

# Generation and Reservoirs Statistics

August 13, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

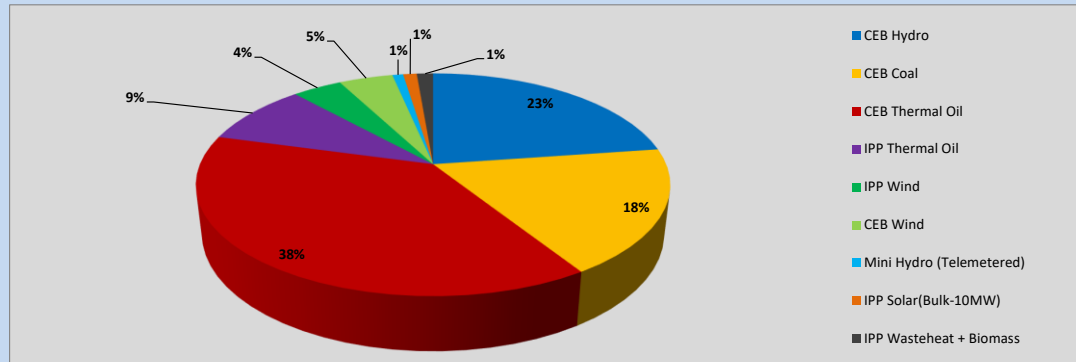


Table 01

	Generation (MWh)
CEB Hydro	8,087
CEB Coal	6,492
CEB Thermal Oil	13,605
IPP Thermal Oil	3,197
IPP Wind	1,435
CEB Wind	1,566
Mini Hydro (Telemetered)	312
IPP Solar (Bulk)	394
IPP Waste heat + Biomass	473
<b>Total Generation (Excluding estimated figures)</b>	<b>35,561</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	3458
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1650
<b>Total Generation (Including estimated figures)</b>	<b>40,973</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)	270
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

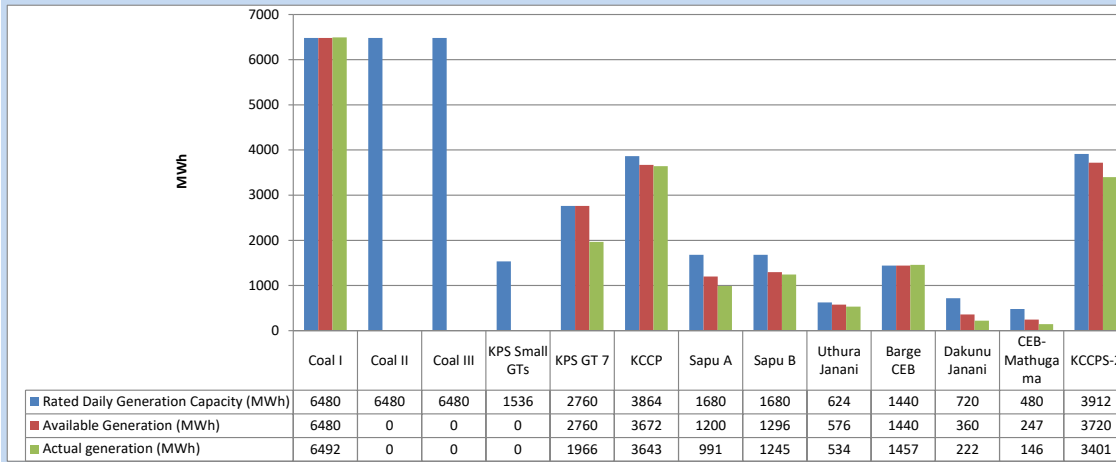
Category	Dispatch (GWh)	
CEB Hydro	123	22.88%
CEB Coal	118	21.91%
CEB Thermal Oil	166	30.98%
IPP Thermal	77	14.42%
SPP Wind	18	3.36%
CEB Wind	18	3.39%
Mini Hydro (Telemetered)	5	0.88%
IPP Solar(Bulk-10MW)	5	0.89%
IPP Waste heat + BMP	7	1.29%
<b>Total</b>	<b>536</b>	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,170	24.92%
CEB Coal	3,367	38.69%
CEB Thermal Oil	1,470	16.89%
IPP Thermal	881	10.12%
SPP Wind	228	2.62%
CEB Wind	235	2.70%
Mini Hydro (Telemetered)	206	2.36%
IPP Solar(Bulk-10MW)	68	0.78%
IPP Waste heat	80	0.92%
<b>Total</b>	<b>8,705</b>	

