

Generation and Reservoirs Statistics

August 18, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

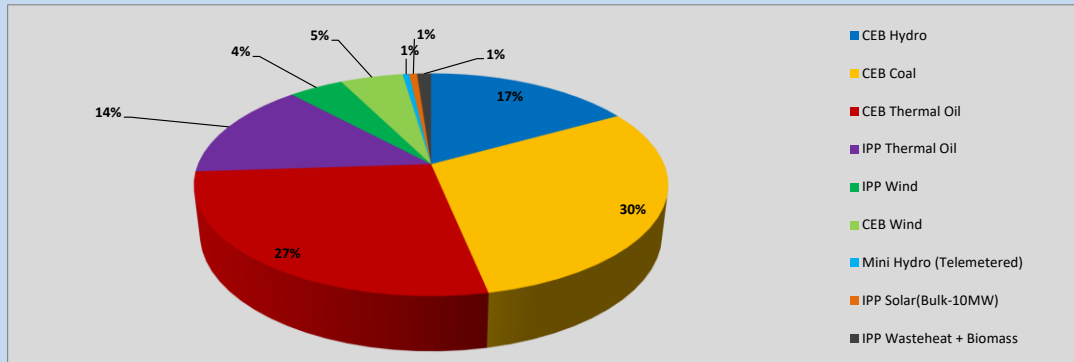


Table 01

	Generation (MWh)
CEB Hydro	7,342
CEB Coal	12,976
CEB Thermal Oil	11,809
IPP Thermal Oil	6,159
IPP Wind	1,931
CEB Wind	2,223
Mini Hydro (Telemetered)	230
IPP Solar (Bulk)	279
IPP Waste heat + Biomass	497
Total Generation (Excluding estimated figures)	43,446
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	3540
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1650
Total Generation (Including estimated figures)	48,940

* 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

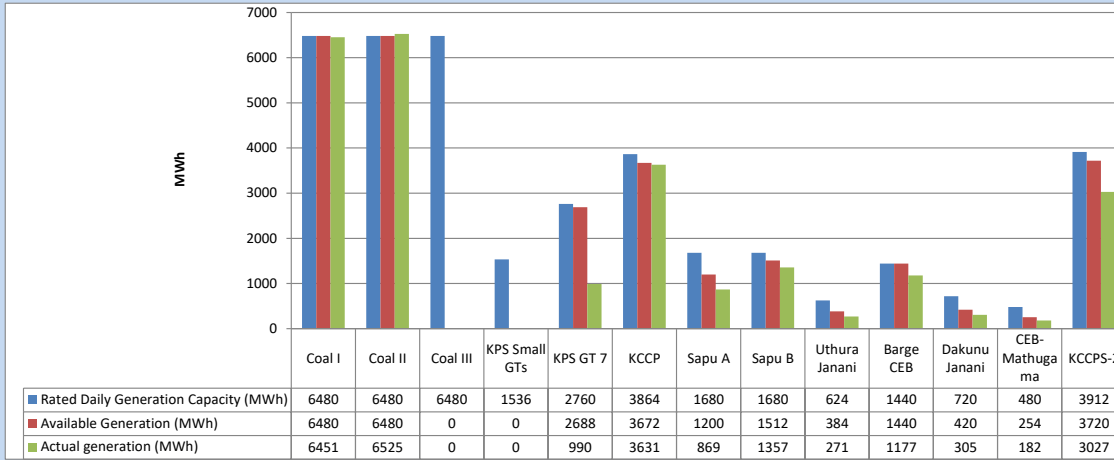
Category	Dispatch (GWh)	
CEB Hydro	168	22.26%
CEB Coal	167	22.15%
CEB Thermal Oil	231	30.71%
IPP Thermal	109	14.40%
SPP Wind	28	3.73%
CEB Wind	29	3.87%
Mini Hydro (Telemetered)	6	0.79%
IPP Solar(Bulk-10MW)	7	0.87%
IPP Waste heat + BMP	9	1.21%
Total	753	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,214	24.82%
CEB Coal	3,417	38.30%
CEB Thermal Oil	1,535	17.21%
IPP Thermal	912	10.23%
SPP Wind	238	2.67%
CEB Wind	246	2.75%
Mini Hydro (Telemetered)	207	2.32%
IPP Solar(Bulk-10MW)	70	0.78%
IPP Waste heat	82	0.92%
Total	8,921	

