

# Generation and Reservoirs Statistics

September 22, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

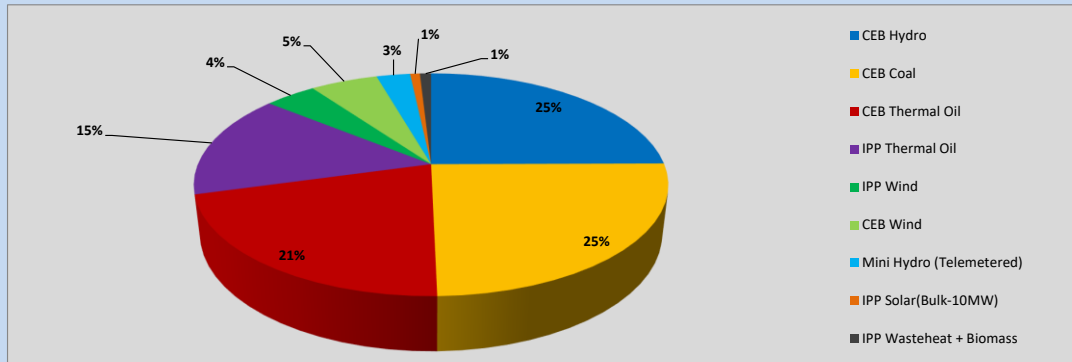


Table 01

	Generation (MWh)
CEB Hydro	9,595
CEB Coal	9,545
CEB Thermal Oil	8,108
IPP Thermal Oil	5,845
IPP Wind	1,616
CEB Wind	2,118
Mini Hydro (Telemetered)	1,059
IPP Solar (Bulk)	306
IPP Waste heat + Biomass	352
<b>Total Generation (Excluding estimated figures)</b>	<b>38,544</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	2581
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1660
<b>Total Generation (Including estimated figures)</b>	<b>43,089</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

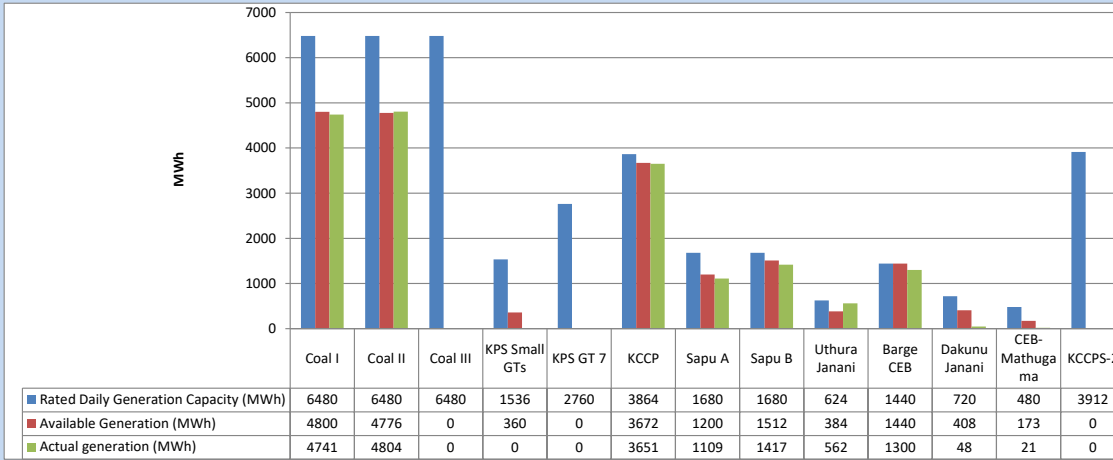
Category	Dispatch (GWh)	
CEB Hydro	188	22.97%
CEB Coal	252	30.69%
CEB Thermal Oil	159	19.41%
IPP Thermal	83	10.12%
SPP Wind	46	5.66%
CEB Wind	47	5.68%
Mini Hydro (Telemetered)	31	3.73%
IPP Solar(Bulk-10MW)	6	0.71%
IPP Waste heat + BMP	8	1.03%
<b>Total</b>	<b>820</b>	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,487	24.19%
CEB Coal	3,836	37.32%
CEB Thermal Oil	1,844	17.94%
IPP Thermal	1,073	10.44%
SPP Wind	307	2.98%
CEB Wind	316	3.07%
Mini Hydro (Telemetered)	241	2.34%
IPP Solar(Bulk-10MW)	80	0.78%
IPP Waste heat	96	0.93%
<b>Total</b>	<b>10,280</b>	

