

Generation and Reservoirs Statistics

August 23, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

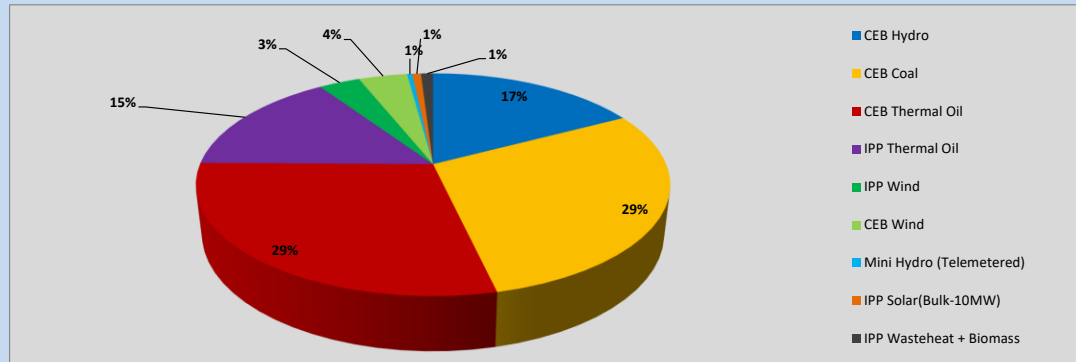


Table 01

	Generation (MWh)
CEB Hydro	7,734
CEB Coal	13,000
CEB Thermal Oil	12,881
IPP Thermal Oil	6,863
IPP Wind	1,502
CEB Wind	1,776
Mini Hydro (Telemetered)	184
IPP Solar (Bulk)	320
IPP Waste heat + Biomass	441
Total Generation (Excluding estimated figures)	44,701
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	3586
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1650
Total Generation (Including estimated figures)	50,241

* 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

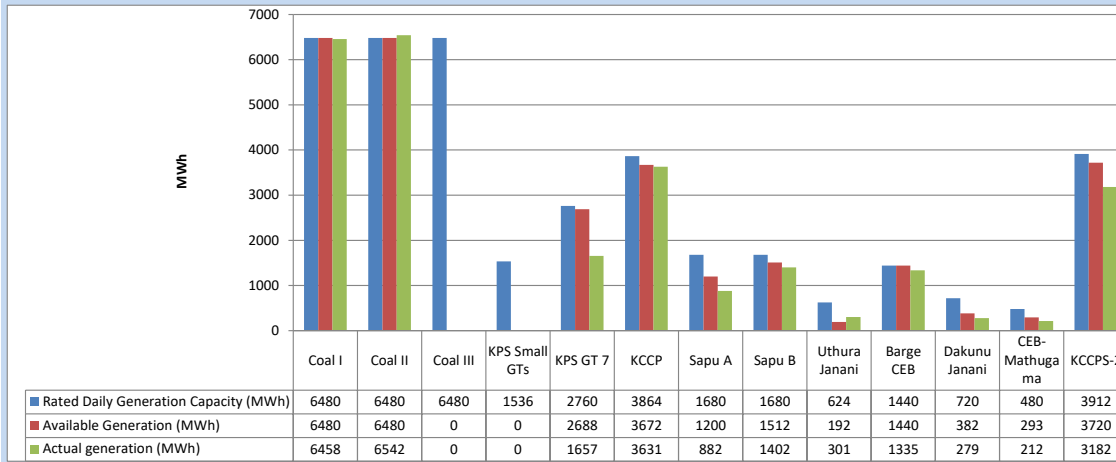
Category	Dispatch (GWh)	
CEB Hydro	204	21.19%
CEB Coal	231	24.02%
CEB Thermal Oil	292	30.28%
IPP Thermal	136	14.13%
SPP Wind	36	3.70%
CEB Wind	38	3.93%
Mini Hydro (Telemetered)	7	0.71%
IPP Solar(Bulk-10MW)	8	0.86%
IPP Waste heat + BMP	11	1.18%
Total	963	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,251	24.65%
CEB Coal	3,481	38.12%
CEB Thermal Oil	1,596	17.47%
IPP Thermal	940	10.29%
SPP Wind	246	2.69%
CEB Wind	254	2.78%
Mini Hydro (Telemetered)	208	2.28%
IPP Solar(Bulk-10MW)	71	0.78%
IPP Waste heat	84	0.92%
Total	9,131	

