

Generation and Reservoirs Statistics

August 20, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

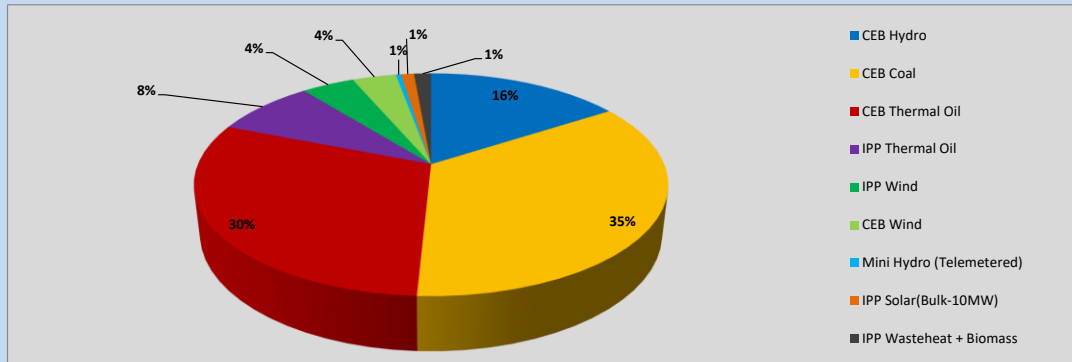


Table 01

	Generation (MWh)
CEB Hydro	5,773
CEB Coal	12,677
CEB Thermal Oil	10,974
IPP Thermal Oil	2,995
IPP Wind	1,565
CEB Wind	1,297
Mini Hydro (Telemetered)	156
IPP Solar (Bulk)	383
IPP Waste heat + Biomass	504
Total Generation (Excluding estimated figures)	36,324
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	3614
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1650
Total Generation (Including estimated figures)	41,892

* 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

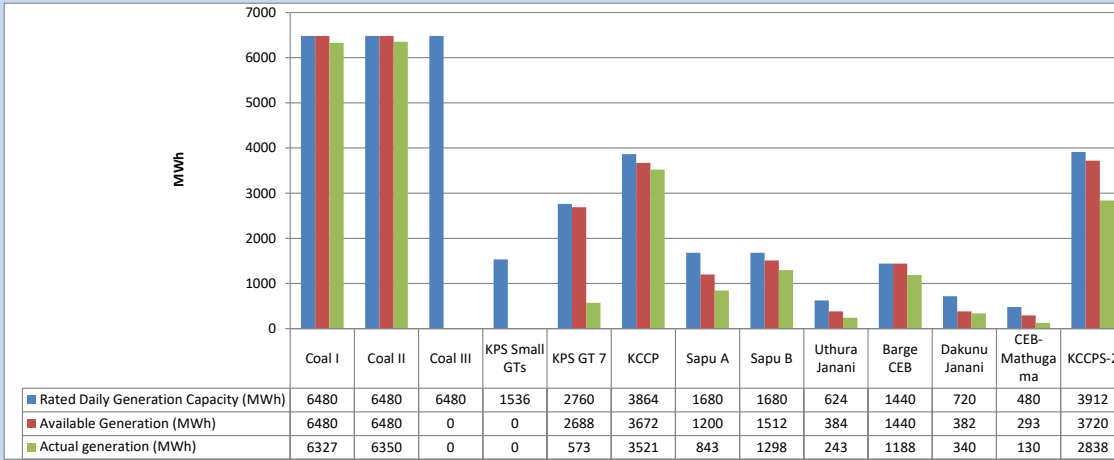
Category	Dispatch (GWh)	
CEB Hydro	179	21.63%
CEB Coal	193	23.22%
CEB Thermal Oil	252	30.43%
IPP Thermal	117	14.08%
SPP Wind	32	3.84%
CEB Wind	33	3.94%
Mini Hydro (Telemetered)	6	0.76%
IPP Solar(Bulk-10MW)	7	0.87%
IPP Waste heat + BMP	10	1.22%
Total	829	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,226	24.74%
CEB Coal	3,442	38.26%
CEB Thermal Oil	1,556	17.30%
IPP Thermal	921	10.23%
SPP Wind	242	2.69%
CEB Wind	249	2.77%
Mini Hydro (Telemetered)	207	2.31%
IPP Solar(Bulk-10MW)	70	0.78%
IPP Waste heat	83	0.92%
Total	8,998	

