

Generation and Reservoirs Statistics

August 16, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

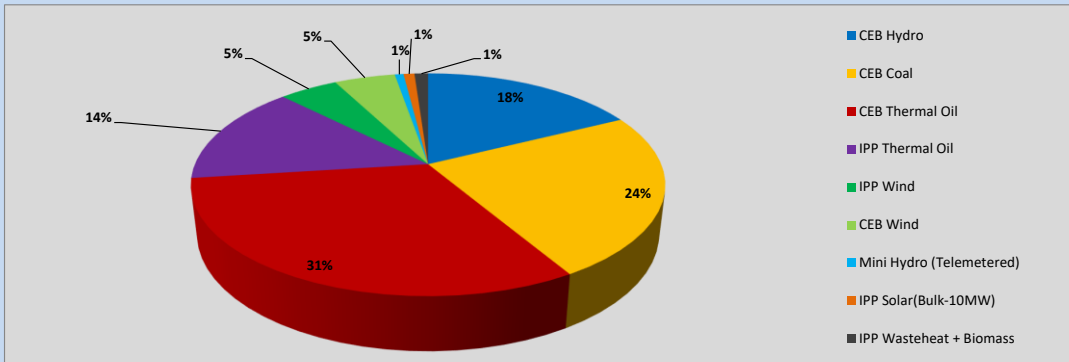


Table 01

	Generation (MWh)
CEB Hydro	7,728
CEB Coal	10,446
CEB Thermal Oil	13,822
IPP Thermal Oil	6,369
IPP Wind	2,096
CEB Wind	2,177
Mini Hydro (Telemetered)	312
IPP Solar (Bulk)	391
IPP Waste heat + Biomass	486
Total Generation (Excluding estimated figures)	43,827
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	3458
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1650
Total Generation (Including estimated figures)	49,239

* 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

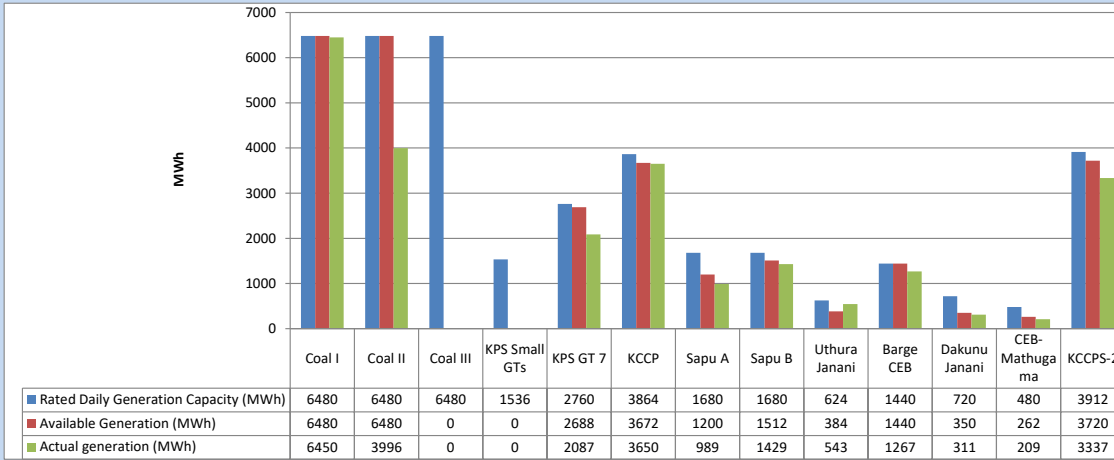
Category	Dispatch (GWh)	
CEB Hydro	153	22.94%
CEB Coal	141	21.16%
CEB Thermal Oil	208	31.17%
IPP Thermal	96	14.45%
SPP Wind	24	3.61%
CEB Wind	25	3.72%
Mini Hydro (Telemetered)	5	0.82%
IPP Solar(Bulk-10MW)	6	0.88%
IPP Waste heat + BMP	8	1.26%
Total	666	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,200	24.90%
CEB Coal	3,391	38.38%
CEB Thermal Oil	1,511	17.11%
IPP Thermal	900	10.19%
SPP Wind	234	2.65%
CEB Wind	241	2.73%
Mini Hydro (Telemetered)	207	2.34%
IPP Solar(Bulk-10MW)	69	0.78%
IPP Waste heat	81	0.92%
Total	8,834	

