

# Generation and Reservoirs Statistics

August 27, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

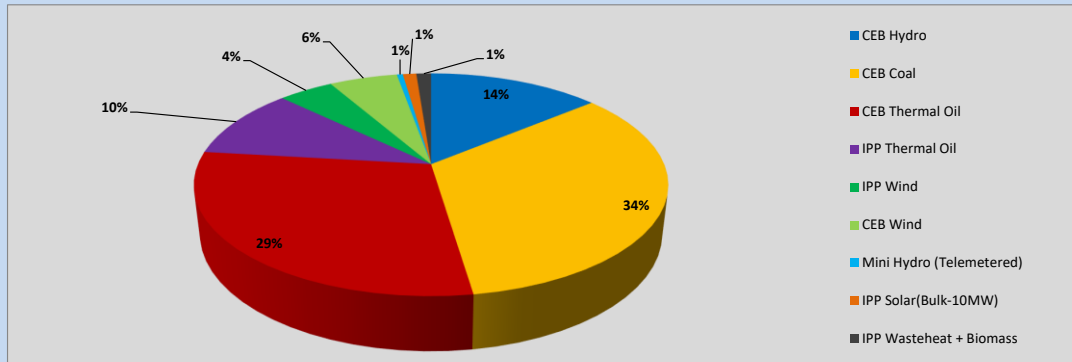


Table 01

	Generation (MWh)
CEB Hydro	5,117
CEB Coal	12,303
CEB Thermal Oil	10,690
IPP Thermal Oil	3,776
IPP Wind	1,639
CEB Wind	2,034
Mini Hydro (Telemetered)	177
IPP Solar (Bulk)	402
IPP Waste heat + Biomass	440
<b>Total Generation (Excluding estimated figures)</b>	<b>36,578</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	3593
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1650
<b>Total Generation (Including estimated figures)</b>	<b>42,125</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)	294
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

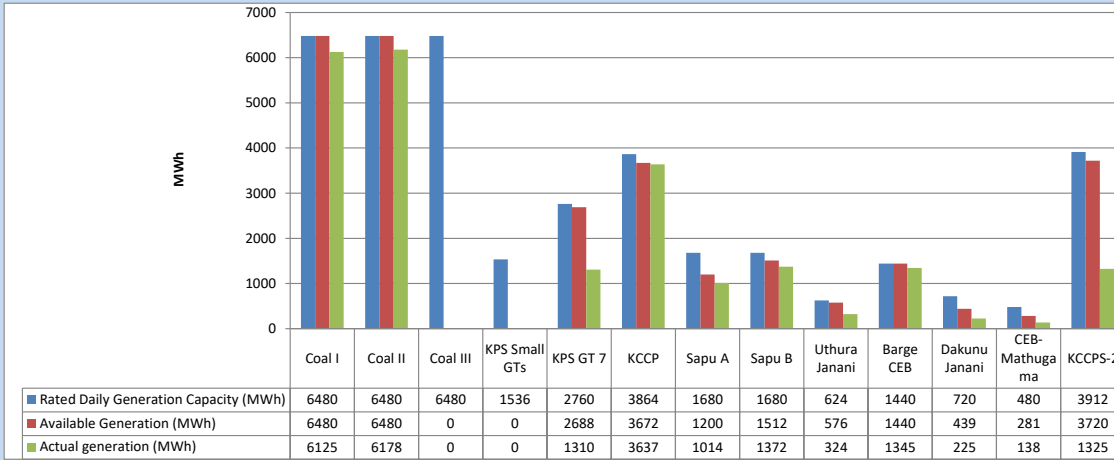
Category	Dispatch (GWh)	
CEB Hydro	228	20.21%
CEB Coal	283	25.03%
CEB Thermal Oil	339	29.97%
IPP Thermal	160	14.19%
SPP Wind	43	3.79%
CEB Wind	46	4.10%
Mini Hydro (Telemetered)	8	0.67%
IPP Solar(Bulk-10MW)	10	0.88%
IPP Waste heat + BMP	13	1.16%
<b>Total</b>	<b>1,130</b>	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,275	24.47%
CEB Coal	3,533	37.99%
CEB Thermal Oil	1,642	17.67%
IPP Thermal	964	10.37%
SPP Wind	253	2.72%
CEB Wind	263	2.83%
Mini Hydro (Telemetered)	209	2.24%
IPP Solar(Bulk-10MW)	73	0.79%
IPP Waste heat	86	0.92%
<b>Total</b>	<b>9,298</b>	

