

Generation and Reservoirs Statistics

September 19, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

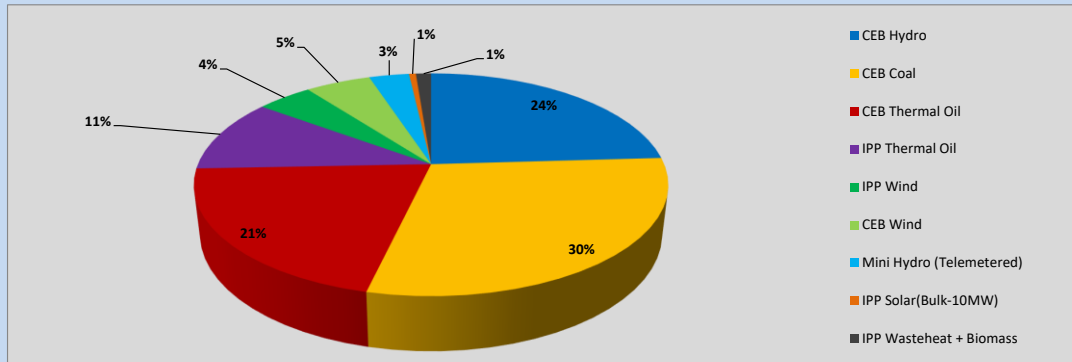


Table 01

	Generation (MWh)
CEB Hydro	9,198
CEB Coal	11,310
CEB Thermal Oil	7,921
IPP Thermal Oil	4,096
IPP Wind	1,732
CEB Wind	2,033
Mini Hydro (Telemetered)	1,247
IPP Solar (Bulk)	214
IPP Waste heat + Biomass	473
Total Generation (Excluding estimated figures)	38,224
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	2393
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1660
Total Generation (Including estimated figures)	42,581

* 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 and ACE Embilipitiya)	387
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

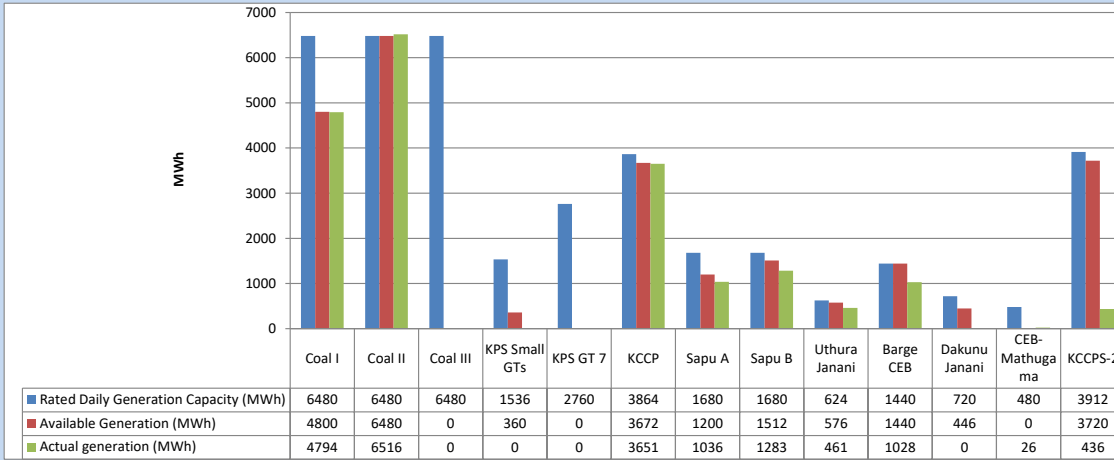
Category	Dispatch (GWh)	
CEB Hydro	158	22.40%
CEB Coal	222	31.47%
CEB Thermal Oil	135	19.20%
IPP Thermal	67	9.57%
SPP Wind	42	5.97%
CEB Wind	41	5.82%
Mini Hydro (Telemetered)	27	3.85%
IPP Solar(Bulk-10MW)	5	0.69%
IPP Waste heat + BMP	7	1.03%
Total	704	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,457	24.17%
CEB Coal	3,806	37.45%
CEB Thermal Oil	1,820	17.91%
IPP Thermal	1,057	10.40%
SPP Wind	302	2.97%
CEB Wind	310	3.05%
Mini Hydro (Telemetered)	237	2.33%
IPP Solar(Bulk-10MW)	79	0.78%
IPP Waste heat	95	0.93%
Total	10,164	