3. CEB owned Thermal Plant Dispatch

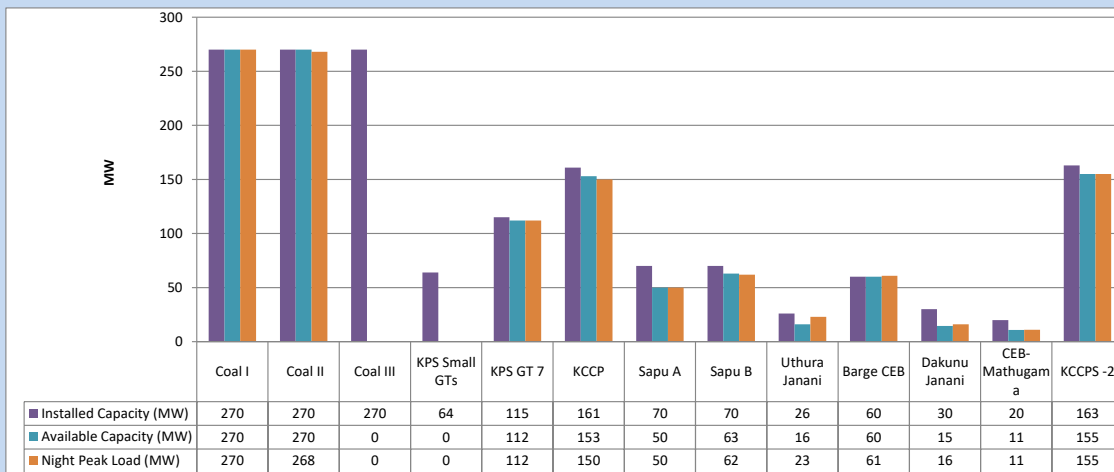
August 16, 2023



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

August 17, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

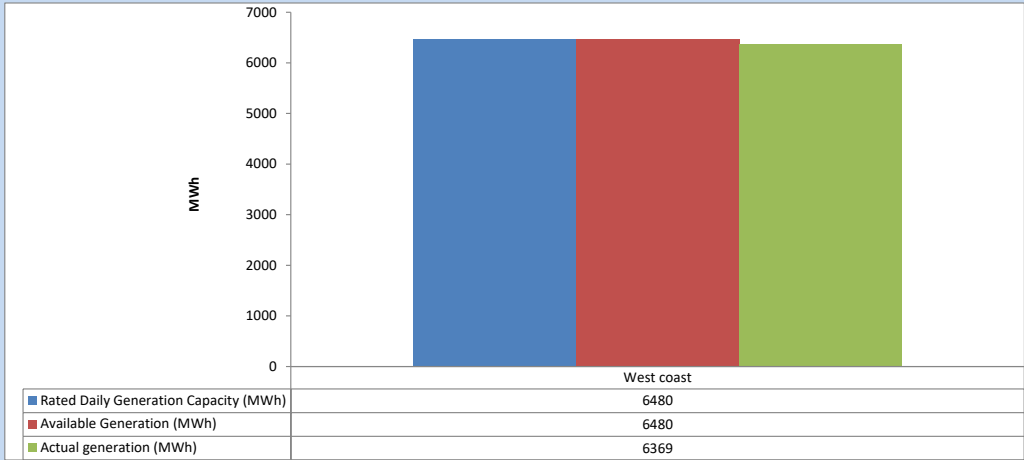


Plant availability is recorded at 6.00 am on

August 17, 2023

5. IPP owned Thermal Plant Dispatch

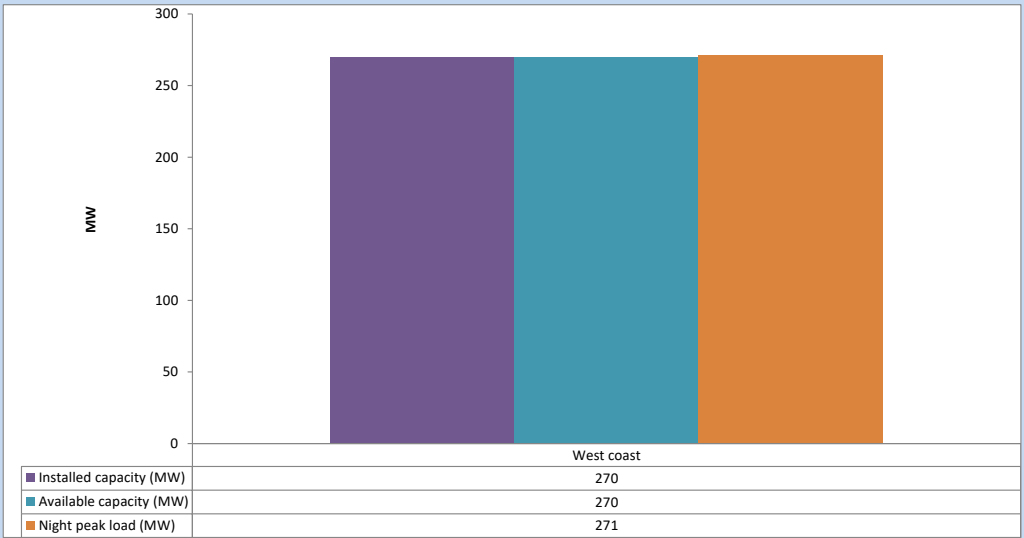
August 16, 2023



