

# Generation and Reservoirs Statistics

November 5, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

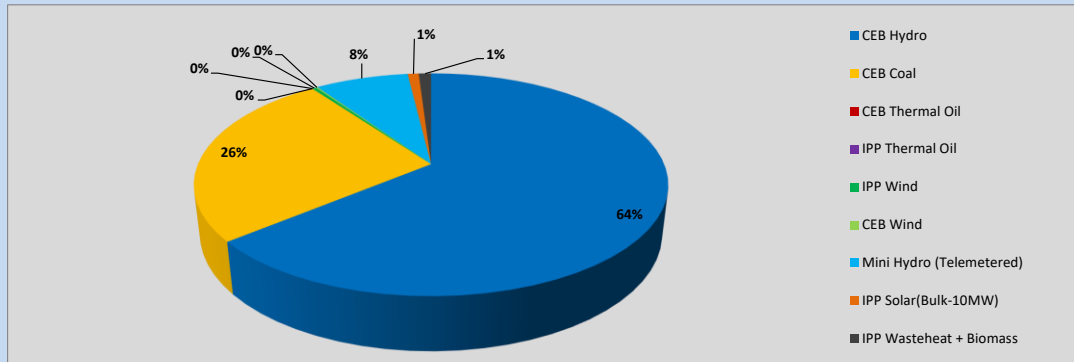


Table 01

	Generation (MWh)
CEB Hydro	19,012
CEB Coal	7,722
CEB Thermal Oil	-
IPP Thermal Oil	-
IPP Wind	96
CEB Wind	45
Mini Hydro (Telemetered)	2,262
IPP Solar (Bulk)	267
IPP Waste heat + Biomass	299
<b>Total Generation (Excluding estimated figures)</b>	<b>29,703</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	2608
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1640
<b>Total Generation (Including estimated figures)</b>	<b>34,255</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

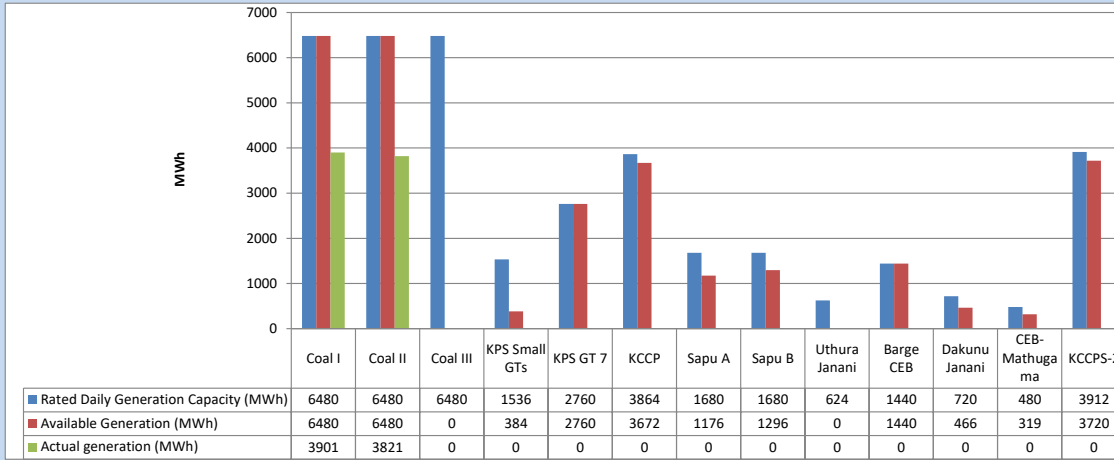
Category	Dispatch (GWh)	
CEB Hydro	111	97.85%
CEB Coal	47	41.55%
CEB Thermal Oil	1	1.01%
IPP Thermal	0	0.13%
SPP Wind	1	0.56%
CEB Wind	1	0.62%
Mini Hydro (Telemetered)	12	10.64%
IPP Solar(Bulk-10MW)	1	1.09%
IPP Waste heat + BMP	1	1.16%
<b>Total</b>	<b>113</b>	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	3,225	27.36%
CEB Coal	4,323	36.68%
CEB Thermal Oil	1,955	16.59%
IPP Thermal	1,114	9.45%
SPP Wind	347	2.95%
CEB Wind	357	3.03%
Mini Hydro (Telemetered)	321	2.73%
IPP Solar(Bulk-10MW)	92	0.78%
IPP Waste heat	109	0.93%
<b>Total</b>	<b>11,786</b>	

