

# Generation and Reservoirs Statistics

October 18, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

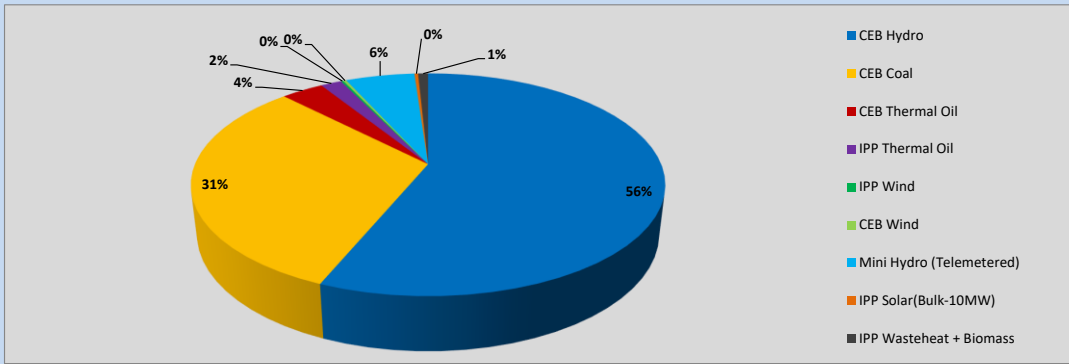


Table 01

	Generation (MWh)
CEB Hydro	21,268
CEB Coal	11,863
CEB Thermal Oil	1,300
IPP Thermal Oil	647
IPP Wind	77
CEB Wind	93
Mini Hydro (Telemetered)	2,129
IPP Solar (Bulk)	112
IPP Waste heat + Biomass	309
<b>Total Generation (Excluding estimated figures)</b>	<b>37,798</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	2731
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1930
<b>Total Generation (Including estimated figures)</b>	<b>42,763</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

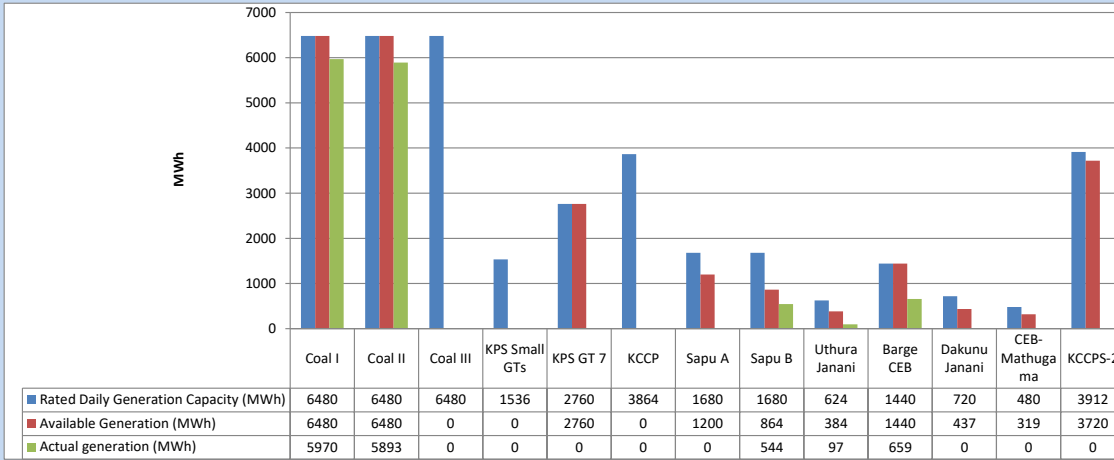
Category	Dispatch (GWh)	
CEB Hydro	279	42.89%
CEB Coal	216	33.10%
CEB Thermal Oil	56	8.53%
IPP Thermal	17	2.55%
SPP Wind	19	2.98%
CEB Wind	22	3.36%
Mini Hydro (Telemetered)	34	5.16%
IPP Solar(Bulk-10MW)	5	0.70%
IPP Waste heat + BMP	5	0.72%
<b>Total</b>	<b>651</b>	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,845	25.37%
CEB Coal	4,135	36.87%
CEB Thermal Oil	1,949	17.38%
IPP Thermal	1,111	9.91%
SPP Wind	345	3.07%
CEB Wind	354	3.15%
Mini Hydro (Telemetered)	285	2.54%
IPP Solar(Bulk-10MW)	87	0.78%
IPP Waste heat	104	0.93%
<b>Total</b>	<b>11,215</b>	