### 3. CEB owned Thermal Plant Dispatch

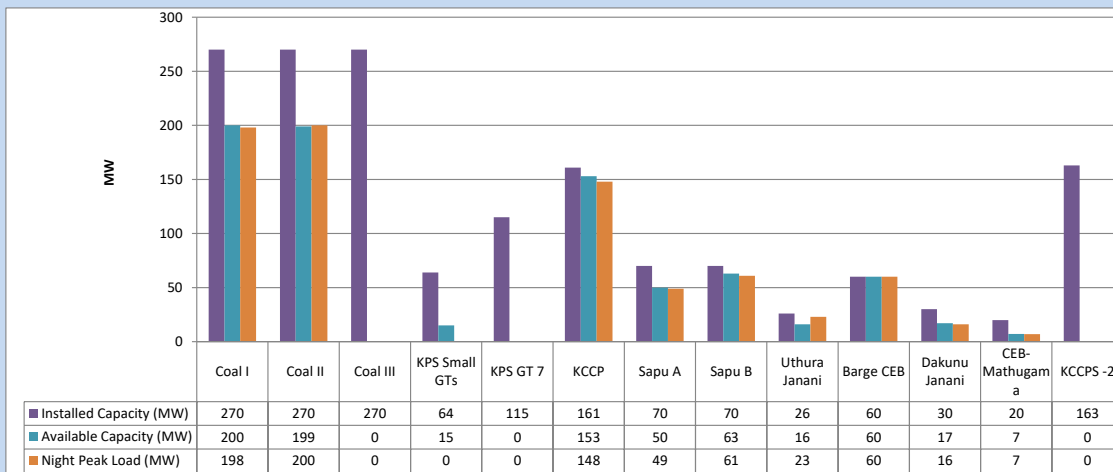
September 22, 2023



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

September 23, 2023

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

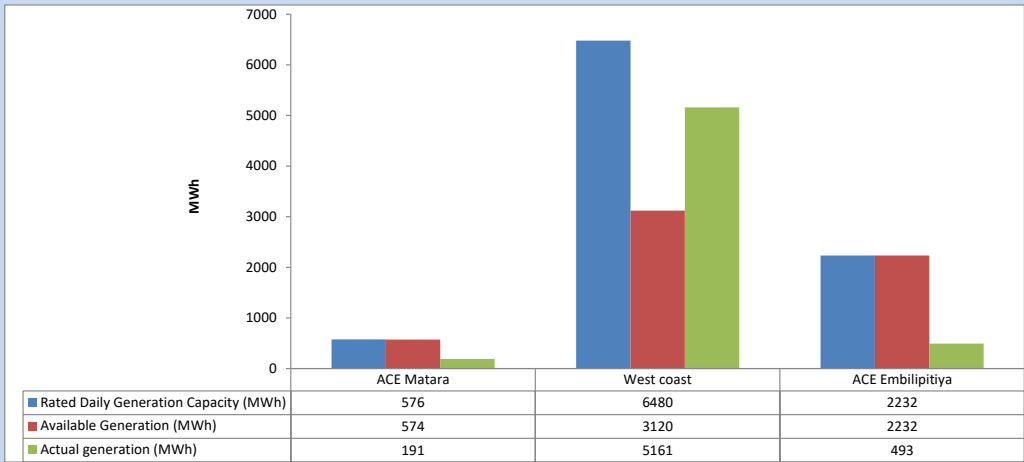


Plant availability is recorded at 6.00 am on

September 23, 2023

5. IPP owned Thermal Plant Dispatch

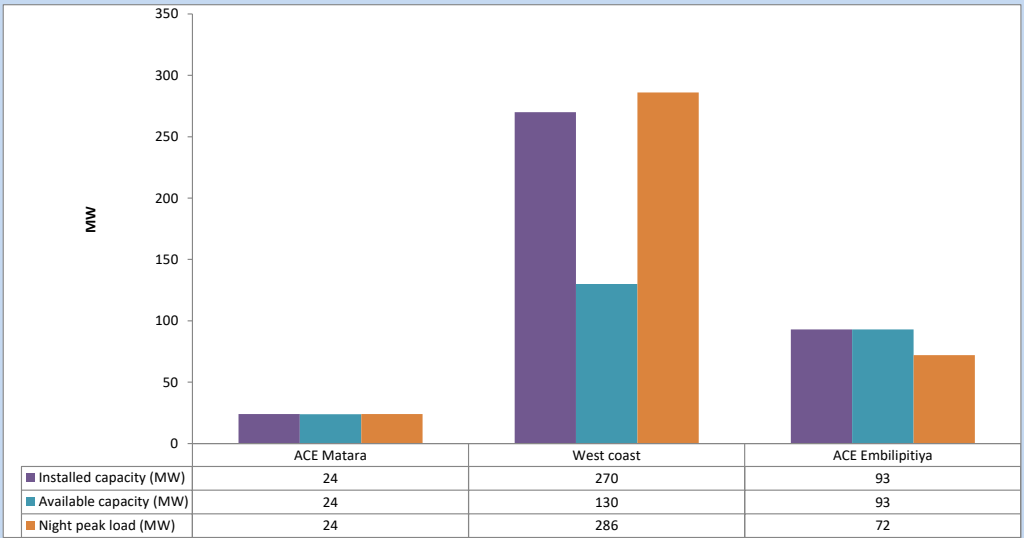
September 22, 2023