### 3. CEB owned Thermal Plant Dispatch

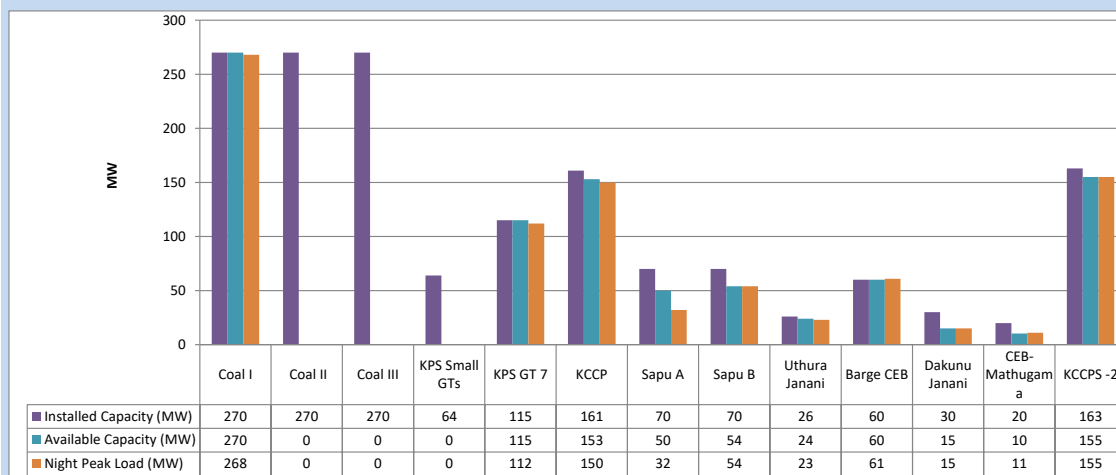
August 13, 2023



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

August 14, 2023

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

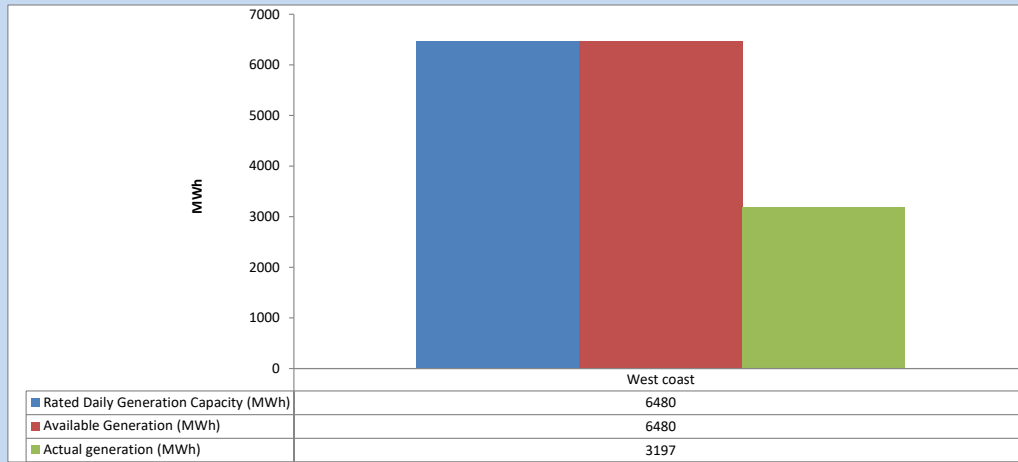


Plant availability is recorded at 6.00 am on

August 14, 2023

### 5. IPP owned Thermal Plant Dispatch

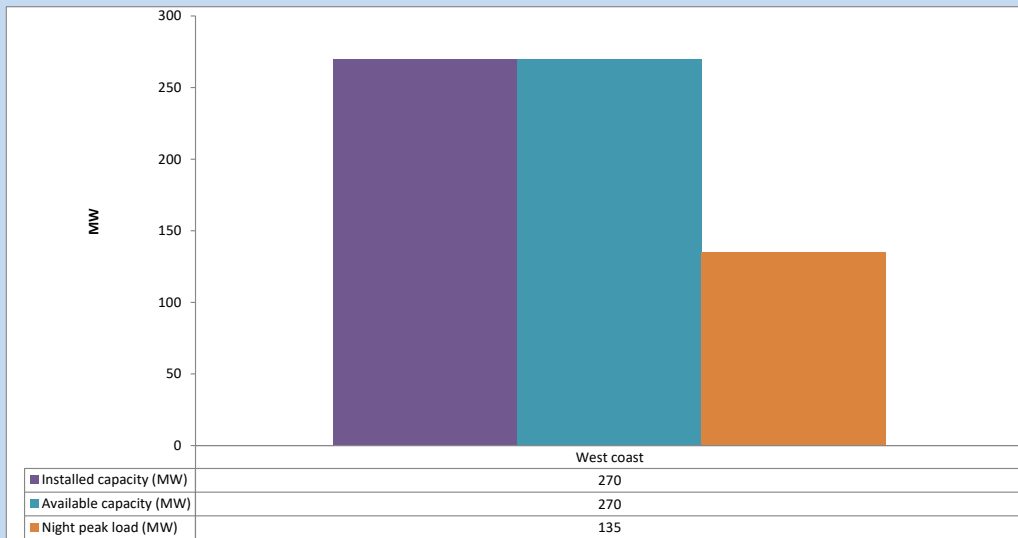
August 13, 2023



