

Generation and Reservoirs Statistics

September 21, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

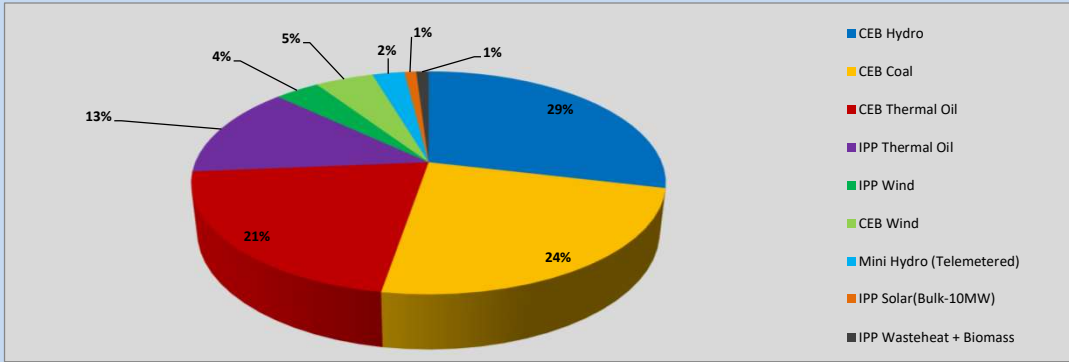


Table 01

	Generation (MWh)
CEB Hydro	11,358
CEB Coal	9,488
CEB Thermal Oil	8,315
IPP Thermal Oil	5,280
IPP Wind	1,451
CEB Wind	1,876
Mini Hydro (Telemetered)	1,036
IPP Solar (Bulk)	382
IPP Waste heat + Biomass	401
Total Generation (Excluding estimated figures)	39,587
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	2604
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1660
Total Generation (Including estimated figures)	44,155

* 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

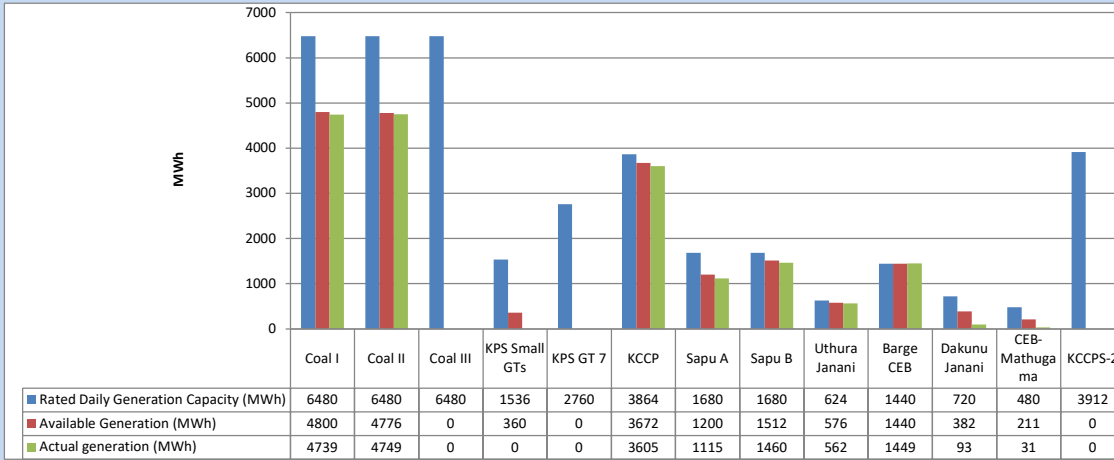
Category	Dispatch (GWh)	
CEB Hydro	179	22.87%
CEB Coal	242	30.99%
CEB Thermal Oil	151	19.33%
IPP Thermal	77	9.88%
SPP Wind	45	5.73%
CEB Wind	44	5.69%
Mini Hydro (Telemetered)	29	3.77%
IPP Solar(Bulk-10MW)	6	0.71%
IPP Waste heat + BMP	8	1.04%
Total	781	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,478	24.19%
CEB Coal	3,827	37.36%
CEB Thermal Oil	1,836	17.93%
IPP Thermal	1,067	10.42%
SPP Wind	305	2.98%
CEB Wind	314	3.06%
Mini Hydro (Telemetered)	240	2.34%
IPP Solar(Bulk-10MW)	80	0.78%
IPP Waste heat	95	0.93%
Total	10,242	