### 3. CEB owned Thermal Plant Dispatch

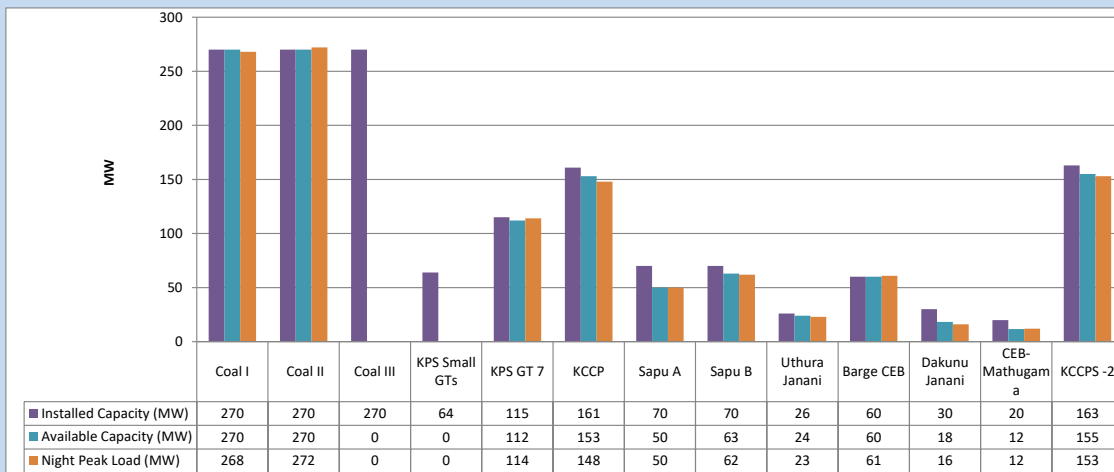
August 27, 2023



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

August 28, 2023

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

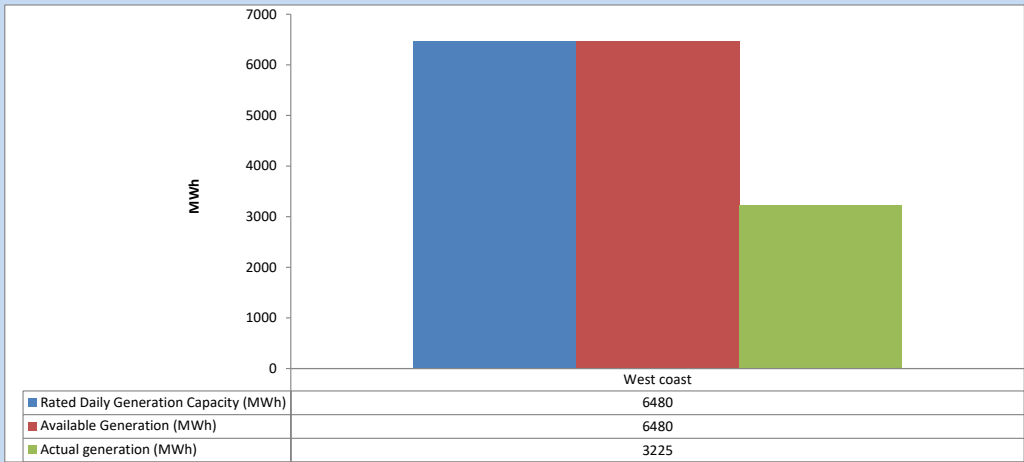


Plant availability is recorded at 6.00 am on

August 28, 2023

5. IPP owned Thermal Plant Dispatch

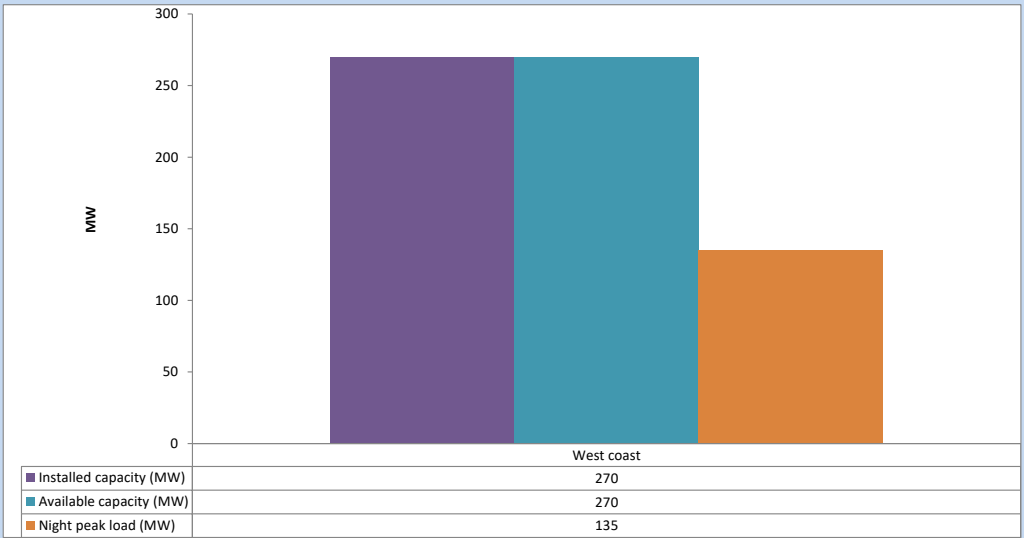
August 27, 2023



