

# Generation and Reservoirs Statistics

October 24, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

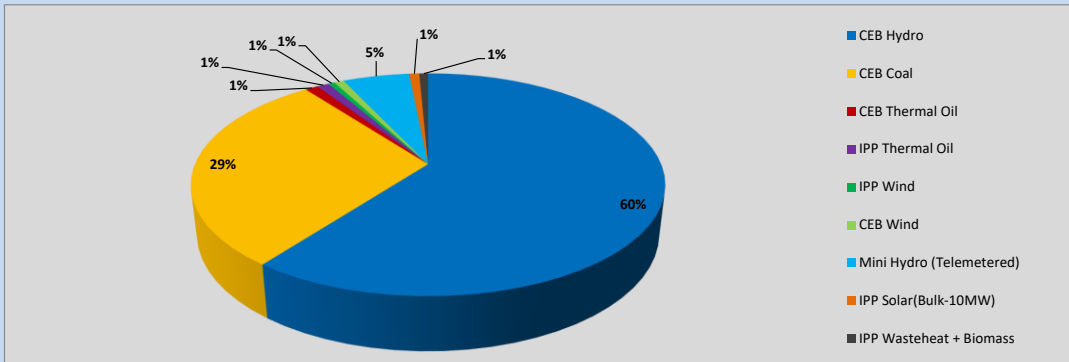


Table 01

	Generation (MWh)
CEB Hydro	22,614
CEB Coal	10,994
CEB Thermal Oil	400
IPP Thermal Oil	363
IPP Wind	196
CEB Wind	297
Mini Hydro (Telemetered)	2,032
IPP Solar (Bulk)	311
IPP Waste heat + Biomass	268
<b>Total Generation (Excluding estimated figures)</b>	<b>37,475</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	2828
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1930
<b>Total Generation (Including estimated figures)</b>	<b>42,537</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

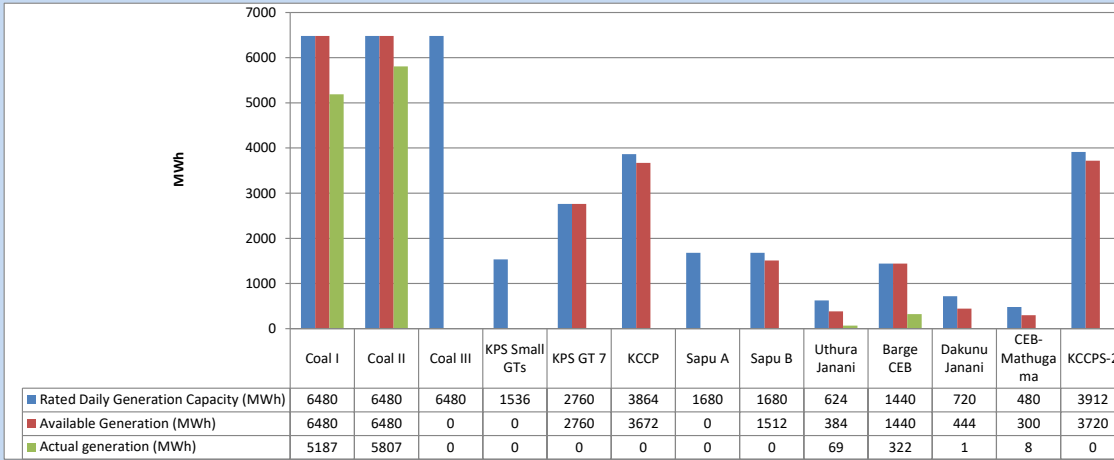
Category	Dispatch (GWh)	
CEB Hydro	404	46.76%
CEB Coal	281	32.53%
CEB Thermal Oil	58	6.71%
IPP Thermal	18	2.06%
SPP Wind	20	2.36%
CEB Wind	23	2.66%
Mini Hydro (Telemetered)	46	5.33%
IPP Solar(Bulk-10MW)	6	0.73%
IPP Waste heat + BMP	6	0.73%
<b>Total</b>	<b>864</b>	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,969	25.98%
CEB Coal	4,200	36.75%
CEB Thermal Oil	1,952	17.08%
IPP Thermal	1,113	9.74%
SPP Wind	346	3.02%
CEB Wind	355	3.10%
Mini Hydro (Telemetered)	298	2.60%
IPP Solar(Bulk-10MW)	89	0.78%
IPP Waste heat	106	0.92%
<b>Total</b>	<b>11,428</b>	