3. CEB owned Thermal Plant Dispatch

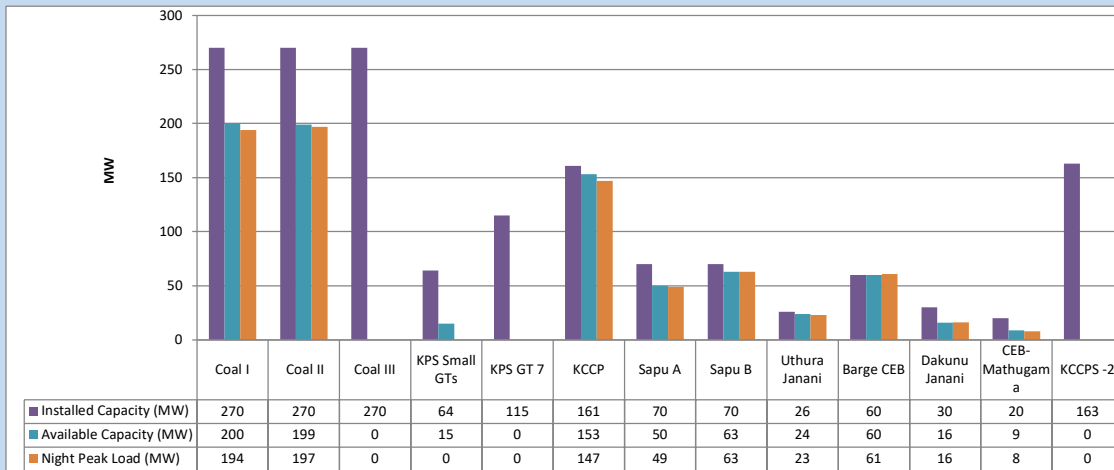
September 21, 2023



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

September 22, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

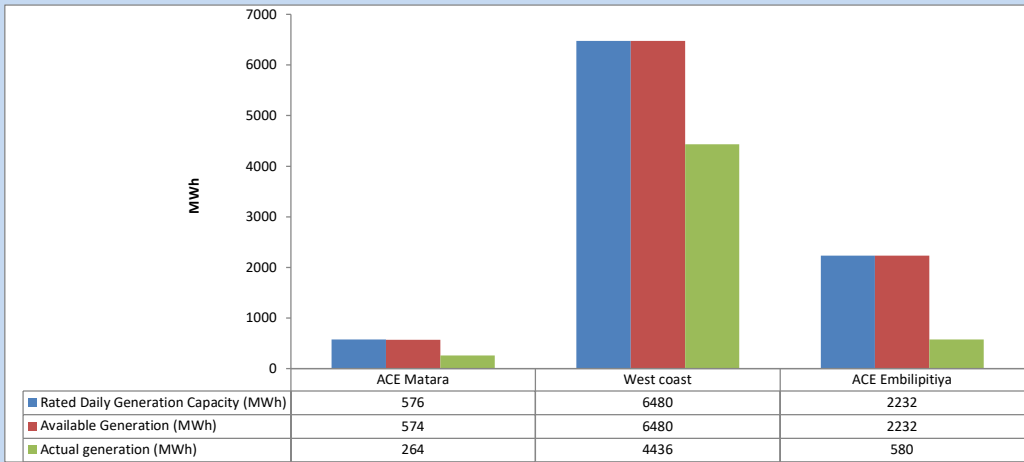


Plant availability is recorded at 6.00 am on

September 22, 2023

5. IPP owned Thermal Plant Dispatch

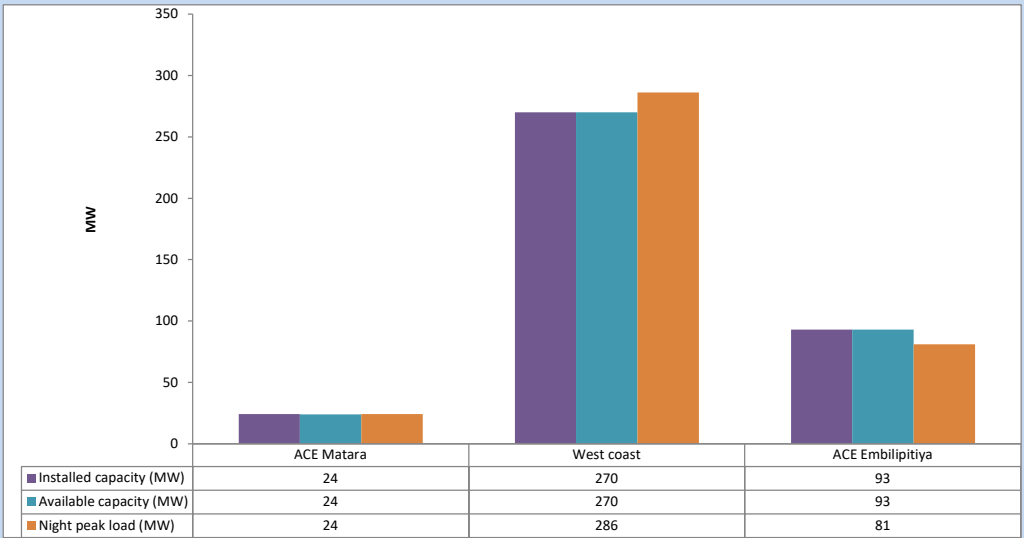
September 21, 2023



