

Generation and Reservoirs Statistics

August 31, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

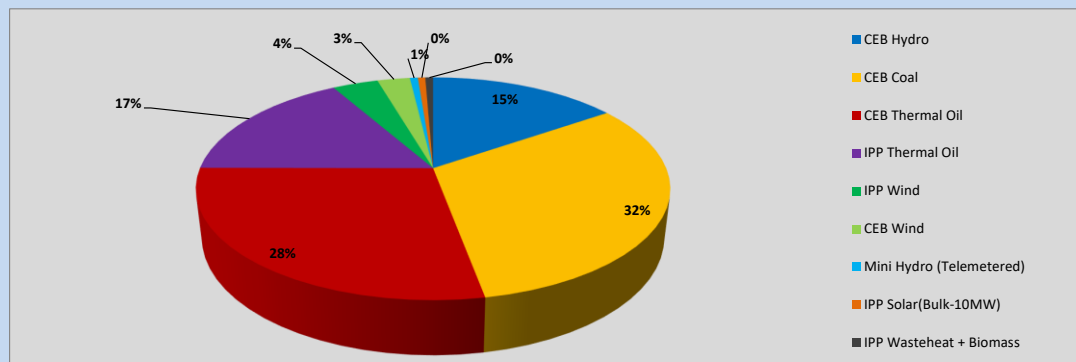


Table 01

	Generation (MWh)
CEB Hydro	6,335
CEB Coal	13,007
CEB Thermal Oil	11,498
IPP Thermal Oil	6,854
IPP Wind	1,528
CEB Wind	1,092
Mini Hydro (Telemetered)	266
IPP Solar (Bulk)	249
IPP Waste heat + Biomass	261
Total Generation (Excluding estimated figures)	41,090
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	3504
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1650
Total Generation (Including estimated figures)	46,548

* 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

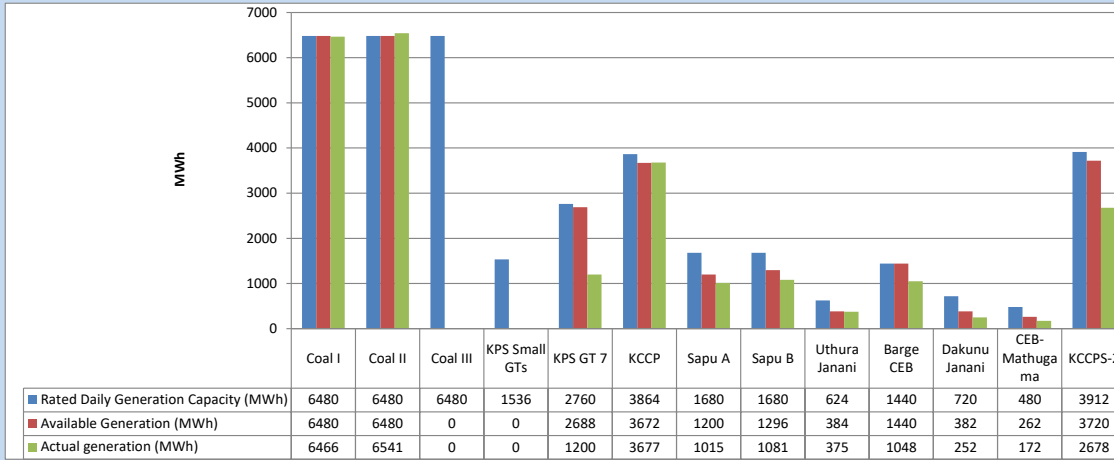
Category	Dispatch (GWh)	
CEB Hydro	252	19.52%
CEB Coal	335	25.90%
CEB Thermal Oil	381	29.51%
IPP Thermal	186	14.42%
SPP Wind	50	3.89%
CEB Wind	53	4.07%
Mini Hydro (Telemetered)	9	0.70%
IPP Solar(Bulk-10MW)	11	0.86%
IPP Waste heat + BMP	15	1.13%
Total	1,292	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,299	24.30%
CEB Coal	3,585	37.89%
CEB Thermal Oil	1,685	17.81%
IPP Thermal	990	10.47%
SPP Wind	260	2.75%
CEB Wind	269	2.84%
Mini Hydro (Telemetered)	210	2.22%
IPP Solar(Bulk-10MW)	74	0.79%
IPP Waste heat	87	0.92%
Total	9,460	