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

August 14, 2023

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

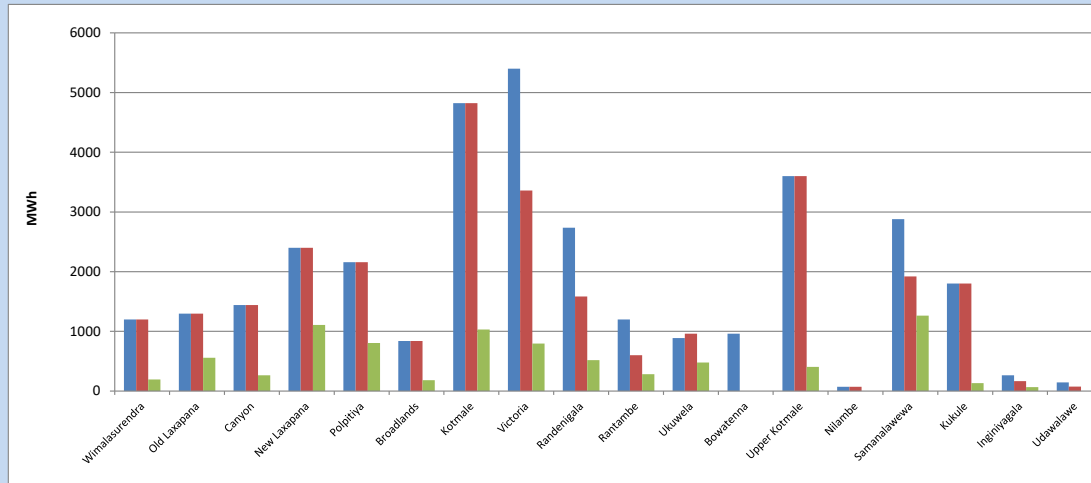


Plant availability is recorded at 6.00 am on

August 14, 2023

### 7. Major Hydro Plant Dispatch

August 13, 2023

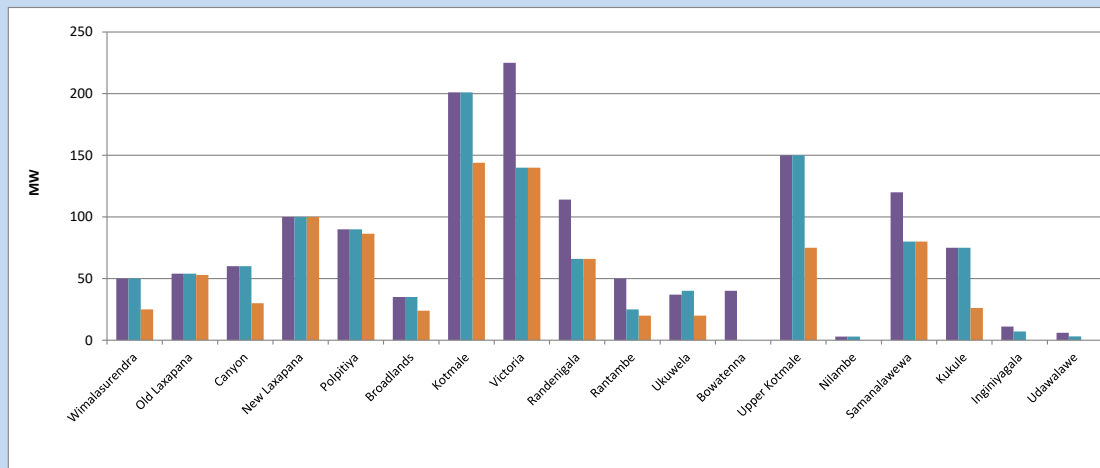


Available Generation is estimated based on plant availability at 6.00am on August 14, 2023  
 Broadlands power plant is operating in the Commissioning Stage

