

Generation and Reservoirs Statistics

December 30, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

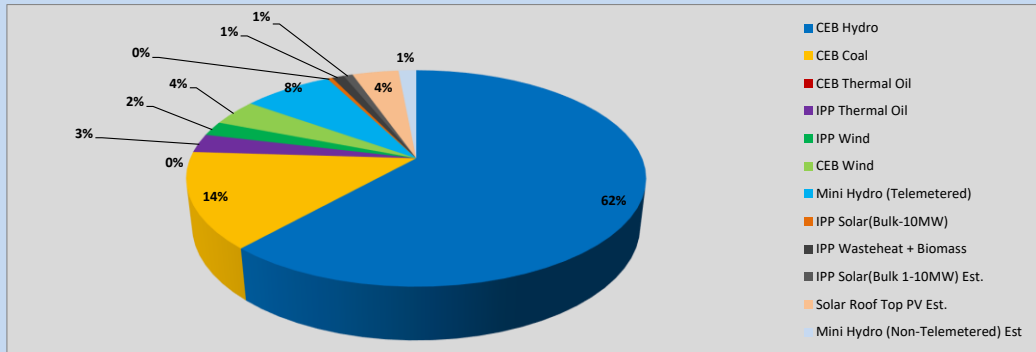


Table 01

	Generation (MWh)
CEB Hydro	24,393
CEB Coal	5,669
CEB Thermal Oil	-
IPP Thermal Oil	1,107
IPP Wind	857
CEB Wind	1,565
Mini Hydro (Telemetered)	2,978
IPP Solar (Bulk)	167
IPP Waste heat + Biomass	398
Total Generation (Excluding estimated figures)	37,134
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	592
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1540
Total Generation (Including estimated figures)	39,570

* 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	735	62.50%
CEB Coal	153	13.05%
CEB Thermal Oil	22	1.85%
IPP Thermal	32	2.75%
SPP Wind	21	1.77%
CEB Wind	29	2.48%
Mini Hydro *	111	9.40%
IPP Solar *	62	5.24%
IPP Waste heat + BMP	11	0.96%
Total	1,176	

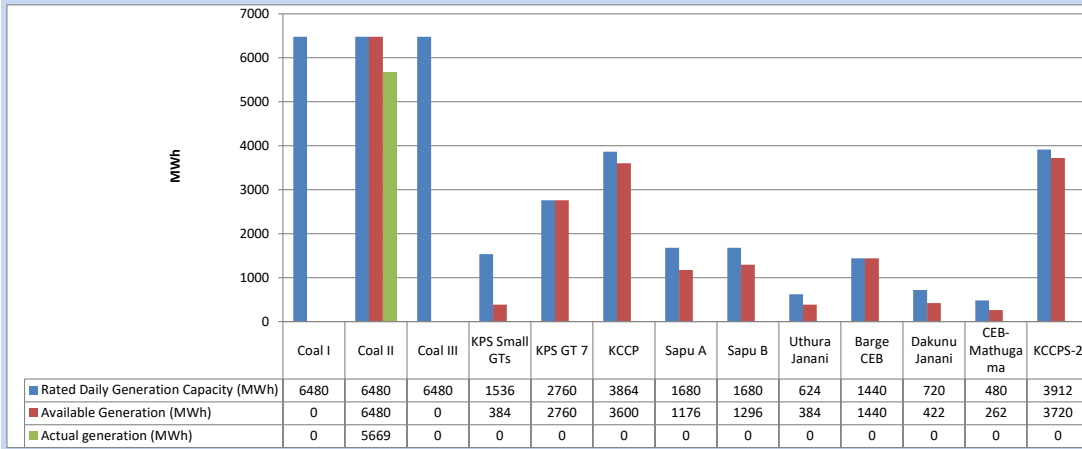
Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	4,558	29.71%
CEB Coal	4,649	30.31%
CEB Thermal Oil	1,976	12.88%
IPP Thermal	1,159	7.56%
SPP Wind	389	2.54%
CEB Wind	391	2.55%
Mini Hydro *	1,200	7.82%
IPP Solar *	864	5.63%
IPP Waste heat	155	1.01%
Total	15,340	