3. CEB owned Thermal Plant Dispatch

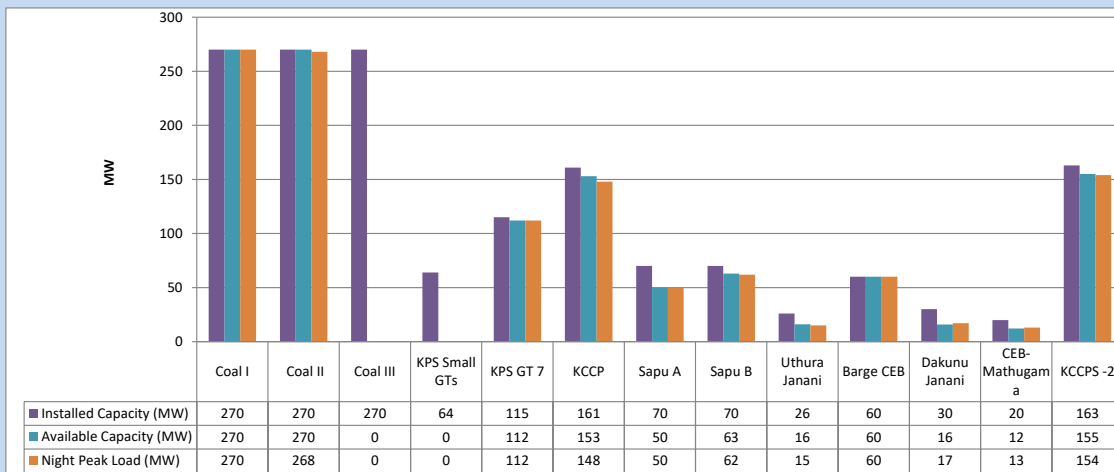
August 20, 2023



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

August 21, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

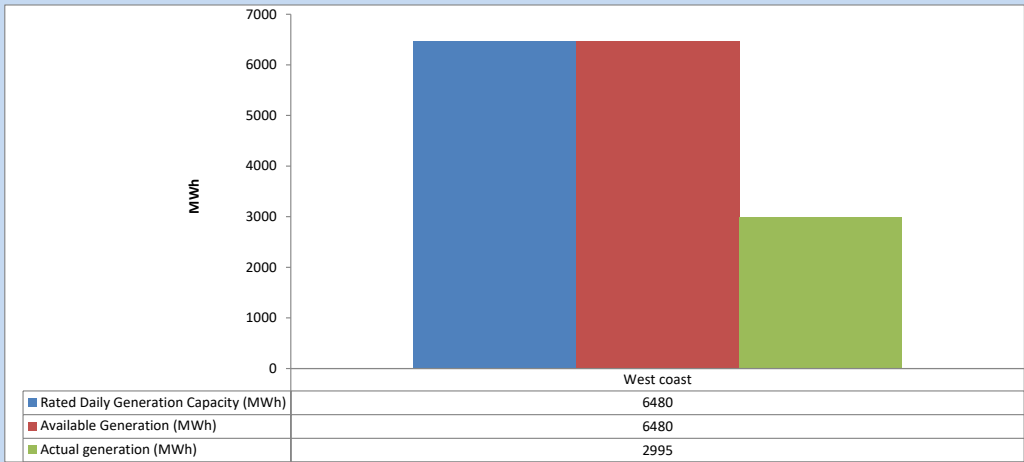


Plant availability is recorded at 6.00 am on

August 21, 2023

5. IPP owned Thermal Plant Dispatch

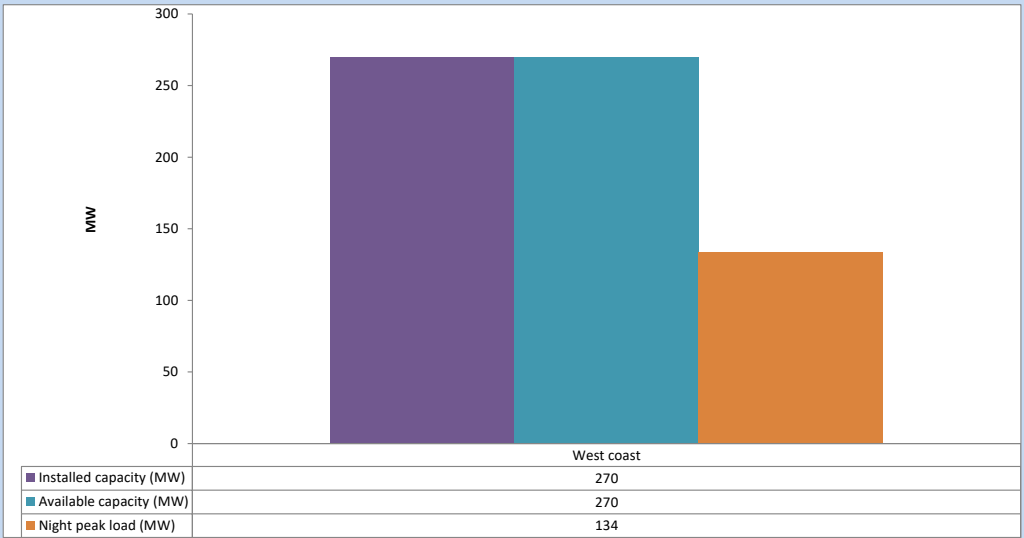
August 20, 2023



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

August 21, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

