

# Generation and Reservoirs Statistics

September 9, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

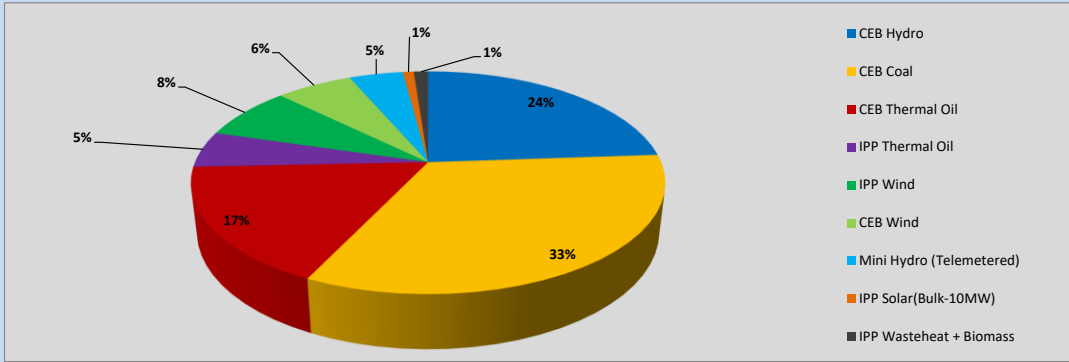


Table 01

	Generation (MWh)
CEB Hydro	8,448
CEB Coal	11,734
CEB Thermal Oil	6,096
IPP Thermal Oil	1,859
IPP Wind	2,727
CEB Wind	2,207
Mini Hydro (Telemetered)	1,555
IPP Solar (Bulk)	315
IPP Waste heat + Biomass	412
<b>Total Generation (Excluding estimated figures)</b>	<b>35,353</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	2085
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1660
<b>Total Generation (Including estimated figures)</b>	<b>39,402</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

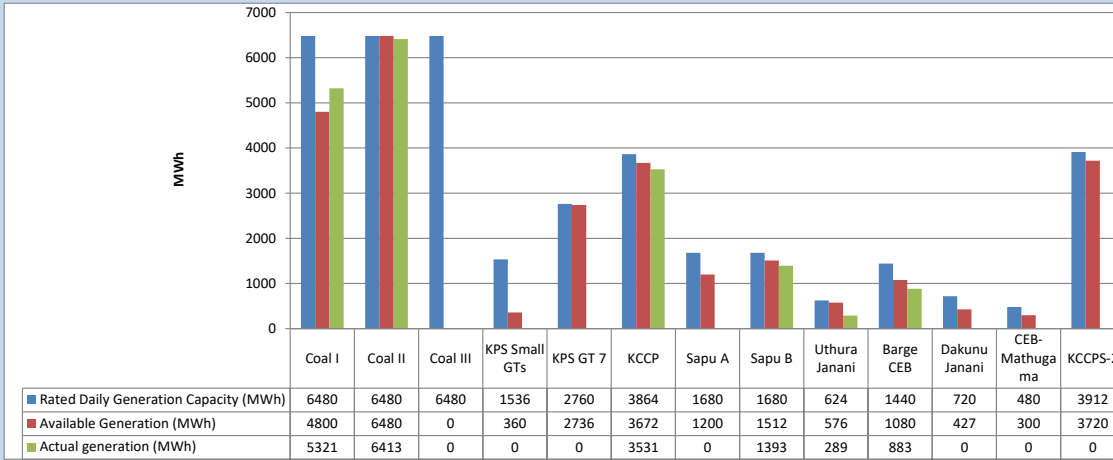
Category	Dispatch (GWh)	
CEB Hydro	70	21.06%
CEB Coal	110	33.23%
CEB Thermal Oil	60	18.03%
IPP Thermal	31	9.45%
SPP Wind	22	6.59%
CEB Wind	20	5.91%
Mini Hydro (Telemetered)	14	4.13%
IPP Solar(Bulk-10MW)	2	0.66%
IPP Waste heat + BMP	3	0.92%
<b>Total</b>	<b>332</b>	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,369	24.19%
CEB Coal	3,695	37.73%
CEB Thermal Oil	1,745	17.82%
IPP Thermal	1,021	10.43%
SPP Wind	282	2.88%
CEB Wind	289	2.95%
Mini Hydro (Telemetered)	224	2.29%
IPP Solar(Bulk-10MW)	77	0.78%
IPP Waste heat	90	0.92%
<b>Total</b>	<b>9,792</b>	

