

Generation and Reservoirs Statistics

August 15, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

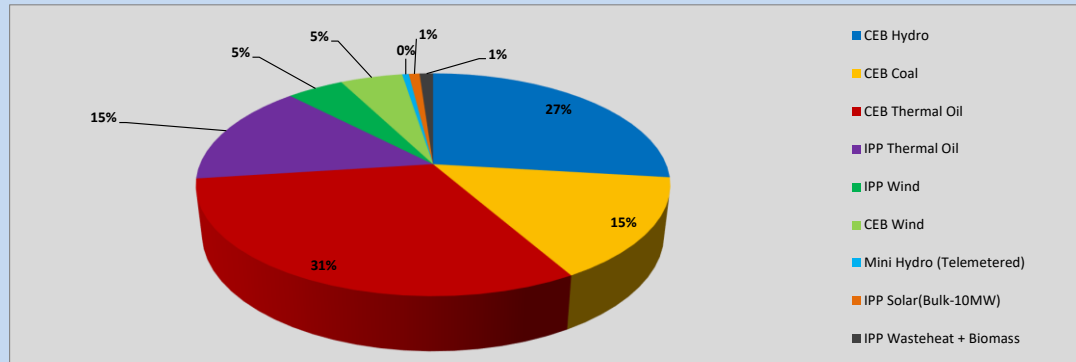


Table 01

	Generation (MWh)
CEB Hydro	11,684
CEB Coal	6,441
CEB Thermal Oil	13,556
IPP Thermal Oil	6,441
IPP Wind	2,017
CEB Wind	2,207
Mini Hydro (Telemetered)	234
IPP Solar (Bulk)	380
IPP Waste heat + Biomass	479
Total Generation (Excluding estimated figures)	43,439
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	3536
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1650
Total Generation (Including estimated figures)	48,929

* 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

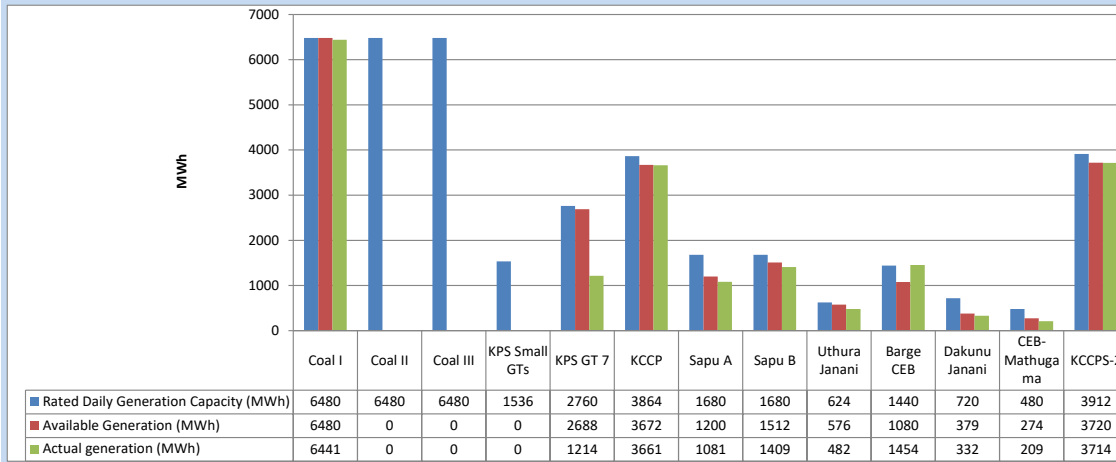
Category	Dispatch (GWh)	
CEB Hydro	145	23.31%
CEB Coal	130	20.97%
CEB Thermal Oil	194	31.15%
IPP Thermal	90	14.44%
SPP Wind	22	3.53%
CEB Wind	23	3.63%
Mini Hydro (Telemetered)	5	0.83%
IPP Solar(Bulk-10MW)	5	0.87%
IPP Waste heat + BMP	8	1.27%
Total	622	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,192	24.93%
CEB Coal	3,380	38.46%
CEB Thermal Oil	1,498	17.04%
IPP Thermal	894	10.17%
SPP Wind	232	2.64%
CEB Wind	239	2.72%
Mini Hydro (Telemetered)	206	2.35%
IPP Solar(Bulk-10MW)	69	0.78%
IPP Waste heat	81	0.92%
Total	8,790	

