

# Generation and Reservoirs Statistics

October 17, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

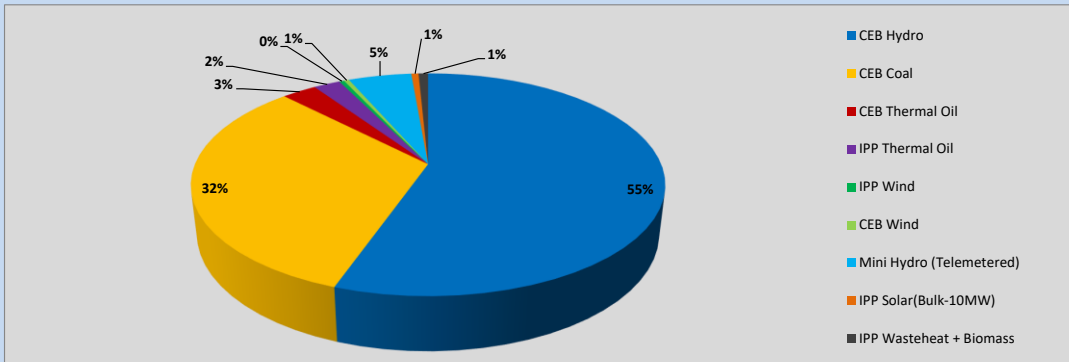


Table 01

	Generation (MWh)
CEB Hydro	21,069
CEB Coal	12,286
CEB Thermal Oil	1,073
IPP Thermal Oil	826
IPP Wind	152
CEB Wind	161
Mini Hydro (Telemetered)	1,957
IPP Solar (Bulk)	226
IPP Waste heat + Biomass	295
<b>Total Generation (Excluding estimated figures)</b>	<b>38,045</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	2903
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1930
<b>Total Generation (Including estimated figures)</b>	<b>43,182</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

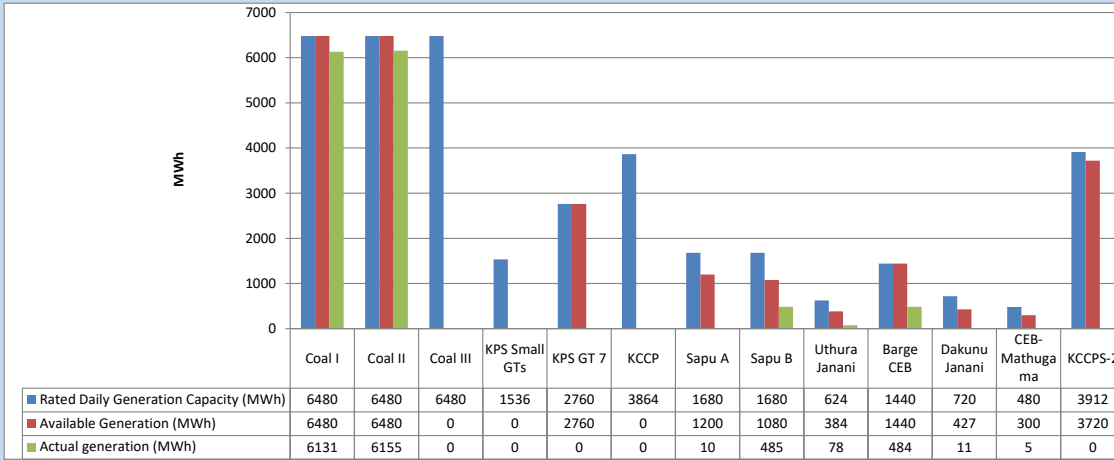
Category	Dispatch (GWh)	
CEB Hydro	258	42.07%
CEB Coal	204	33.20%
CEB Thermal Oil	54	8.85%
IPP Thermal	16	2.60%
SPP Wind	19	3.15%
CEB Wind	22	3.56%
Mini Hydro (Telemetered)	31	5.13%
IPP Solar(Bulk-10MW)	4	0.73%
IPP Waste heat + BMP	4	0.72%
<b>Total</b>	<b>613</b>	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,824	25.26%
CEB Coal	4,123	36.89%
CEB Thermal Oil	1,948	17.43%
IPP Thermal	1,111	9.94%
SPP Wind	345	3.08%
CEB Wind	354	3.16%
Mini Hydro (Telemetered)	283	2.53%
IPP Solar(Bulk-10MW)	87	0.78%
IPP Waste heat	104	0.93%
<b>Total</b>	<b>11,177</b>	