August 14, 2023

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

August 13, 2023



Plant availability is recorded at 6.00 am on August 14, 2023  
 Broadlands power plant is operating in the Commissioning Stage

August 14, 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	25	193
Old Laxapana	54	54	53	559
Canyon	60	60	30	265
New Laxapana	100	100	100	1,107
Polpitiya	90	90	86	805
Broadlands	35	35	24	182
Kotmale	201	201	144	1,030
Victoria	225	140	140	797
Randenigala	114	66	66	518
Rantambe	50	25	20	284
Ukuwela	37	40	20	479
Bowatenna	40	0	0	0
Upper Kotmale	150	150	75	406
Nilambe	3	3	0	0
Samanalawewa	120	80	80	1,262
Kukule	75	75	26	134
Inginiyagala	11	7	0	66
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	268	6,492
Puttalam Coal II	270	0	0	0
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	0	0	0
KPS GT 7	115	115	112	1,966
KCCP	161	153	150	3,643
Sapugaskanda A	70	50	32	991
Sapugaskanda B	70	54	54	1,245
Uthura Janani	26	24	23	534
Barge CEB	60	60	61	1,457
CEB-Hambantota	30	15	15	222
CEB-Mathugama	20	10	11	146
ACE Matara	24	0	0	0
Asia Power	50	0	0	0
KCCPS -2	163	155	155	3,401
West Coast	270	270	135	3,197
Nothern Power	36	0	0	0
ACE Embilipitiya	93	0	0	0
<b>Total</b>	<b>3,483</b>	<b>2,355</b>	<b>2,044</b>	<b>35,561</b>

Plant availability is the availability recorded at 6 am on

August 14, 2023

## 10. Contribution to the Night Peak in MW

August 13, 2023

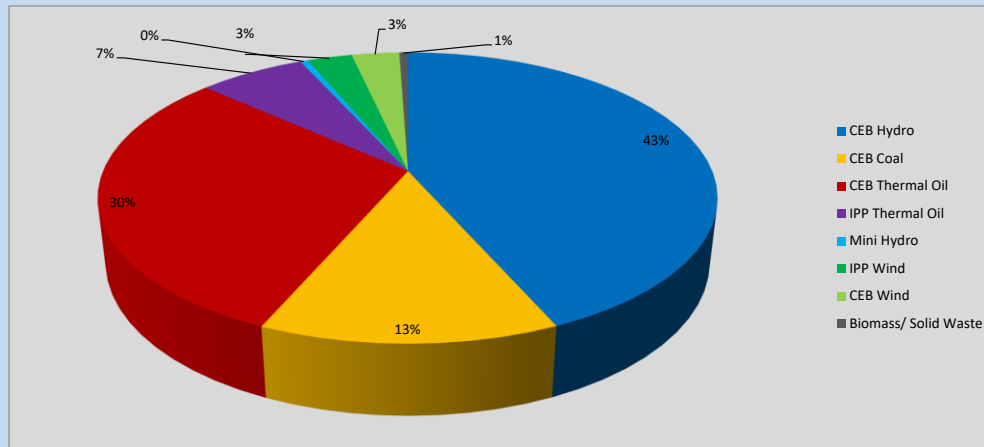


Table 06

CEB Hydro	884	MW
CEB Coal	268	MW
CEB Thermal Oil	613	MW
IPP Thermal Oil	135	MW
Mini Hydro (Telemetered)	10	MW
IPP Wind	57.1	MW
CEB Wind	60.5	MW
Biomass/ Solid Waste	11	MW

### Recorded Peak Demand Data

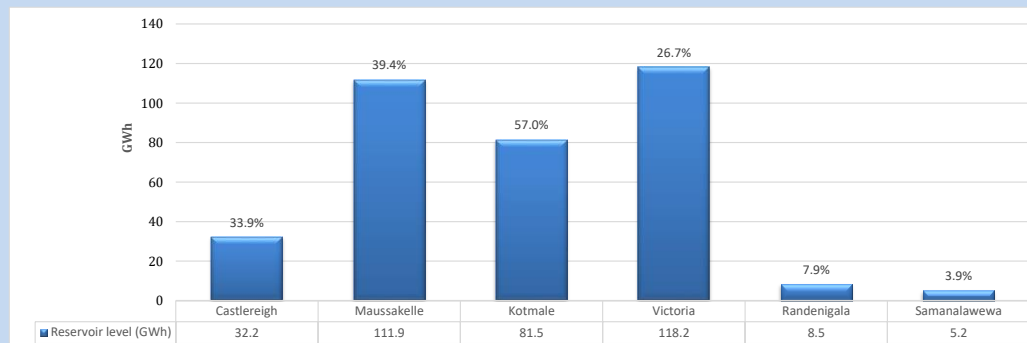
Table 07

Night Peak*	2,039	MW
Day Peak Maximum Demand	1,378	MW
Day Peak Minimum Demand	1,160	MW
Off Peak Minimum Demand	1,299	MW