3. CEB owned Thermal Plant Dispatch

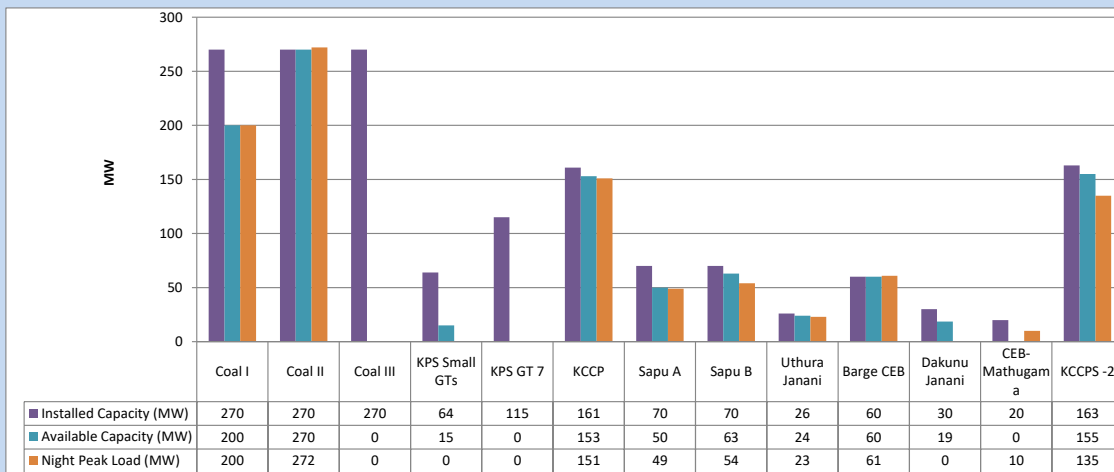
September 19, 2023



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

September 20, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

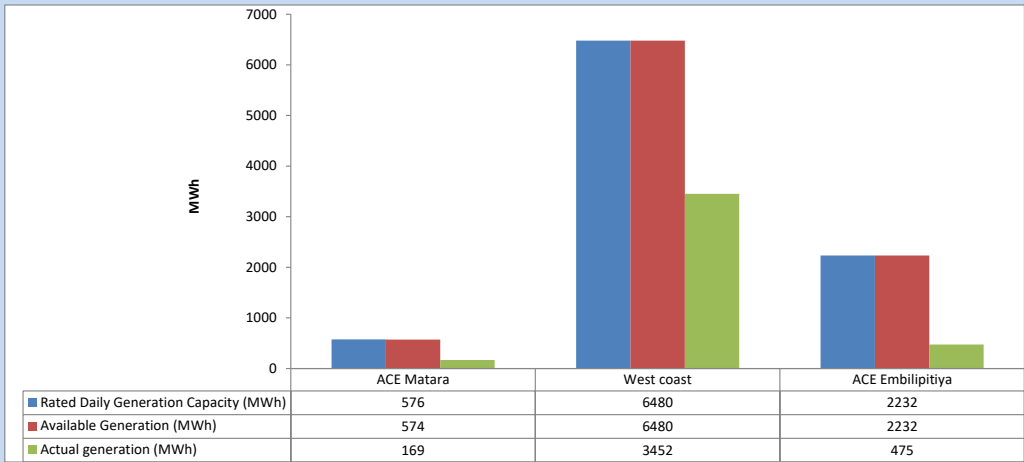


Plant availability is recorded at 6.00 am on

September 20, 2023

5. IPP owned Thermal Plant Dispatch

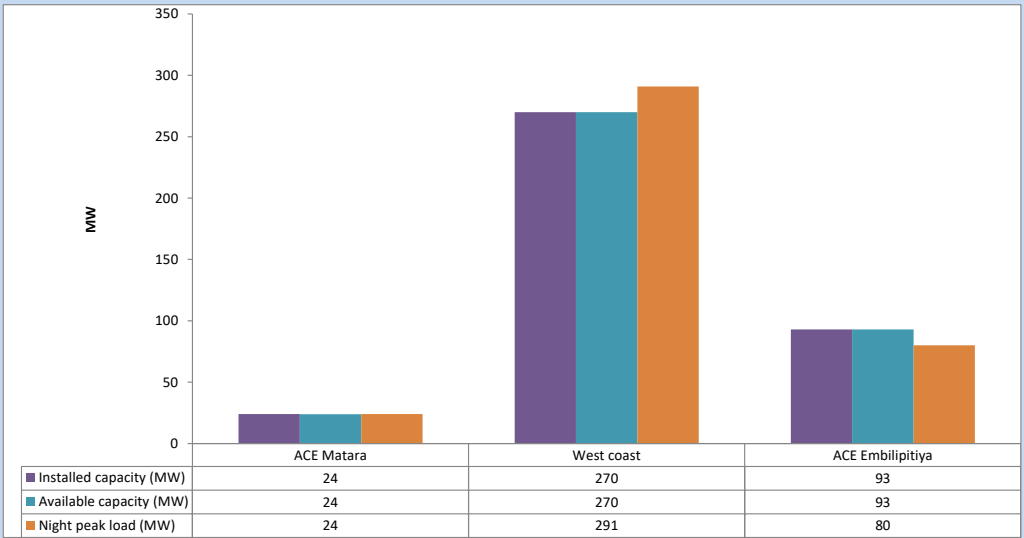
September 19, 2023



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

September 20, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

