

# Generation and Reservoirs Statistics

November 16, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

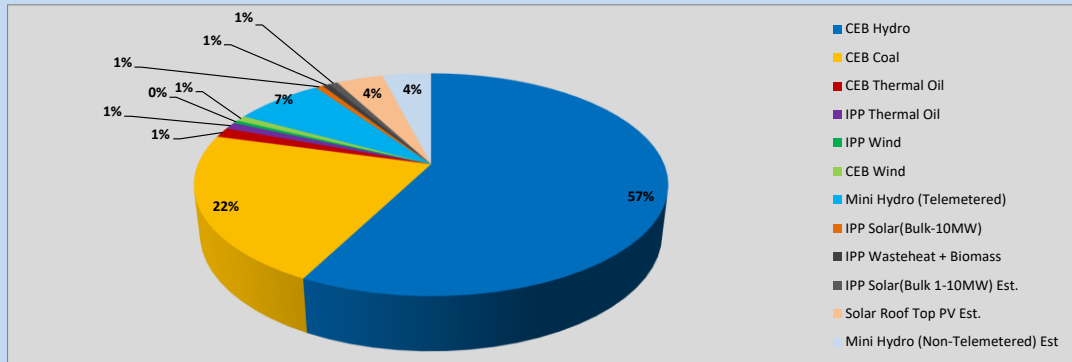


Table 01

	Generation (MWh)
CEB Hydro	24,881
CEB Coal	9,403
CEB Thermal Oil	619
IPP Thermal Oil	434
IPP Wind	191
CEB Wind	354
Mini Hydro (Telemetered)	3,152
IPP Solar (Bulk)	270
IPP Waste heat + Biomass	254
<b>Total Generation (Excluding estimated figures)</b>	<b>39,558</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	1718
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1640
<b>Total Generation (Including estimated figures)</b>	<b>43,220</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	422
IPP Waste heat + Biomass	50
IPP Solar	136
Rooftop Solar (Ordinary)	277
Rooftop Solar (LT Bulk)	263
Rooftop Solar (HT Bulk)	70

Data Source - Monthly Review Report [Aug-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	366	56.82%
CEB Coal	144	22.43%
CEB Thermal Oil	4	0.66%
IPP Thermal	2	0.25%
SPP Wind	5	0.74%
CEB Wind	6	0.89%
Mini Hydro *	78	12.11%
IPP Solar *	35	5.41%
IPP Waste heat + BMP	4	0.68%
<b>Total</b>	<b>644</b>	

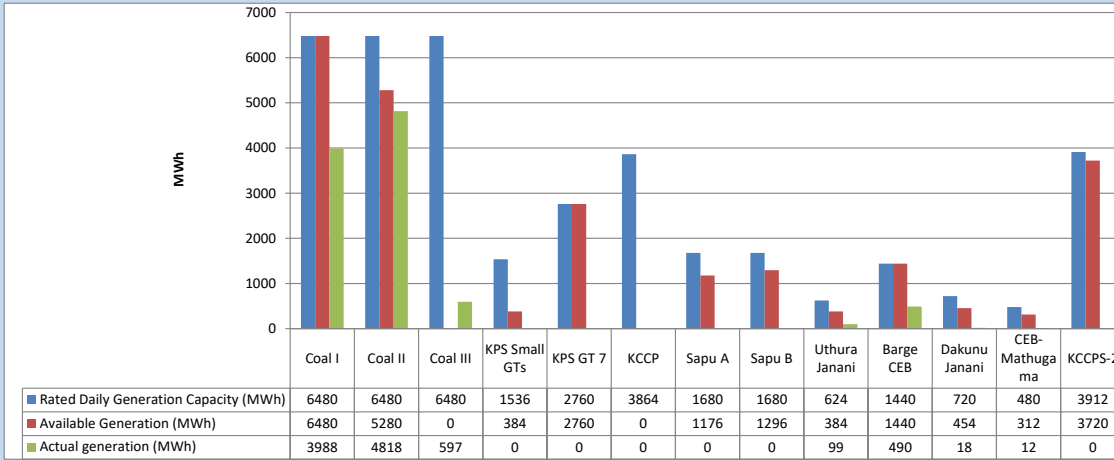
Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	3,468	25.53%
CEB Coal	4,410	32.47%
CEB Thermal Oil	1,949	14.35%
IPP Thermal	1,115	8.21%
SPP Wind	369	2.72%
CEB Wind	358	2.64%
Mini Hydro *	1,004	7.40%
IPP Solar *	772	5.68%
IPP Waste heat	135	0.99%
<b>Total</b>	<b>13,581</b>	