### 3. CEB owned Thermal Plant Dispatch

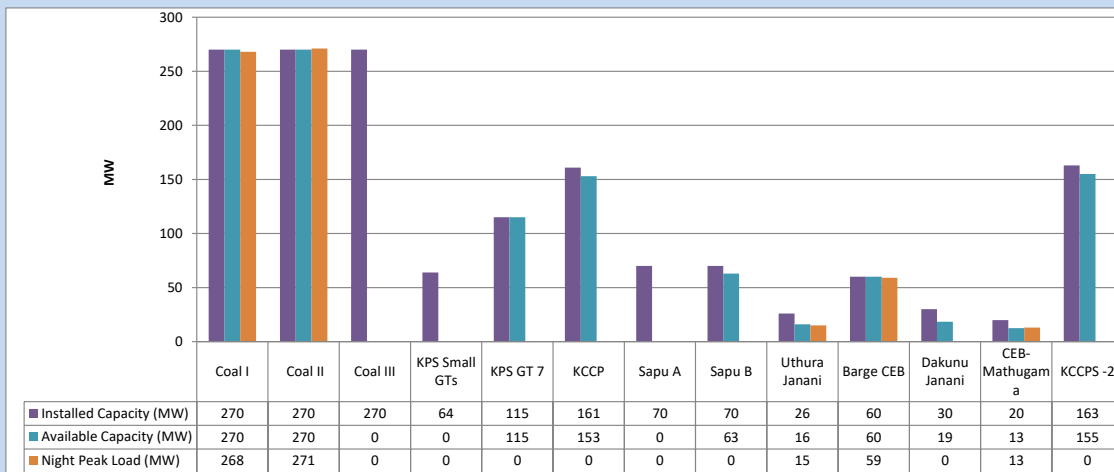
October 24, 2023



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

October 25, 2023

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

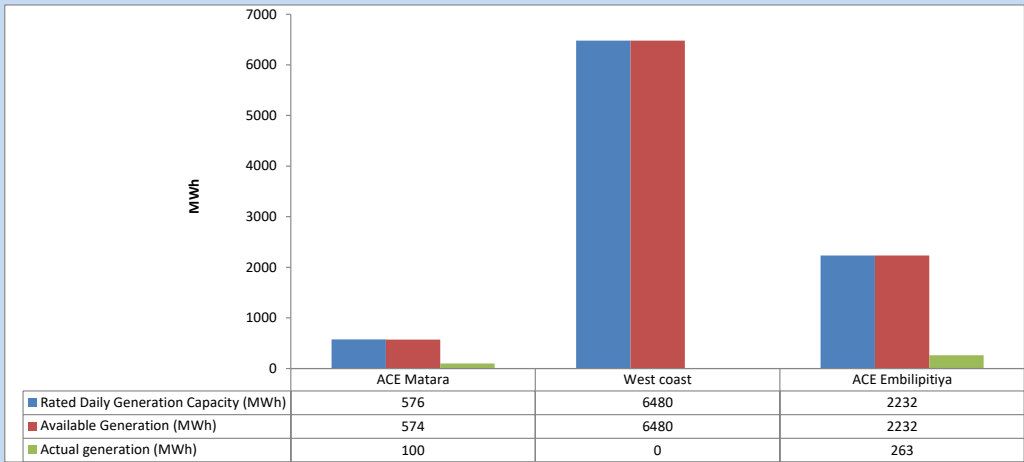


Plant availability is recorded at 6.00 am on

October 25, 2023

5. IPP owned Thermal Plant Dispatch

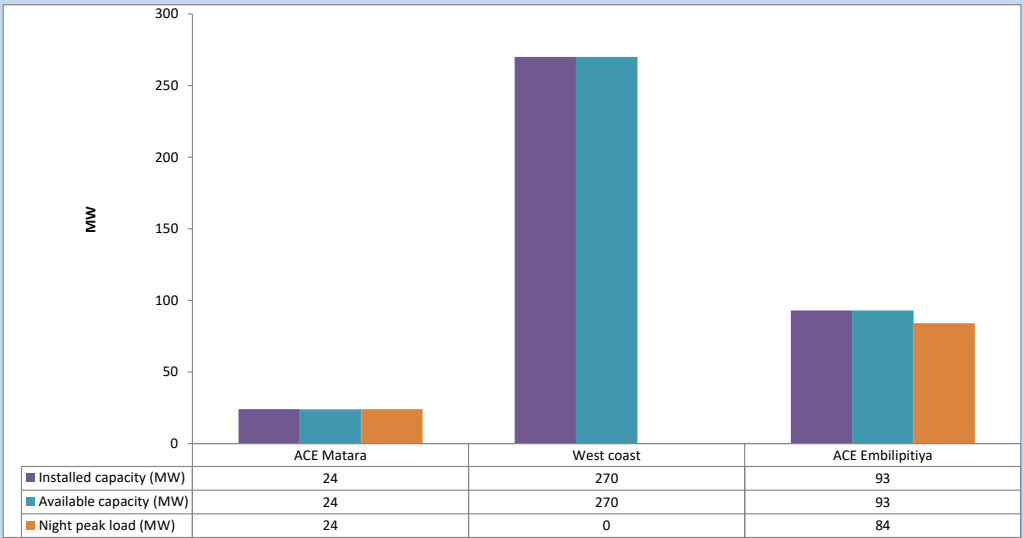
October 24, 2023



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

October 25, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