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

August 17, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

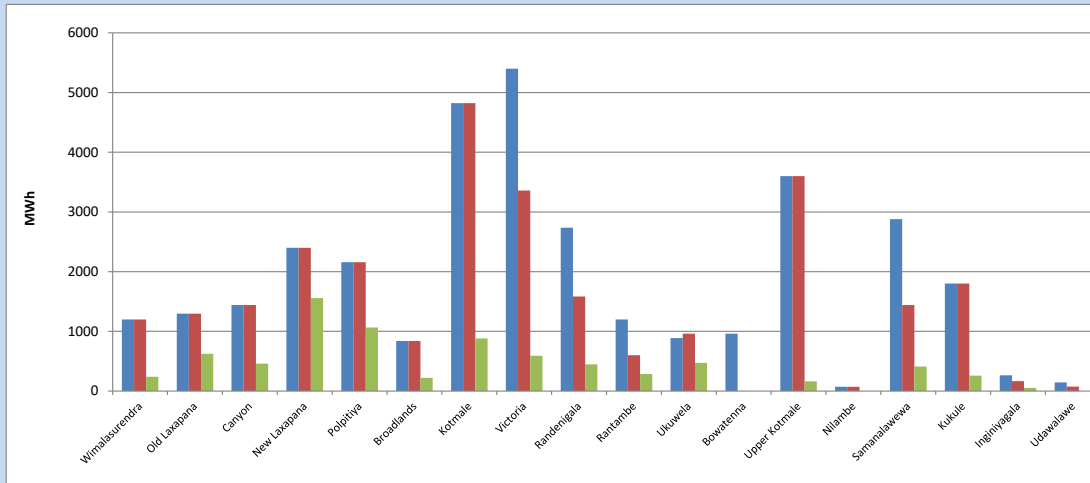


Plant availability is recorded at 6.00 am on

August 17, 2023

7. Major Hydro Plant Dispatch

August 16, 2023

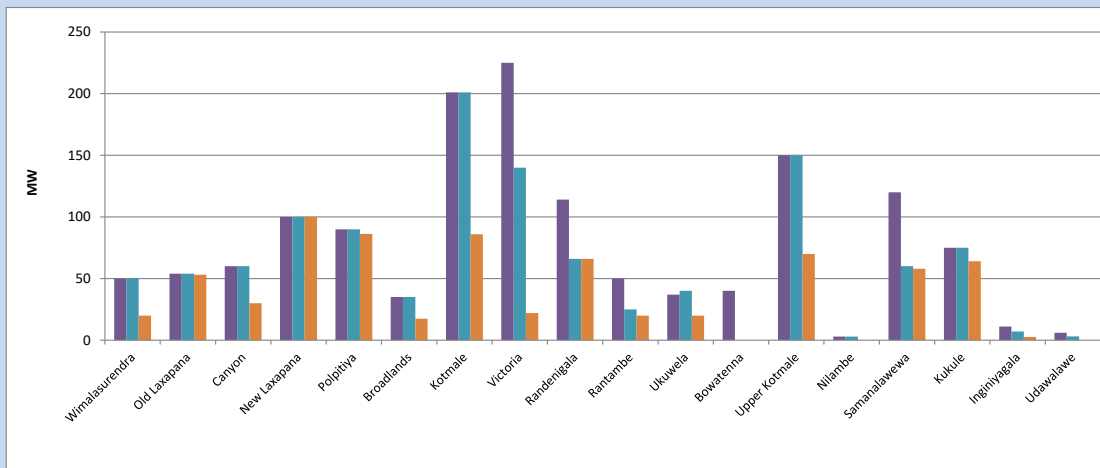


Available Generation is estimated based on plant availability at 6.00am on August 17, 2023
Broadlands power plant is operating in the Commissioning Stage