3. CEB owned Thermal Plant Dispatch

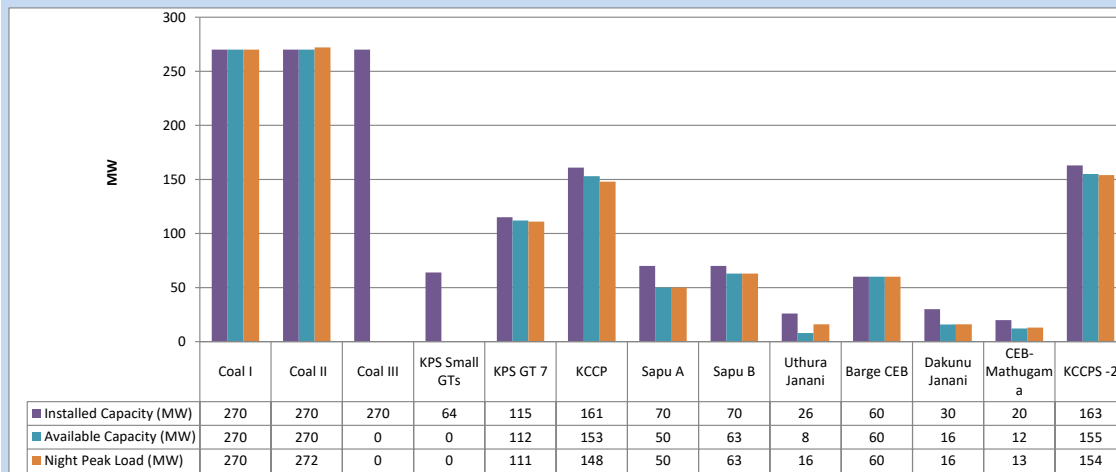
August 23, 2023



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

August 24, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

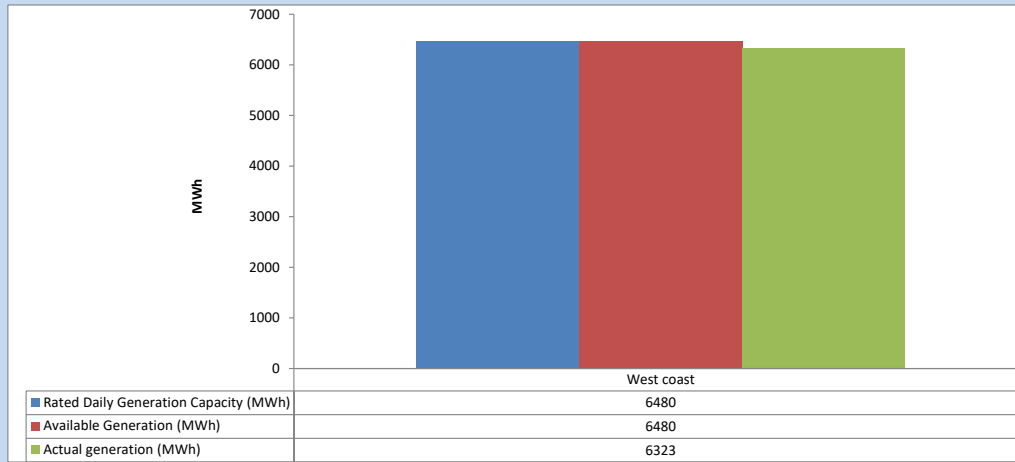


Plant availability is recorded at 6.00 am on

August 24, 2023

5. IPP owned Thermal Plant Dispatch

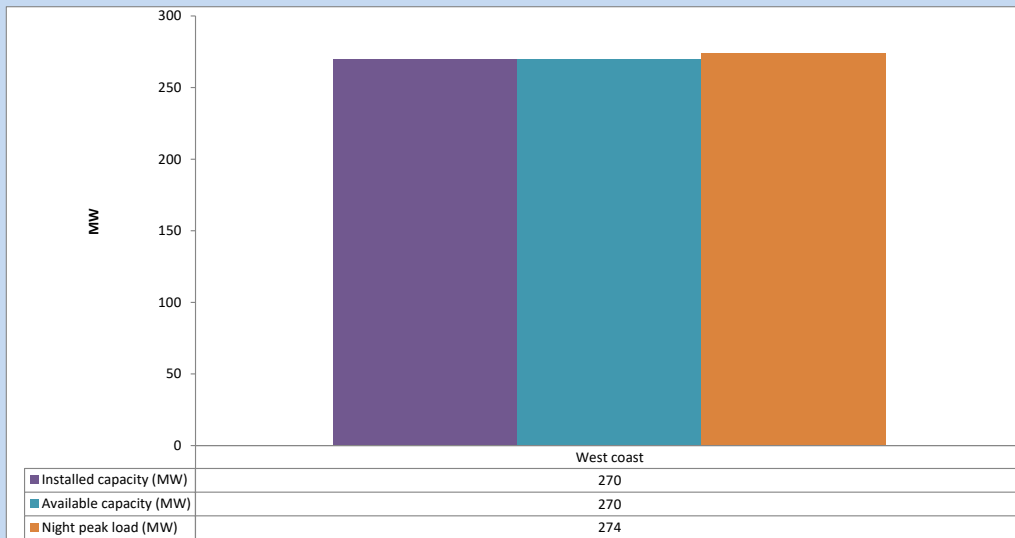
August 23, 2023



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

August 24, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