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

September 23, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

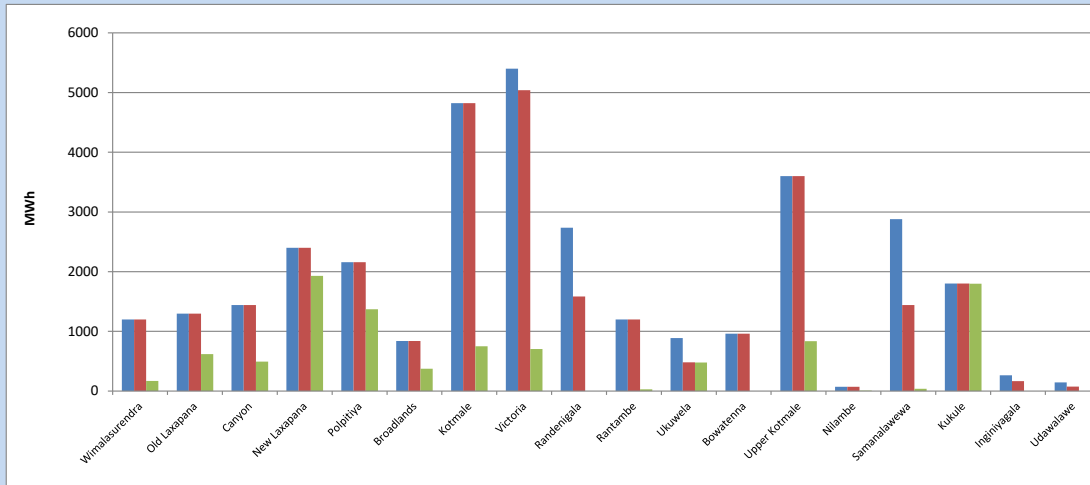


Plant availability is recorded at 6.00 am on

September 23, 2023

7. Major Hydro Plant Dispatch

September 22, 2023

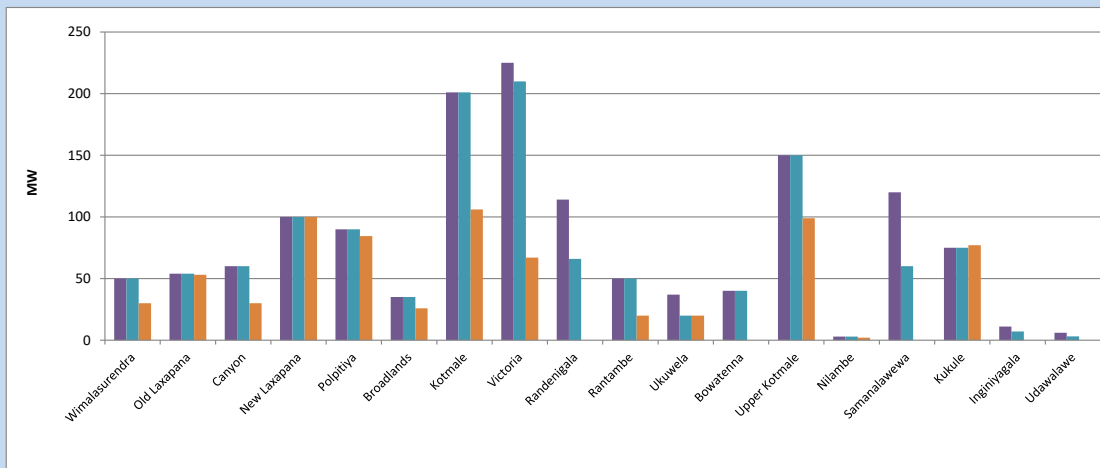


Available Generation is estimated based on plant availability at 6.00am on September 23, 2023  
Broadlands power plant is operating in the Commissioning Stage

