

Generation and Reservoirs Statistics

December 17, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

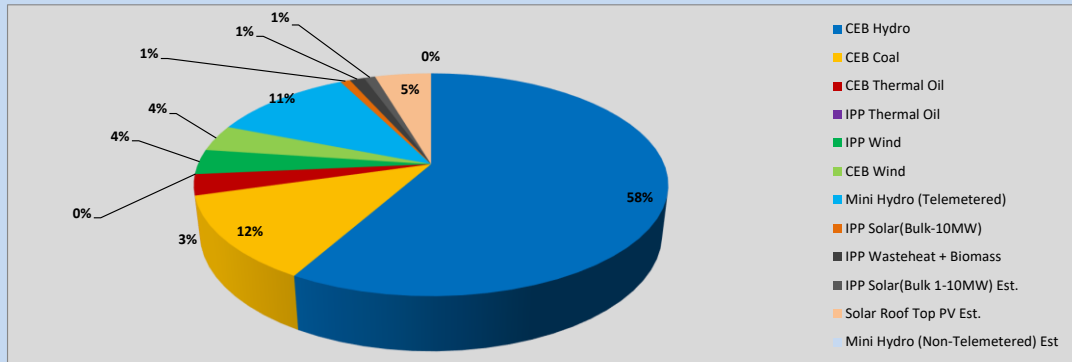


Table 01

	Generation (MWh)
CEB Hydro	19,550
CEB Coal	4,146
CEB Thermal Oil	1,014
IPP Thermal Oil	-
IPP Wind	1,213
CEB Wind	1,289
Mini Hydro (Telemetered)	3,868
IPP Solar (Bulk)	268
IPP Waste heat + Biomass	405
Total Generation (Excluding estimated figures)	31,753
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	-
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1540
Total Generation (Including estimated figures)	33,597

* 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	423	64.03%
CEB Coal	81	12.28%
CEB Thermal Oil	14	2.13%
IPP Thermal	14	2.19%
SPP Wind	10	1.53%
CEB Wind	14	2.10%
Mini Hydro *	63	9.50%
IPP Solar *	35	5.25%
IPP Waste heat + BMP	7	0.99%
Total	661	

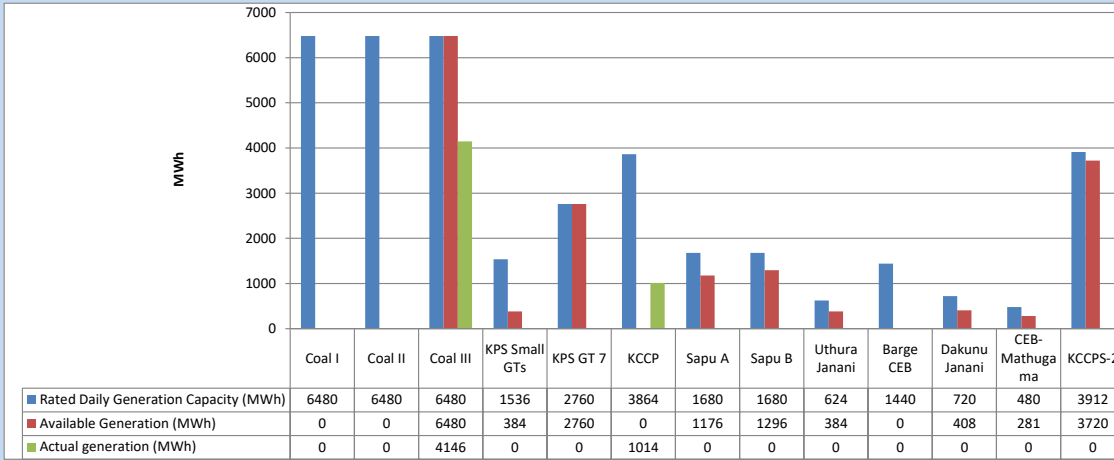
Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	4,246	28.64%
CEB Coal	4,577	30.87%
CEB Thermal Oil	1,969	13.28%
IPP Thermal	1,141	7.70%
SPP Wind	378	2.55%
CEB Wind	376	2.54%
Mini Hydro *	1,152	7.77%
IPP Solar *	837	5.64%
IPP Waste heat	150	1.01%
Total	14,825	