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

August 28, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

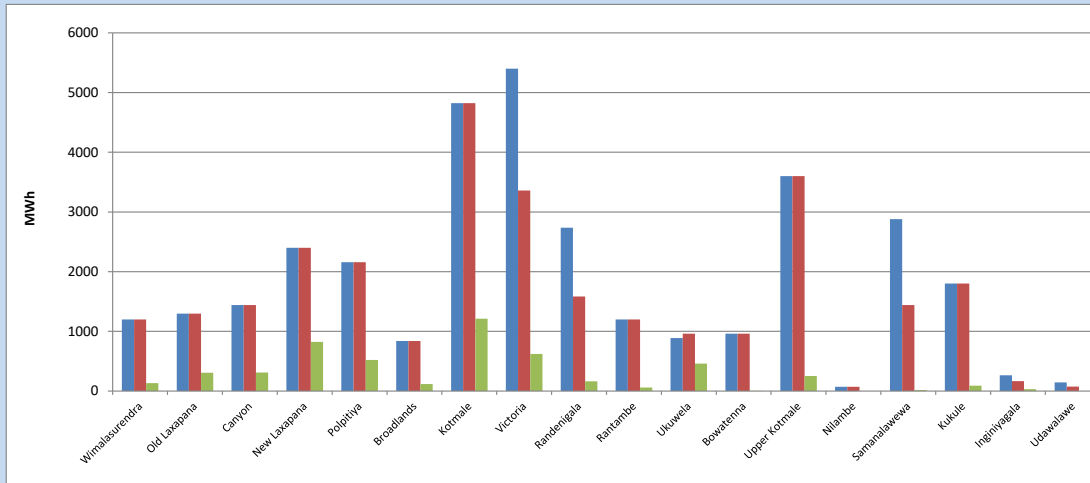


Plant availability is recorded at 6.00 am on

August 28, 2023

### 7. Major Hydro Plant Dispatch

August 27, 2023

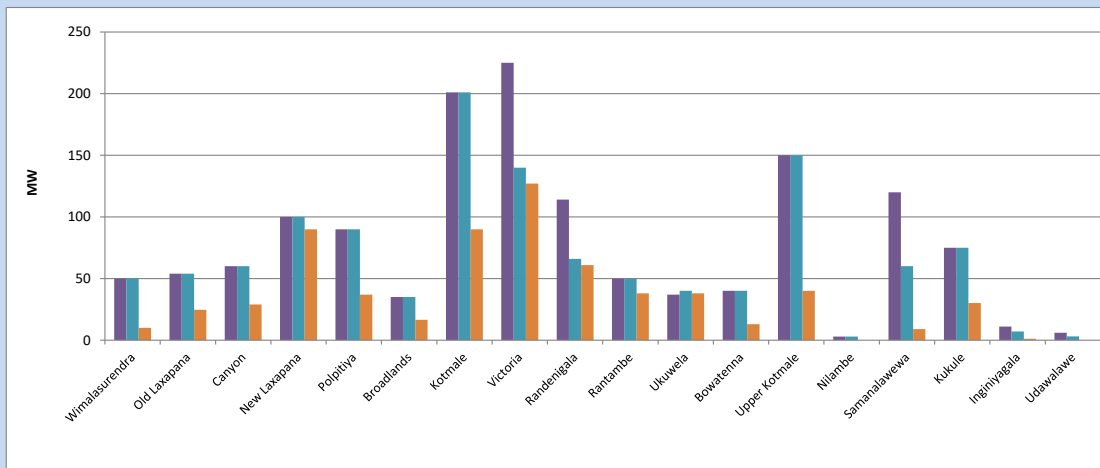


Available Generation is estimated based on plant availability at 6.00am on August 28, 2023  
Broadlands power plant is operating in the Commissioning Stage