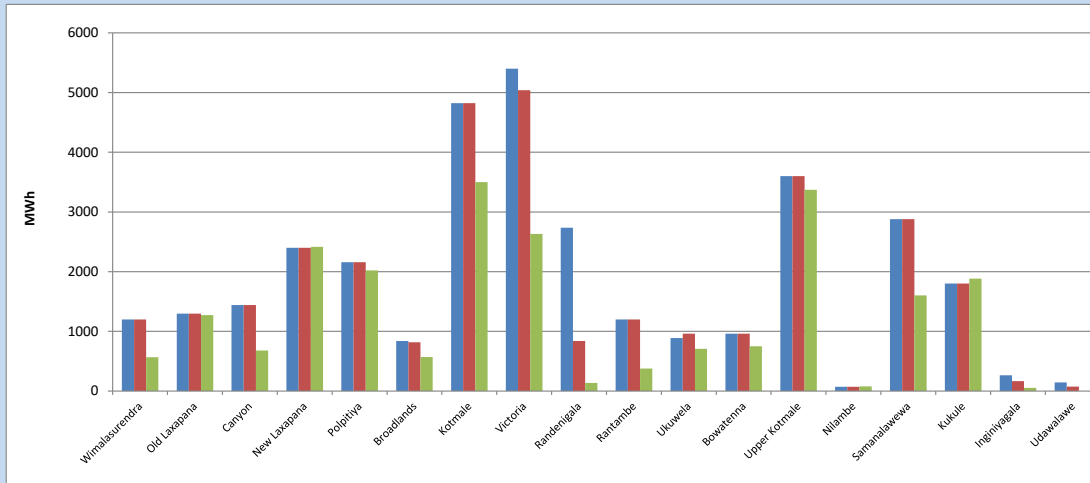


Plant availability is recorded at 6.00 am on

October 25, 2023

### 7. Major Hydro Plant Dispatch

October 24, 2023

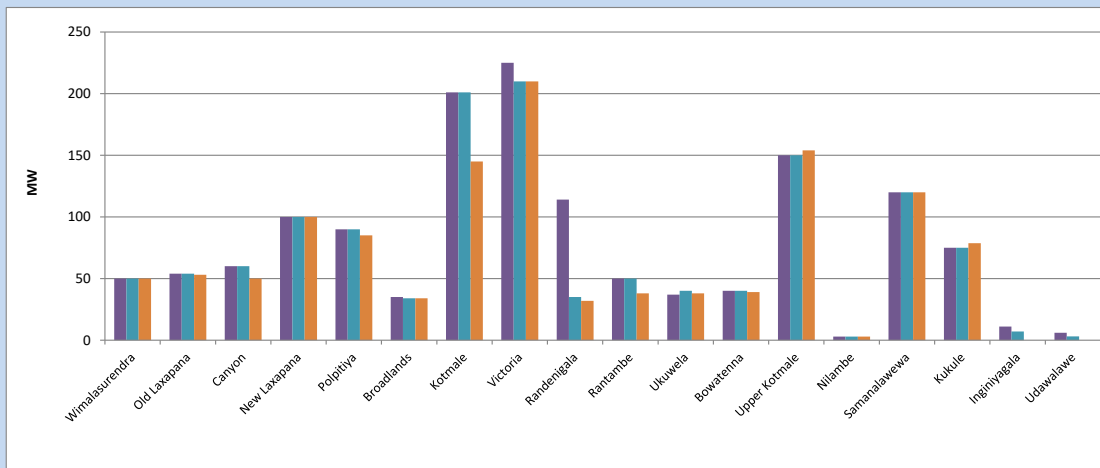


Available Generation is estimated based on plant availability at 6.00am on October 25, 2023  
Broadlands power plant is operating in the Commissioning Stage

October 25, 2023

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

October 24, 2023



Plant availability is recorded at 6.00 am on October 25, 2023  
Broadlands power plant is operating in the Commissioning Stage