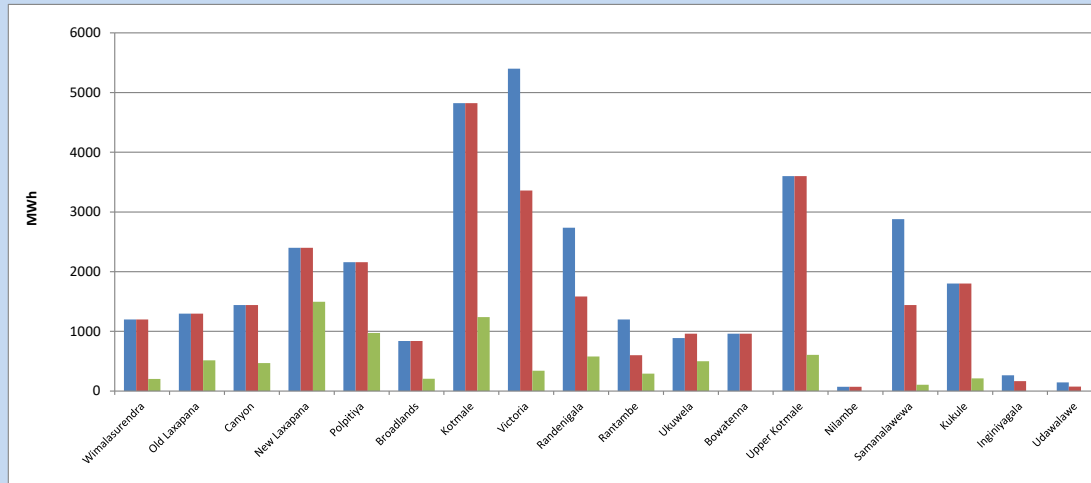


Plant availability is recorded at 6.00 am on

August 24, 2023

7. Major Hydro Plant Dispatch

August 23, 2023

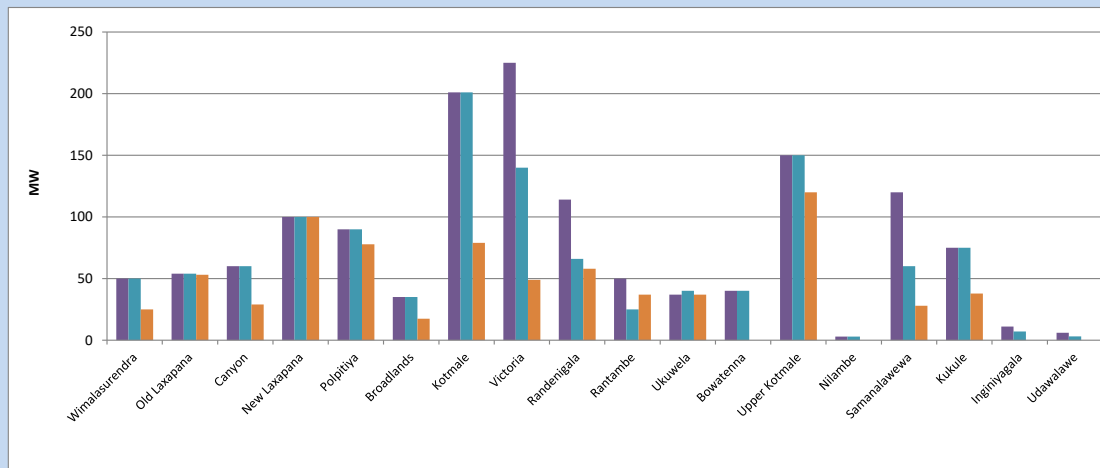


Available Generation is estimated based on plant availability at 6.00am on August 24, 2023
Broadlands power plant is operating in the Commissioning Stage

August 24, 2023

8. Major Hydro Plant Loading at Night Peak

August 23, 2023



Plant availability is recorded at 6.00 am on August 24, 2023
Broadlands power plant is operating in the Commissioning Stage