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

September 22, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

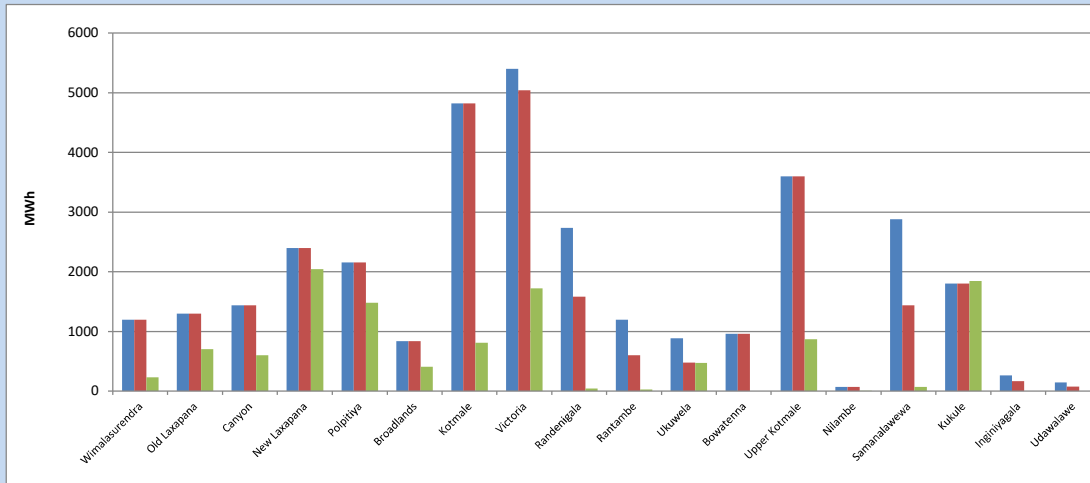


Plant availability is recorded at 6.00 am on

September 22, 2023

7. Major Hydro Plant Dispatch

September 21, 2023

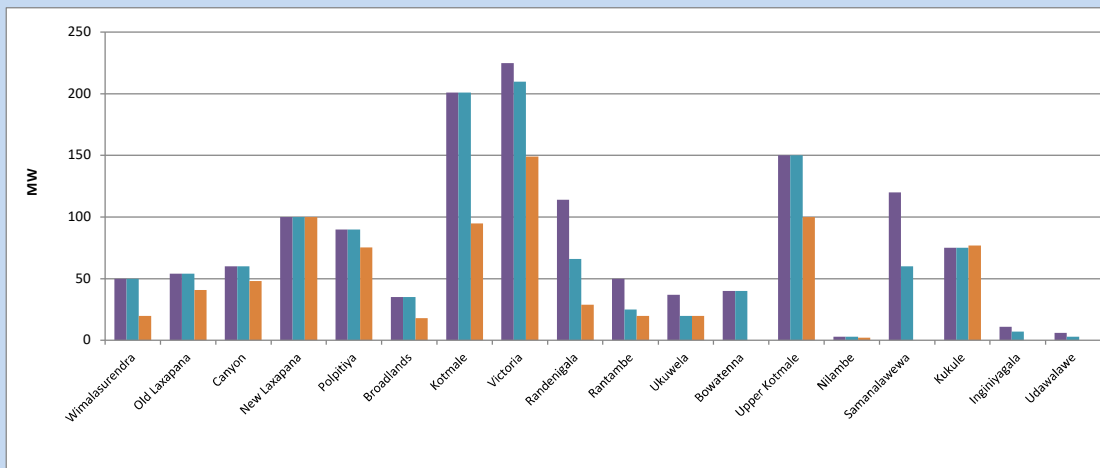


Available Generation is estimated based on plant availability at 6.00am on September 22, 2023
Broadlands power plant is operating in the Commissioning Stage

