

Generation and Reservoirs Statistics

September 1, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

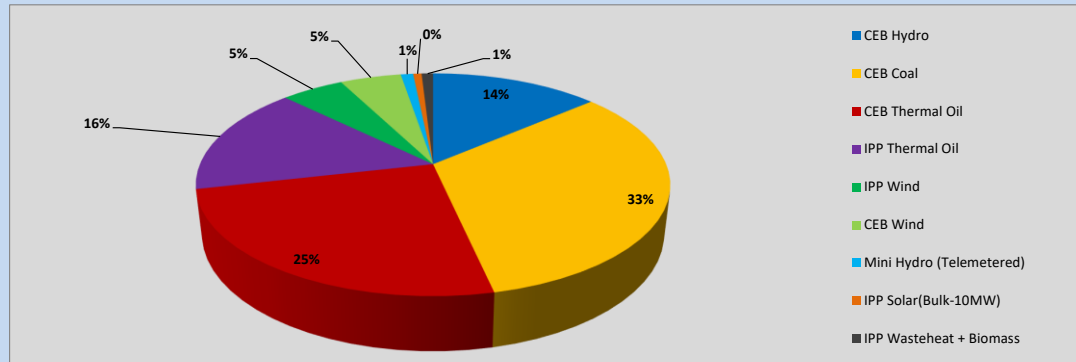


Table 01

	Generation (MWh)
CEB Hydro	5,445
CEB Coal	13,018
CEB Thermal Oil	9,871
IPP Thermal Oil	6,284
IPP Wind	2,023
CEB Wind	1,976
Mini Hydro (Telemetered)	399
IPP Solar (Bulk)	274
IPP Waste heat + Biomass	371
Total Generation (Excluding estimated figures)	39,661
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	3241
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1650
Total Generation (Including estimated figures)	44,856

* 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

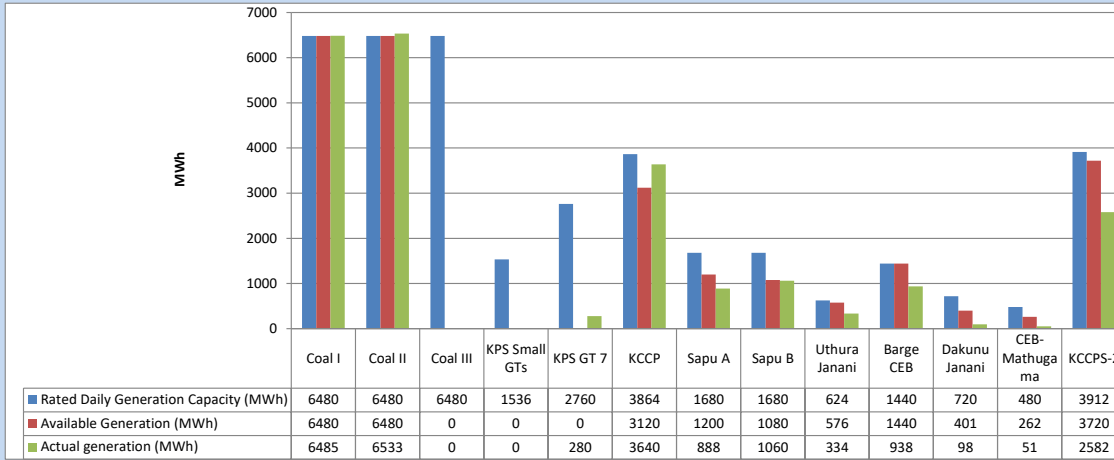
Category	Dispatch (GWh)	
CEB Hydro	5	13.74%
CEB Coal	13	32.83%
CEB Thermal Oil	10	24.89%
IPP Thermal	6	15.83%
SPP Wind	2	5.09%
CEB Wind	2	4.99%
Mini Hydro (Telemetered)	0	1.01%
IPP Solar(Bulk-10MW)	0	0.68%
IPP Waste heat + BMP	0	0.93%
Total	40	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,304	24.26%
CEB Coal	3,598	37.87%
CEB Thermal Oil	1,695	17.84%
IPP Thermal	996	10.49%
SPP Wind	262	2.76%
CEB Wind	271	2.85%
Mini Hydro (Telemetered)	211	2.22%
IPP Solar(Bulk-10MW)	75	0.79%
IPP Waste heat	88	0.92%
Total	9,500	