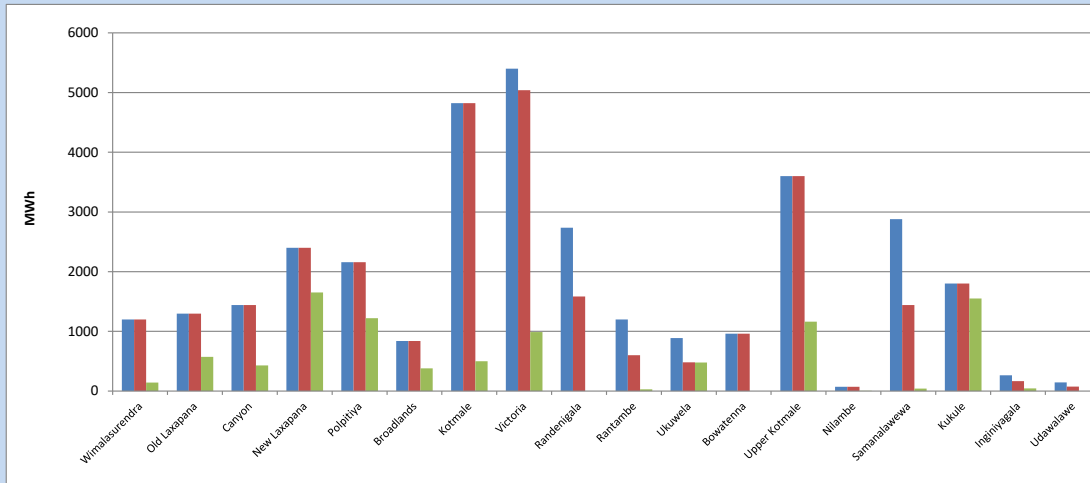


Plant availability is recorded at 6.00 am on

September 20, 2023

7. Major Hydro Plant Dispatch

September 19, 2023

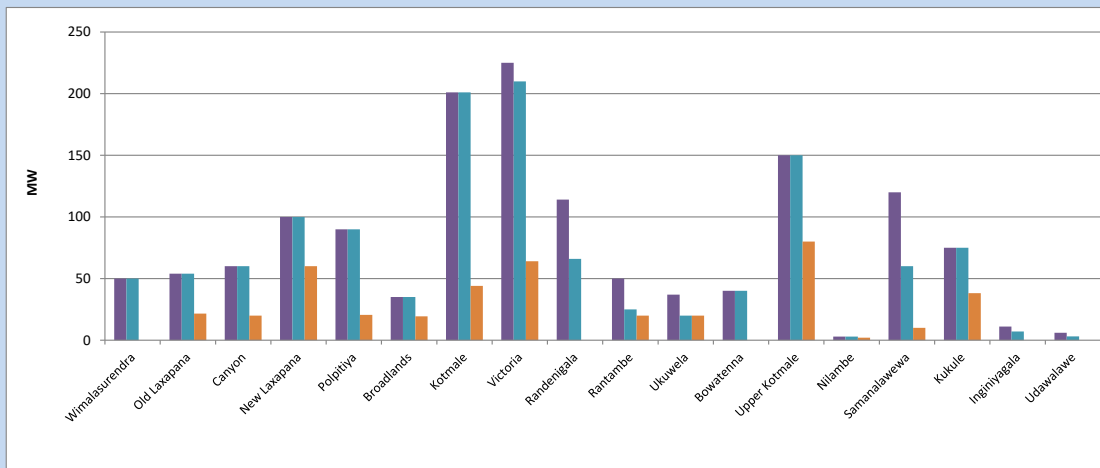


Available Generation is estimated based on plant availability at 6.00am on September 20, 2023
Broadlands power plant is operating in the Commissioning Stage

September 20, 2023

8. Major Hydro Plant Loading at Night Peak

September 19, 2023



Plant availability is recorded at 6.00 am on September 20, 2023
Broadlands power plant is operating in the Commissioning Stage