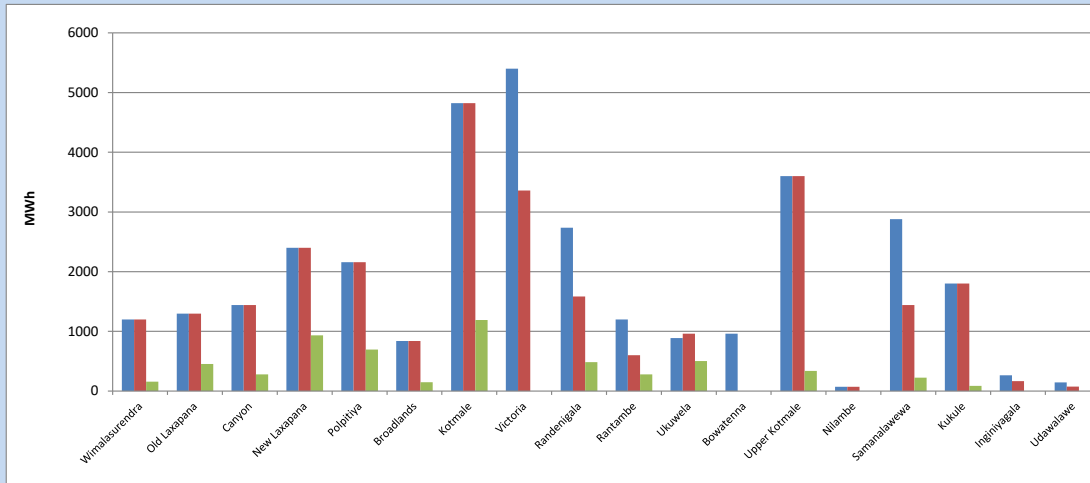


Plant availability is recorded at 6.00 am on

August 21, 2023

7. Major Hydro Plant Dispatch

August 20, 2023

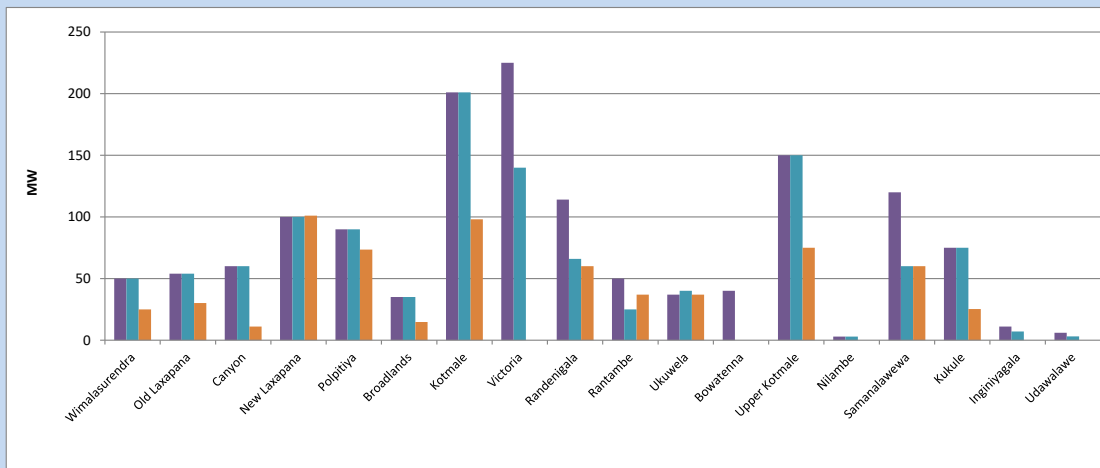


Available Generation is estimated based on plant availability at 6.00am on August 21, 2023
Broadlands power plant is operating in the Commissioning Stage

August 21, 2023

8. Major Hydro Plant Loading at Night Peak

August 20, 2023



Plant availability is recorded at 6.00 am on August 21, 2023
Broadlands power plant is operating in the Commissioning Stage