### 3. CEB owned Thermal Plant Dispatch

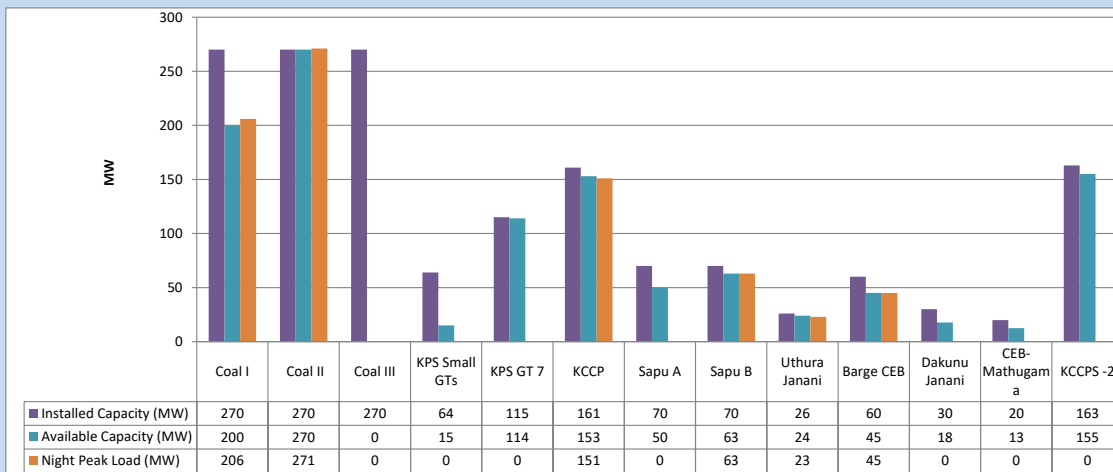
September 9, 2023



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

September 10, 2023

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

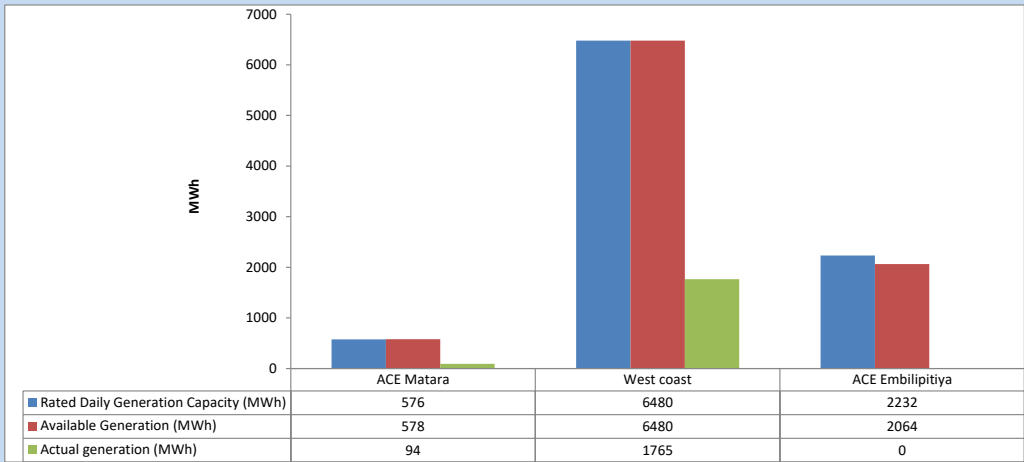


Plant availability is recorded at 6.00 am on

September 10, 2023

5. IPP owned Thermal Plant Dispatch

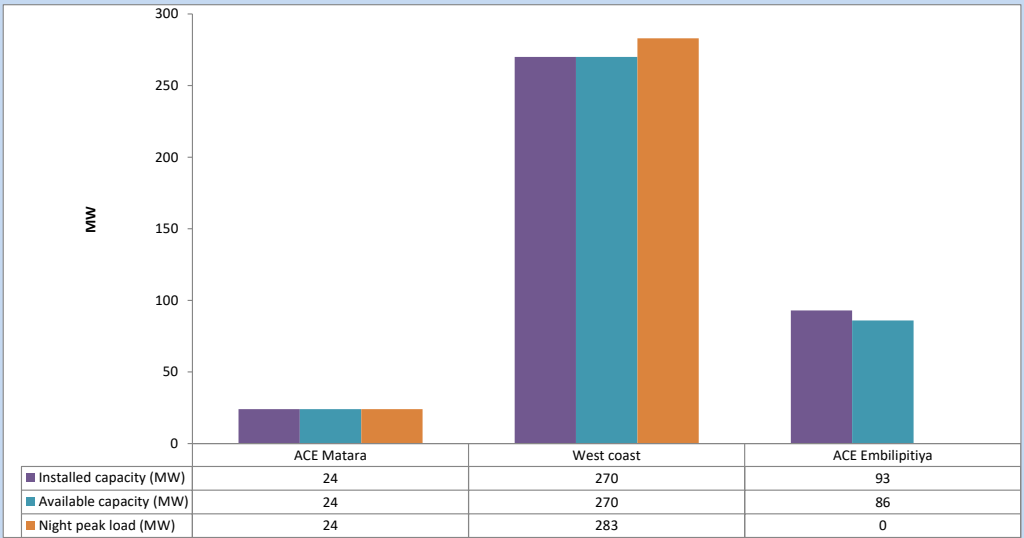
September 9, 2023



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