### 3. CEB owned Thermal Plant Dispatch

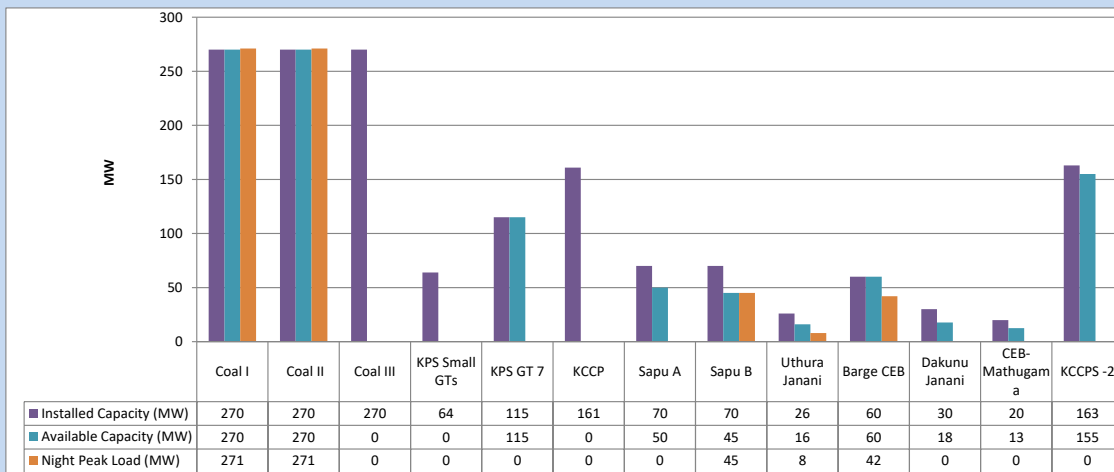
October 17, 2023



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

October 18, 2023

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

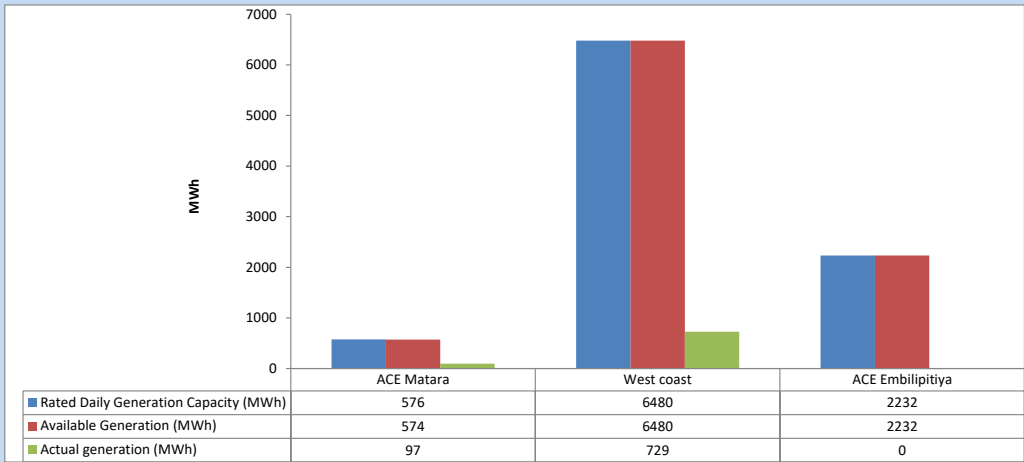


Plant availability is recorded at 6.00 am on

October 18, 2023

### 5. IPP owned Thermal Plant Dispatch

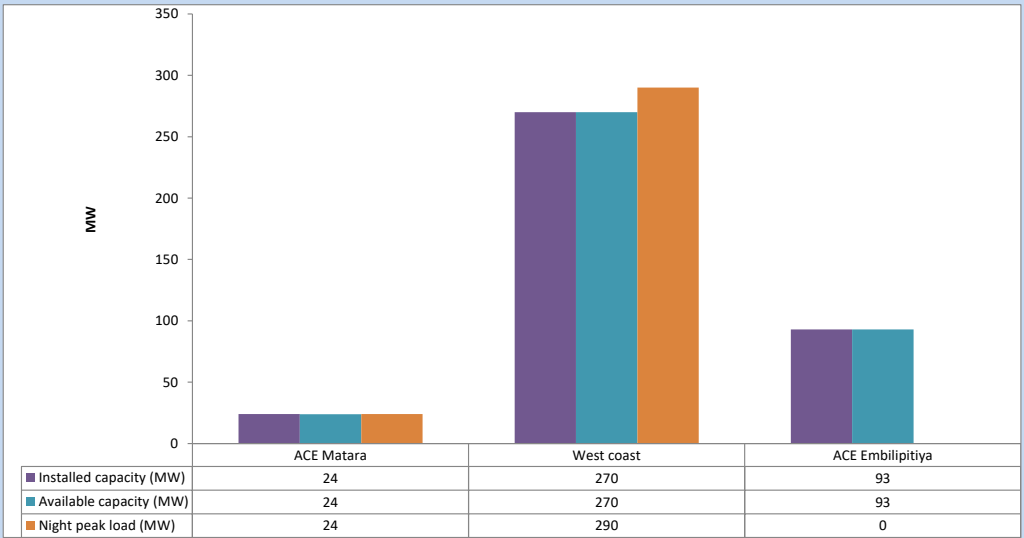
October 17, 2023



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

October 18, 2023

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