\*Including estimated contribution from non telemetered plants

### 3. CEB owned Thermal Plant Dispatch

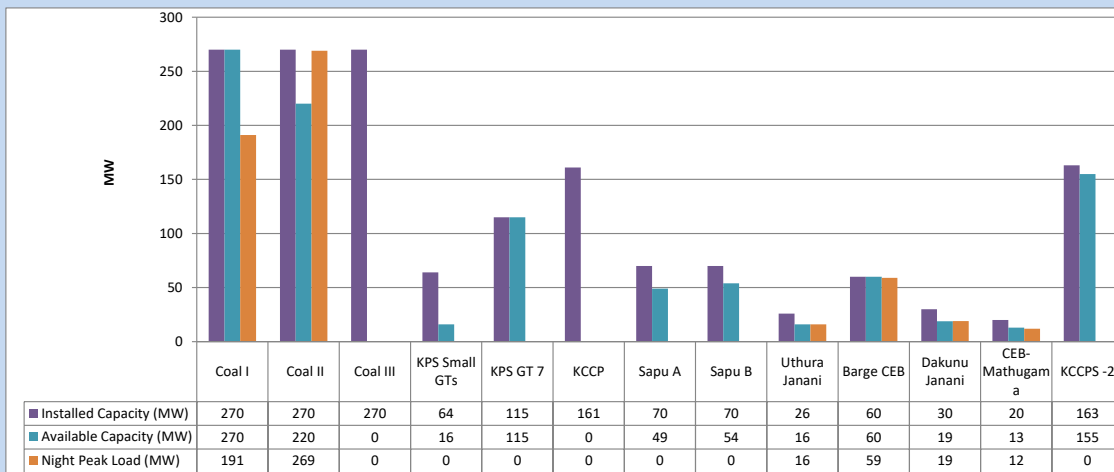
November 16, 2023



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

November 17, 2023

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

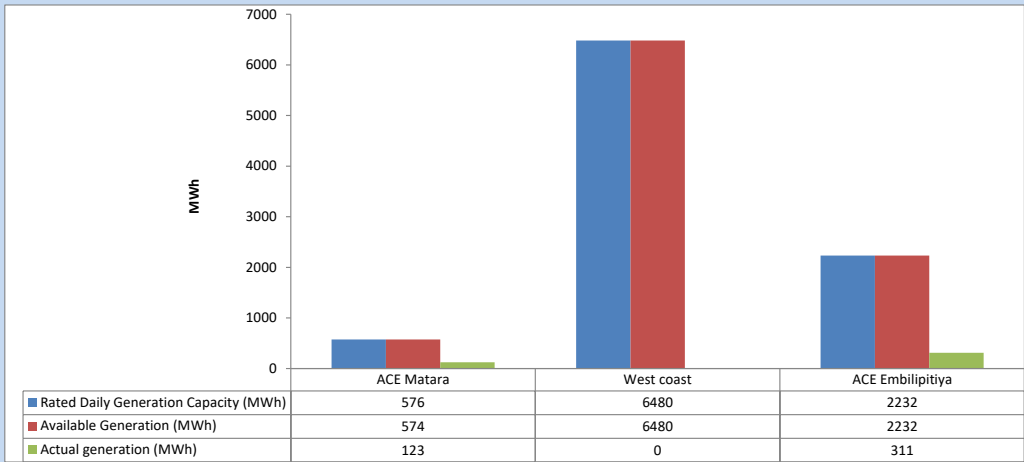


Plant availability is recorded at 6.00 am on

November 17, 2023

5. IPP owned Thermal Plant Dispatch

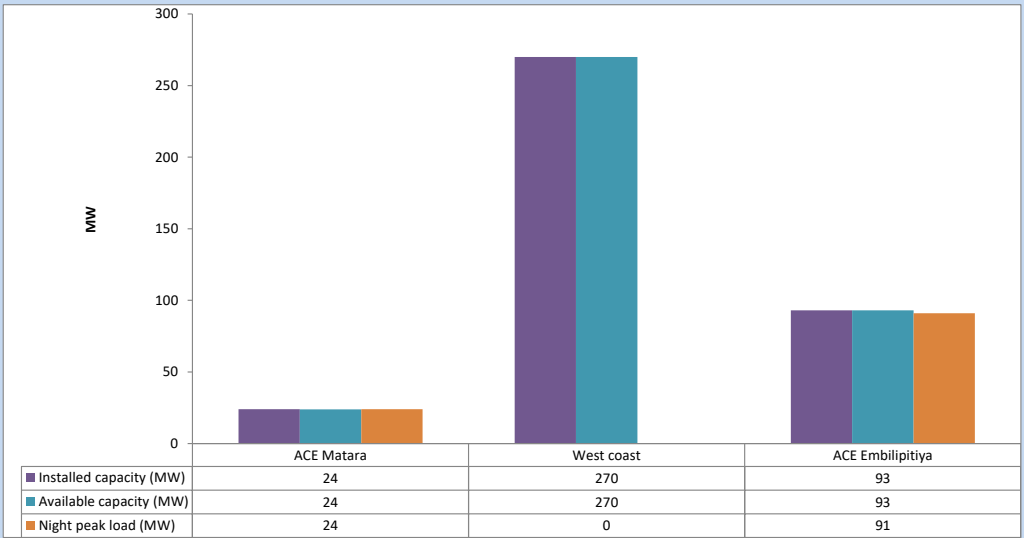
November 16, 2023



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

November 17, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