August 17, 2023

8. Major Hydro Plant Loading at Night Peak

August 16, 2023



Plant availability is recorded at 6.00 am on August 17, 2023
Broadlands power plant is operating in the Commissioning Stage

August 17, 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	20	240
Old Laxapana Canyon	54	54	53	625
New Laxapana	60	60	30	461
Polpitiya	100	100	100	1,556
Broadlands	90	90	86	1,064
Kotmale	35	35	17	221
Kotmale	201	201	86	880
Victoria	225	140	22	590
Randenigala	114	66	66	448
Rantambe	50	25	20	285
Ukuwela	37	40	20	473
Bowatenna	40	0	0	0
Upper Kotmale	150	150	70	163
Nilambe	3	3	0	0
Samanalawewa	120	60	58	411
Kukule	75	75	64	257
Inginiyagala	11	7	3	54
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	270	6,450
Puttalam Coal II	270	270	268	3,996
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	0	0	0
KPS GT 7	115	112	112	2,087
KCCP	161	153	150	3,650
Sapugaskanda A	70	50	50	989
Sapugaskanda B	70	63	62	1,429
Uthura Janani	26	16	23	543
Barge CEB	60	60	61	1,267
CEB-Hambantota	30	15	16	311
CEB-Mathugama	20	11	11	209
ACE Matara	24	0	0	0
Asia Power	50	0	0	0
KCCPS -2	163	155	155	3,337
West Coast	270	270	271	6,369
Nothern Power	36	0	0	0
ACE Embilipitiya	93	0	0	0
Total	3,483	2,604	2,335	43,827

Plant availability is the availability recorded at 6 am on

August 17, 2023

10. Contribution to the Night Peak in MW

August 16, 2023

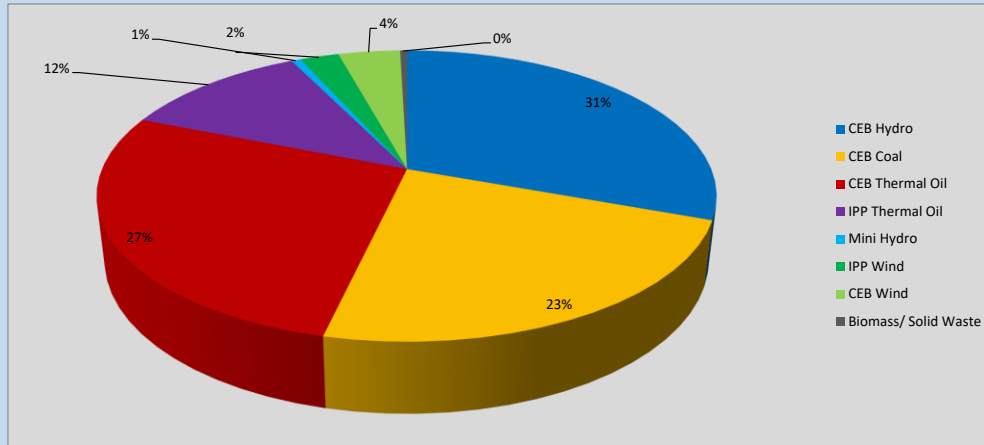


Table 06

CEB Hydro	712	MW
CEB Coal	538	MW
CEB Thermal Oil	640	MW
IPP Thermal Oil	271	MW
Mini Hydro (Telemetered)	14	MW
IPP Wind	56.3	MW
CEB Wind	89.9	MW
Biomass/ Solid Waste	10	MW

Recorded Peak Demand Data

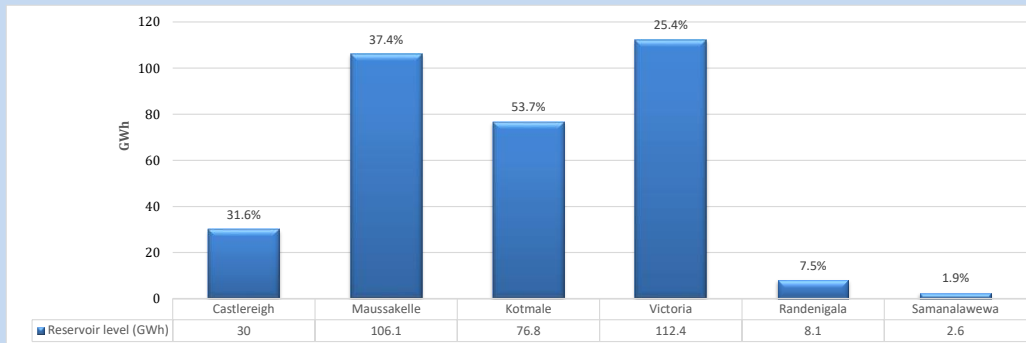
Table 07

Night Peak*	2,331	MW
Day Peak Maximum Demand	2,004	MW
Day Peak Minimum Demand	1,696	MW
Off Peak Minimum Demand	1,361	MW