August 21, 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	158
Old Laxapana	54	54	30	454
Canyon	60	60	11	279
New Laxapana	100	100	101	932
Polpitiya	90	90	74	696
Broadlands	35	35	15	148
Kotmale	201	201	98	1,190
Victoria	225	140	0	0
Randenigala	114	66	60	483
Rantambe	50	25	37	280
Ukuwela	37	40	37	504
Bowatenna	40	0	0	0
Upper Kotmale	150	150	75	337
Nilambe	3	3	0	0
Samanalawewa	120	60	60	225
Kukule	75	75	25	87
Inginiyagala	11	7	0	0
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	270	6,327
Puttalam Coal II	270	270	268	6,350
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	0	0	0
KPS GT 7	115	112	112	573
KCCP	161	153	148	3,521
Sapugaskanda A	70	50	50	843
Sapugaskanda B	70	63	62	1,298
Uthura Janani	26	16	15	243
Barge CEB	60	60	60	1,188
CEB-Hambantota	30	16	17	340
CEB-Mathugama	20	12	13	130
ACE Matara	24	0	0	0
Asia Power	50	0	0	0
KCCPS -2	163	155	154	2,838
West Coast	270	270	134	2,995
Nothern Power	36	0	0	0
ACE Embilipitiya	93	0	0	0
Total	3,483	2,606	2,087	36,324

Plant availability is the availability recorded at 6 am on

August 21, 2023

10. Contribution to the Night Peak in MW

August 20, 2023

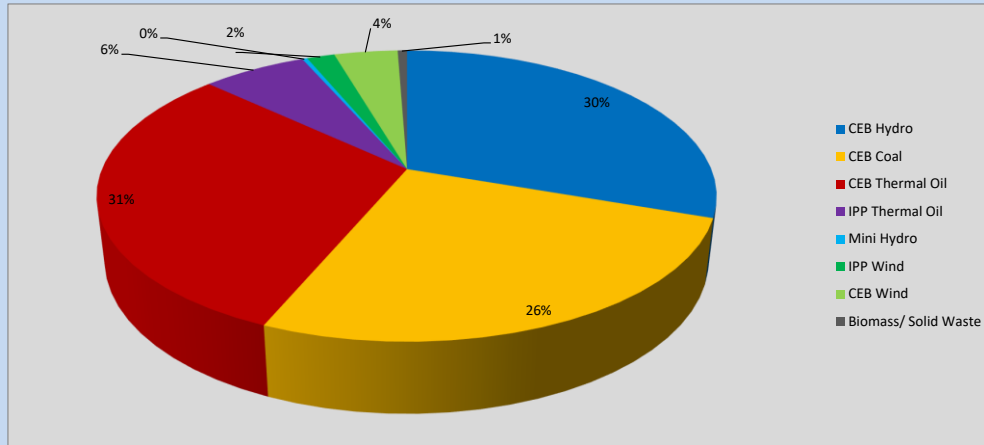


Table 06

CEB Hydro	626	MW
CEB Coal	538	MW
CEB Thermal Oil	631	MW
IPP Thermal Oil	134	MW
Mini Hydro (Telemetered)	7	MW
IPP Wind	35.8	MW
CEB Wind	81.8	MW
Biomass/ Solid Waste	12	MW

Recorded Peak Demand Data

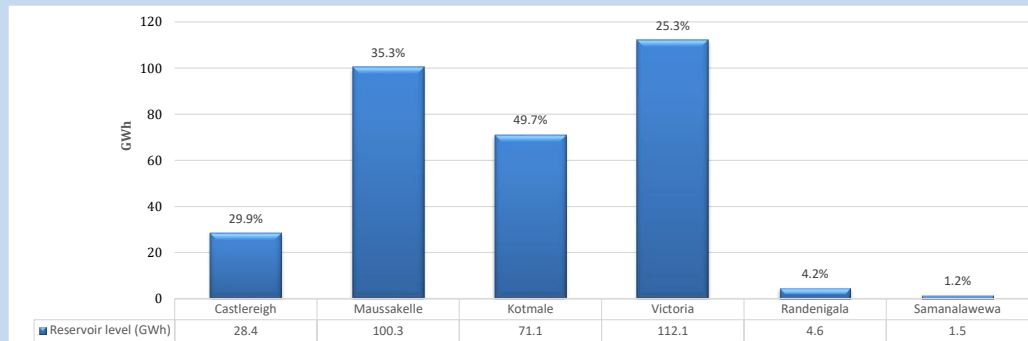
Table 07

Night Peak*	2,065	MW
Day Peak Maximum Demand	1,403	MW
Day Peak Minimum Demand	1,187	MW
Off Peak Minimum Demand	1,330	MW