3. CEB owned Thermal Plant Dispatch

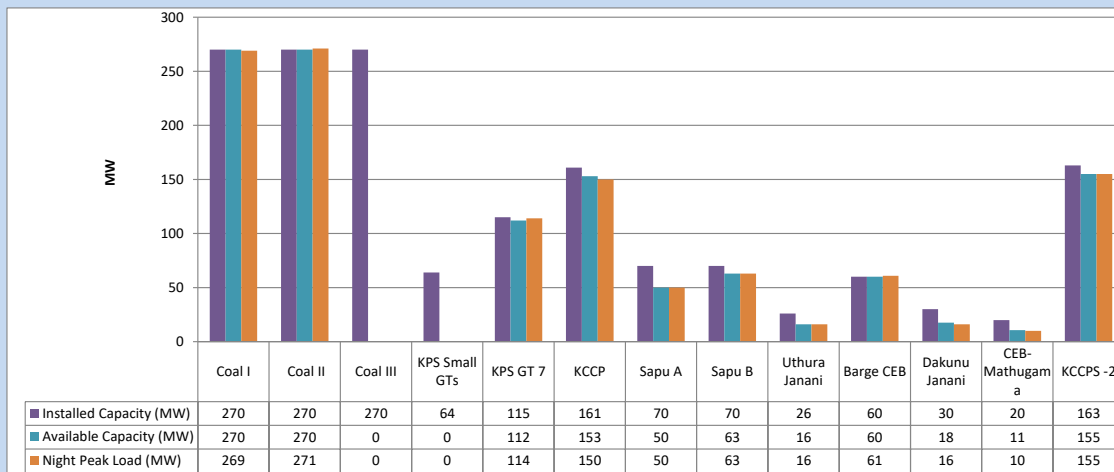
August 18, 2023



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

August 19, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

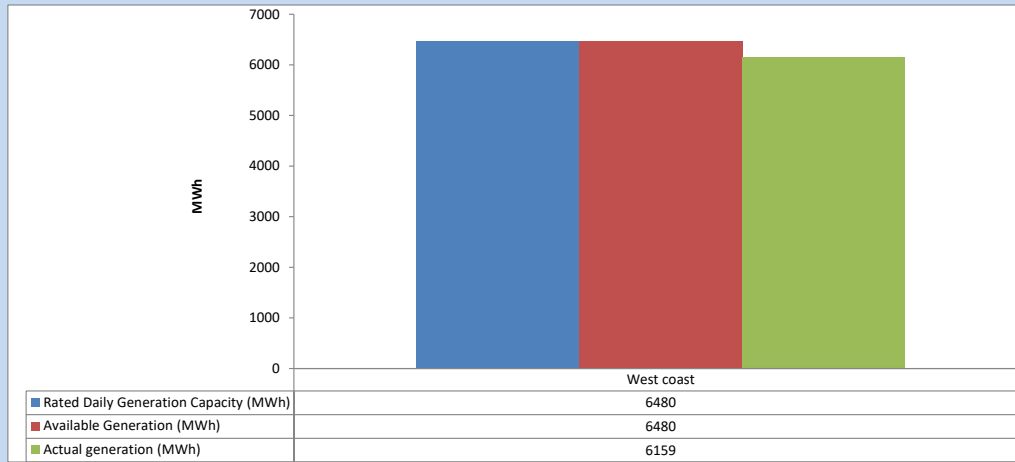


Plant availability is recorded at 6.00 am on

August 19, 2023

5. IPP owned Thermal Plant Dispatch

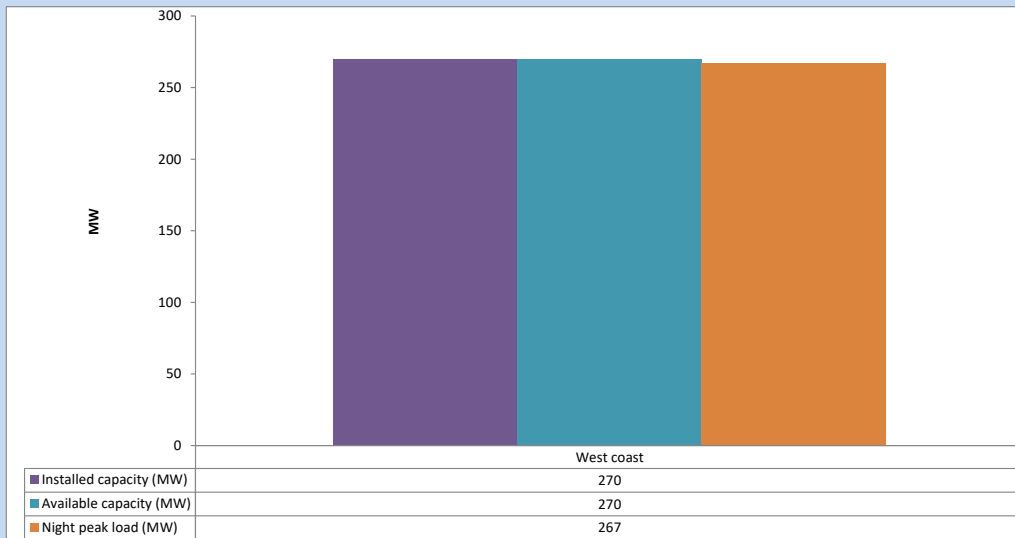
August 18, 2023



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

August 19, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