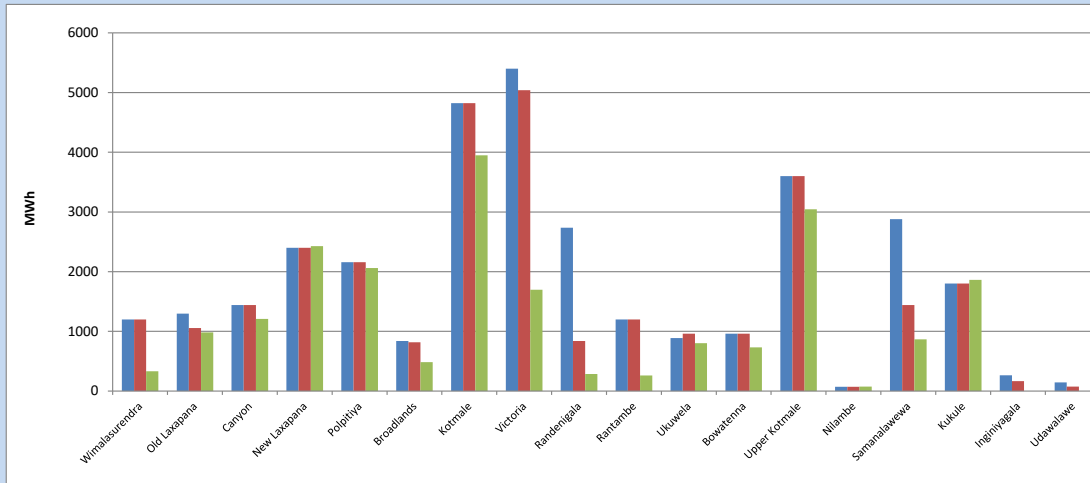


Plant availability is recorded at 6.00 am on

October 18, 2023

7. Major Hydro Plant Dispatch

October 17, 2023

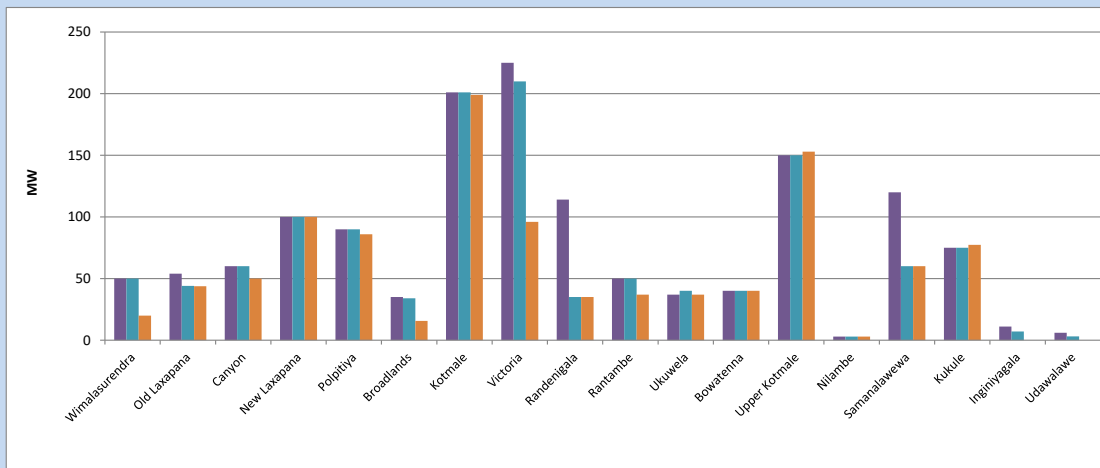


Available Generation is estimated based on plant availability at 6.00am on October 18, 2023  
Broadlands power plant is operating in the Commissioning Stage

October 18, 2023

8. Major Hydro Plant Loading at Night Peak

October 17, 2023



Plant availability is recorded at 6.00 am on October 18, 2023  
Broadlands power plant is operating in the Commissioning Stage

