

# Generation and Reservoirs Statistics

August 19, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

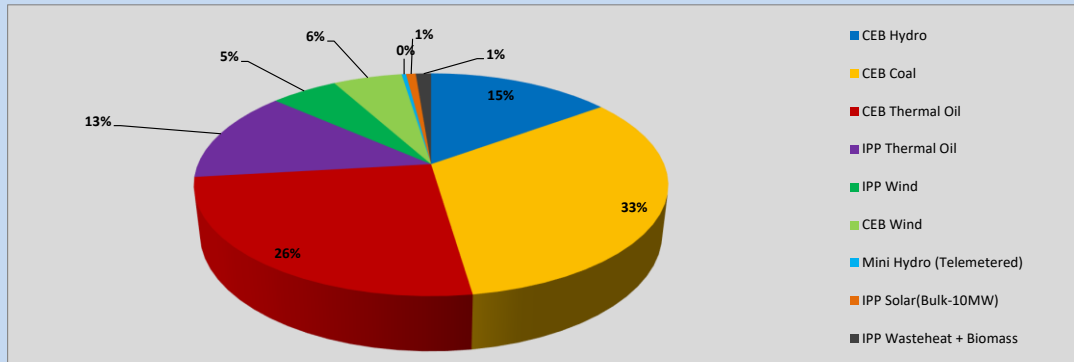


Table 01

	Generation (MWh)
CEB Hydro	5,959
CEB Coal	12,995
CEB Thermal Oil	10,130
IPP Thermal Oil	5,309
IPP Wind	2,176
CEB Wind	2,239
Mini Hydro (Telemetered)	142
IPP Solar (Bulk)	315
IPP Waste heat + Biomass	496
<b>Total Generation (Excluding estimated figures)</b>	<b>39,761</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	3628
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1650
<b>Total Generation (Including estimated figures)</b>	<b>45,343</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

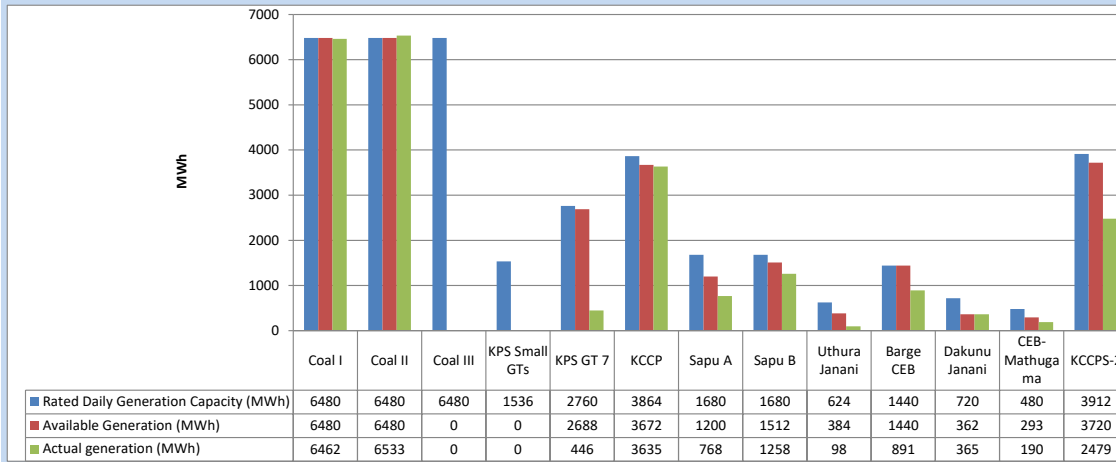
Category	Dispatch (GWh)	
CEB Hydro	174	21.90%
CEB Coal	180	22.68%
CEB Thermal Oil	241	30.44%
IPP Thermal	114	14.35%
SPP Wind	30	3.82%
CEB Wind	31	3.96%
Mini Hydro (Telemetered)	6	0.77%
IPP Solar(Bulk-10MW)	7	0.86%
IPP Waste heat + BMP	10	1.21%
<b>Total</b>	<b>793</b>	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,220	24.78%
CEB Coal	3,430	38.27%
CEB Thermal Oil	1,545	17.24%
IPP Thermal	918	10.24%
SPP Wind	240	2.68%
CEB Wind	248	2.77%
Mini Hydro (Telemetered)	207	2.31%
IPP Solar(Bulk-10MW)	70	0.78%
IPP Waste heat	82	0.92%
<b>Total</b>	<b>8,961</b>	