*Including estimated contribution from non telemetered plants

3. CEB owned Thermal Plant Dispatch

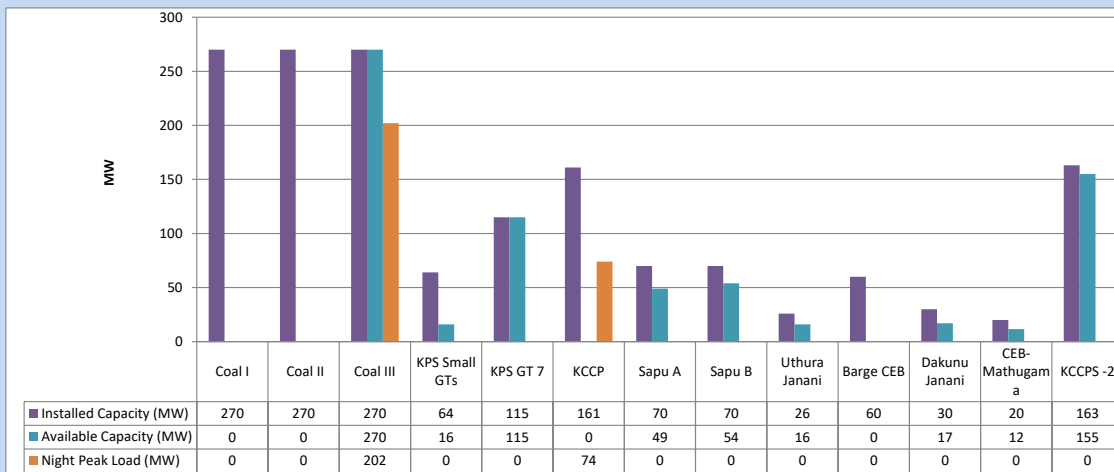
December 17, 2023



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

December 18, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

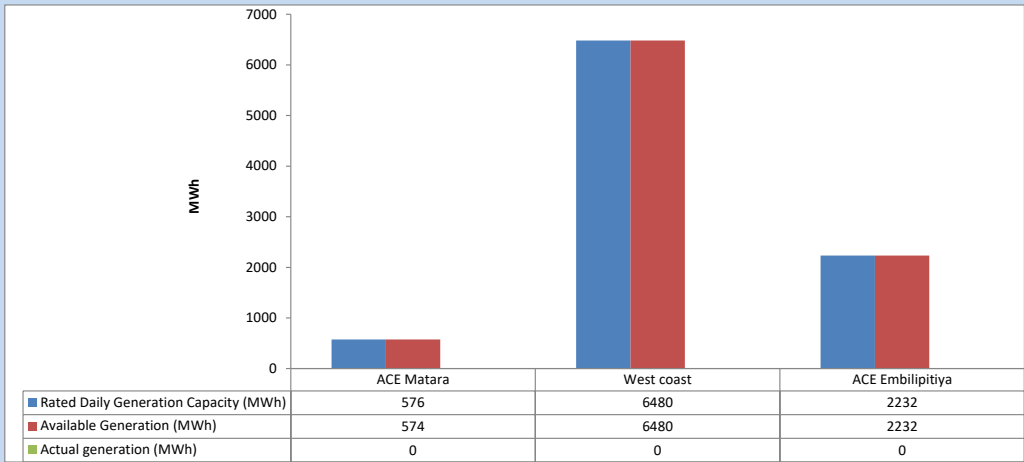


Plant availability is recorded at 6.00 am on

December 18, 2023

5. IPP owned Thermal Plant Dispatch

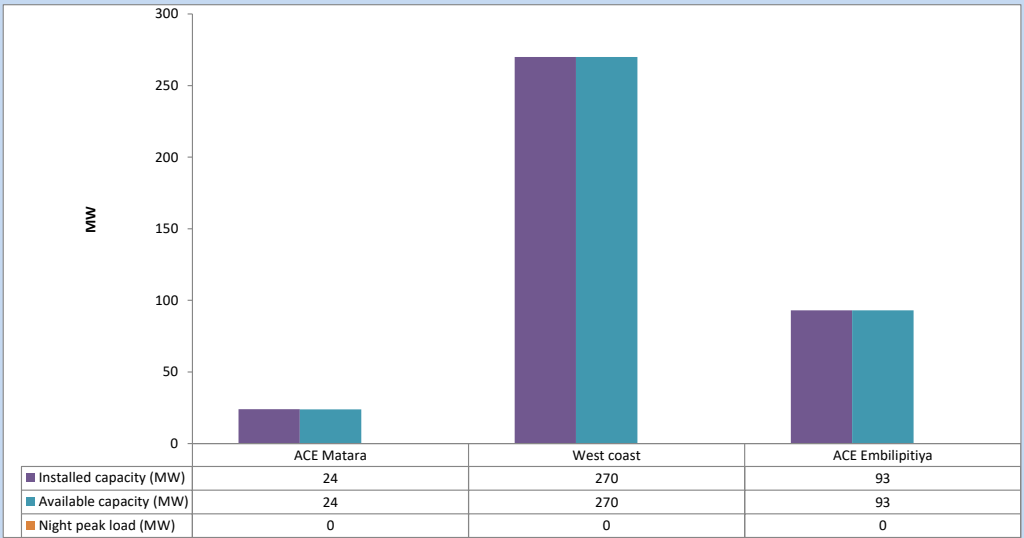
December 17, 2023



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

December 18, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