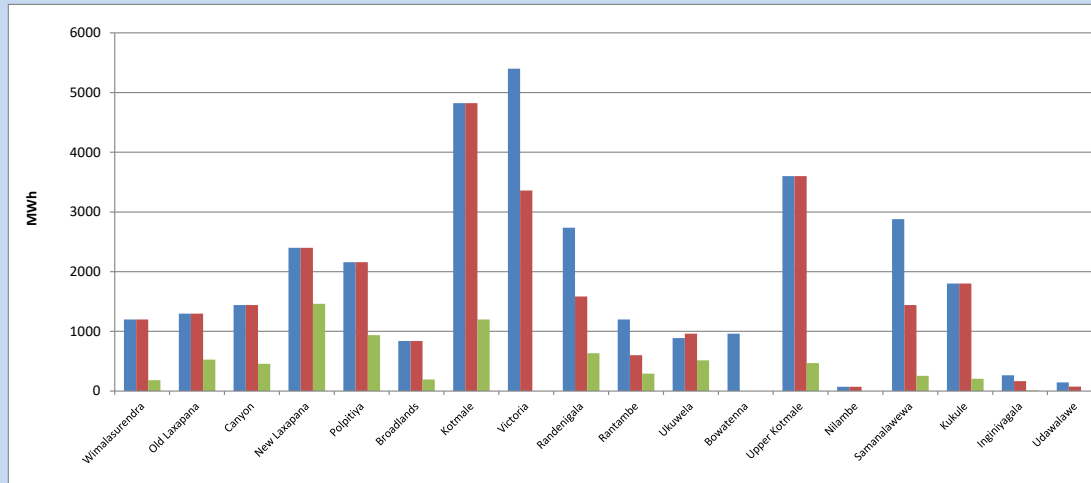


Plant availability is recorded at 6.00 am on

August 19, 2023

7. Major Hydro Plant Dispatch

August 18, 2023

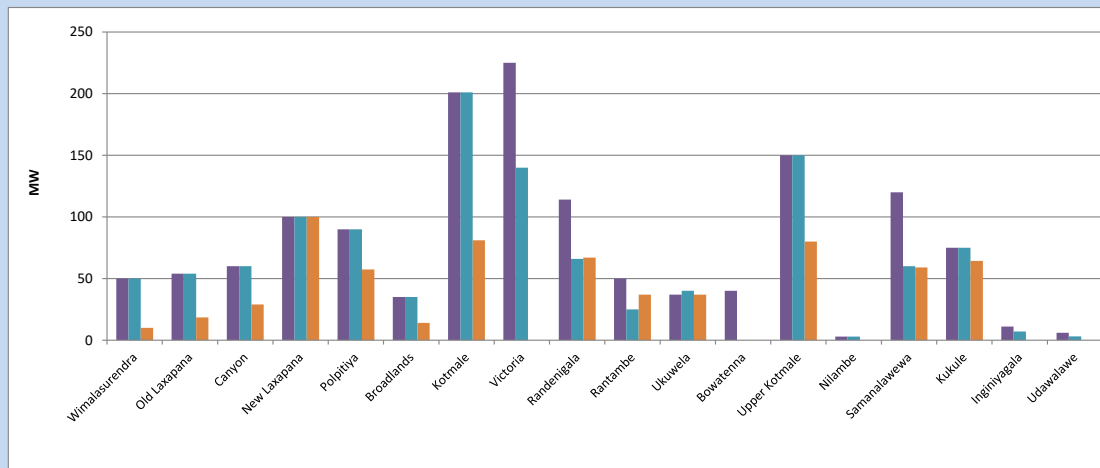


Available Generation is estimated based on plant availability at 6.00am on August 19, 2023
Broadlands power plant is operating in the Commissioning Stage

August 19, 2023

8. Major Hydro Plant Loading at Night Peak

August 18, 2023



Plant availability is recorded at 6.00 am on August 19, 2023
Broadlands power plant is operating in the Commissioning Stage

