

# Generation and Reservoirs Statistics

September 29, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

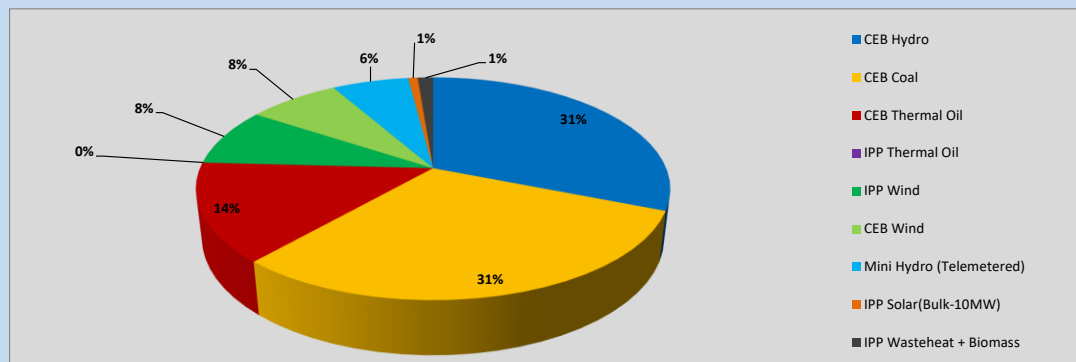


Table 01

	Generation (MWh)
CEB Hydro	9,118
CEB Coal	8,958
CEB Thermal Oil	4,208
IPP Thermal Oil	-
IPP Wind	2,468
CEB Wind	2,202
Mini Hydro (Telemetered)	1,835
IPP Solar (Bulk)	228
IPP Waste heat + Biomass	368
<b>Total Generation (Excluding estimated figures)</b>	<b>29,385</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	1806
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1660
<b>Total Generation (Including estimated figures)</b>	<b>33,155</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

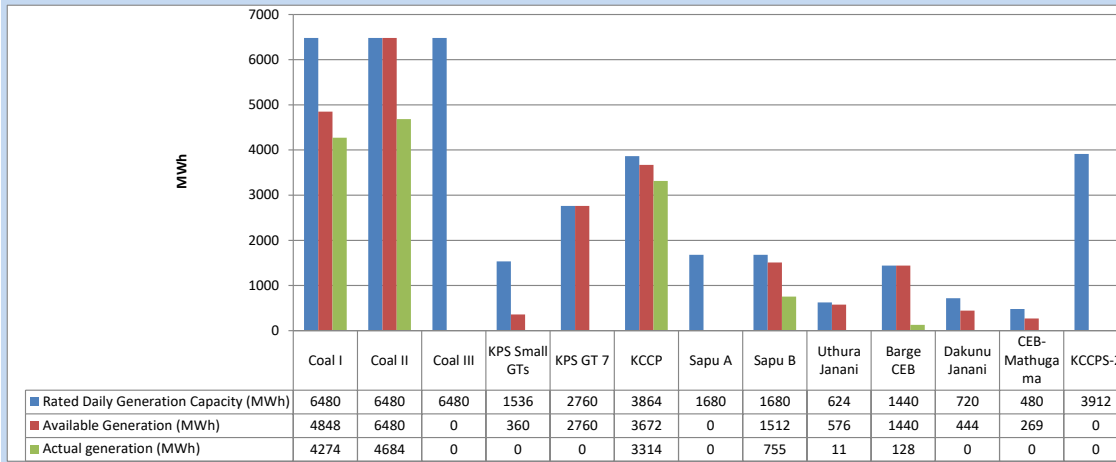
Category	Dispatch (GWh)	
CEB Hydro	254	23.71%
CEB Coal	324	30.24%
CEB Thermal Oil	207	19.36%
IPP Thermal	104	9.69%
SPP Wind	63	5.85%
CEB Wind	60	5.64%
Mini Hydro (Telemetered)	40	3.69%
IPP Solar(Bulk-10MW)	8	0.74%
IPP Waste heat + BMP	12	1.08%
<b>Total</b>	<b>1,072</b>	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,553	24.24%
CEB Coal	3,909	37.11%
CEB Thermal Oil	1,893	17.97%
IPP Thermal	1,094	10.39%
SPP Wind	323	3.07%
CEB Wind	330	3.13%
Mini Hydro (Telemetered)	250	2.37%
IPP Solar(Bulk-10MW)	82	0.78%
IPP Waste heat	99	0.94%
<b>Total</b>	<b>10,532</b>	