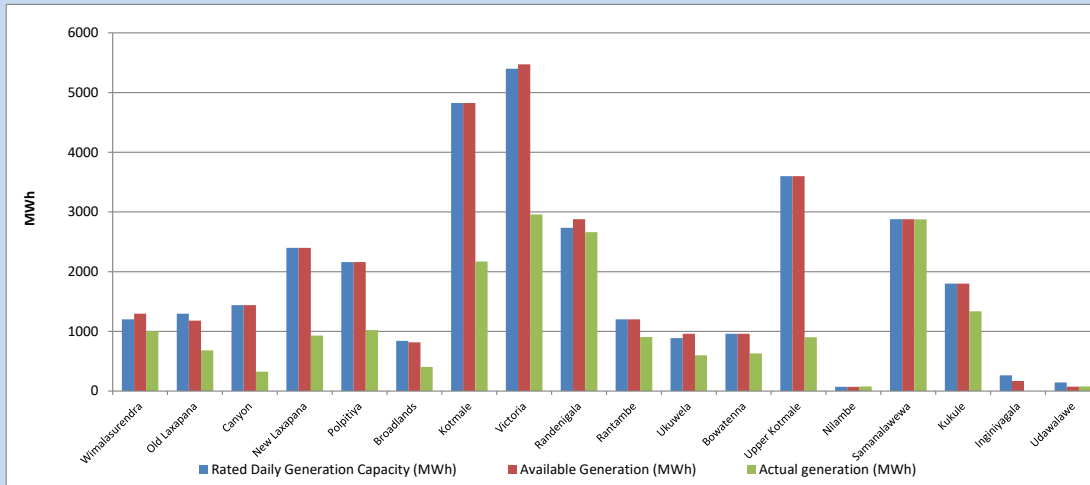


Plant availability is recorded at 6.00 am on

December 18, 2023

7. Major Hydro Plant Dispatch

December 17, 2023

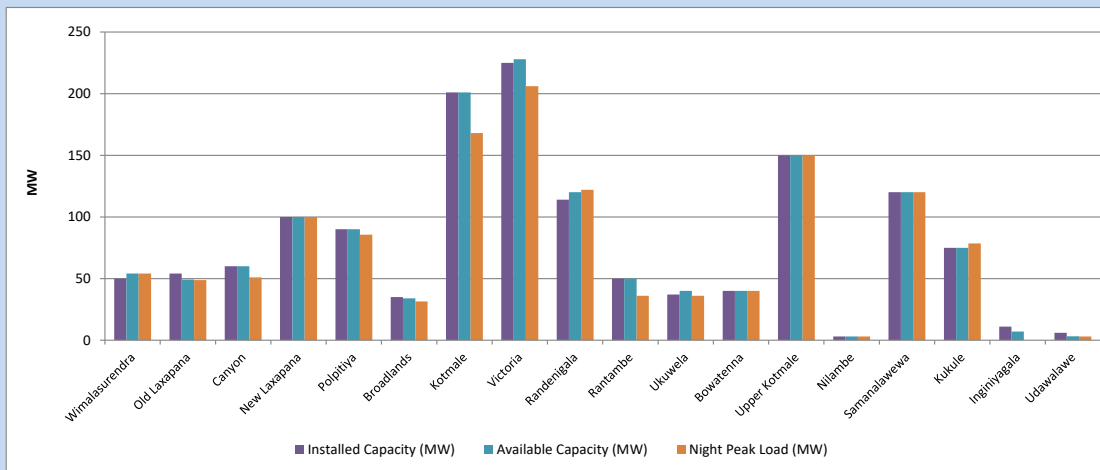


Available Generation is estimated based on plant availability at 6.00am on December 18, 2023
Broadlands power plant is operating in the Commissioning Stage

December 18, 2023

8. Major Hydro Plant Loading at Night Peak

December 17, 2023



Plant availability is recorded at 6.00 am on December 18, 2023
Broadlands power plant is operating in the Commissioning Stage