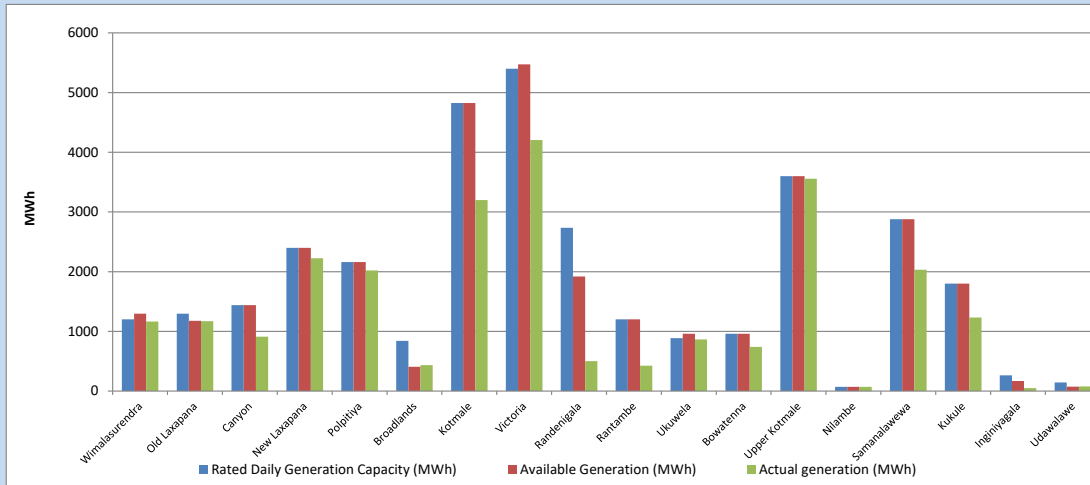


Plant availability is recorded at 6.00 am on

November 17, 2023

### 7. Major Hydro Plant Dispatch

November 16, 2023

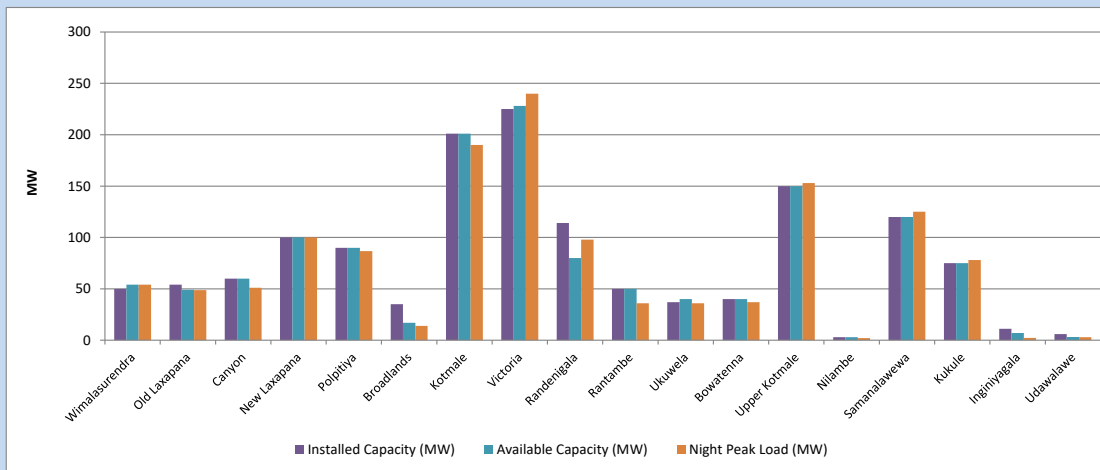


Available Generation is estimated based on plant availability at 6.00am on November 17, 2023  
Broadlands power plant is operating in the Commissioning Stage

November 17, 2023

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

November 16, 2023



Plant availability is recorded at 6.00 am on November 17, 2023  
Broadlands power plant is operating in the Commissioning Stage