### 3. CEB owned Thermal Plant Dispatch

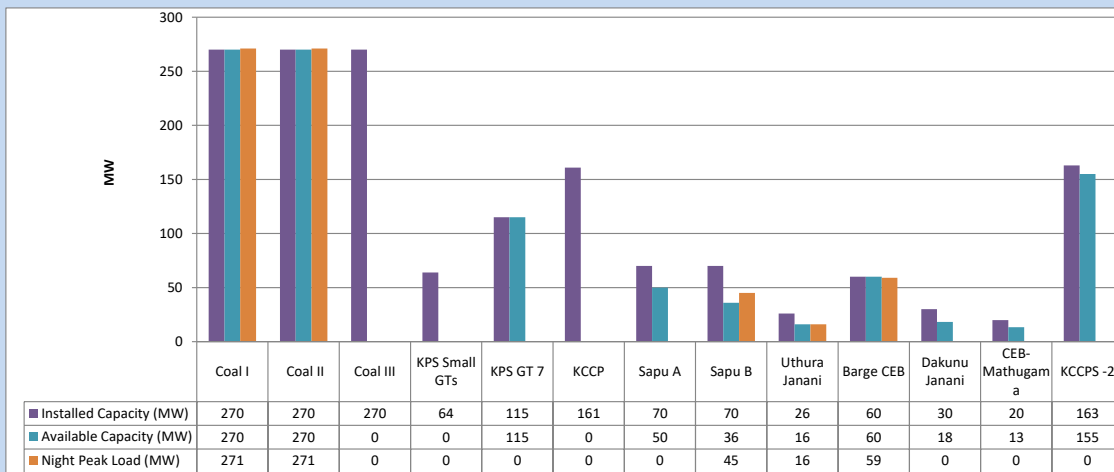
October 18, 2023



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

October 19, 2023

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

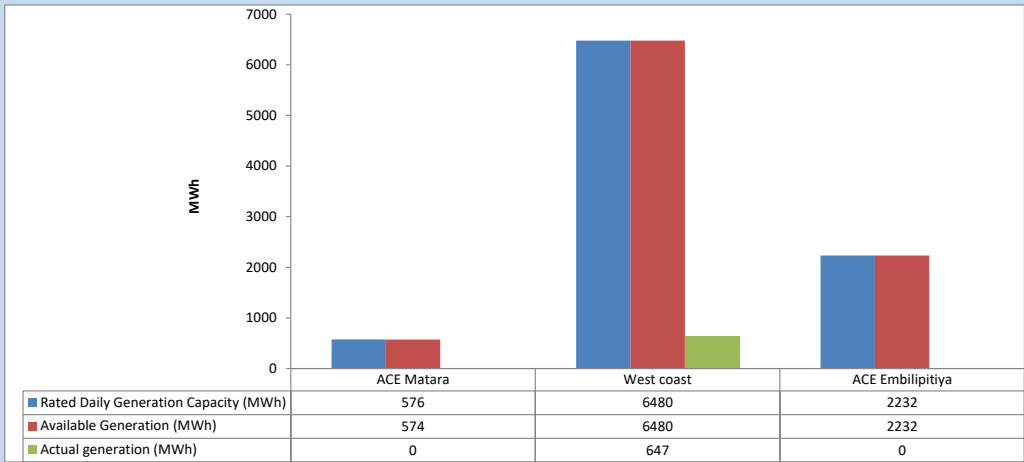


Plant availability is recorded at 6.00 am on

October 19, 2023

### 5. IPP owned Thermal Plant Dispatch

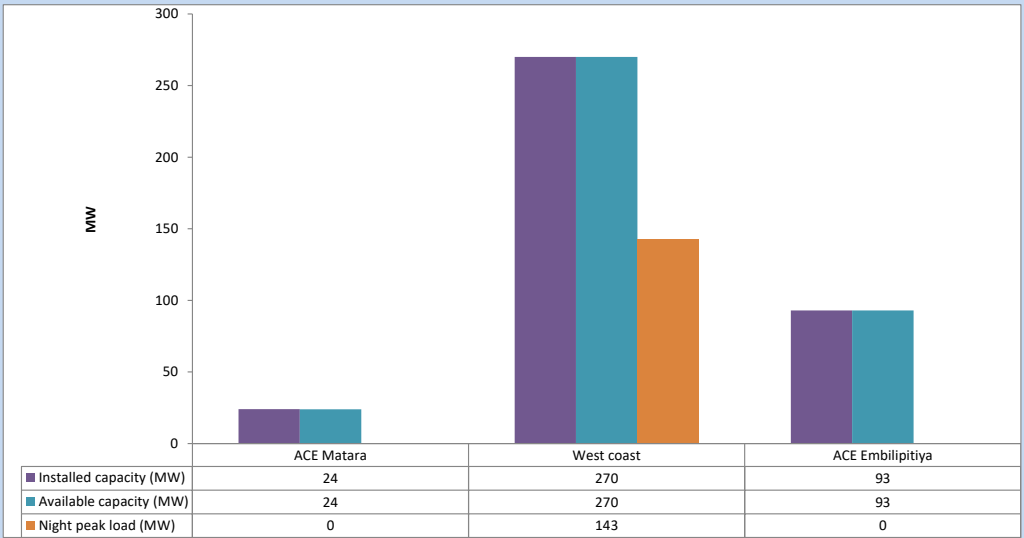
October 18, 2023



