

# Generation and Reservoirs Statistics

August 21, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

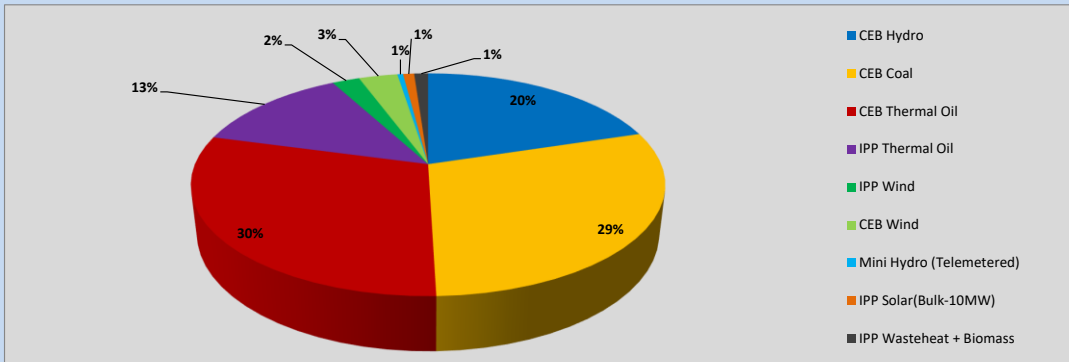


Table 01

	Generation (MWh)
CEB Hydro	8,916
CEB Coal	12,923
CEB Thermal Oil	13,075
IPP Thermal Oil	5,684
IPP Wind	988
CEB Wind	1,394
Mini Hydro (Telemetered)	203
IPP Solar (Bulk)	398
IPP Waste heat + Biomass	500
<b>Total Generation (Excluding estimated figures)</b>	<b>44,081</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	3567
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1650
<b>Total Generation (Including estimated figures)</b>	<b>49,602</b>

\* Estimated figures of CEB generation report

Table 02

	Installed Capacity (MW)
CEB Hydro	1409
CEB Coal	810
CEB Thermal Oil	781
IPP Thermal Oil (West Coast)	270
IPP Wind	148
CEB Wind	100
Mini Hydro	416
IPP Waste heat + Biomass	50
IPP Solar	130
Rooftop Solar* (Ordinary)	267
Rooftop Solar* (LT Bulk)	256
Rooftop Solar* (HT Bulk)	61

Data Source - Monthly Review Report [May-2023]

## 2. Cumulative Dispatch

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

Table 03 - Current Month

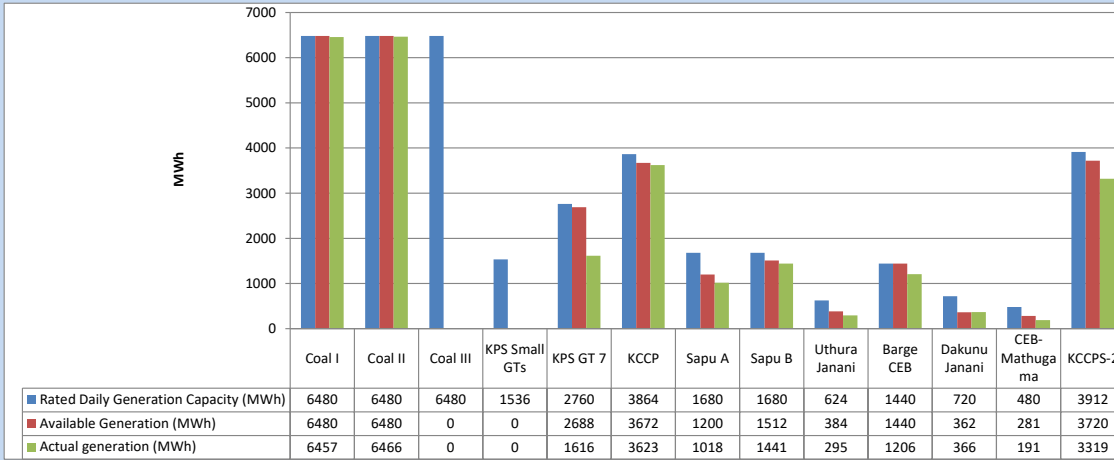
Category	Dispatch (GWh)	
CEB Hydro	188	21.56%
CEB Coal	205	23.52%
CEB Thermal Oil	266	30.40%
IPP Thermal	123	14.02%
SPP Wind	33	3.76%
CEB Wind	34	3.90%
Mini Hydro (Telemetered)	6	0.74%
IPP Solar (Bulk-10MW)	8	0.87%
IPP Waste heat + BMP	11	1.21%
<b>Total</b>	<b>874</b>	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,235	24.72%
CEB Coal	3,455	38.22%
CEB Thermal Oil	1,569	17.36%
IPP Thermal	926	10.24%
SPP Wind	243	2.69%
CEB Wind	251	2.77%
Mini Hydro (Telemetered)	208	2.30%
IPP Solar (Bulk-10MW)	71	0.78%
IPP Waste heat	83	0.92%
<b>Total</b>	<b>9,042</b>	

