

Generation and Reservoirs Statistics

December 7, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

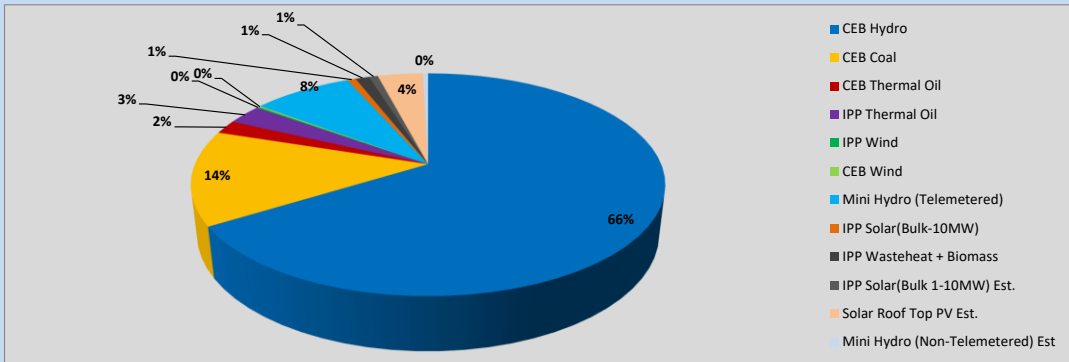


Table 01

	Generation (MWh)
CEB Hydro	27,693
CEB Coal	5,770
CEB Thermal Oil	828
IPP Thermal Oil	1,200
IPP Wind	73
CEB Wind	84
Mini Hydro (Telemetered)	3,392
IPP Solar (Bulk)	295
IPP Waste heat + Biomass	467
Total Generation (Excluding estimated figures)	39,802
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	178
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1540
Total Generation (Including estimated figures)	41,824

* 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	422
IPP Waste heat + Biomass	50
IPP Solar	136
Rooftop Solar (Ordinary)	277
Rooftop Solar (LT Bulk)	263
Rooftop Solar (HT Bulk)	70

Data Source - Monthly Review Report [Aug-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	180	64.82%
CEB Coal	37	13.23%
CEB Thermal Oil	4	1.33%
IPP Thermal	5	1.84%
SPP Wind	4	1.40%
CEB Wind	5	1.87%
Mini Hydro *	26	9.30%
IPP Solar *	14	5.16%
IPP Waste heat + BMP	3	1.05%
Total	278	

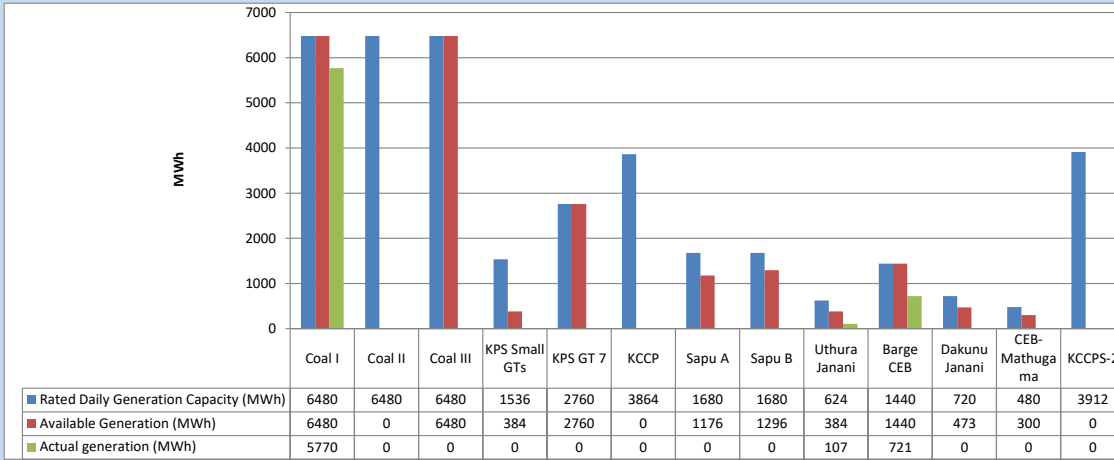
Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	4,004	27.75%
CEB Coal	4,533	31.41%
CEB Thermal Oil	1,959	13.58%
IPP Thermal	1,132	7.85%
SPP Wind	377	2.61%
CEB Wind	368	2.55%
Mini Hydro *	1,098	7.61%
IPP Solar *	817	5.66%
IPP Waste heat	142	0.99%
Total	14,431	