November 17, 2023

## 9. Summary of Major Plant performance

Table 05

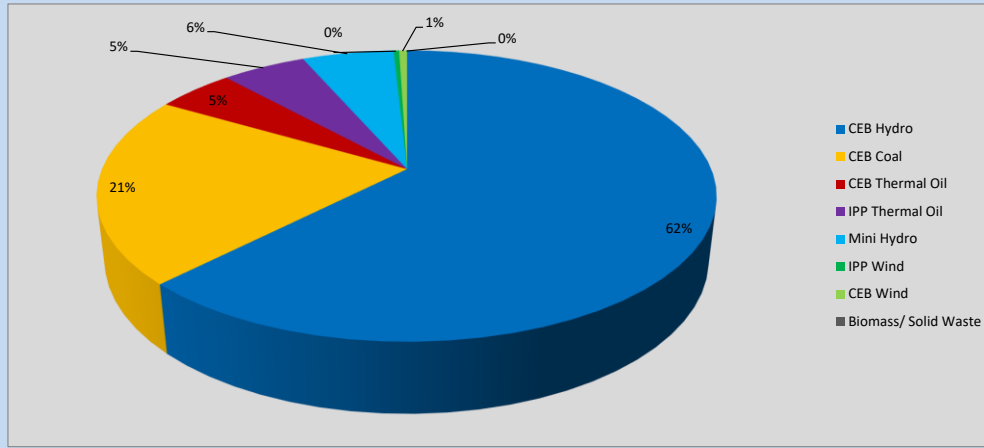
Plant	Installed Capacity	Plant Availability	Night peak Load	Plant Dispatch
	(MW)	(MW)	(MW)	(MWh)
Wimalasurendra	50	54	54	1,165
Old Laxapana	54	49	49	1,170
Canyon	60	60	51	910
New Laxapana	100	100	100	2,224
Polpitiya	90	90	87	2,020
Broadlands	35	17	14	433
Kotmale	201	201	190	3,200
Victoria	225	228	240	4,206
Randenigala	114	80	98	503
Rantambe	50	50	36	426
Ukuwela	37	40	36	864
Bowatenna	40	40	37	740
Upper Kotmale	150	150	153	3,558
Nilambe	3	3	2	71
Samanalawewa	120	120	125	2,032
Kukule	75	75	78	1,233
Inginiyagala	11	7	2	48
Udawalawe	6	3	3	78
Puttalam Coal I	270	270	191	3,988
Puttalam Coal II	270	220	269	4,818
Puttalam Coal III	270	0	0	597
KPS Small GTs	64	16	0	0
KPS GT 7	115	115	0	0
KCCP	161	0	0	0
Sapugaskanda A	70	49	0	0
Sapugaskanda B	70	54	0	0
Uthura Janani	26	16	16	99
Barge CEB	60	60	59	490
CEB-Hambantota	30	19	19	18
CEB-Mathugama	20	13	12	12
ACE Matara	24	24	24	123
Asia Power	50	0	0	0
KCCPS -2	163	155	0	0
West Coast	270	270	0	0
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	91	311
<b>Total</b>	<b>3,483</b>	<b>2,741</b>	<b>2,179</b>	<b>39,558</b>

Plant availability is the availability recorded at 6 am on

November 17, 2023

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

November 16, 2023



**Table 06**

CEB Hydro	1369	MW
CEB Coal	460	MW
CEB Thermal Oil	106	MW
IPP Thermal Oil	115	MW
Mini Hydro (Telemetered)	125	MW
IPP Wind	7.6	MW
CEB Wind	10.8	MW
Biomass/ Solid Waste	0	MW

#### Recorded Peak Demand Data

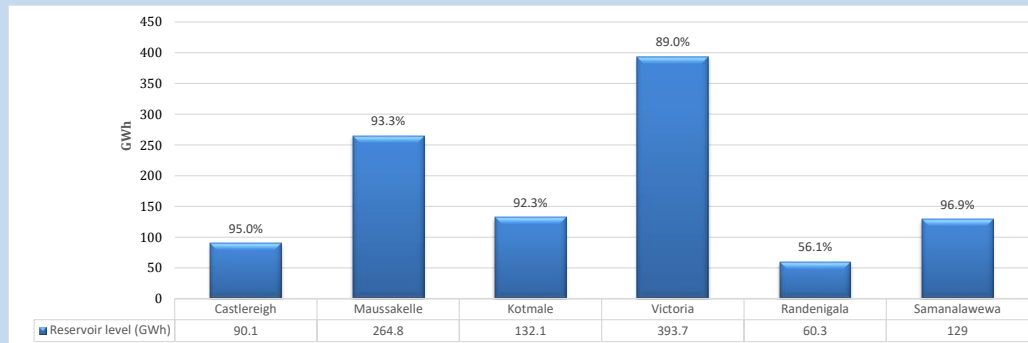
**Table 07**

Night Peak*	2,193	MW
Day Peak Maximum Demand	1,962	MW
Day Peak Minimum Demand	1,632	MW
Off Peak Minimum Demand	1,158	MW