### 3. CEB owned Thermal Plant Dispatch

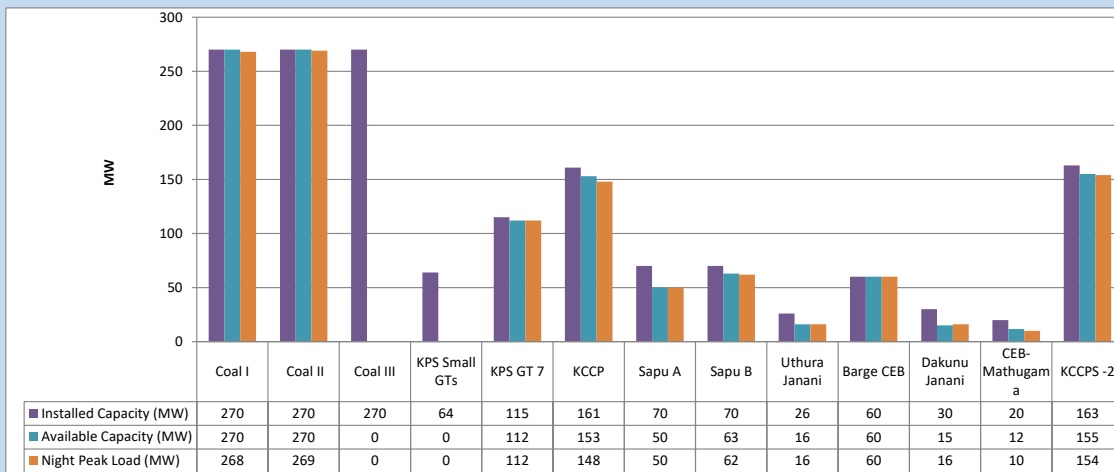
August 21, 2023



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

August 22, 2023

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

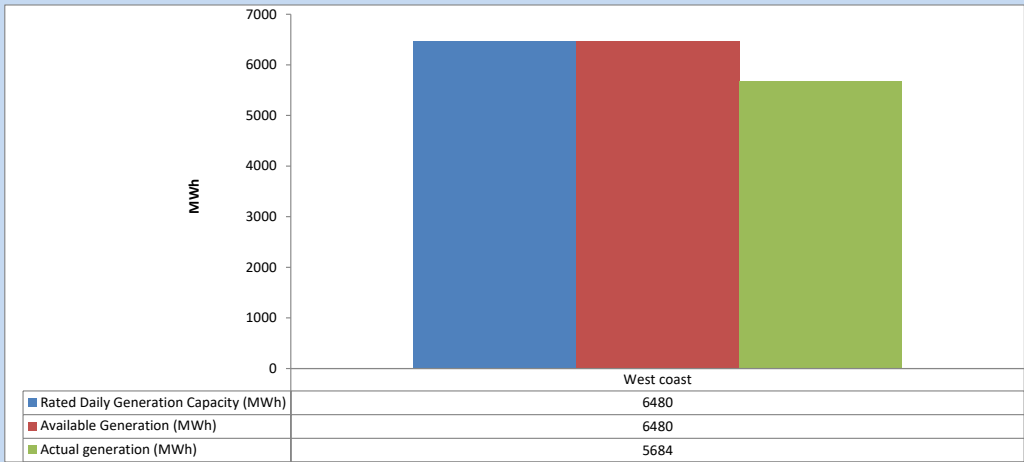


Plant availability is recorded at 6.00 am on

August 22, 2023

5. IPP owned Thermal Plant Dispatch

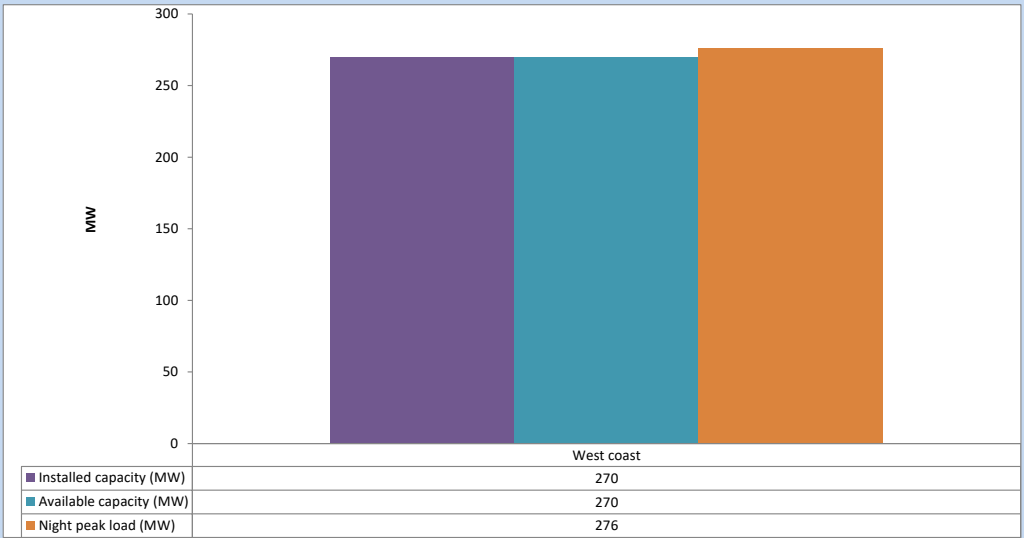
August 21, 2023