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

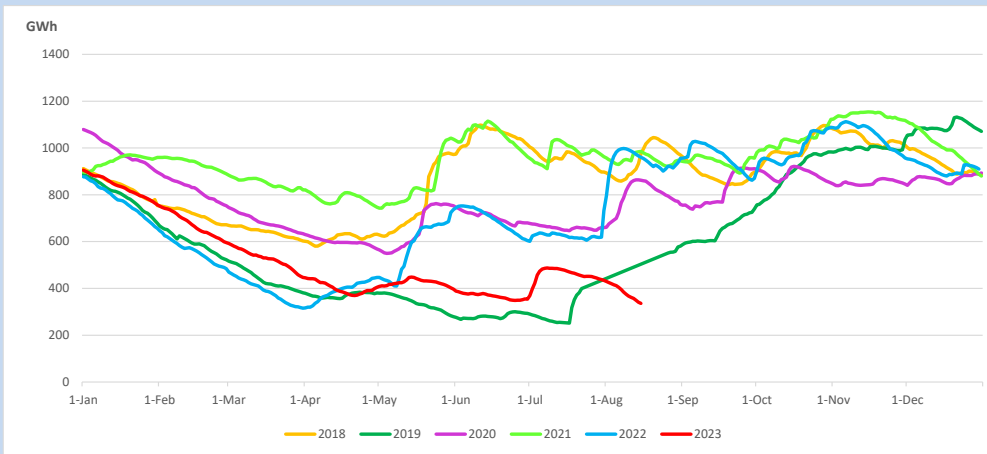
Reservoir Levels -

as at 06.00 Hr on August 17, 2023

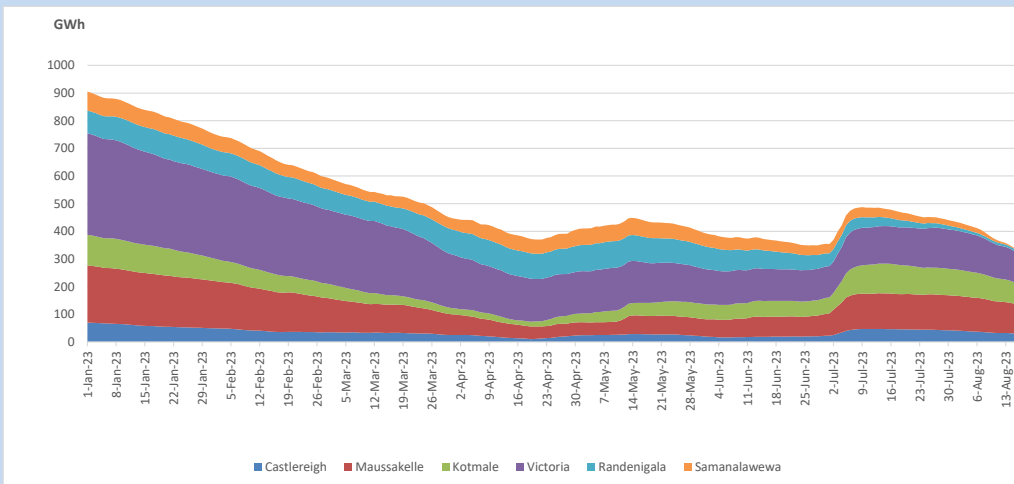


Total Reservoir Level 336 GWh
 % of Total capacity 27.8%

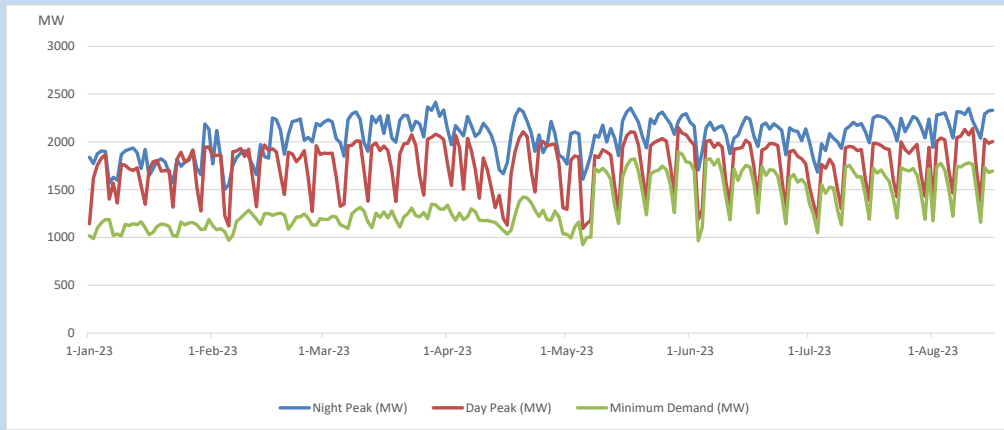
11. Comparison of Total Reservoir Storage Levels with Past Years