October 18, 2023

## 9. Summary of Major Plant performance

Table 05

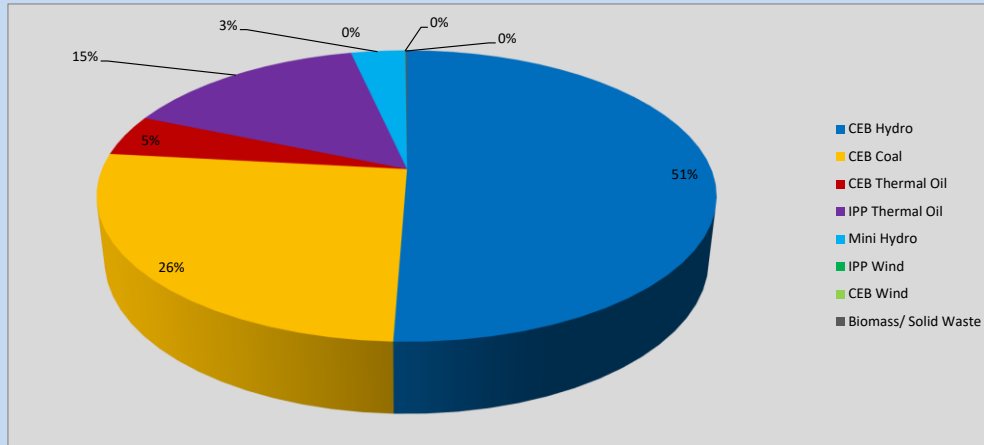
Plant	Installed Capacity	Plant Availability	Night peak Load	Plant Dispatch
	(MW)	(MW)	(MW)	(MWh)
Wimalasurendra	50	50	20	333
Old Laxapana	54	44	44	981
Canyon	60	60	50	1,209
New Laxapana	100	100	100	2,428
Polpitiya	90	90	86	2,060
Broadlands	35	34	16	485
Kotmale	201	201	199	3,950
Victoria	225	210	96	1,698
Randenigala	114	35	35	285
Rantambe	50	50	37	260
Ukuwela	37	40	37	802
Bowatenna	40	40	40	732
Upper Kotmale	150	150	153	3,046
Nilambe	3	3	3	74
Samanalawewa	120	60	60	865
Kukule	75	75	77	1,861
Inginiyagala	11	7	0	0
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	271	6,131
Puttalam Coal II	270	270	271	6,155
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	0	0	0
KPS GT 7	115	115	0	0
KCCP	161	0	0	0
Sapugaskanda A	70	50	0	10
Sapugaskanda B	70	45	45	485
Uthura Janani	26	16	8	78
Barge CEB	60	60	42	484
CEB-Hambantota	30	18	0	11
CEB-Mathugama	20	13	0	5
ACE Matara	24	24	24	97
Asia Power	50	0	0	0
KCCPS -2	163	155	0	0
West Coast	270	270	290	729
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	0	0
<b>Total</b>	<b>3,483</b>	<b>2,650</b>	<b>2,076</b>	<b>38,045</b>

Plant availability is the availability recorded at 6 am on

October 18, 2023

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

October 17, 2023



**Table 06**

CEB Hydro	1048	MW
CEB Coal	542	MW
CEB Thermal Oil	95	MW
IPP Thermal Oil	314	MW
Mini Hydro (Telemetered)	70	MW
IPP Wind	0.3	MW
CEB Wind	0	MW
Biomass/ Solid Waste	2	MW

### Recorded Peak Demand Data

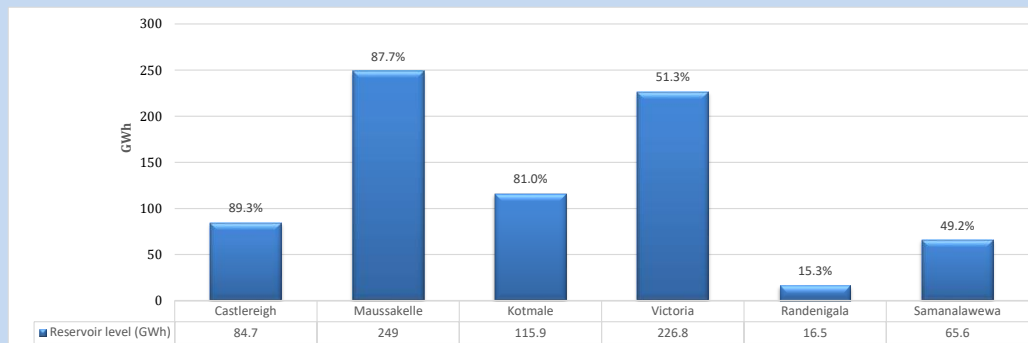
**Table 07**

Night Peak*	2,071	MW
Day Peak Maximum Demand	1,873	MW
Day Peak Minimum Demand	1,541	MW
Off Peak Minimum Demand	1,164	MW