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

August 22, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

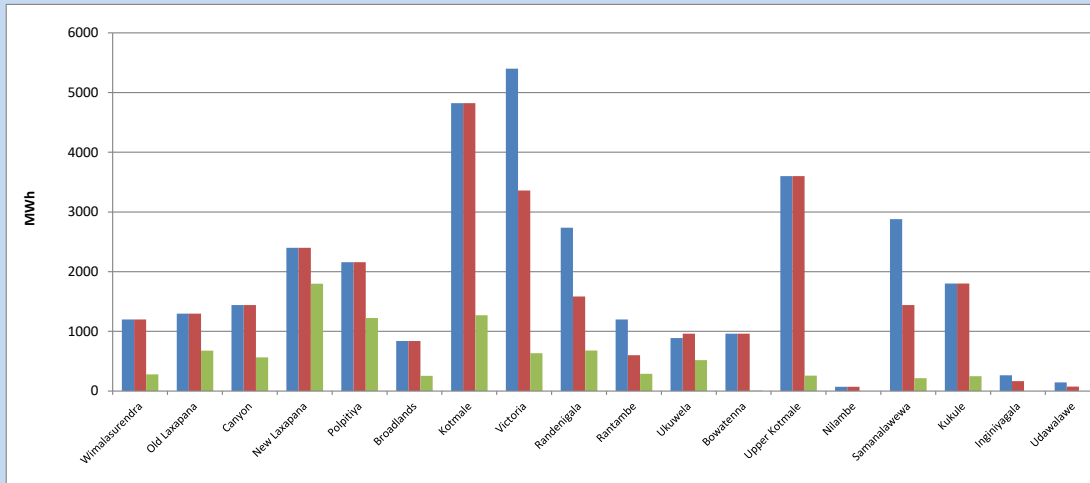


Plant availability is recorded at 6.00 am on

August 22, 2023

### 7. Major Hydro Plant Dispatch

August 21, 2023

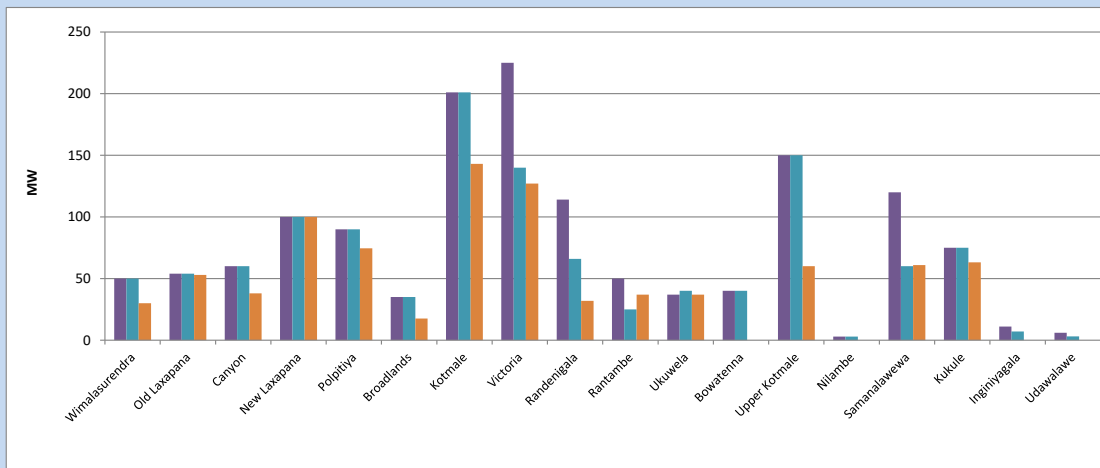


Available Generation is estimated based on plant availability at 6.00am on August 22, 2023  
Broadlands power plant is operating in the Commissioning Stage