September 10, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

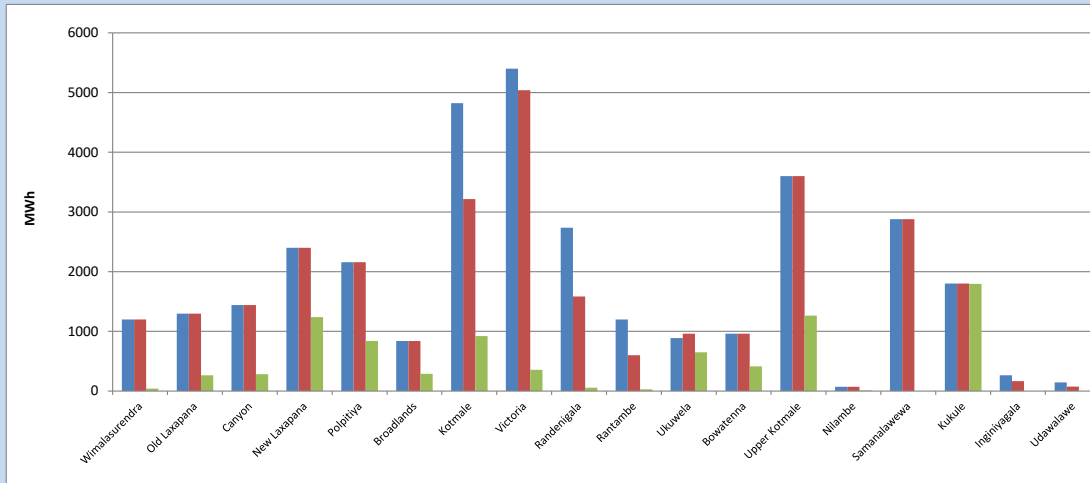


Plant availability is recorded at 6.00 am on

September 10, 2023

7. Major Hydro Plant Dispatch

September 9, 2023

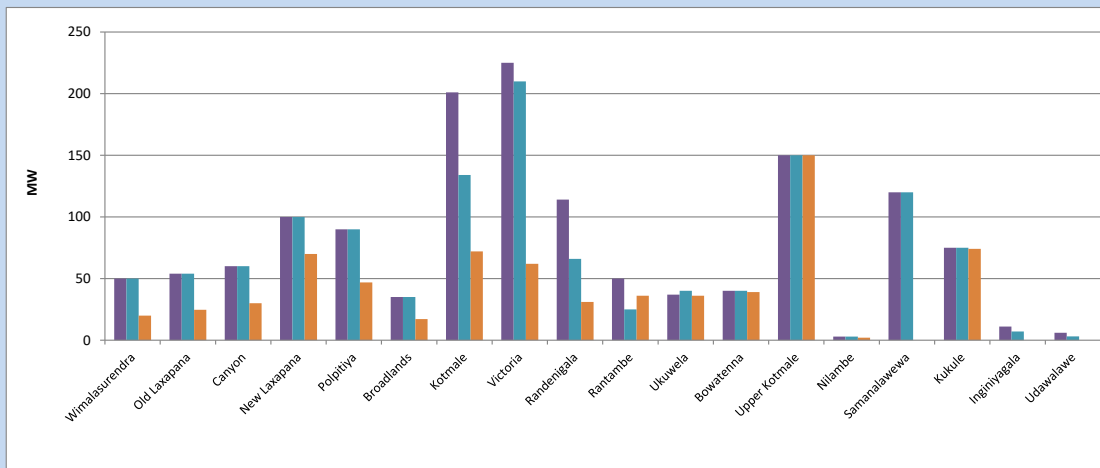


Available Generation is estimated based on plant availability at 6.00am on September 10, 2023  
Broadlands power plant is operating in the Commissioning Stage

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8. Major Hydro Plant Loading at Night Peak