3. CEB owned Thermal Plant Dispatch

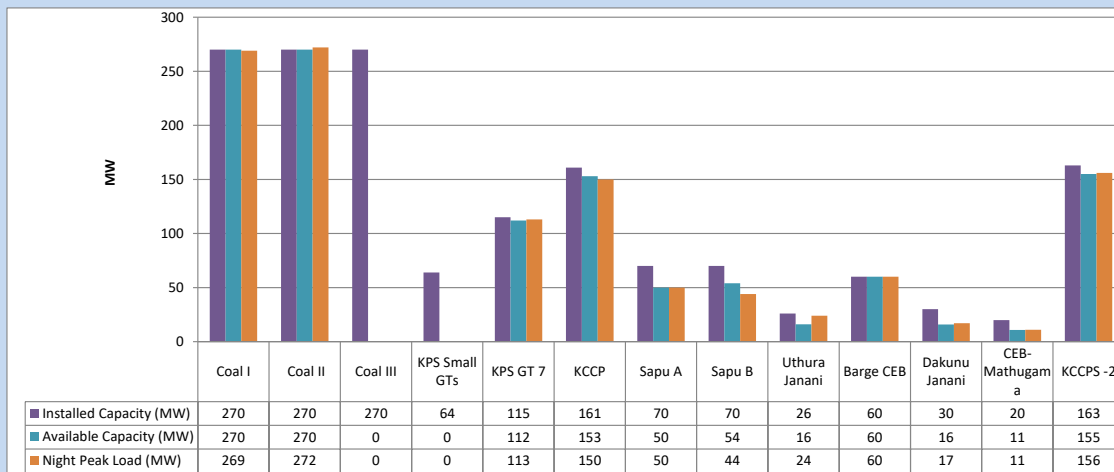
August 31, 2023



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

September 1, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

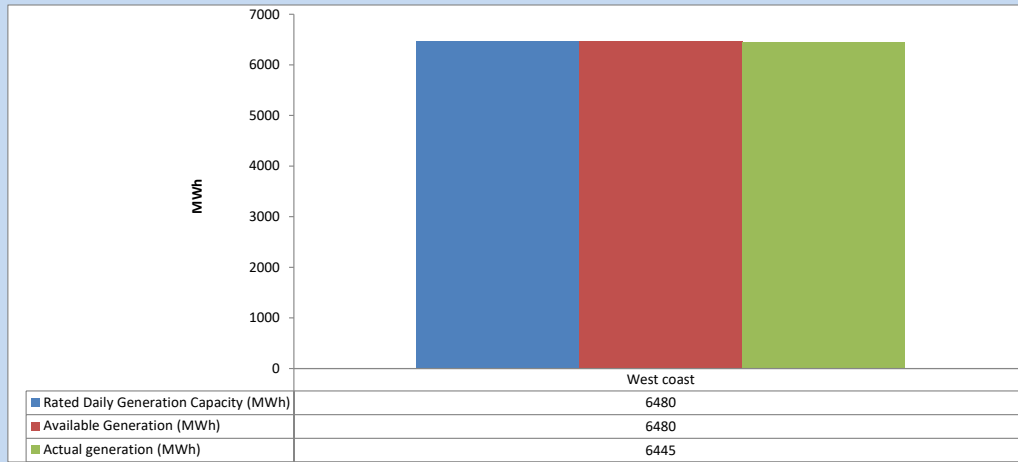


Plant availability is recorded at 6.00 am on

September 1, 2023

5. IPP owned Thermal Plant Dispatch

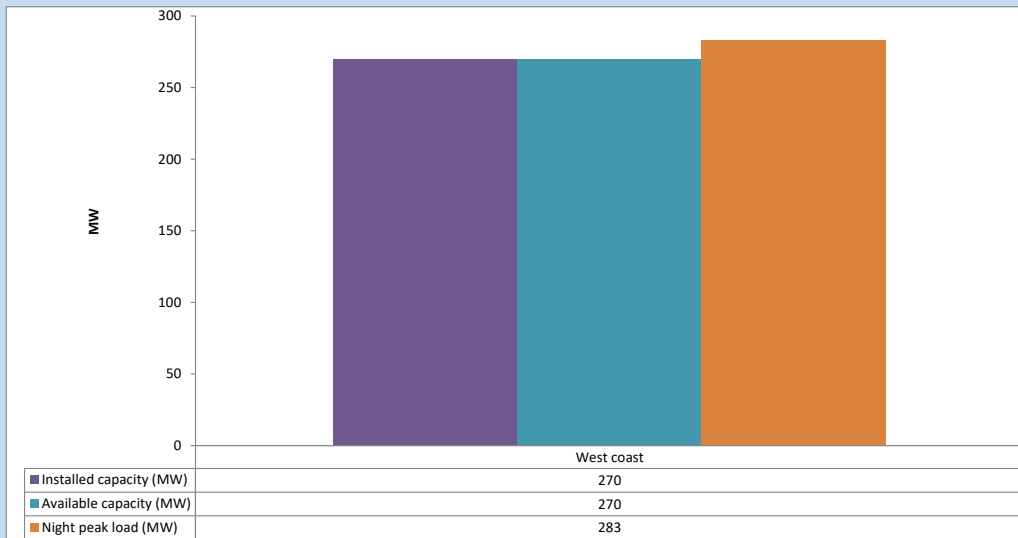
August 31, 2023



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

September 1, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