3. CEB owned Thermal Plant Dispatch

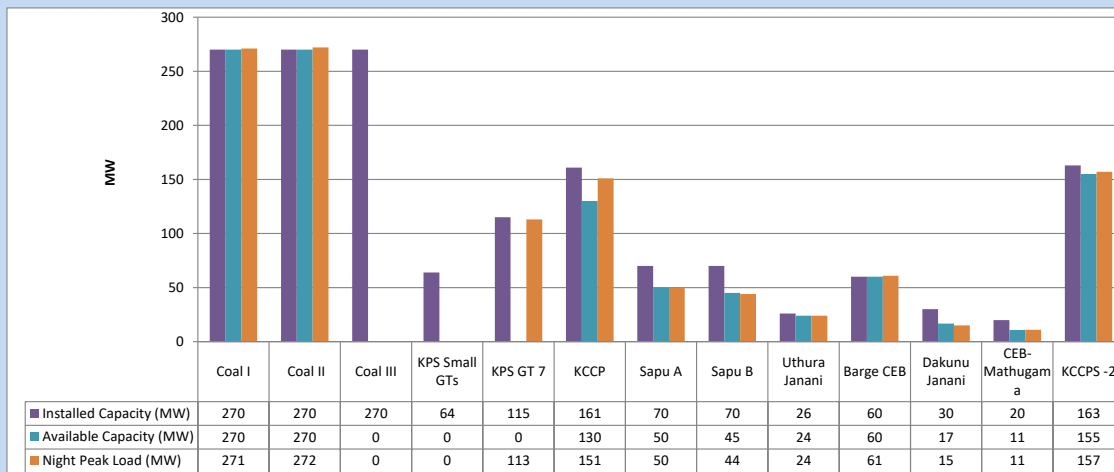
September 1, 2023



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

September 2, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

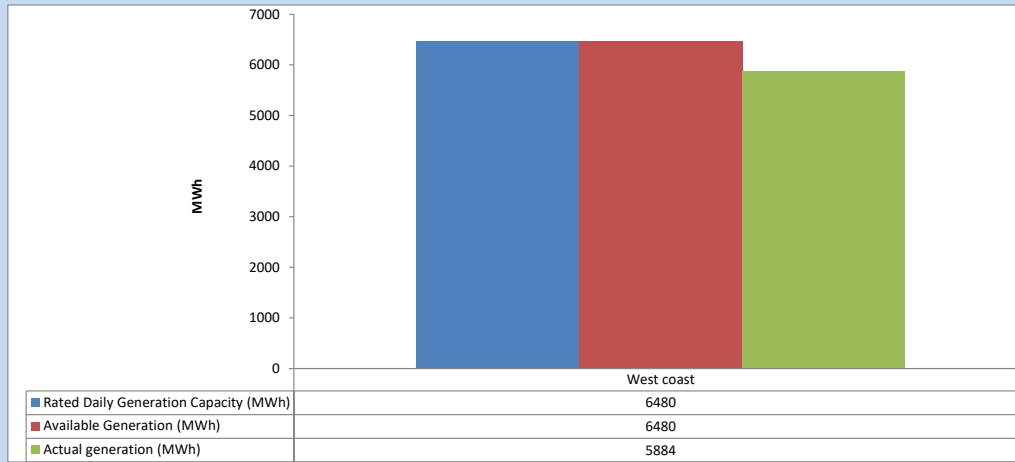


Plant availability is recorded at 6.00 am on

September 2, 2023

5. IPP owned Thermal Plant Dispatch

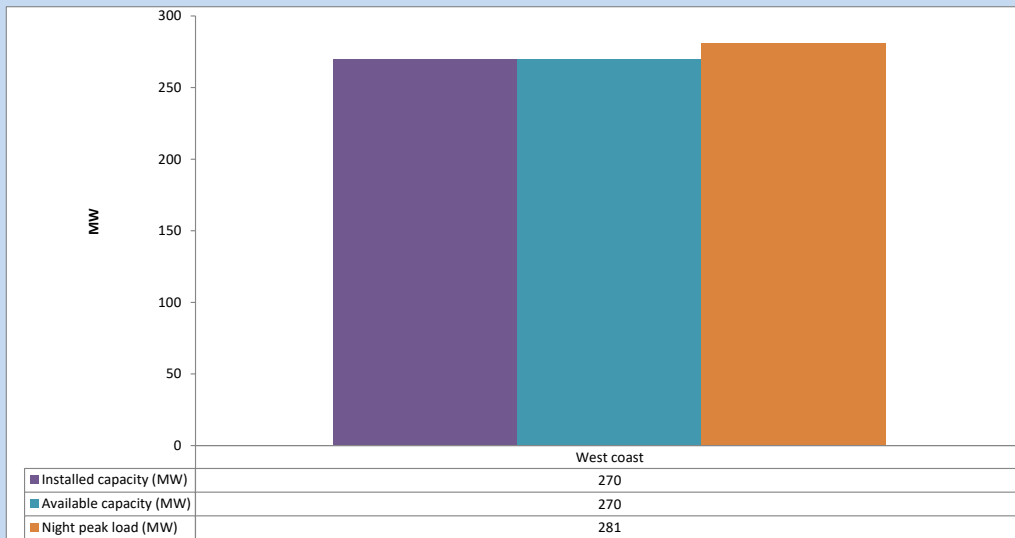
September 1, 2023



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

September 2, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

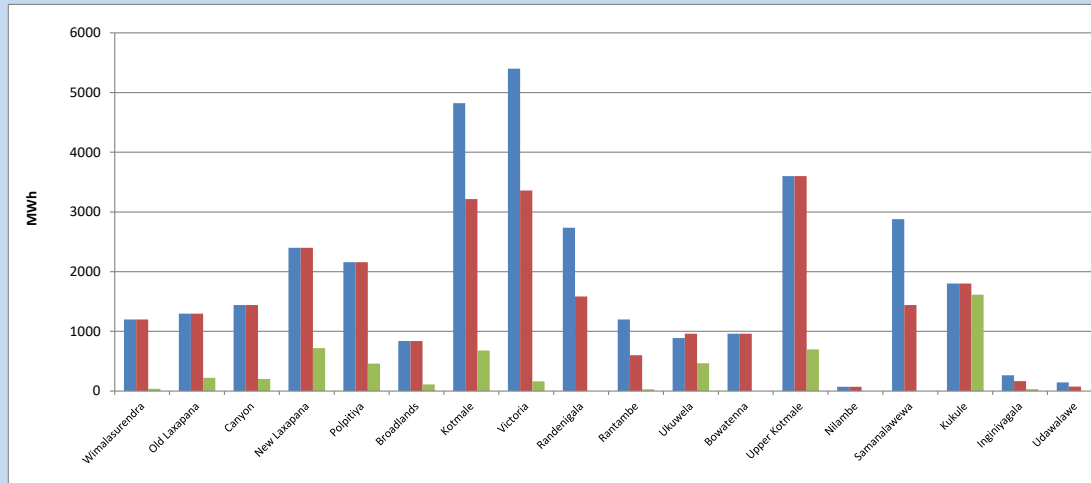


Plant availability is recorded at 6.00 am on

September 2, 2023

7. Major Hydro Plant Dispatch

September 1, 2023

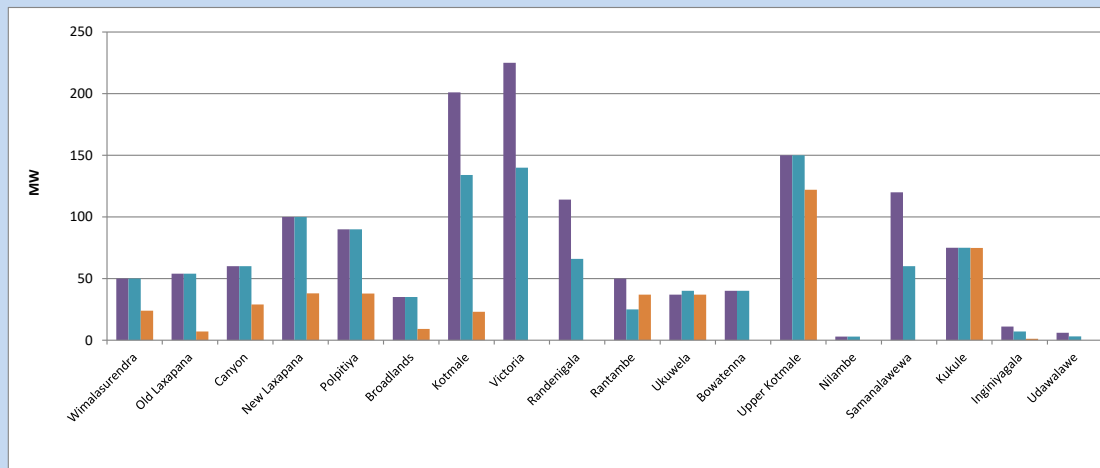


Available Generation is estimated based on plant availability at 6.00am on September 2, 2023