August 22, 2023

### 8. Major Hydro Plant Loading at Night Peak

August 21, 2023



Plant availability is recorded at 6.00 am on August 22, 2023  
Broadlands power plant is operating in the Commissioning Stage

August 22, 2023

## 9. Summary of Major Plant performance

Table 05

Plant	Installed Capacity	Plant Availability	Night peak Load	Plant Dispatch
	(MW)	(MW)	(MW)	(MWh)
Wimalasurendra	50	50	30	280
Old Laxapana Canyon	54	54	53	677
New Laxapana	60	60	38	563
Polpitiya	100	100	100	1,797
Broadlands	90	90	75	1,225
Kotmale	35	35	18	256
Victoria	201	201	143	1,270
Randenigala	225	140	127	634
Rantambe	114	66	32	679
Ukuwela	50	25	37	289
Bowatenna	37	40	37	518
Upper Kotmale	40	40	0	7
Nilambe	150	150	60	257
Samanalawewa	3	3	0	0
Kukule	120	60	61	214
Inginiyagala	75	75	63	250
Udawalawe	11	7	0	0
Puttalam Coal I	6	3	0	0
Puttalam Coal II	270	270	268	6,457
Puttalam Coal III	270	270	269	6,466
KPS Small GTs	270	0	0	0
KPS GT 7	64	0	0	0
KCCP	115	112	112	1,616
Sapugaskanda A	161	153	148	3,623
Sapugaskanda B	70	50	50	1,018
Uthura Janani	70	63	62	1,441
Barge CEB	26	16	16	295
CEB-Hambantota	60	60	60	1,206
CEB-Mathugama	30	15	16	366
ACE Matara	20	12	10	191
Asia Power	24	0	0	0
KCCPS -2	50	0	0	0
West Coast	163	155	154	3,319
Nothern Power	270	270	276	5,684
ACE Embilipitiya	36	0	0	0
Total	93	0	0	0
	3,483	2,645	2,377	44,081

Plant availability is the availability recorded at 6 am on

August 22, 2023

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

August 21, 2023

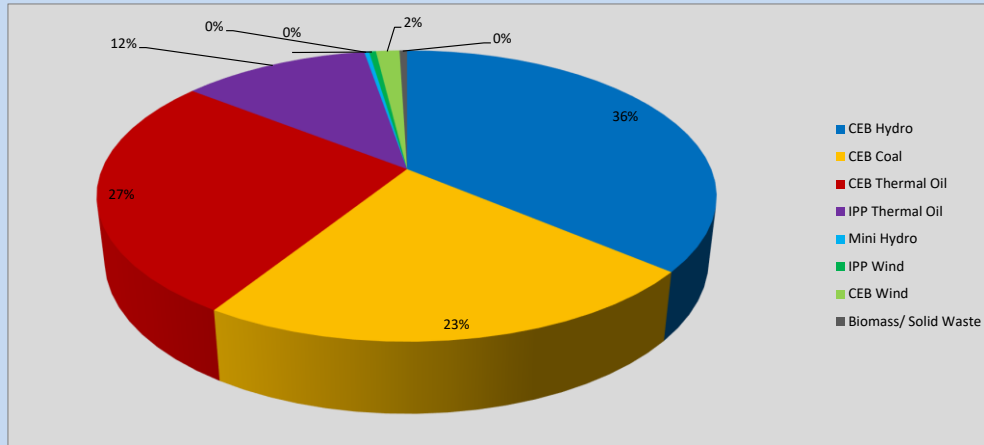


Table 06

CEB Hydro	851	MW
CEB Coal	537	MW
CEB Thermal Oil	628	MW
IPP Thermal Oil	276	MW
Mini Hydro (Telemetered)	7	MW
IPP Wind	10.1	MW
CEB Wind	34.6	MW
Biomass/ Solid Waste	11	MW

### Recorded Peak Demand Data

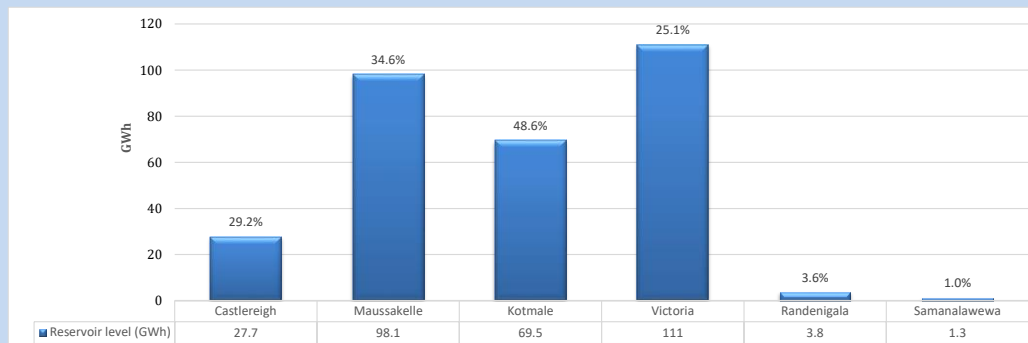
Table 07

Night Peak*	2,355	MW
Day Peak Maximum Demand	2,123	MW
Day Peak Minimum Demand	1,822	MW
Off Peak Minimum Demand	1,305	MW