September 20, 2023

9. Summary of Major Plant performance

Table 05

Plant	Installed Capacity	Plant Availability	Night peak Load	Plant Dispatch
	(MW)	(MW)	(MW)	(MWh)
Wimalasurendra	50	50	0	141
Old Laxapana Canyon	54	54	22	574
New Laxapana	60	60	20	430
Polpitiya	100	100	60	1,650
Broadlands	90	90	21	1,220
Kotmale	35	35	19	381
Victoria	201	201	44	500
Randenigala	225	210	64	988
Rantambe	114	66	0	0
Ukuwela	50	25	20	29
Bowatenna	37	20	20	479
Upper Kotmale	40	40	0	0
Nilambe	150	150	80	1,163
Samanalawewa	3	3	2	5
Kukule	120	60	10	42
Inginiyagala	75	75	38	1,551
Udawalawe	11	7	0	45
Puttalam Coal I	6	3	0	0
Puttalam Coal II	270	200	200	4,794
Puttalam Coal III	270	270	272	6,516
KPS Small GTs	270	0	0	0
KPS GT 7	64	15	0	0
KCCP	115	0	0	0
Sapugaskanda A	161	153	151	3,651
Sapugaskanda B	70	50	49	1,036
Uthura Janani	70	63	54	1,283
Barge CEB	26	24	23	461
CEB-Hambantota	60	60	61	1,028
CEB-Mathugama	30	19	0	0
ACE Matara	20	0	10	26
Asia Power	24	24	24	169
KCCPS -2	50	0	0	0
West Coast	163	155	135	436
Nothern Power	270	270	291	3,452
ACE Embilipitiya	36	0	0	0
Total	93	93	80	475
	3,483	2,645	1,989	38,224

Plant availability is the availability recorded at 6 am on

September 20, 2023

10. Contribution to the Night Peak in MW

September 19, 2023

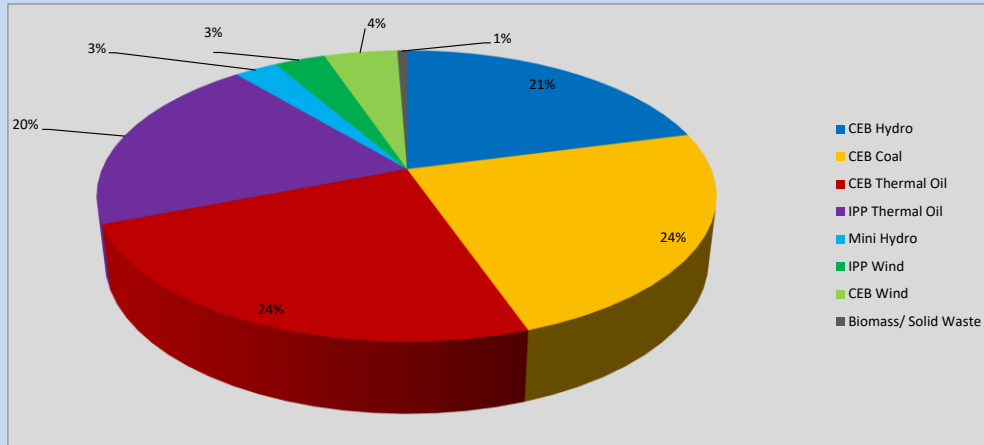


Table 06

CEB Hydro	415	MW
CEB Coal	472	MW
CEB Thermal Oil	483	MW
IPP Thermal Oil	395	MW
Mini Hydro (Telemetered)	53	MW
IPP Wind	63.3	MW
CEB Wind	90.8	MW
Biomass/ Solid Waste	12	MW

Recorded Peak Demand Data

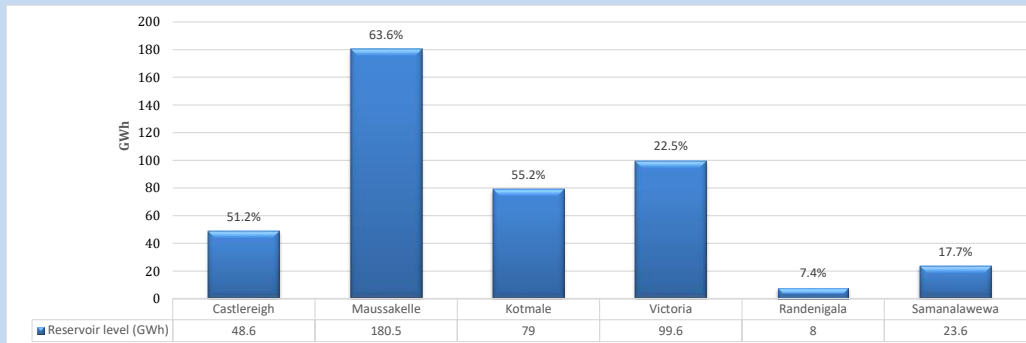
Table 07

Night Peak*	1,984	MW
Day Peak Maximum Demand	1,837	MW
Day Peak Minimum Demand	1,594	MW
Off Peak Minimum Demand	1,131	MW