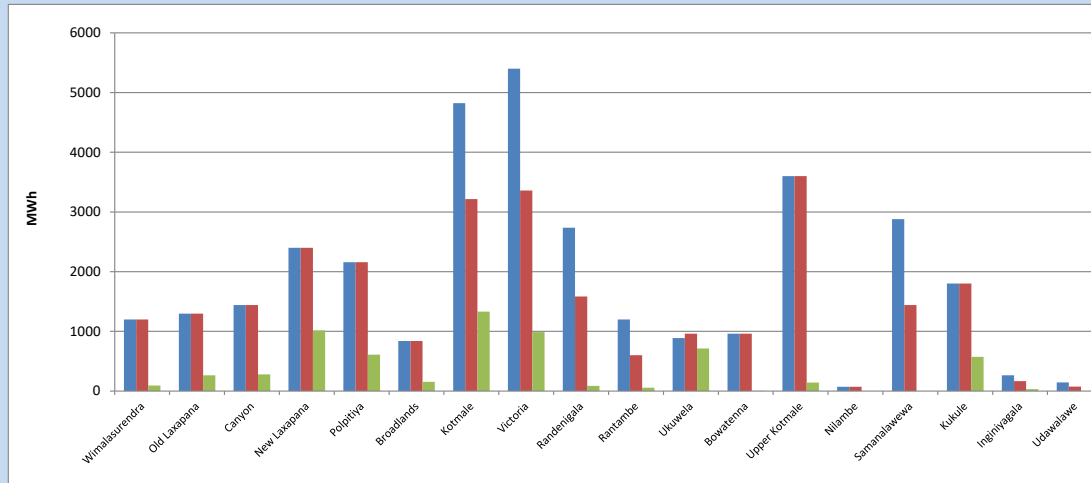


Plant availability is recorded at 6.00 am on

September 1, 2023

7. Major Hydro Plant Dispatch

August 31, 2023

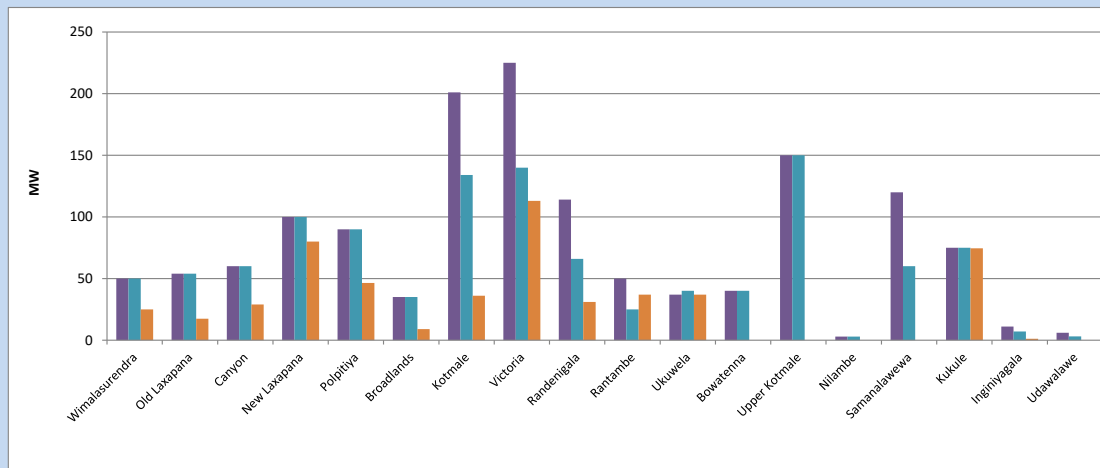


Available Generation is estimated based on plant availability at 6.00am on September 1, 2023
Broadlands power plant is operating in the Commissioning Stage

September 1, 2023

8. Major Hydro Plant Loading at Night Peak

August 31, 2023



Plant availability is recorded at 6.00 am on September 1, 2023
Broadlands power plant is operating in the Commissioning Stage