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

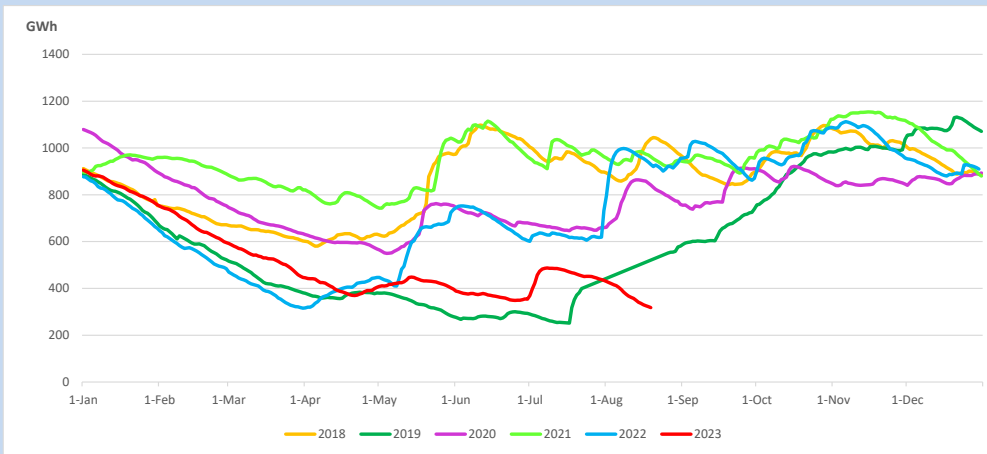
Reservoir Levels -

as at 06.00 Hr on August 21, 2023

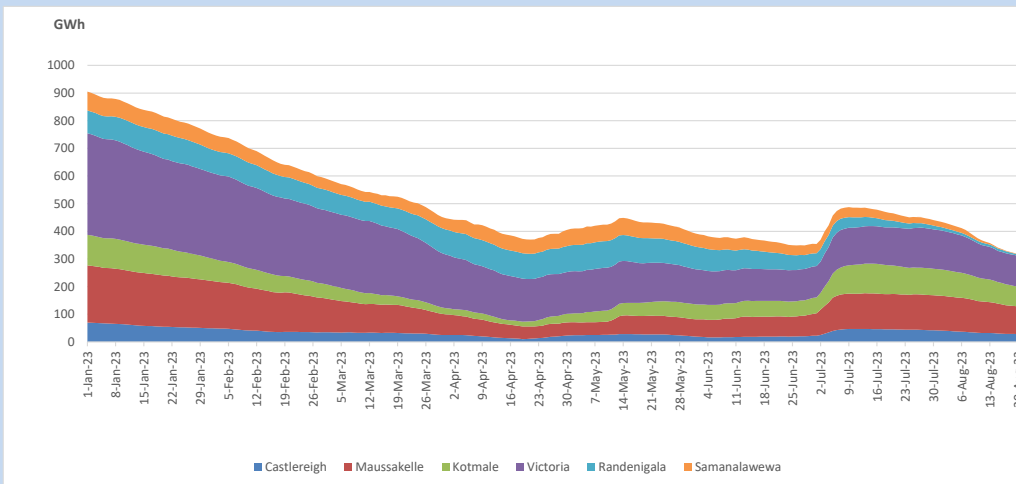


Total Reservoir Level 318 GWh
% of Total capacity 26.5%

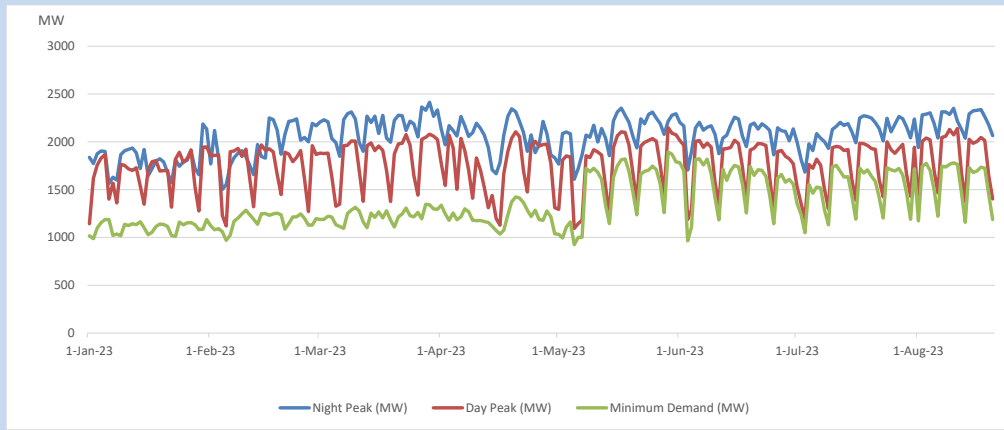
11. Comparison of Total Reservoir Storage Levels with Past Years