*Including estimated contribution from non telemetered plants

3. CEB owned Thermal Plant Dispatch

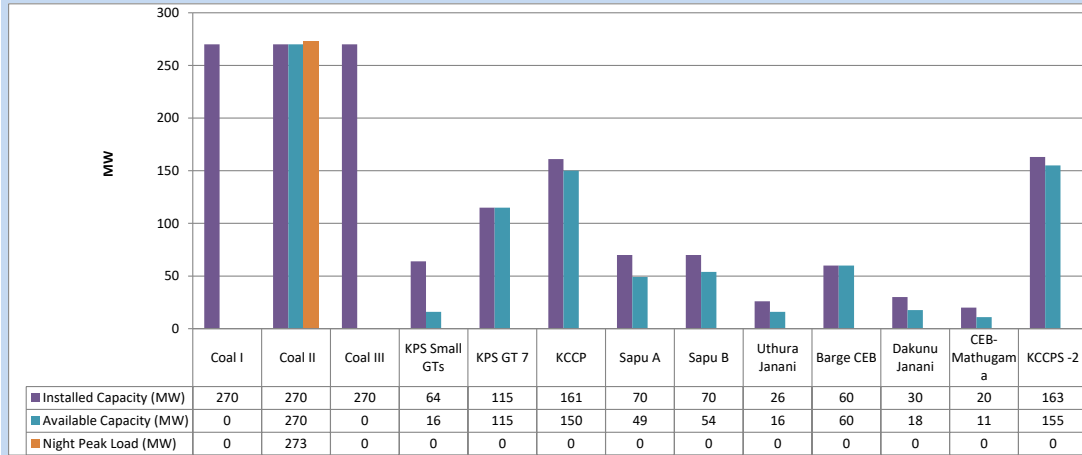
December 30, 2023



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

December 31, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

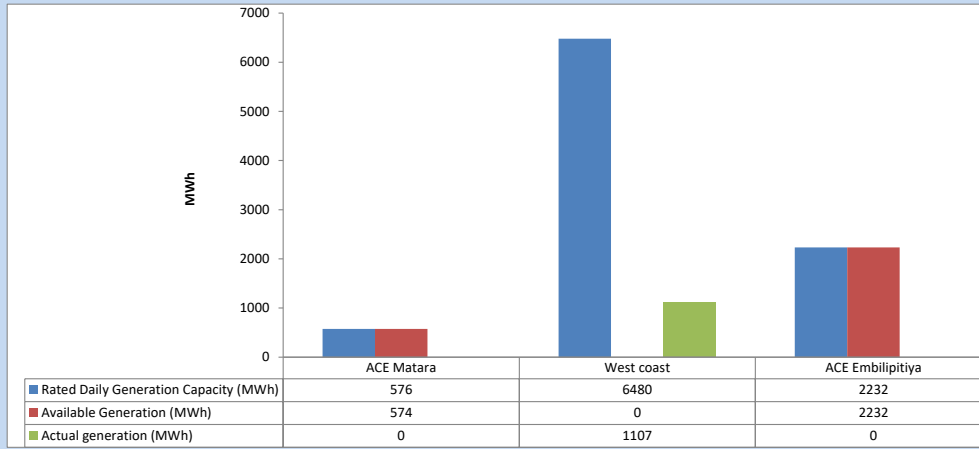


Plant availability is recorded at 6.00 am on

December 31, 2023

5. IPP owned Thermal Plant Dispatch

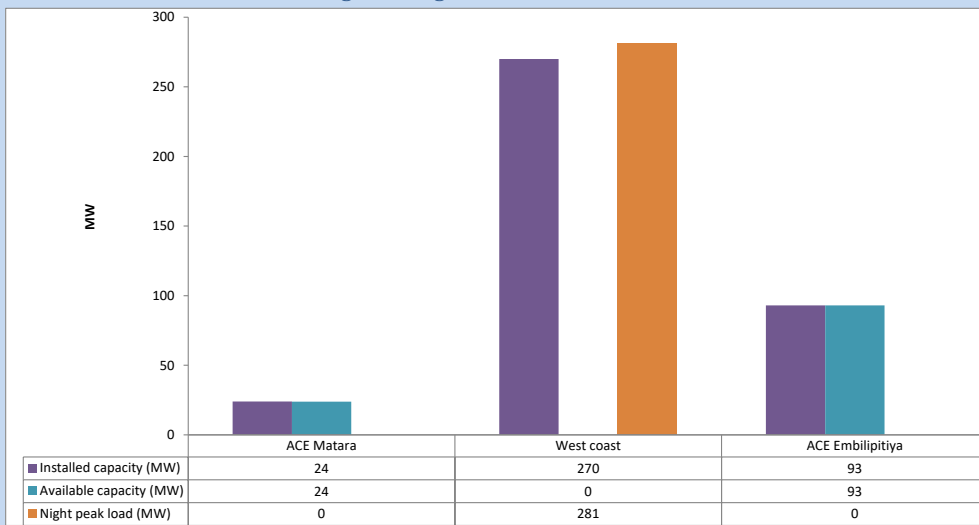
December 30, 2023



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

December 31, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

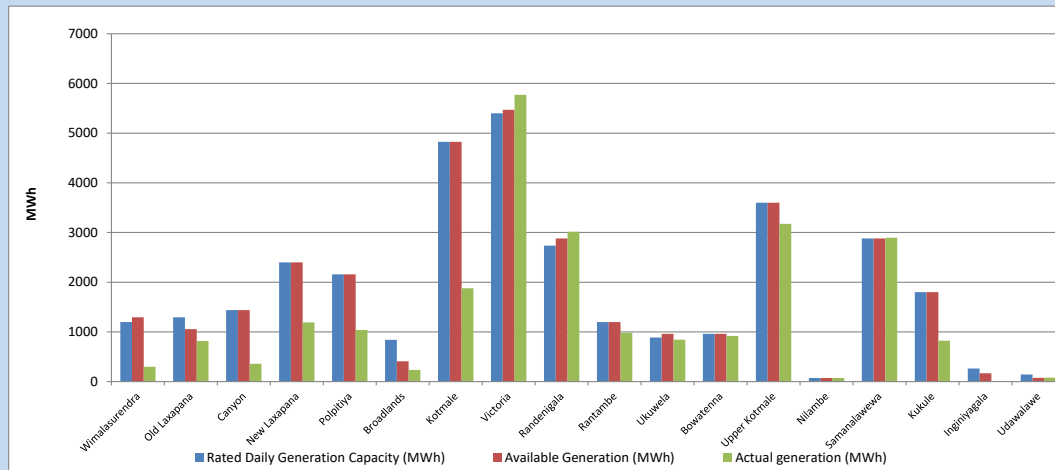


Plant availability is recorded at 6.00 am on

December 31, 2023

7. Major Hydro Plant Dispatch

December 30, 2023

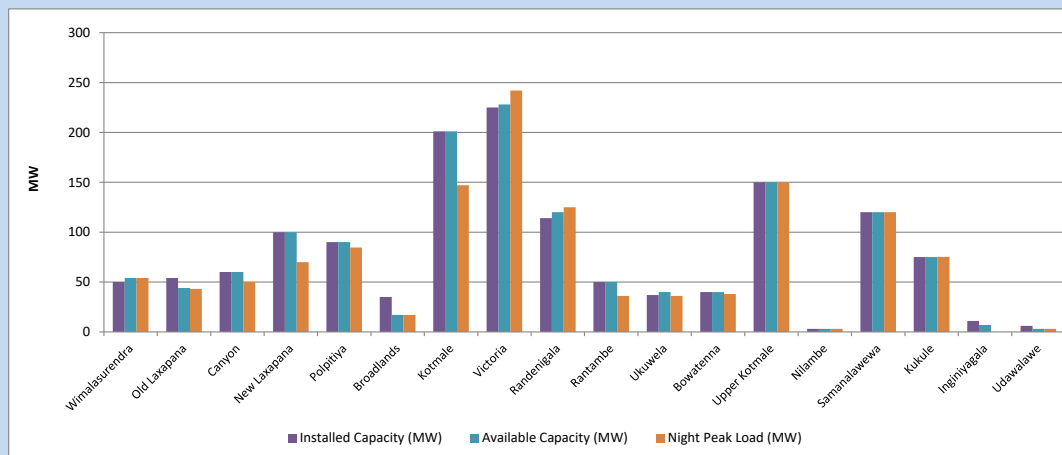


Available Generation is estimated based on plant availability at 6.00am on
Broadlands power plant is operating in the Commissioning Stage

December 31, 2023

8. Major Hydro Plant Loading at Night Peak

December 30, 2023