### 3. CEB owned Thermal Plant Dispatch

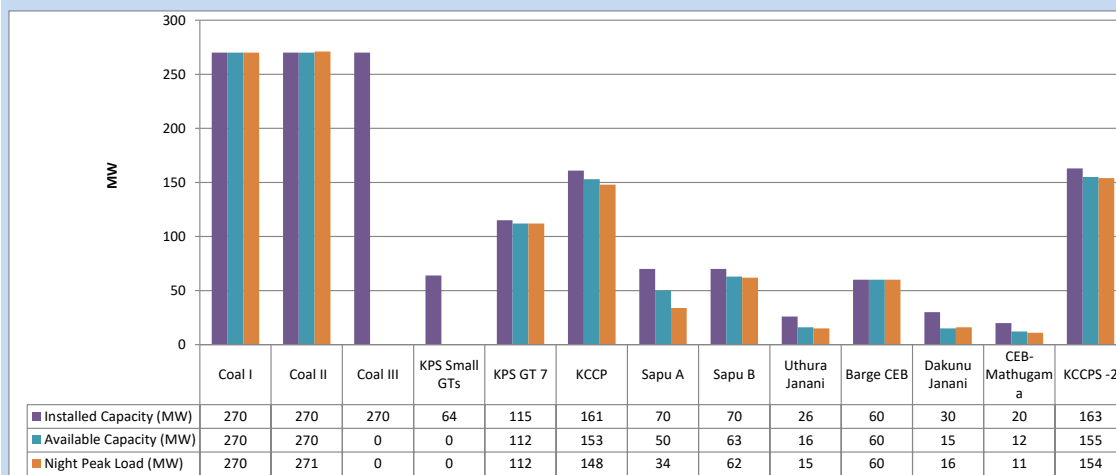
August 19, 2023



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

August 20, 2023

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

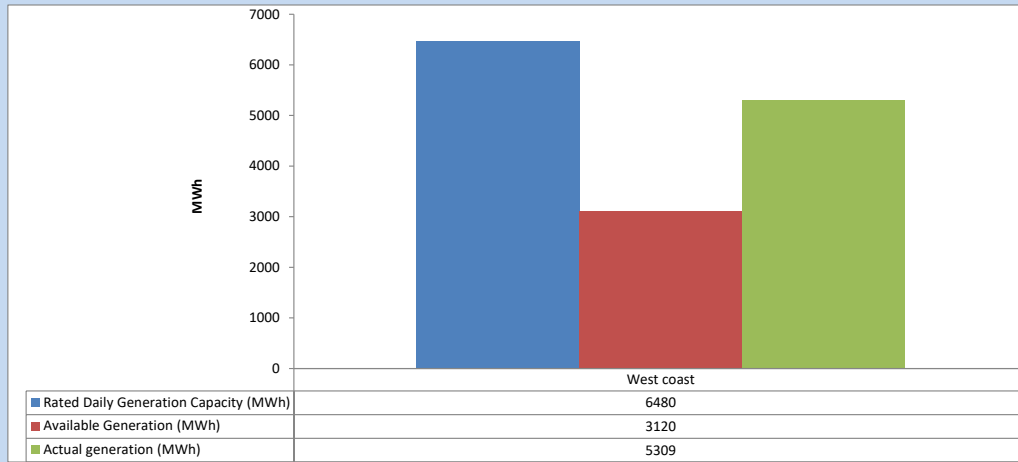


Plant availability is recorded at 6.00 am on

August 20, 2023

### 5. IPP owned Thermal Plant Dispatch

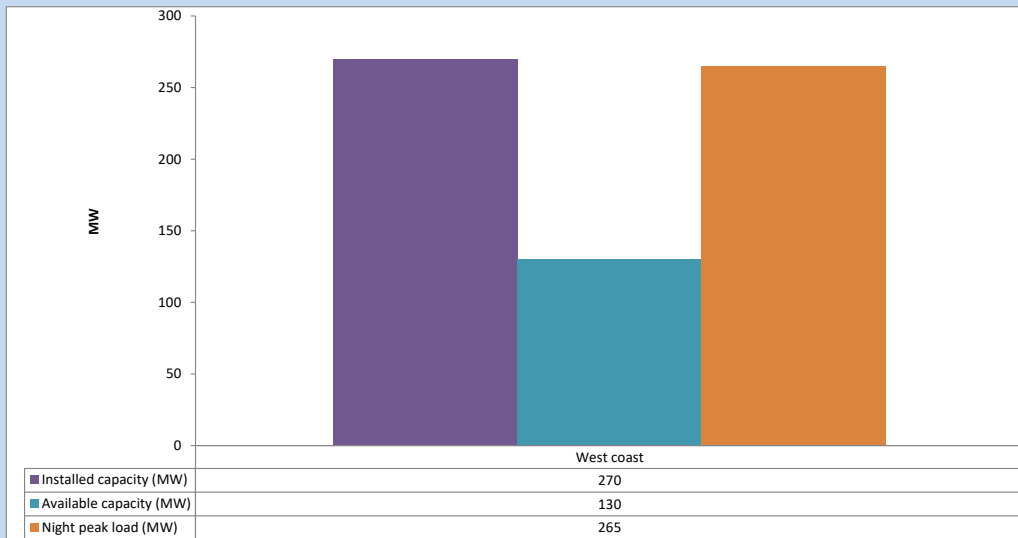
August 19, 2023