### 3. CEB owned Thermal Plant Dispatch

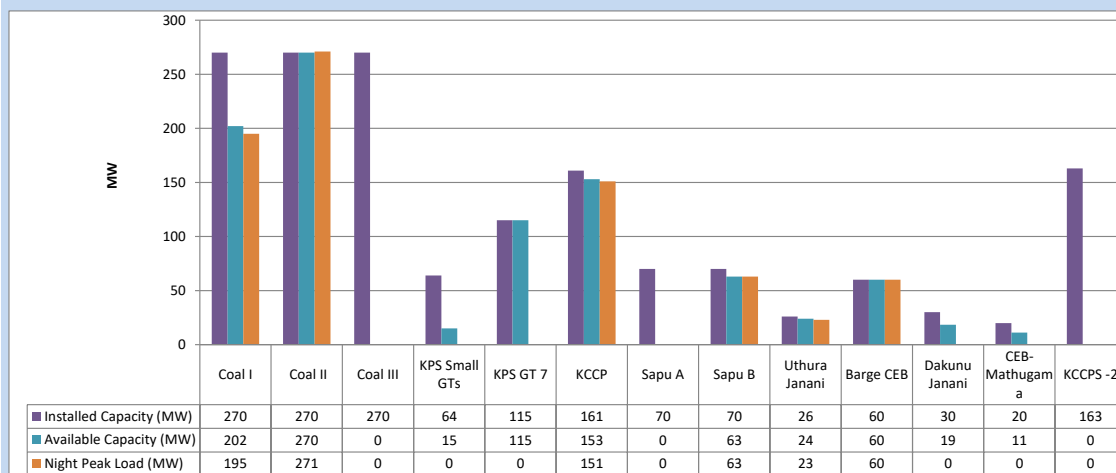
September 29, 2023



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

September 30, 2023

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

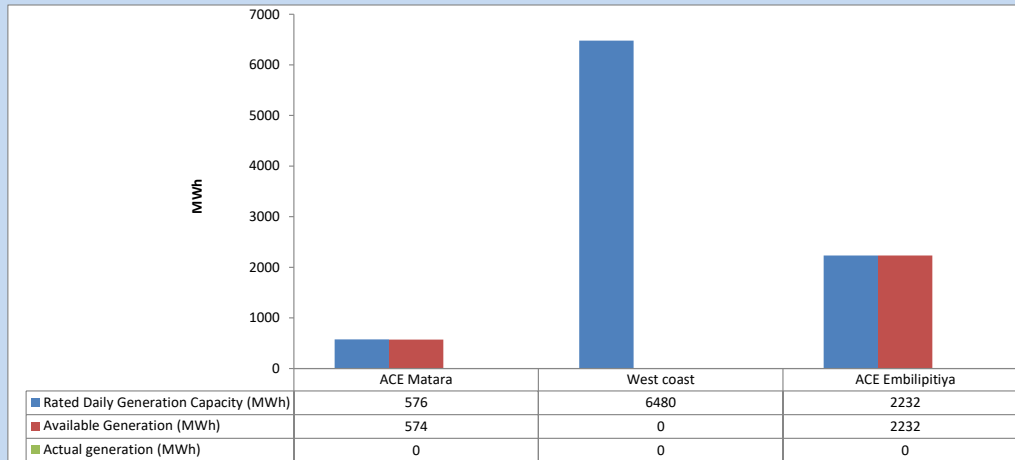


Plant availability is recorded at 6.00 am on

September 30, 2023

### 5. IPP owned Thermal Plant Dispatch

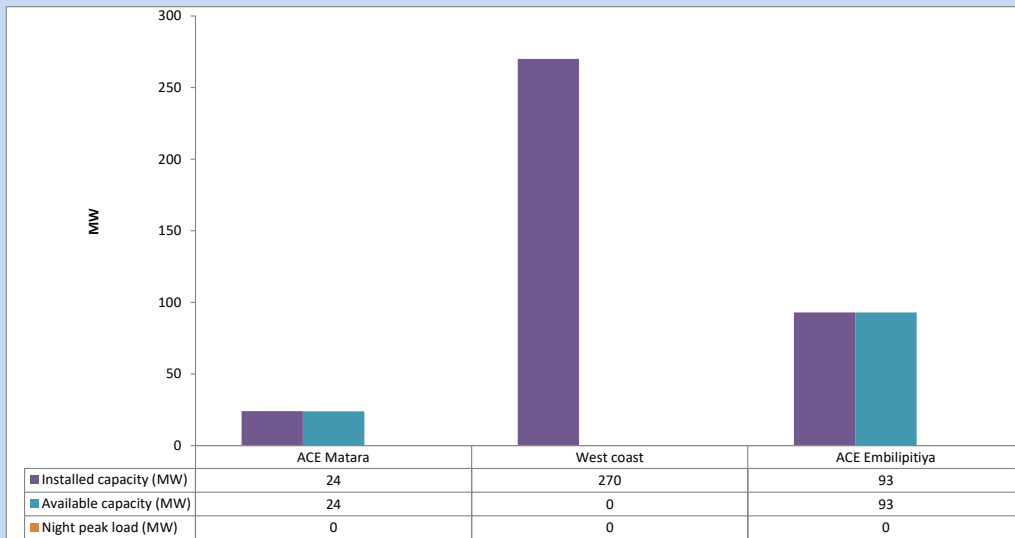
September 29, 2023