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

October 19, 2023

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

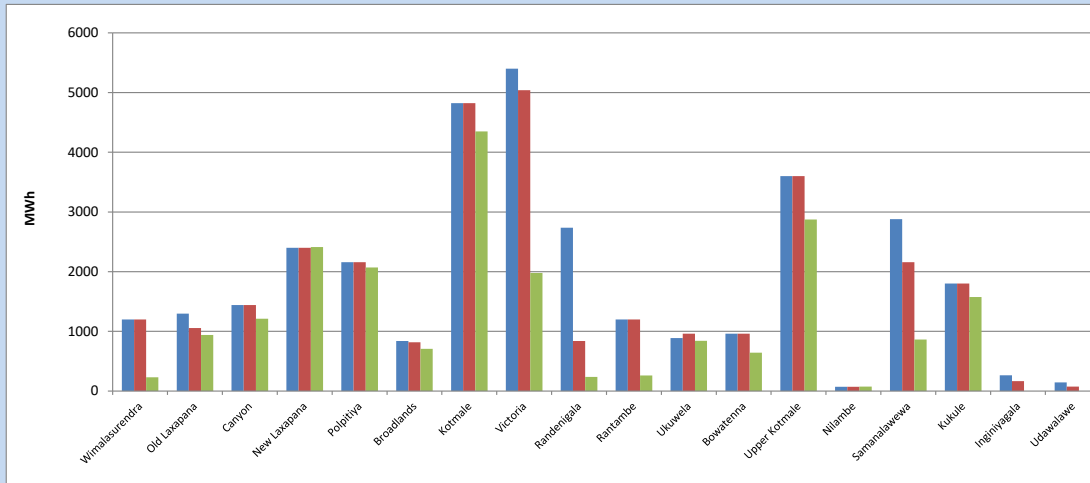


Plant availability is recorded at 6.00 am on

October 19, 2023

7. Major Hydro Plant Dispatch

October 18, 2023

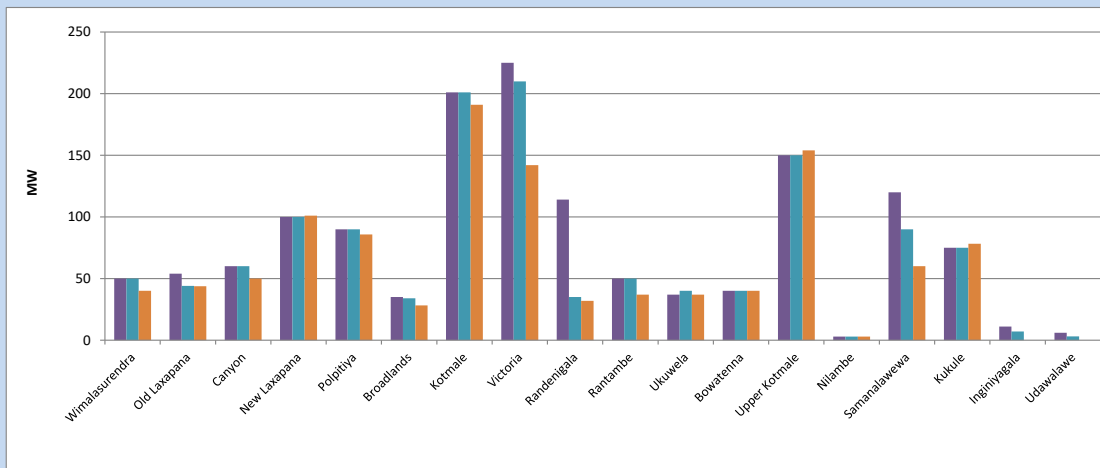


Available Generation is estimated based on plant availability at 6.00am on October 19, 2023  
Broadlands power plant is operating in the Commissioning Stage