December 18, 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	1,004
Old Laxapana	54	49	49	681
Canyon	60	60	51	325
New Laxapana	100	100	100	928
Polpitiya	90	90	86	1,020
Broadlands	35	34	31	405
Kotmale	201	201	168	2,170
Victoria	225	228	206	2,957
Randenigala	114	120	122	2,663
Rantambe	50	50	36	904
Ukuwela	37	40	36	599
Bowatenna	40	40	40	629
Upper Kotmale	150	150	150	901
Nilambe	3	3	3	76
Samanalawewa	120	120	120	2,875
Kukule	75	75	79	1,335
Inginiyagala	11	7	0	0
Udawalawe	6	3	3	78
Puttalam Coal I	270	0	0	0
Puttalam Coal II	270	0	0	0
Puttalam Coal III	270	270	202	4,146
KPS Small GTs	64	16	0	0
KPS GT 7	115	115	0	0
KCCP	161	0	74	1,014
Sapugaskanda A	70	49	0	0
Sapugaskanda B	70	54	0	0
Uthura Janani	26	16	0	0
Barge CEB	60	0	0	0
CEB-Hambantota	30	17	0	0
CEB-Mathugama	20	12	0	0
ACE Matara	24	24	0	0
Asia Power	50	0	0	0
KCCPS -2	163	155	0	0
West Coast	270	270	0	0
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	0	0
Total	3,483	2,515	1,866	31,753

Plant availability is the availability recorded at 6 am on

December 18, 2023

10. Contribution to the Night Peak in MW

December 17, 2023

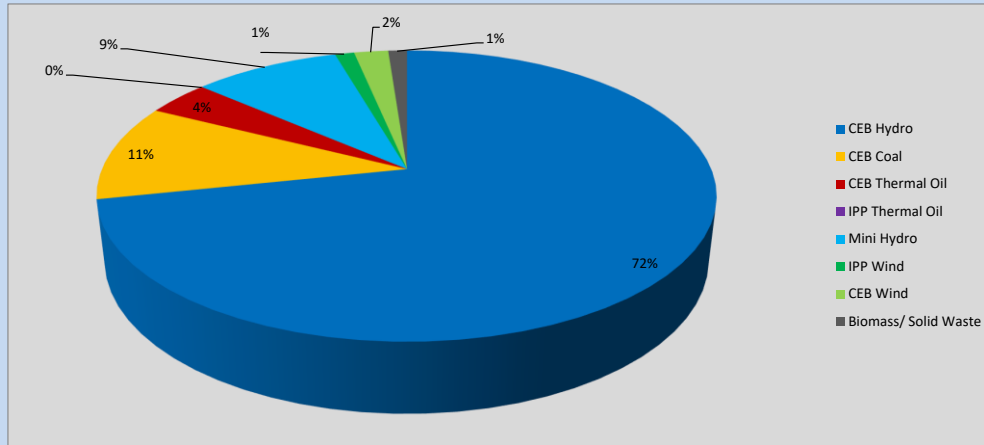


Table 06

CEB Hydro	1349	MW
CEB Coal	202	MW
CEB Thermal Oil	74	MW
IPP Thermal Oil	0	MW
Mini Hydro (Telemetered)	172	MW
IPP Wind	22.5	MW
CEB Wind	40	MW
Biomass/ Solid Waste	22	MW

Recorded Peak Demand Data

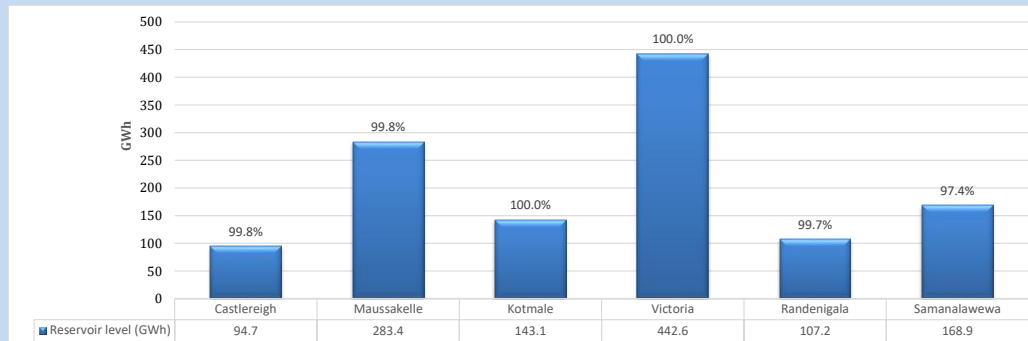
Table 07

Night Peak*	1,881	MW
Day Peak Maximum Demand	1,458	MW
Day Peak Minimum Demand	1,147	MW
Off Peak Minimum Demand	1,079	MW

