

# Generation and Reservoirs Statistics

September 6, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

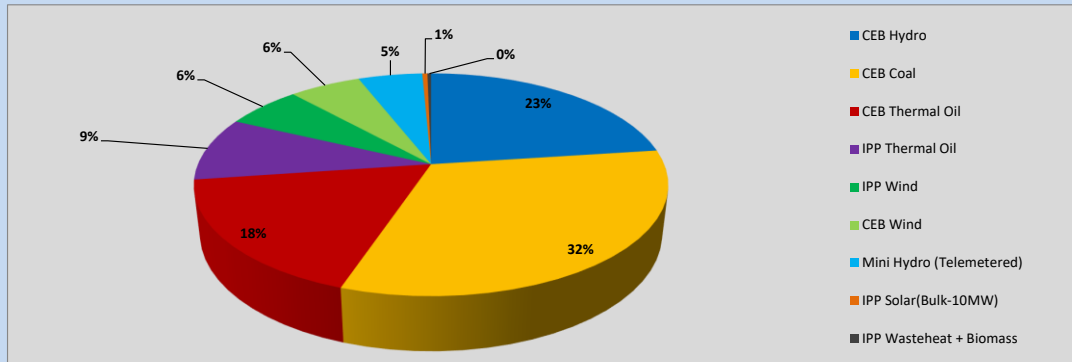


Table 01

	Generation (MWh)
CEB Hydro	8,901
CEB Coal	12,524
CEB Thermal Oil	6,835
IPP Thermal Oil	3,593
IPP Wind	2,408
CEB Wind	2,259
Mini Hydro (Telemetered)	2,033
IPP Solar (Bulk)	162
IPP Waste heat + Biomass	116
<b>Total Generation (Excluding estimated figures)</b>	<b>38,831</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	1607
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1650
<b>Total Generation (Including estimated figures)</b>	<b>42,392</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, ACE Matara and ACE Embilipitiya)	387
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

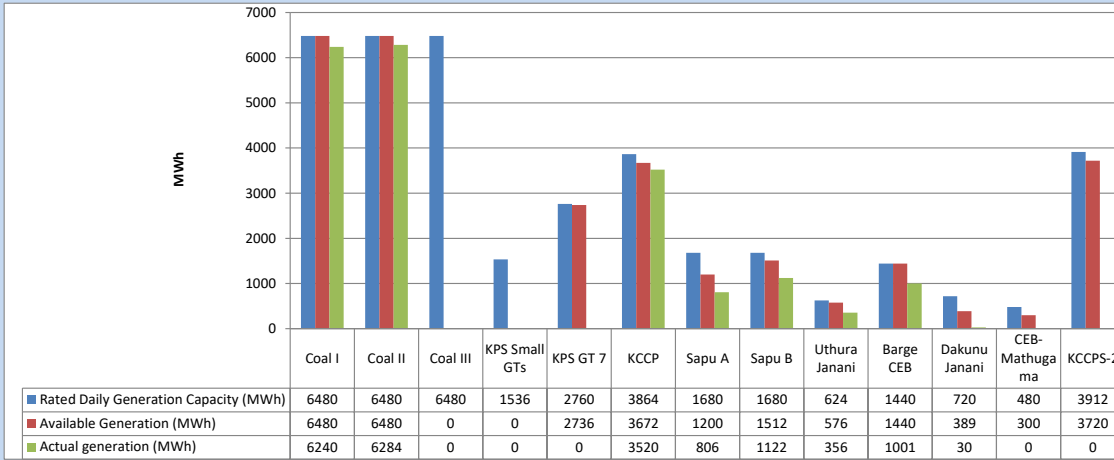
Category	Dispatch (GWh)	
CEB Hydro	46	20.84%
CEB Coal	74	33.26%
CEB Thermal Oil	41	18.45%
IPP Thermal	22	10.12%
SPP Wind	14	6.32%
CEB Wind	13	5.81%
Mini Hydro (Telemetered)	8	3.68%
IPP Solar(Bulk-10MW)	1	0.63%
IPP Waste heat + BMP	2	0.88%
<b>Total</b>	<b>222</b>	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,345	24.22%
CEB Coal	3,658	37.78%
CEB Thermal Oil	1,726	17.83%
IPP Thermal	1,013	10.46%
SPP Wind	274	2.83%
CEB Wind	282	2.91%
Mini Hydro (Telemetered)	218	2.26%
IPP Solar(Bulk-10MW)	76	0.78%
IPP Waste heat	89	0.92%
<b>Total</b>	<b>9,682</b>	