September 1, 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	92
Old Laxapana	54	54	17	265
Canyon	60	60	29	279
New Laxapana	100	100	80	1,015
Polpitiya	90	90	46	610
Broadlands	35	35	9	153
Kotmale	201	134	36	1,330
Victoria	225	140	113	989
Randenigala	114	66	31	87
Rantambe	50	25	37	56
Ukuwela	37	40	37	712
Bowatenna	40	40	0	2
Upper Kotmale	150	150	0	141
Nilambe	3	3	0	0
Samanalawewa	120	60	0	0
Kukule	75	75	75	572
Inginiyagala	11	7	1	32
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	269	6,466
Puttalam Coal II	270	270	272	6,541
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	0	0	0
KPS GT 7	115	112	113	1,200
KCCP	161	153	150	3,677
Sapugaskanda A	70	50	50	1,015
Sapugaskanda B	70	54	44	1,081
Uthura Janani	26	16	24	375
Barge CEB	60	60	60	1,048
CEB-Hambantota	30	16	17	252
CEB-Mathugama	20	11	11	172
ACE Matara	24	24	24	409
Asia Power	50	0	0	0
KCCPS -2	163	155	156	2,678
West Coast	270	270	283	6,445
Nothern Power	36	0	0	0
ACE Embilipitiya	93	0	0	0
Total	3,483	2,593	2,155	41,090

Plant availability is the availability recorded at 6 am on

September 1, 2023

10. Contribution to the Night Peak in MW

August 31, 2023

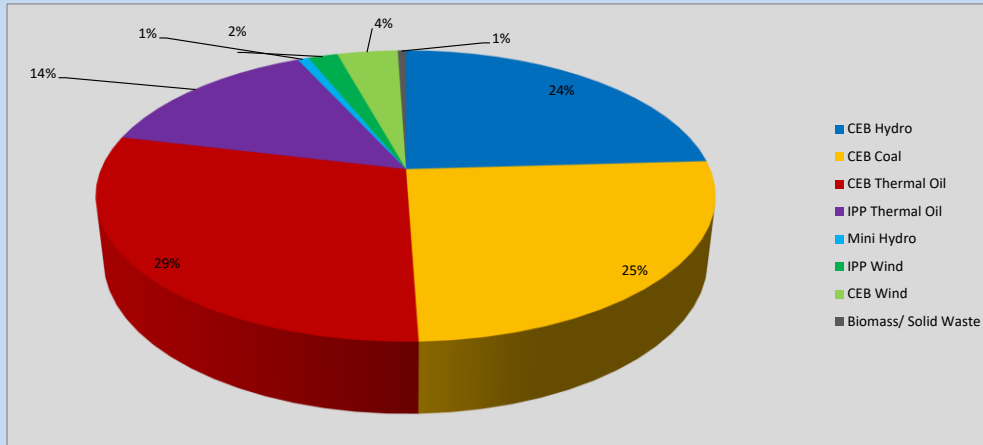


Table 06

CEB Hydro	514	MW
CEB Coal	541	MW
CEB Thermal Oil	625	MW
IPP Thermal Oil	307	MW
Mini Hydro (Telemetered)	15	MW
IPP Wind	39.3	MW
CEB Wind	80.4	MW
Biomass/ Solid Waste	11	MW

Recorded Peak Demand Data

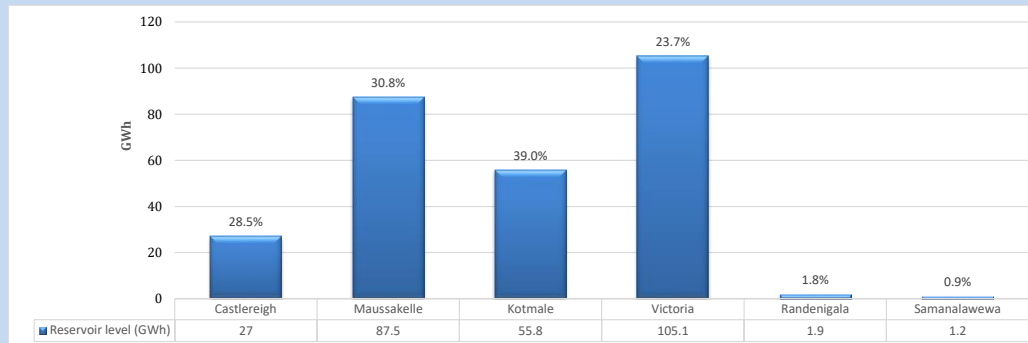
Table 07

Night Peak*	2,132	MW
Day Peak Maximum Demand	2,026	MW
Day Peak Minimum Demand	1,778	MW
Off Peak Minimum Demand	1,190	MW