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

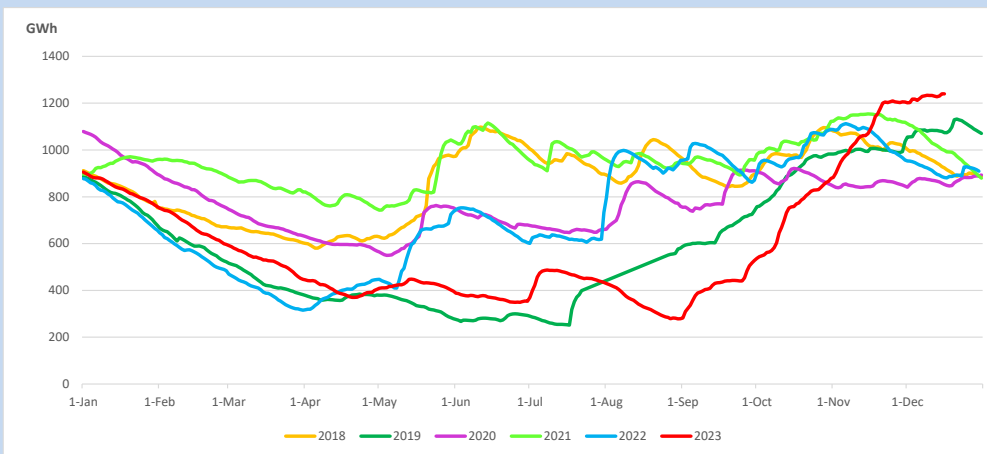
Reservoir Levels -

as at 06.00 Hr on December 18, 2023

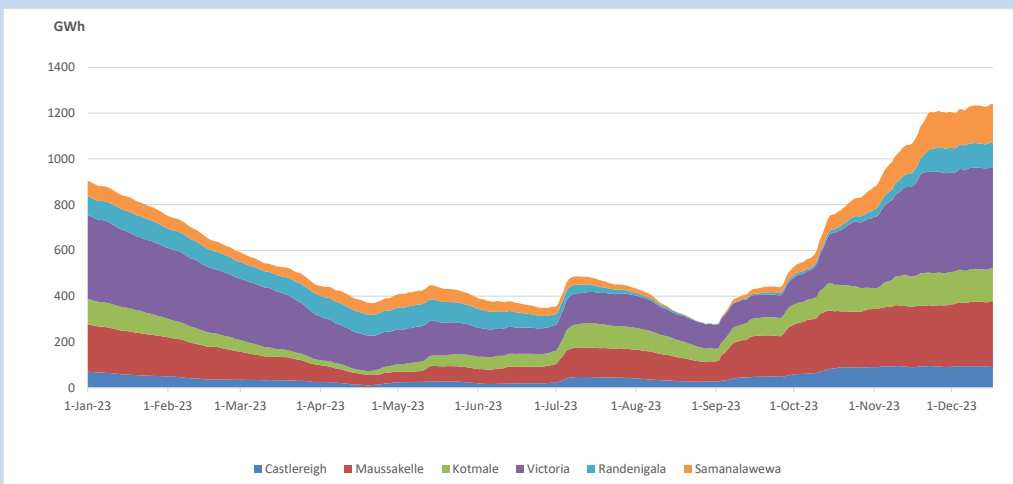


Total Reservoir Level 1239.9 GWh
 % of Total capacity 99.6%

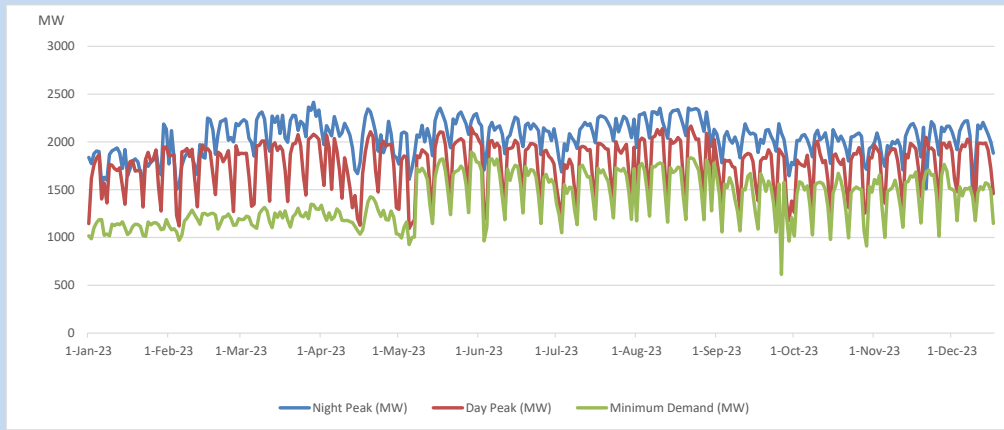
11. Comparison of Total Reservoir Storage Levels with Past Years