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



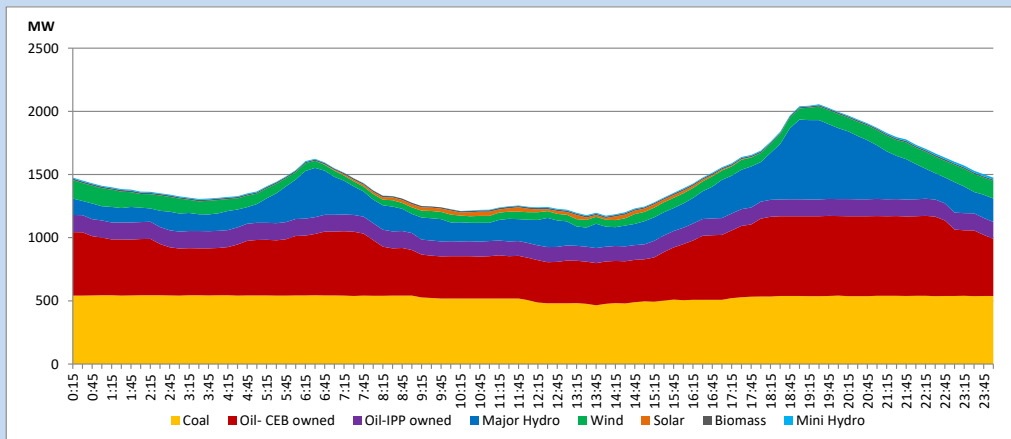
13. Variation of Demand during the current year