August 19, 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	183
Old Laxapana	54	54	18	526
Canyon	60	60	29	458
New Laxapana	100	100	100	1,461
Polpitiya	90	90	57	937
Broadlands	35	35	14	195
Kotmale	201	201	81	1,200
Victoria	225	140	0	0
Randenigala	114	66	67	635
Rantambe	50	25	37	291
Ukuwela	37	40	37	516
Bowatenna	40	0	0	0
Upper Kotmale	150	150	80	470
Nilambe	3	3	0	0
Samanalawewa	120	60	59	254
Kukule	75	75	64	206
Inginiyagala	11	7	0	10
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	269	6,451
Puttalam Coal II	270	270	271	6,525
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	0	0	0
KPS GT 7	115	112	114	990
KCCP	161	153	150	3,631
Sapugaskanda A	70	50	50	869
Sapugaskanda B	70	63	63	1,357
Uthura Janani	26	16	16	271
Barge CEB	60	60	61	1,177
CEB-Hambantota	30	18	16	305
CEB-Mathugama	20	11	10	182
ACE Matara	24	0	0	0
Asia Power	50	0	0	0
KCCPS -2	163	155	155	3,027
West Coast	270	270	267	6,159
Nothern Power	36	0	0	0
ACE Embilipitiya	93	0	0	0
Total	3,483	2,606	2,285	43,446

Plant availability is the availability recorded at 6 am on

August 19, 2023

10. Contribution to the Night Peak in MW

August 18, 2023

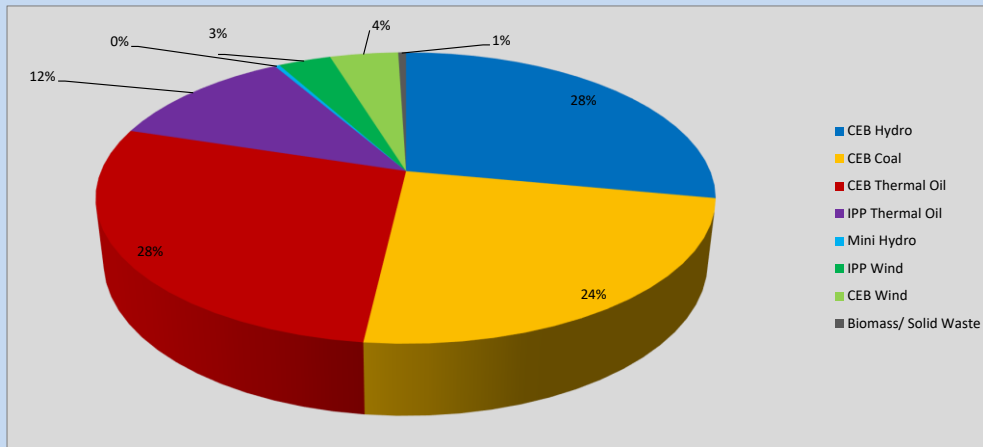


Table 06

CEB Hydro	633	MW
CEB Coal	540	MW
CEB Thermal Oil	635	MW
IPP Thermal Oil	267	MW
Mini Hydro (Telemetered)	7	MW
IPP Wind	74.4	MW
CEB Wind	96.4	MW
Biomass/ Solid Waste	11	MW

Recorded Peak Demand Data

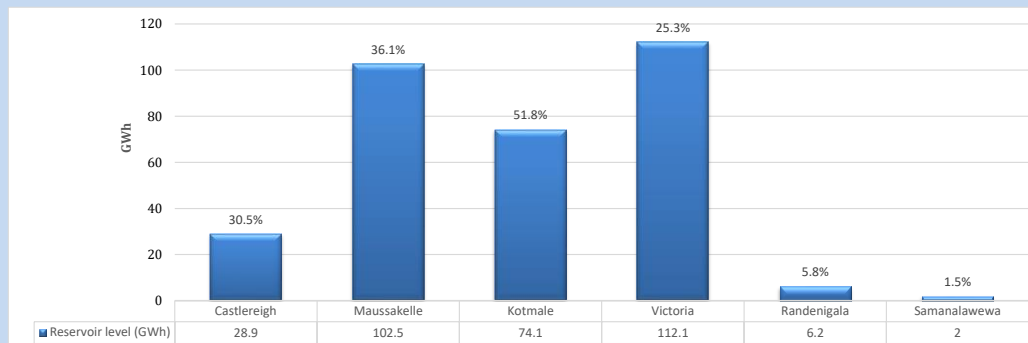
Table 07

Night Peak*	2,264	MW
Day Peak Maximum Demand	2,014	MW
Day Peak Minimum Demand	1,725	MW
Off Peak Minimum Demand	1,387	MW