September 23, 2023

8. Major Hydro Plant Loading at Night Peak

September 22, 2023



Plant availability is recorded at 6.00 am on September 23, 2023  
Broadlands power plant is operating in the Commissioning Stage

September 23, 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	169
Old Laxapana Canyon	54	54	53	619
New Laxapana	60	60	30	493
Polpitiya	100	100	100	1,930
Broadlands	90	90	85	1,370
Kotmale	35	35	26	374
Victoria	201	201	106	750
Randenigala	225	210	67	703
Rantambe	114	66	0	0
Ukuwela	50	50	20	30
Bowatenna	37	20	20	478
Upper Kotmale	40	40	0	0
Nilambe	150	150	99	836
Samanalawewa	3	3	2	9
Kukule	120	60	0	37
Inginiyagala	75	75	77	1,797
Udawalawe	11	7	0	0
Puttalam Coal I	6	3	0	0
Puttalam Coal II	270	200	198	4,741
Puttalam Coal III	270	199	200	4,804
KPS Small GTs	270	0	0	0
KPS GT 7	64	15	0	0
KCCP	115	0	0	0
Sapugaskanda A	161	153	148	3,651
Sapugaskanda B	70	50	49	1,109
Uthura Janani	70	63	61	1,417
Barge CEB	26	16	23	562
CEB-Hambantota	60	60	60	1,300
CEB-Mathugama	30	17	16	48
ACE Matara	20	7	7	21
Asia Power	24	24	24	191
KCCPS -2	50	0	0	0
West Coast	163	0	0	0
Nothern Power	270	130	286	5,161
ACE Embilipitiya	36	0	0	0
Total	93	93	72	493
Total	3,483	2,301	2,065	38,544

Plant availability is the availability recorded at 6 am on

September 23, 2023

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

September 22, 2023

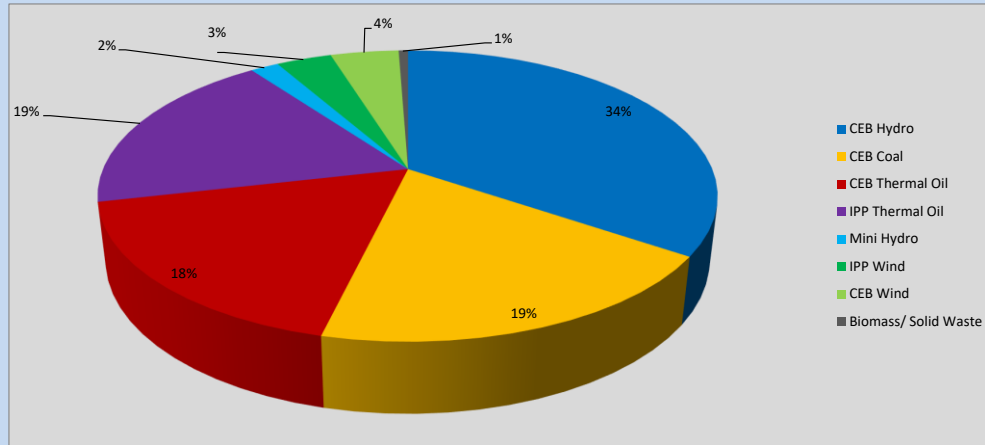


Table 06

CEB Hydro	710	MW
CEB Coal	398	MW
CEB Thermal Oil	364	MW
IPP Thermal Oil	382	MW
Mini Hydro (Telemetered)	36	MW
IPP Wind	71.1	MW
CEB Wind	87.6	MW
Biomass/ Solid Waste	12	MW

### Recorded Peak Demand Data

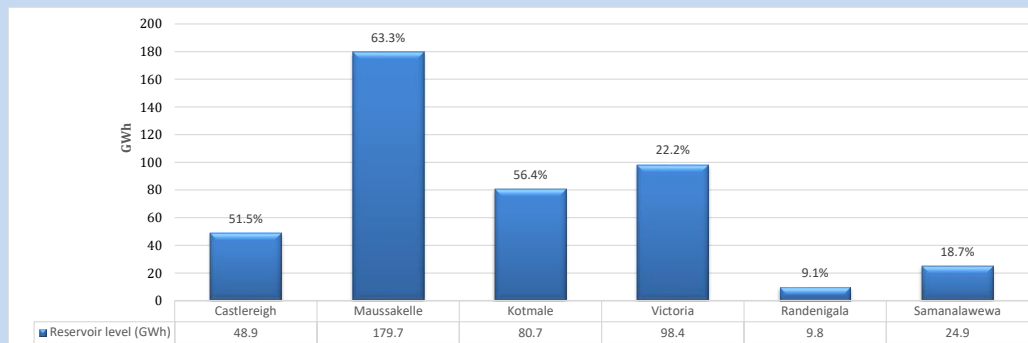
Table 07

Night Peak*	2,060	MW
Day Peak Maximum Demand	1,870	MW
Day Peak Minimum Demand	1,532	MW
Off Peak Minimum Demand	1,183	MW