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

### Reservoir Levels -

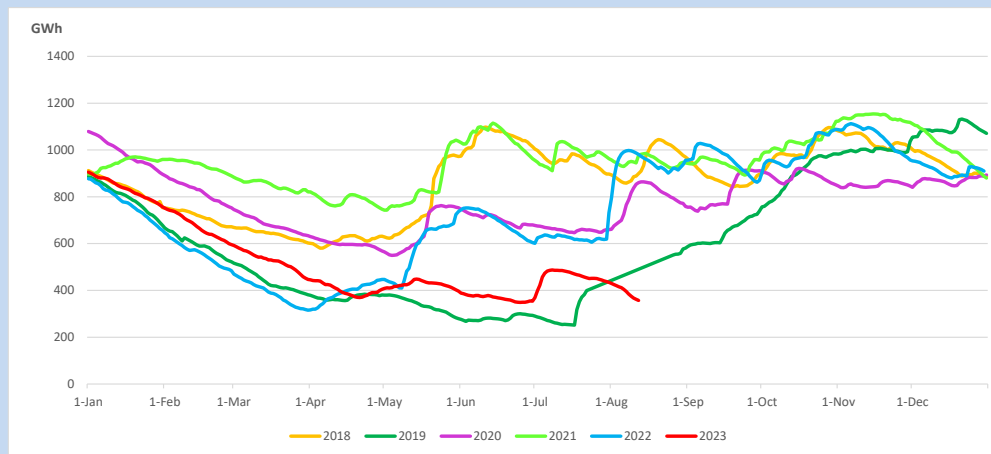
as at 06.00 Hr on August 14, 2023



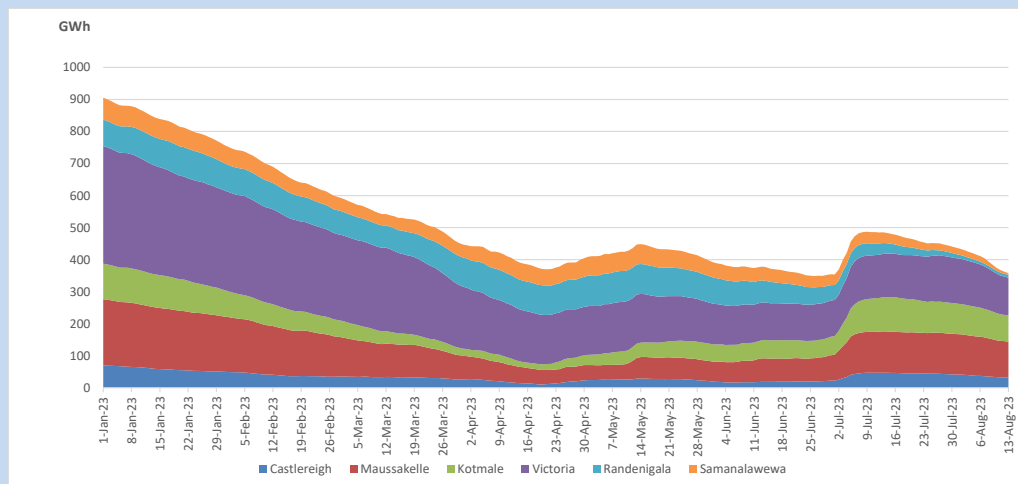
Total Reservoir Level  
% of Total capacity