3. CEB owned Thermal Plant Dispatch

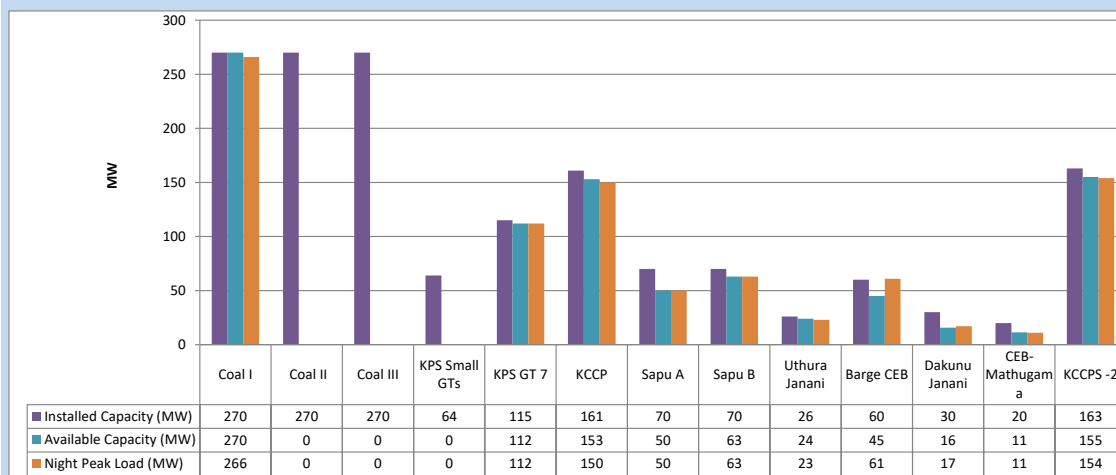
August 15, 2023



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

August 16, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

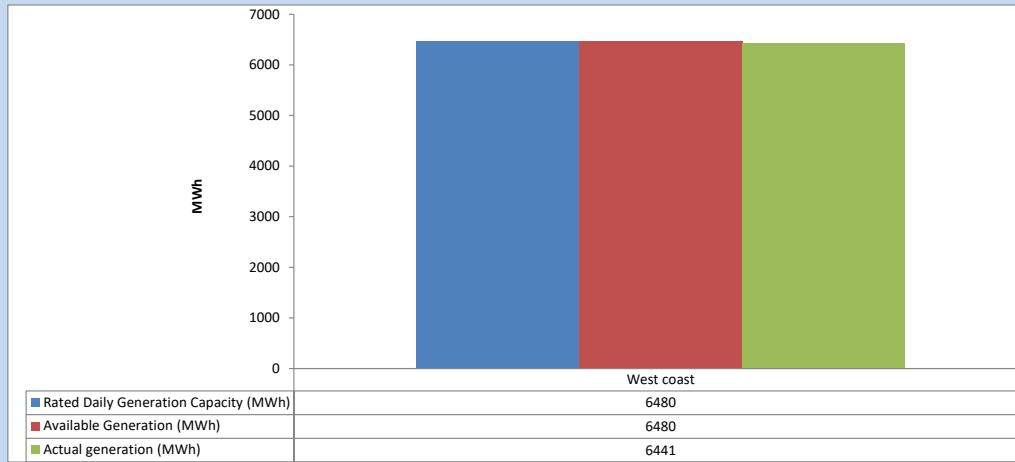


Plant availability is recorded at 6.00 am on

August 16, 2023

5. IPP owned Thermal Plant Dispatch

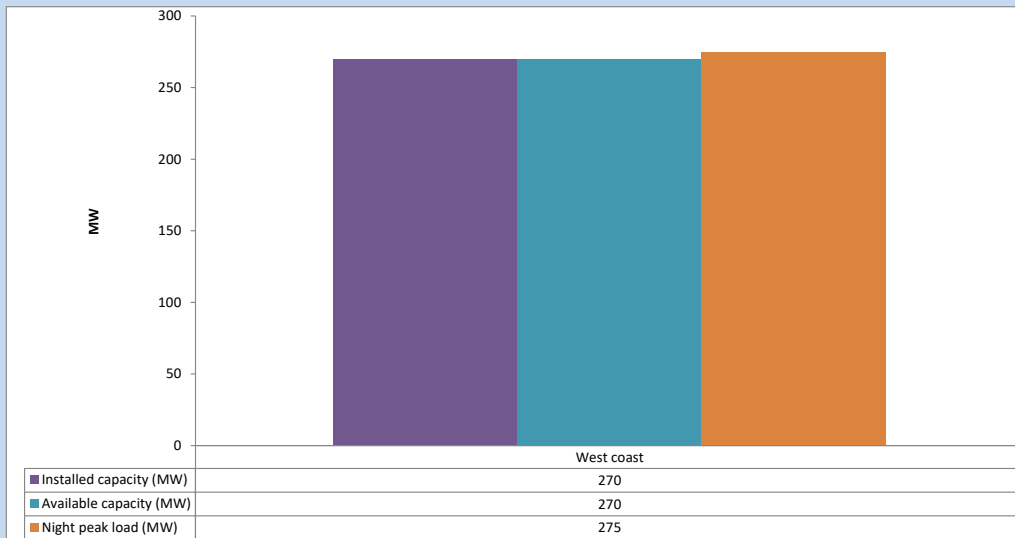
August 15, 2023



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

August 16, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