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



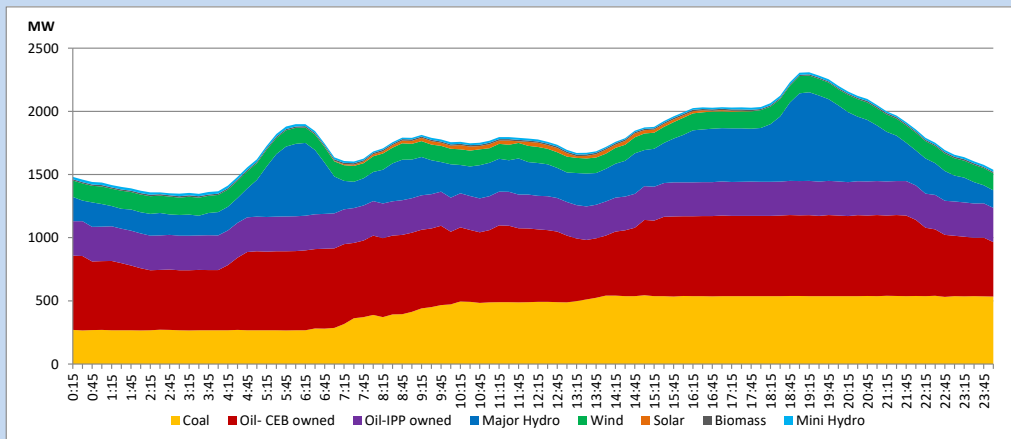
13. Variation of Demand during the current year