### 3. CEB owned Thermal Plant Dispatch

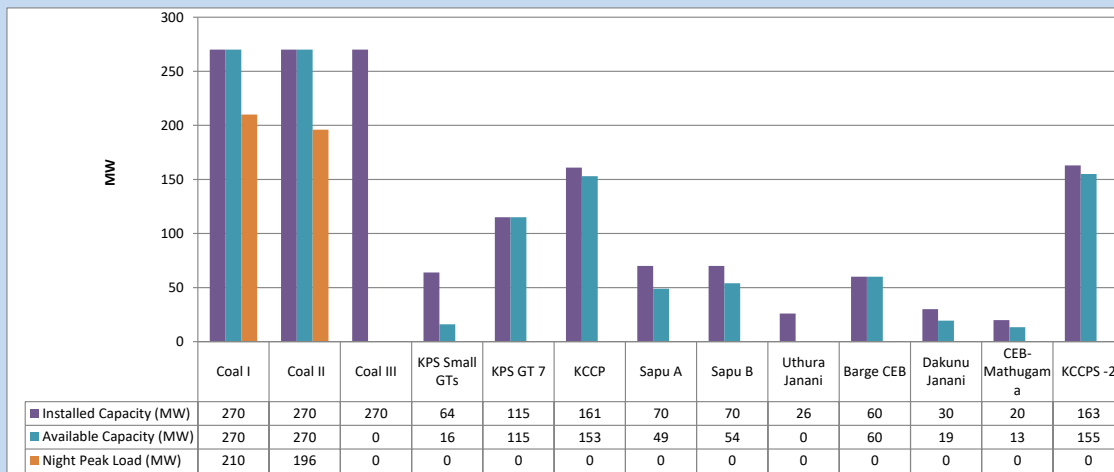
November 5, 2023



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

November 6, 2023

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

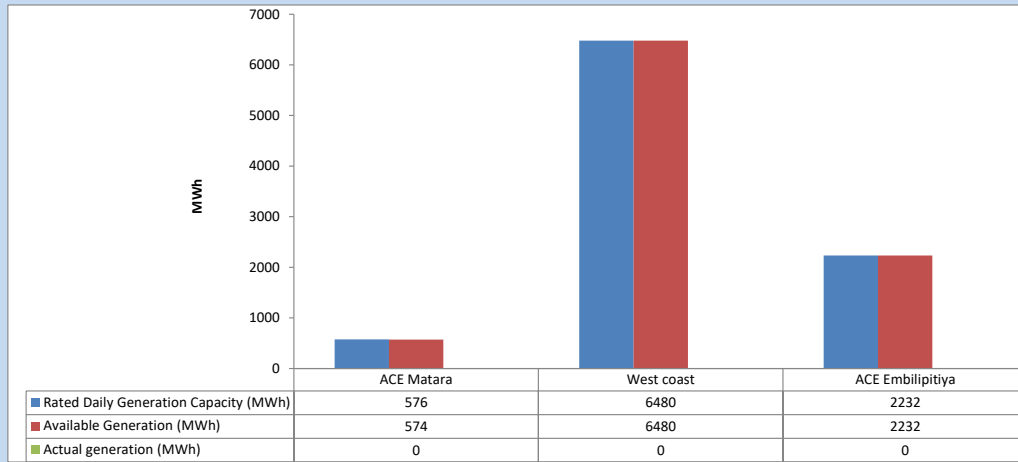


Plant availability is recorded at 6.00 am on

November 6, 2023

### 5. IPP owned Thermal Plant Dispatch

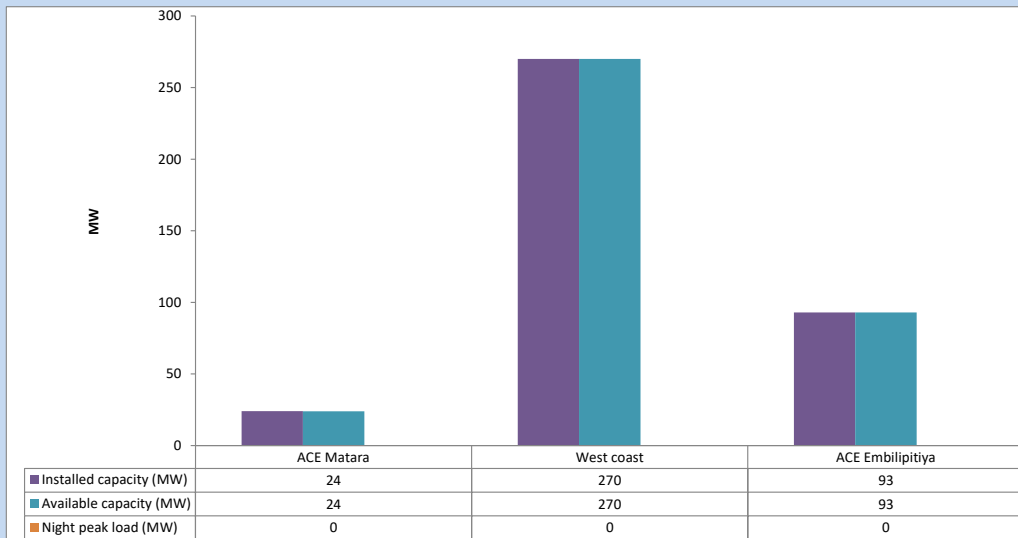
November 5, 2023



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

November 6, 2023

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