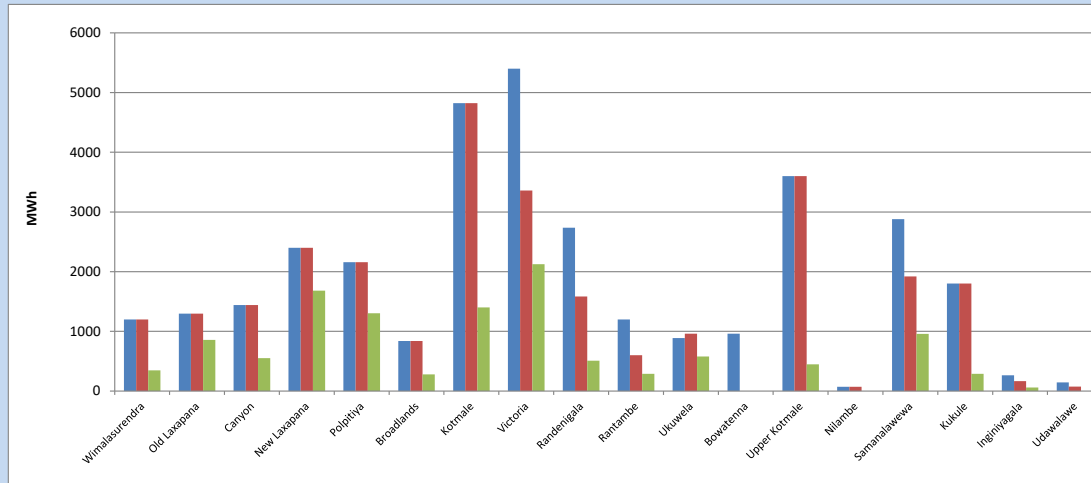


Plant availability is recorded at 6.00 am on

August 16, 2023

7. Major Hydro Plant Dispatch

August 15, 2023

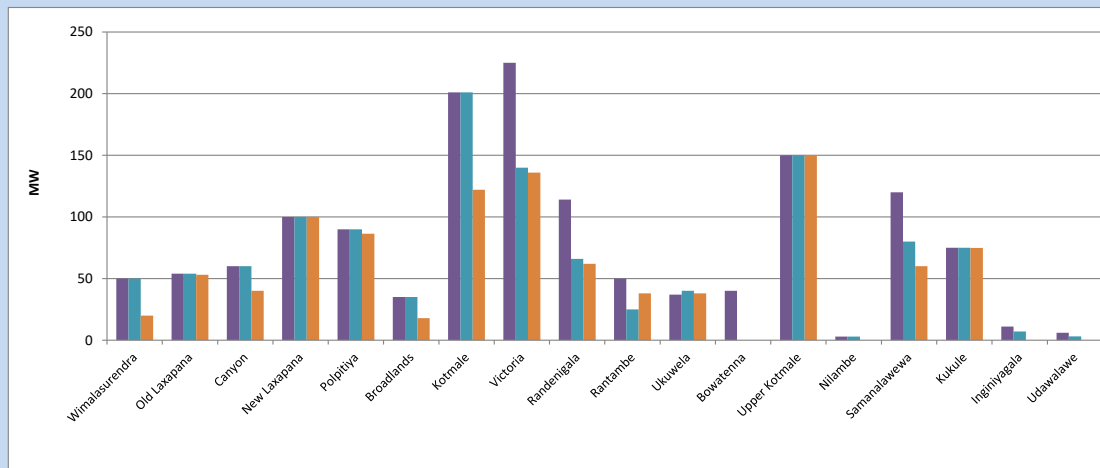


Available Generation is estimated based on plant availability at 6.00am on August 16, 2023
Broadlands power plant is operating in the Commissioning Stage

August 16, 2023

8. Major Hydro Plant Loading at Night Peak

August 15, 2023



Plant availability is recorded at 6.00 am on August 16, 2023
Broadlands power plant is operating in the Commissioning Stage