October 19, 2023

8. Major Hydro Plant Loading at Night Peak

October 18, 2023



Plant availability is recorded at 6.00 am on October 19, 2023  
Broadlands power plant is operating in the Commissioning Stage

October 19, 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	40	231
Old Laxapana	54	44	44	940
Canyon	60	60	50	1,211
New Laxapana	100	100	101	2,412
Polpitiya	90	90	86	2,070
Broadlands	35	34	28	706
Kotmale	201	201	191	4,350
Victoria	225	210	142	1,978
Randenigala	114	35	32	237
Rantambe	50	50	37	262
Ukuwela	37	40	37	842
Bowatenna	40	40	40	642
Upper Kotmale	150	150	154	2,872
Nilambe	3	3	3	76
Samanalawewa	120	90	60	864
Kukule	75	75	78	1,575
Inginiyagala	11	7	0	0
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	271	5,970
Puttalam Coal II	270	270	271	5,893
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	0
Sapugaskanda B	70	36	45	544
Uthura Janani	26	16	16	97
Barge CEB	60	60	59	659
CEB-Hambantota	30	18	0	0
CEB-Mathugama	20	13	0	0
ACE Matara	24	24	0	0
Asia Power	50	0	0	0
KCCPS -2	163	155	0	0
West Coast	270	270	143	647
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	0	0
Total	3,483	2,673	2,014	37,798

Plant availability is the availability recorded at 6 am on

October 19, 2023

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

October 18, 2023

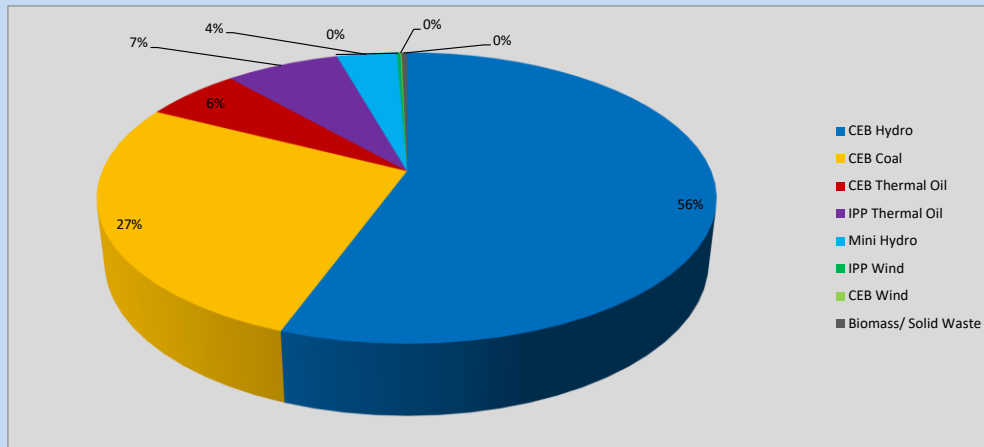


Table 06

CEB Hydro	1116	MW
CEB Coal	542	MW
CEB Thermal Oil	120	MW
IPP Thermal Oil	143	MW
Mini Hydro (Telemetered)	75	MW
IPP Wind	4.6	MW
CEB Wind	-1.1	MW
Biomass/ Solid Waste	7	MW

#### Recorded Peak Demand Data

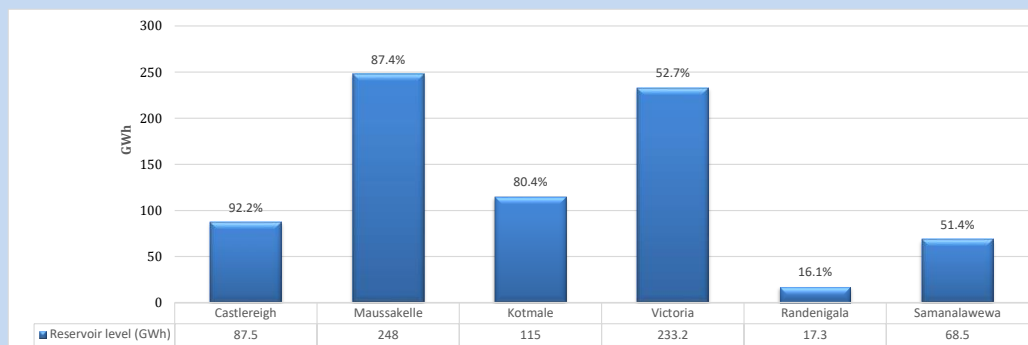
Table 07

Night Peak*	2,007	MW
Day Peak Maximum Demand	1,800	MW
Day Peak Minimum Demand	1,672	MW
Off Peak Minimum Demand	1,112	MW