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

September 30, 2023

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

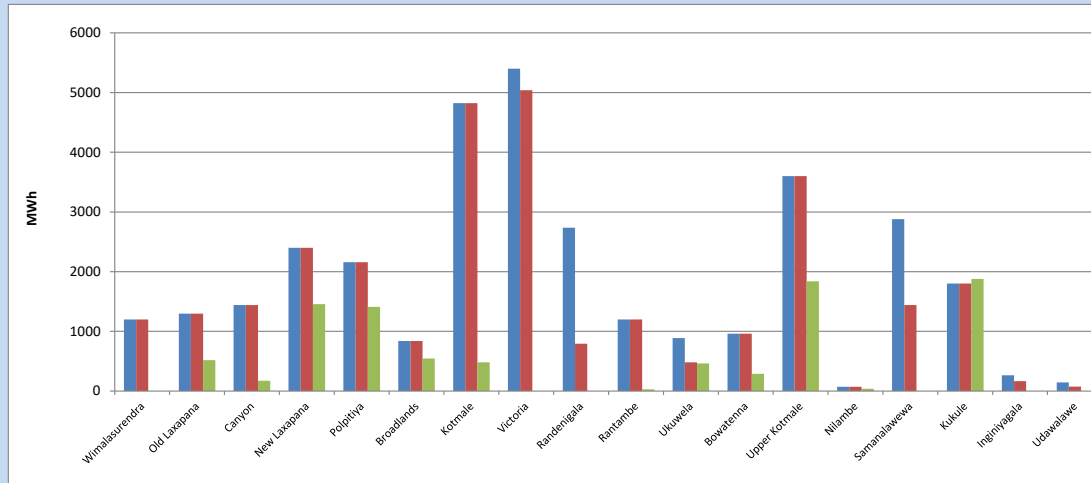


Plant availability is recorded at 6.00 am on

September 30, 2023

### 7. Major Hydro Plant Dispatch

September 29, 2023

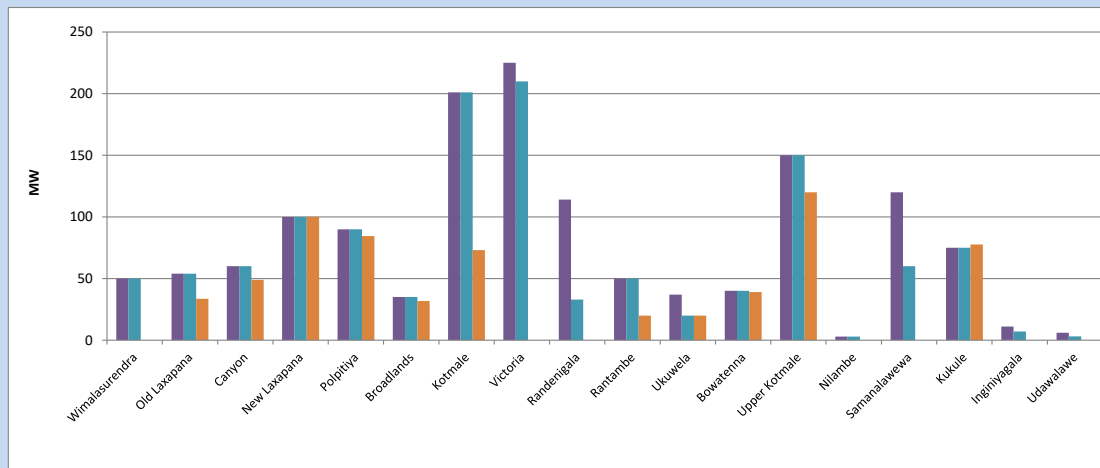


Available Generation is estimated based on plant availability at 6.00am on September 30, 2023  
Broadlands power plant is operating in the Commissioning Stage