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

14. Daily Load Curve

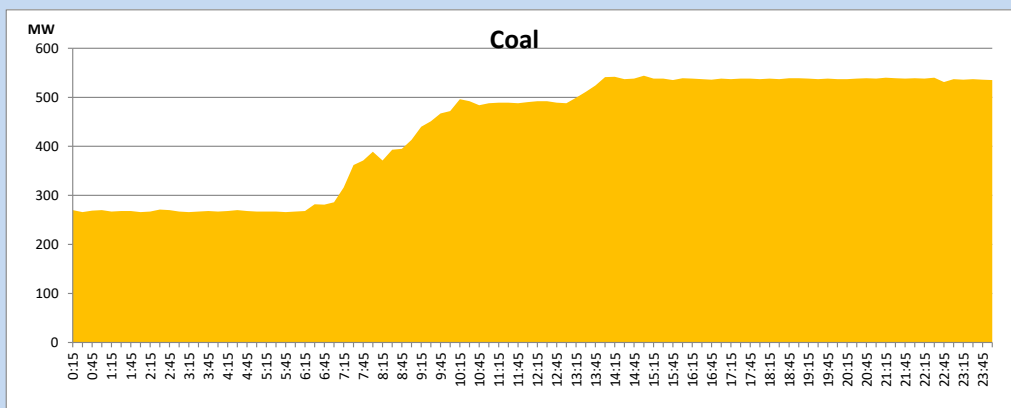
August 16, 2023



Solar and wind data is based on Telemetered Power Stations only

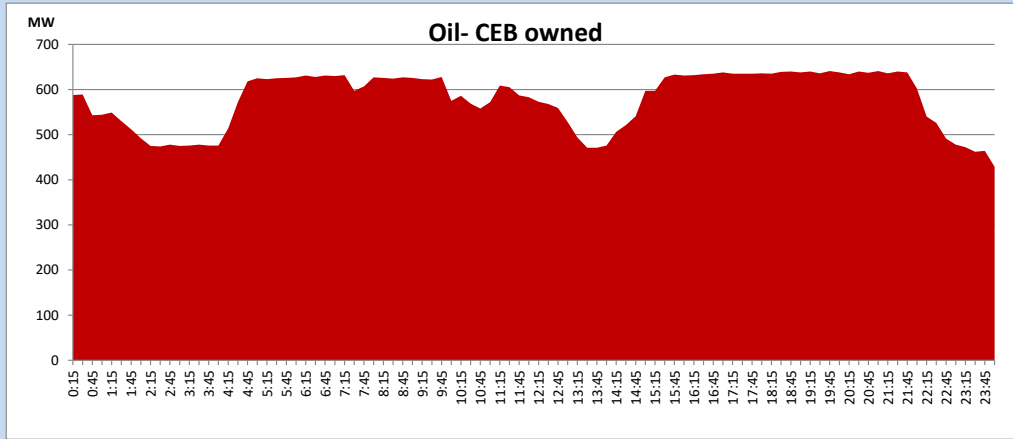
Coal Generation during

August 16, 2023



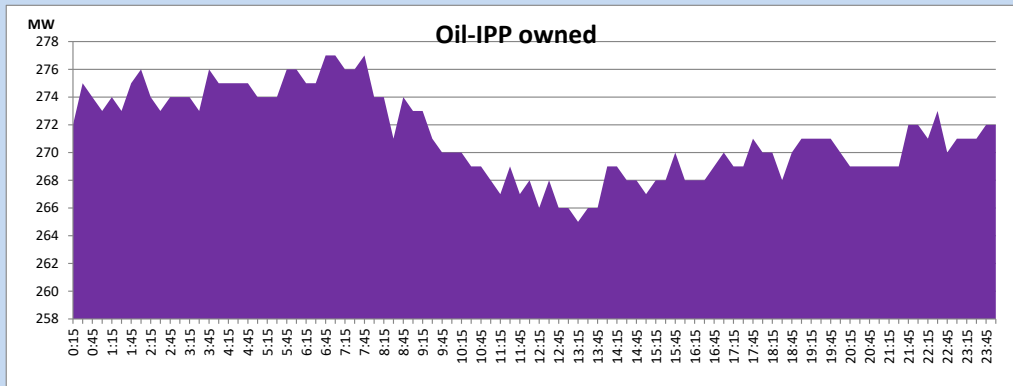
CEB Oil Plant Generation during

August 16, 2023



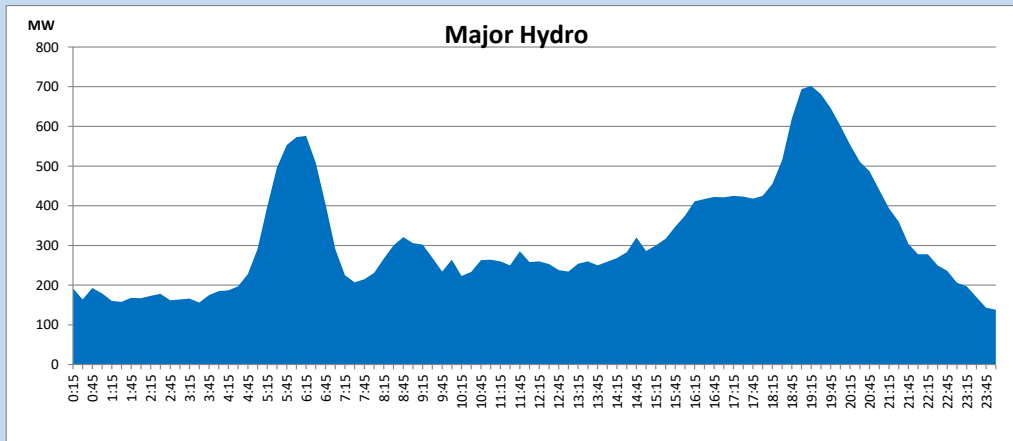
IPP Oil Plant Generation during

August 16, 2023



Major Hydro Generation during

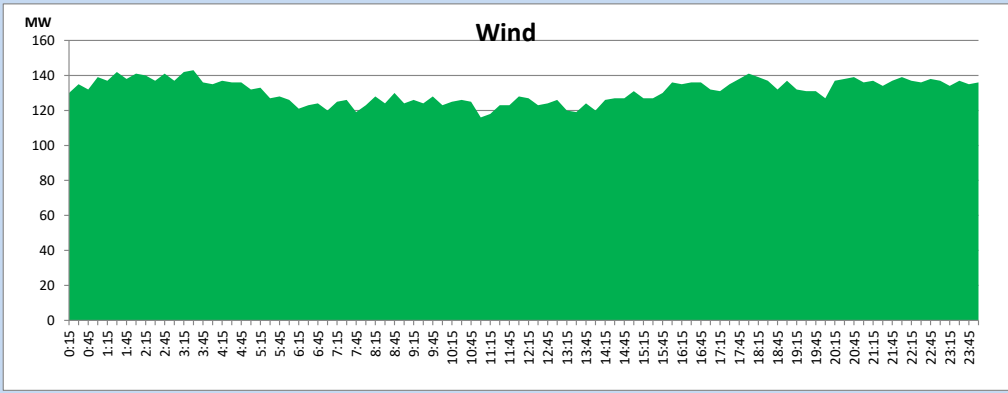
August 16, 2023



Wind Generation during

August 16, 2023