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

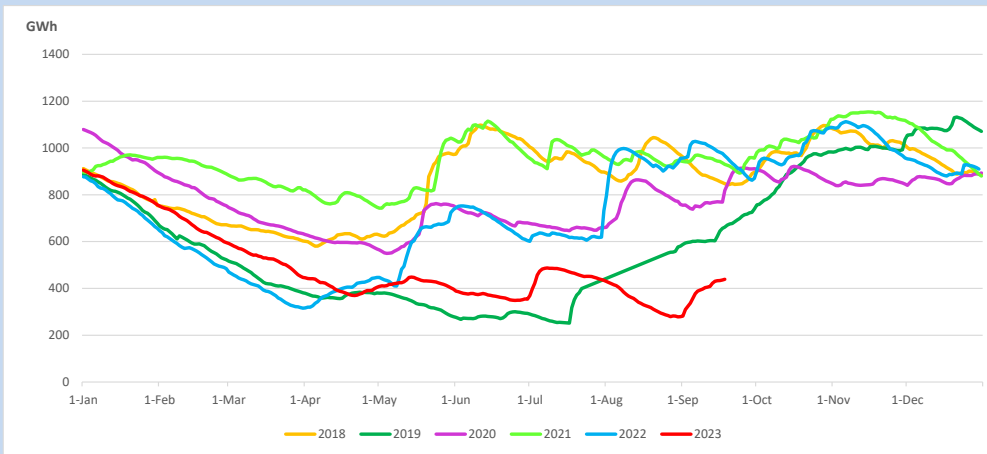
Reservoir Levels -

as at 06.00 Hr on September 20, 2023

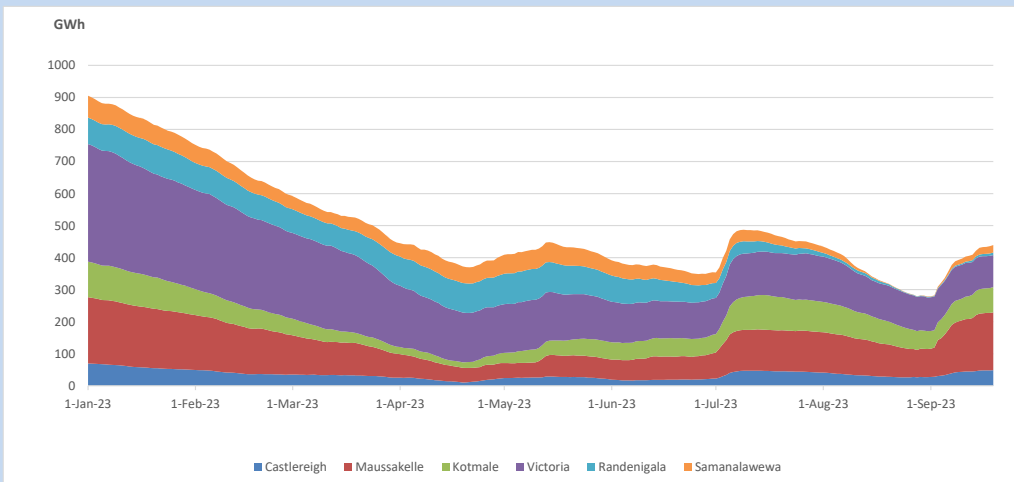


Total Reservoir Level 439.3 GWh
 % of Total capacity 36.4%

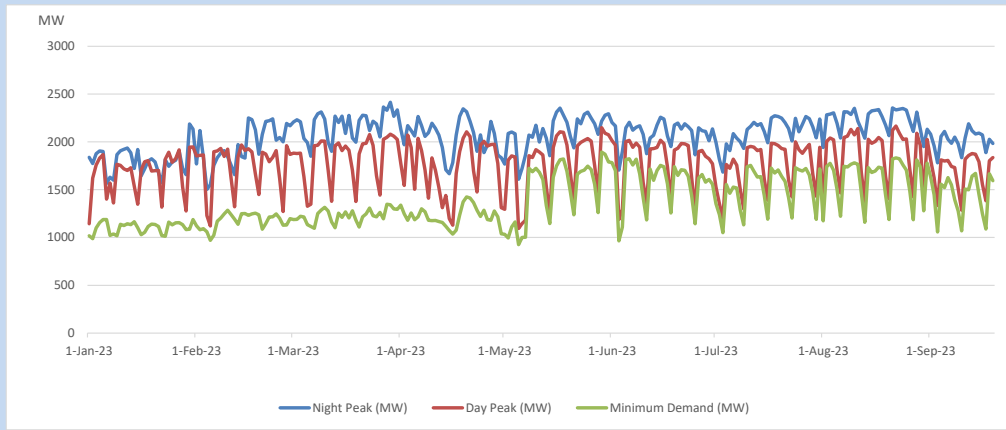
11. Comparison of Total Reservoir Storage Levels with Past Years