August 28, 2023

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

August 27, 2023



Plant availability is recorded at 6.00 am on August 28, 2023  
Broadlands power plant is operating in the Commissioning Stage

August 28, 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	10	134
Old Laxapana Canyon	54	54	25	308
New Laxapana	60	60	29	310
Polpitiya	100	100	90	823
Broadlands	90	90	37	522
Kotmale	35	35	17	117
Victoria	201	201	90	1,210
Randenigala	225	140	127	622
Rantambe	114	66	61	162
Ukuwela	50	50	38	59
Bowatenna	37	40	38	461
Upper Kotmale	40	40	13	2
Nilambe	150	150	40	251
Samanalawewa	3	3	0	0
Kukule	120	60	9	16
Inginiyagala	75	75	30	89
Udawalawe	11	7	1	31
Puttalam Coal I	6	3	0	0
Puttalam Coal II	270	270	268	6,125
Puttalam Coal III	270	270	272	6,178
KPS Small GTs	270	0	0	0
KPS GT 7	64	0	0	0
KCCP	115	112	114	1,310
Sapugaskanda A	161	153	148	3,637
Sapugaskanda B	70	50	50	1,014
Uthura Janani	70	63	62	1,372
Barge CEB	26	24	23	324
CEB-Hambantota	60	60	61	1,345
CEB-Mathugama	30	18	16	225
ACE Matara	20	12	12	138
Asia Power	24	0	0	0
KCCPS -2	50	0	0	0
West Coast	163	155	153	1,325
Nothern Power	270	270	135	3,225
ACE Embilipitiya	36	0	0	0
Total	93	0	0	0
	3,483	2,681	2,109	36,027

Plant availability is the availability recorded at 6 am on

August 28, 2023

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

August 27, 2023

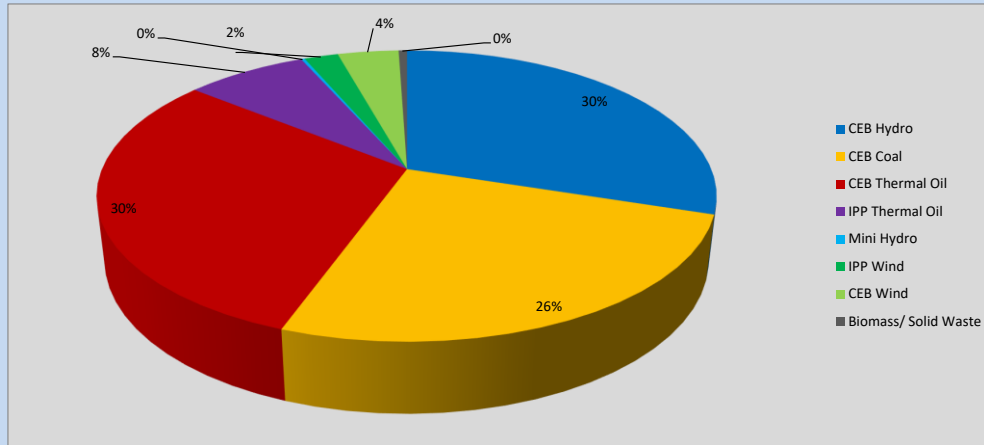


Table 06

CEB Hydro	631	MW
CEB Coal	540	MW
CEB Thermal Oil	639	MW
IPP Thermal Oil	159	MW
Mini Hydro (Telemetered)	5	MW
IPP Wind	44.7	MW
CEB Wind	80.2	MW
Biomass/ Solid Waste	11	MW

### Recorded Peak Demand Data

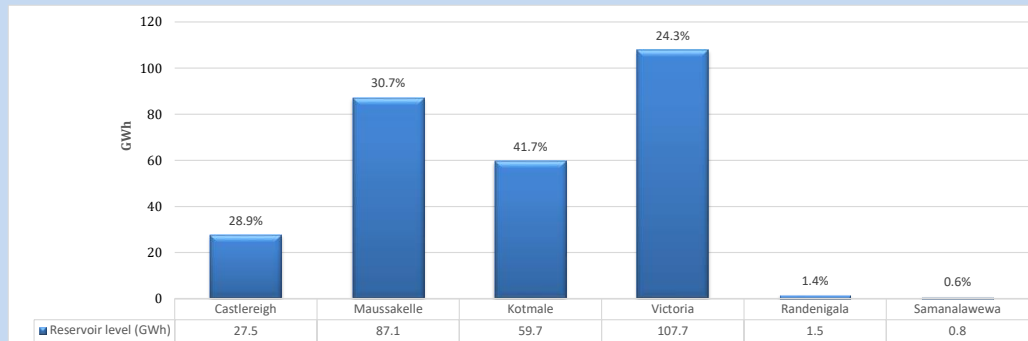
Table 07

Night Peak*	2,110	MW
Day Peak Maximum Demand	1,424	MW
Day Peak Minimum Demand	1,186	MW
Off Peak Minimum Demand	1,346	MW