Broadlands power plant is operating in the Commissioning Stage

September 2, 2023

8. Major Hydro Plant Loading at Night Peak

September 1, 2023



Plant availability is recorded at 6.00 am on September 2, 2023
Broadlands power plant is operating in the Commissioning Stage

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	24	38
Old Laxapana	54	54	7	223
Canyon	60	60	29	204
New Laxapana	100	100	38	721
Polpitiya	90	90	38	460
Broadlands	35	35	9	113
Kotmale	201	134	23	680
Victoria	225	140	0	163
Randenigala	114	66	0	0
Rantambe	50	25	37	30
Ukuwela	37	40	37	467
Bowatenna	40	40	0	0
Upper Kotmale	150	150	122	699
Nilambe	3	3	0	0
Samanalawewa	120	60	0	0
Kukule	75	75	75	1,615
Inginiyagala	11	7	1	32
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	271	6,485
Puttalam Coal II	270	270	272	6,533
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	0	0	0
KPS GT 7	115	0	113	280
KCCP	161	130	151	3,640
Sapugaskanda A	70	50	50	888
Sapugaskanda B	70	45	44	1,060
Uthura Janani	26	24	24	334
Barge CEB	60	60	61	938
CEB-Hambantota	30	17	15	98
CEB-Mathugama	20	11	11	51
ACE Matara	24	24	24	400
Asia Power	50	0	0	0
KCCPS -2	163	155	157	2,582
West Coast	270	270	281	5,884
Nothern Power	36	0	0	0
ACE Embilipitiya	93	0	0	0
Total	3,483	2,458	2,104	39,661

Plant availability is the availability recorded at 6 am on

September 2, 2023

10. Contribution to the Night Peak in MW

September 1, 2023

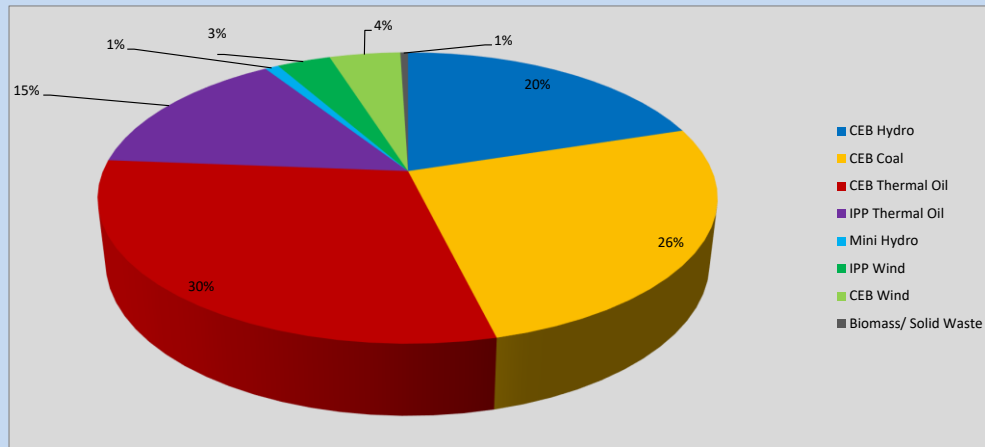


Table 06

CEB Hydro	418	MW
CEB Coal	543	MW
CEB Thermal Oil	626	MW
IPP Thermal Oil	305	MW
Mini Hydro (Telemetered)	18	MW
IPP Wind	69.6	MW
CEB Wind	92	MW
Biomass/ Solid Waste	10	MW