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

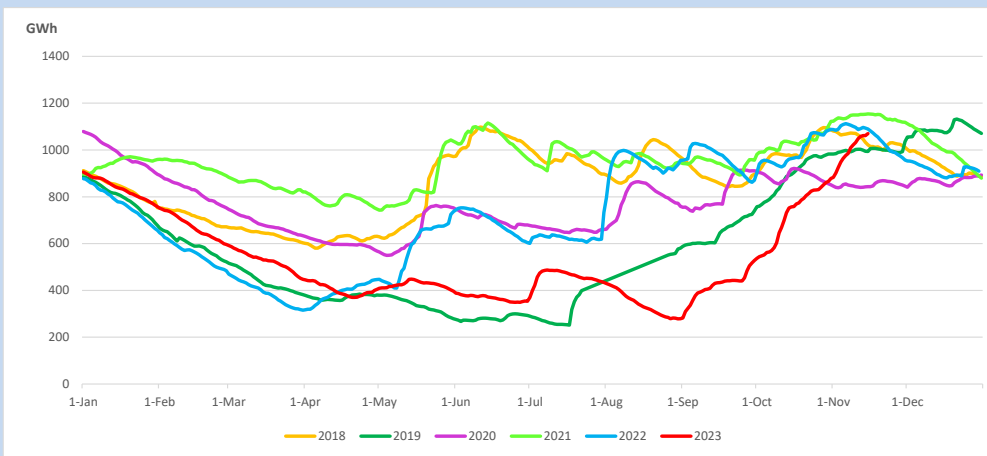
#### Reservoir Levels -

as at 06.00 Hr on November 17, 2023

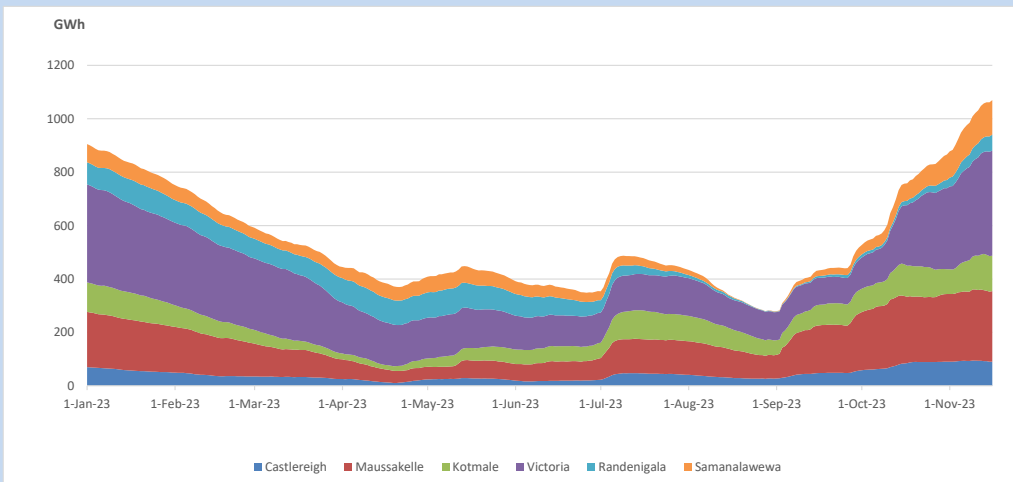


Total Reservoir Level            1070 GWh  
 % of Total capacity                88.8%