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

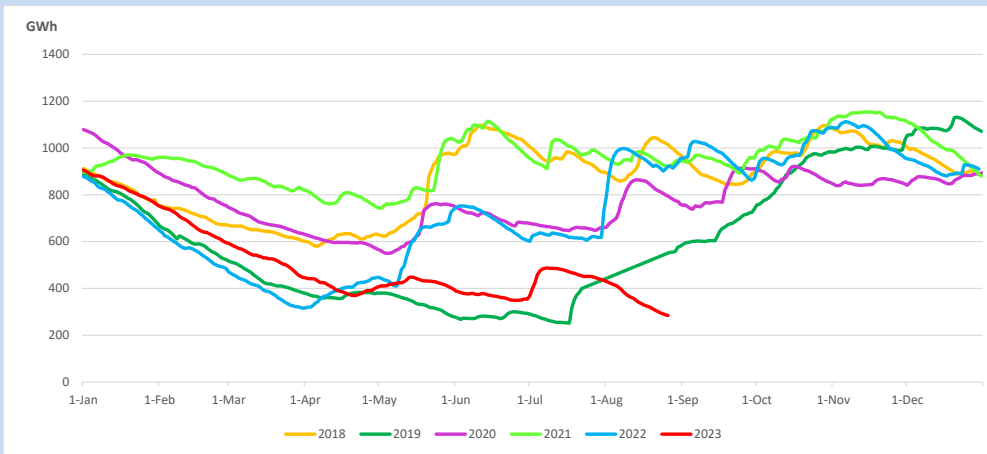
### Reservoir Levels -

as at 06.00 Hr on August 28, 2023

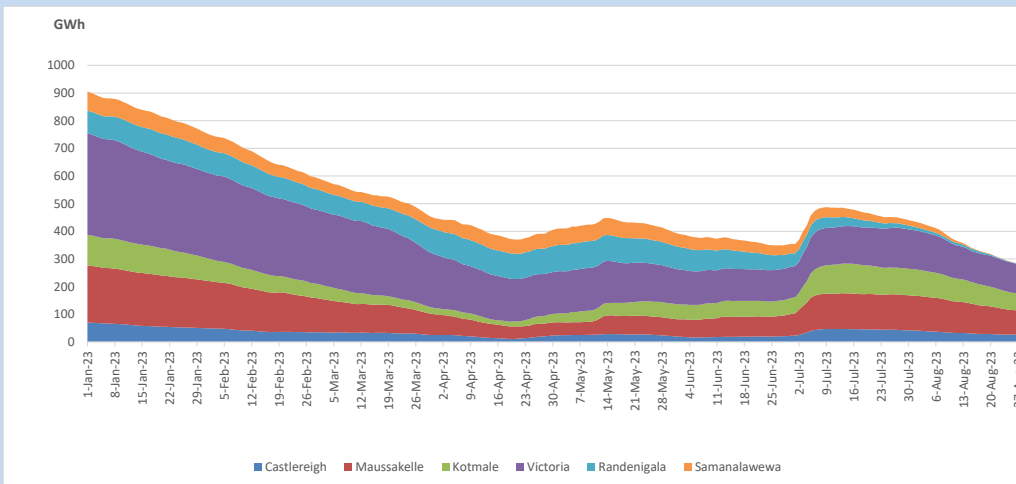


Total Reservoir Level            284.3 GWh  
 % of Total capacity                23.6%