September 30, 2023

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

September 29, 2023



Plant availability is recorded at 6.00 am on September 30, 2023  
Broadlands power plant is operating in the Commissioning Stage

September 30, 2023

## 9. Summary of Major Plant performance

**Table 05**

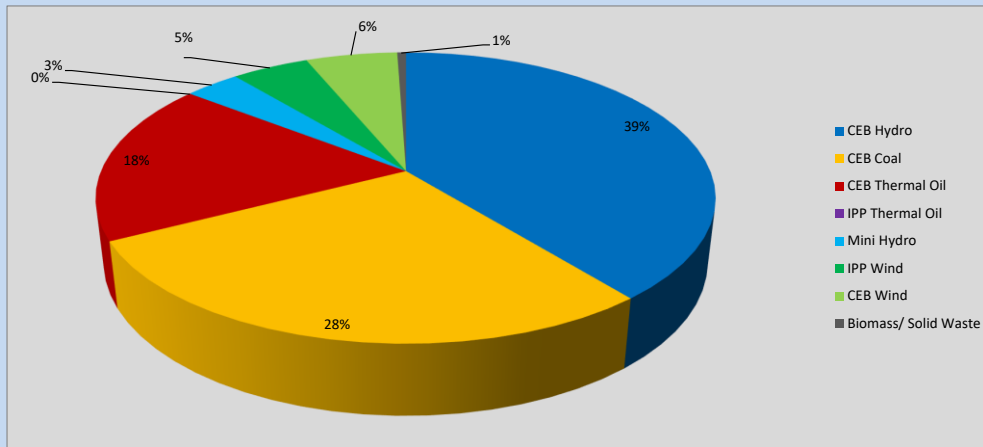
Plant	Installed Capacity (MW)	Plant Availability (MW)	Night peak Load (MW)	Plant Dispatch (MWh)
Wimalasurendra	50	50	0	0
Old Laxapana	54	54	34	519
Canyon	60	60	49	174
New Laxapana	100	100	100	1,455
Polpitiya	90	90	85	1,410
Broadlands	35	35	32	546
Kotmale	201	201	73	480
Victoria	225	210	0	0
Randenigala	114	33	0	0
Rantambe	50	50	20	28
Ukuwela	37	20	20	462
Bowatenna	40	40	39	290
Upper Kotmale	150	150	120	1,839
Nilambe	3	3	0	39
Samanalawewa	120	60	0	0
Kukule	75	75	78	1,876
Inginiyagala	11	7	0	0
Udawalawe	6	3	0	0
Puttalam Coal I	270	202	195	4,274
Puttalam Coal II	270	270	271	4,684
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	15	0	0
KPS GT 7	115	115	0	0
KCCP	161	153	151	3,314
Sapugaskanda A	70	0	0	0
Sapugaskanda B	70	63	63	755
Uthura Janani	26	24	23	11
Barge CEB	60	60	60	128
CEB-Hambantota	30	19	0	0
CEB-Mathugama	20	11	0	0
ACE Matara	24	24	0	0
Asia Power	50	0	0	0
KCCPS -2	163	0	0	0
West Coast	270	0	0	0
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	0	0
<b>Total</b>	<b>3,483</b>	<b>2,290</b>	<b>1,650</b>	<b>29,385</b>

Plant availability is the availability recorded at 6 am on

September 30, 2023

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

September 29, 2023



**Table 06**

CEB Hydro	644	MW
CEB Coal	466	MW
CEB Thermal Oil	297	MW
IPP Thermal Oil	0	MW
Mini Hydro (Telemetered)	57	MW
IPP Wind	78.9	MW
CEB Wind	94	MW
Biomass/ Solid Waste	9	MW

### Recorded Peak Demand Data

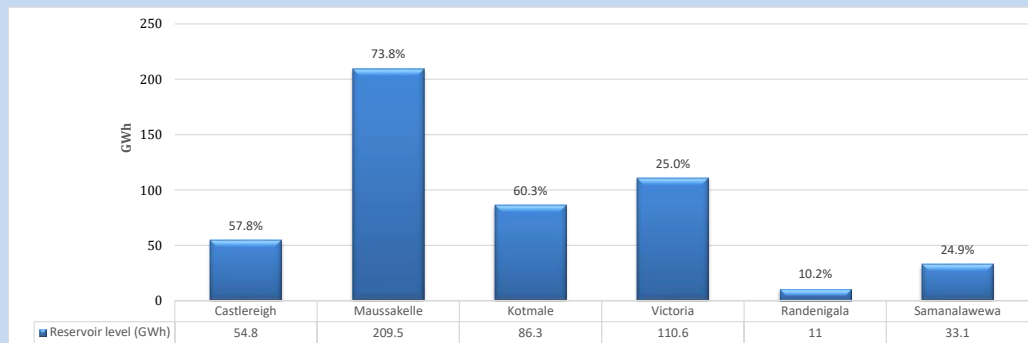
**Table 07**

Night Peak*	1,645	MW
Day Peak Maximum Demand	1,177	MW
Day Peak Minimum Demand	963	MW
Off Peak Minimum Demand	991	MW