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

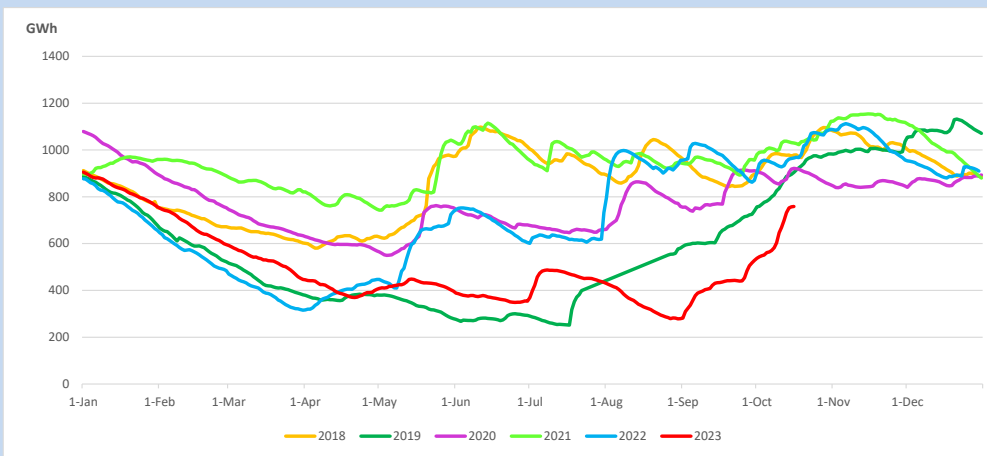
### Reservoir Levels -

as at 06.00 Hr on October 18, 2023

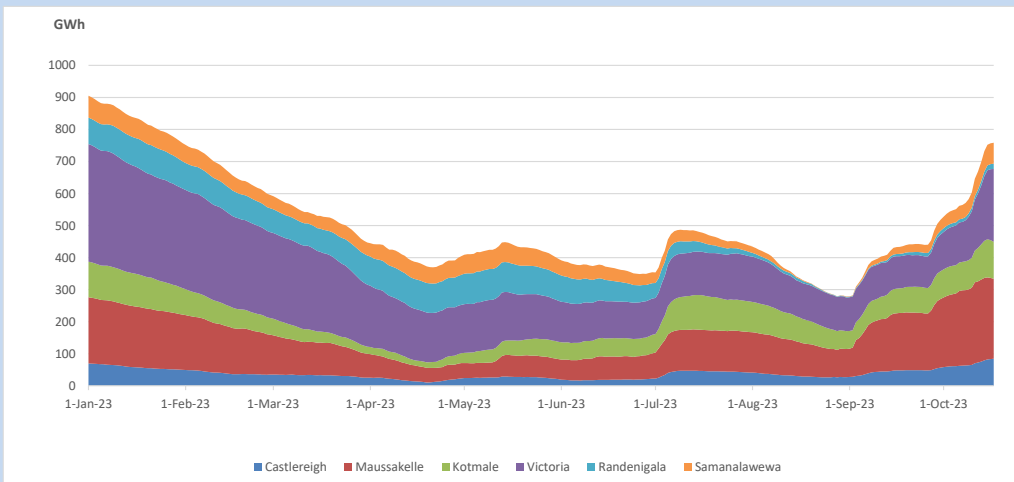


Total Reservoir Level 758.5 GWh  
 % of Total capacity 62.9%

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

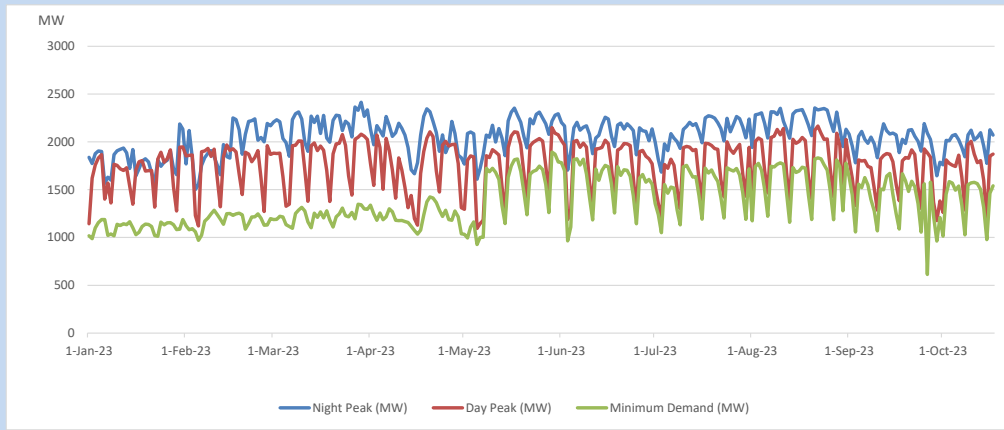


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





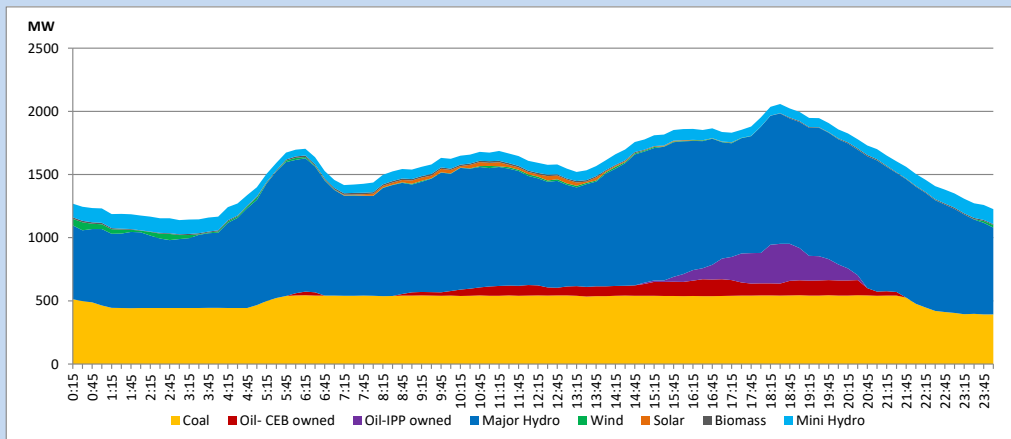
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