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

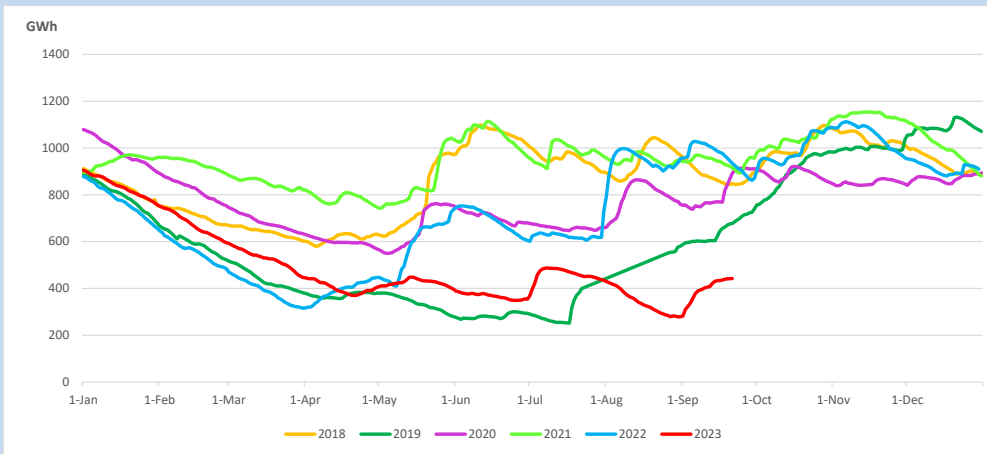
### Reservoir Levels -

as at 06.00 Hr on September 23, 2023

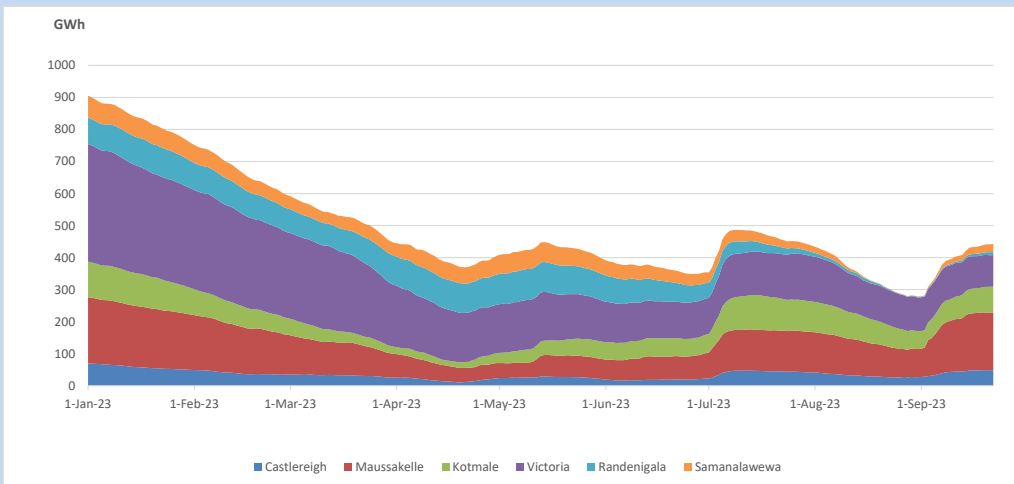


Total Reservoir Level 442.4 GWh  
 % of Total capacity 36.7%

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

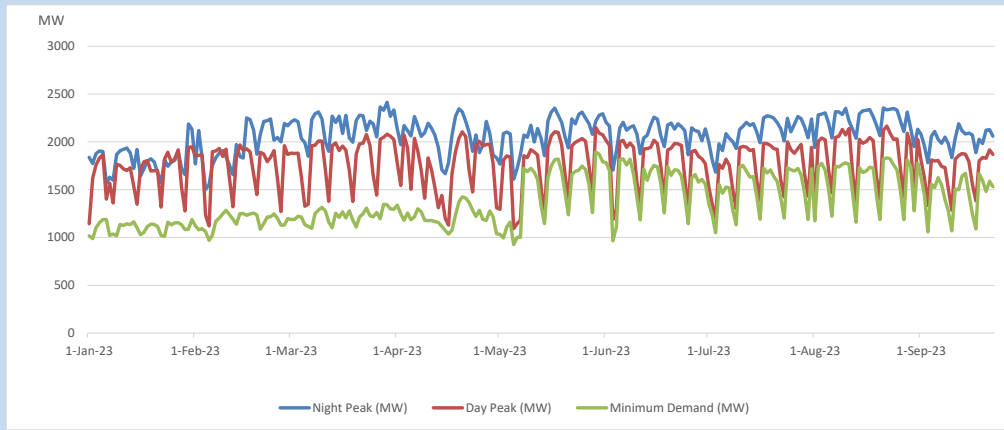


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





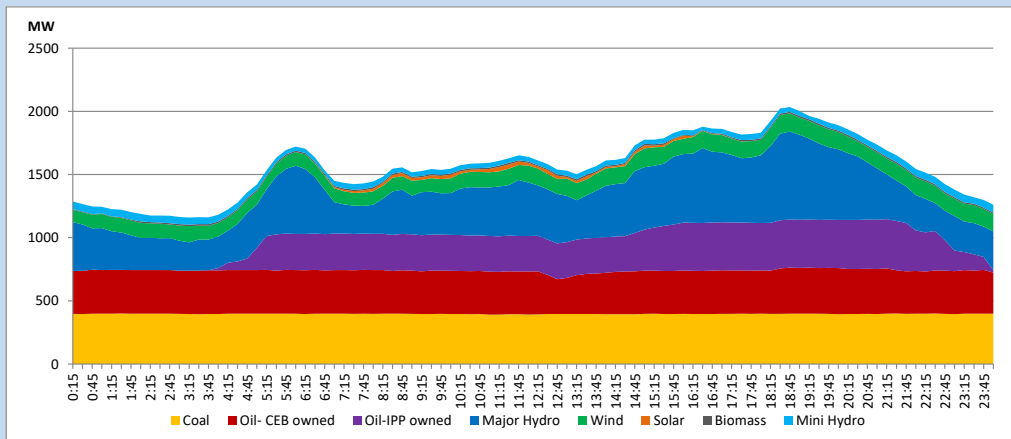
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