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

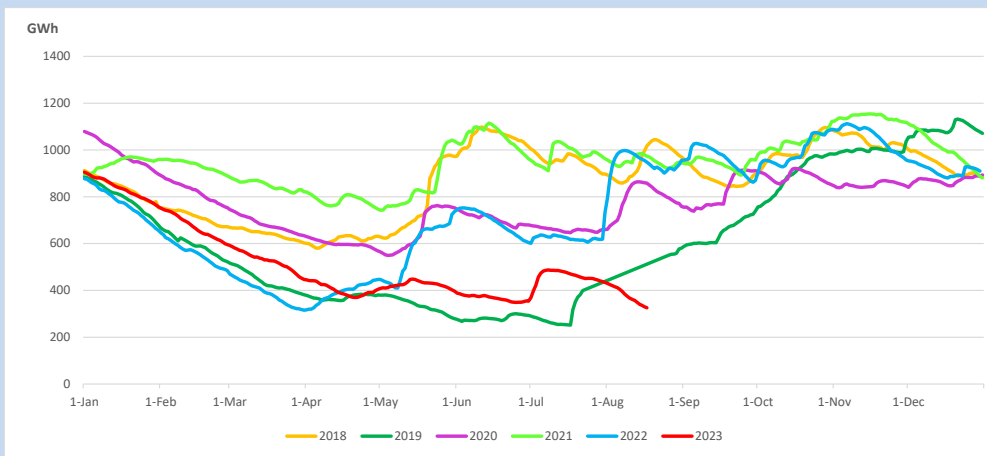
Reservoir Levels -

as at 06.00 Hr on August 19, 2023

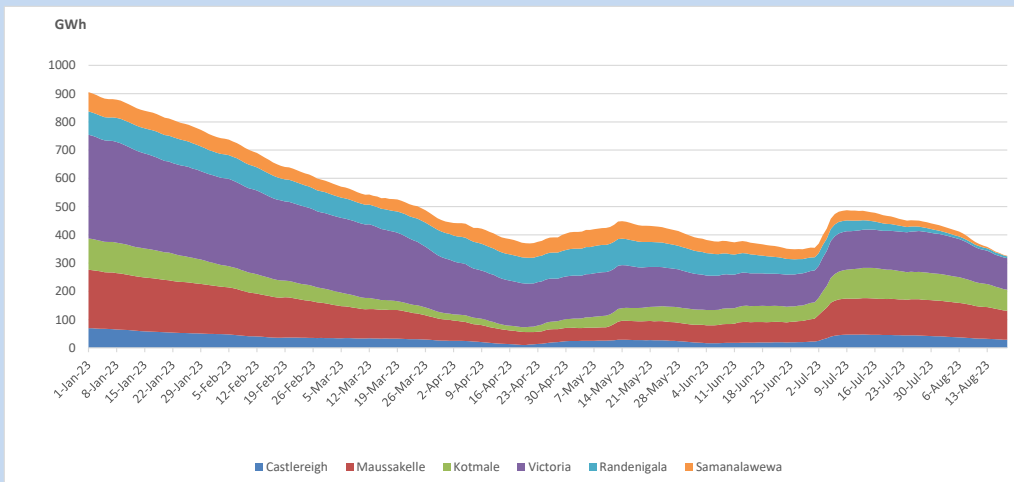


Total Reservoir Level 325.8 GWh
% of Total capacity 27.0%

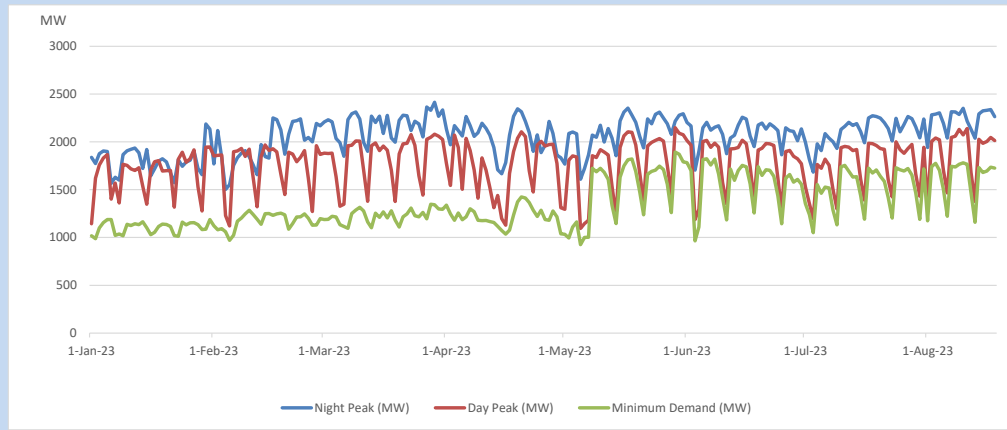
11. Comparison of Total Reservoir Storage Levels with Past Years