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

August 20, 2023

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

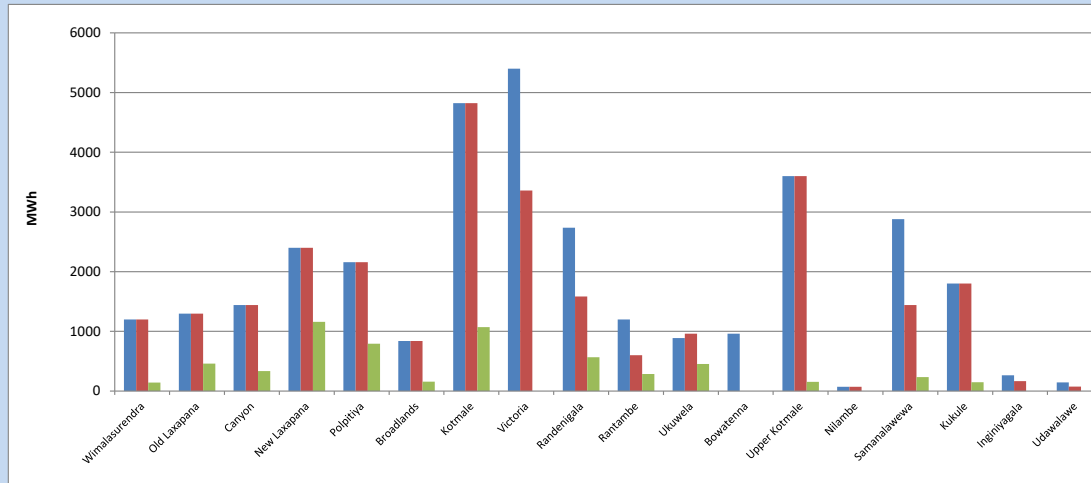


Plant availability is recorded at 6.00 am on

August 20, 2023

### 7. Major Hydro Plant Dispatch

August 19, 2023

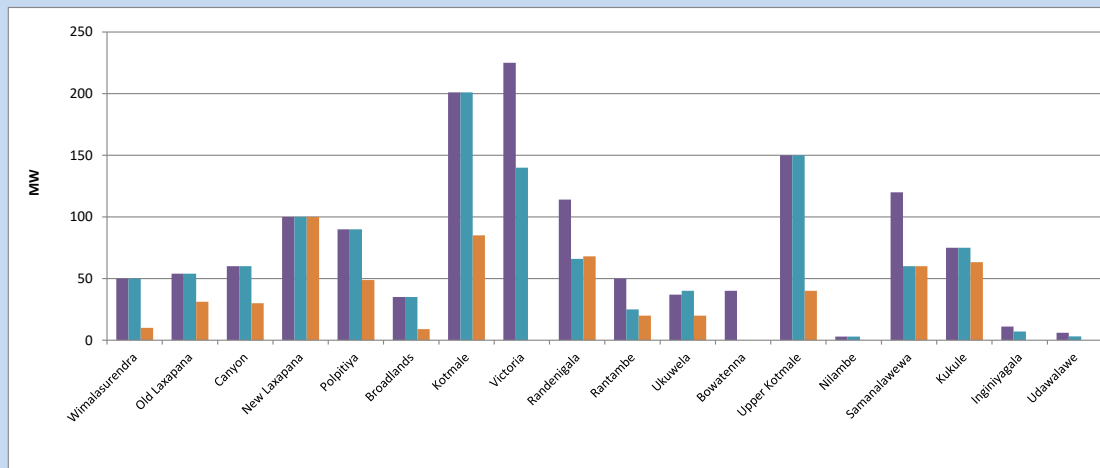


Available Generation is estimated based on plant availability at 6.00am on August 20, 2023  
Broadlands power plant is operating in the Commissioning Stage