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

14. Daily Load Curve

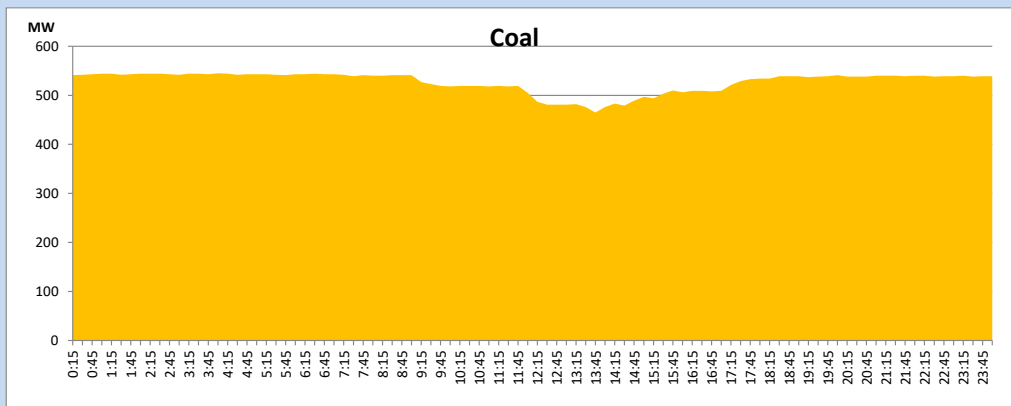
August 20, 2023



Solar and wind data is based on Telemetered Power Stations only

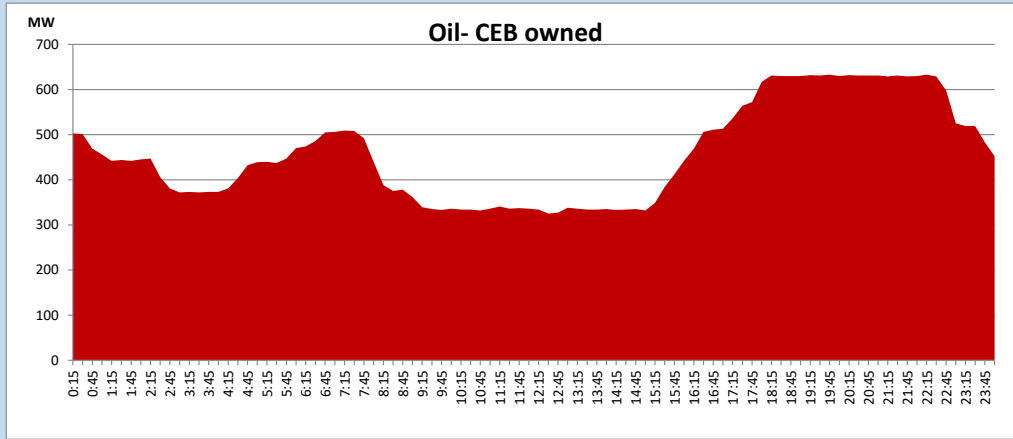
Coal Generation during

August 20, 2023



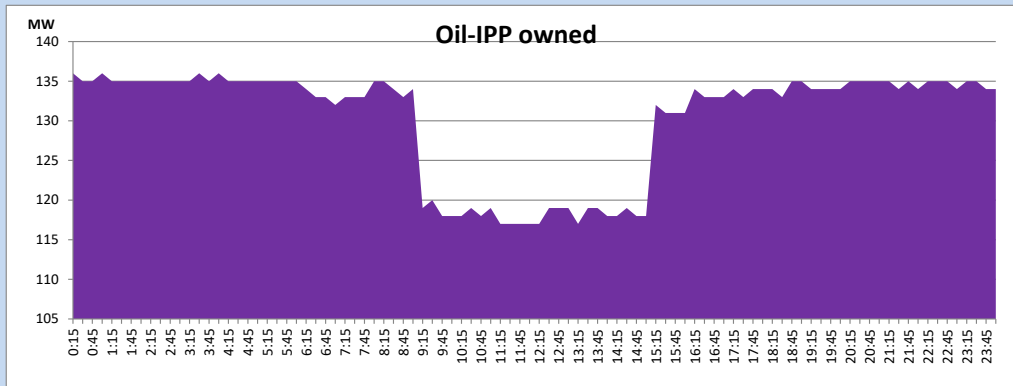
CEB Oil Plant Generation during

August 20, 2023



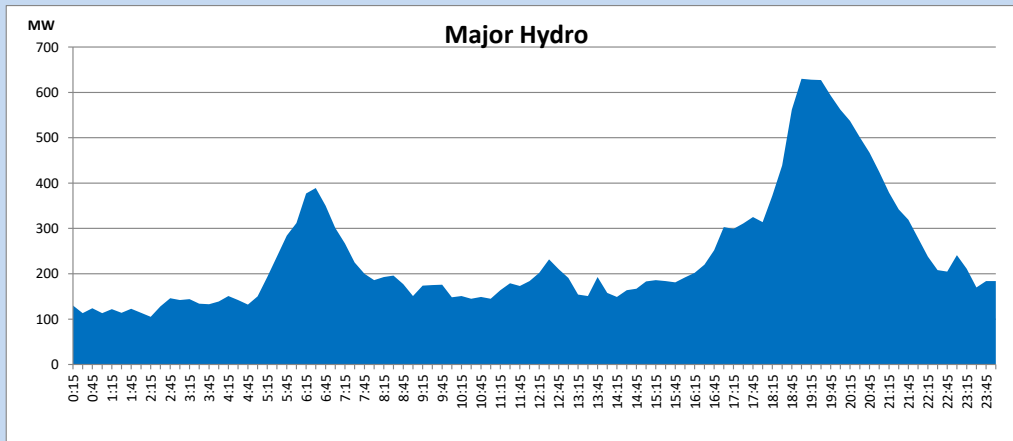
IPP Oil Plant Generation during

August 20, 2023



Major Hydro Generation during

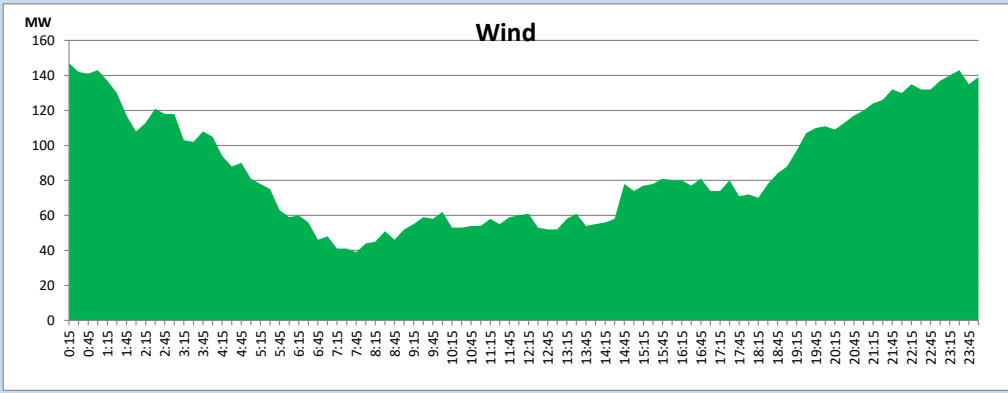
August 20, 2023



Wind Generation during

August 20, 2023

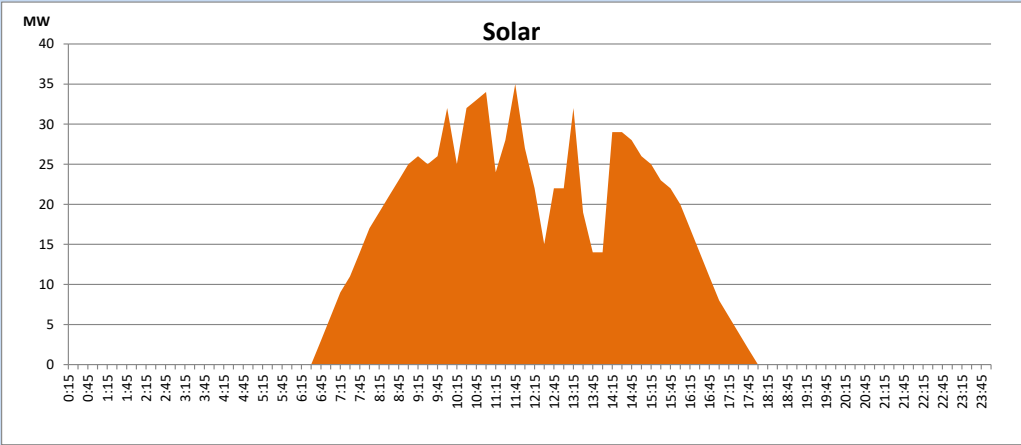
Based on Telemetered Power Stations only



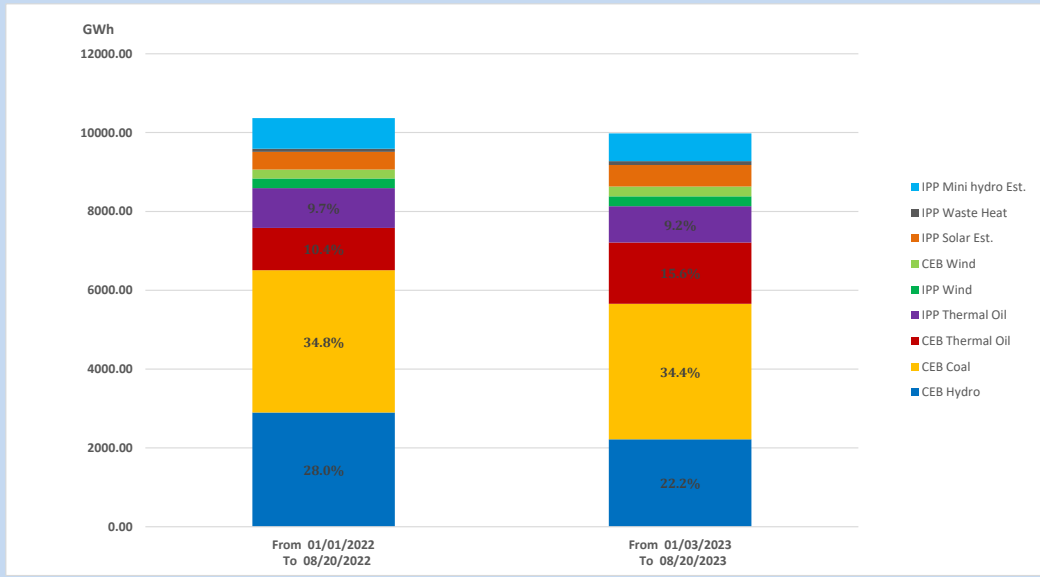
Solar Generation during

August 20, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch

From 01/01/2022 To 08/20/2022

10366 GWh

From 01/01/2023 To 08/20/2023

9981 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 20, 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) Habarana - New Anuradhapura 132kV cct tripped from both ends at 13:43hrs due to the operation of distance protection. The cct was normalized at 14:10hrs.
- 3) Thuhiriya Feeder 07 tripped at 18:27hrs due to the operation of O/C and E/F protection. Consequently, Thuhiriya 33kV B/S CB, 132/33kV T/F 01 and T/F 03 tripped from both sides due to the operation of O/C protection. This caused 33kV B/S 01 to be dead along with feeders 01, 03, 05, 09 and 11. Both T/Fs and all affected feeders except feeder 07 were restored by 19:24 hrs.