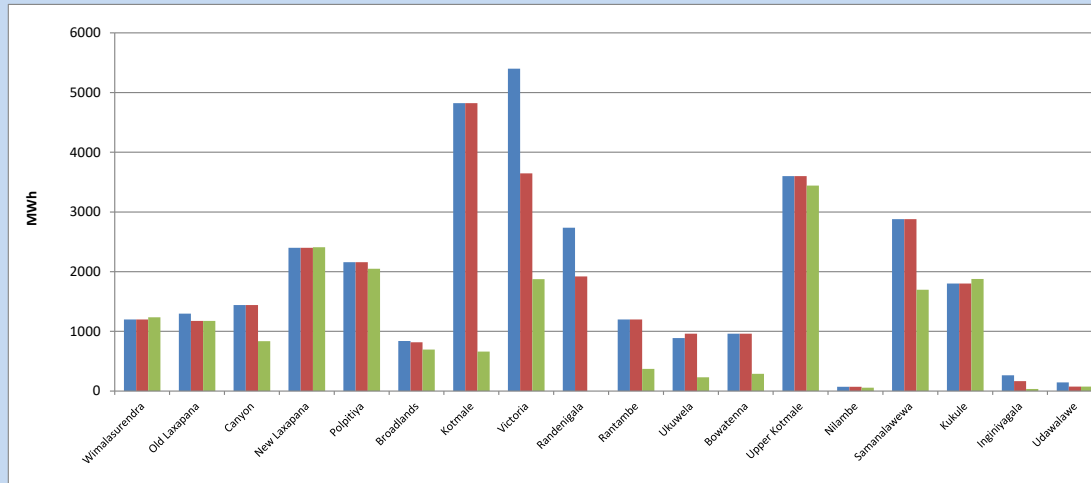


Plant availability is recorded at 6.00 am on

November 6, 2023

### 7. Major Hydro Plant Dispatch

November 5, 2023

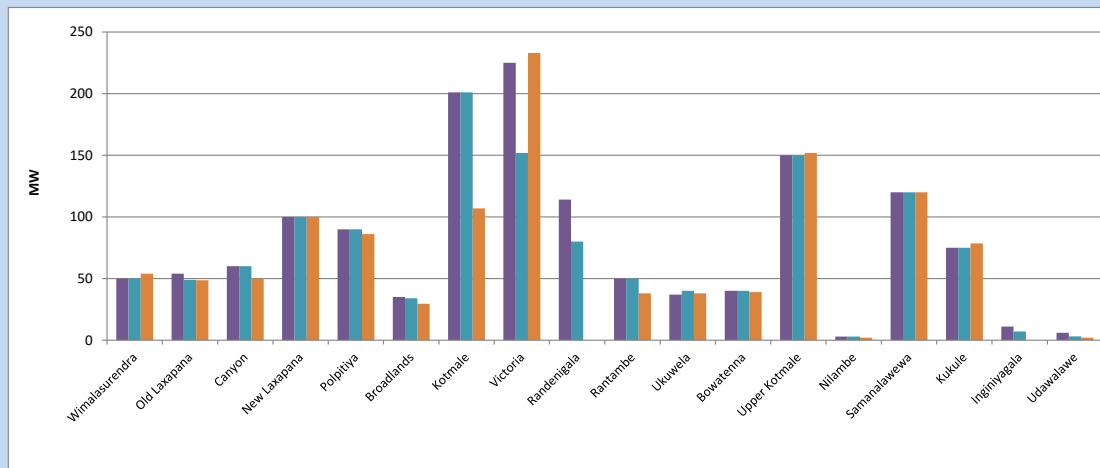


Available Generation is estimated based on plant availability at 6.00am on November 6, 2023  
Broadlands power plant is operating in the Commissioning Stage

November 6, 2023

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

November 5, 2023



Plant availability is recorded at 6.00 am on November 6, 2023  
Broadlands power plant is operating in the Commissioning Stage