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

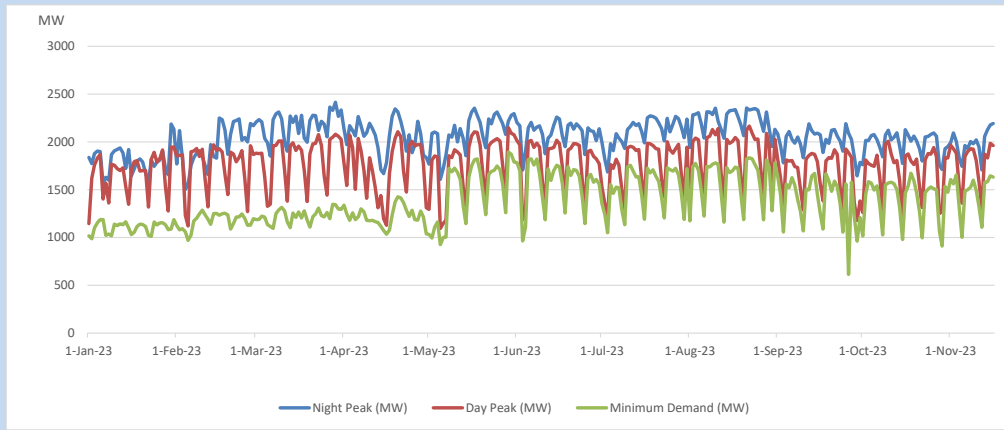


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





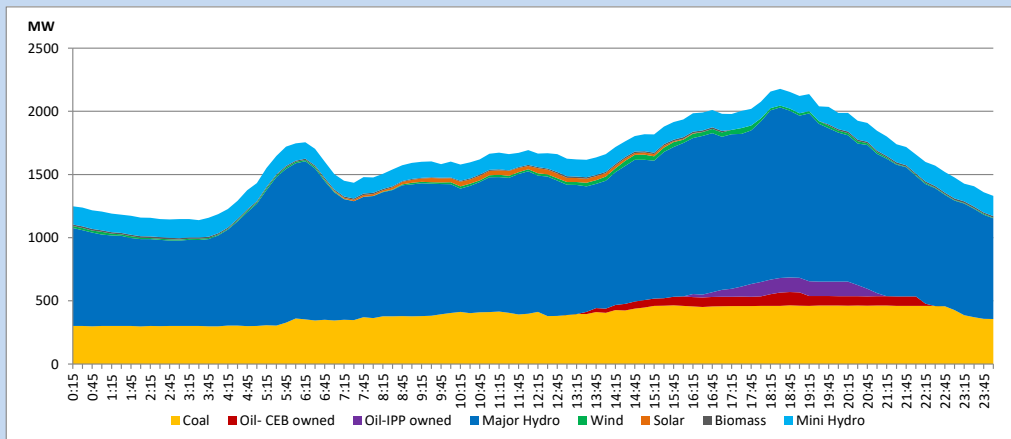
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