*Including estimated contribution from non telemetered plants

3. CEB owned Thermal Plant Dispatch

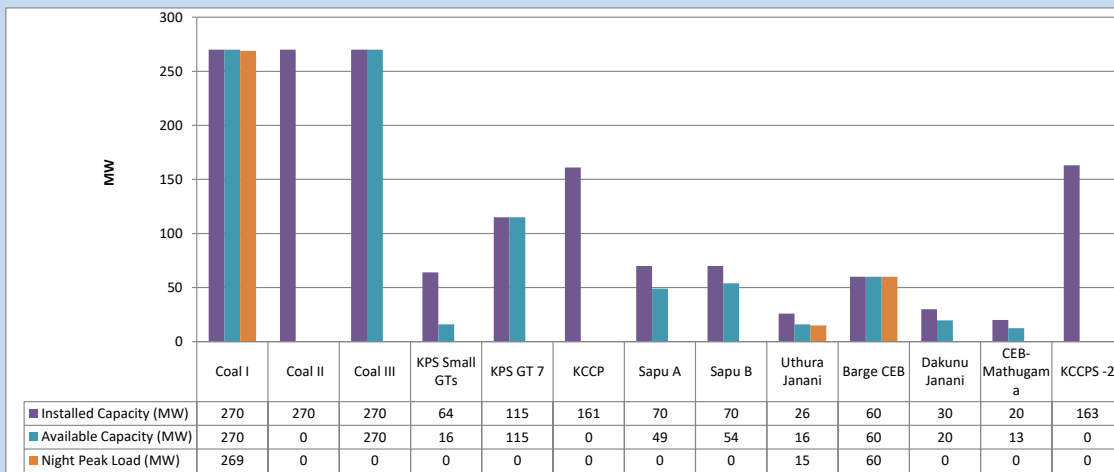
December 7, 2023



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

December 8, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

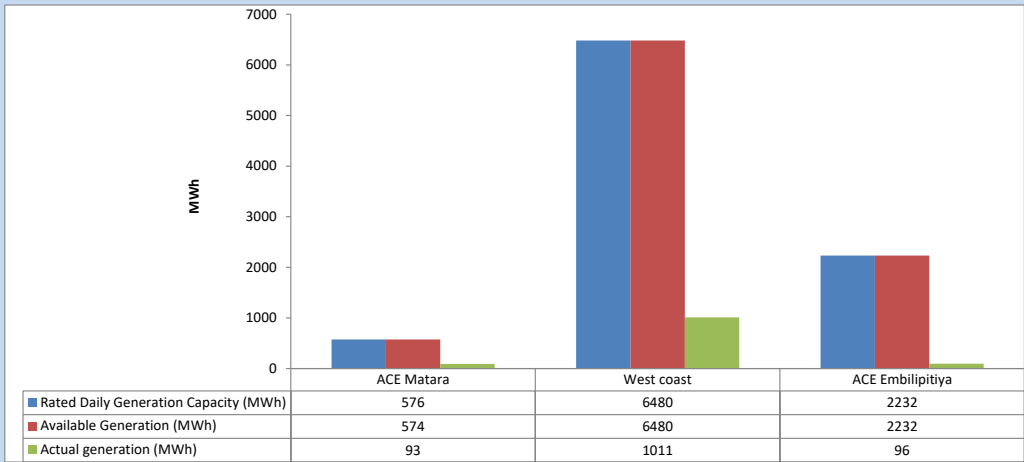


Plant availability is recorded at 6.00 am on

December 8, 2023

5. IPP owned Thermal Plant Dispatch

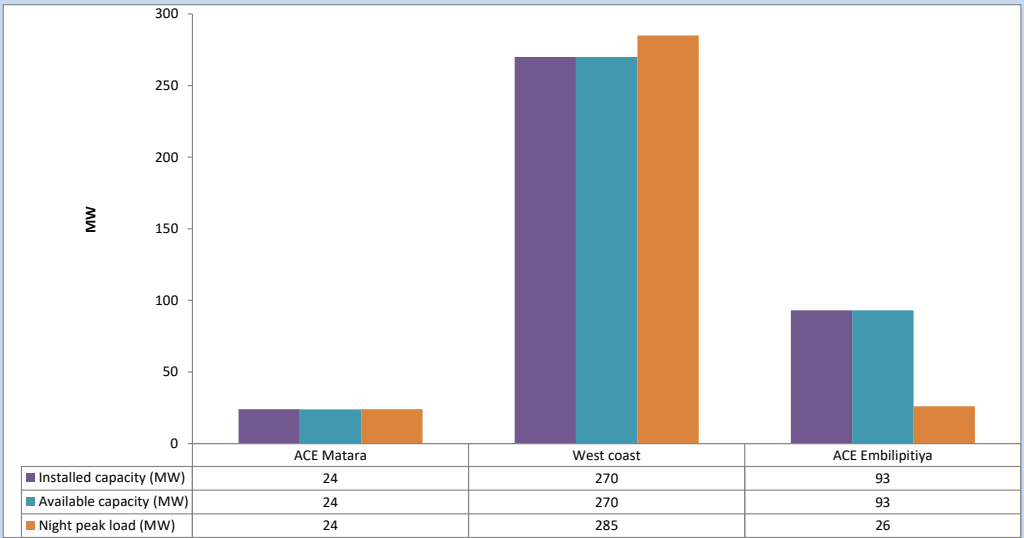
December 7, 2023



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

December 8, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