August 24, 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	202
Old Laxapana	54	54	53	515
Canyon	60	60	29	468
New Laxapana	100	100	100	1,495
Polpitiya	90	90	78	973
Broadlands	35	35	17	206
Kotmale	201	201	79	1,240
Victoria	225	140	49	340
Randenigala	114	66	58	578
Rantambe	50	25	37	292
Ukuwela	37	40	37	500
Bowatenna	40	40	0	0
Upper Kotmale	150	150	120	607
Nilambe	3	3	0	0
Samanalawewa	120	60	28	105
Kukule	75	75	38	213
Inginiyagala	11	7	0	0
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	270	6,458
Puttalam Coal II	270	270	272	6,542
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	0	0	0
KPS GT 7	115	112	111	1,657
KCCP	161	153	148	3,631
Sapugaskanda A	70	50	50	882
Sapugaskanda B	70	63	63	1,402
Uthura Janani	26	8	16	301
Barge CEB	60	60	60	1,335
CEB-Hambantota	30	16	16	279
CEB-Mathugama	20	12	13	212
ACE Matara	24	0	0	0
Asia Power	50	0	0	0
KCCPS -2	163	155	154	3,182
West Coast	270	270	274	6,323
Nothern Power	36	0	0	0
ACE Embilipitiya	93	0	0	0
Total	3,483	2,638	2,340	44,161

Plant availability is the availability recorded at 6 am on

August 24, 2023

10. Contribution to the Night Peak in MW

August 23, 2023

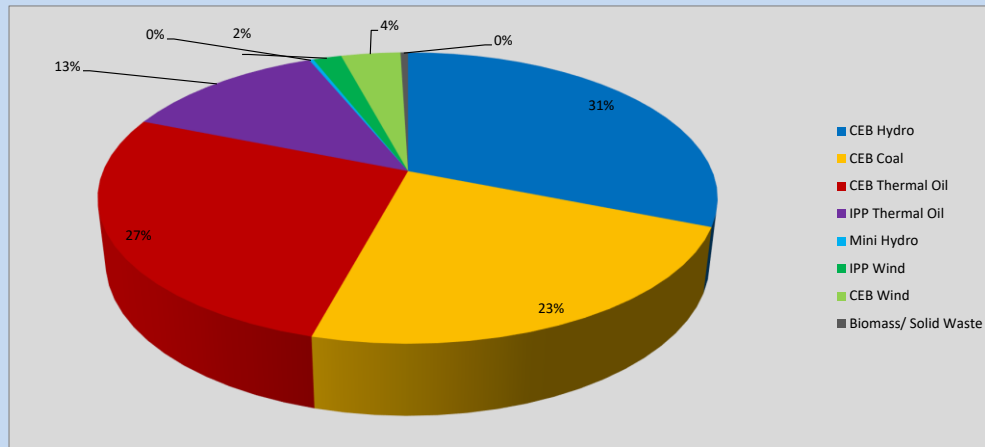


Table 06

CEB Hydro	727	MW
CEB Coal	542	MW
CEB Thermal Oil	631	MW
IPP Thermal Oil	297	MW
Mini Hydro (Telemetered)	6	MW
IPP Wind	41.5	MW
CEB Wind	86.7	MW
Biomass/ Solid Waste	11	MW

Recorded Peak Demand Data

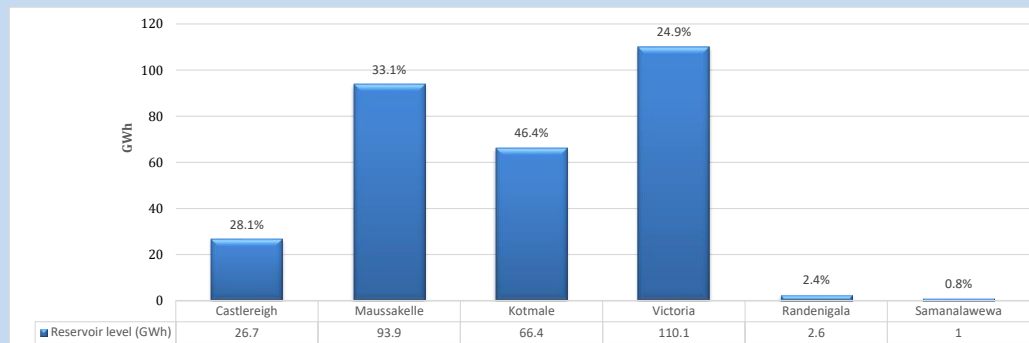
Table 07

Night Peak*	2,342	MW
Day Peak Maximum Demand	2,090	MW
Day Peak Minimum Demand	1,823	MW
Off Peak Minimum Demand	1,416	MW