August 16, 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	346
Old Laxapana	54	54	53	857
Canyon	60	60	40	553
New Laxapana	100	100	100	1,683
Polpitiya	90	90	86	1,303
Broadlands	35	35	18	281
Kotmale	201	201	122	1,400
Victoria	225	140	136	2,124
Randenigala	114	66	62	510
Rantambe	50	25	38	290
Ukuwela	37	40	38	580
Bowatenna	40	0	0	0
Upper Kotmale	150	150	150	449
Nilambe	3	3	0	0
Samanalawewa	120	80	60	957
Kukule	75	75	75	290
Inginiyagala	11	7	0	61
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	266	6,441
Puttalam Coal II	270	0	0	0
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	0	0	0
KPS GT 7	115	112	112	1,214
KCCP	161	153	150	3,661
Sapugaskanda A	70	50	50	1,081
Sapugaskanda B	70	63	63	1,409
Uthura Janani	26	24	23	482
Barge CEB	60	45	61	1,454
CEB-Hambantota	30	16	17	332
CEB-Mathugama	20	11	11	209
ACE Matara	24	0	0	0
Asia Power	50	0	0	0
KCCPS -2	163	155	154	3,714
West Coast	270	270	275	6,441
Nothern Power	36	0	0	0
ACE Embilipitiya	93	0	0	0
Total	3,483	2,348	2,349	43,439

Plant availability is the availability recorded at 6 am on

August 16, 2023

10. Contribution to the Night Peak in MW

August 15, 2023

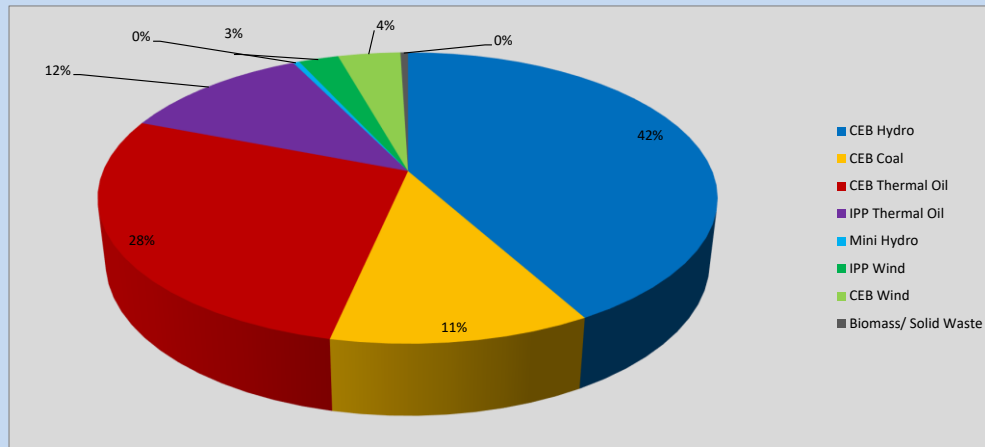


Table 06

CEB Hydro	975	MW
CEB Coal	266	MW
CEB Thermal Oil	641	MW
IPP Thermal Oil	275	MW
Mini Hydro (Telemetered)	9	MW
IPP Wind	58	MW
CEB Wind	90.5	MW
Biomass/ Solid Waste	11	MW

Recorded Peak Demand Data

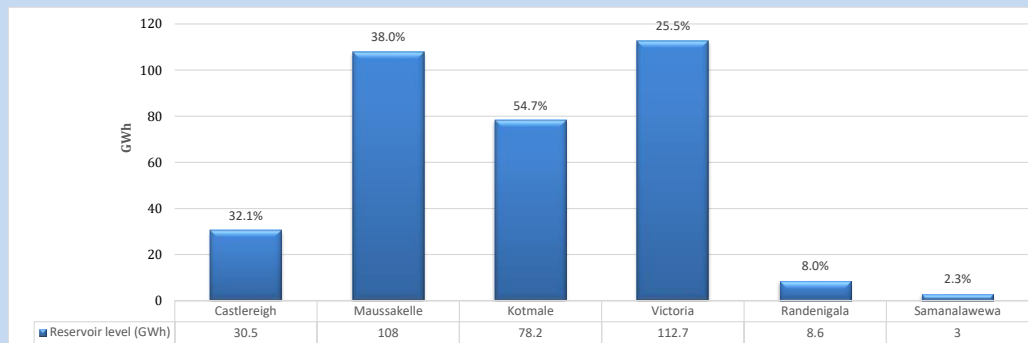
Table 07

Night Peak*	2,326	MW
Day Peak Maximum Demand	1,985	MW
Day Peak Minimum Demand	1,680	MW
Off Peak Minimum Demand	1,346	MW