### 3. CEB owned Thermal Plant Dispatch

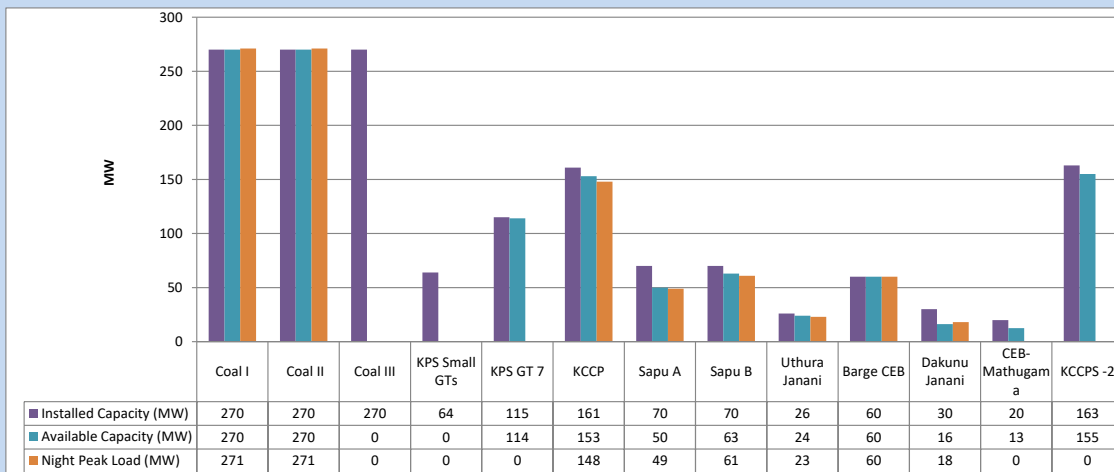
September 6, 2023



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

September 7, 2023

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

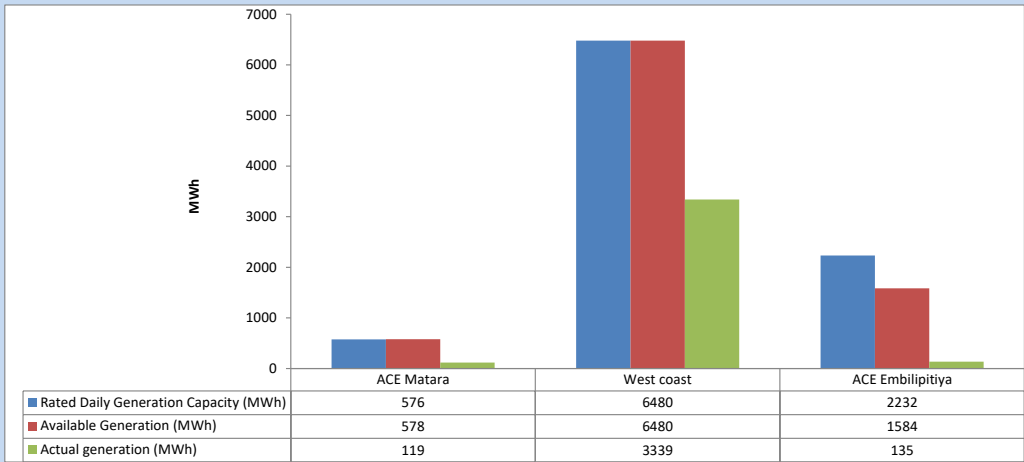


Plant availability is recorded at 6.00 am on

September 7, 2023

5. IPP owned Thermal Plant Dispatch

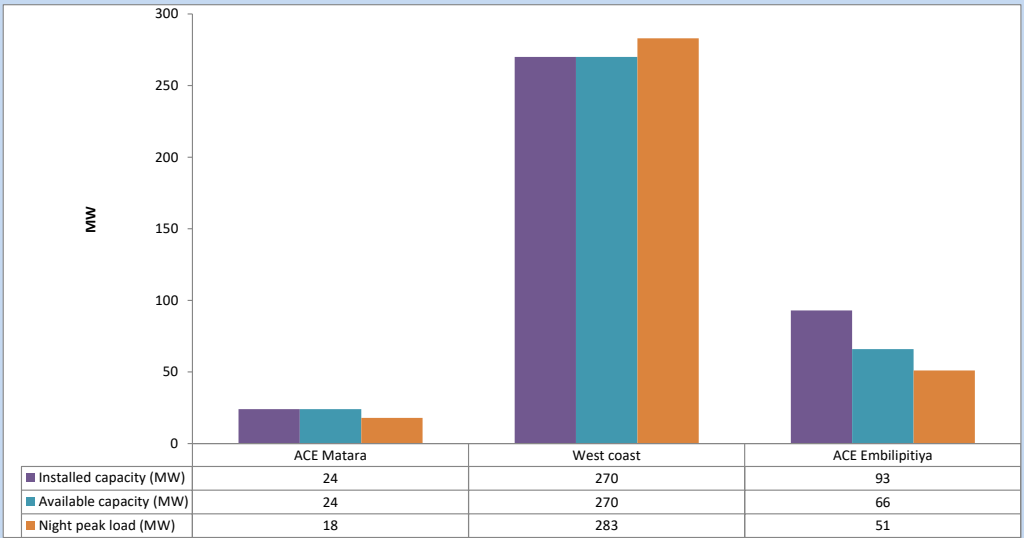
September 6, 2023