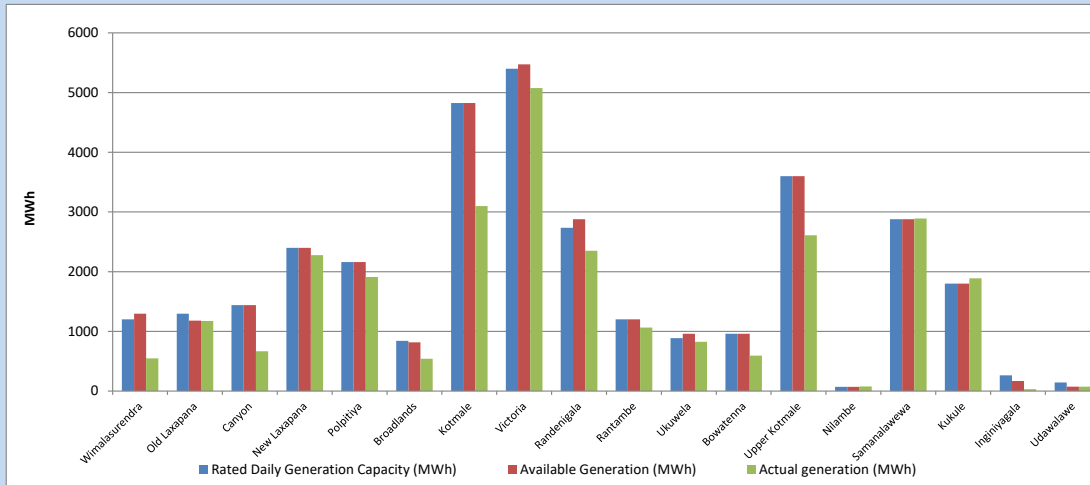


Plant availability is recorded at 6.00 am on

December 8, 2023

7. Major Hydro Plant Dispatch

December 7, 2023

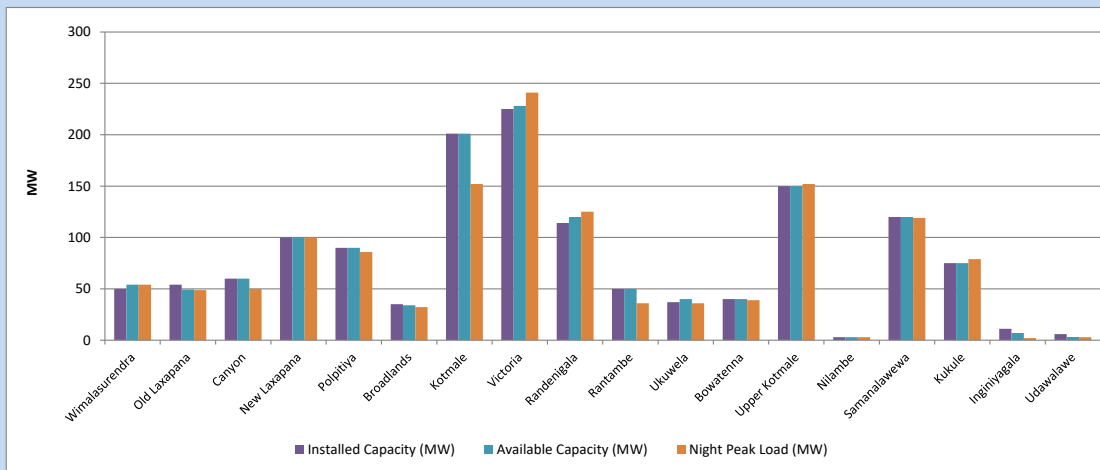


Available Generation is estimated based on plant availability at 6.00am on December 8, 2023
Broadlands power plant is operating in the Commissioning Stage

December 8, 2023

8. Major Hydro Plant Loading at Night Peak

December 7, 2023



Plant availability is recorded at 6.00 am on December 8, 2023
Broadlands power plant is operating in the Commissioning Stage