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



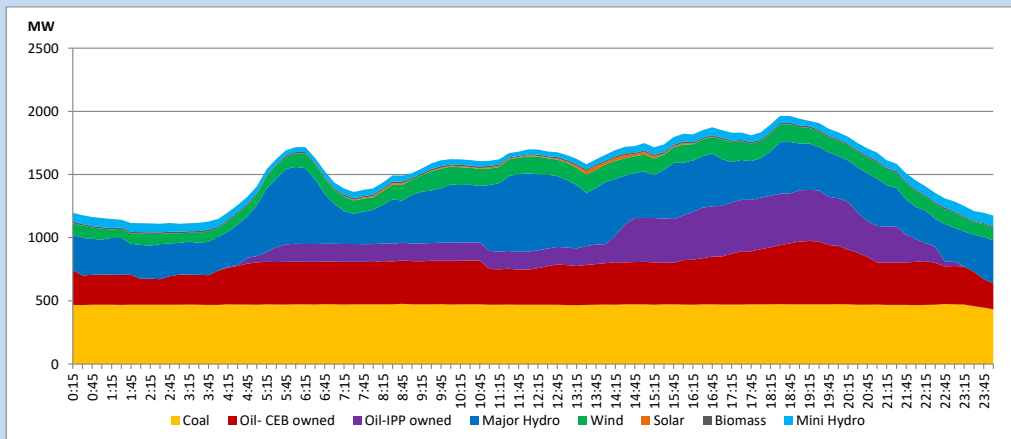
13. Variation of Demand during the current year