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

September 7, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

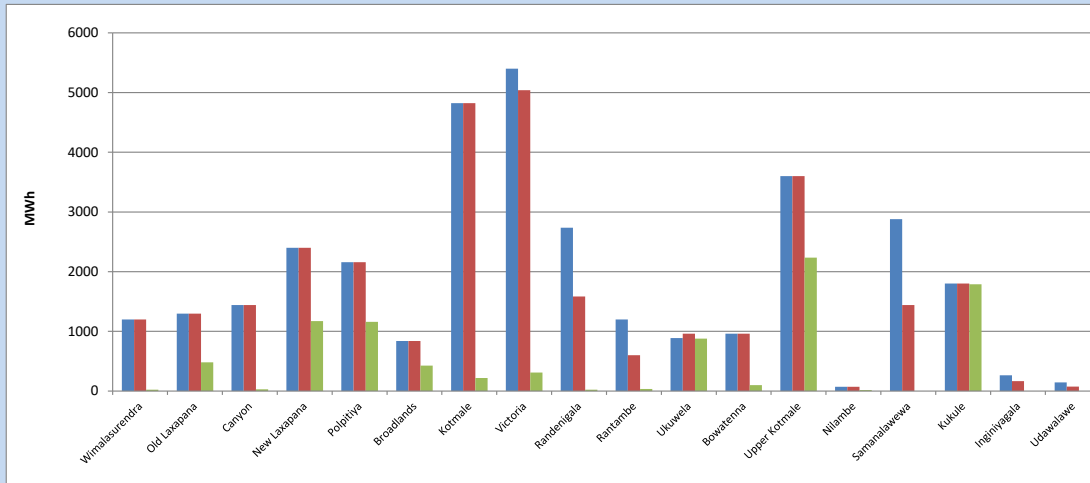


Plant availability is recorded at 6.00 am on

September 7, 2023

7. Major Hydro Plant Dispatch

September 6, 2023

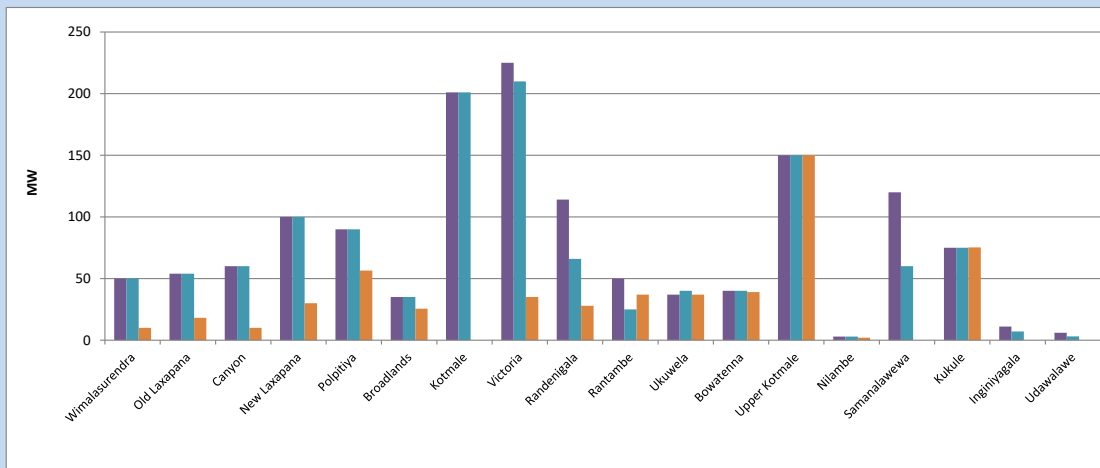


Available Generation is estimated based on plant availability at 6.00am on September 7, 2023  
Broadlands power plant is operating in the Commissioning Stage