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

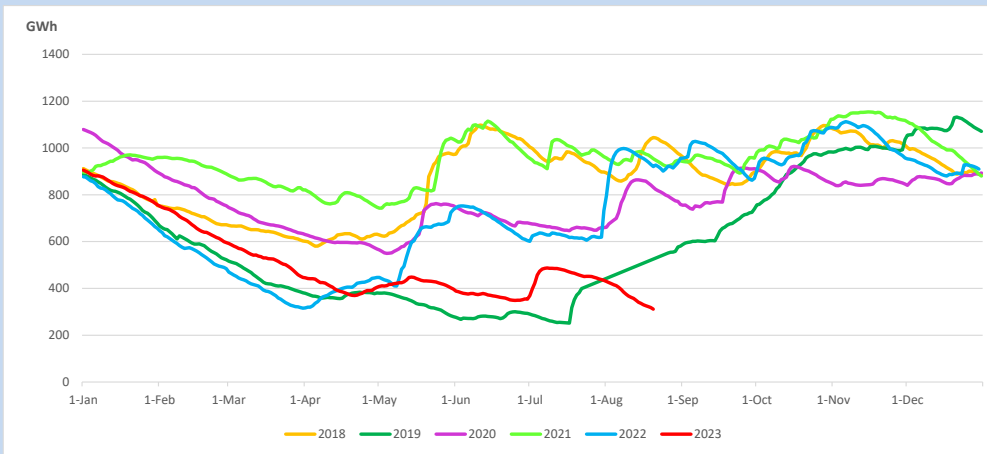
### Reservoir Levels -

as at 06.00 Hr on August 22, 2023

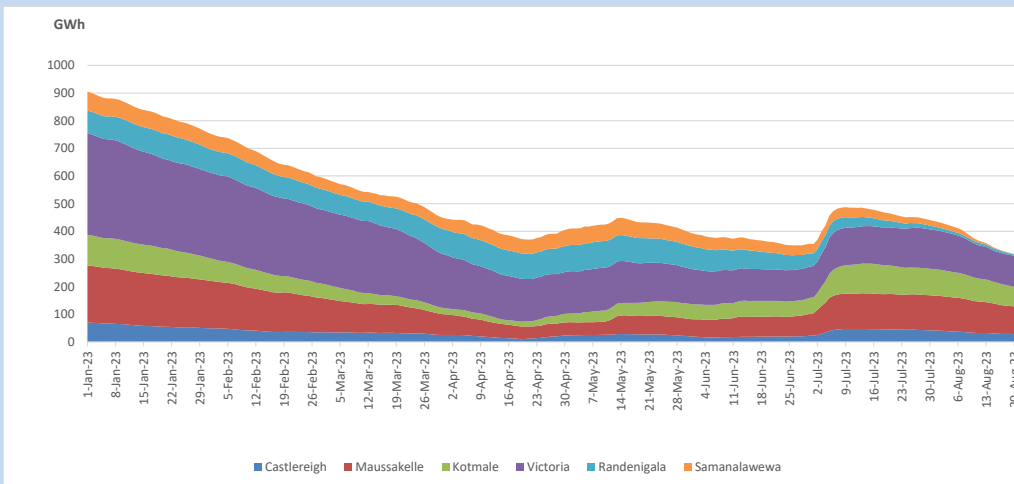


Total Reservoir Level 311.4 GWh  
% of Total capacity 26.0%

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

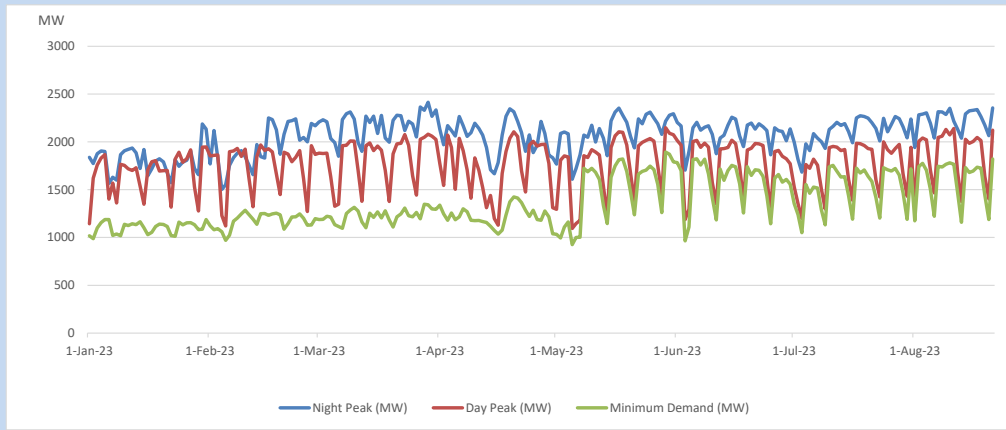


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





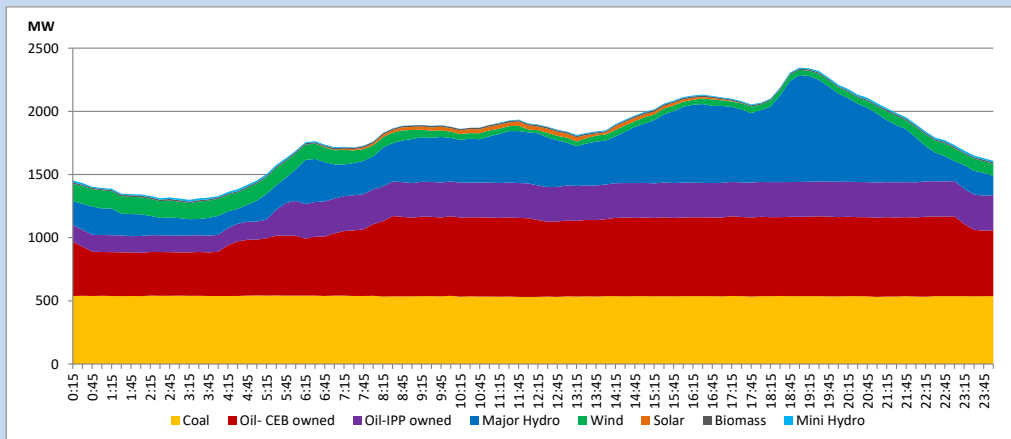
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