November 6, 2023

## 9. Summary of Major Plant performance

Table 05

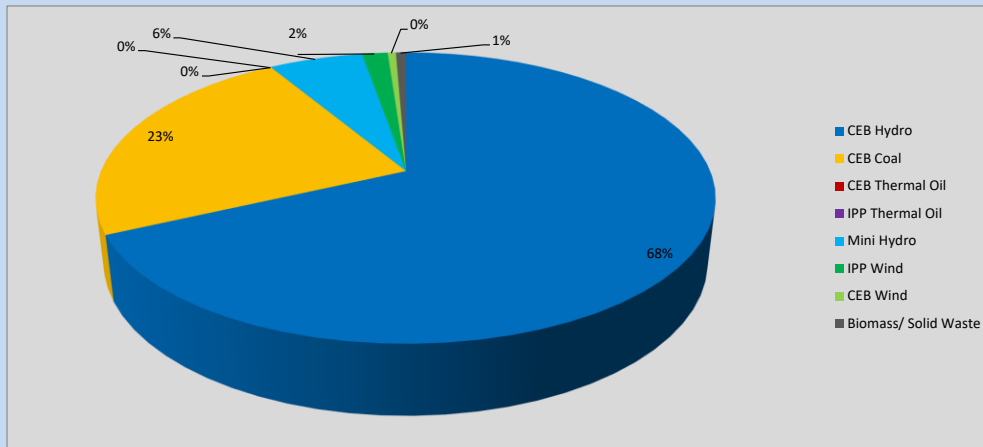
Plant	Installed Capacity (MW)	Plant Availability (MW)	Night peak Load (MW)	Plant Dispatch (MWh)
Wimalasurendra	50	50	54	1,236
Old Laxapana Canyon	54	49	49	1,176
New Laxapana	60	60	50	835
Polpitiya	100	100	100	2,410
Broadlands	90	90	86	2,050
Kotmale	35	34	30	694
Victoria	201	201	107	660
Randenigala	225	152	233	1,874
Rantambe	114	80	0	0
Ukuwela	50	50	38	371
Bowatenna	37	40	38	231
Upper Kotmale	40	40	39	290
Nilambe	150	150	152	3,442
Samanalawewa	3	3	2	57
Kukule	120	120	120	1,696
Inginiyagala	75	75	79	1,879
Udawalawe	11	7	0	35
Puttalam Coal I	6	3	2	76
Puttalam Coal II	270	270	210	3,901
Puttalam Coal III	270	270	196	3,821
KPS Small GTs	270	0	0	0
KPS GT 7	64	16	0	0
KCCP	115	115	0	0
Sapugaskanda A	161	153	0	0
Sapugaskanda B	70	49	0	0
Uthura Janani	70	54	0	0
Barge CEB	26	0	0	0
CEB-Hambantota	60	60	0	0
CEB-Mathugama	30	19	0	0
ACE Matara	20	13	0	0
Asia Power	24	24	0	0
KCCPS -2	50	0	0	0
West Coast	163	155	0	0
Nothern Power	270	270	0	0
ACE Embilipitiya	36	0	0	0
Total	93	93	0	0
<b>Total</b>	<b>3,483</b>	<b>2,866</b>	<b>1,734</b>	<b>29,703</b>

Plant availability is the availability recorded at 6 am on

November 6, 2023

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

November 5, 2023



**Table 06**

CEB Hydro	1189	MW
CEB Coal	406	MW
CEB Thermal Oil	0	MW
IPP Thermal Oil	0	MW
Mini Hydro (Telemetered)	102	MW
IPP Wind	28	MW
CEB Wind	8.9	MW
Biomass/ Solid Waste	11	MW

### Recorded Peak Demand Data

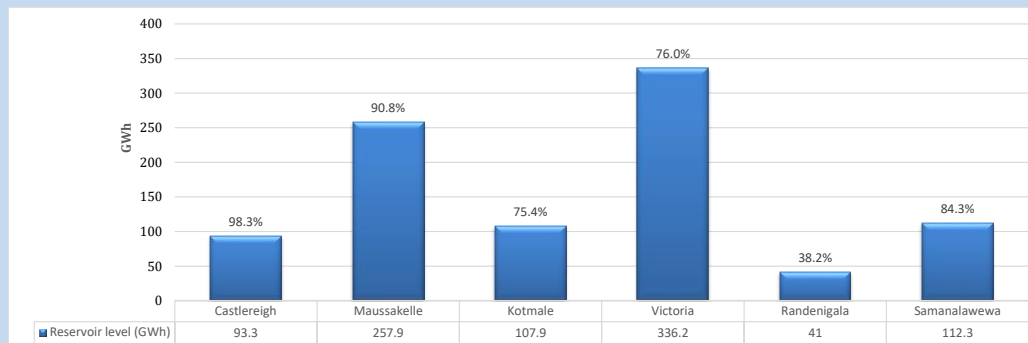
**Table 07**

Night Peak*	1,745	MW
Day Peak Maximum Demand	1,360	MW
Day Peak Minimum Demand	1,003	MW
Off Peak Minimum Demand	1,018	MW