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

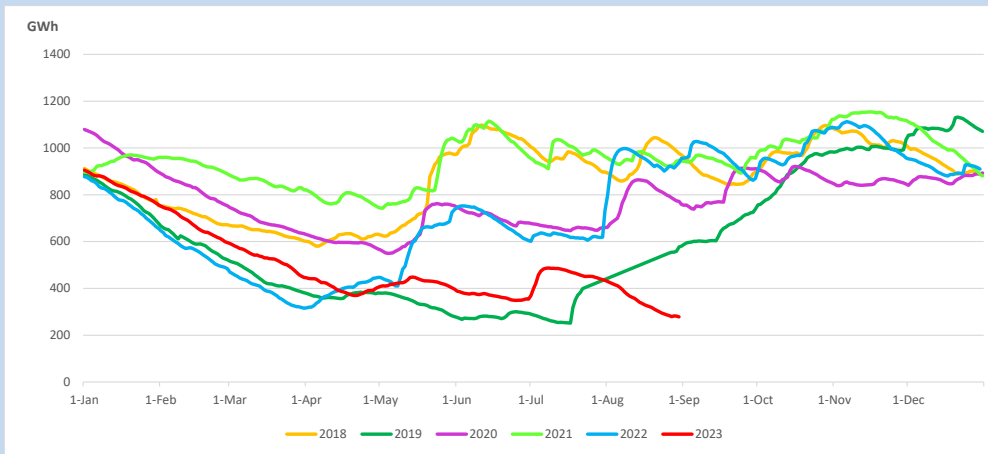
Reservoir Levels -

as at 06.00 Hr on September 1, 2023

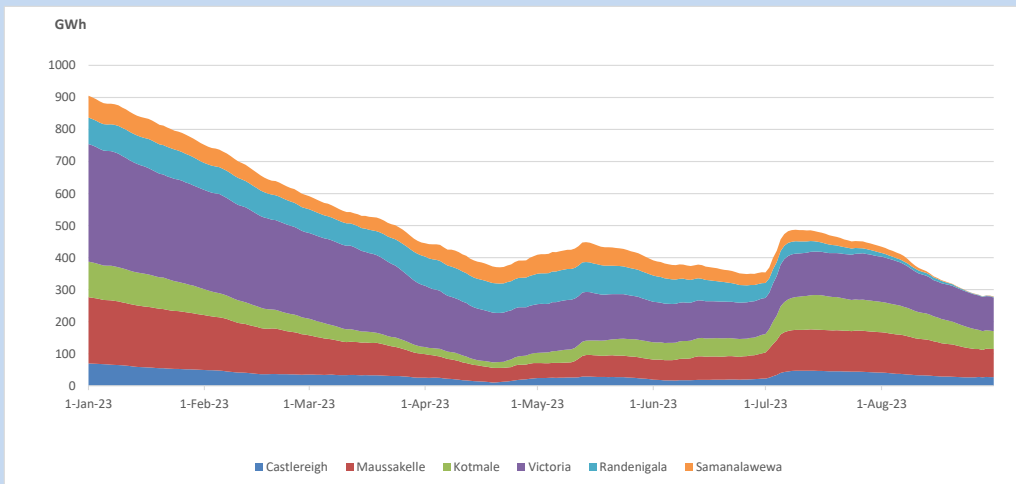


Total Reservoir Level 278.5 GWh
 % of Total capacity 23.1%

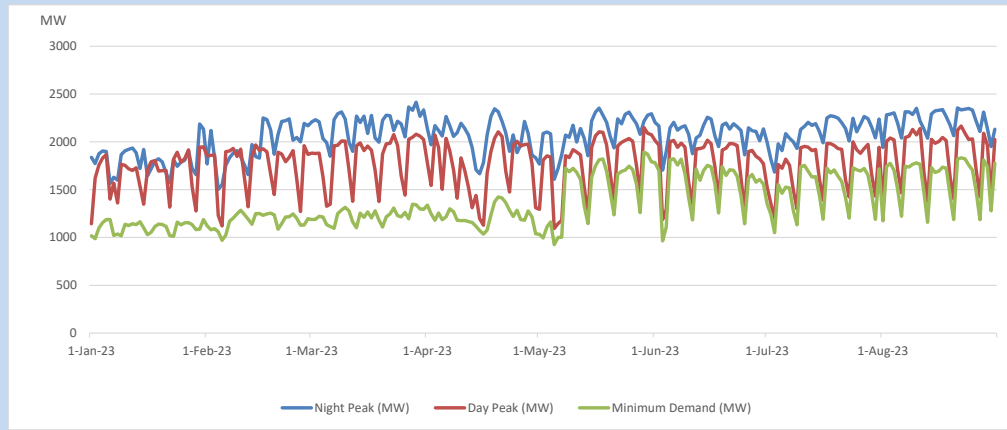
11. Comparison of Total Reservoir Storage Levels with Past Years