September 22, 2023

8. Major Hydro Plant Loading at Night Peak

September 21, 2023



Plant availability is recorded at 6.00 am on September 22, 2023
Broadlands power plant is operating in the Commissioning Stage

September 22, 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	20	231
Old Laxapana Canyon	54	54	41	703
New Laxapana	60	60	48	603
Polpitiya	100	100	100	2,046
Broadlands	90	90	75	1,480
Kotmale	35	35	18	407
Victoria	201	201	95	810
Randenigala	225	210	149	1,724
Rantambe	114	66	29	46
Ukuwela	50	25	20	30
Bowatenna	37	20	20	474
Upper Kotmale	40	40	0	4
Nilambe	150	150	100	873
Samanalawewa	3	3	2	7
Kukule	120	60	0	73
Inginiyagala	75	75	77	1,847
Udawalawe	11	7	0	0
Puttalam Coal I	6	3	0	0
Puttalam Coal II	270	200	194	4,739
Puttalam Coal III	270	199	197	4,749
KPS Small GTs	270	0	0	0
KPS GT 7	64	15	0	0
KCCP	115	0	0	0
Sapugaskanda A	161	153	147	3,605
Sapugaskanda B	70	50	49	1,115
Uthura Janani	70	63	63	1,460
Barge CEB	26	24	23	562
CEB-Hambantota	60	60	61	1,449
CEB-Mathugama	30	16	16	93
ACE Matara	20	9	8	31
Asia Power	24	24	24	264
KCCPS -2	50	0	0	0
West Coast	163	0	0	0
Nothern Power	270	270	286	4,436
ACE Embilipitiya	36	0	0	0
Total	93	93	81	580
	3,483	2,425	2,134	39,587

Plant availability is the availability recorded at 6 am on

September 22, 2023

10. Contribution to the Night Peak in MW

September 21, 2023

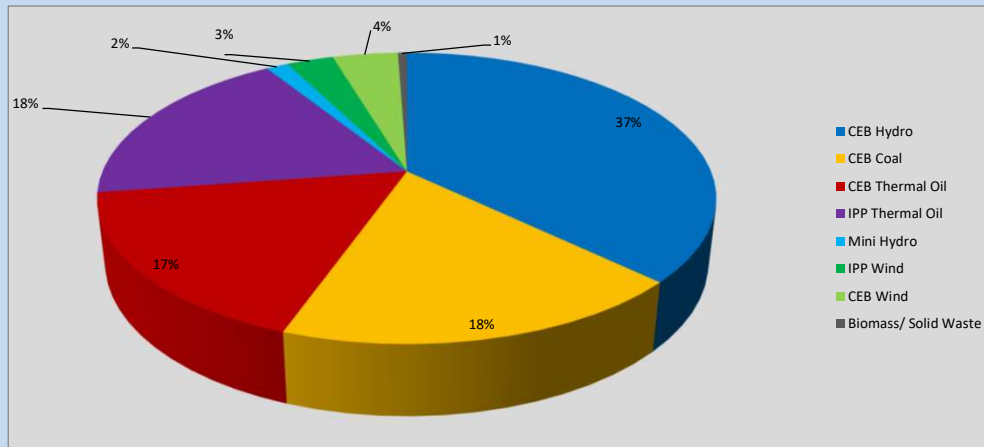


Table 06

CEB Hydro	790	MW
CEB Coal	391	MW
CEB Thermal Oil	367	MW
IPP Thermal Oil	391	MW
Mini Hydro (Telemetered)	29	MW
IPP Wind	62.5	MW
CEB Wind	86.8	MW
Biomass/ Solid Waste	12	MW

Recorded Peak Demand Data

Table 07

Night Peak*	2,129	MW
Day Peak Maximum Demand	1,918	MW
Day Peak Minimum Demand	1,589	MW
Off Peak Minimum Demand	1,191	MW