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

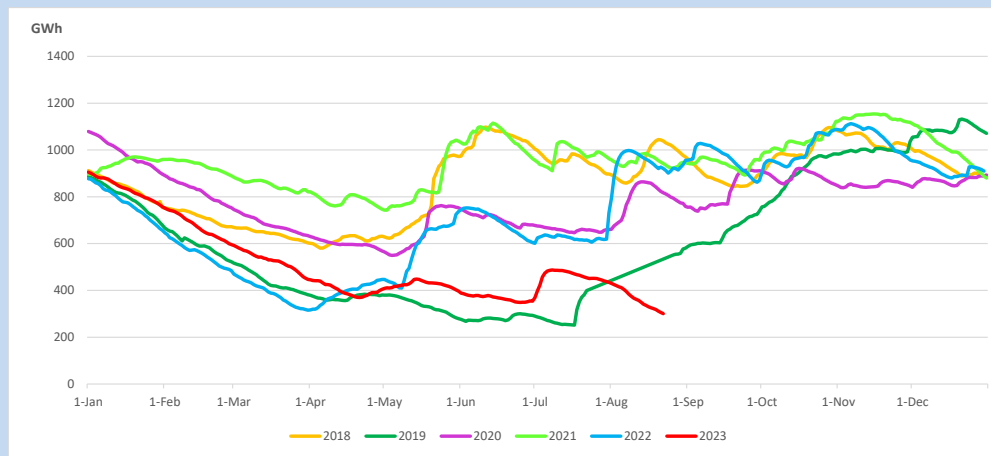
Reservoir Levels -

as at 06.00 Hr on August 24, 2023

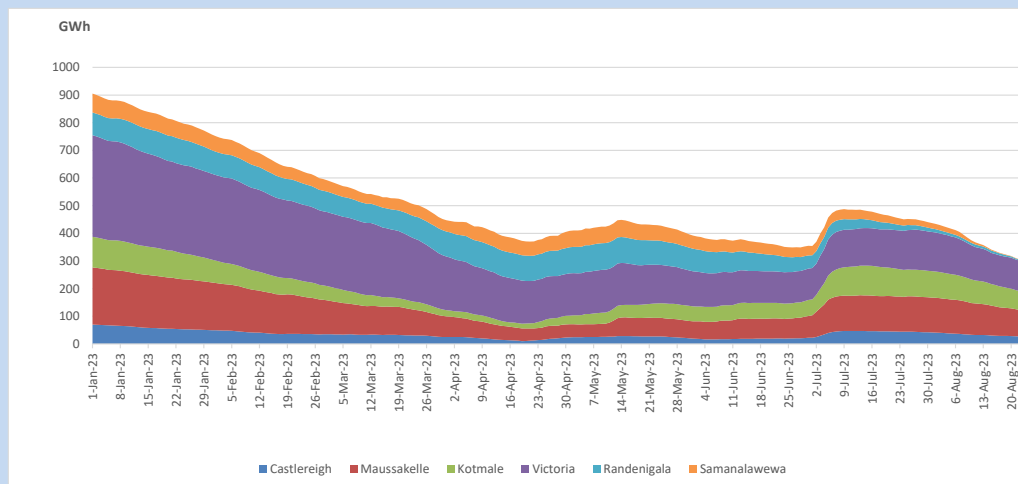


Total Reservoir Level 300.7 GWh
 % of Total capacity 25.1%

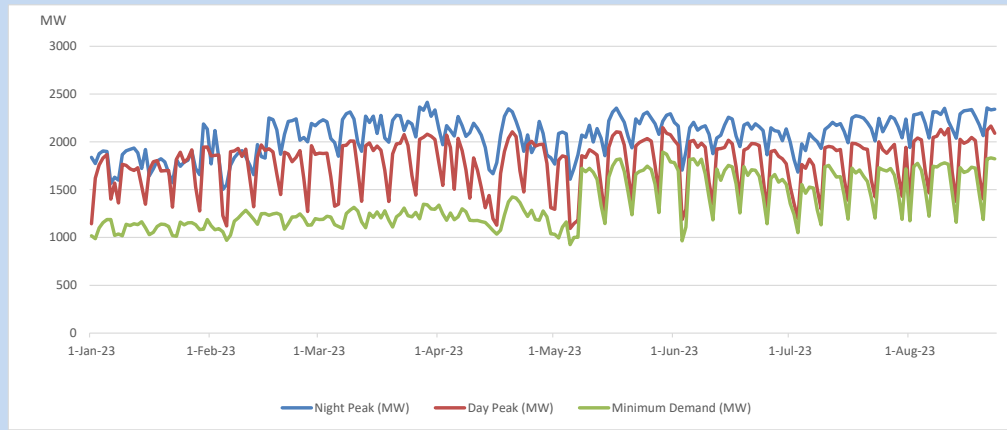
11. Comparison of Total Reservoir Storage Levels with Past Years