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



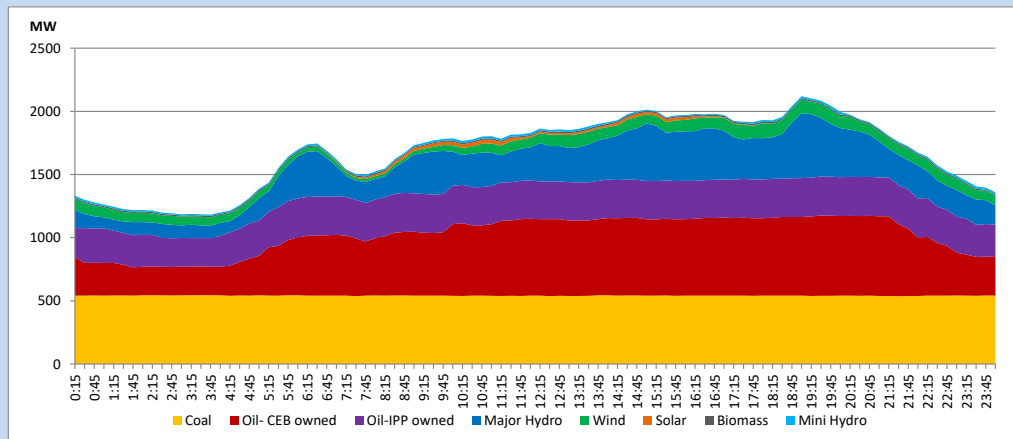
13. Variation of Demand during the current year