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

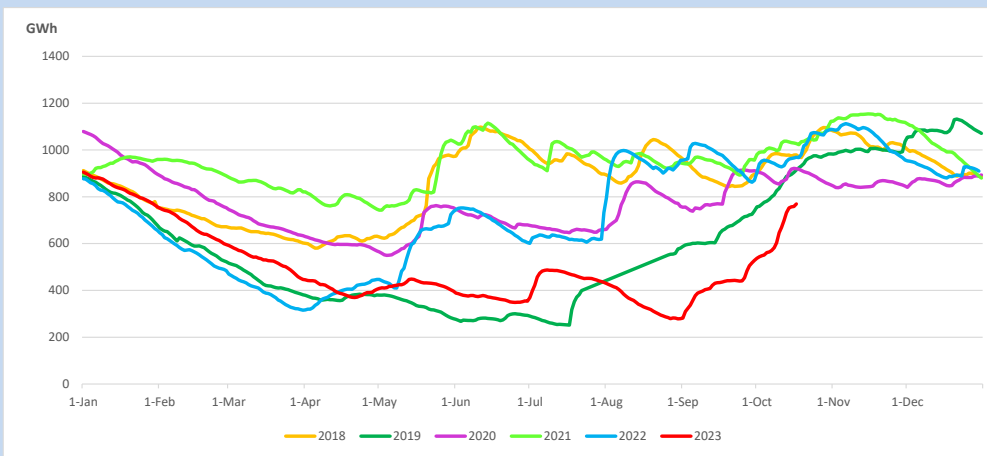
#### Reservoir Levels -

as at 06.00 Hr on October 19, 2023

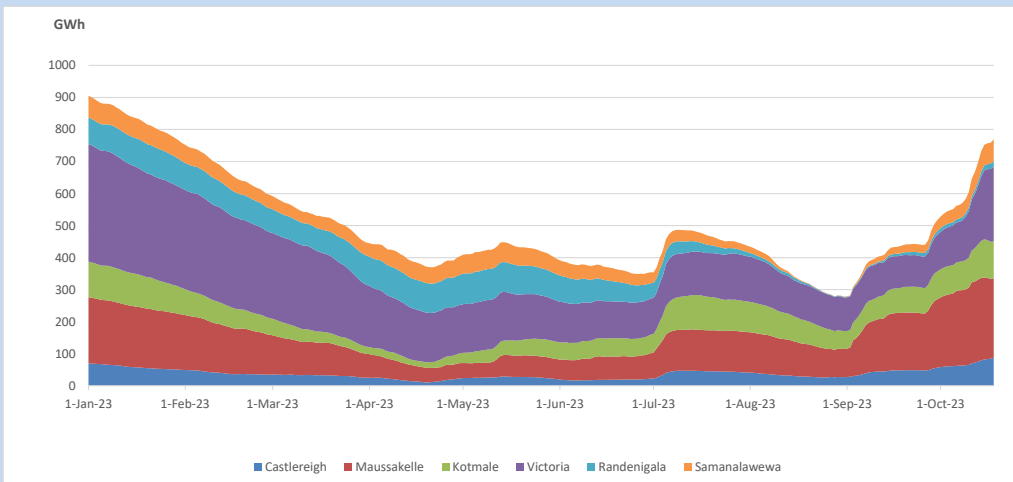


Total Reservoir Level 769.5 GWh  
% of Total capacity 63.9%

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

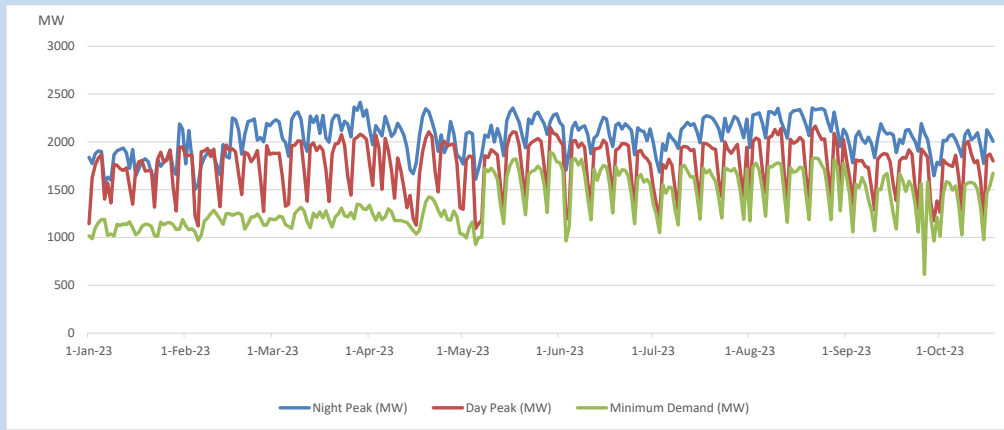


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





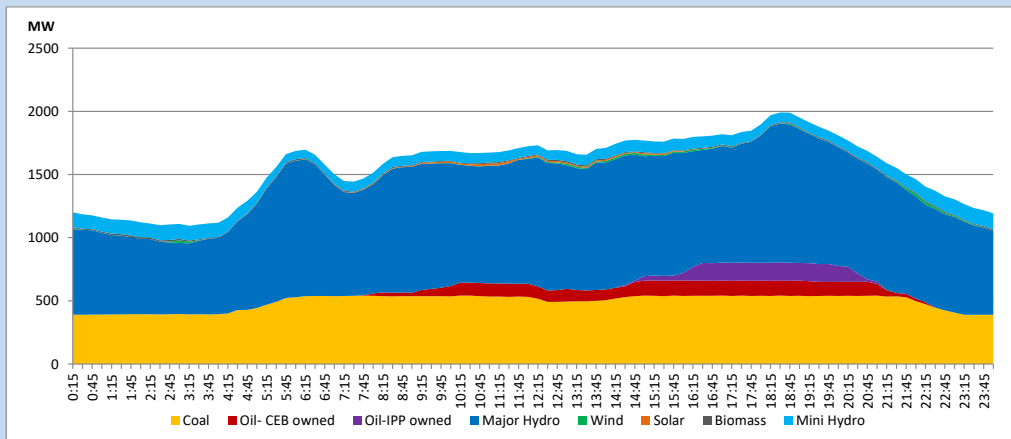
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