December 8, 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	54	54	546
Old Laxapana	54	49	49	1,174
Canyon	60	60	50	666
New Laxapana	100	100	100	2,278
Polpitiya	90	90	86	1,910
Broadlands	35	34	32	540
Kotmale	201	201	152	3,100
Victoria	225	228	241	5,075
Randenigala	114	120	125	2,351
Rantambe	50	50	36	1,063
Ukuwela	37	40	36	824
Bowatenna	40	40	39	594
Upper Kotmale	150	150	152	2,610
Nilambe	3	3	3	76
Samanalawewa	120	120	119	2,892
Kukule	75	75	79	1,888
Inginiyagala	11	7	2	32
Udawalawe	6	3	3	74
Puttalam Coal I	270	270	269	5,770
Puttalam Coal II	270	0	0	0
Puttalam Coal III	270	270	0	0
KPS Small GTs	64	16	0	0
KPS GT 7	115	115	0	0
KCCP	161	0	0	0
Sapugaskanda A	70	49	0	0
Sapugaskanda B	70	54	0	0
Uthura Janani	26	16	15	107
Barge CEB	60	60	60	721
CEB-Hambantota	30	20	0	0
CEB-Mathugama	20	13	0	0
ACE Matara	24	24	24	93
Asia Power	50	0	0	0
KCCPS -2	163	0	0	0
West Coast	270	270	285	1,011
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	26	96
Total	3,483	2,693	2,202	39,802

Plant availability is the availability recorded at 6 am on

December 8, 2023

10. Contribution to the Night Peak in MW

December 7, 2023

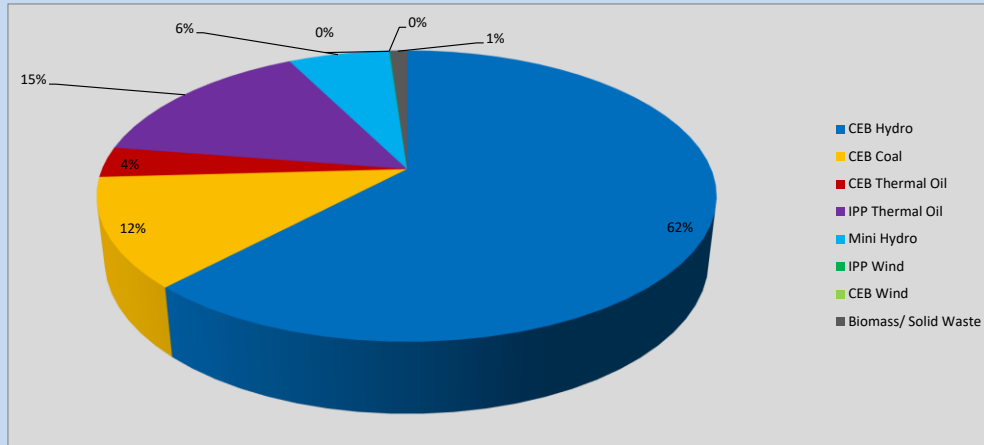


Table 06

CEB Hydro	1378	MW
CEB Coal	269	MW
CEB Thermal Oil	75	MW
IPP Thermal Oil	335	MW
Mini Hydro (Telemetered)	140	MW
IPP Wind	1.1	MW
CEB Wind	0	MW
Biomass/ Solid Waste	24	MW

Recorded Peak Demand Data

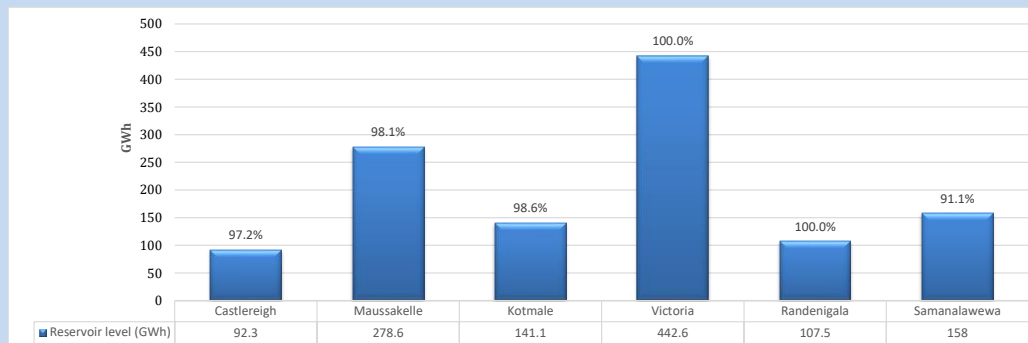
Table 07

Night Peak*	2,222	MW
Day Peak Maximum Demand	2,028	MW
Day Peak Minimum Demand	1,507	MW
Off Peak Minimum Demand	1,195	MW