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

14. Daily Load Curve

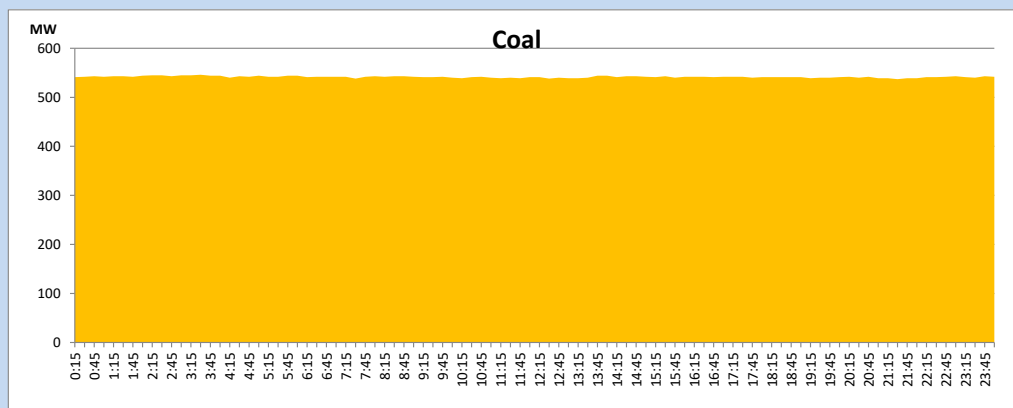
August 31, 2023



Solar and wind data is based on Telemetered Power Stations only

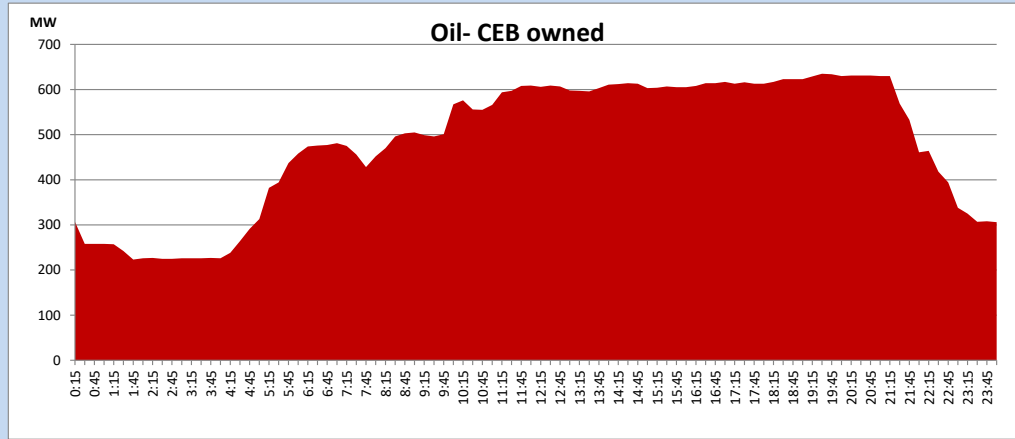
Coal Generation during

August 31, 2023



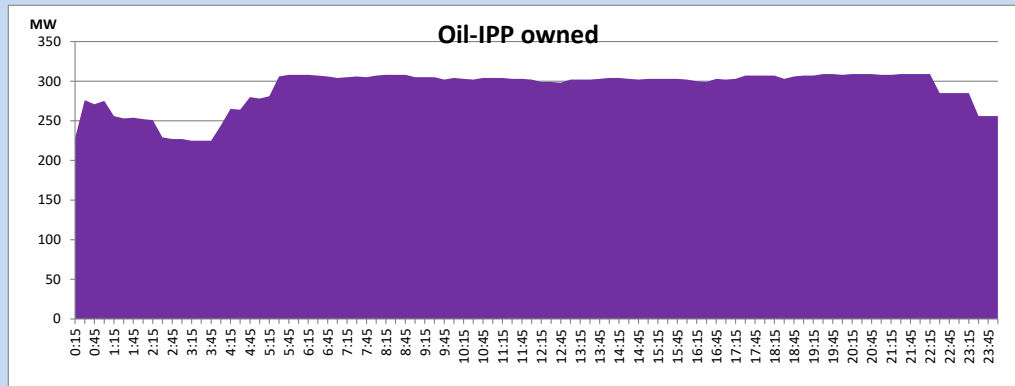
CEB Oil Plant Generation during

August 31, 2023



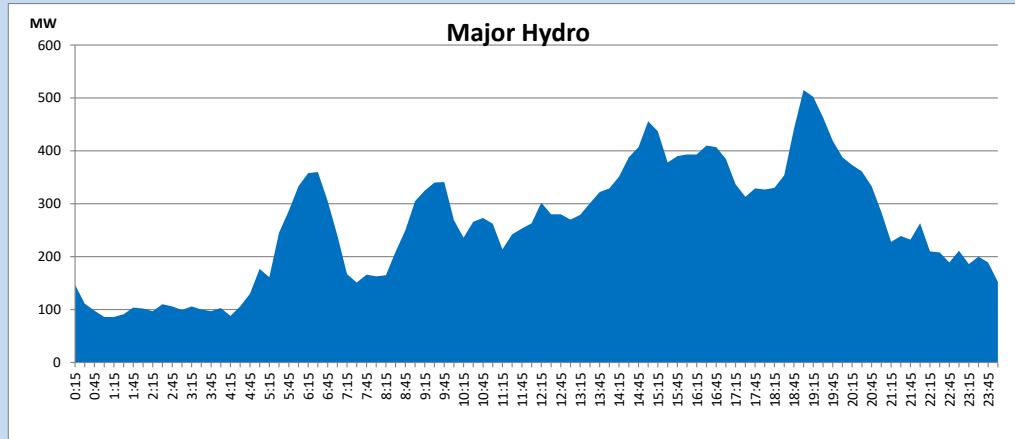
IPP Oil Plant Generation during

August 31, 2023



Major Hydro Generation during

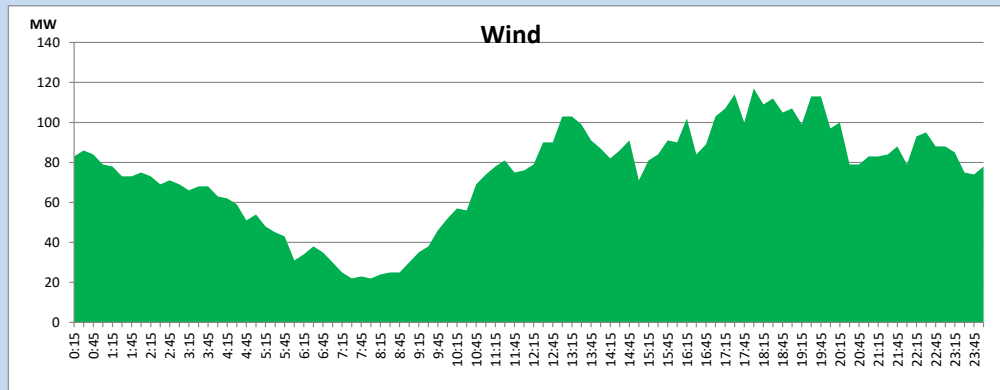
August 31, 2023



Wind Generation during

August 31, 2023

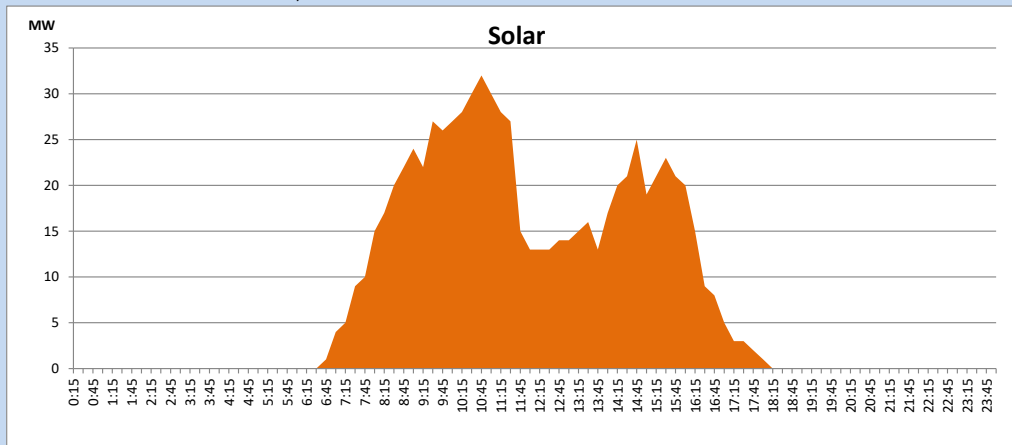
Based on Telemetered Power Stations only



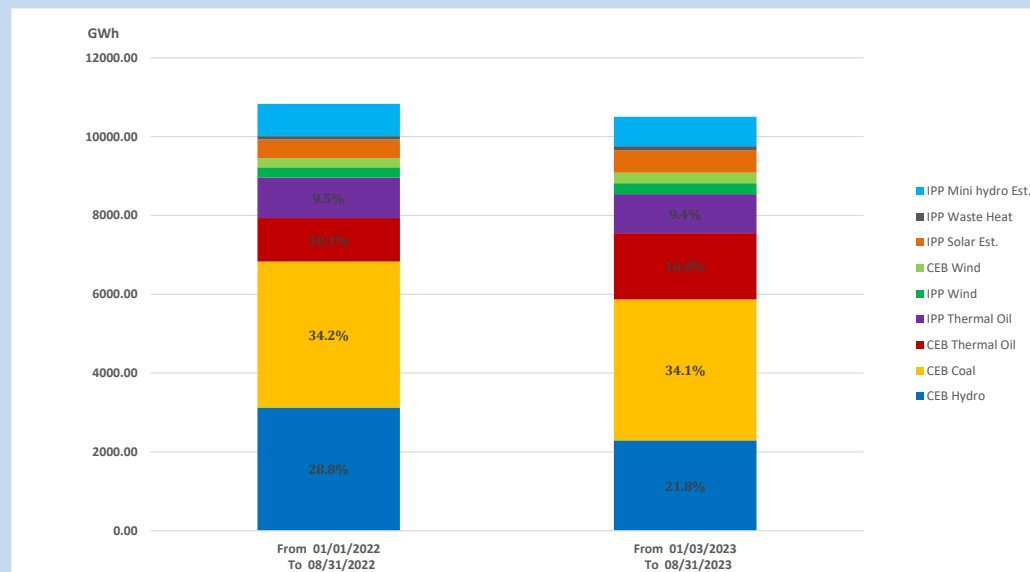
Solar Generation during

August 31, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch
 From 01/01/2022 To 08/31/2022
 From 01/03/2023 To 08/31/2023

10832 GWh
 10502 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 31, 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) N'Galle 132/33kV T/F 01 tripped at 6:22hrs due to OLTC oil level Low, causing 33kV feeders 7, 9, and 11 to be dead. N'Galle 33kV feeders 7, 9, and 11 restored at 6:31hrs via 33kV B/S CB 01. N' Galle T/F 01 restored at 16:15hrs.
- 3). Veyangoda 132/33kV T/F 02 tripped from both ends at 7:16hrs due to operation of Differential protection. At the same time 132/33kV T/F 03 tripped from both ends and 132/33kV T/F 01 tripped only from 33kV side due to the operation O/C protection, causing all 33kV feeders to be dead. The T/F 01, 02, and 03 restored at 8:01hrs, 17:06hrs, and 10:03hrs respectively. All affected feeders were restored by 10:24hrs.
- 4) Power Barge Gen 03 performed a forced shut down at 08:34hrs due to generator cooling fan failure. Barge Gen 03 resumed generation at 14:02hrs.