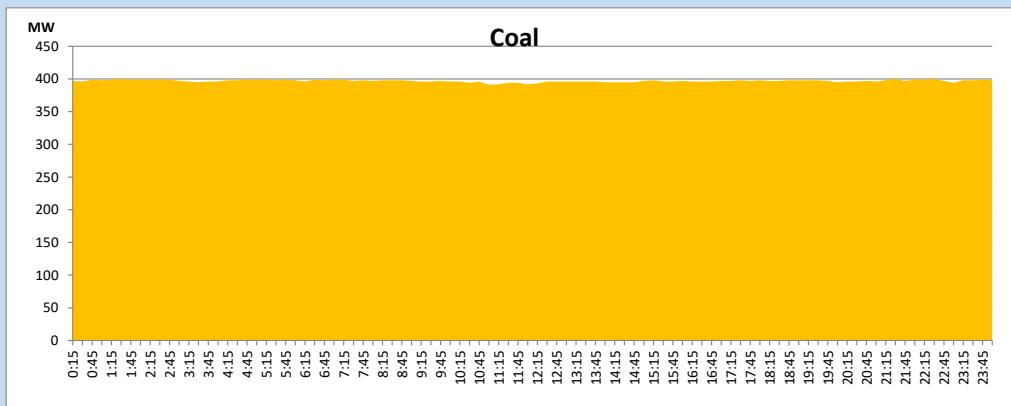
September 22, 2023



Solar and wind data is based on Telemetered Power Stations only

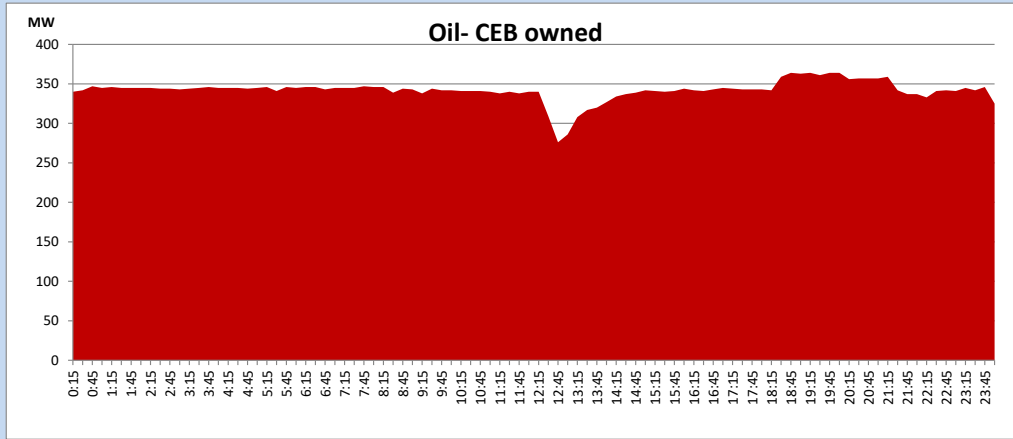
### Coal Generation during

September 22, 2023



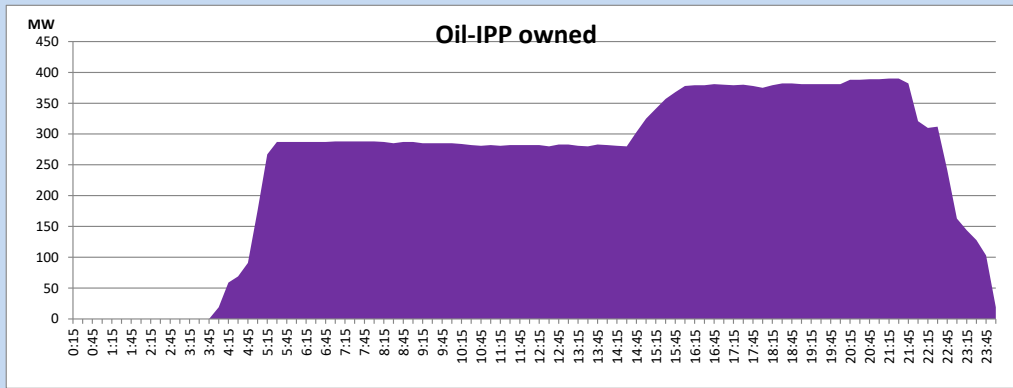
CEB Oil Plant Generation during

September 22, 2023



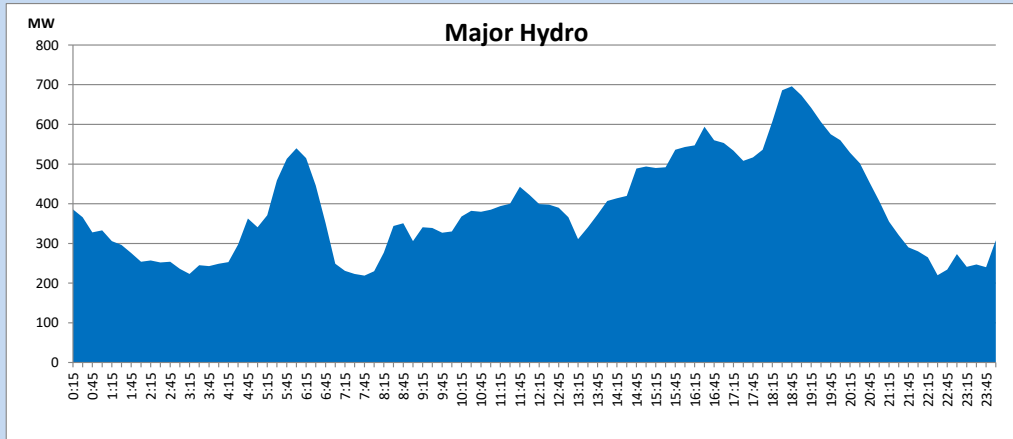