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



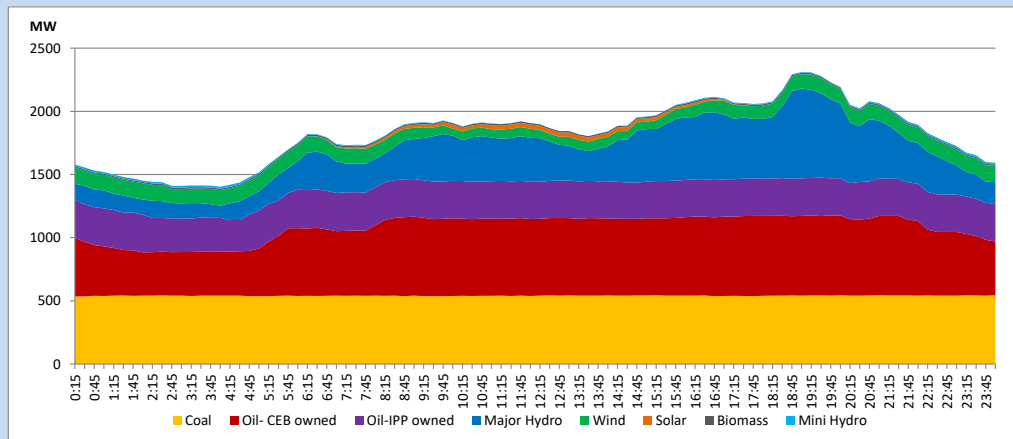
13. Variation of Demand during the current year