October 25, 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	50	566
Old Laxapana	54	54	53	1,272
Canyon	60	60	50	680
New Laxapana	100	100	100	2,414
Polpitiya	90	90	85	2,020
Broadlands	35	34	34	571
Kotmale	201	201	145	3,500
Victoria	225	210	210	2,631
Randenigala	114	35	32	136
Rantambe	50	50	38	377
Ukuwela	37	40	38	708
Bowatenna	40	40	39	750
Upper Kotmale	150	150	154	3,373
Nilambe	3	3	3	77
Samanalawewa	120	120	120	1,602
Kukule	75	75	79	1,884
Inginiyagala	11	7	0	53
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	268	5,187
Puttalam Coal II	270	270	271	5,807
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	0	0	0
KPS GT 7	115	115	0	0
KCCP	161	153	0	0
Sapugaskanda A	70	0	0	0
Sapugaskanda B	70	63	0	0
Uthura Janani	26	16	15	69
Barge CEB	60	60	59	322
CEB-Hambantota	30	19	0	1
CEB-Mathugama	20	13	13	8
ACE Matara	24	24	24	100
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	84	263
<b>Total</b>	<b>3,483</b>	<b>2,842</b>	<b>2,046</b>	<b>37,475</b>

Plant availability is the availability recorded at 6 am on

October 25, 2023

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

October 24, 2023

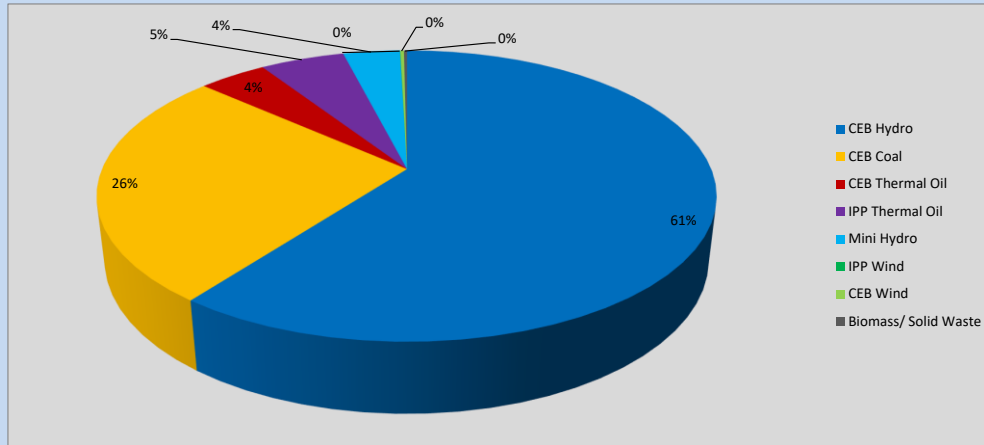


Table 06

CEB Hydro	1241	MW
CEB Coal	539	MW
CEB Thermal Oil	87	MW
IPP Thermal Oil	108	MW
Mini Hydro (Telemetered)	73	MW
IPP Wind	0.4	MW
CEB Wind	4.7	MW
Biomass/ Solid Waste	4	MW

#### Recorded Peak Demand Data

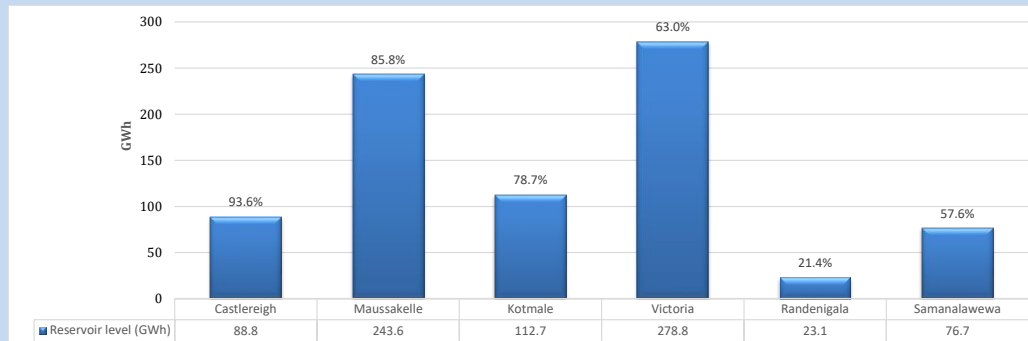
Table 07

Night Peak*	2,057	MW
Day Peak Maximum Demand	1,879	MW
Day Peak Minimum Demand	1,506	MW
Off Peak Minimum Demand	1,114	MW