August 20, 2023

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

August 19, 2023



Plant availability is recorded at 6.00 am on August 20, 2023  
Broadlands power plant is operating in the Commissioning Stage

August 20, 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	10	143
Old Laxapana	54	54	31	460
Canyon	60	60	30	334
New Laxapana	100	100	100	1,159
Polpitiya	90	90	49	793
Broadlands	35	35	9	157
Kotmale	201	201	85	1,070
Victoria	225	140	0	0
Randenigala	114	66	68	568
Rantambe	50	25	20	285
Ukuwela	37	40	20	454
Bowatenna	40	0	0	0
Upper Kotmale	150	150	40	154
Nilambe	3	3	0	0
Samanalawewa	120	60	60	235
Kukule	75	75	63	147
Inginiyagala	11	7	0	0
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	270	6,462
Puttalam Coal II	270	270	271	6,533
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	0	0	0
KPS GT 7	115	112	112	446
KCCP	161	153	148	3,635
Sapugaskanda A	70	50	34	768
Sapugaskanda B	70	63	62	1,258
Uthura Janani	26	16	15	98
Barge CEB	60	60	60	891
CEB-Hambantota	30	15	16	365
CEB-Mathugama	20	12	11	190
ACE Matara	24	0	0	0
Asia Power	50	0	0	0
KCCPS -2	163	155	154	2,479
West Coast	270	130	265	5,309
Nothern Power	36	0	0	0
ACE Embilipitiya	93	0	0	0
<b>Total</b>	<b>3,483</b>	<b>2,465</b>	<b>2,181</b>	<b>39,761</b>

Plant availability is the availability recorded at 6 am on

August 20, 2023

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

August 19, 2023

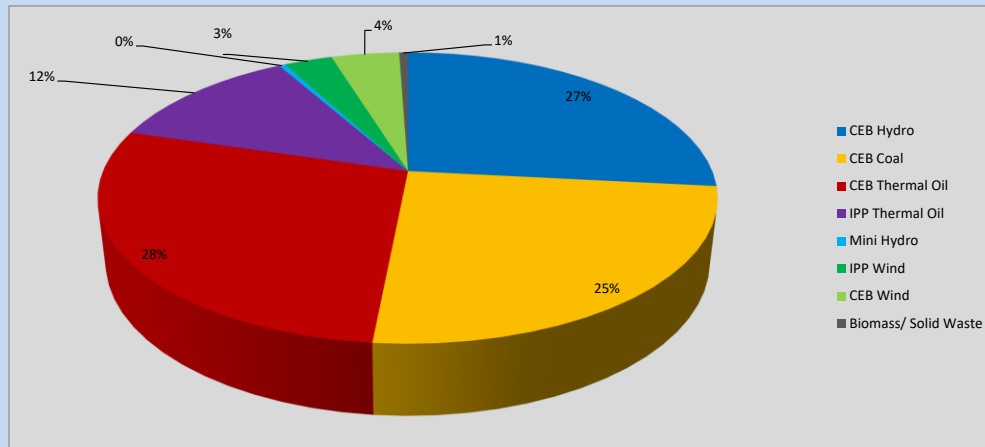


Table 06

CEB Hydro	580	MW
CEB Coal	541	MW
CEB Thermal Oil	612	MW
IPP Thermal Oil	265	MW
Mini Hydro (Telemetered)	9	MW
IPP Wind	65.1	MW
CEB Wind	92.2	MW
Biomass/ Solid Waste	12	MW

### Recorded Peak Demand Data

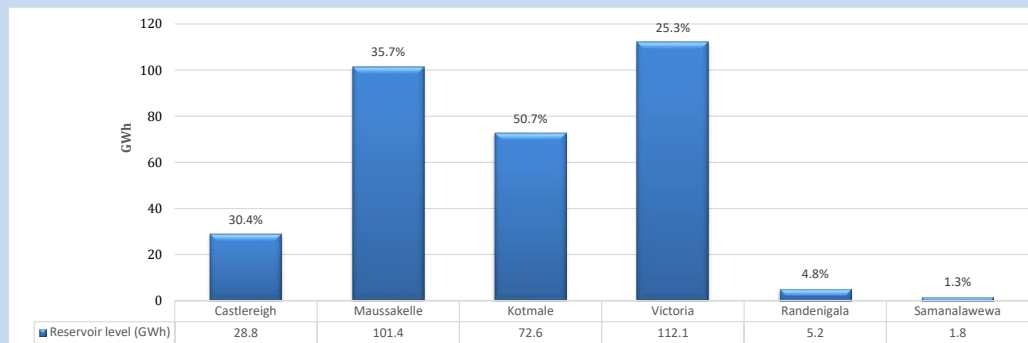
Table 07

Night Peak*	2,176	MW
Day Peak Maximum Demand	1,640	MW
Day Peak Minimum Demand	1,446	MW
Off Peak Minimum Demand	1,358	MW