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

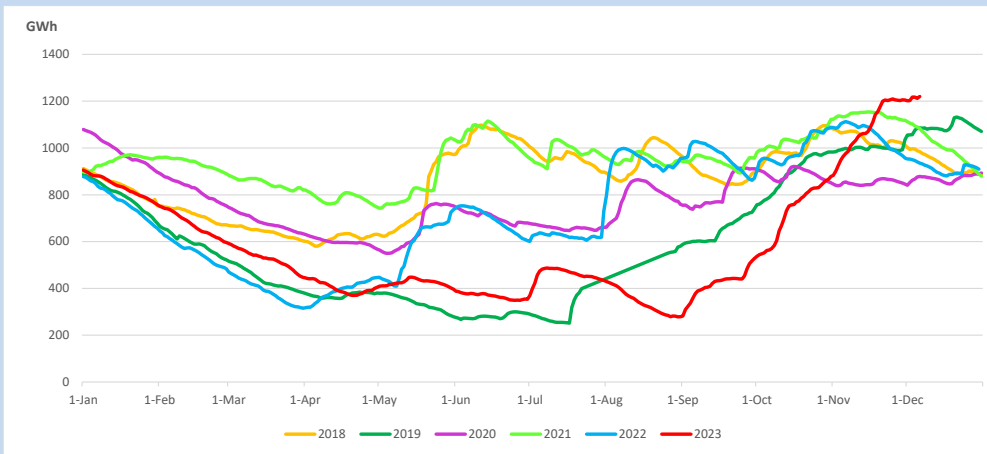
Reservoir Levels -

as at 06.00 Hr on December 8, 2023

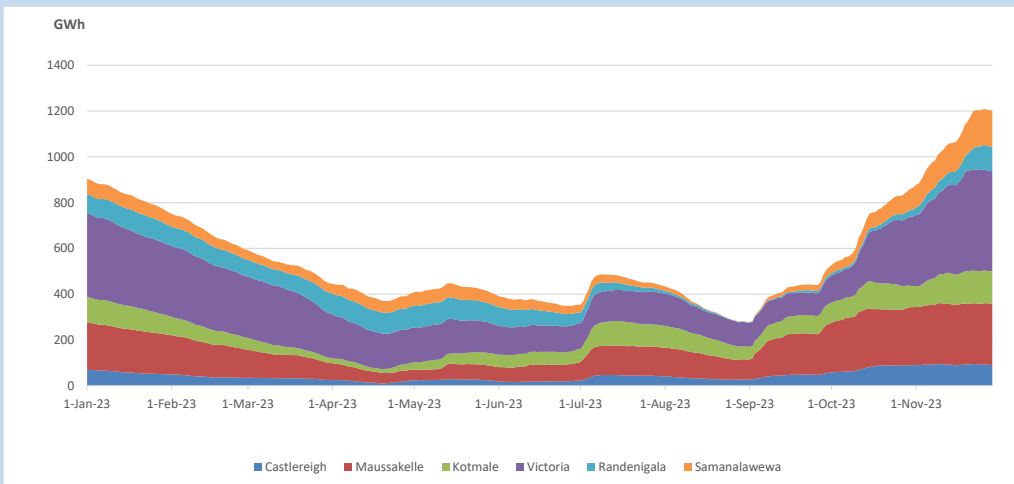


Total Reservoir Level 1220.1 GWh
 % of Total capacity 98.0%

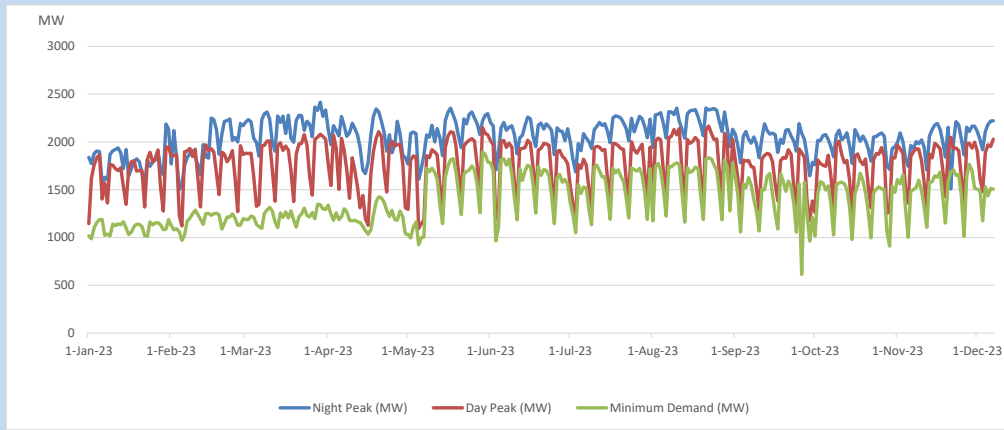
11. Comparison of Total Reservoir Storage Levels with Past Years