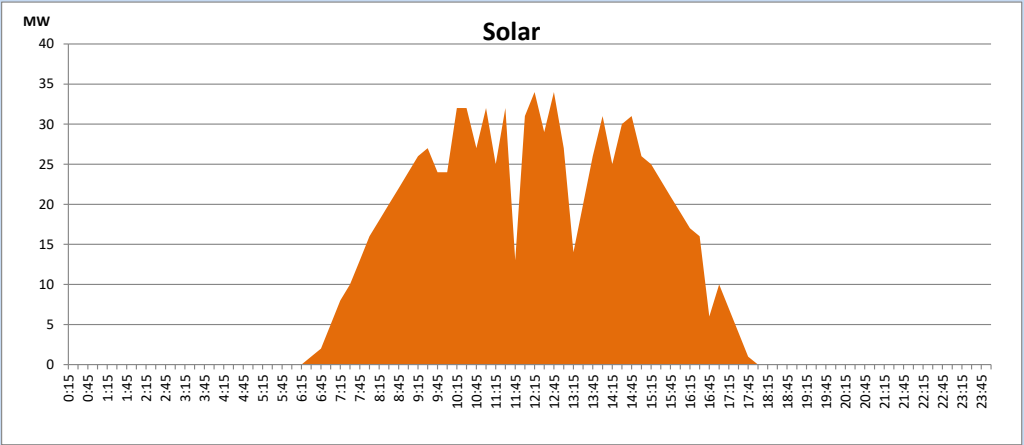
Based on Telemetered Power Stations only



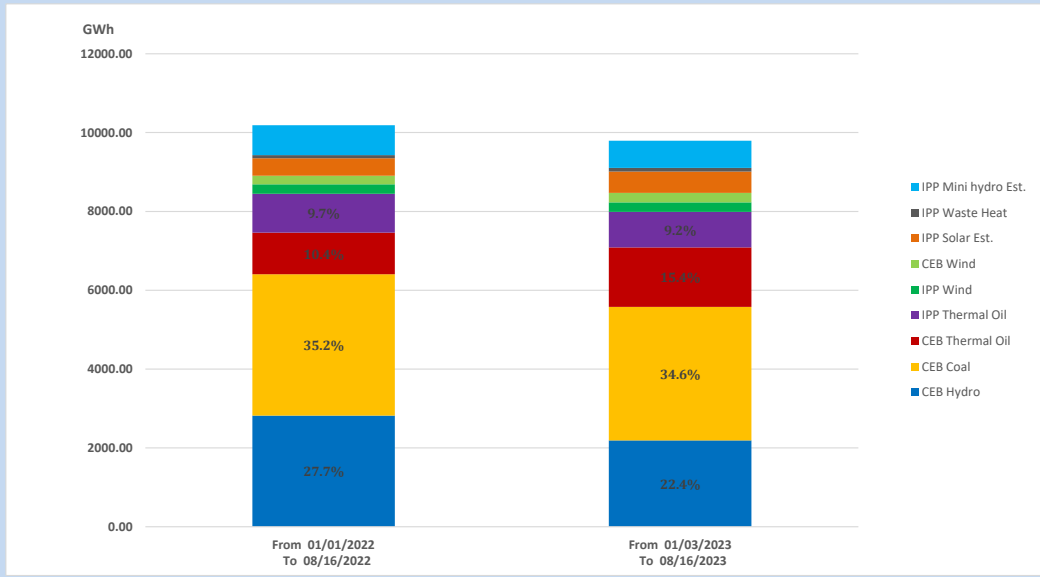
Solar Generation during

August 16, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch

From 01/01/2022 To 08/16/2022

10186 GWh

From 01/01/2023 To 08/16/2023

9796 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 16, 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) LVPS Unit 02 synchronized at 06:19hrs and reached 270MW(net) at 14:00hrs.
- 3) Hambanthota 220/132kV T/F 02 tripped from both ends at 17:02hrs due to the operation of differential protection. The T/F was normalized at 17:35hrs.