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

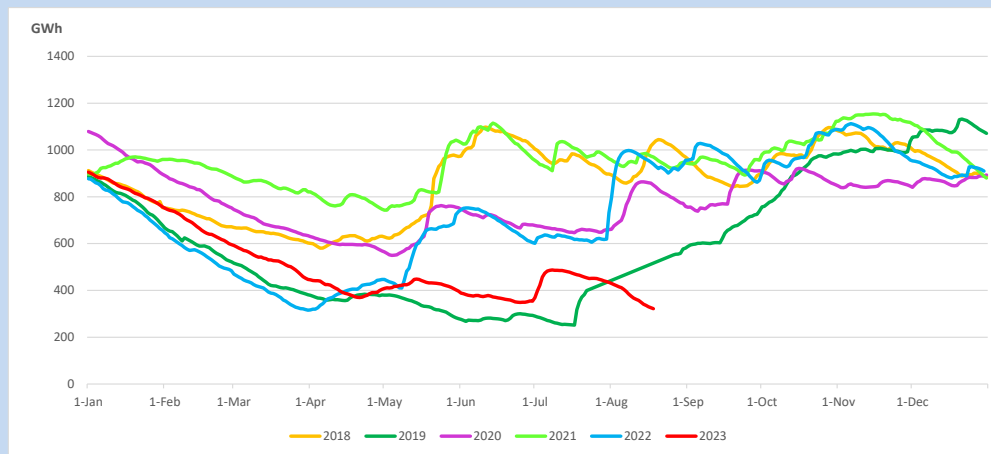
### Reservoir Levels -

as at 06.00 Hr on August 20, 2023

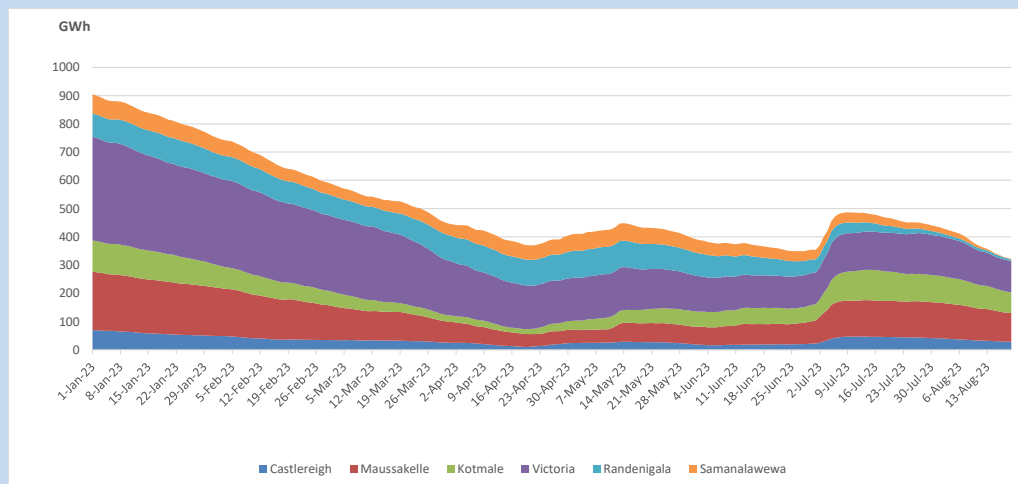


Total Reservoir Level 321.9 GWh  
% of Total capacity 26.6%

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

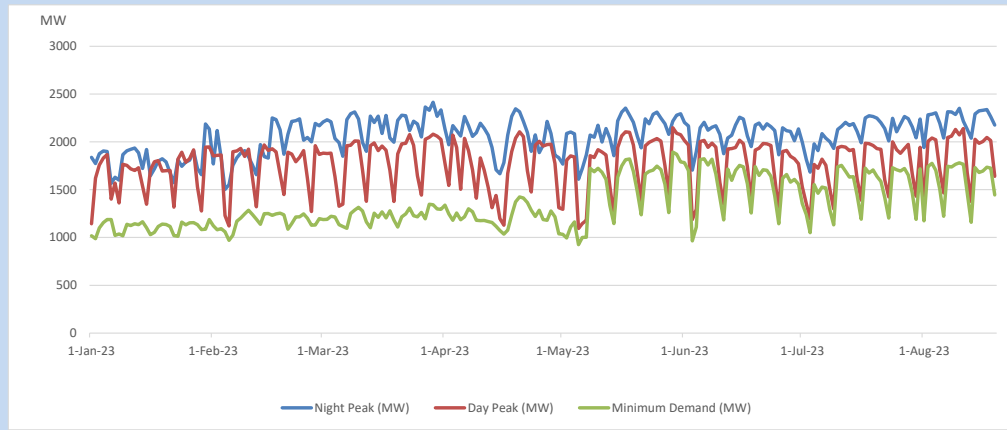


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





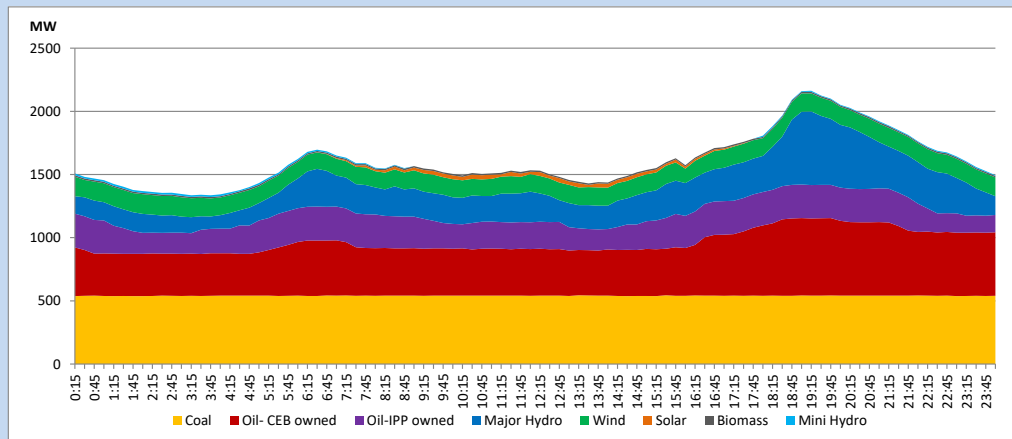
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