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



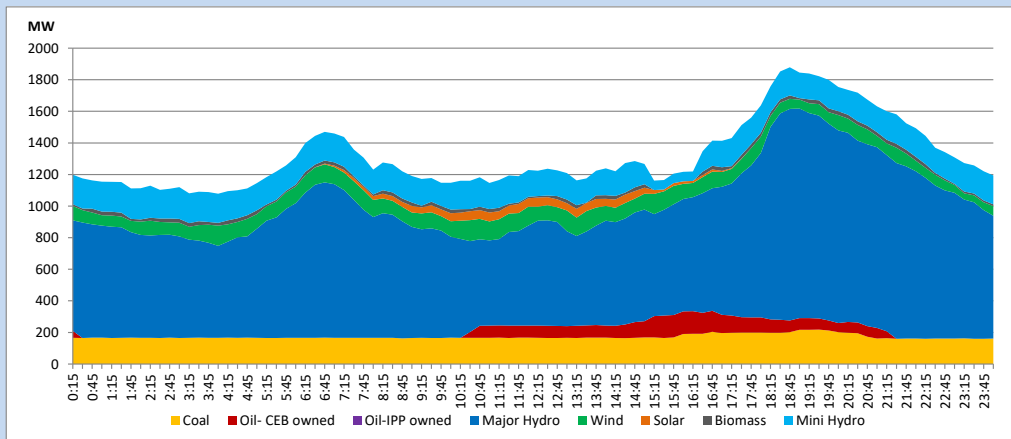
13. Variation of Demand during the current year