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

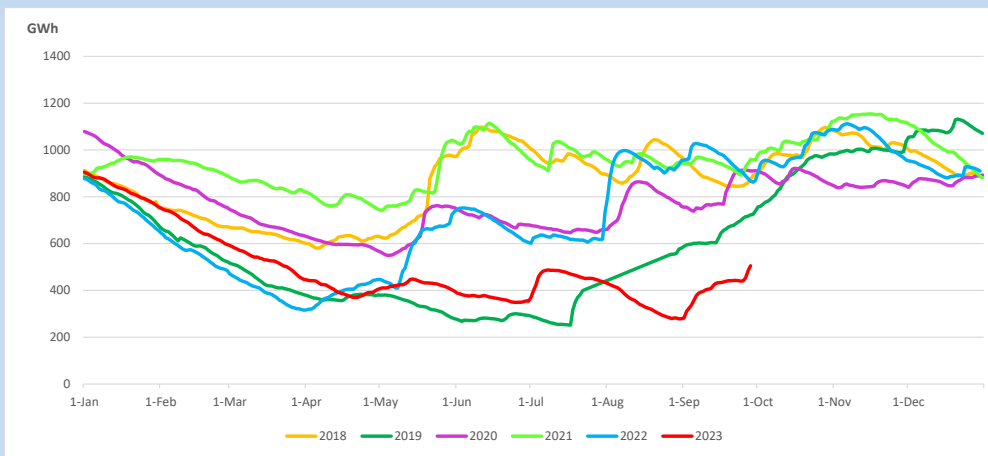
### Reservoir Levels -

as at 06.00 Hr on September 30, 2023

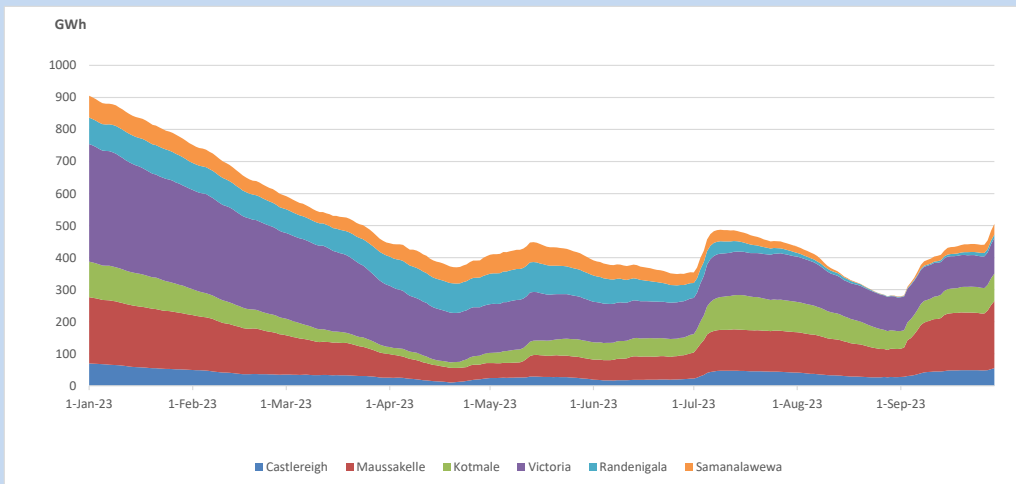


Total Reservoir Level 505.3 GWh  
% of Total capacity 41.9%

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

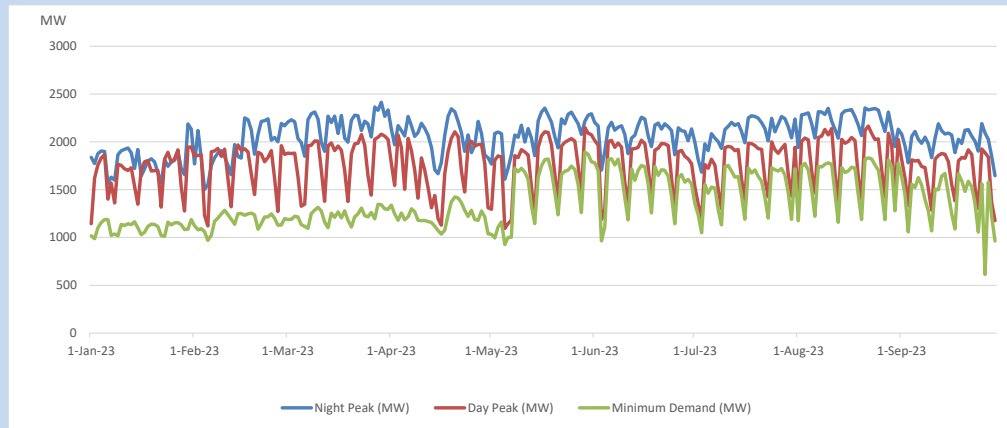


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





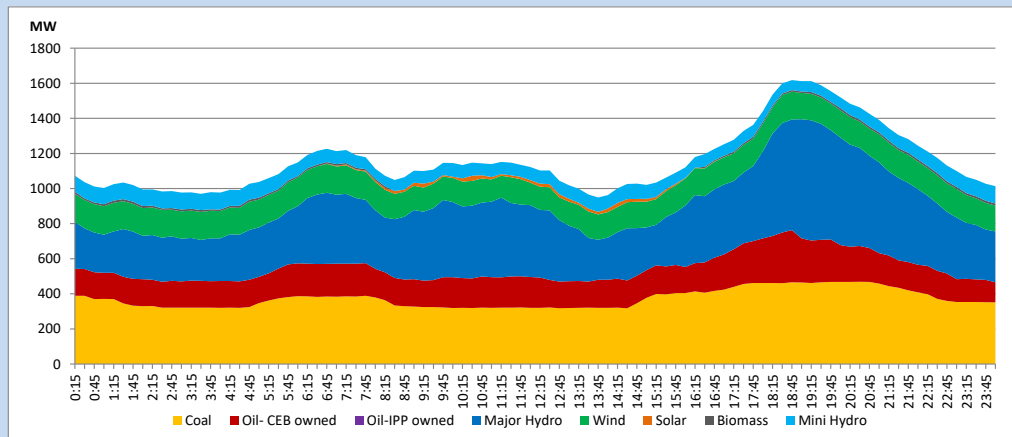
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