September 9, 2023



Plant availability is recorded at 6.00 am on September 10, 2023  
Broadlands power plant is operating in the Commissioning Stage

## 9. Summary of Major Plant performance

Table 05

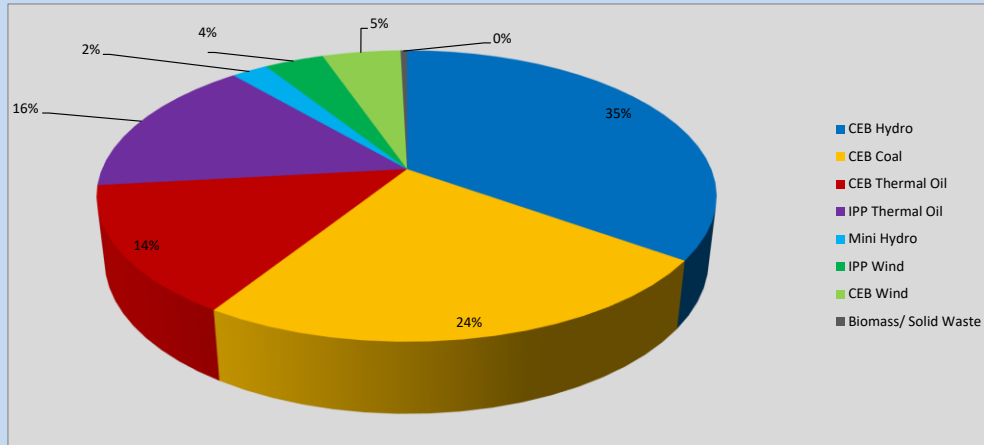
Plant	Installed Capacity	Plant Availability	Night peak Load	Plant Dispatch
	(MW)	(MW)	(MW)	(MWh)
Wimalasurendra	50	50	20	40
Old Laxapana Canyon	54	54	25	263
New Laxapana	60	60	30	284
Polpitiya	100	100	70	1,240
Broadlands	90	90	47	840
Kotmale	35	35	17	289
Victoria	201	134	72	920
Randenigala	225	210	62	356
Rantambe	114	66	31	58
Ukuwela	50	25	36	28
Bowatenna	37	40	36	649
Upper Kotmale	40	40	39	413
Nilambe	150	150	150	1,263
Samanalawewa	3	3	2	10
Kukule	120	120	0	0
Inginiyagala	75	75	74	1,795
Udawalawe	11	7	0	0
Puttalam Coal I	6	3	0	0
Puttalam Coal II	270	200	206	5,321
Puttalam Coal III	270	270	271	6,413
KPS Small GTs	270	0	0	0
KPS GT 7	64	15	0	0
KCCP	115	114	0	0
Sapugaskanda A	161	153	151	3,531
Sapugaskanda B	70	50	0	0
Uthura Janani	70	63	63	1,393
Barge CEB	26	24	23	289
CEB-Hambantota	60	45	45	883
CEB-Mathugama	30	18	0	0
ACE Matara	20	13	0	0
Asia Power	24	24	24	94
KCCPS -2	50	0	0	0
West Coast	163	155	0	0
Nothern Power	270	270	283	1,765
ACE Embilipitiya	36	0	0	0
Total	93	86	0	0
	3,483	2,762	2,000	35,353

Plant availability is the availability recorded at 6 am on

September 10, 2023

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

September 9, 2023



**Table 06**

CEB Hydro	690	MW
CEB Coal	477	MW
CEB Thermal Oil	282	MW
IPP Thermal Oil	307	MW
Mini Hydro (Telemetered)	45	MW
IPP Wind	73.5	MW
CEB Wind	96.6	MW
Biomass/ Solid Waste	8	MW

### Recorded Peak Demand Data

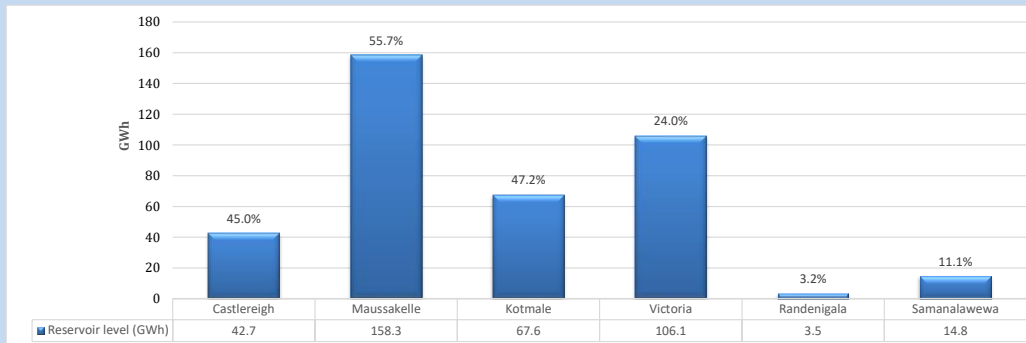
**Table 07**

Night Peak*	1,979	MW
Day Peak Maximum Demand	1,512	MW
Day Peak Minimum Demand	1,278	MW
Off Peak Minimum Demand	1,118	MW