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

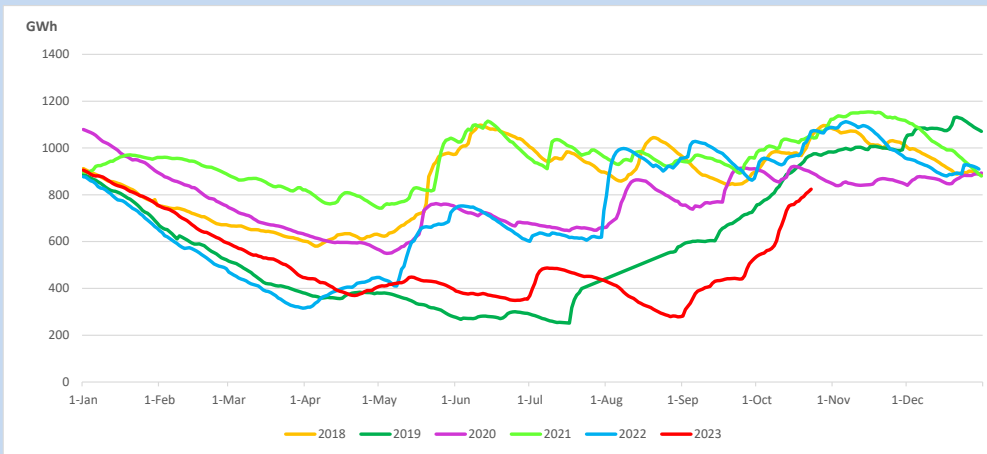
#### Reservoir Levels -

as at 06.00 Hr on October 25, 2023

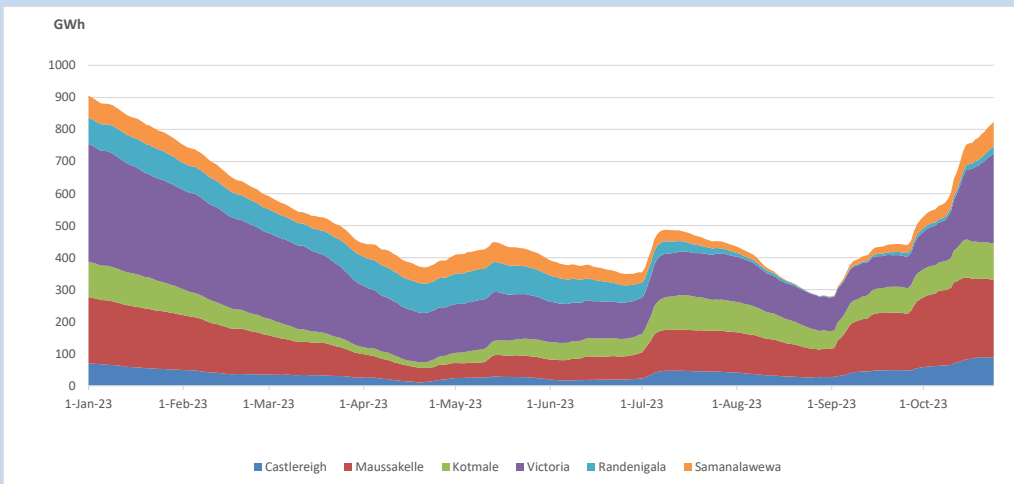


Total Reservoir Level            823.7 GWh  
 % of Total capacity                68.3%