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

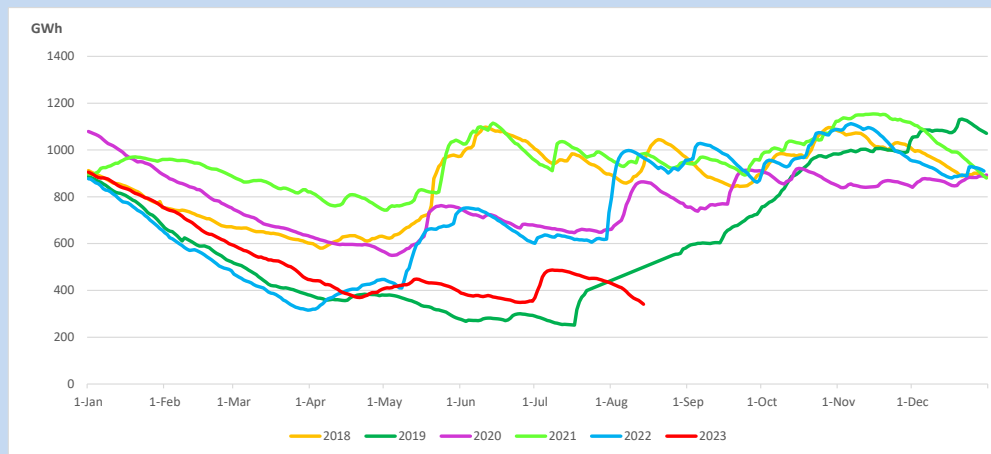
Reservoir Levels -

as at 06.00 Hr on August 16, 2023

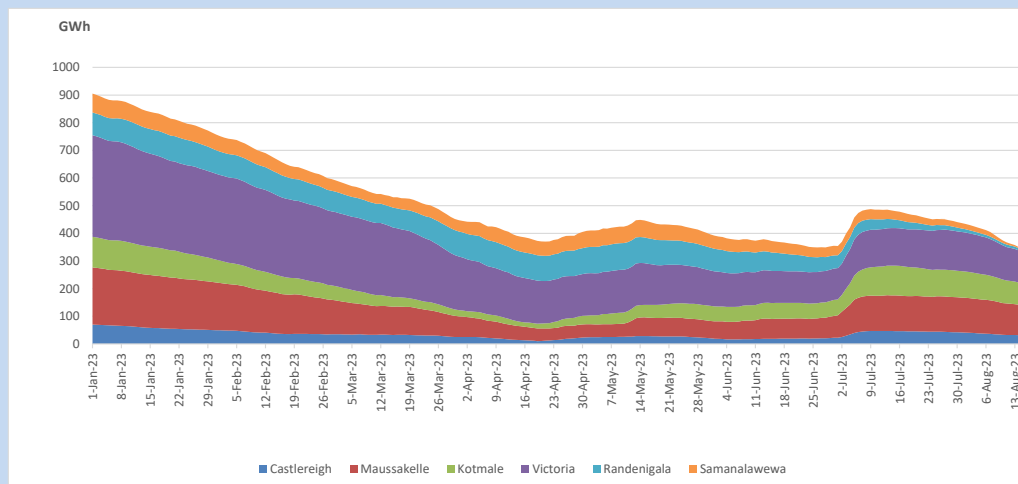


Total Reservoir Level 341 GWh
% of Total capacity 28.4%

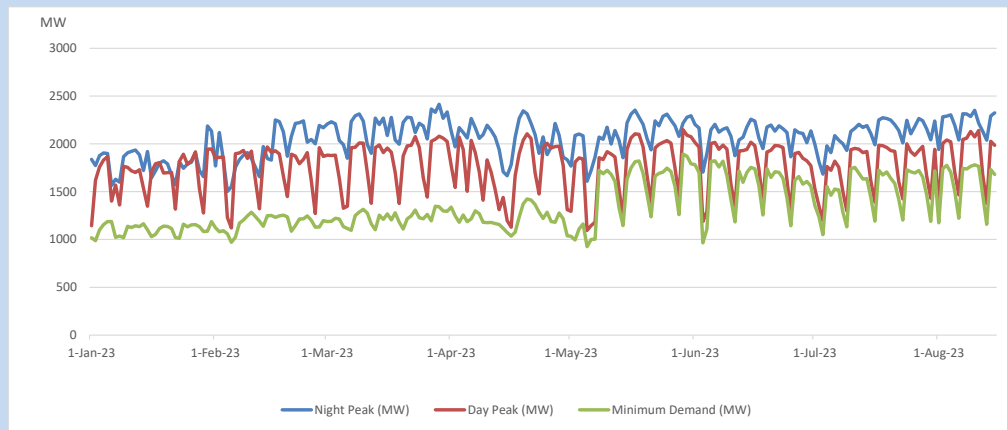
11. Comparison of Total Reservoir Storage Levels with Past Years