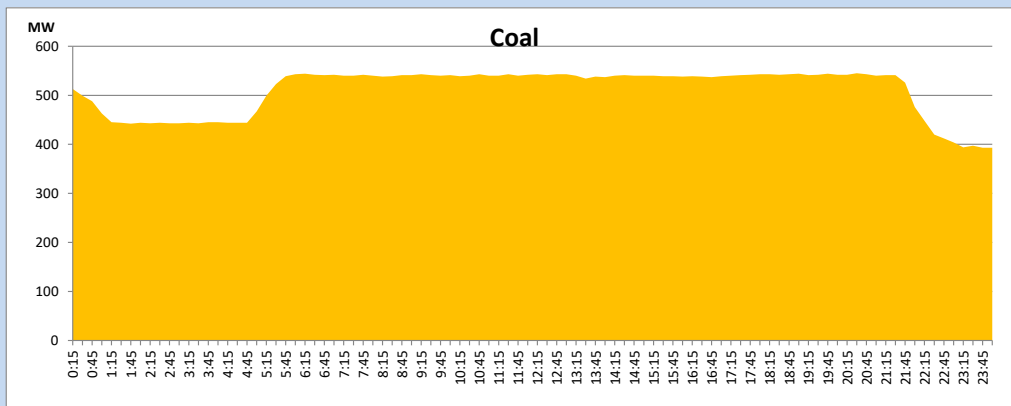
October 17, 2023



Solar and wind data is based on Telemetered Power Stations only

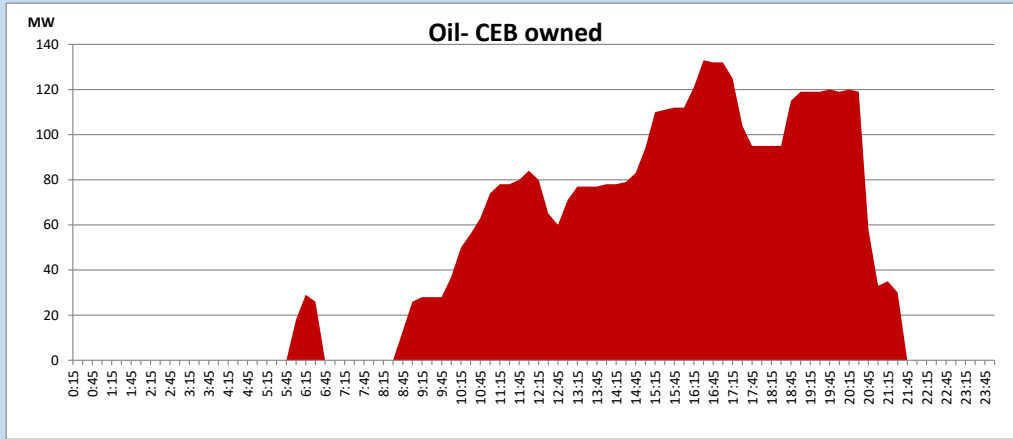
### Coal Generation during

October 17, 2023



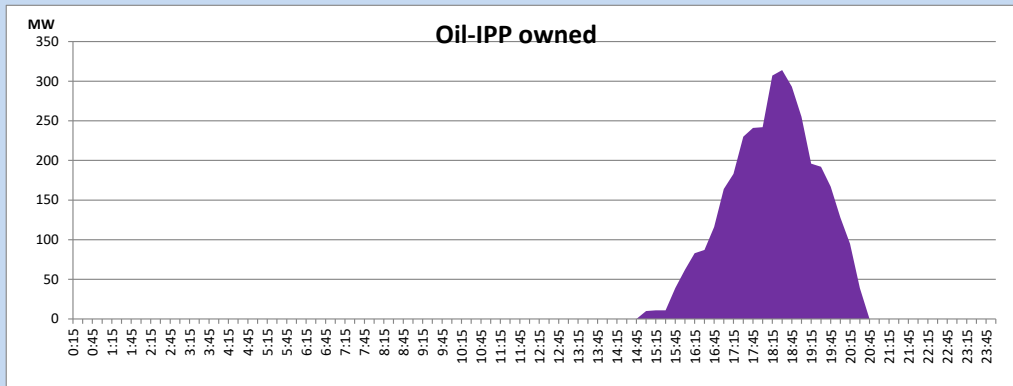
CEB Oil Plant Generation during

October 17, 2023



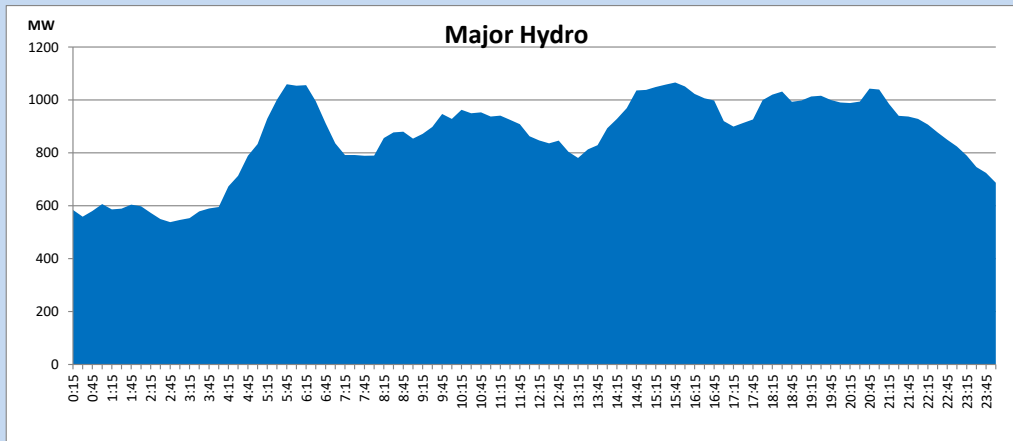
IPP Oil Plant Generation during

October 17, 2023



Major Hydro Generation during

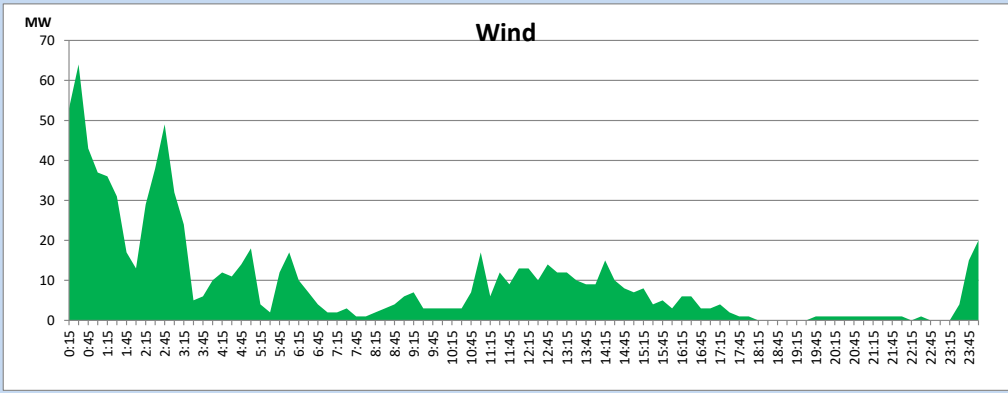