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

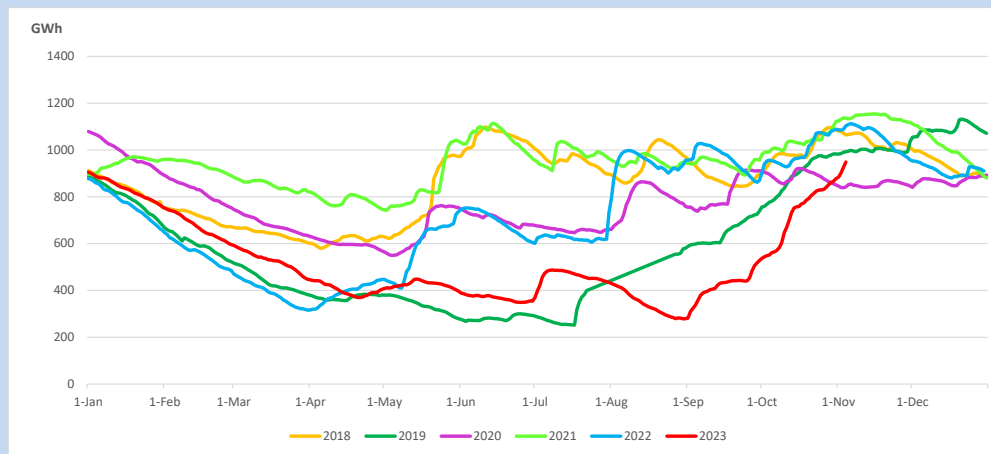
### Reservoir Levels -

as at 06.00 Hr on November 6, 2023

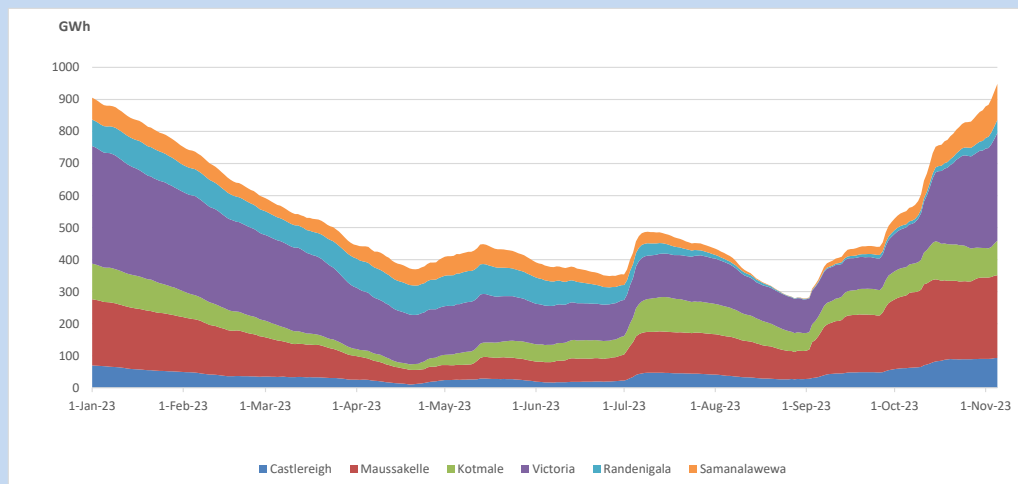


Total Reservoir Level            948.6 GWh  
 % of Total capacity                78.7%