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

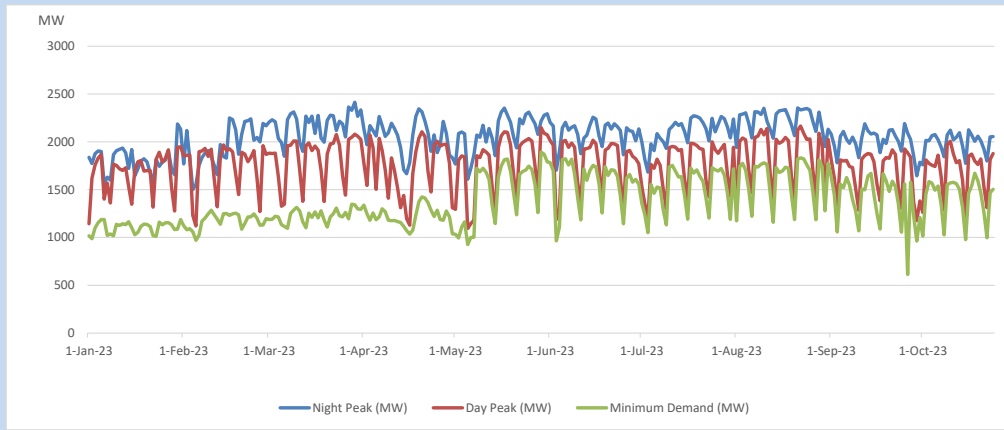


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





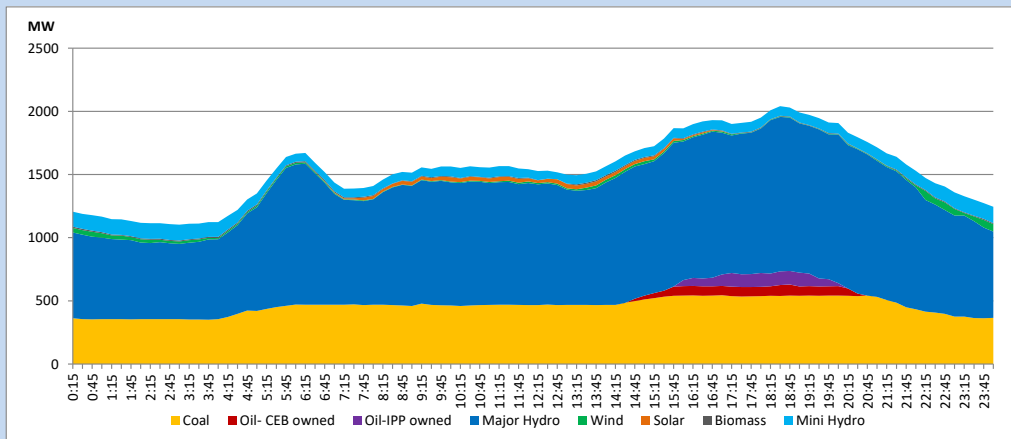
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