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



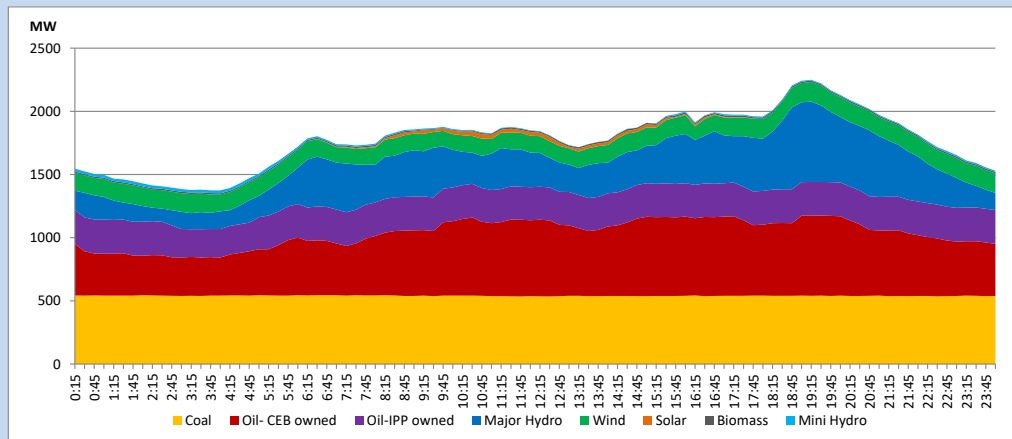
13. Variation of Demand during the current year



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

14. Daily Load Curve

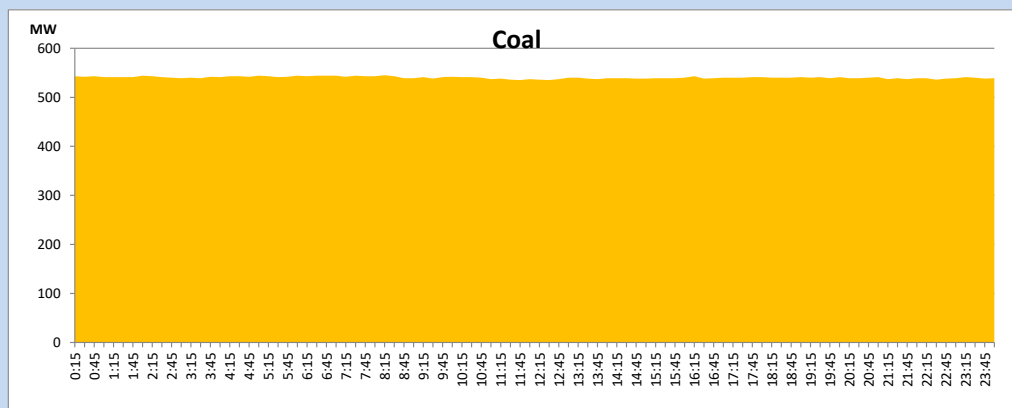
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Solar and wind data is based on Telemetered Power Stations only