Recorded Peak Demand Data

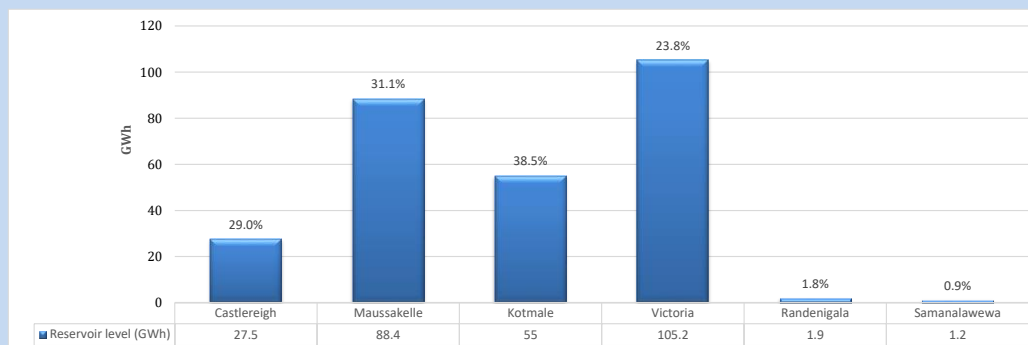
Table 07

Night Peak*	2,082	MW
Day Peak Maximum Demand	1,813	MW
Day Peak Minimum Demand	1,635	MW
Off Peak Minimum Demand	1,187	MW

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

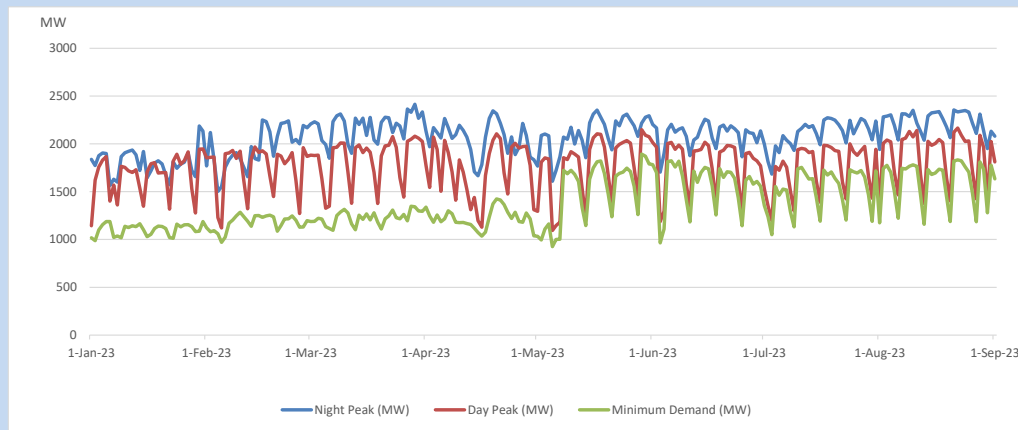
Reservoir Levels -

as at 06.00 Hr on September 2, 2023



Total Reservoir Level 279.2 GWh
 % of Total capacity 23.2%

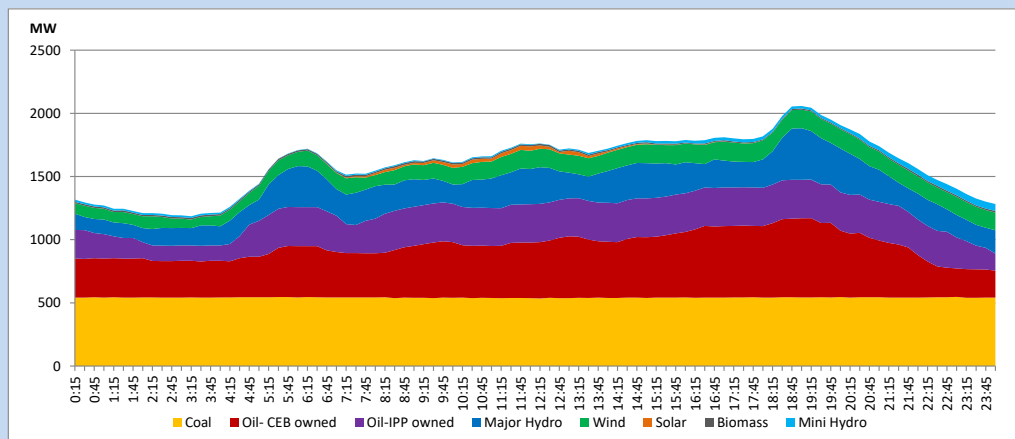
13. Variation of Demand during the current year