September 7, 2023

8. Major Hydro Plant Loading at Night Peak

September 6, 2023



Plant availability is recorded at 6.00 am on September 7, 2023  
Broadlands power plant is operating in the Commissioning Stage

September 7, 2023

## 9. Summary of Major Plant performance

Table 05

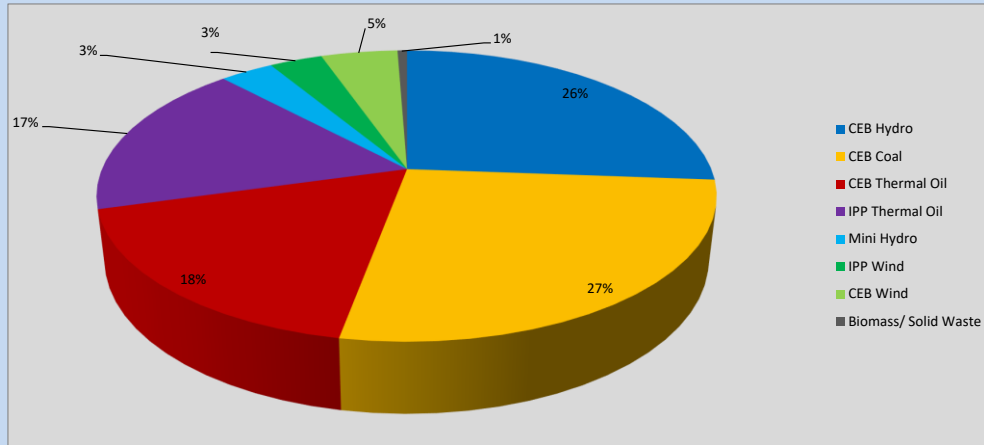
Plant	Installed Capacity	Plant Availability	Night peak Load	Plant Dispatch
	(MW)	(MW)	(MW)	(MWh)
Wimalasurendra	50	50	10	24
Old Laxapana Canyon	54	54	18	480
New Laxapana	60	60	10	29
Polpitiya	100	100	30	1,173
Broadlands	90	90	57	1,160
Kotmale	35	35	26	427
Victoria	201	201	0	220
Randenigala	225	210	35	311
Rantambe	114	66	28	23
Ukuwela	50	25	37	36
Bowatenna	37	40	37	877
Upper Kotmale	40	40	39	100
Nilambe	150	150	150	2,234
Samanalawewa	3	3	2	17
Kukule	120	60	0	0
Inginiyagala	75	75	75	1,790
Udawalawe	11	7	0	0
Puttalam Coal I	6	3	0	0
Puttalam Coal II	270	270	271	6,240
Puttalam Coal III	270	270	271	6,284
KPS Small GTs	270	0	0	0
KPS GT 7	64	0	0	0
KCCP	115	114	0	0
Sapugaskanda A	161	153	148	3,520
Sapugaskanda B	70	50	49	806
Uthura Janani	70	63	61	1,122
Barge CEB	26	24	23	356
CEB-Hambantota	60	60	60	1,001
CEB-Mathugama	30	16	18	30
ACE Matara	20	13	0	0
Asia Power	24	24	18	119
KCCPS -2	50	0	0	0
West Coast	163	155	0	0
Nothern Power	270	270	283	3,339
ACE Embilipitiya	36	0	0	0
Total	93	66	51	135
	3,483	2,817	2,050	38,831

Plant availability is the availability recorded at 6 am on

September 7, 2023

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

September 6, 2023



**Table 06**

CEB Hydro	530	MW
CEB Coal	542	MW
CEB Thermal Oil	359	MW
IPP Thermal Oil	352	MW
Mini Hydro (Telemetered)	68	MW
IPP Wind	66.9	MW
CEB Wind	96.7	MW
Biomass/ Solid Waste	12	MW