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

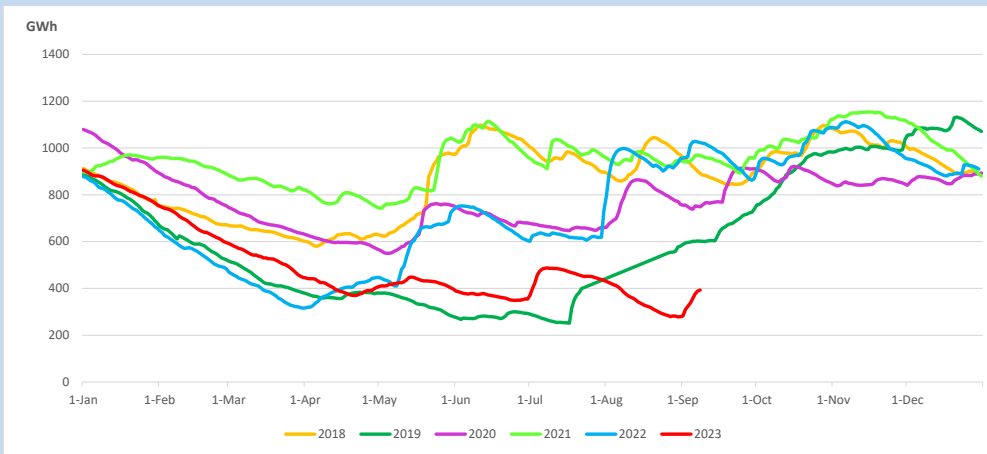
### Reservoir Levels -

as at 06.00 Hr on September 10, 2023

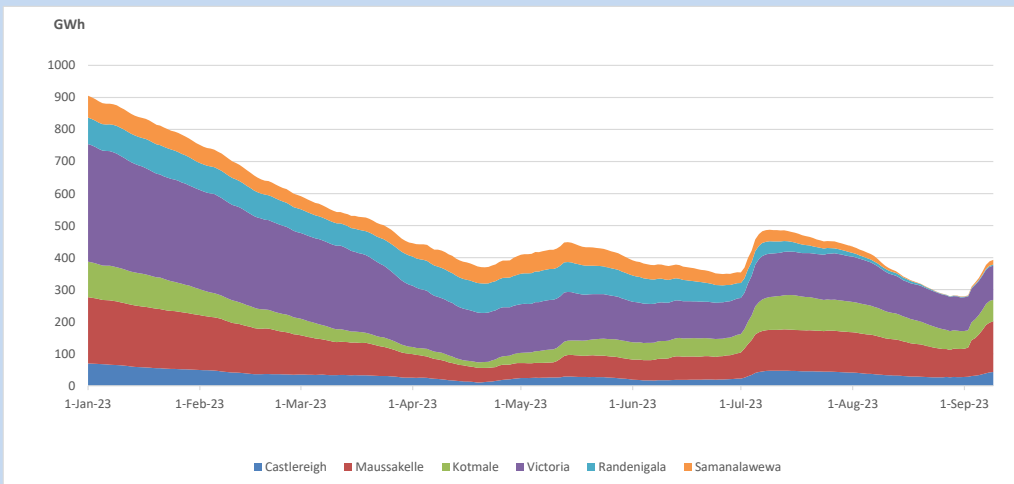


Total Reservoir Level            393 GWh  
 % of Total capacity                32.6%