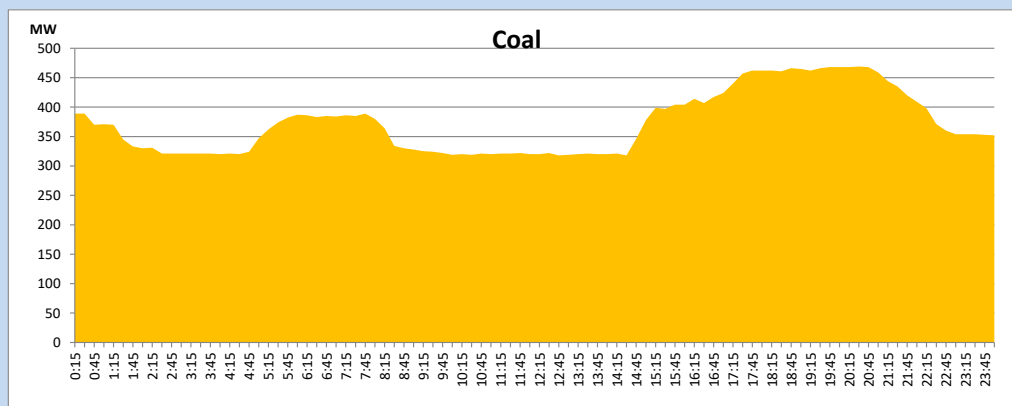
September 29, 2023



Solar and wind data is based on Telemetered Power Stations only

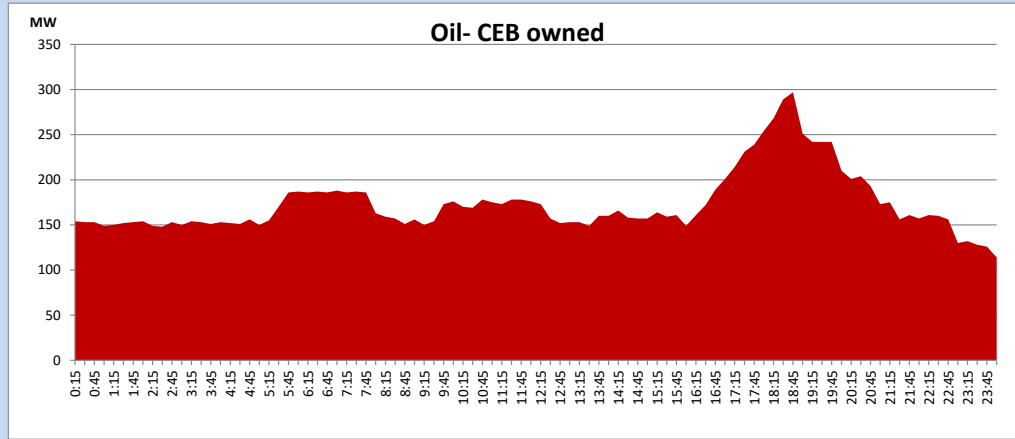
### Coal Generation during

September 29, 2023



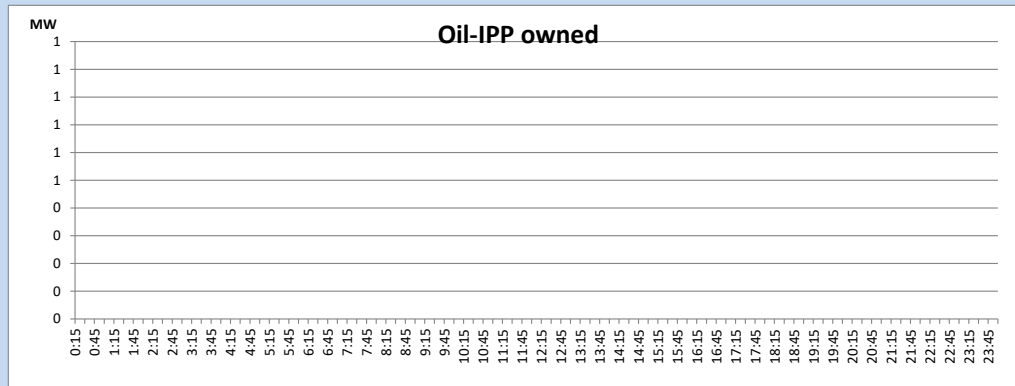
CEB Oil Plant Generation during

September 29, 2023



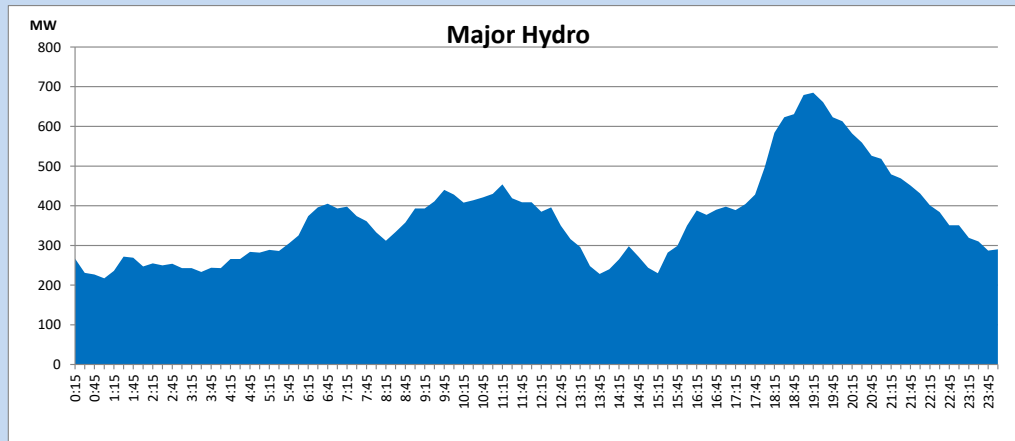
IPP Oil Plant Generation during

September 29, 2023



Major Hydro Generation during