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

14. Daily Load Curve

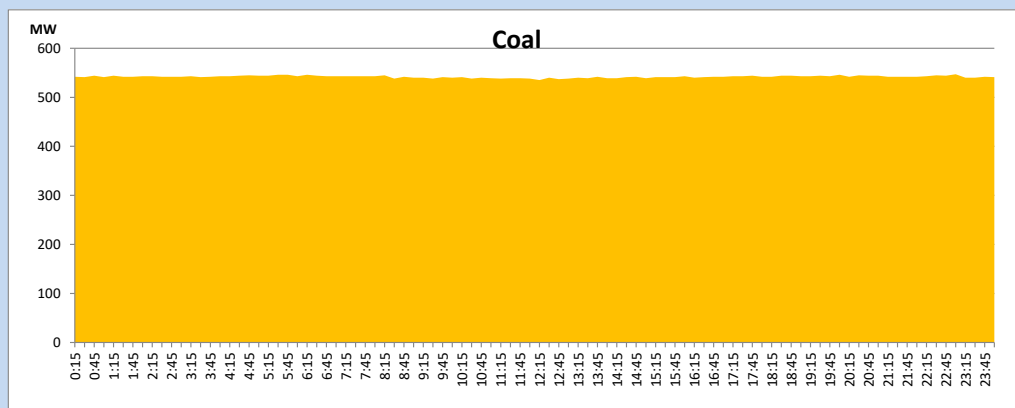
September 1, 2023



Solar and wind data is based on Telemetered Power Stations only

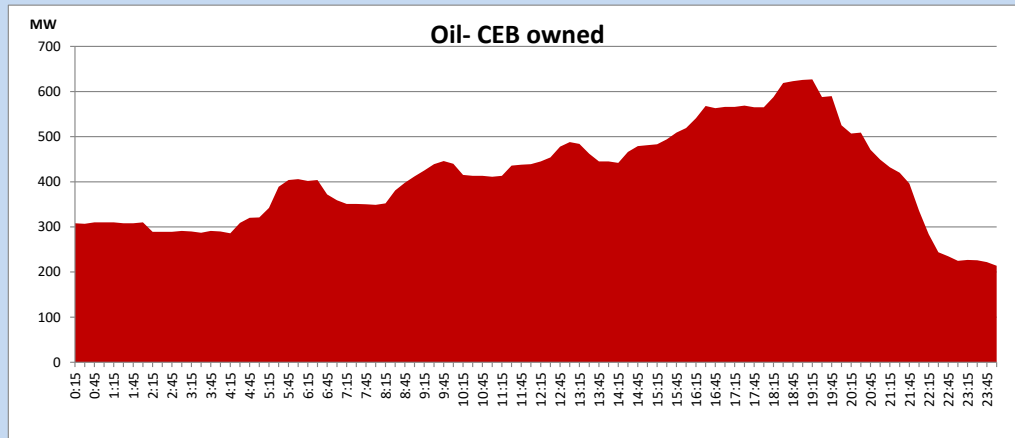
Coal Generation during

September 1, 2023



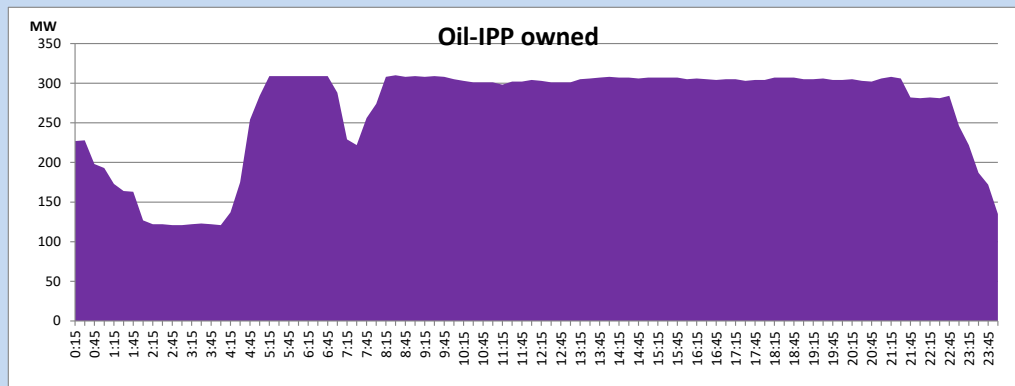
CEB Oil Plant Generation during

September 1, 2023



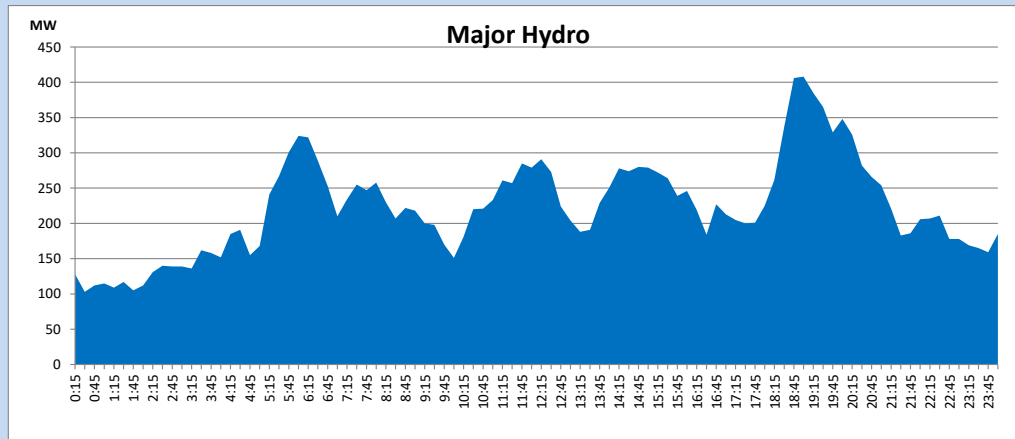
IPP Oil Plant Generation during

September 1, 2023



Major Hydro Generation during

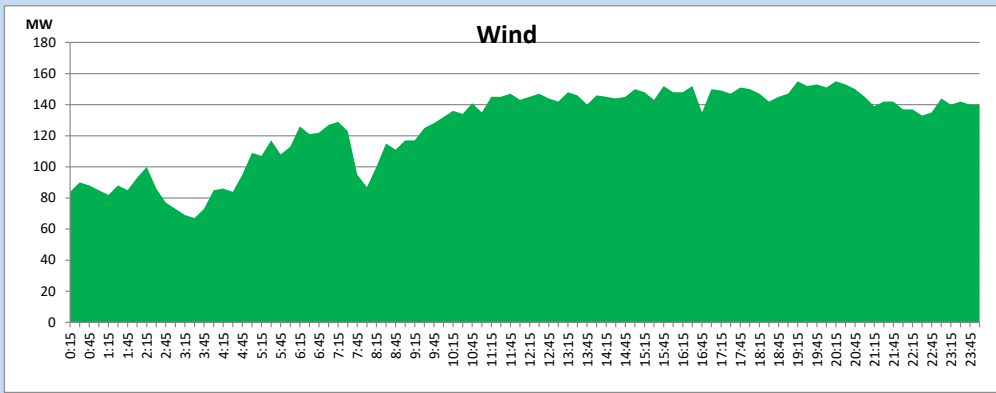
September 1, 2023



Wind Generation during

September 1, 2023