October 17, 2023



## Wind Generation during

October 17, 2023

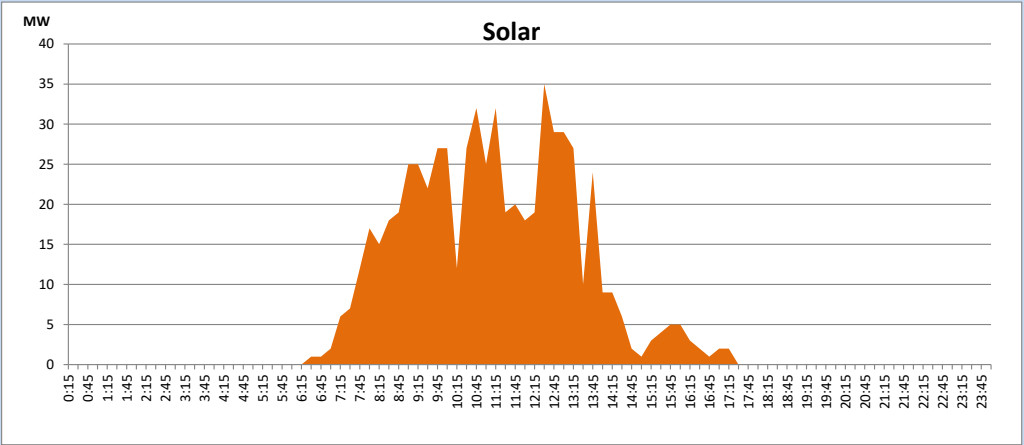
Based on Telemetered Power Stations only



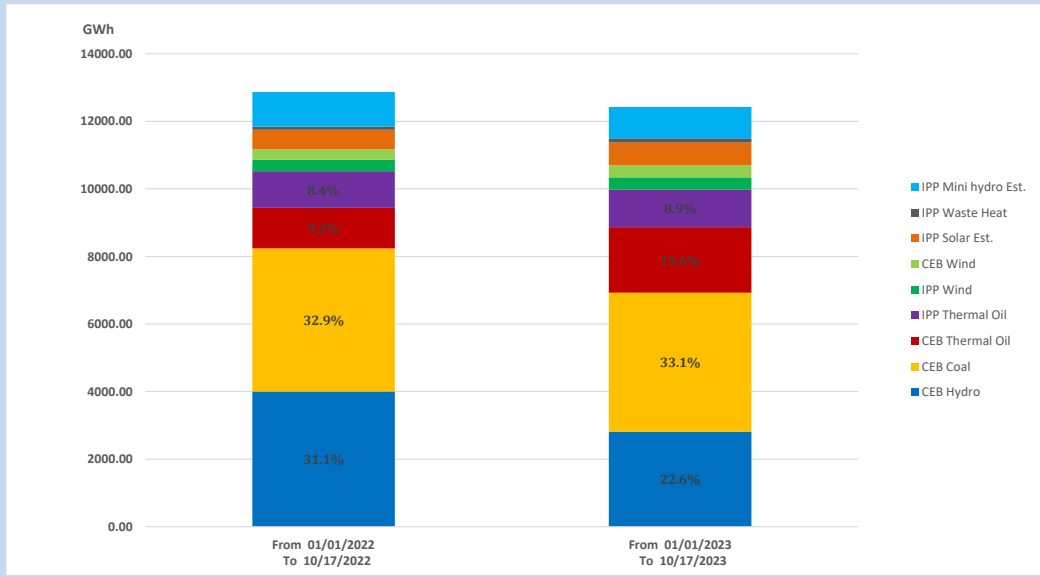
## Solar Generation during

October 17, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch  
 From 01/01/2022 To 10/17/2022  
 From 01/01/2023 To 10/17/2023

12869 GWh  
 12424 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

October 17, 2023

- 1) Horana 132/33kV T/F 03 which was tripped on 16.10.2023 , was normalized at 08:48hrs.
- 2) At 13:47hrs , system frequency dropped to 49.03Hz due to the rejection of embedded generation.
- 3) Upper Kotmale unit 01 made a forced shutdown at 16:27hrs due to cooling water system issue. The unit resumed generation at 17:14hrs.
- 4) Laxapana pond started spilling at 06:40hrs. Broadlands pond spilling stopped at 21:59hrs . Laxapana and Canyon pond spilling continues to the present hour.