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

14. Daily Load Curve

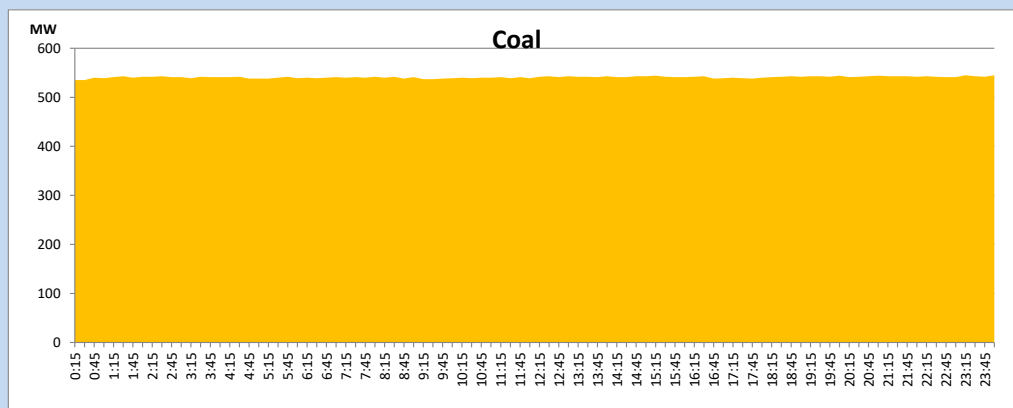
August 23, 2023



Solar and wind data is based on Telemetered Power Stations only

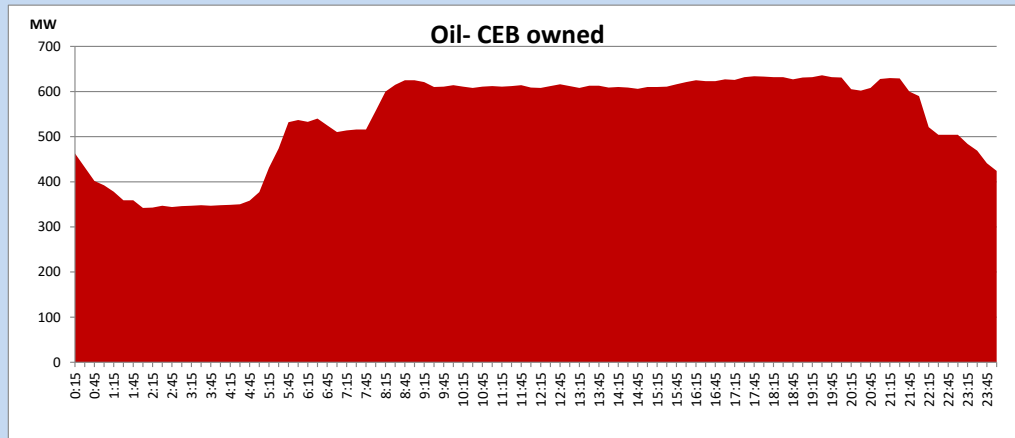
Coal Generation during

August 23, 2023



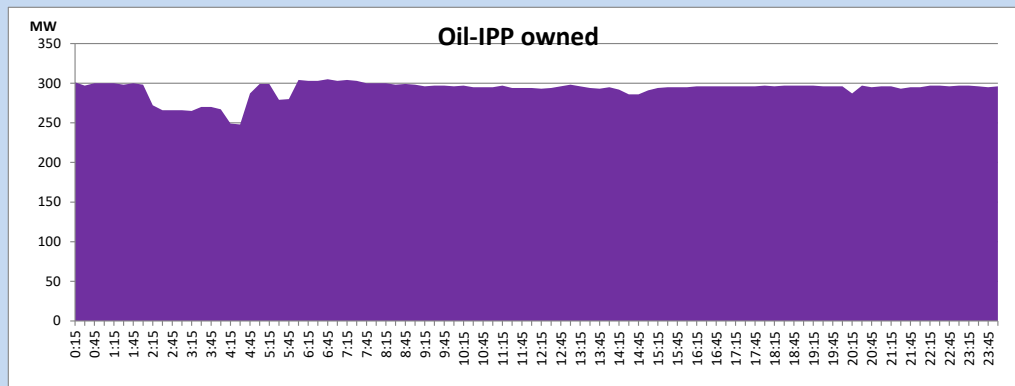
CEB Oil Plant Generation during

August 23, 2023



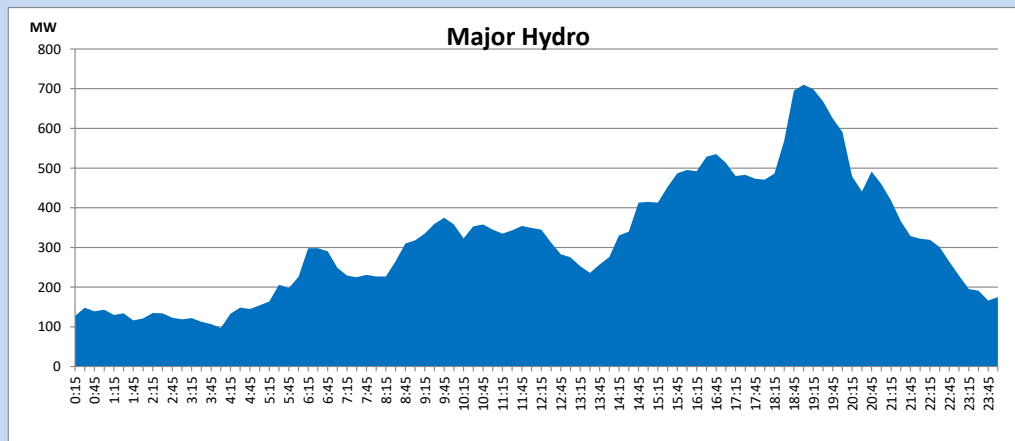
IPP Oil Plant Generation during

August 23, 2023



Major Hydro Generation during

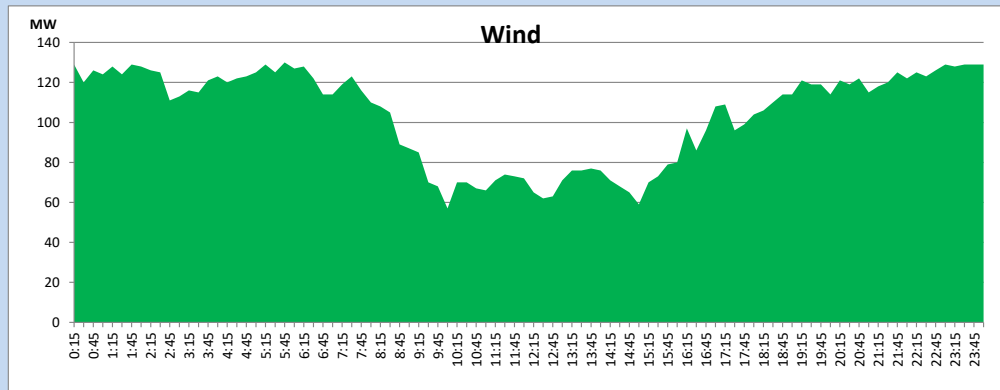
August 23, 2023



Wind Generation during

August 23, 2023

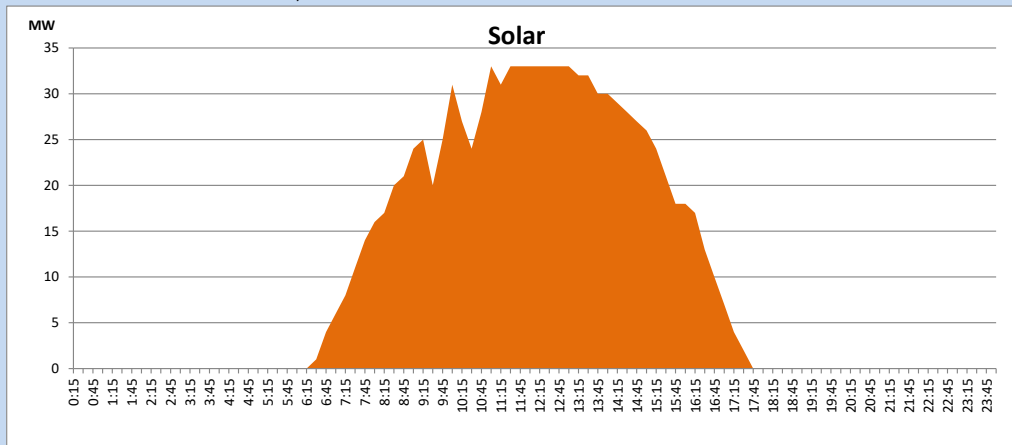
Based on Telemetered Power Stations only



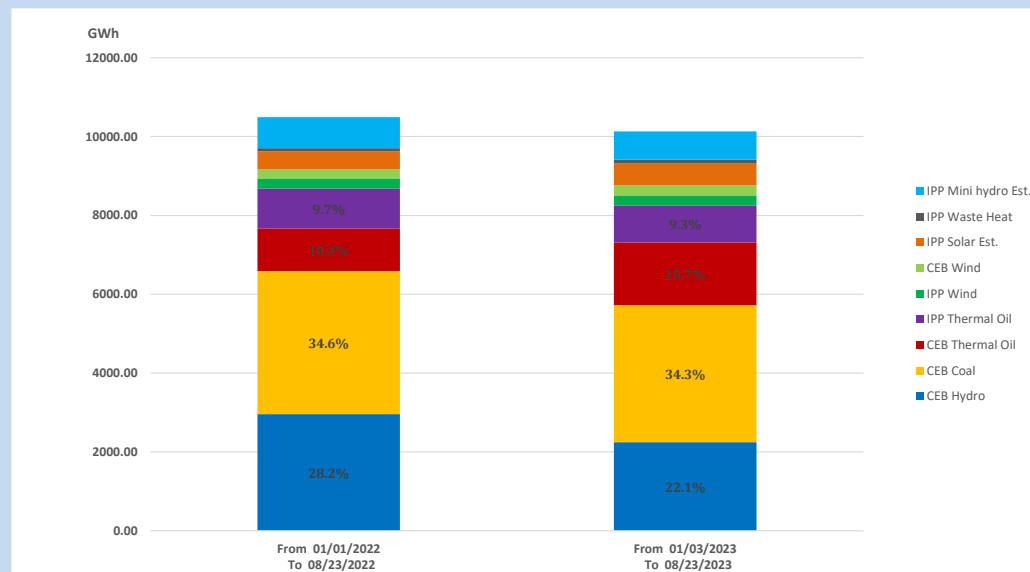
Solar Generation during

August 23, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch
 From 01/01/2022 To 08/23/2022
 From 01/03/2023 To 08/23/2023

10493 GWh
 10132 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 23, 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) New Laxapana Unit 01 tripped at 13:51hrs, rejecting 15MW from the system due to the operation of the master trip. New Laxapana Unit 01 resumed generation at 15:01hrs.
- 3) Beliatta, Embilipitiya, Hambantota and Matara GSS were dead along with Power Barge Unit 02, ACE Matara and Dakunu Janani DPP, rejecting 15MW, 23.2MW and 15MW respectively from the system at 20:14hrs, due to a transmission network failure. All affected GSS and feeders were restored by 20:40hrs. Power Barge Unit 02, ACE Matara and Dakunu Janani DPP resumed generation at 20:36hrs, 20:58hrs and 20:52hrs respectively.