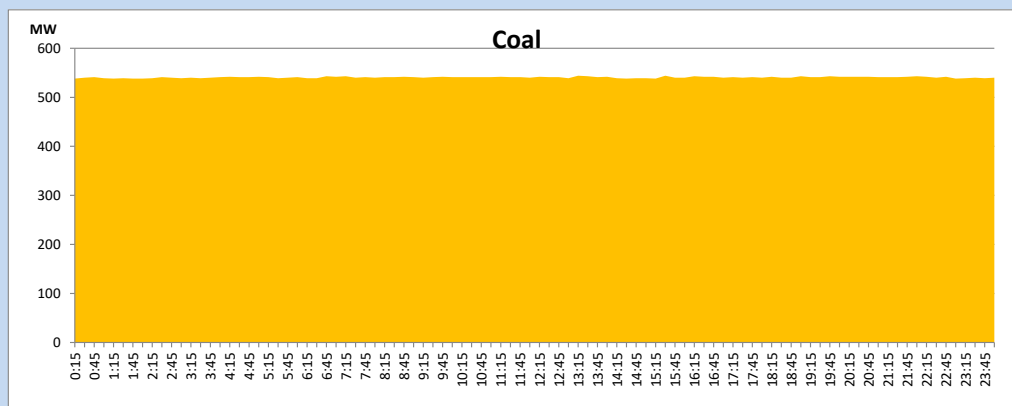
August 19, 2023



Solar and wind data is based on Telemetered Power Stations only

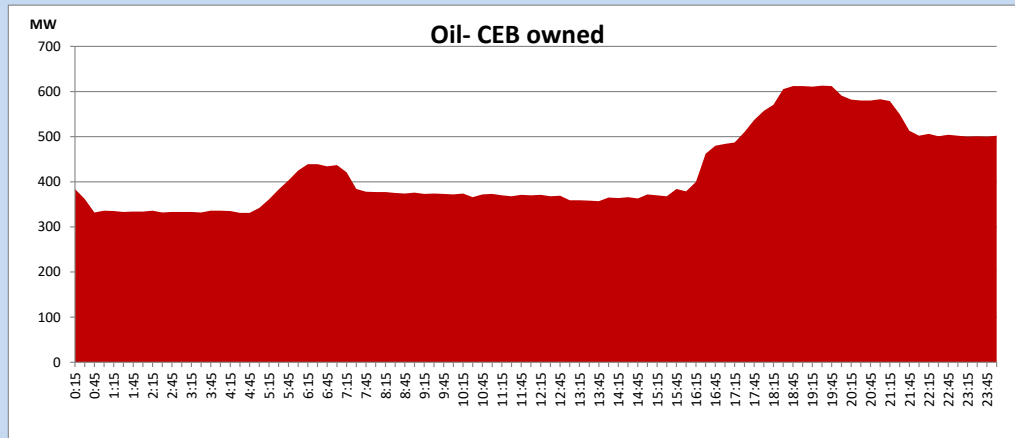
### Coal Generation during

August 19, 2023



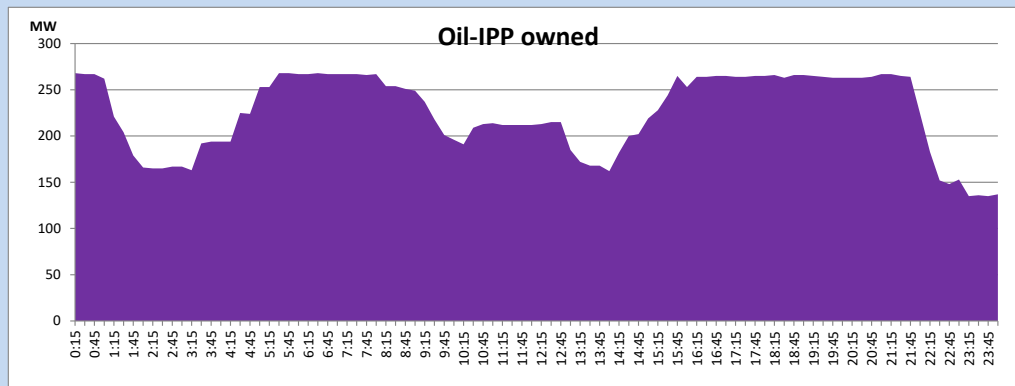
CEB Oil Plant Generation during

August 19, 2023



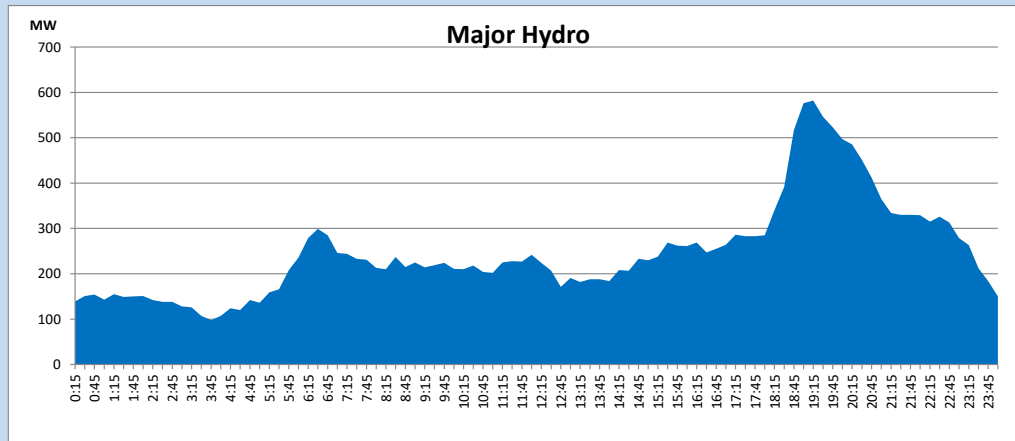
IPP Oil Plant Generation during