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

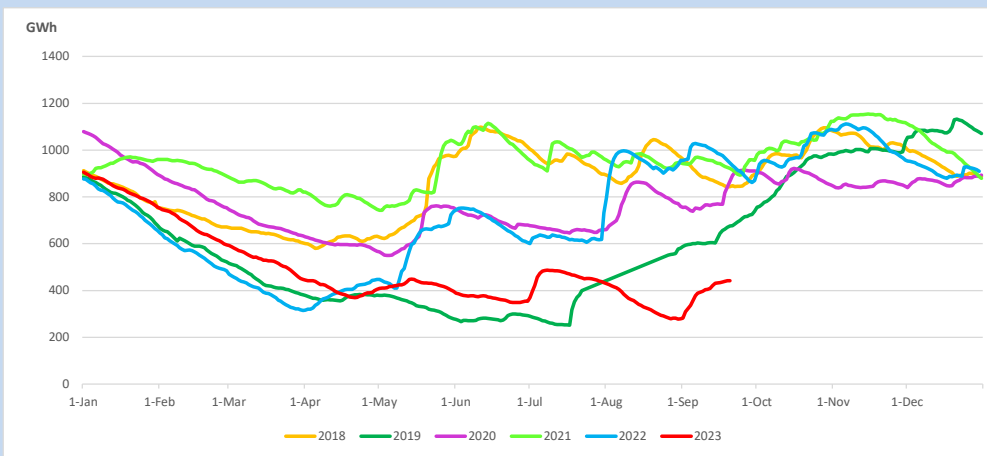
Reservoir Levels -

as at 06.00 Hr on September 22, 2023

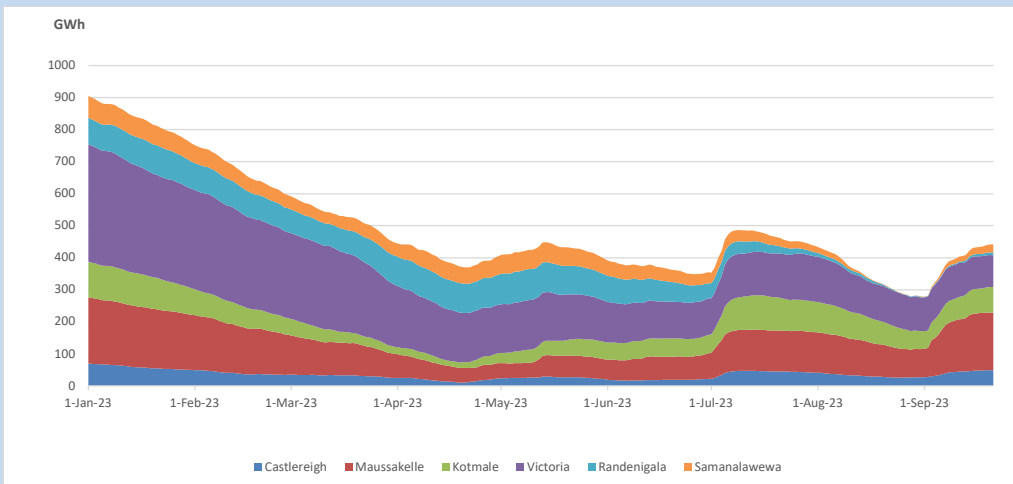


Total Reservoir Level 441.3 GWh
% of Total capacity 36.7%

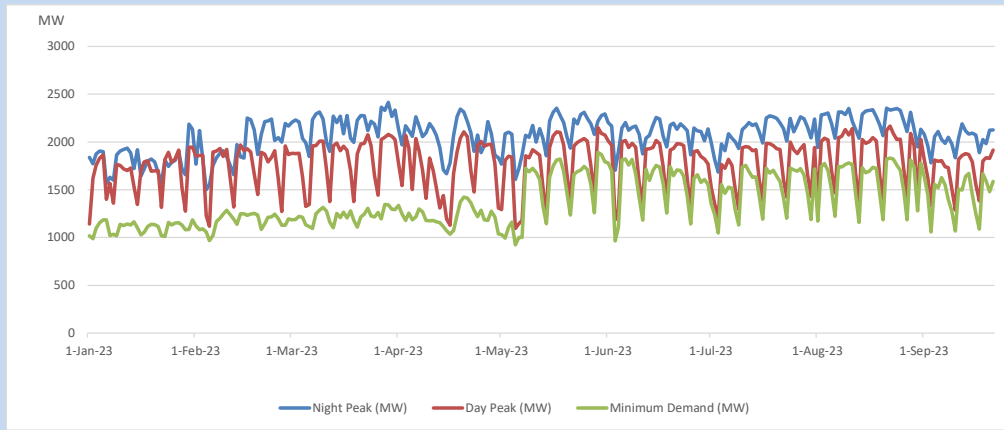
11. Comparison of Total Reservoir Storage Levels with Past Years