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

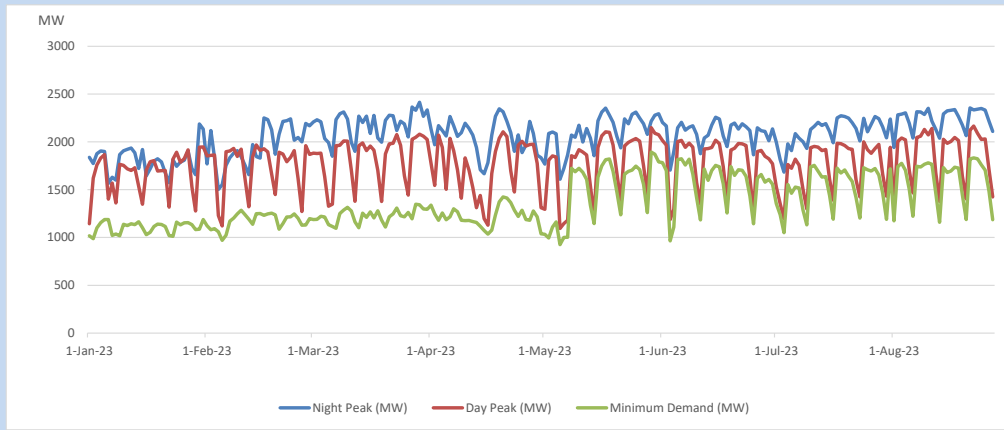


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





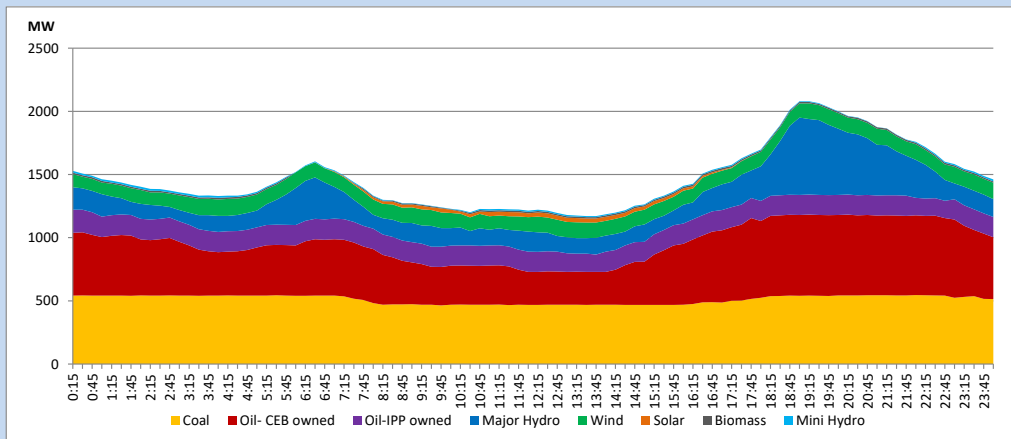
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