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

14. Daily Load Curve

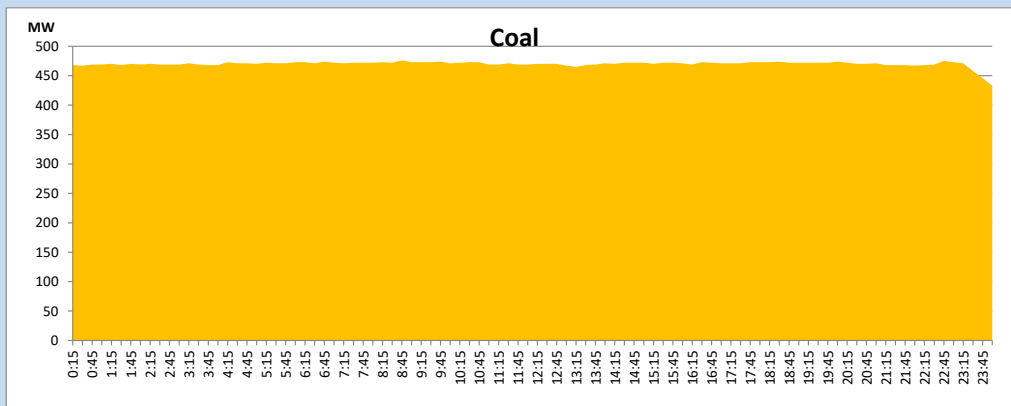
September 19, 2023



Solar and wind data is based on Telemetered Power Stations only

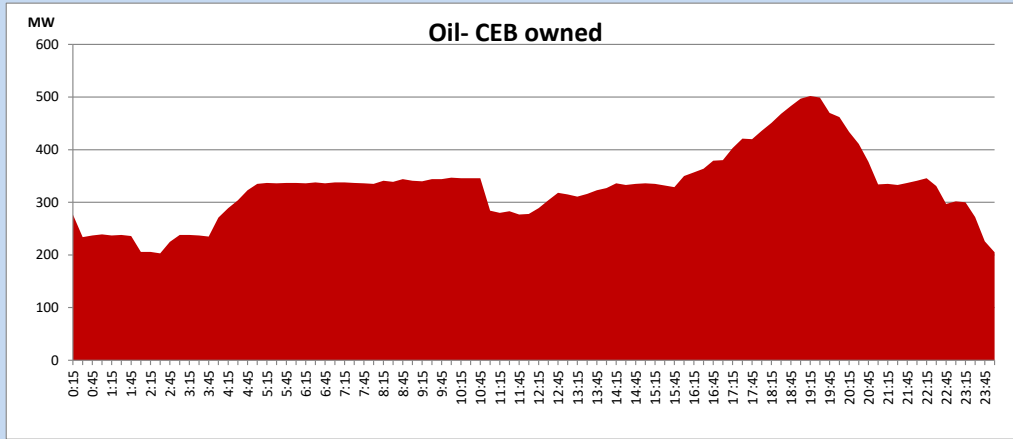
Coal Generation during

September 19, 2023



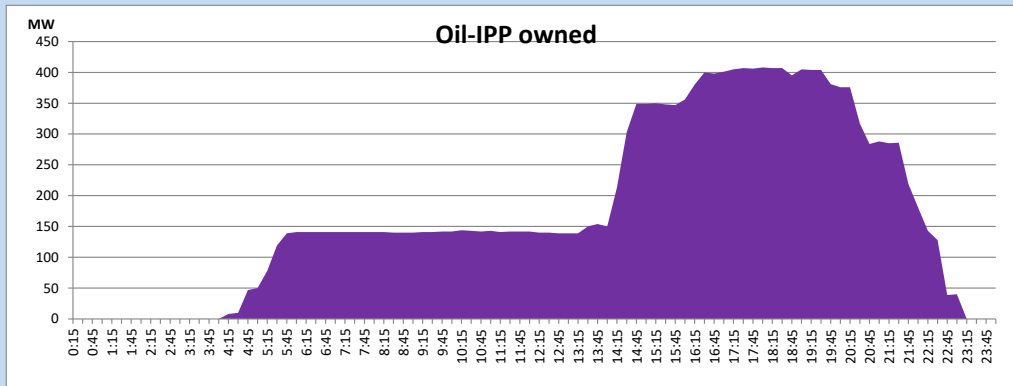
CEB Oil Plant Generation during

September 19, 2023



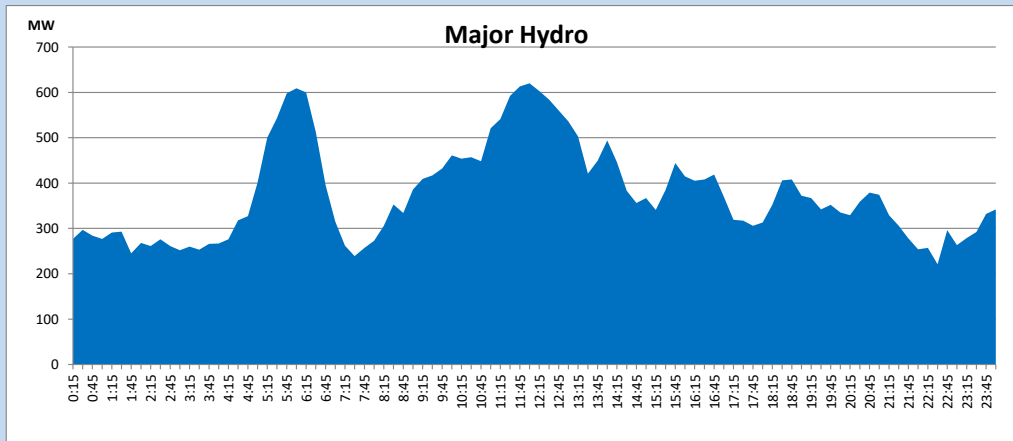
IPP Oil Plant Generation during

September 19, 2023



Major Hydro Generation during

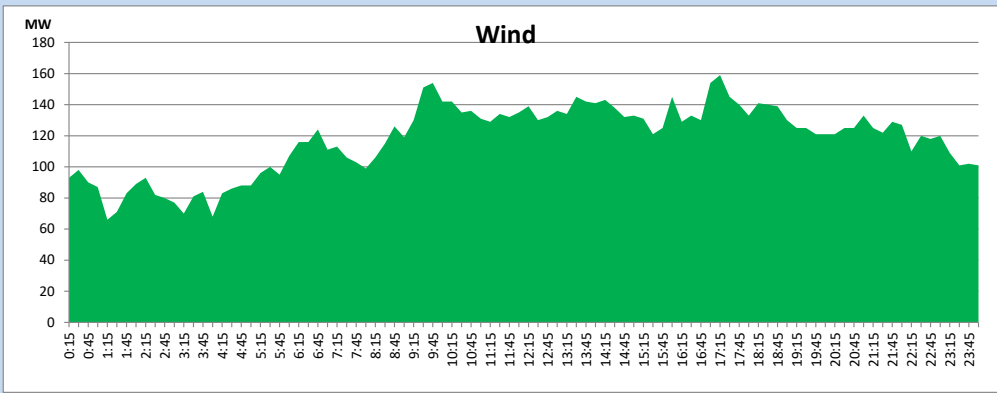
September 19, 2023



Wind Generation during

September 19, 2023

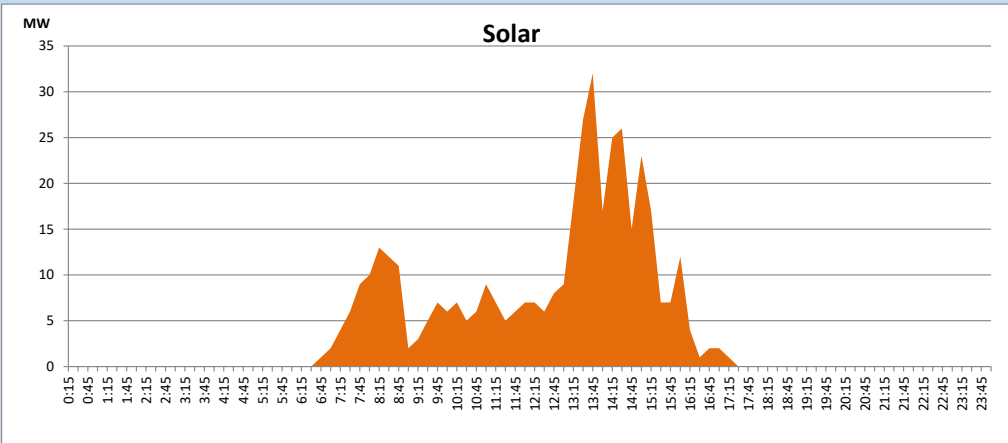
Based on Telemetered Power Stations only



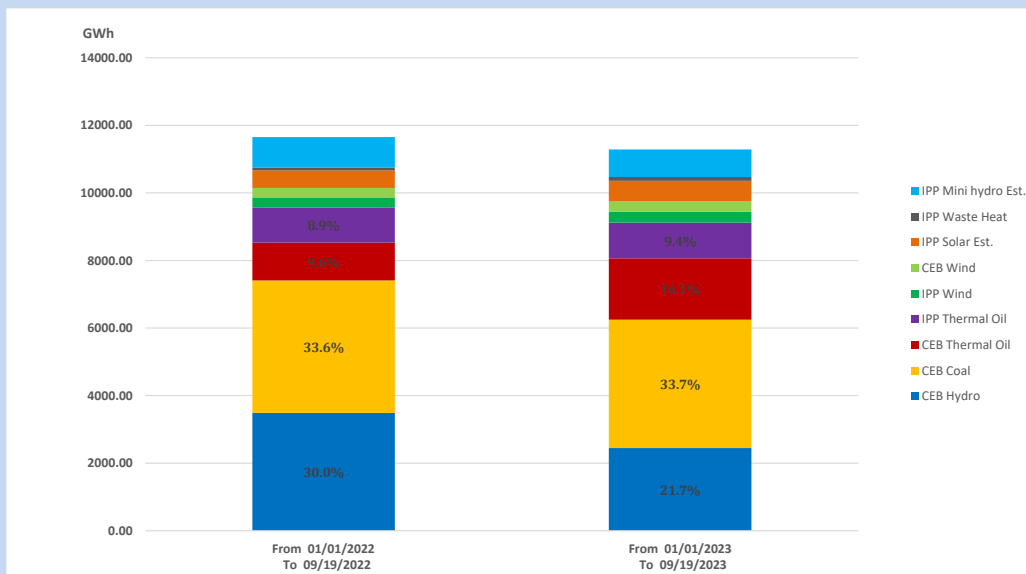
Solar Generation during

September 19, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch

From 01/01/2022 To 09/19/2022

11652 GWh

From 01/01/2023 To 09/19/2023

11285 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
ACE Embilipitiya	Heavy Fuel

Major Incidents reported during the day

September 19, 2023

- 1) Badulla 132/33kV T/F 03 tripped at 07:57hrs due to the operation of differential protection. The T/F was normalized by 11:12hrs
- 2) Barge - Kelanitissa 220kV cable tripped at 10:49hrs with an indication of cable protection trip from Kelanitissa 220kV GIS causing BMPP to trip and reject 60MW from the system. Subsequently system recovered with the operation of UFLS Stage - I and all the affected feeders were normalized by 10:55hrs. The cable was normalized at 11:34hrs and BMPP resumed generation at 11:58hrs.
- 3) Mathugama DPP made unavailable at 05:12hrs (20.09.2023) due to DDLO failure. The plant is yet to make available for the generation