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

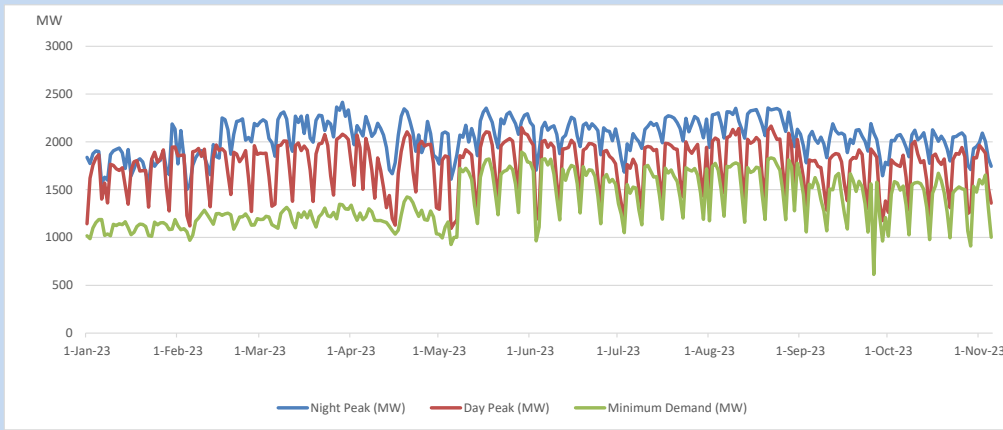


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





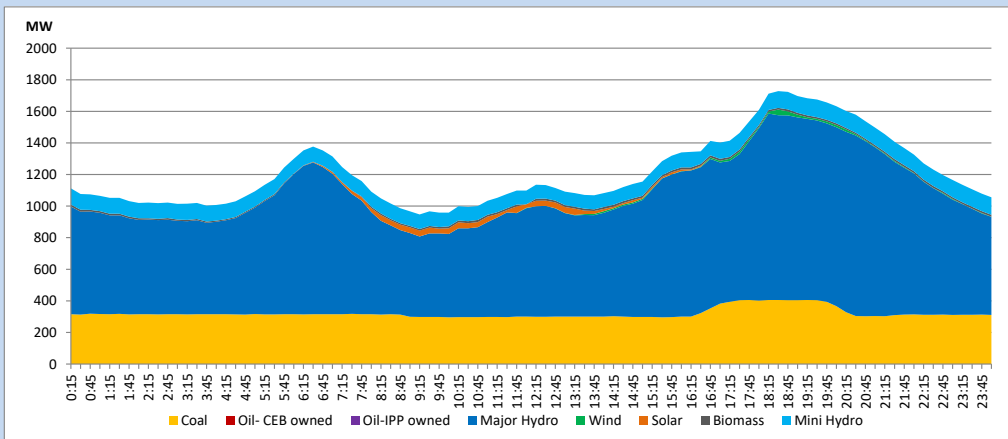
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

