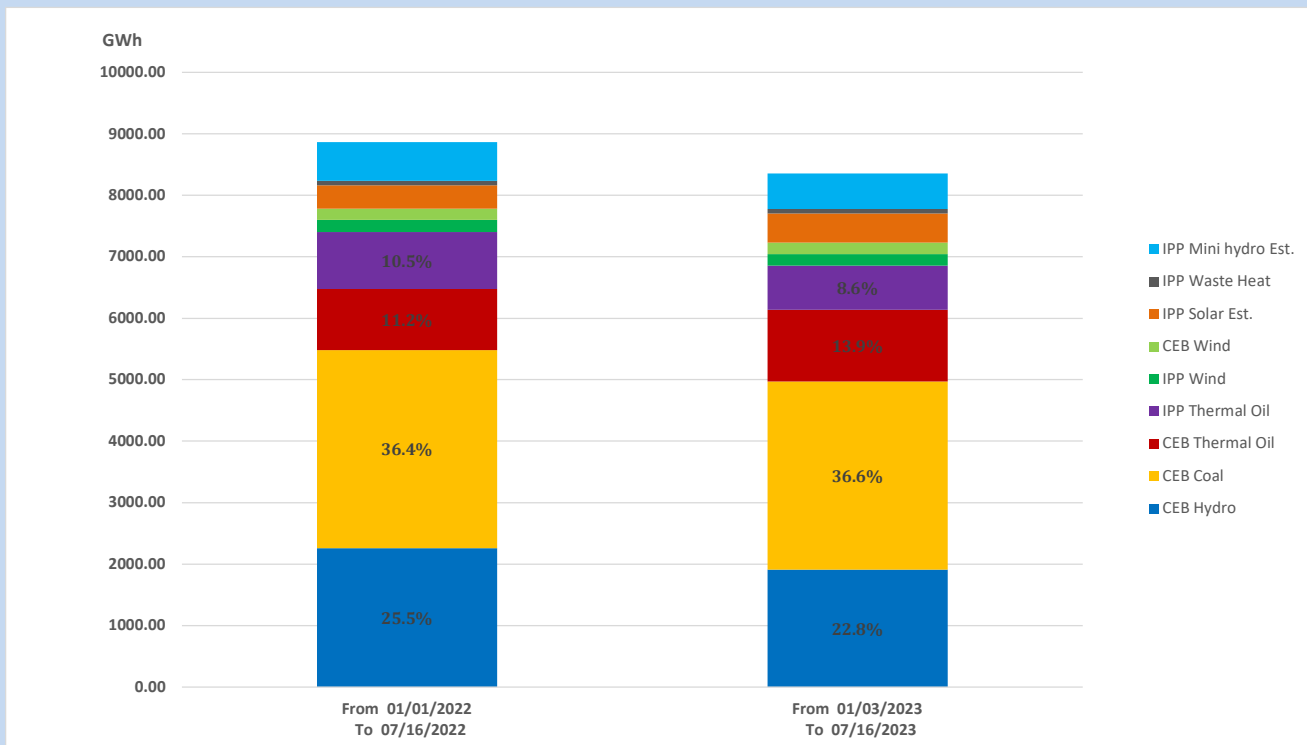
## Solar Generation during

July 16, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 07/16/2022

8865 GWh

From 01/01/2023 To 07/16/2023

8358 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 16, 2023

- 1). LVPS Unit 01 ran back to 150MW (net) at 05:57hrs due to a tripping of an ID fan. LVPS Unit 01 reached full load at 10:55hrs.
- 2). Kerawalapitiya 220/33kV T/F 01 and 02 tripped from the 33kV side only along with 33kV feeder 03 at 10:24hrs causing all feeders to be dead. The both T/Fs and all affected feeders except feeder 01,02,03 were restored by 11:29hrs.
- 3). Hambantota 220/132kV T/F 01 tripped from both ends at 13:30hrs due to the operation of differential protection. The T/F 01 was restored at 13:55hrs 4). LVPS unit 01 coal feeder tripped at 15:00hrs and is being operated with 03 coal mills only. LVPS unit 01 availability limited at 183MW (net). LVPS Unit 01 reached full load at 19:30hrs.
- 5). Sapugaskanda Unit 07 tripped at 20:44hrs rejecting 9MW from the system due to high temperature of lube oil and resumed generation at 21:18hrs.
- 6). Kiribathkumbura 132/33kV T/F 01 tripped from both ends at 21:48hrs due to the operation of differential protection. The T/F 01 is yet to be normalized.
- 7.) KCCP ST which was tripped at 15:23hrs (14.07.2023), made available at 5:34hrs (17.07.2023).