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



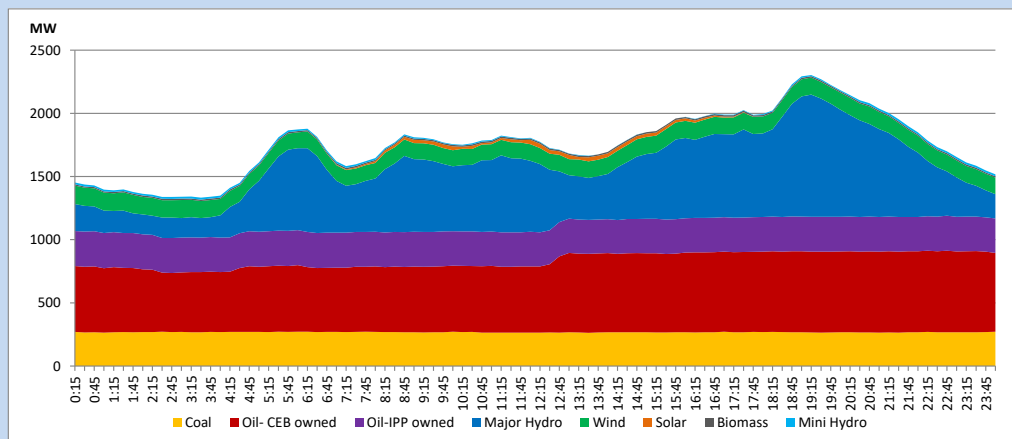
13. Variation of Demand during the current year