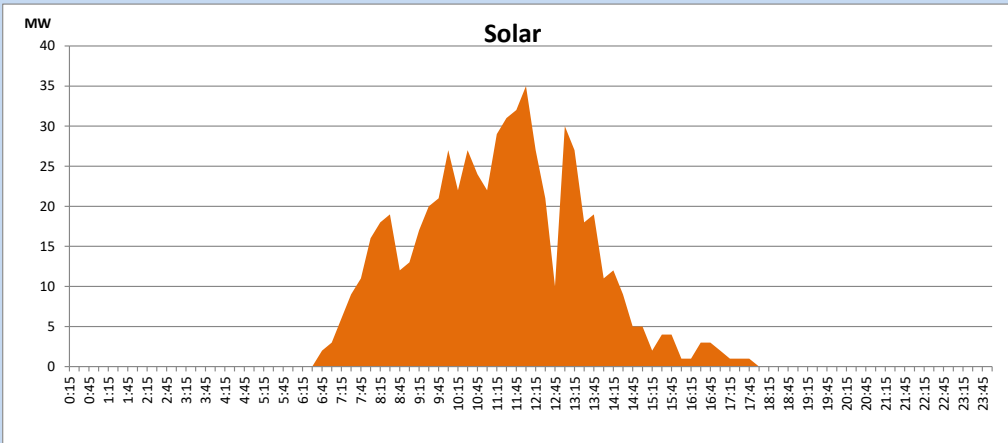
Based on Telemetered Power Stations only



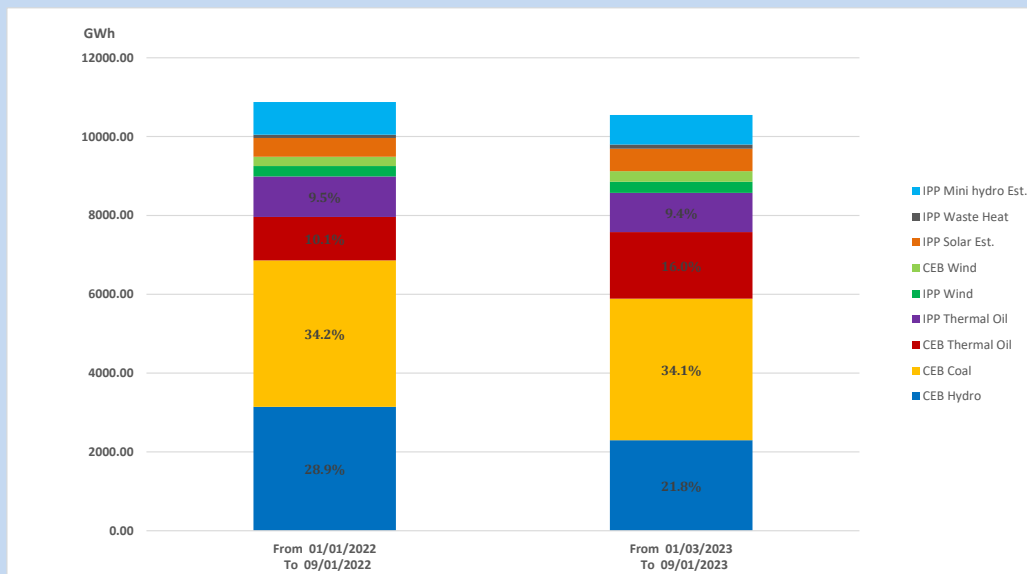
Solar Generation during

September 1, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch

From 01/01/2022 To 09/01/2022

10875 GWh

From 01/01/2023 To 09/01/2023

10547 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

September 1, 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) Monaragala 132/33kV T/F 01 tripped only from the 33kV side at 06:40hrs without any indications causing 33kV feeders 01, 03, 05, and 07 to be dead. The T/F was normalized at 07:03hrs and all affected feeders were normalized by 07:22hrs.
- 3) Kelanitissa 220/132/33kV T/F 01 tripped from 220kV and 132kV sides at 04:07hrs due to the operation of the main protection. The T/F 01 is yet to be normalized.
- 4) Kukule spilling started at 4:48hrs and continuous to present hour.
- 5) Kalutara 132/33kV T/F 01 tripped from both sides at 5:29hrs due to operation of differential protection. As well as Kalutara 132/33kV T/F 02 has been already released for a breakdown on 21.07.2023. Hence, 33kV side of the GSS to be dead. Kalutara 132/33kV T/F 01 and affected feeders yet to be normalized.