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



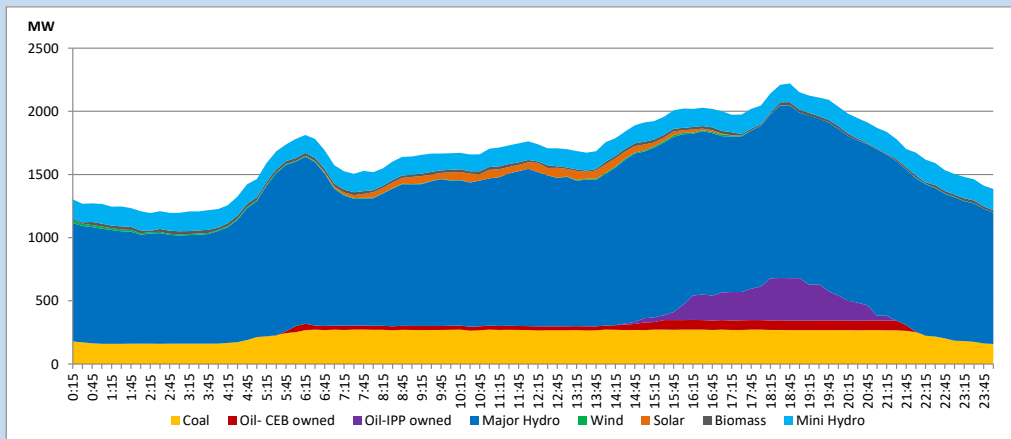
13. Variation of Demand during the current year