IPP Oil Plant Generation during

September 22, 2023



Major Hydro Generation during

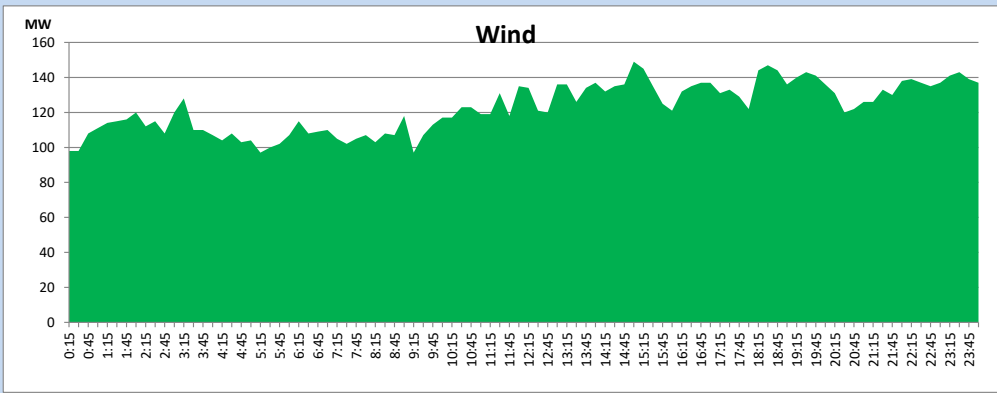
September 22, 2023



## Wind Generation during

September 22, 2023

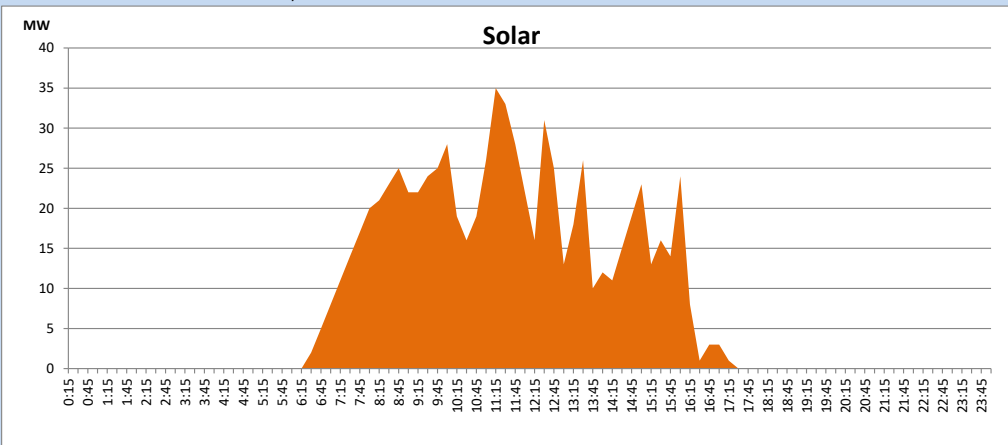
Based on Telemetered Power Stations only



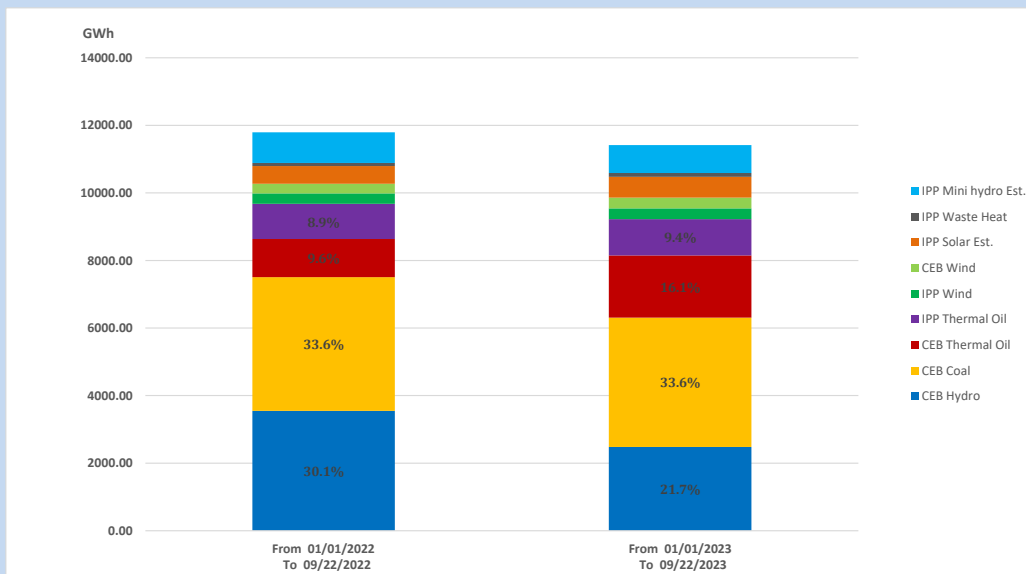
## Solar Generation during

September 22, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 09/22/2022

11795 GWh

From 01/01/2023 To 09/22/2023

11414 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 22, 2023

- 1) Mahiyanganaya 132/33kV T/F 01 and 02 both tripped from 33kV side only at 13:41hrs due to the operation of Neutral TOC protection Both T/Fs and feeders were normalized by 14:29hrs.