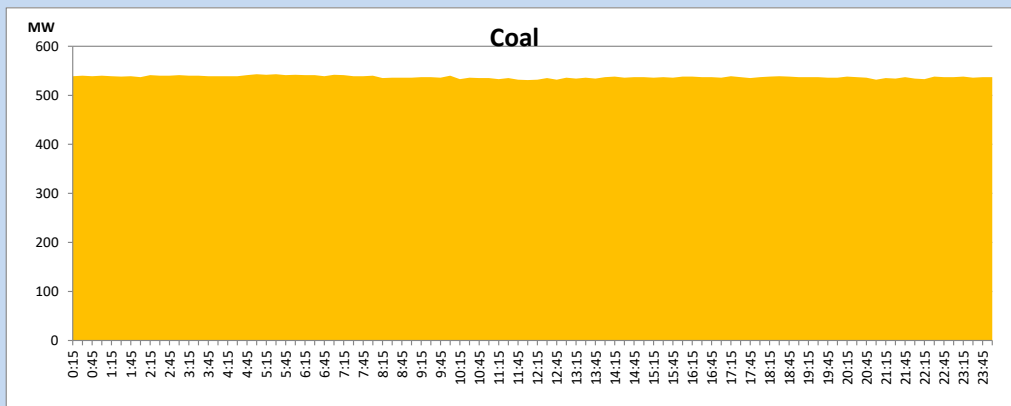
August 21, 2023



Solar and wind data is based on Telemetered Power Stations only

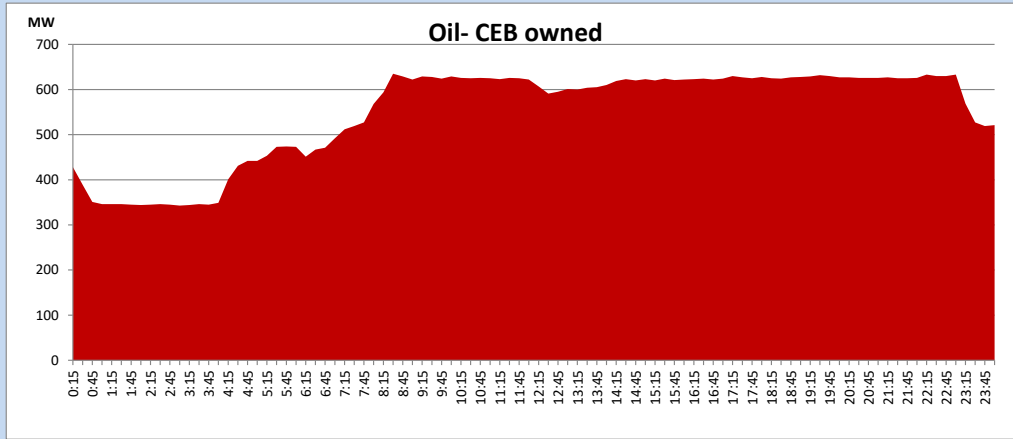
### Coal Generation during

August 21, 2023



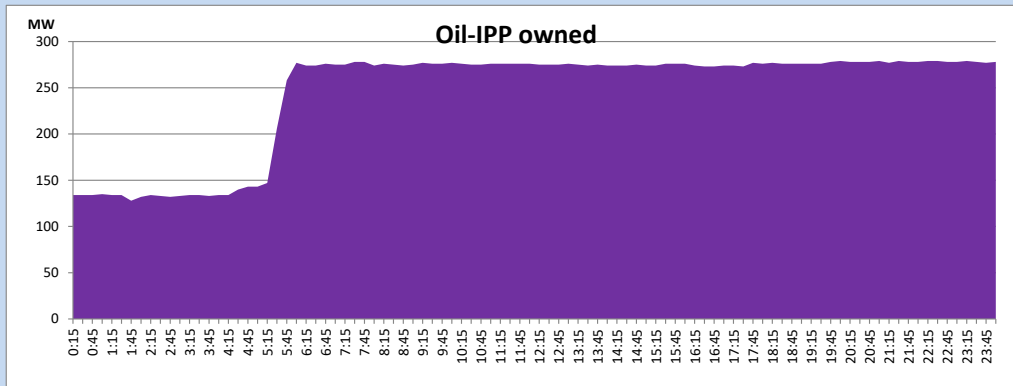
CEB Oil Plant Generation during

August 21, 2023



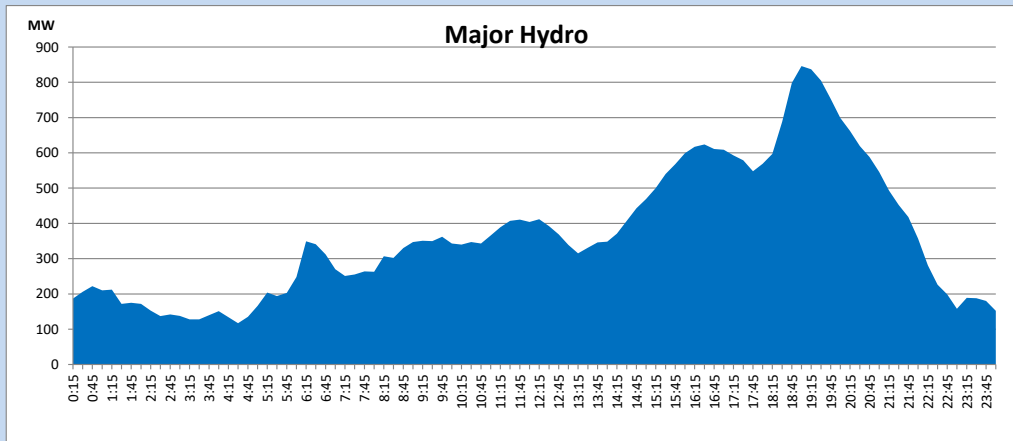
IPP Oil Plant Generation during

August 21, 2023



Major Hydro Generation during

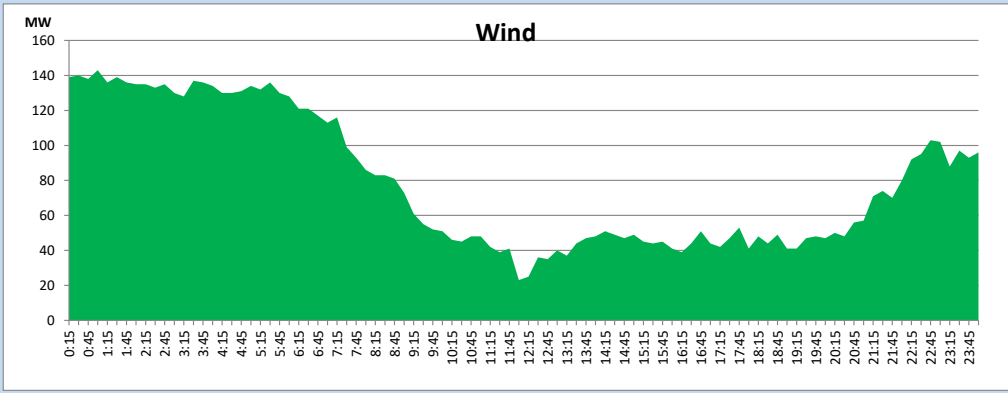
August 21, 2023



## Wind Generation during

August 21, 2023

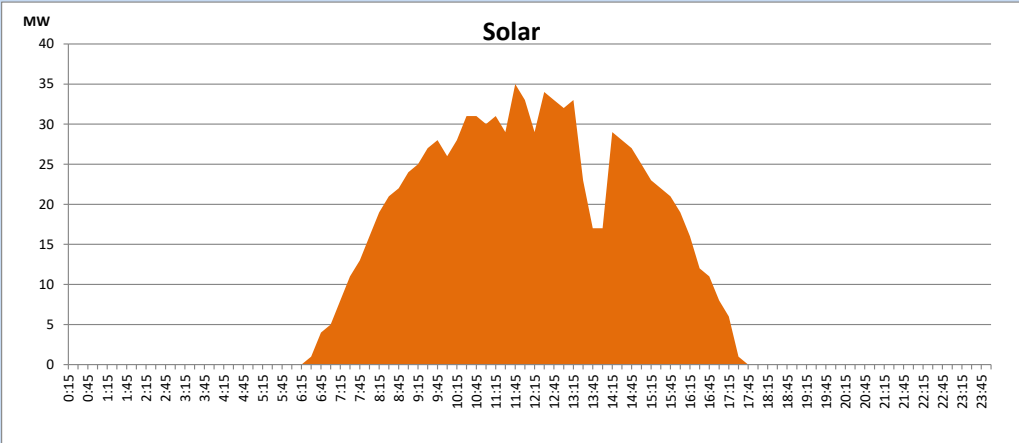
Based on Telemetered Power Stations only



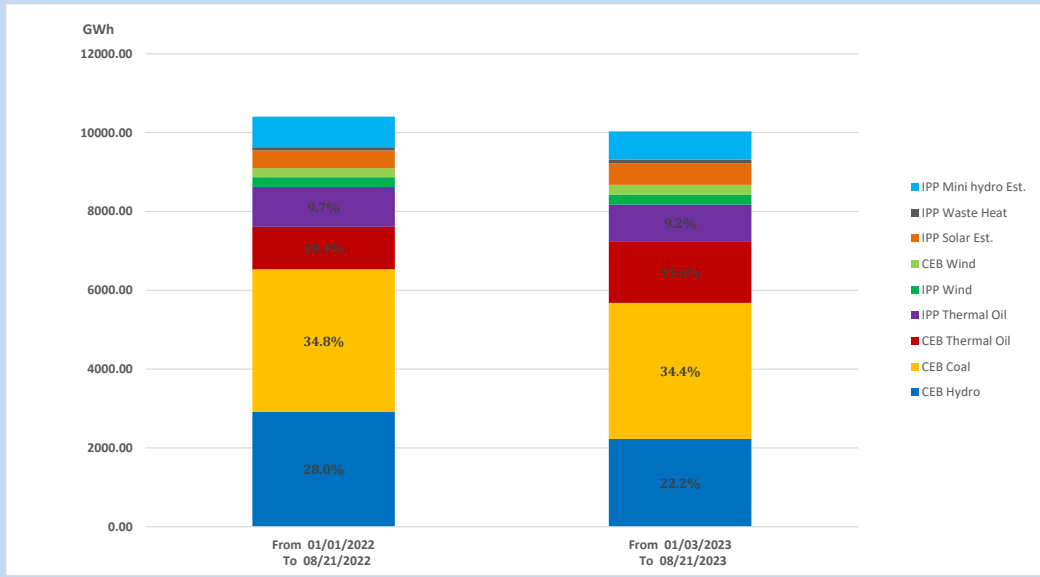
## Solar Generation during

August 21, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 08/21/2022

10406 GWh

From 01/01/2023 To 08/21/2023

10031 GWh

The above figures are including contribution from roof top solar, non telemetered solar and mini hydro plants (figures have been adjusted based on the data from the CEB monthly review reports.)

Thermal Plant Fuel types

Table 08

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

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

Major Incidents reported during the day

August 21, 2023

- 1) Samanawewa full load generation restricted, in order to comply with the operation constraints initiated by propagation of air bubbles at reservoir intake, which would further course for the possible formation of vortex at the same place, due to the severe depletion of Samanawewa reservoir storage.
- 2) ACE -Matara power plant was dispatched for the testing purpose, intermittently throughout the day upon the request received from the plant. First synchronization to the system initiated at 14:56hrs and the final de-synchronization from the system happened at 00:28hrs (22.08.2023). The plant is yet to declare it's availability for the commercial operations.
- 3) Bowathenna plant made available at 17:44hrs, after the A/M which had been facilitated on 28.07.2023.