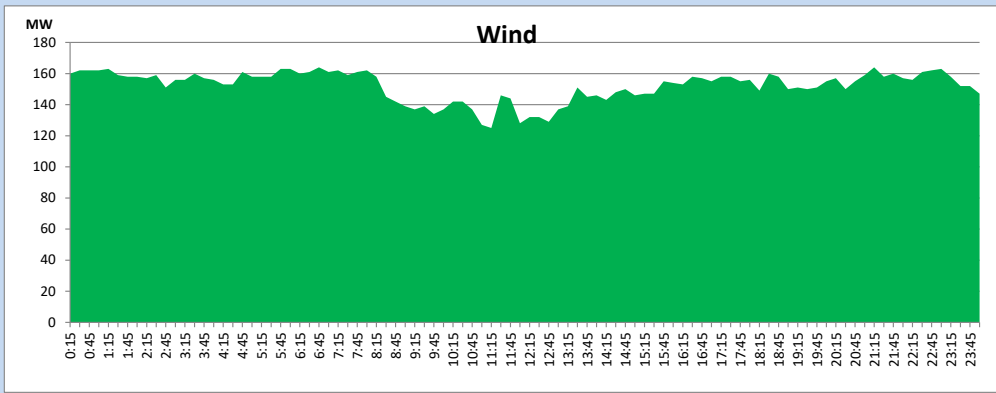
September 29, 2023



## Wind Generation during

September 29, 2023

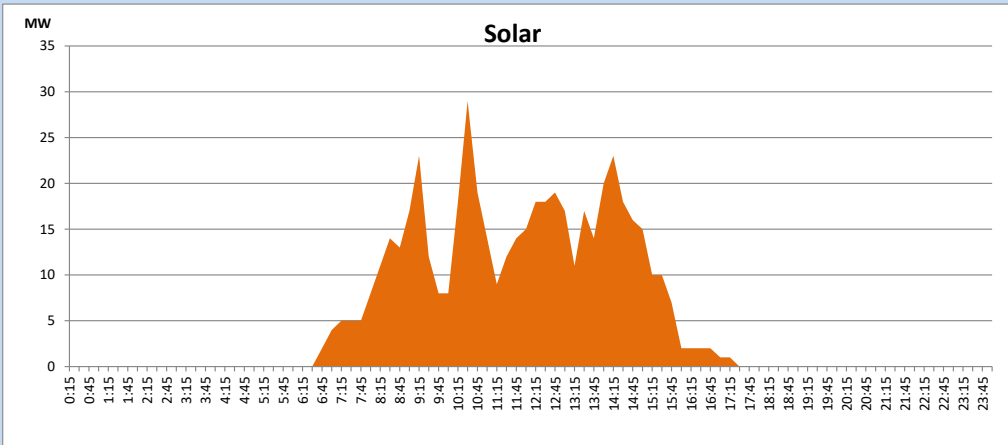
Based on Telemetered Power Stations only



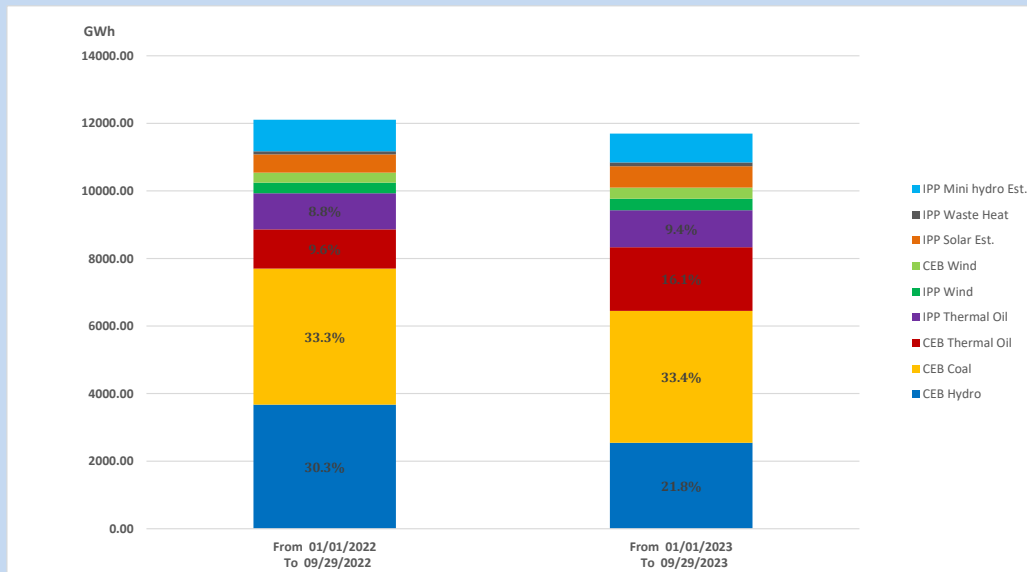
## Solar Generation during

September 29, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch  
 From 01/01/2022 To 09/29/2022  
 From 01/01/2023 To 09/29/2023

12106 GWh  
 11697 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 29, 2023

1) Kukule spilling continues to present hour.

2) Mannar 220/33kV T/F tripped (33kV only) at 06:14hrs (30/09/2023) due to the operation of E/F protection, causing all 33kV feeders to be dead. At the same time, 33kV feeder 01 tripped due to the operation of E/F protection. Mannar 132/33kV T/F was normalized at 06:29hrs (30/09/2023). All affected feeders, except feeder 01, were normalized by 06:32hrs (30/09/2023)