**Recorded Peak Demand Data**

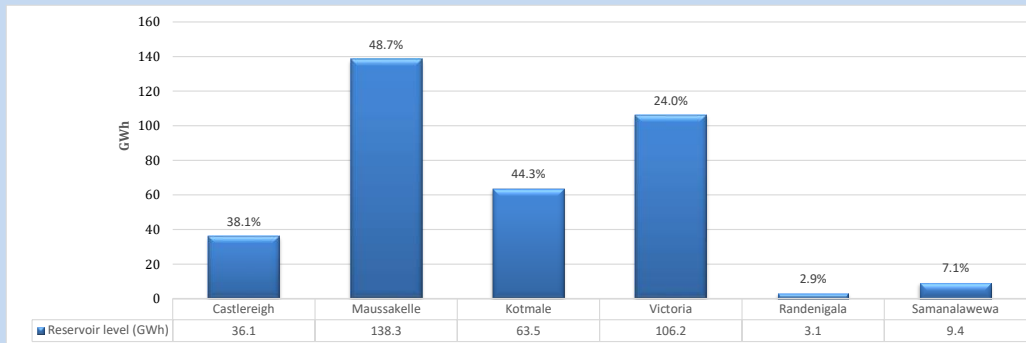
**Table 07**

Night Peak*	2,027	MW
Day Peak Maximum Demand	1,805	MW
Day Peak Minimum Demand	1,626	MW
Off Peak Minimum Demand	1,152	MW