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

December 31, 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	54	54	298
Old Laxapana	54	44	43	816
Canyon	60	60	50	358
New Laxapana	100	100	70	1,190
Polpitiya	90	90	85	1,040
Broadlands	35	17	17	234
Kotmale	201	201	147	1,880
Victoria	225	228	242	5,771
Randenigala	114	120	125	3,016
Rantambe	50	50	36	981
Ukuwela	37	40	36	846
Bowatenna	40	40	38	920
Upper Kotmale	150	150	150	3,176
Nilambe	3	3	3	72
Samanalawewa	120	120	120	2,894
Kukule	75	75	75	823
Inginiyagala	11	7	0	0
Udawalawe	6	3	3	78
Puttalam Coal I	270	0	0	0
Puttalam Coal II	270	270	273	5,669
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	16	0	0
KPS GT 7	115	115	0	0
KCCP	161	150	0	0
Sapugaskanda A	70	49	0	0
Sapugaskanda B	70	54	0	0
Uthura Janani	26	16	0	0
Barge CEB	60	60	0	0
CEB-Hambantota	30	18	0	0
CEB-Mathugama	20	11	0	0
ACE Matara	24	24	0	0
Asia Power	50	0	0	0
KCCPS -2	163	155	0	0
West Coast	270	0	281	1,107
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	0	0
Total	3,483	2,433	2,060	37,134