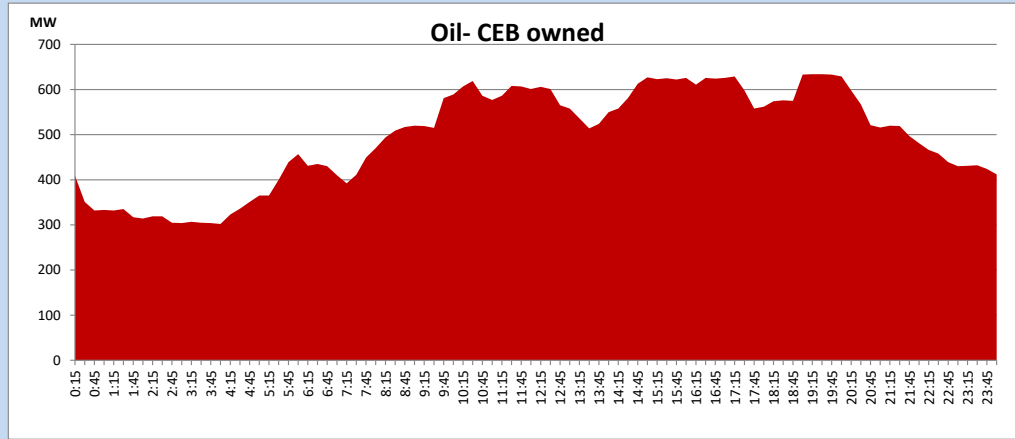
Coal Generation during

August 18, 2023



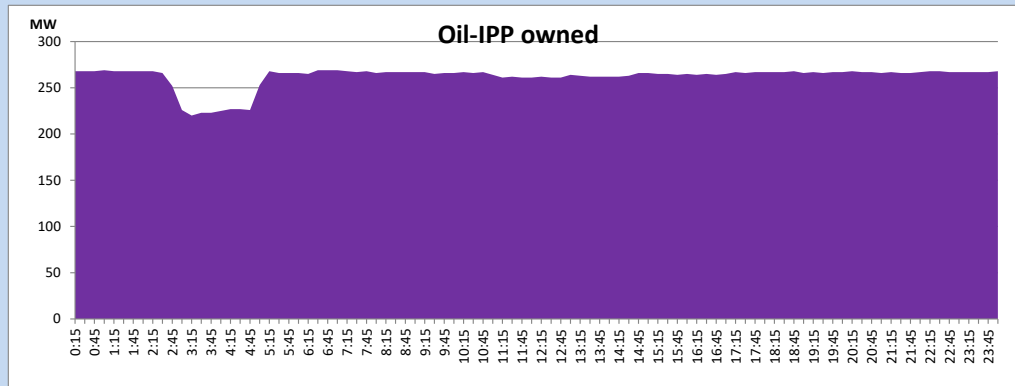
CEB Oil Plant Generation during

August 18, 2023



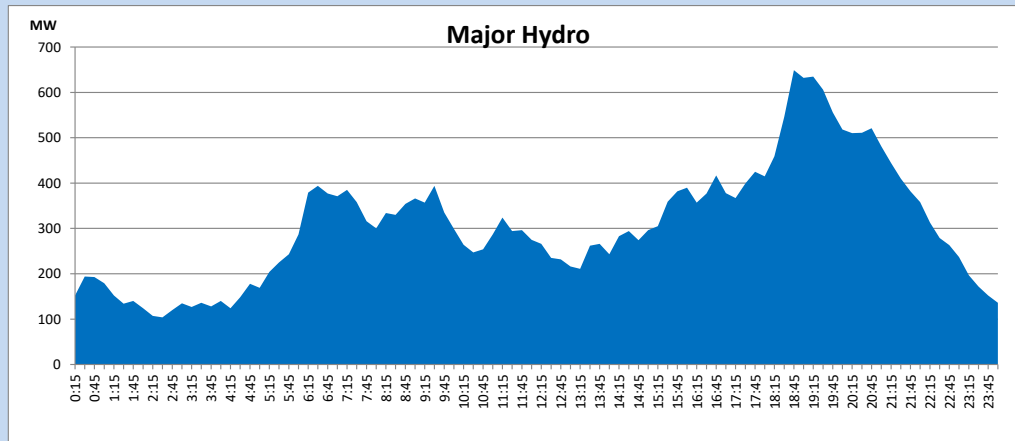
IPP Oil Plant Generation during

August 18, 2023



Major Hydro Generation during

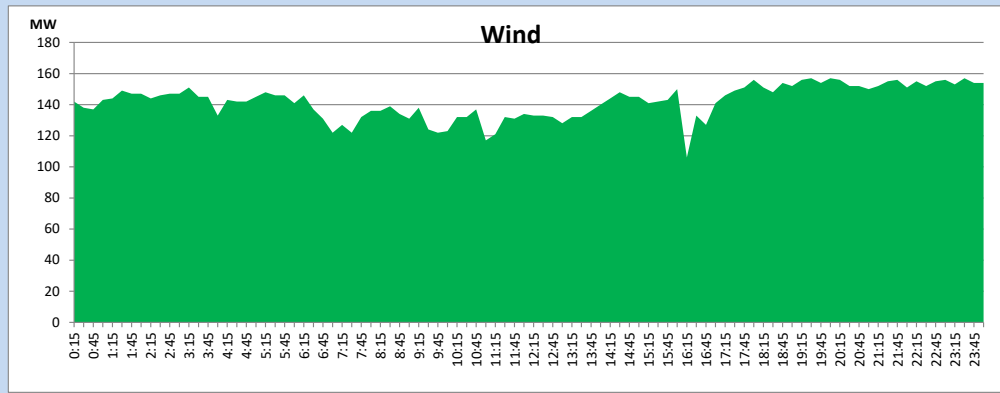
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Wind Generation during