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



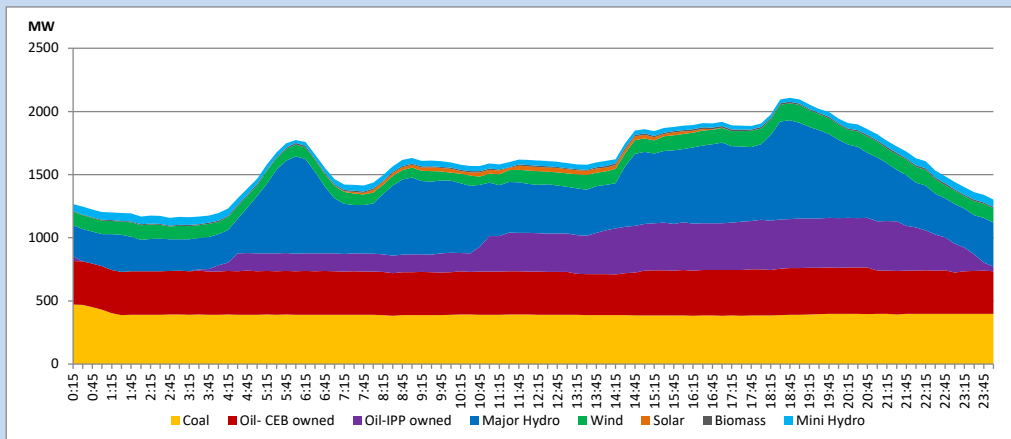
13. Variation of Demand during the current year



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

14. Daily Load Curve

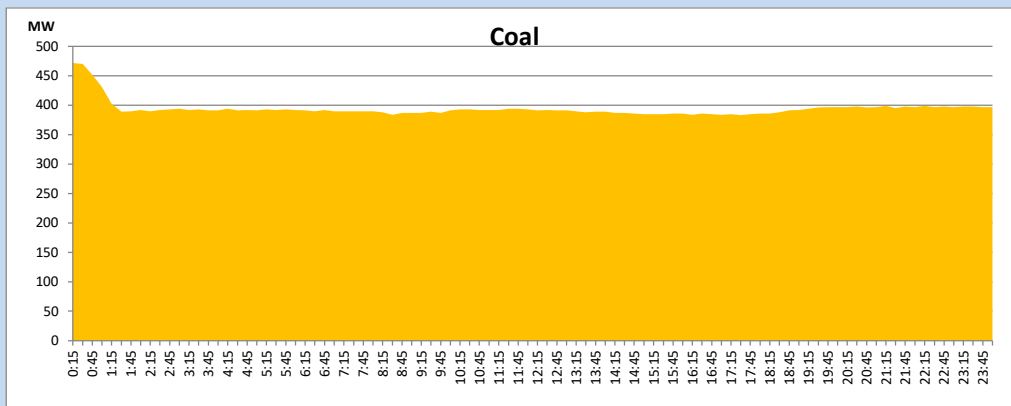
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Solar and wind data is based on Telemetered Power Stations only