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

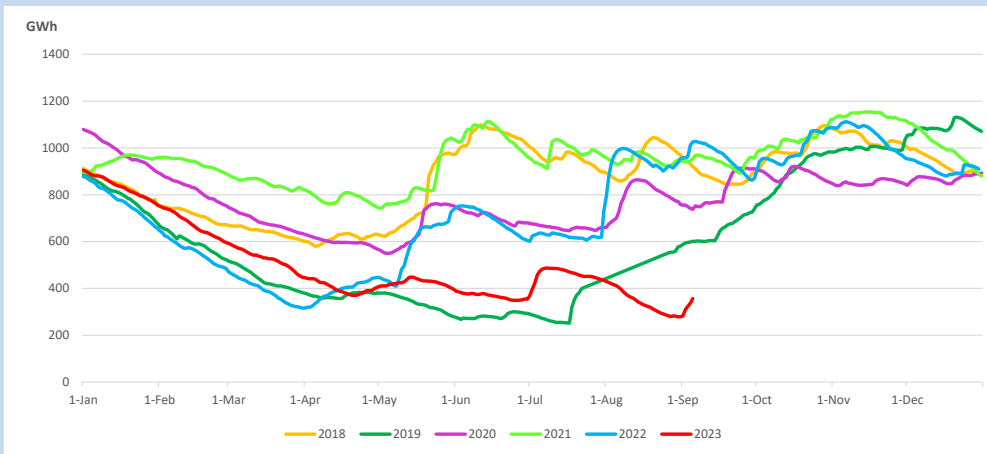
**Reservoir Levels -**

as at 06.00 Hr on September 7, 2023

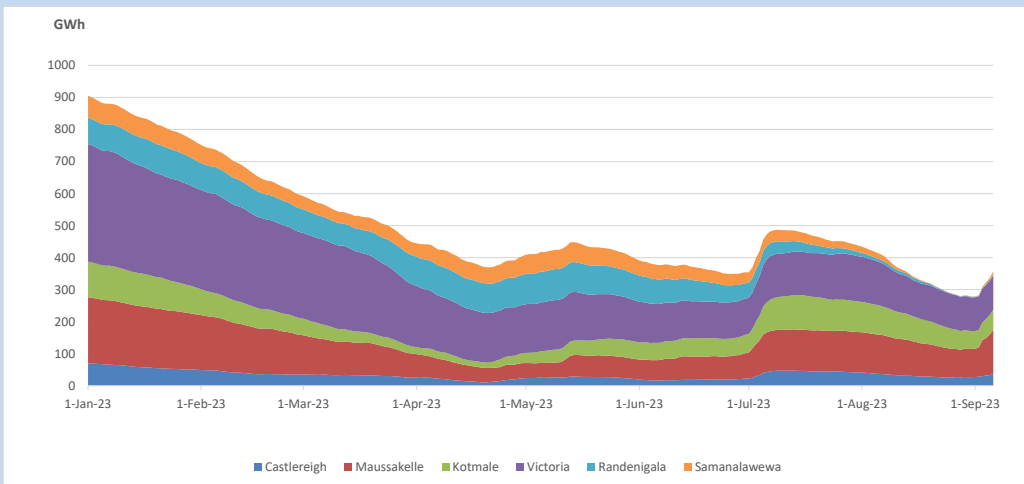


Total Reservoir Level 356.6 GWh  
 % of Total capacity 29.6%

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

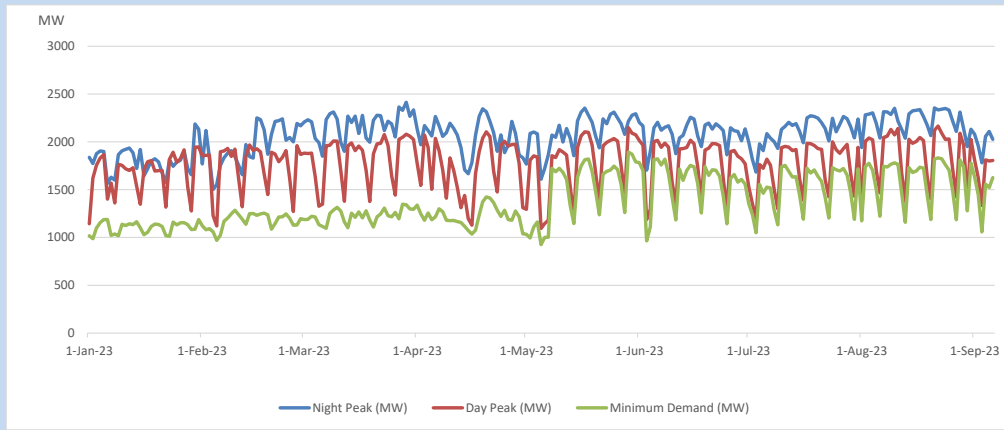


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





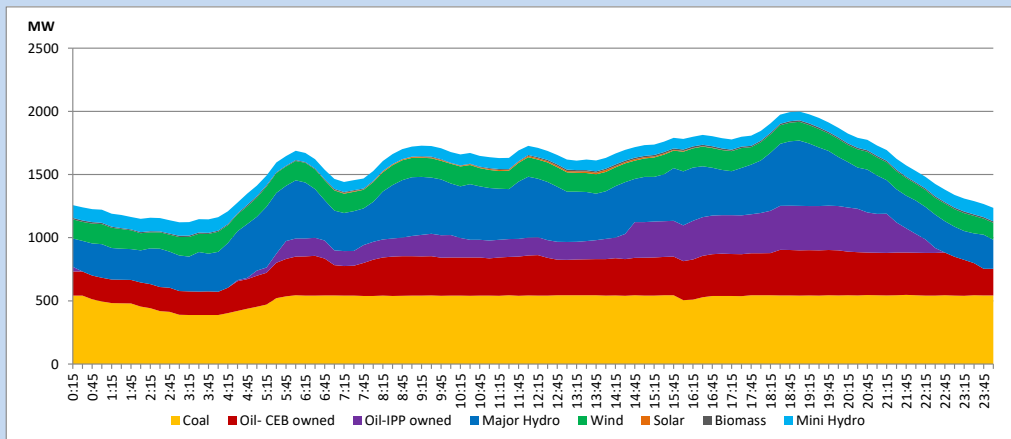
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