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

14. Daily Load Curve

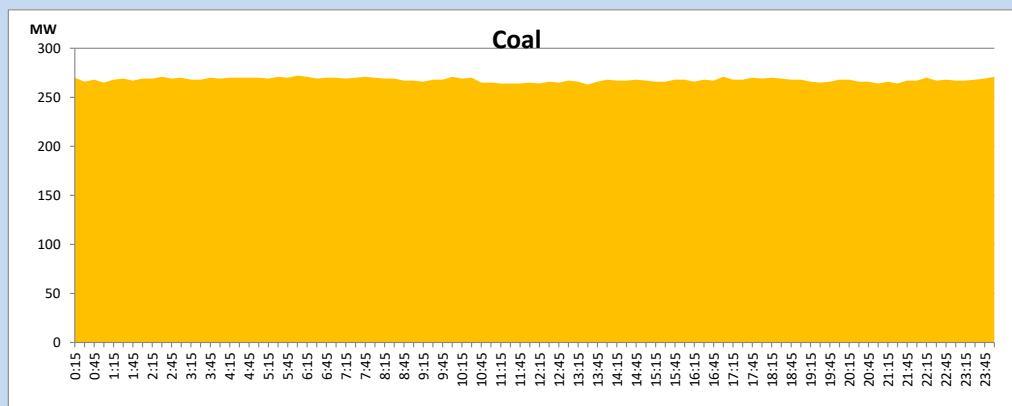
August 15, 2023



Solar and wind data is based on Telemetered Power Stations only

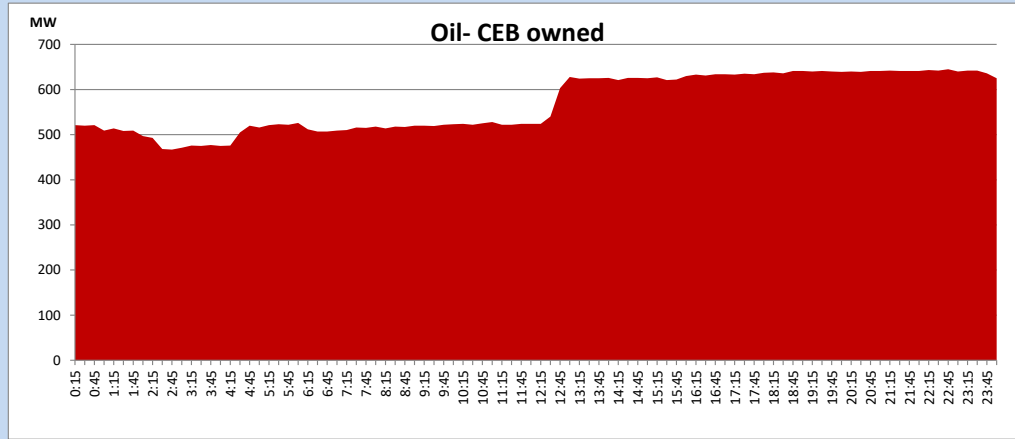
Coal Generation during

August 15, 2023



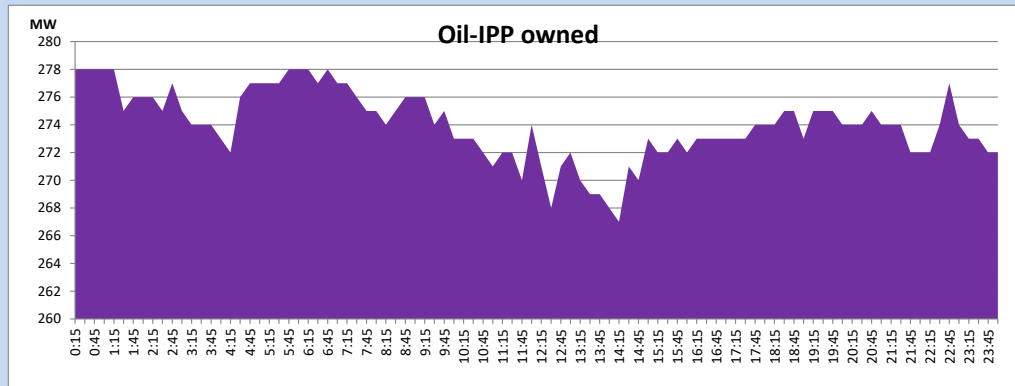
CEB Oil Plant Generation during

August 15, 2023



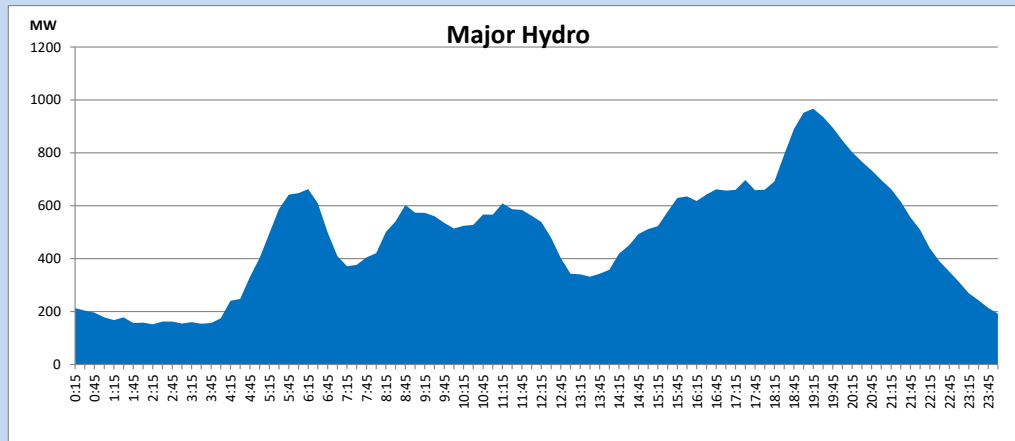
IPP Oil Plant Generation during

August 15, 2023



Major Hydro Generation during

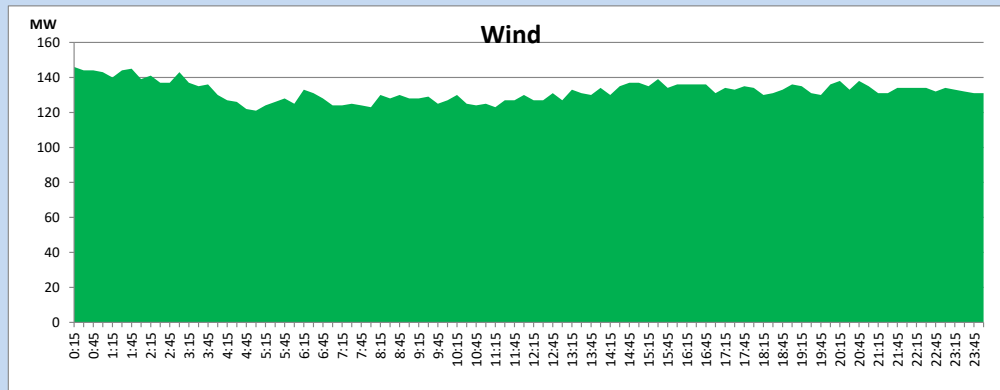
August 15, 2023



Wind Generation during

August 15, 2023

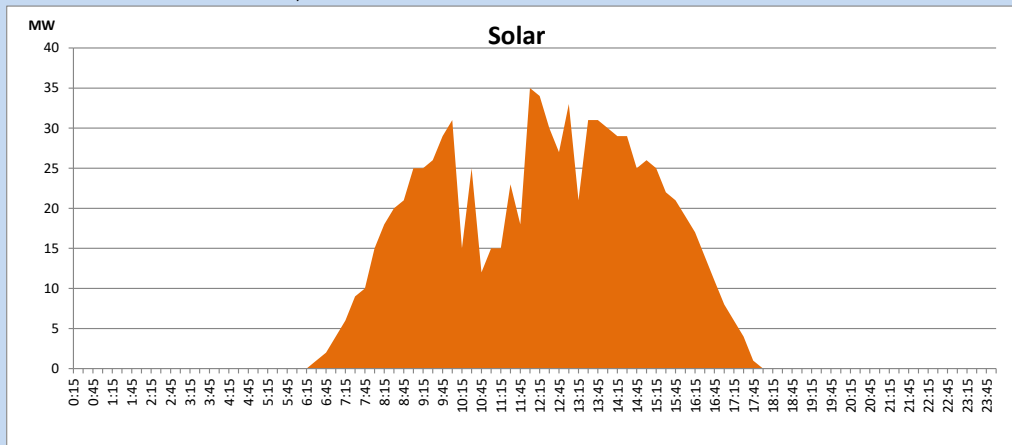
Based on Telemetered Power Stations only



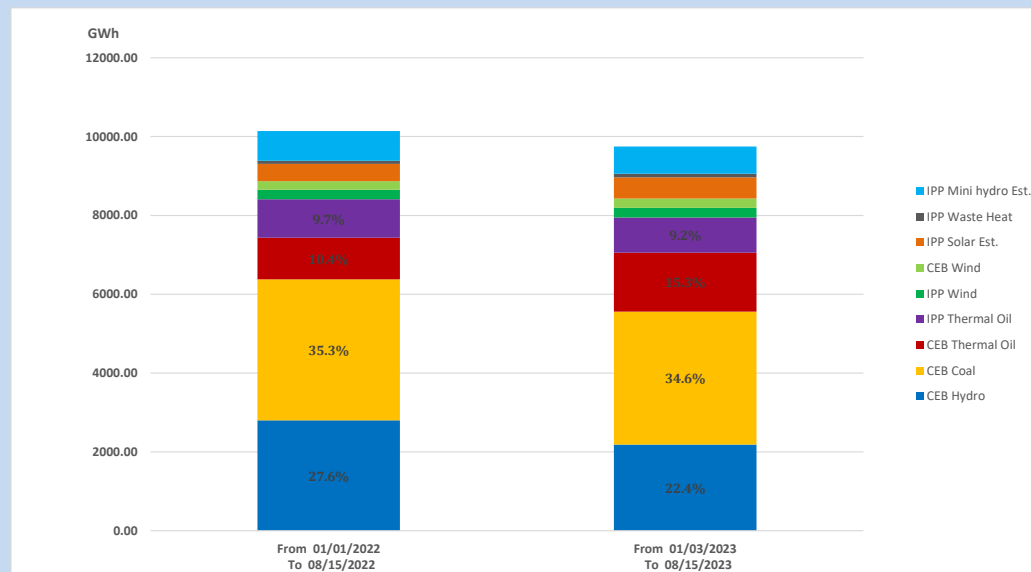
Solar Generation during

August 15, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch
 From 01/01/2022 To 08/15/2022
 From 01/03/2023 To 08/15/2023

10141 GWh
 9746 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 15, 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) Mathugama 132/33kV T/F 01, 02, and 03 tripped only from 33kV side at 12:18hrs due to an internal DC cct malfunction causing Mathugama GSS all 33kV feeders to be dead. At the same time Mathugama DPP tripped rejecting 11.9MW from the system. All T/F were normalized at 12:40hrs and all affected feeders were normalized by 12:44hrs. The Mathugama DPP resumed generation at 12:59hrs.
- 3) KPS GT 07 which performed a forced shutdown on 14.08.23 resumed generation at 12:32hrs and reached full load at 12:57hrs.