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

14. Daily Load Curve

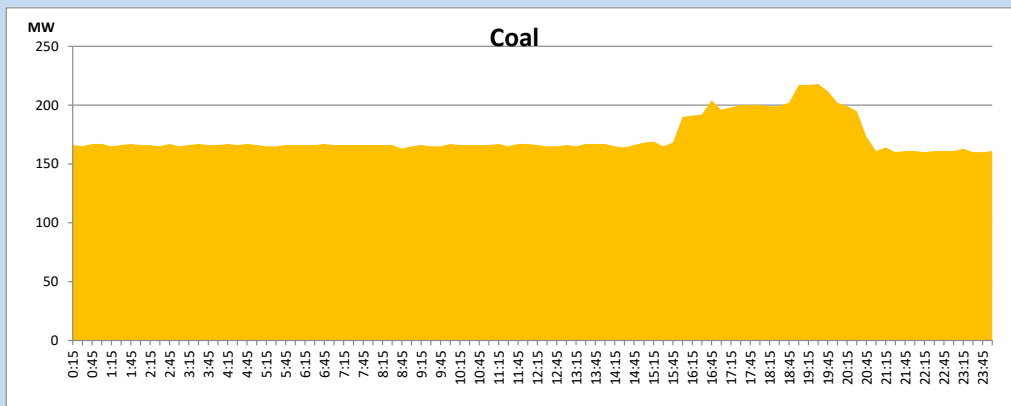
December 17, 2023



Solar and wind data is based on Telemetered Power Stations only

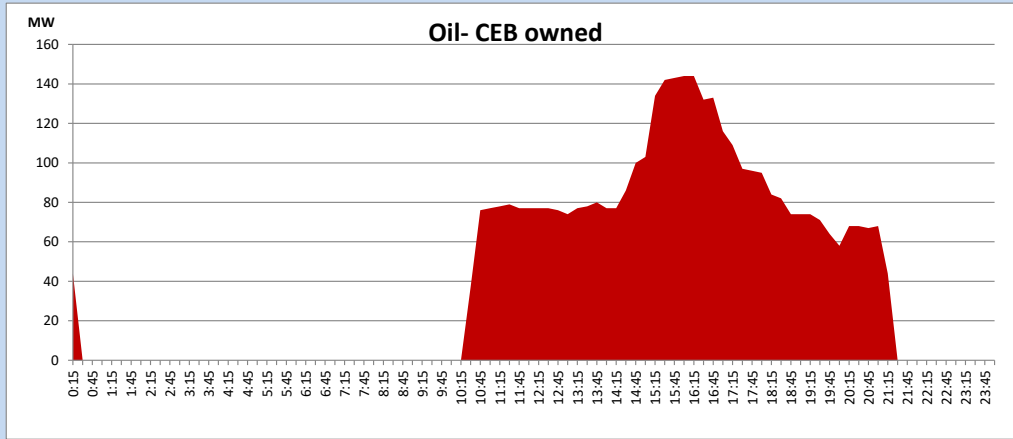
Coal Generation during

December 17, 2023



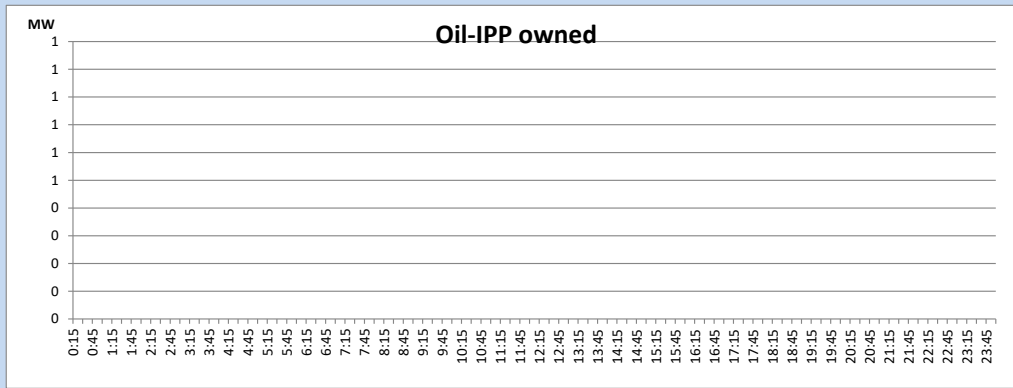
CEB Oil Plant Generation during

December 17, 2023



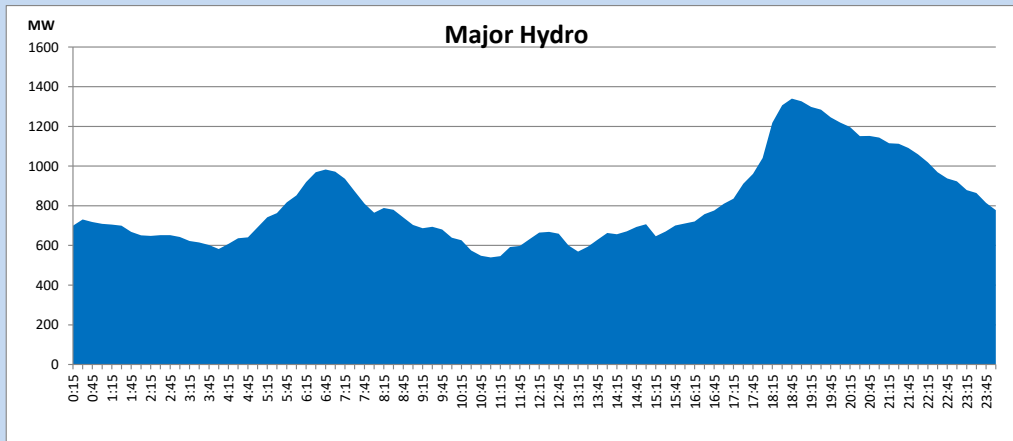
IPP Oil Plant Generation during

December 17, 2023



Major Hydro Generation during

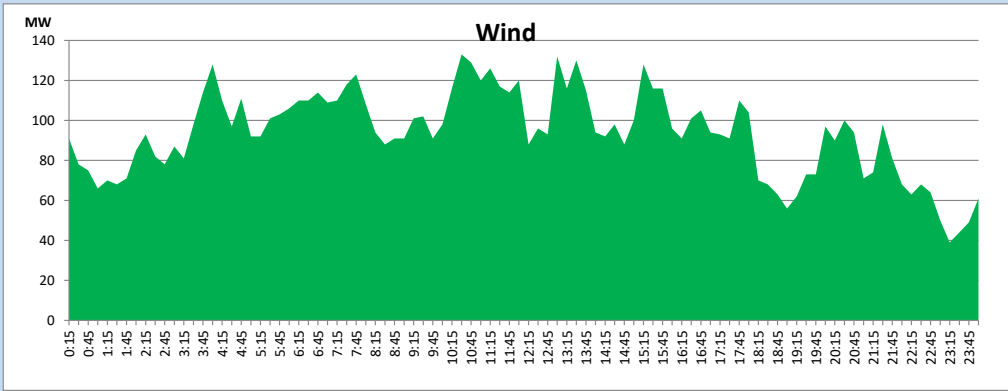
December 17, 2023



Wind Generation during

December 17, 2023

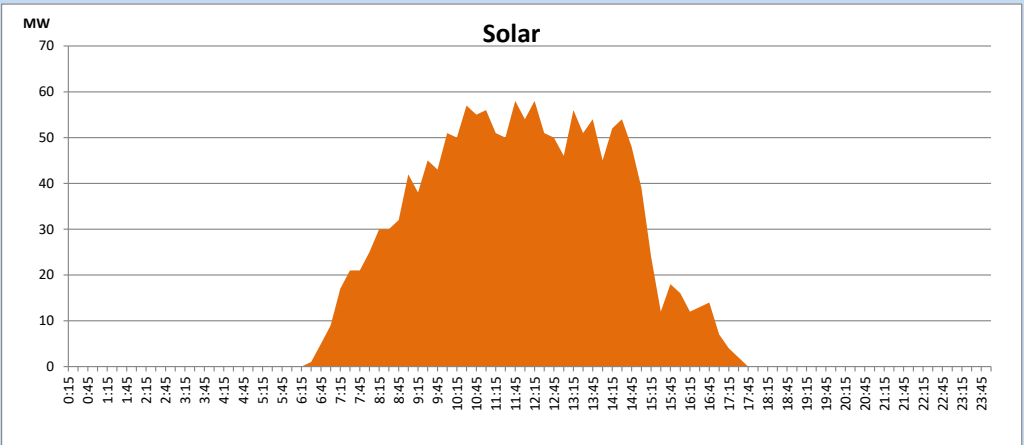
Based on Telemetered Power Stations only



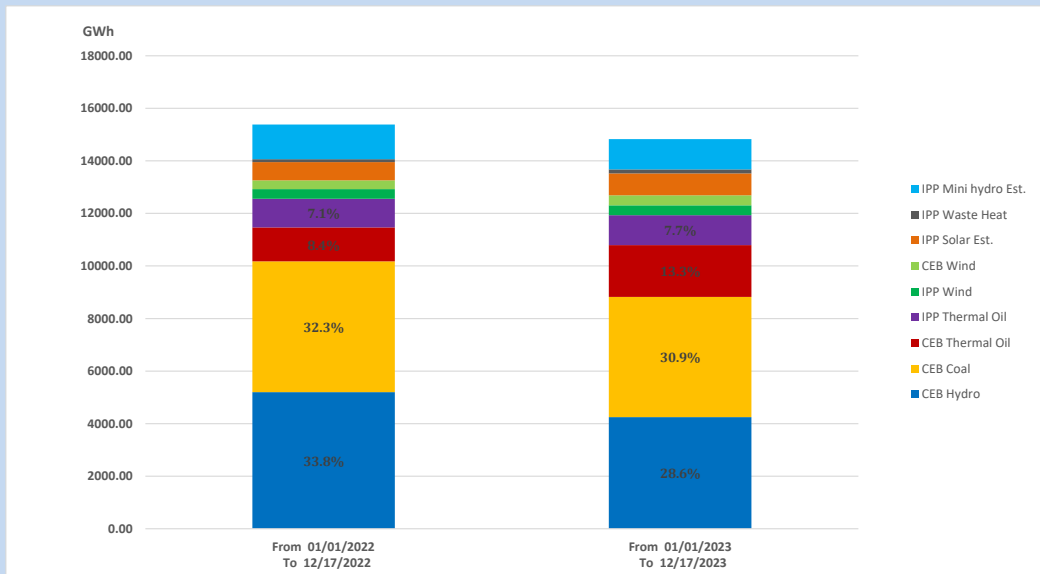
Solar Generation during

December 17, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch
 From 01/01/2022 To 12/17/2022
 From 01/01/2023 To 12/17/2023

15381 GWh
 14825 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 17, 2023

- 1) Kothmale, Victoria, and Randenigala reservoirs spilled intermittently. Kothmale and Randenigala reservoirs spilling stopped at 21:31hrs and 16:41hrs respectively. Victoria reservoir spilling continues to the present hour.
- 2) Castlereigh reservoir spilling stopped at 14:55hrs. Maussakele reservoir spilling started at 14:09hrs and stopped at 16:51hrs.
- 3) Kukule pond spilling stopped at 6:00hrs (18.12.2023).
- 4) Upper Kothmale pond spilling continue to the present hour.