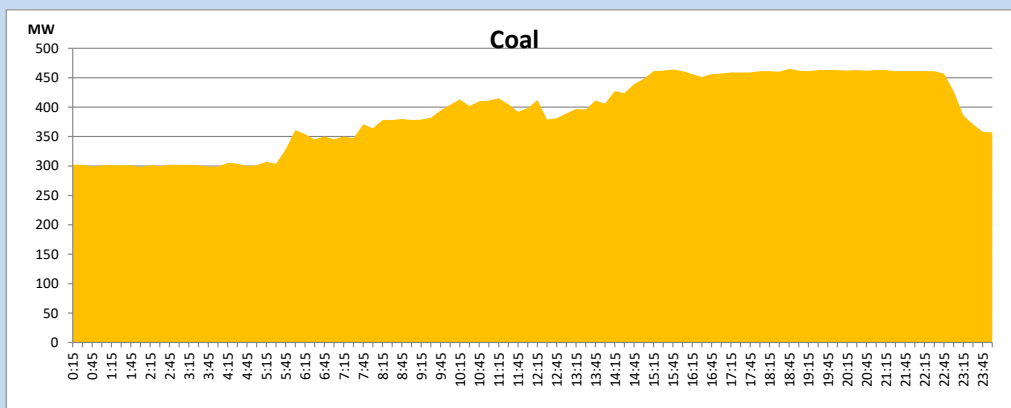
November 16, 2023



Solar and wind data is based on Telemetered Power Stations only

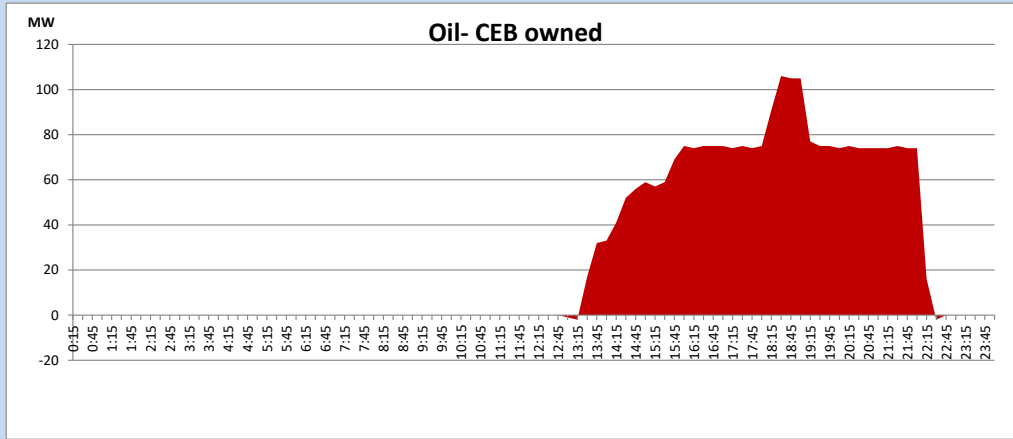
### Coal Generation during

November 16, 2023



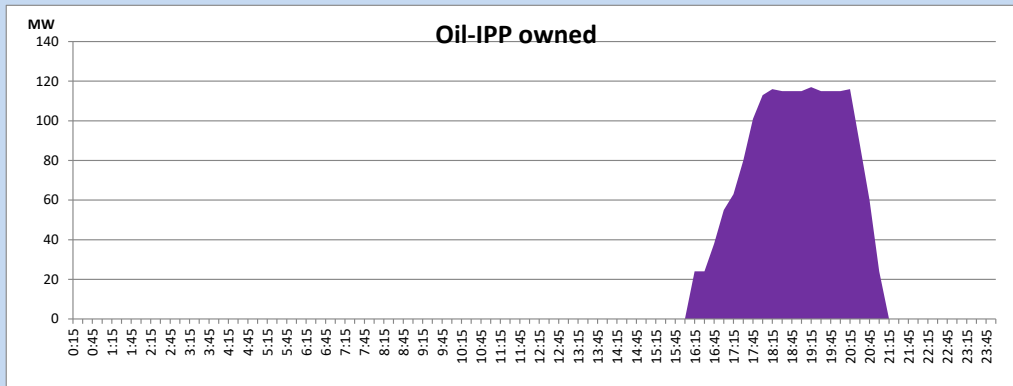
CEB Oil Plant Generation during

November 16, 2023



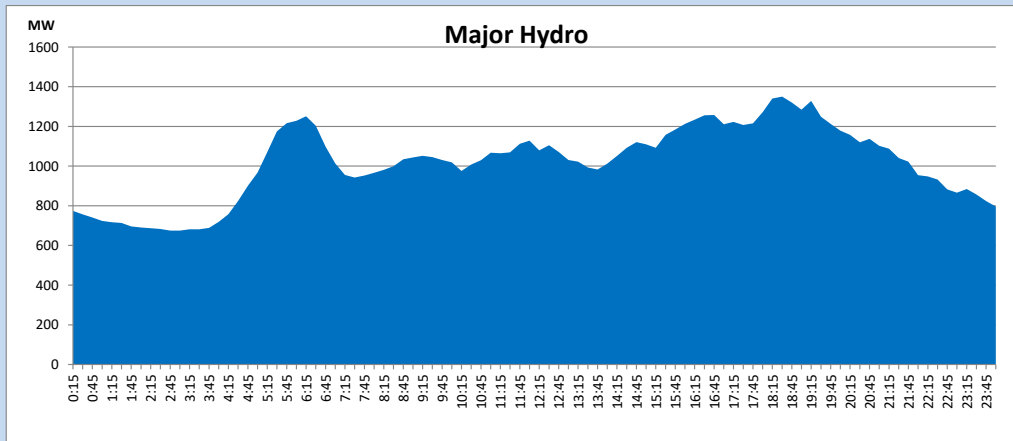
IPP Oil Plant Generation during

November 16, 2023



Major Hydro Generation during

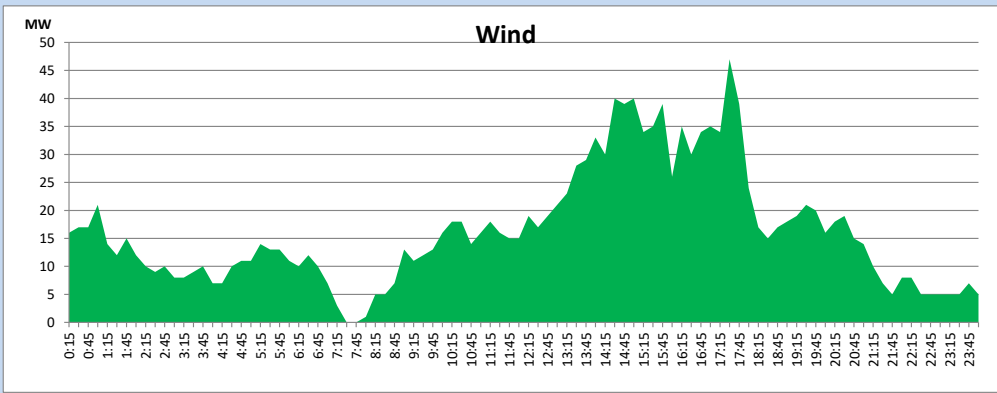
November 16, 2023



## Wind Generation during

November 16, 2023

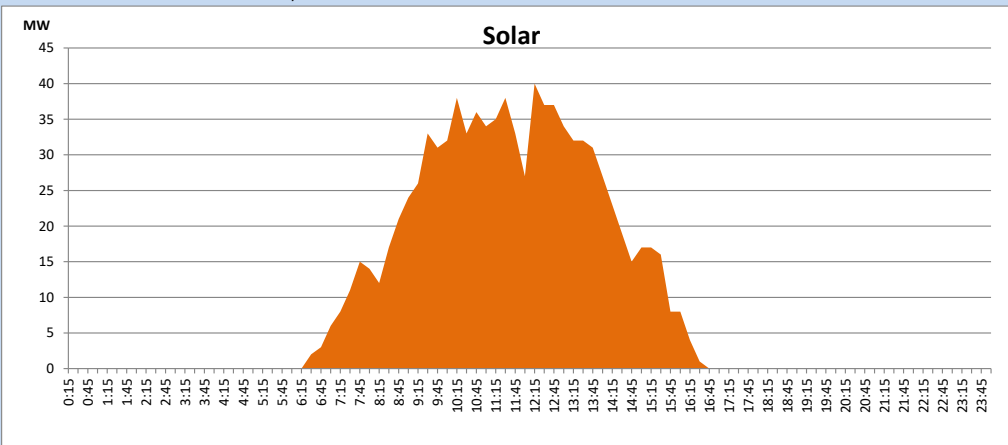
Based on Telemetered Power Stations only



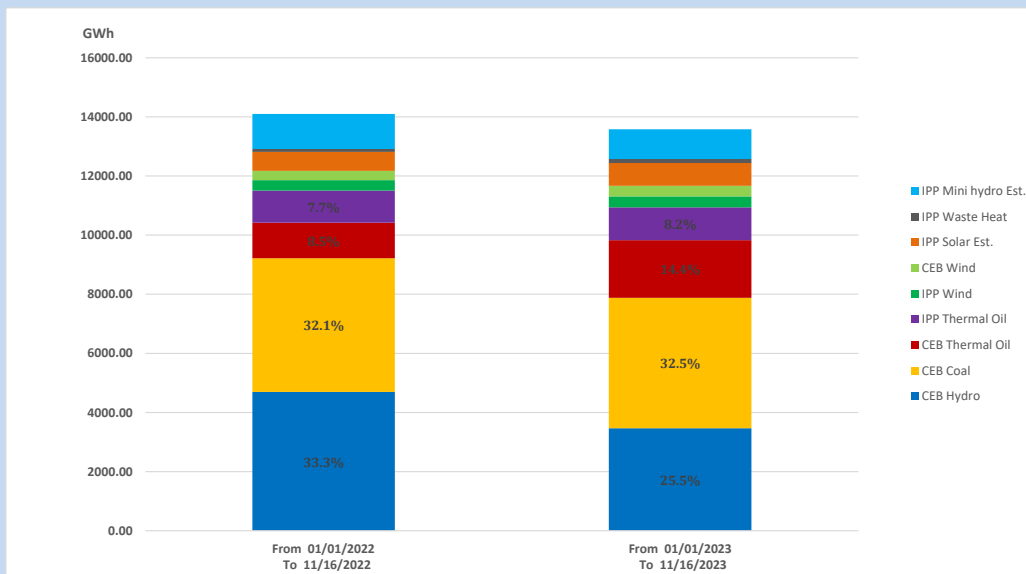
## Solar Generation during

November 16, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 11/16/2022

14099 GWh

From 01/01/2023 To 11/16/2023

13581 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 16, 2023

- 1) LVPS Unit 03, desynchronized at 12:43hrs due to a steam leakage in the extraction system. The unit is currently in the start up process.
- 2) Kaluthara 132/33kV T/F 02 (which tripped on 18.07.2023) was restored at 09:50hrs.
- 3) Kolonnawa-Seethawaka 132kV cct tripped & A/R from both ends at 10:51hrs due to the operation of distance protection.
- 4) Balangoda-New Galle 132kV cct tripped & A/R from both ends at 23:10hrs due to the operation of distance protection. Simultaneously, Deniyaya- New Galle 132kV cct tripped & A/R from both ends due to the operation of distance protection.
- 5) Availability of LVPS Unit 01 was limited to 190MW(net) from 12:26hrs to 04:30hrs(17.11.2023), due to a sea water leakage in a condenser. Availability of LVPS Unit 02 was limited to 220MW(net) from 4:45hrs(17.11.2023) onwards, due to a leakage in HP heater No.3. LVPS Unit 02 is yet to declare full load.