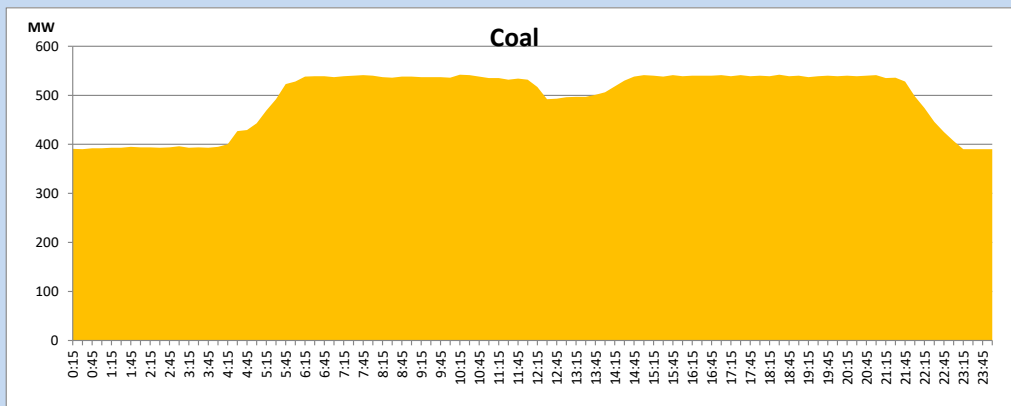
October 18, 2023



Solar and wind data is based on Telemetered Power Stations only

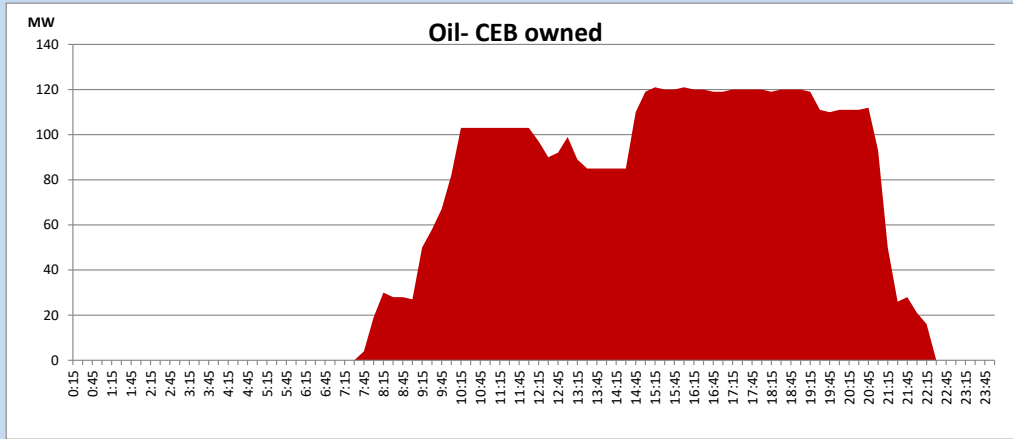
### Coal Generation during

October 18, 2023



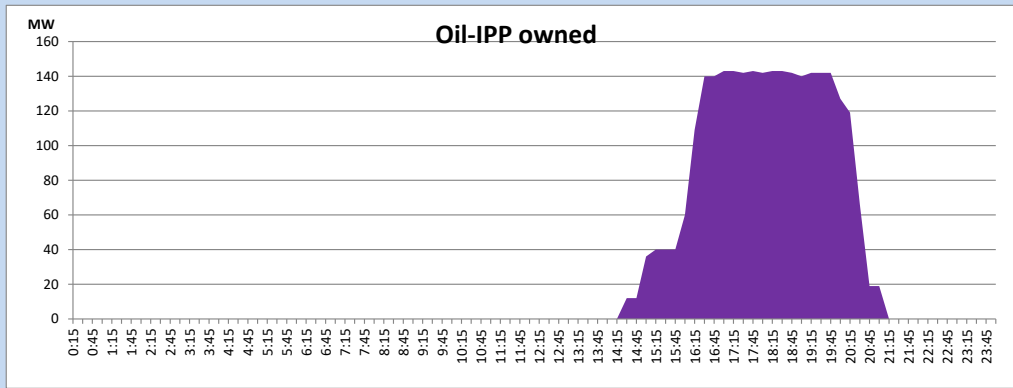
CEB Oil Plant Generation during

October 18, 2023



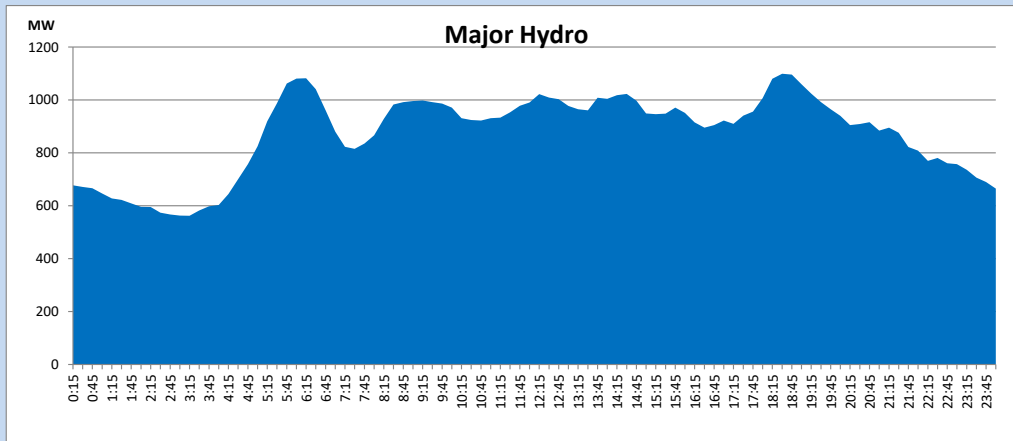
IPP Oil Plant Generation during

October 18, 2023



Major Hydro Generation during

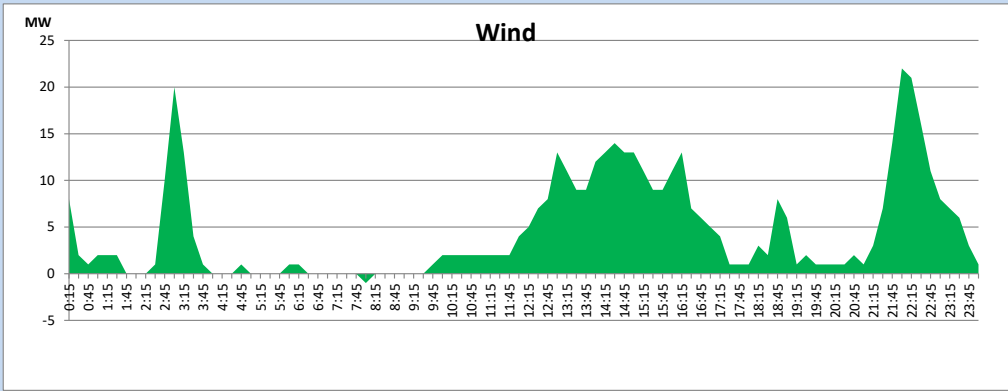
October 18, 2023



### Wind Generation during

October 18, 2023

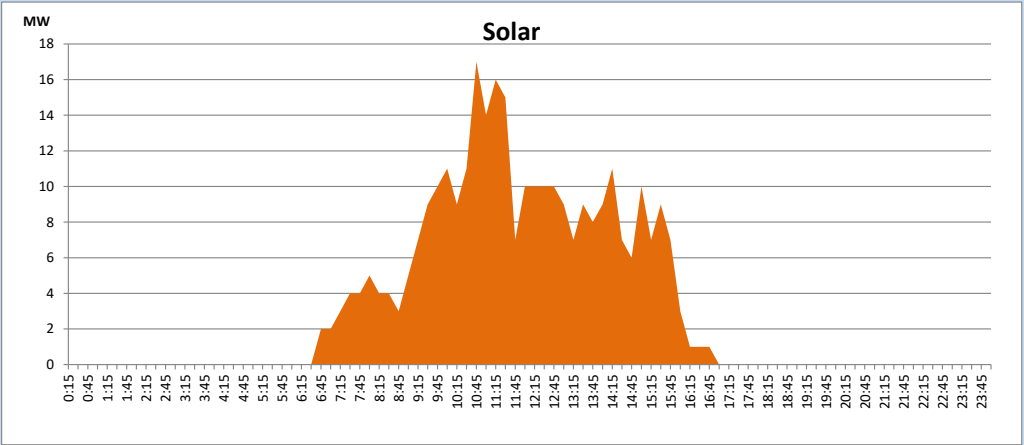