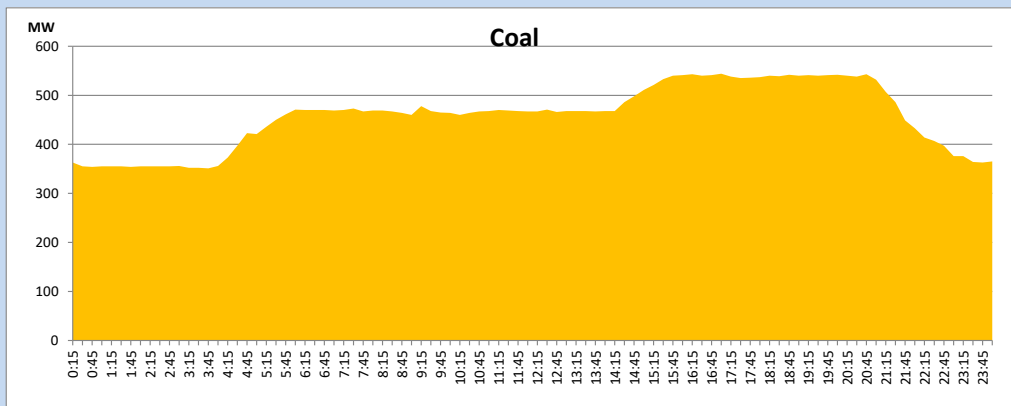
October 24, 2023



Solar and wind data is based on Telemetered Power Stations only

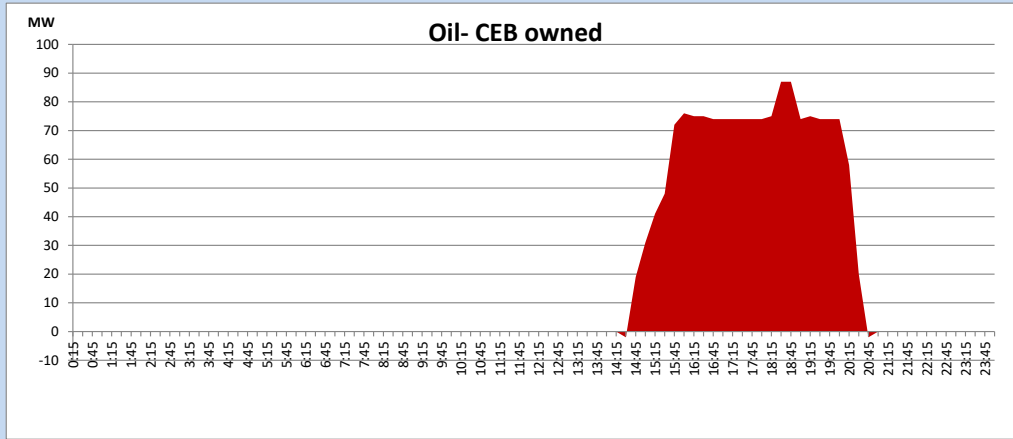
### Coal Generation during

October 24, 2023



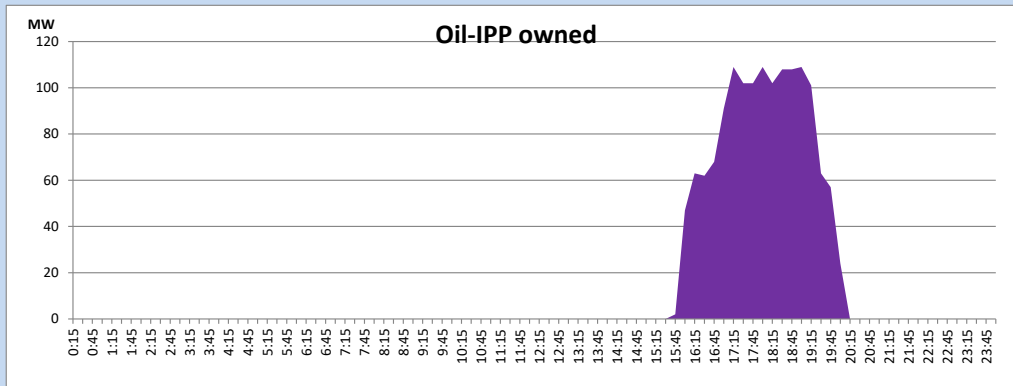
CEB Oil Plant Generation during

October 24, 2023



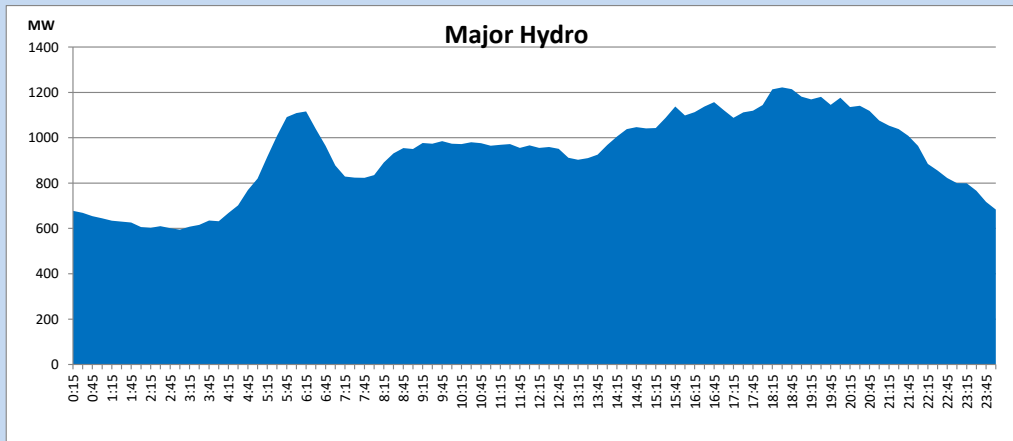
IPP Oil Plant Generation during

October 24, 2023



Major Hydro Generation during

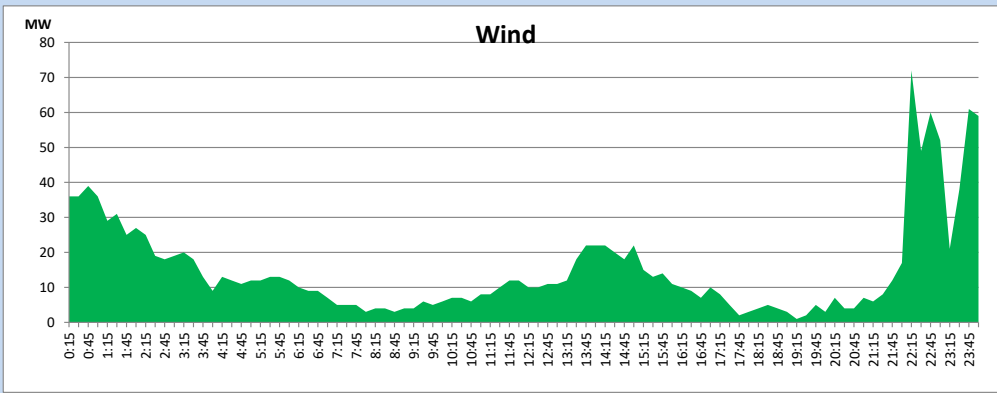
October 24, 2023



## Wind Generation during

October 24, 2023

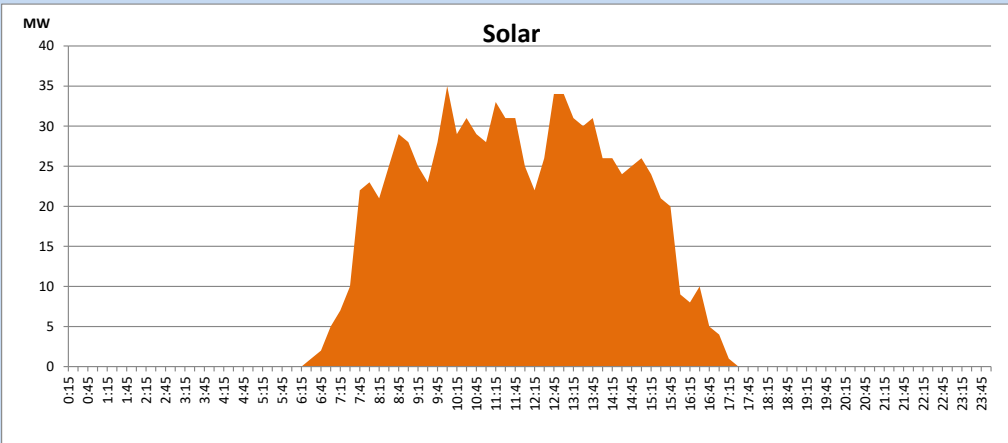
Based on Telemetered Power Stations only



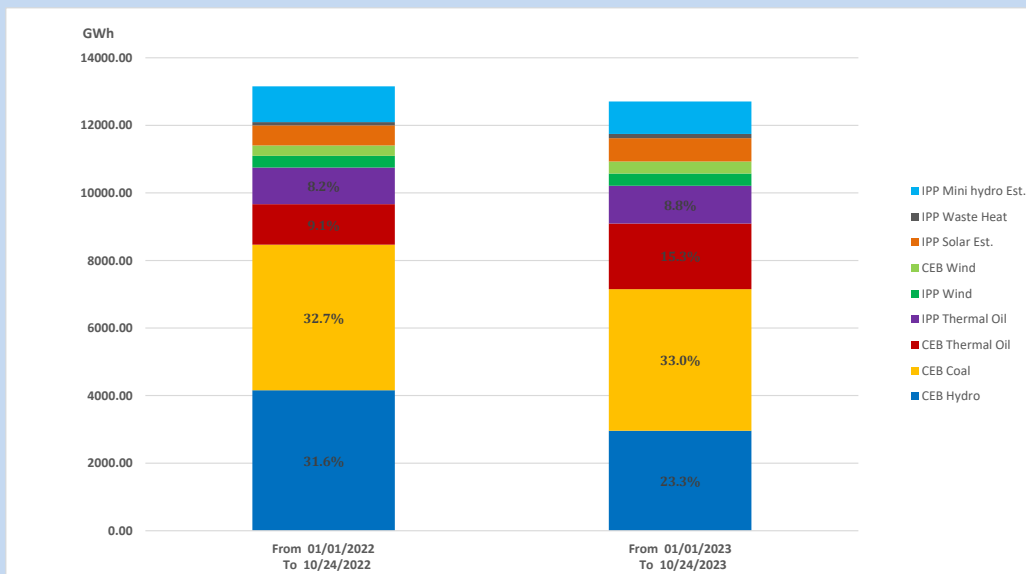
## Solar Generation during

October 24, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 10/24/2022

13156 GWh

From 01/01/2023 To 10/24/2023

12707 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 24, 2023

- 1) Thulhiriya 132/33kV T/F 03 was manually switched off at 15:55hrs due to an oil leak. Therefore, manual load shedding of Thulhiriya GSS was carried out as Thulhiriya 132/33kV T/F 02 was already facilitated for a planned outage. Thulhiriya T/F 02 and all affected feeders were restored by 16:21hrs. Thulhiriya T/F 03 is yet to be restored.
- 2) N' Polpitiya - Padukka cct 01 & 02 tripped and A/R from both ends at 16:32hrs due to the operation of distance protection.
- 3) Dakunu Janani DPP made unavailable from 18:13hrs due to the tripping of the incoming feeder while loading the plant. The incoming feeder and Dakunu Janani DPP made available at 18:32hrs.
- 4) Norton pond, spilling started at 19:15hrs and stopped at 1:45hrs (25.10.2023).
- 5) Kukule Pond, spilling started at 23:05hrs.
- 6) Victoria Unit 03 tripped at 4:47hrs(25.10.2023) due to the operation of the turbine guide bearing oil level low alarm. The unit resumed generation at 05:32hrs(25.10.2023).