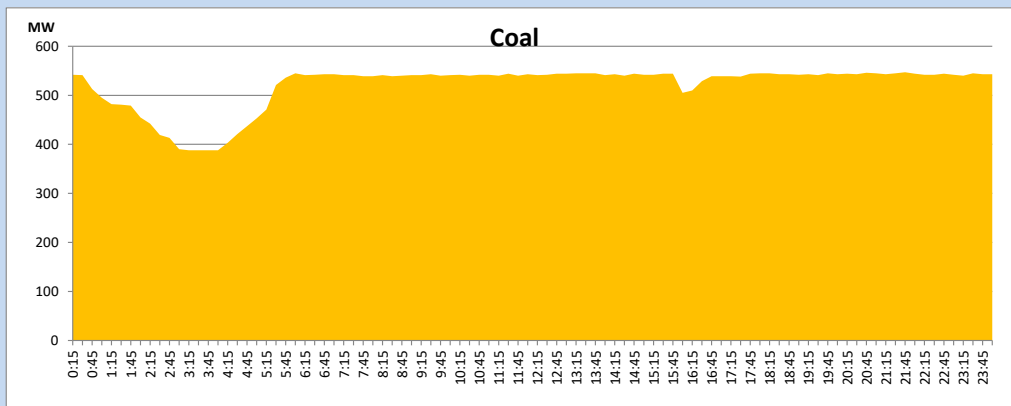
September 6, 2023



Solar and wind data is based on Telemetered Power Stations only

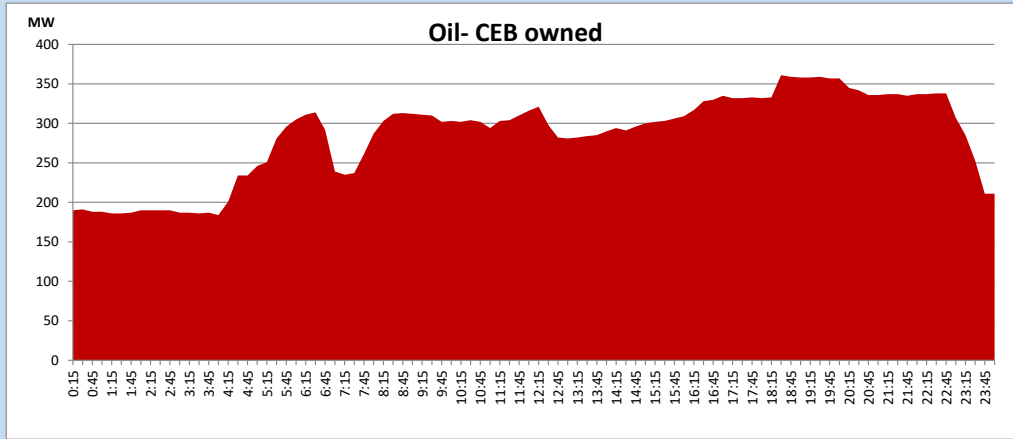
### Coal Generation during

September 6, 2023



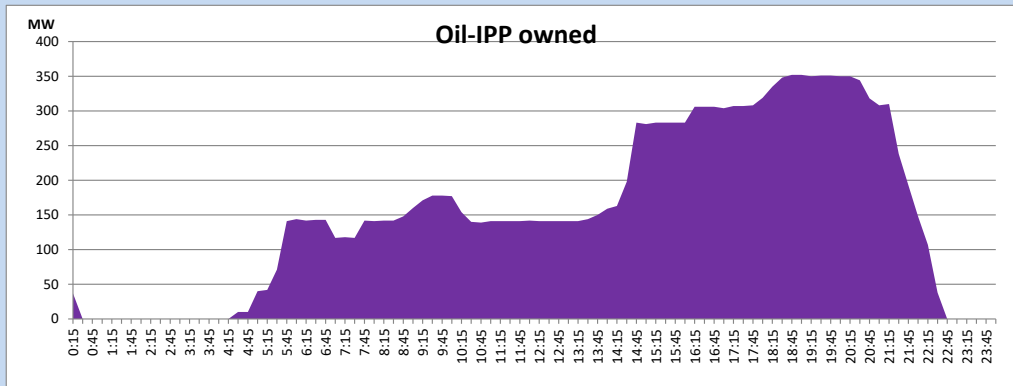
CEB Oil Plant Generation during

September 6, 2023



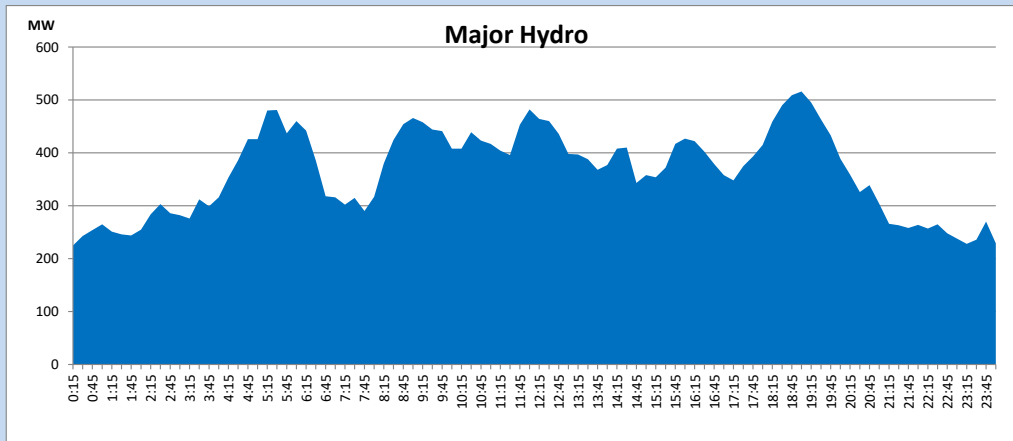
IPP Oil Plant Generation during

September 6, 2023



Major Hydro Generation during

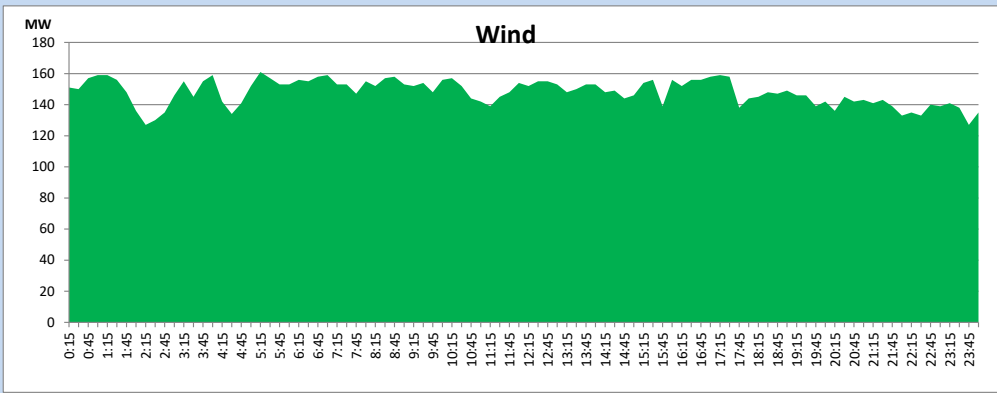
September 6, 2023



## Wind Generation during

September 6, 2023