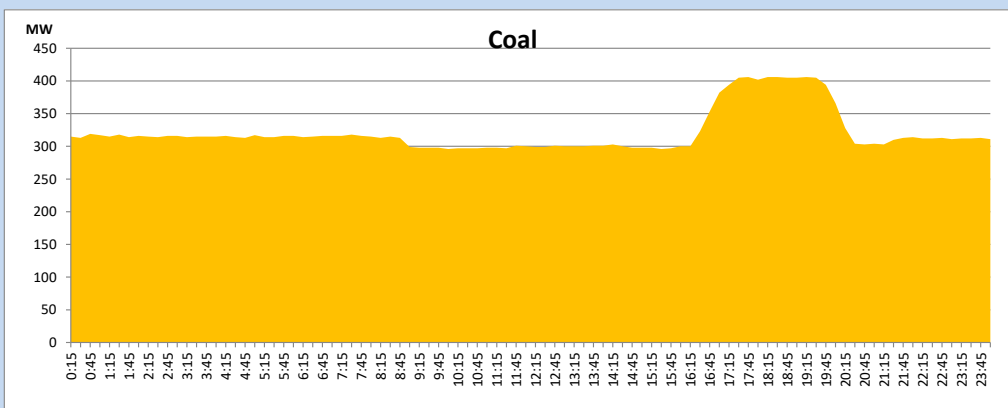
November 5, 2023



Solar and wind data is based on Telemetered Power Stations only

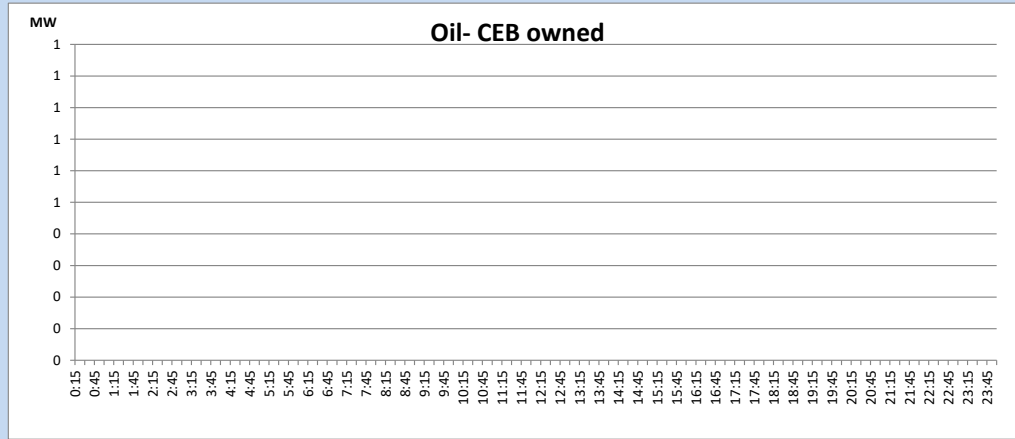
### Coal Generation during

November 5, 2023



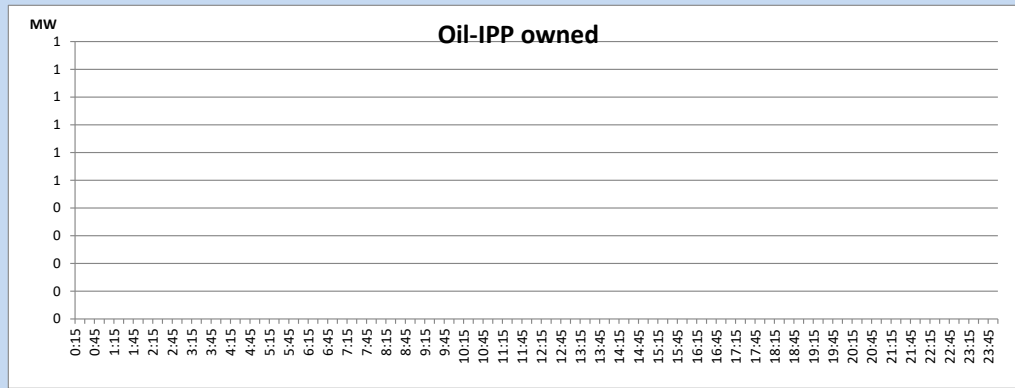
CEB Oil Plant Generation during

November 5, 2023



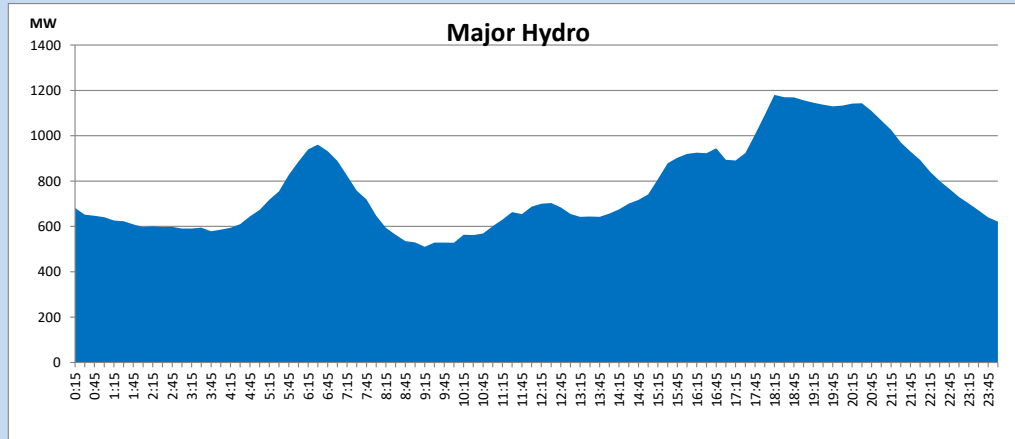
IPP Oil Plant Generation during

November 5, 2023



Major Hydro Generation during

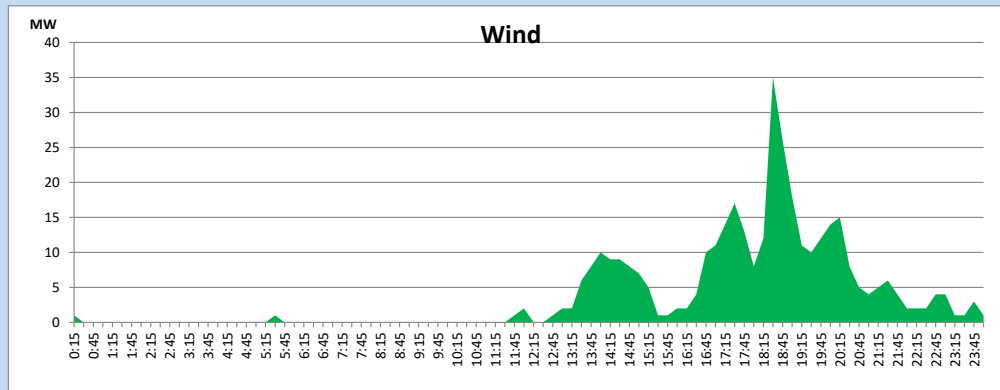
November 5, 2023



## Wind Generation during

November 5, 2023

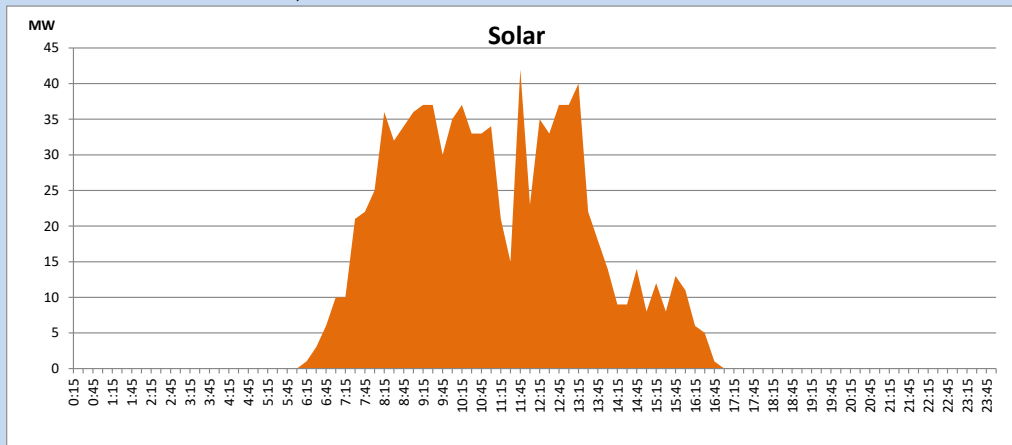
Based on Telemetered Power Stations only



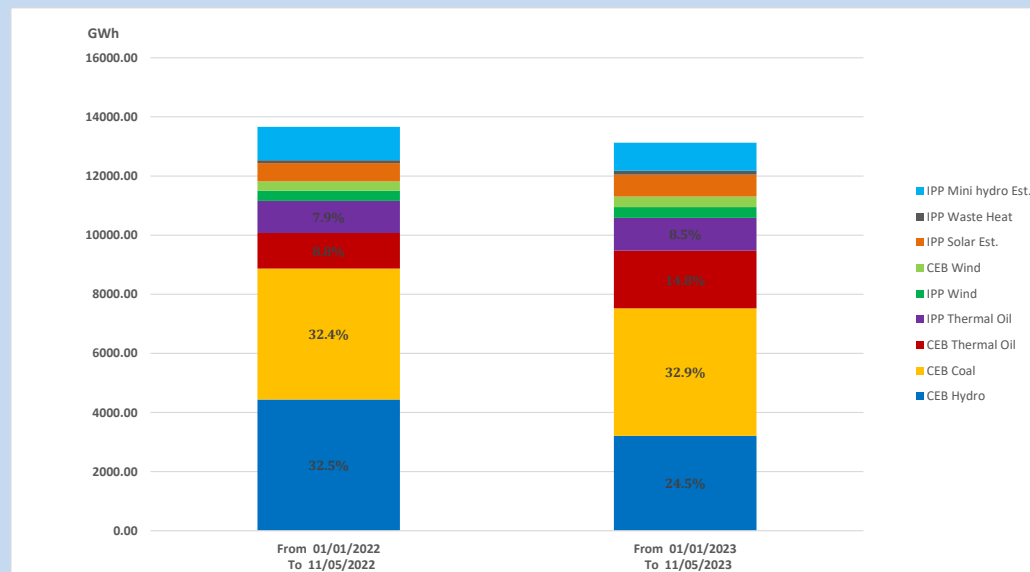
## Solar Generation during

November 5, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 11/05/2022

13666 GWh

From 01/01/2023 To 11/05/2023

13134 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

November 5, 2023

1) New Polpitiya – Thulhiriya – Athurugiriya 132kV cct tripped from New Polpitiya end and tripped and A/R from Athurugiriya and Thulhiriya ends at 16:32hrs due to the operation of distance protection. Simultaneously, Polpitiya – Thulhiriya – Athurugiriya 132kV cct tripped and A/R from all three ends also due to the operation of distance protection. At the same time, system frequency dropped to 48.91Hz due to the rejection of embedded NCRE generation. New Polpitiya – Thulhiriya – Athurugiriya 132kV cct was normalized at 16:44hrs.

2) Pannipitiya – Dehiwala 132kV cable was manually switched off at 18:17hrs due to a mechanical fault in the CB at Pannipitiya end. The cable is yet to be normalized.

3) Upper Kothmale and Kukule ponds spilling continue to the present hour.