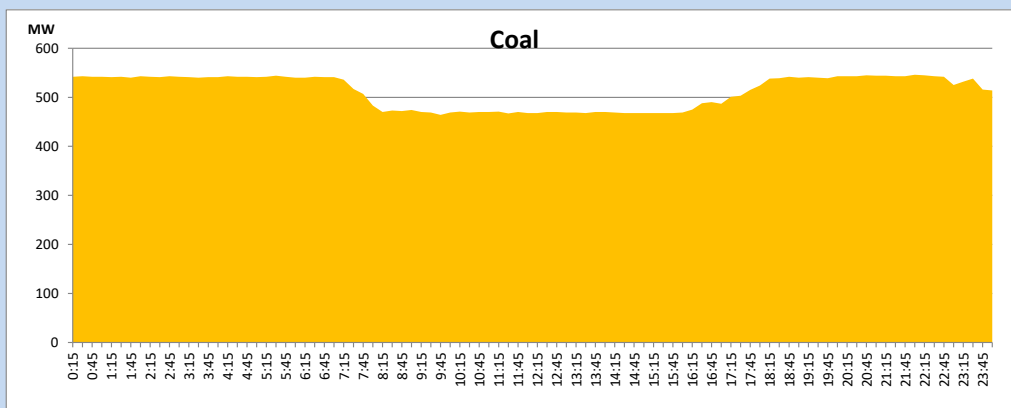
August 27, 2023



Solar and wind data is based on Telemetered Power Stations only

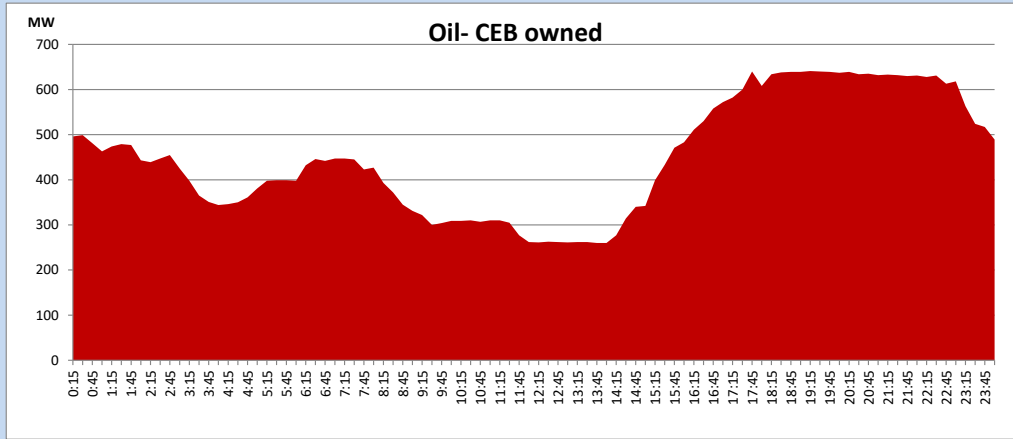
### Coal Generation during

August 27, 2023



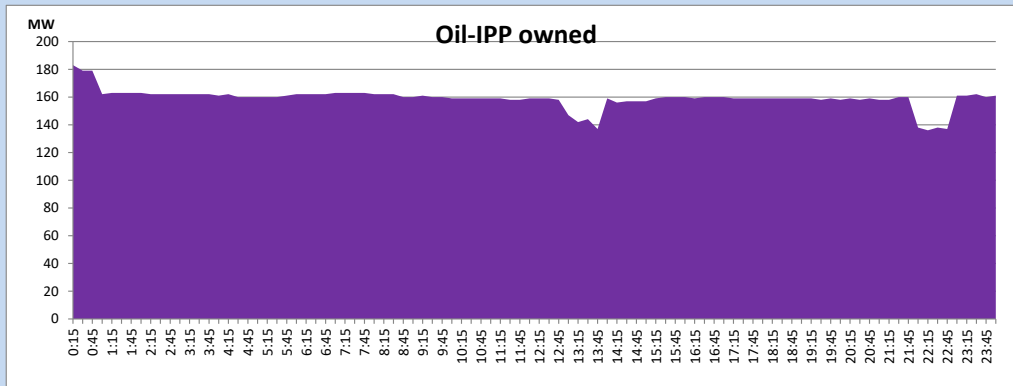
CEB Oil Plant Generation during

August 27, 2023



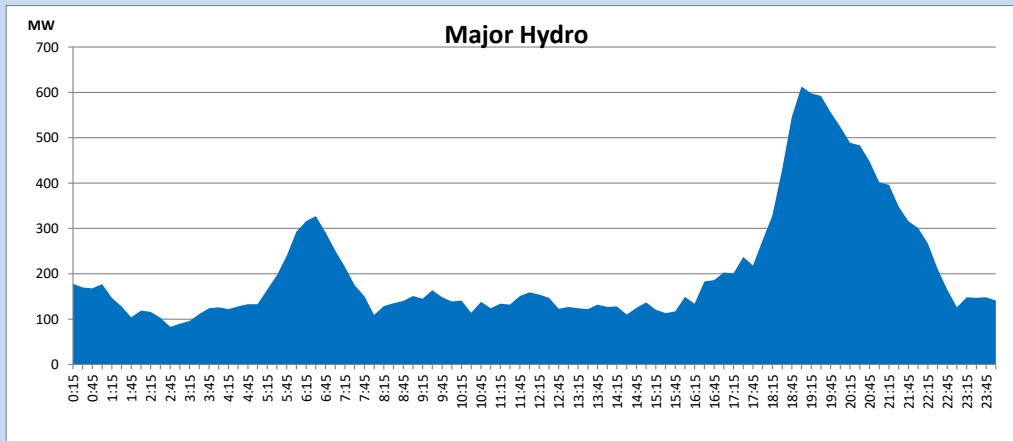
IPP Oil Plant Generation during

August 27, 2023



Major Hydro Generation during

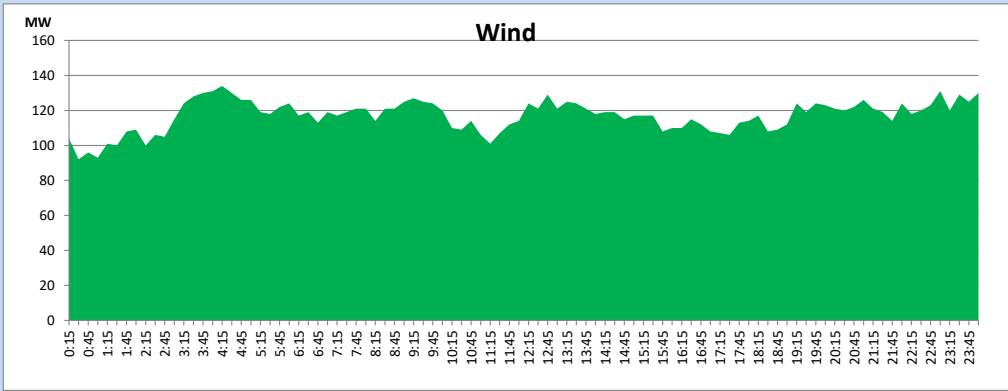
August 27, 2023



## Wind Generation during

August 27, 2023

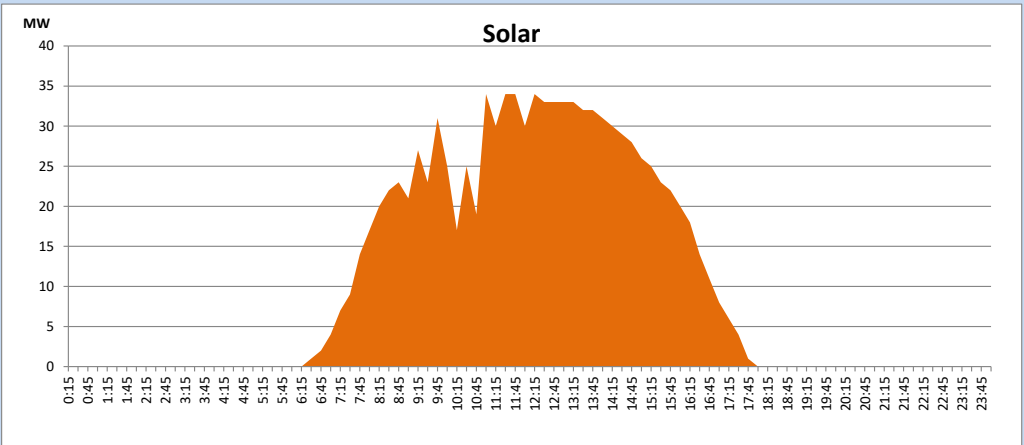