357.5 GWh  
29.7%

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

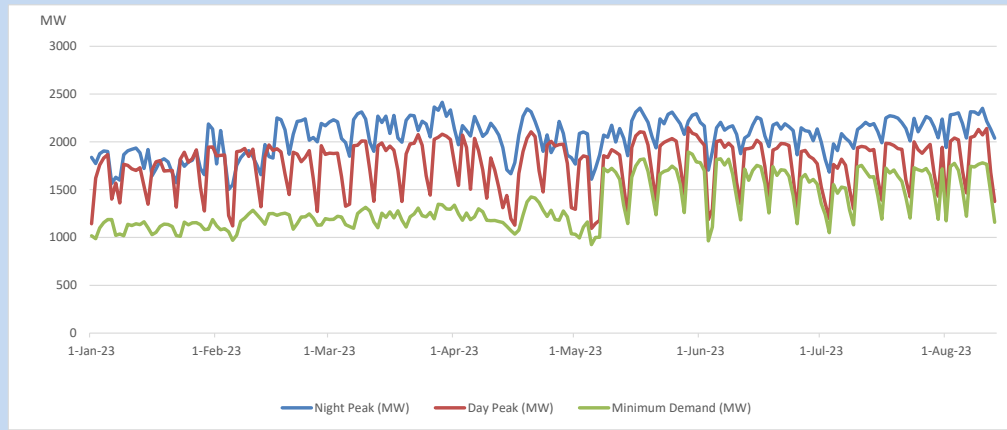


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





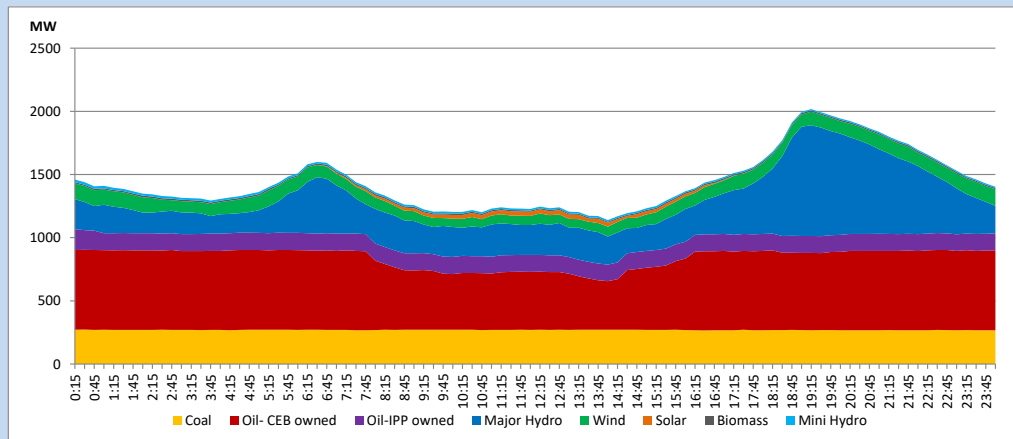
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