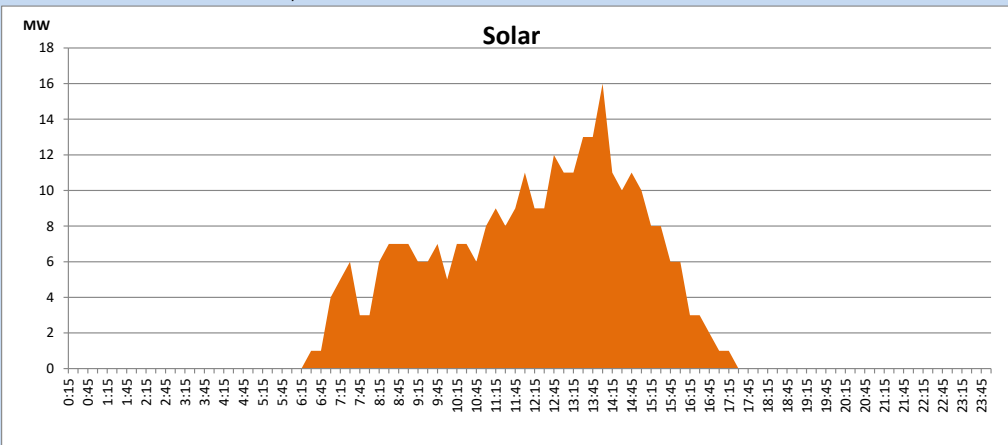
Based on Telemetered Power Stations only



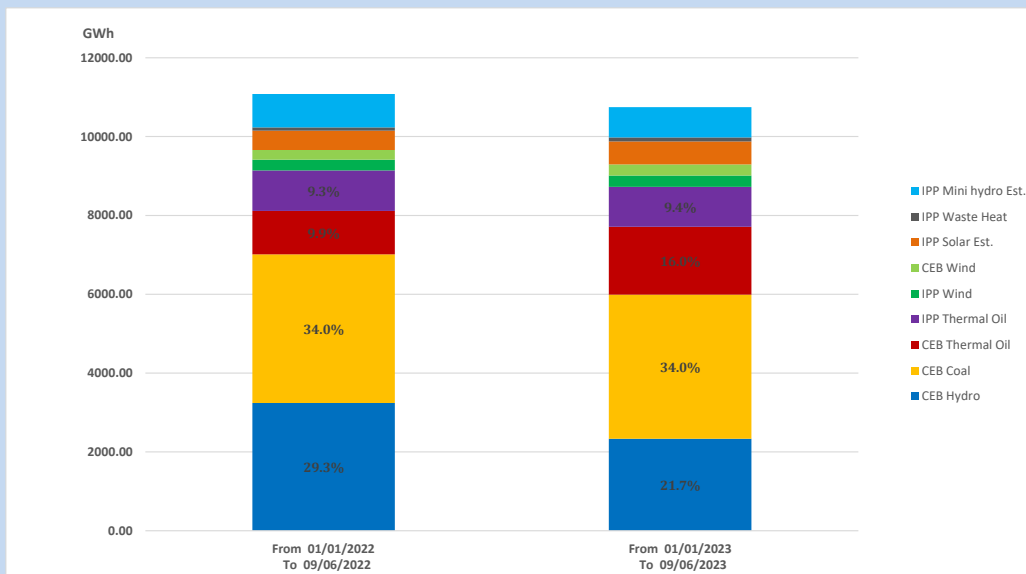
## Solar Generation during

September 6, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 09/06/2022

11083 GWh

From 01/01/2023 To 09/06/2023

10749 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
ACE Matara	Heavy Fuel
ACE Embilipitiya	Heavy Fuel

Major Incidents reported during the day

September 6, 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) Kukule pond spilling continues to the present hour.