Based on Telemetered Power Stations only



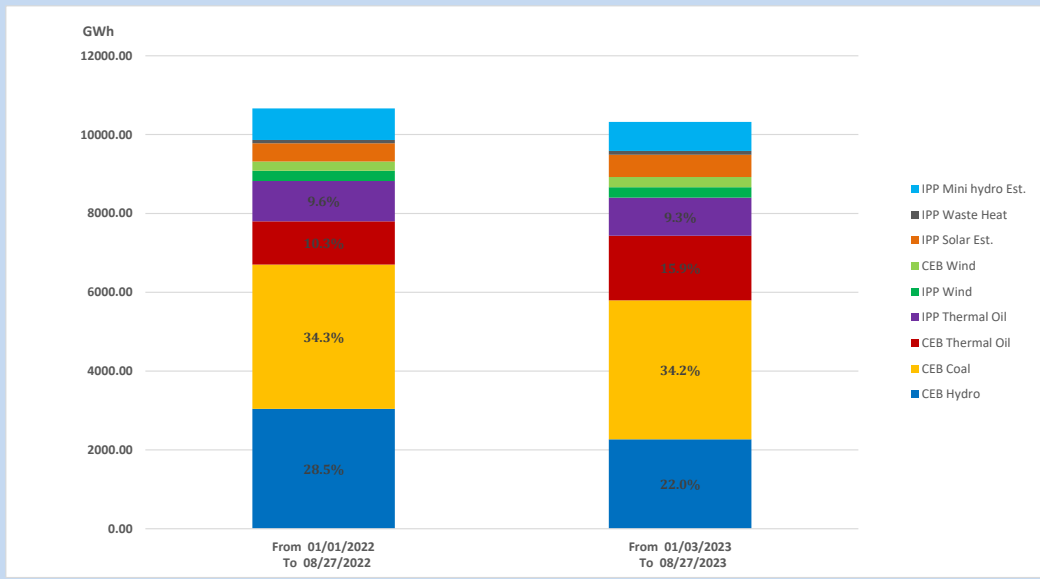
## Solar Generation during

August 27, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 08/27/2022

10665 GWh

From 01/01/2023 To 08/27/2023

10320 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

Major Incidents reported during the day

August 27, 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) Ukuwela - Bowathenna cct tripped from Ukuwela end only at 23:36hrs due to the operation of distance protection. The cct was restored at 23:46hrs.