August 18, 2023

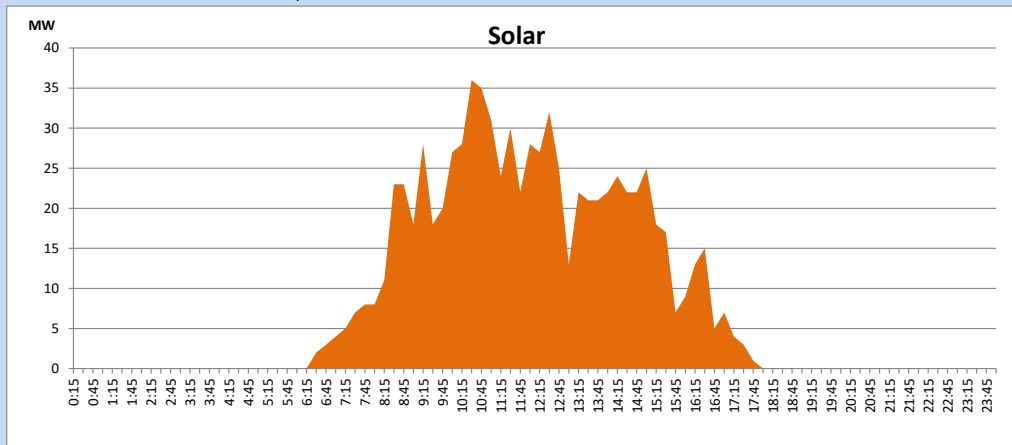
Based on Telemetered Power Stations only



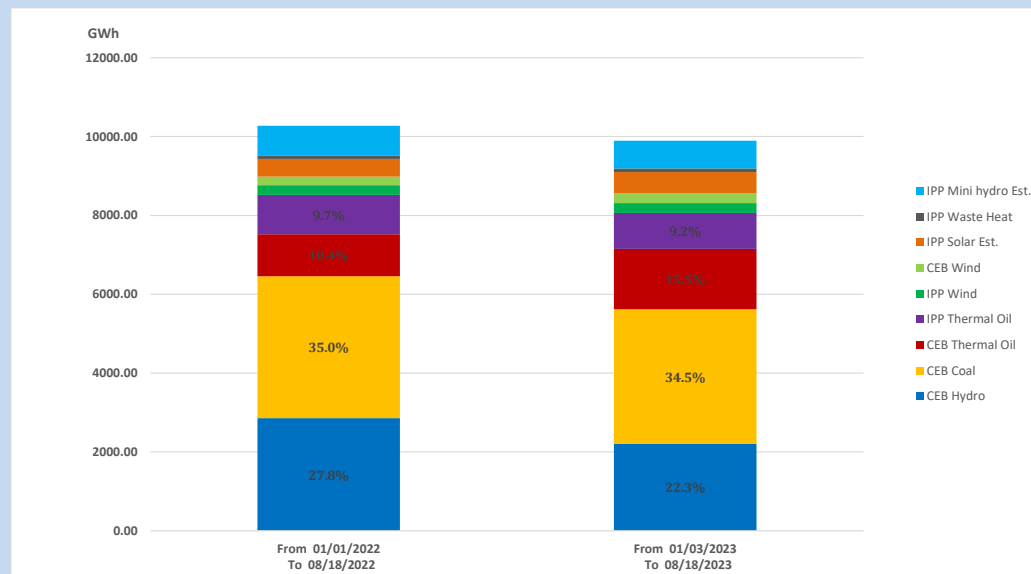
Solar Generation during

August 18, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch
 From 01/01/2022 To 08/18/2022
 From 01/03/2023 To 08/18/2023

10277 GWh
 9894 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 18, 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 from Kotugoda end and tripped and A/R and tripped again from Veyangoda end at 16:06hrs due to the operation of differential protection. At the same time, Matugama DPP tripped rejecting 9.8MW from the system and Mannar 11 nos. of WT tripped rejecting 33MW from the system due to the disturbance. Both plants resumed generation by 16:10hrs and 17:04hrs respectively. The cct was normalized at 20:13hrs
- 3) New Polpitiya 220/132/33kV T/F 02 tripped from all ends at 17:24hrs due to the operation of differential protection. The T/F was restored at 18:03hrs.