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

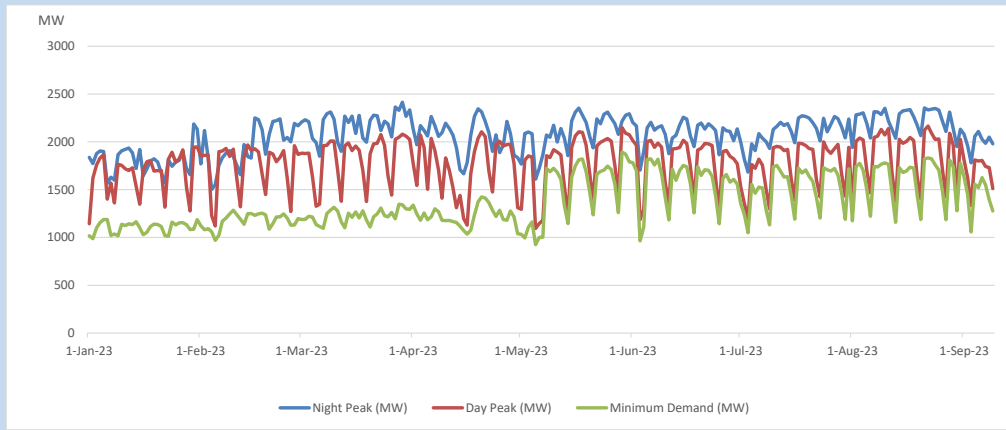


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





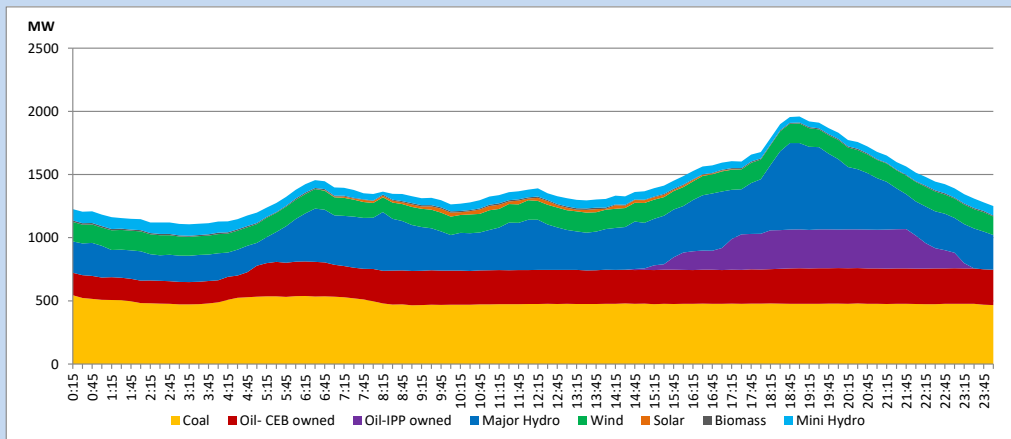
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