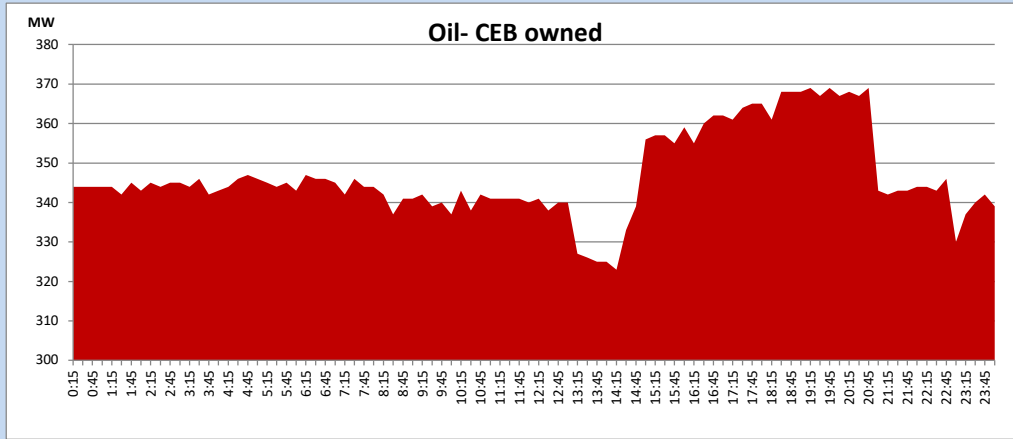
Coal Generation during

September 21, 2023



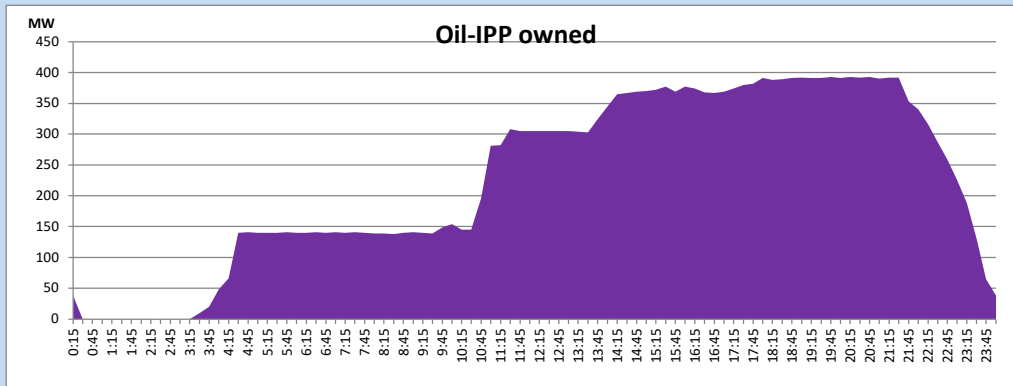
CEB Oil Plant Generation during

September 21, 2023



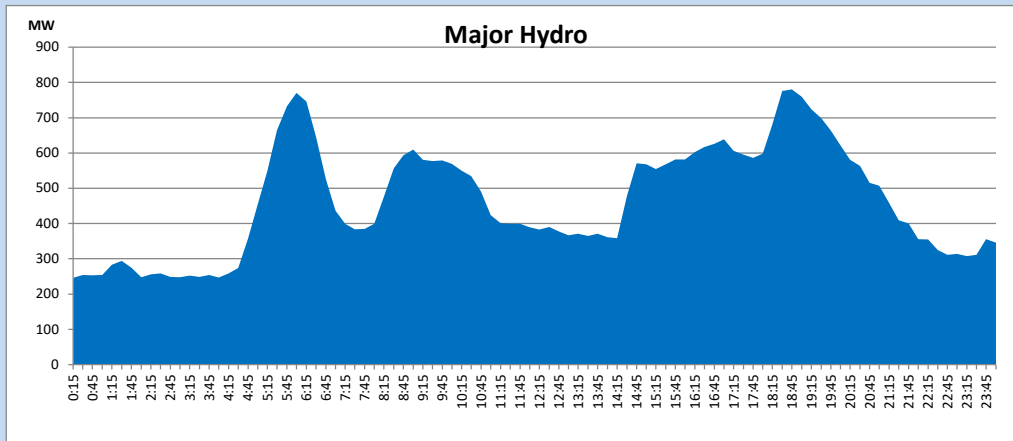
IPP Oil Plant Generation during

September 21, 2023



Major Hydro Generation during

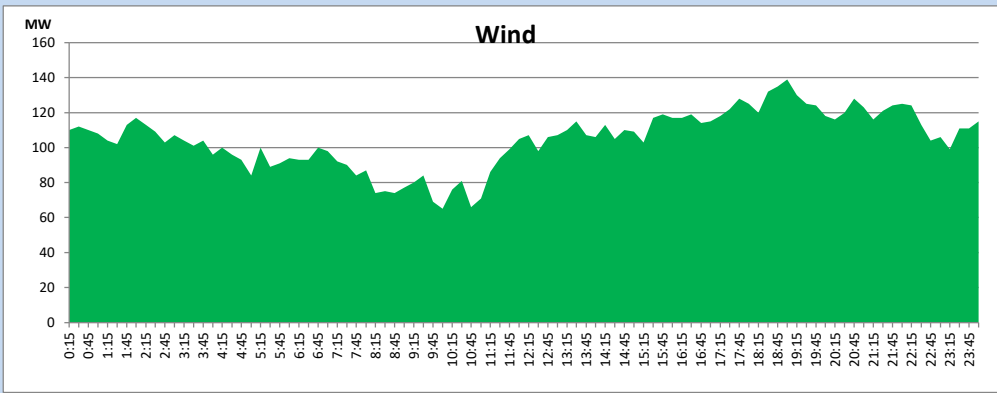
September 21, 2023



Wind Generation during

September 21, 2023

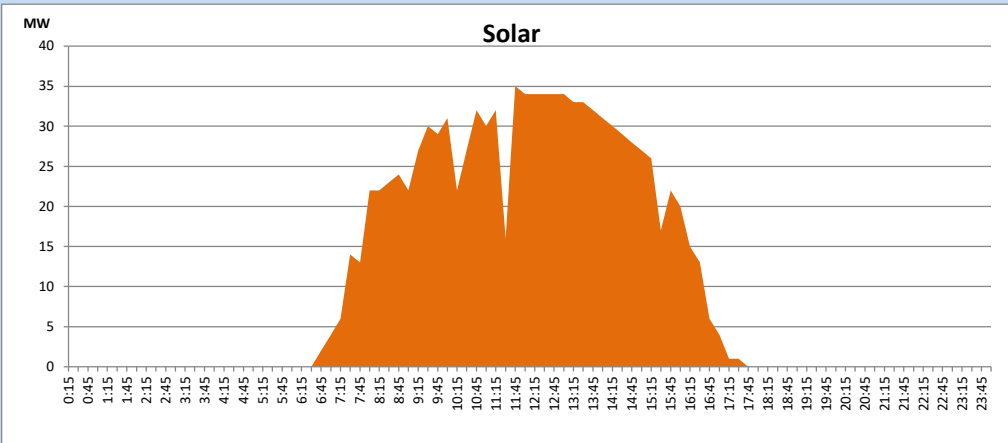
Based on Telemetered Power Stations only



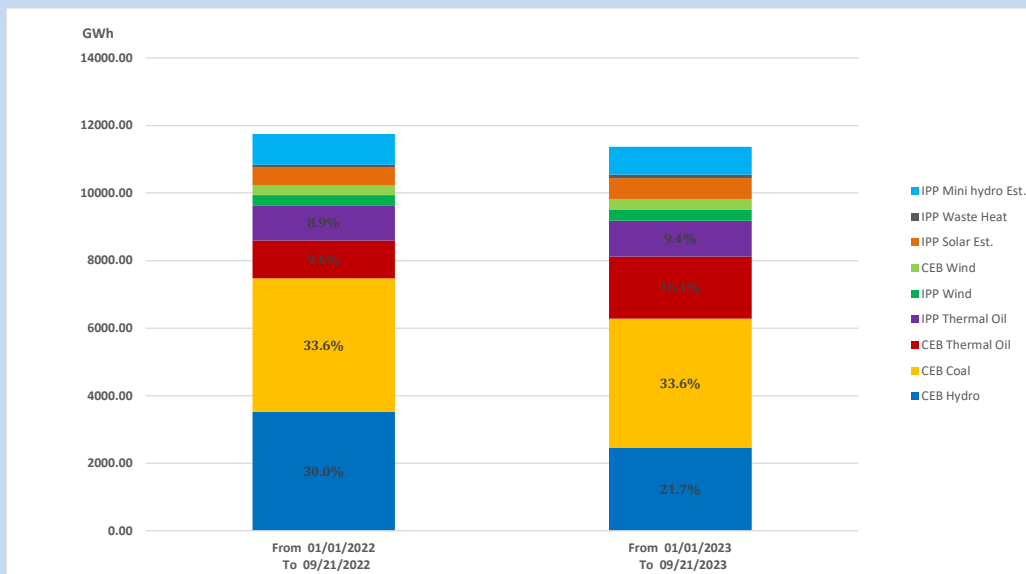
Solar Generation during

September 21, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch

From 01/01/2022 To 09/21/2022

11747 GWh

From 01/01/2023 To 09/21/2023

11371 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 21, 2023

- 1) Victoria Unit 01(which was the frequency controlling machine at the time) tripped at 14:11hrs due to high temperature at generator thrust bearing pad. Consequently, 59MW got rejected from the system and the system recovered with the operation of UFLS Stage I. All affected feeders were normalized by 14:21hrs. Victoria Unit 01 resumed generation at 15:36hrs.