Based on Telemetered Power Stations only



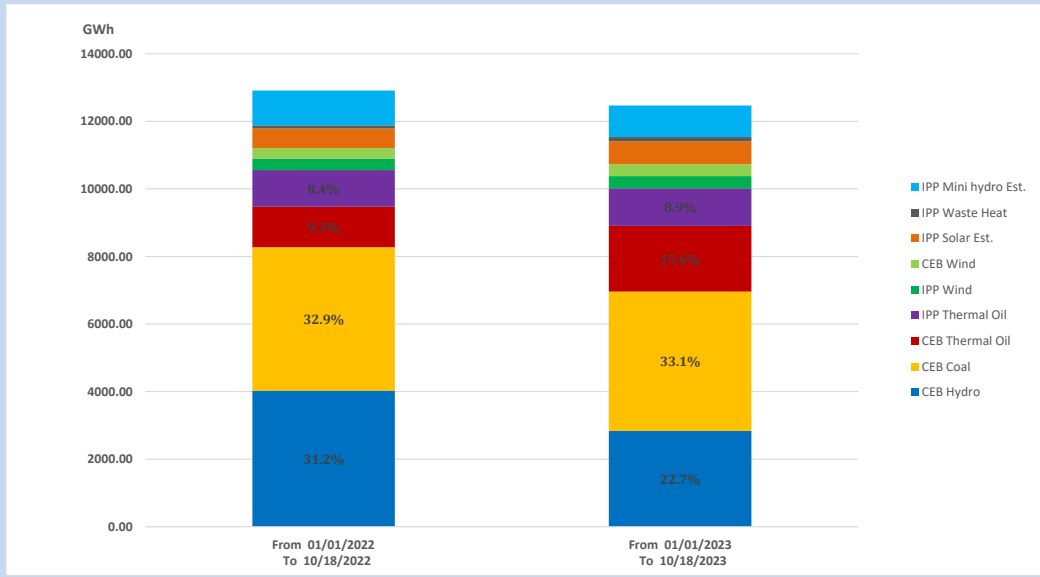
### Solar Generation during

October 18, 2023

Based on Telemetered Power Stations only



### 15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch  
 From 01/01/2022 To 10/18/2022  
 From 01/01/2023 To 10/18/2023

12912 GWh  
 12466 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 18, 2023

- 1) Upper Kotmale unit 02 made a forced shutdown at 19:41hrs due to blockage of cooling water. The unit resumed generation at 04:02hrs(19.10.2023).
- 2) Maliboda 132/33kV T/F 02 tripped along with feeder 03 at 02:21hrs(19.10.2023) due to the operation of restricted earth fault protection. The T/F is yet to be normalized.
- 3) Upper Kotmale pond spilling started at 02:29hrs(19.10.2023) and stopped at 04:04hrs(19.10.2023). Kukule pond spilling started at 21:30hrs and continues to the present hour.
- 4) At 04:15hrs (19.10.2023), system frequency dropped to 49.43Hz due to the tripping of embeded generation.
- 5) Laxapana pond spilled intermittently and spilling continues to the present hour. Canyon pond spilling stopped at 04:12hrs(19.10.2013).