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

14. Daily Load Curve

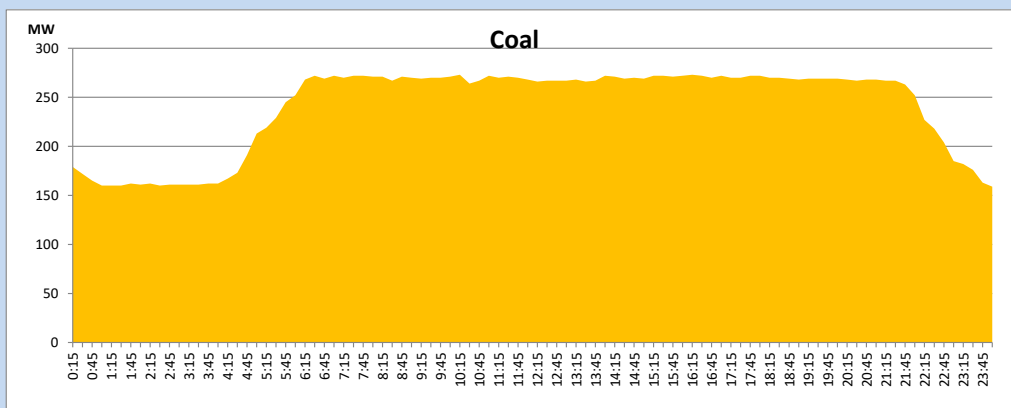
December 7, 2023



Solar and wind data is based on Telemetered Power Stations only

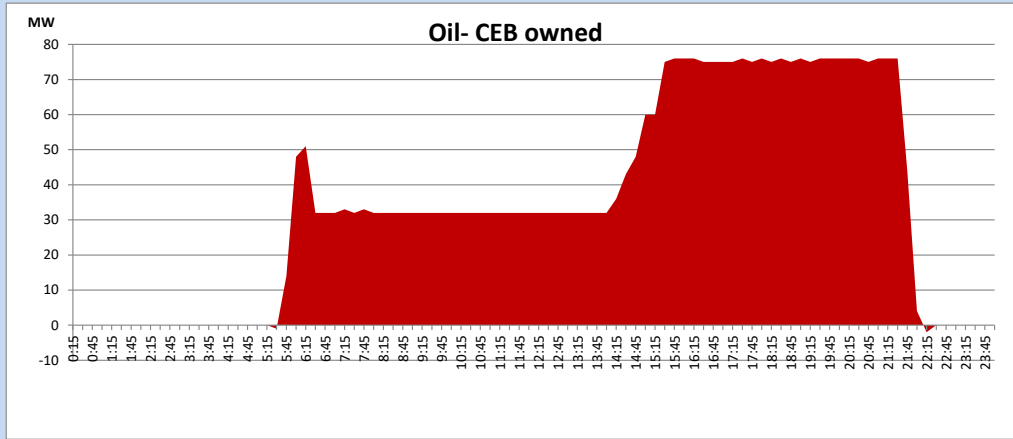
Coal Generation during

December 7, 2023



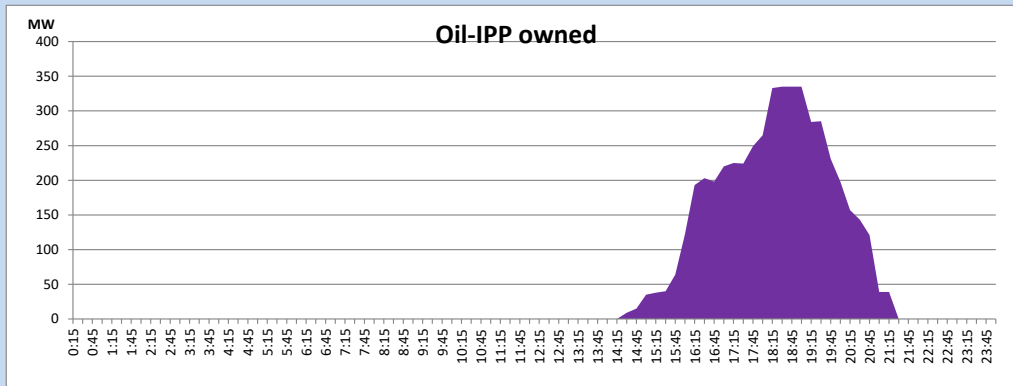
CEB Oil Plant Generation during

December 7, 2023



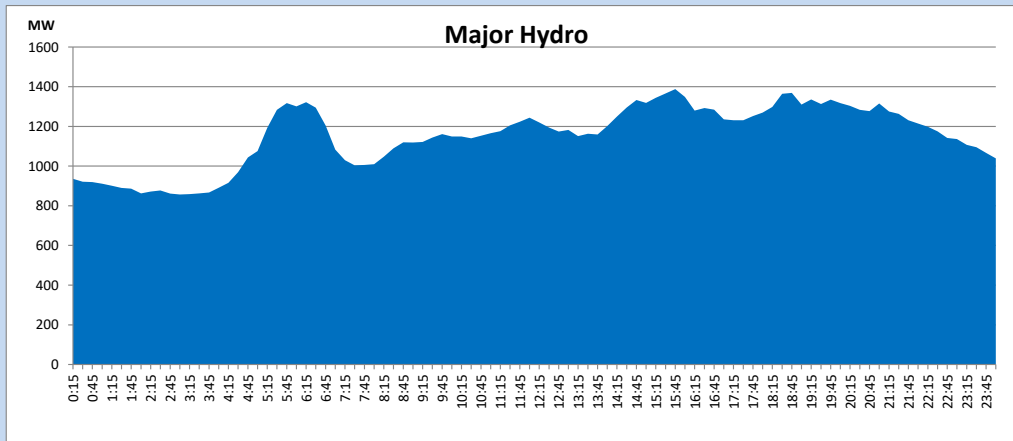
IPP Oil Plant Generation during

December 7, 2023



Major Hydro Generation during

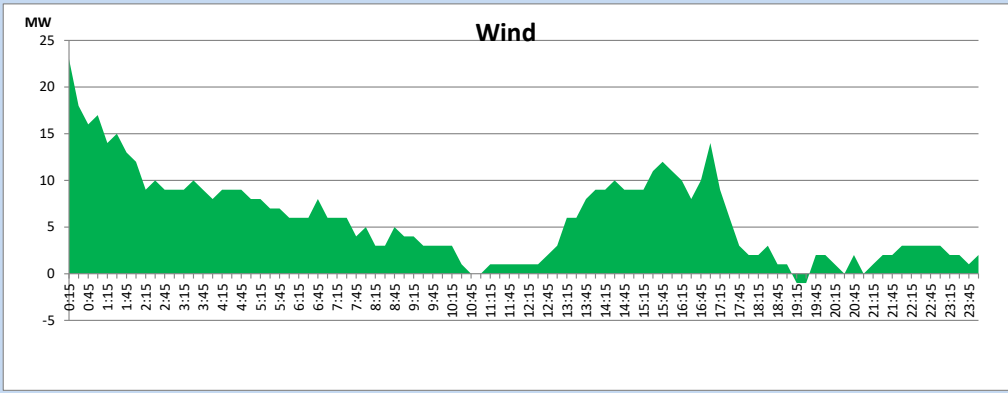
December 7, 2023



Wind Generation during

December 7, 2023

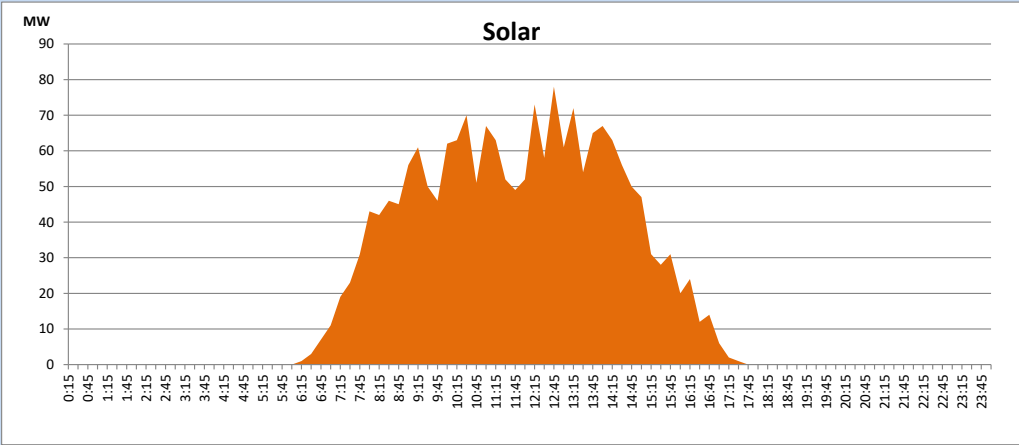
Based on Telemetered Power Stations only



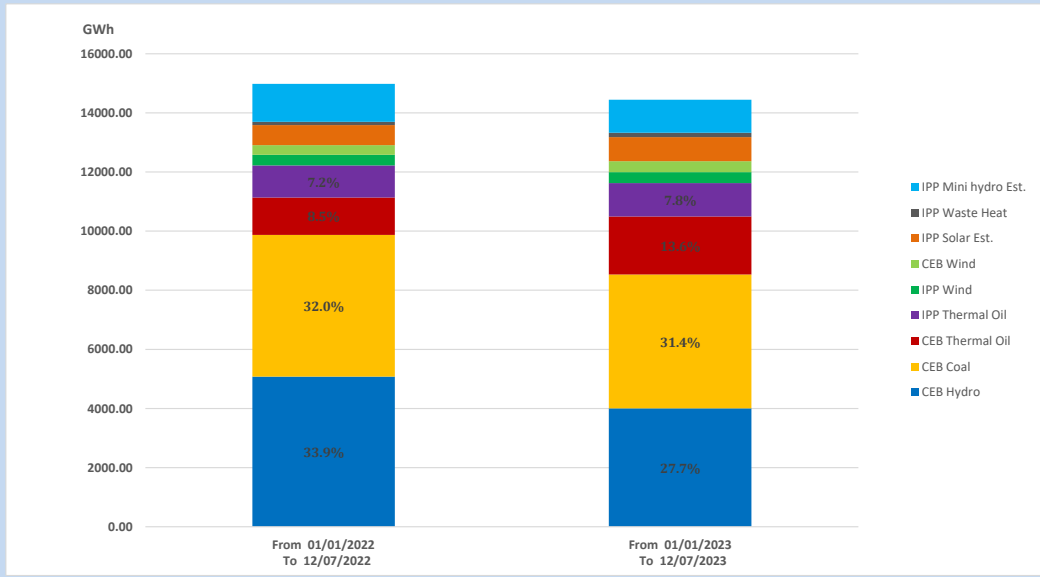
Solar Generation during

December 7, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch
 From 01/01/2022 To 12/07/2022
 From 01/01/2023 To 12/07/2023

14984 GWh
 14442 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

December 7, 2023

- 1) Broadlands Unit 02 made unavailable from 9:37hrs due to the governor oil leakage and resumed generation at 12:52hrs. Also, Broadlands Unit 01 tripped without any indications at 21:19hrs and resumed generation at 21:30hrs.
- 2) N'Anu - Trinco 132kV cct tripped and A/R from both ends due to the operation of distance protection at 13:51hrs.
- 3) Kukule pond spilling stopped at 15:45hrs and again started at 20:50 hrs. Kukule pond spilling continues to the present hour.
- 4) Victoria reservoir spilling started at 00:40hrs (08.12.2023) and spilling continues to the present hour.
- 5) Randenigala reservoir spilling started at 02:54hrs (08.12.2023) and spilling continues to the present hour.
- 6) U'Kotmale pond spilling started at 05:02hrs (08.12.2023) and spilling continues to the present hour.