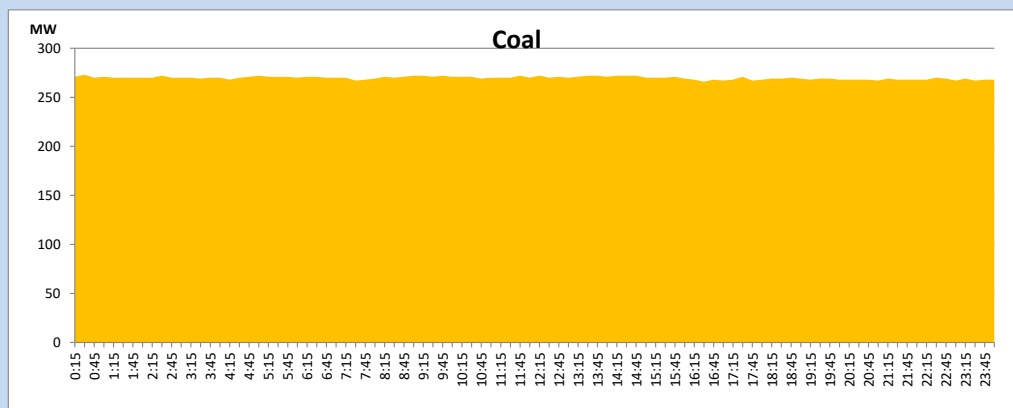
August 13, 2023



Solar and wind data is based on Telemetered Power Stations only

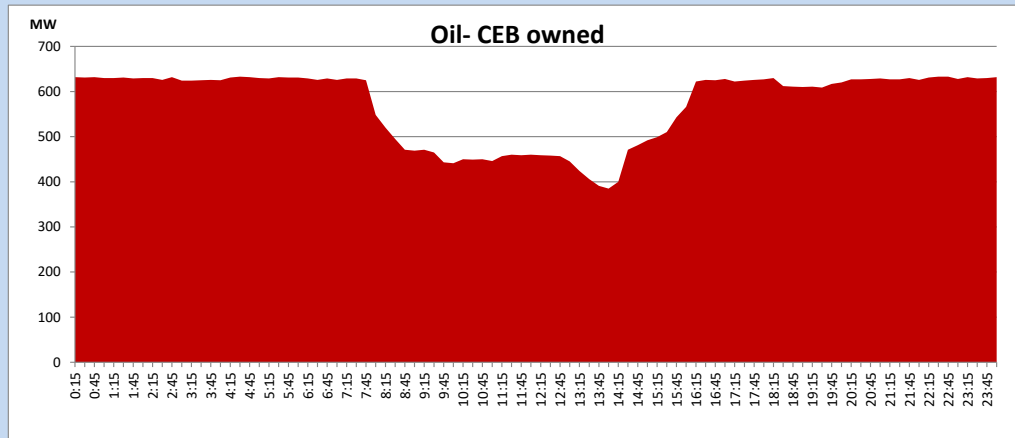
### Coal Generation during

August 13, 2023



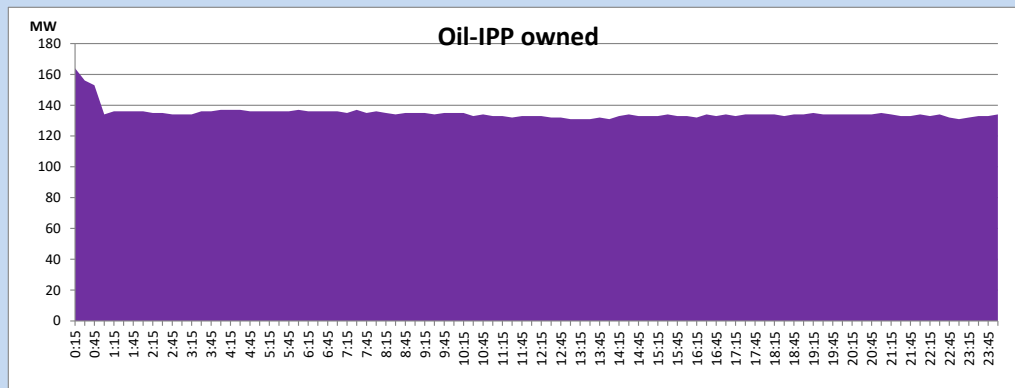
CEB Oil Plant Generation during

August 13, 2023



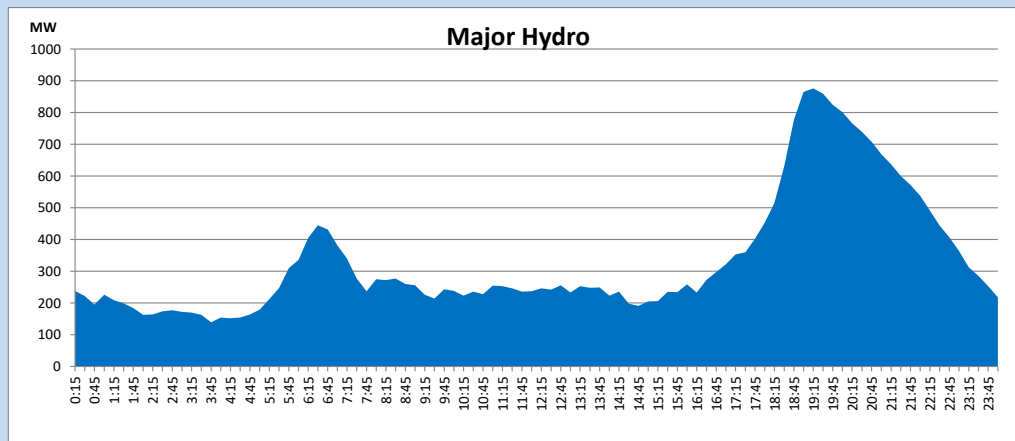
IPP Oil Plant Generation during

August 13, 2023



Major Hydro Generation during

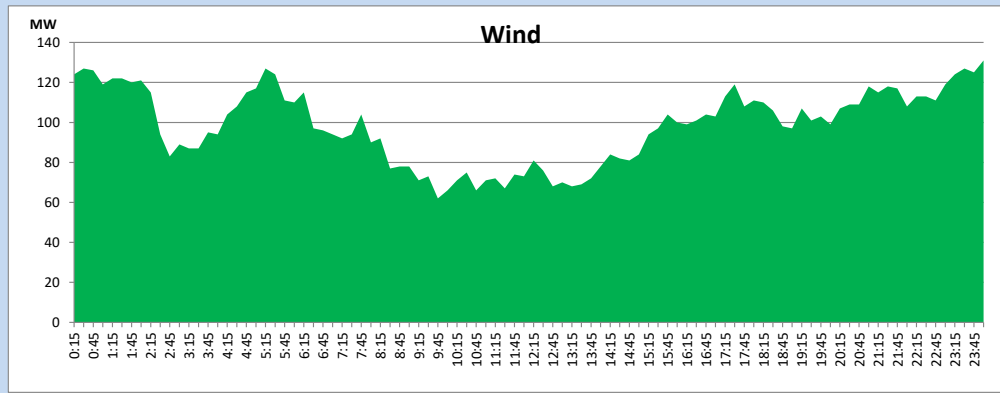
August 13, 2023



## Wind Generation during

August 13, 2023

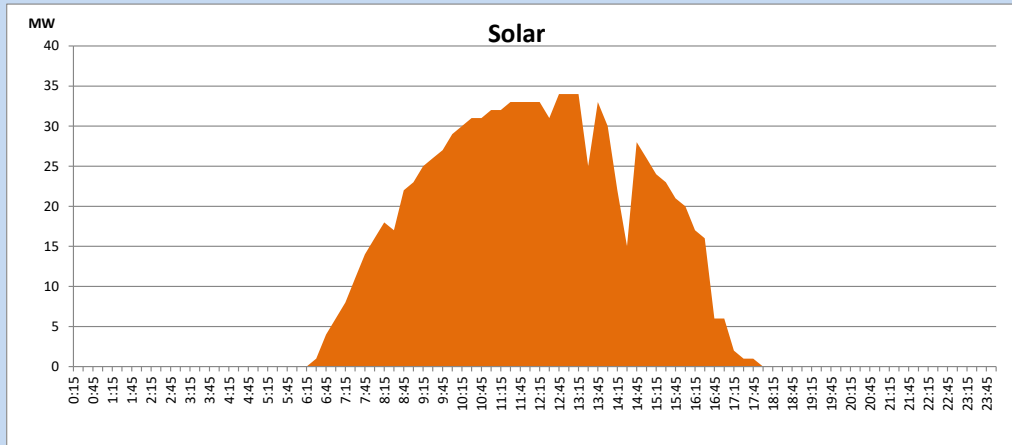
Based on Telemetered Power Stations only



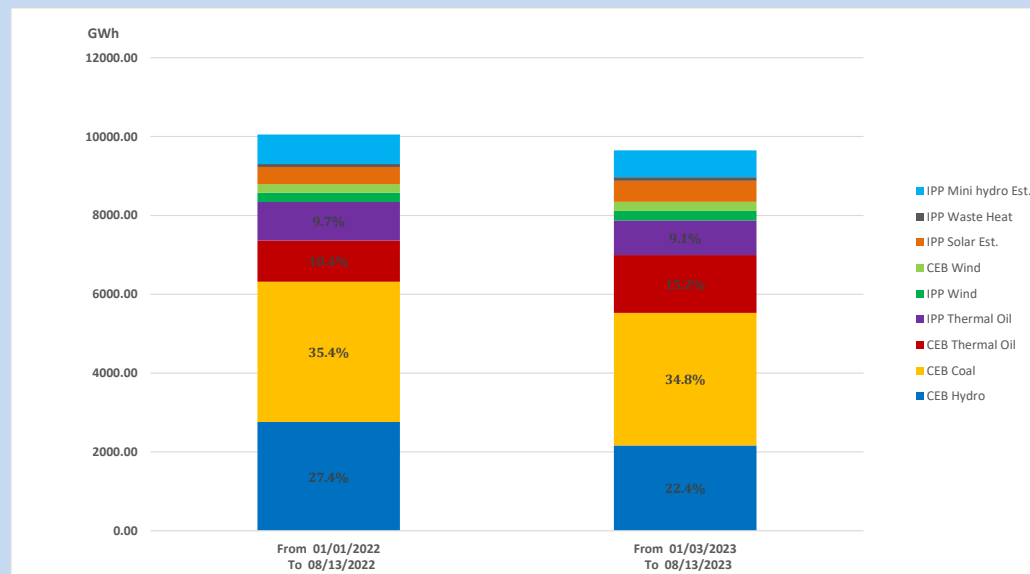
## Solar Generation during

August 13, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 08/13/2022

10054 GWh

From 01/01/2023 To 08/13/2023

9650 GWh

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

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

Major Incidents reported during the day

August 13, 2023

- 1) Samanalawewa full load generation restricted, in order to comply with the operation constraints initiated by propagation of air bubbles at reservoir intake, which would further course for the possible formation of vortex at the same place, due to the severe depletion of Samanalawewa reservoir storage.
- 2) Biyagama - Sapugaskanda P/S 132kV cct 02 was manually switched off at 12:50hrs due to an oil leak in the line bay CB. The cct is yet to be restored.