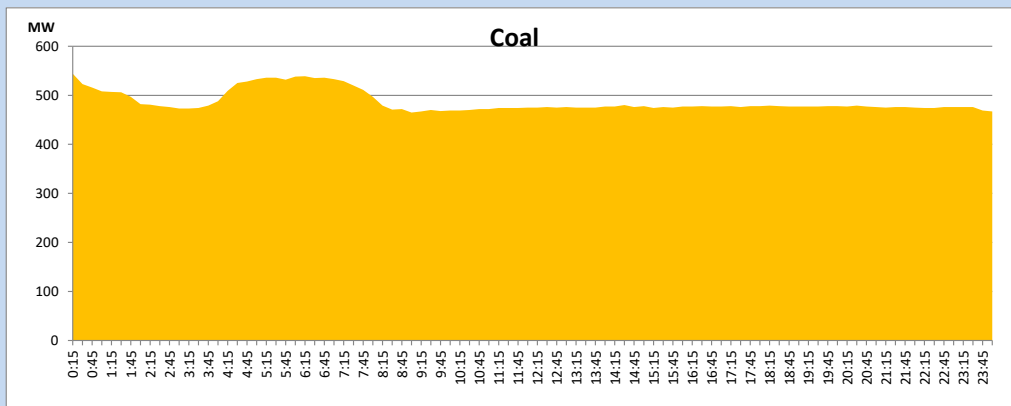
September 9, 2023



Solar and wind data is based on Telemetered Power Stations only

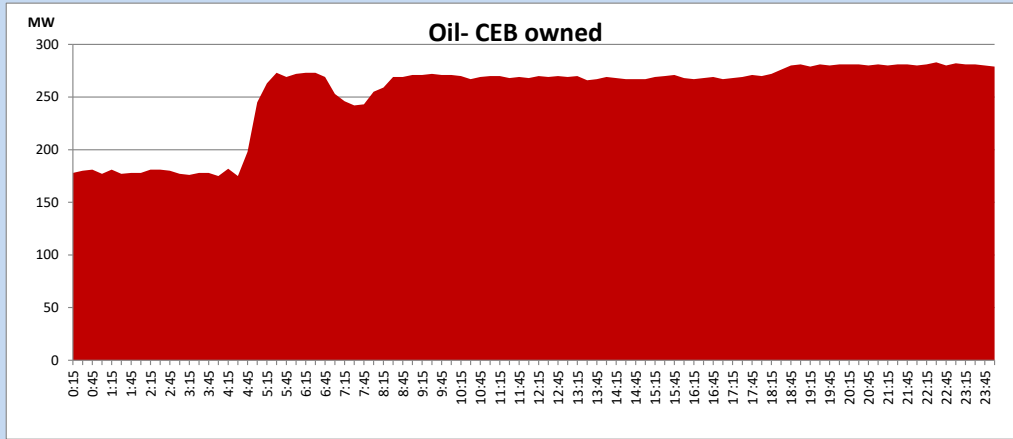
### Coal Generation during

September 9, 2023



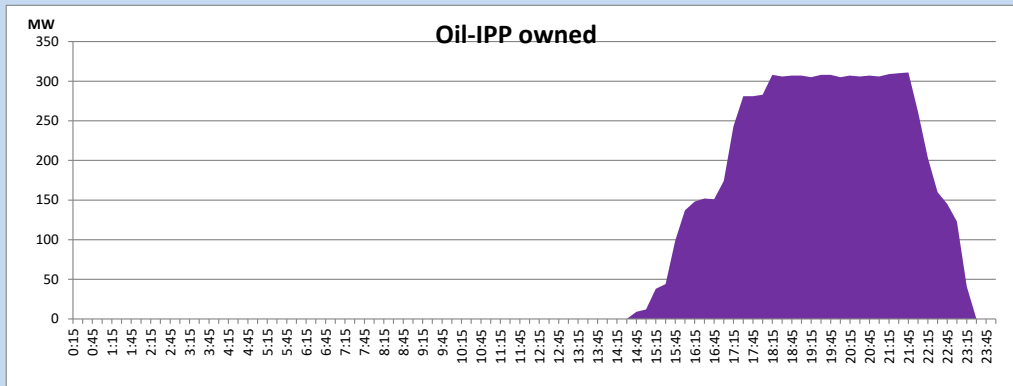
CEB Oil Plant Generation during

September 9, 2023



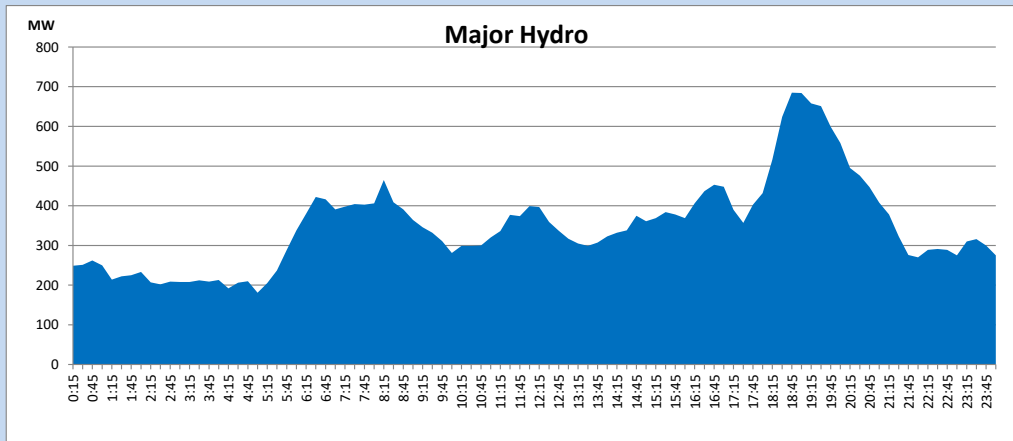
IPP Oil Plant Generation during

September 9, 2023



Major Hydro Generation during

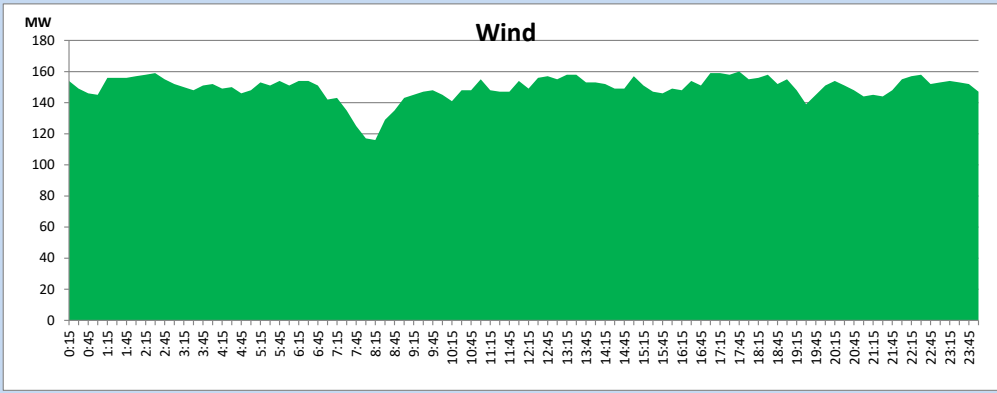
September 9, 2023



## Wind Generation during

September 9, 2023

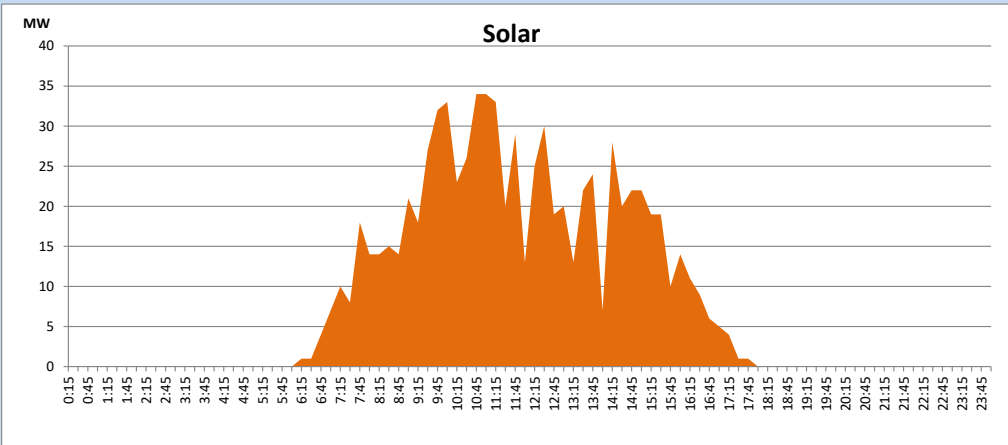
Based on Telemetered Power Stations only



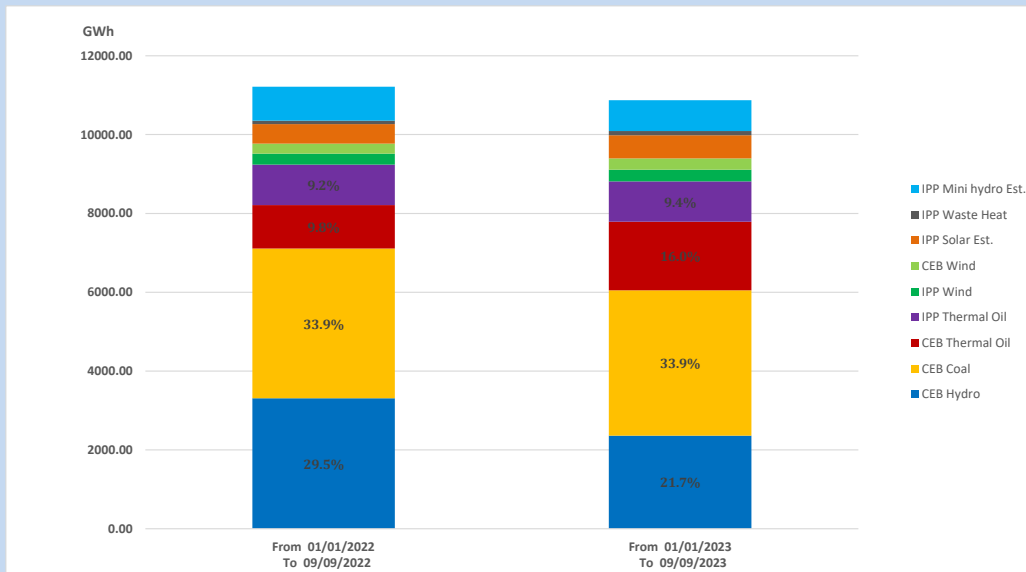
## Solar Generation during

September 9, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

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

11215 GWh

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

10870 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 9, 2023

- 1) Kukule pond spilling continues to the present hour.
- 2) Kolonnawa - Pannipitiya - Sri jayawardenapura 132kV cct 01(which tripped on 08.09.2023) was restored at 18:45hrs.
- 3) Katunayake – Kotugoda 132kV cct 01 tripped and A/R from Katunayake end at 22:23hrs, due to operation of differential protection (cct was switched off from Kotugoda end for system requirement).