August 19, 2023



Major Hydro Generation during

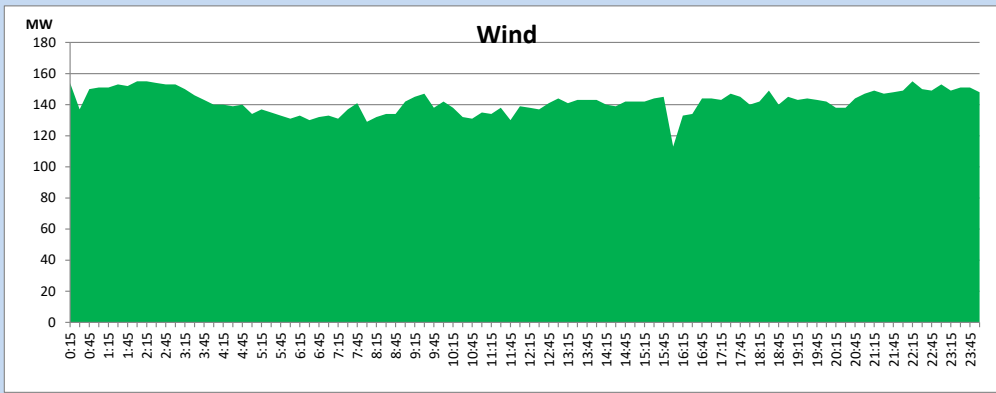
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## Wind Generation during

August 19, 2023

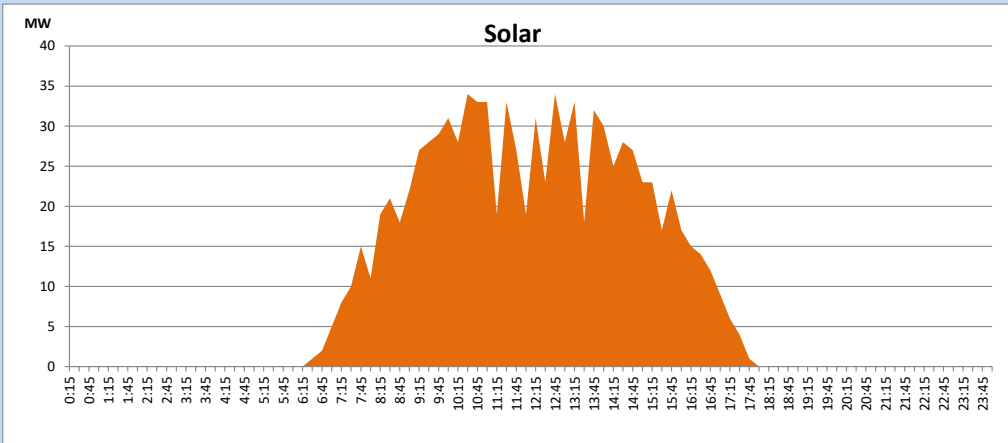
Based on Telemetered Power Stations only



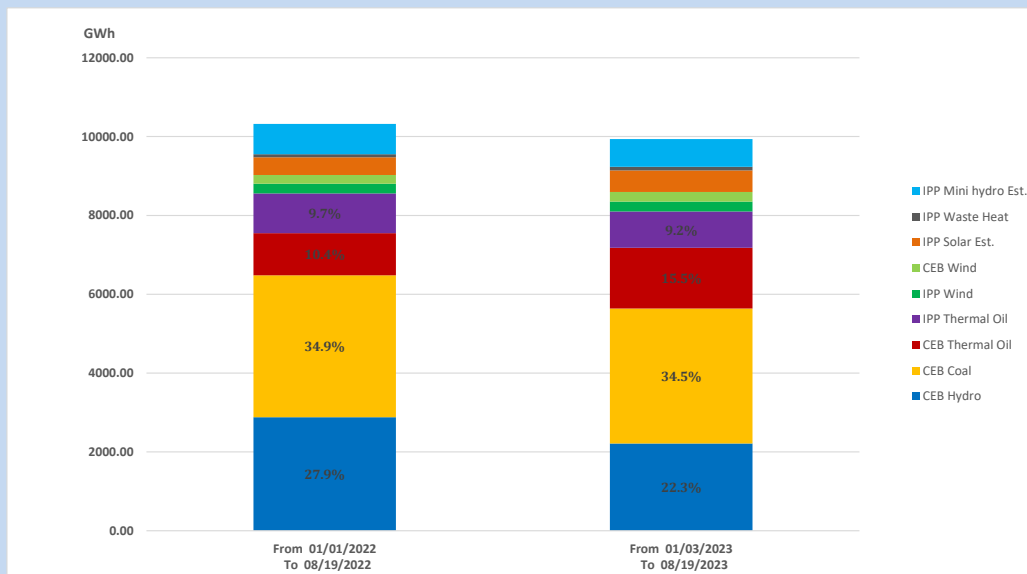
## Solar Generation during

August 19, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 08/19/2022

10323 GWh

From 01/01/2023 To 08/19/2023

9939 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

Major Incidents reported during the day

August 19, 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) Kotugoda - Veyangoda 220kV cct 02 tripped and A/R from Both ends at 15:57hrs due to the operation of differential protection.