Plant availability is the availability recorded at 6 am on

December 31, 2023

10. Contribution to the Night Peak in MW

December 30, 2023

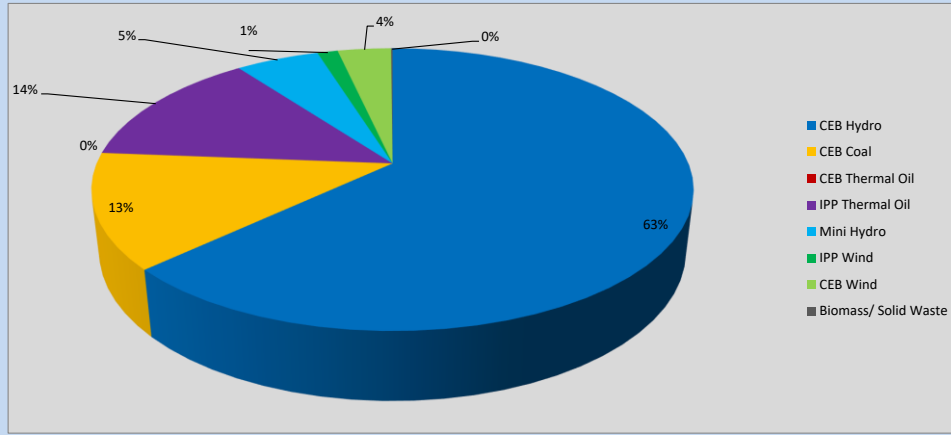


Table 06

CEB Hydro	1307	MW
CEB Coal	273	MW
CEB Thermal Oil	0	MW
IPP Thermal Oil	281	MW
Mini Hydro (Telemetered)	111	MW
IPP Wind	27.3	MW
CEB Wind	71.1	MW
Biomass/ Solid Waste	2	MW

Recorded Peak Demand Data

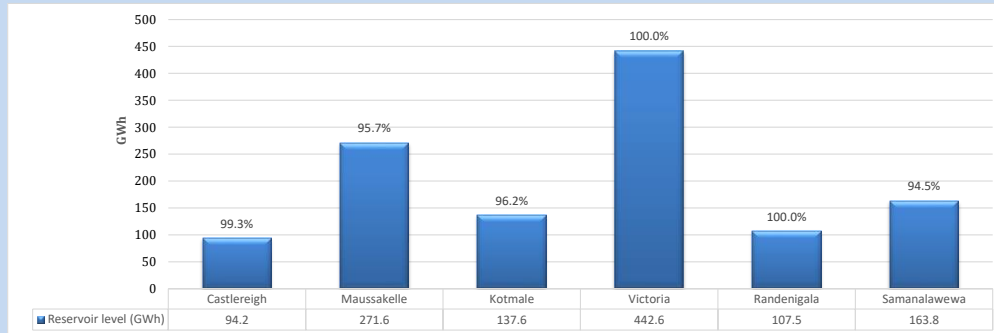
Table 07

Night Peak*	2,073	MW
Day Peak Maximum Demand	1,725	MW
Day Peak Minimum Demand	1,475	MW
Off Peak Minimum Demand	1,145	MW

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

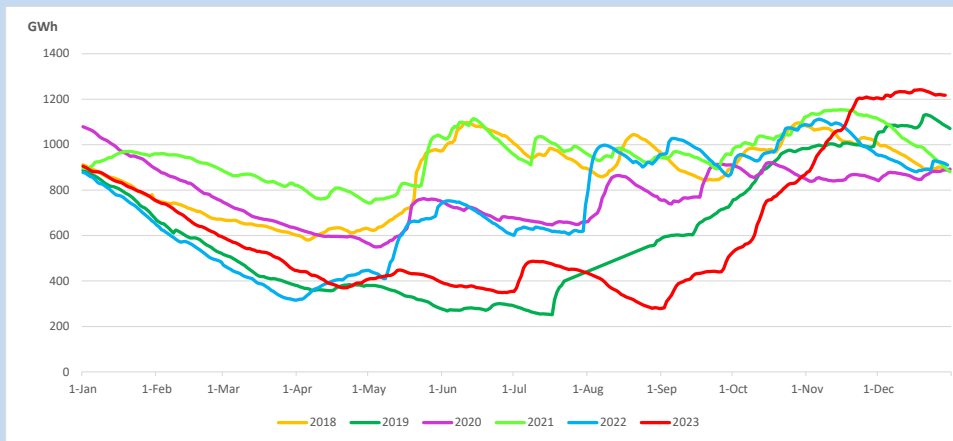
Reservoir Levels -

as at 06.00 Hr on December 31, 2023

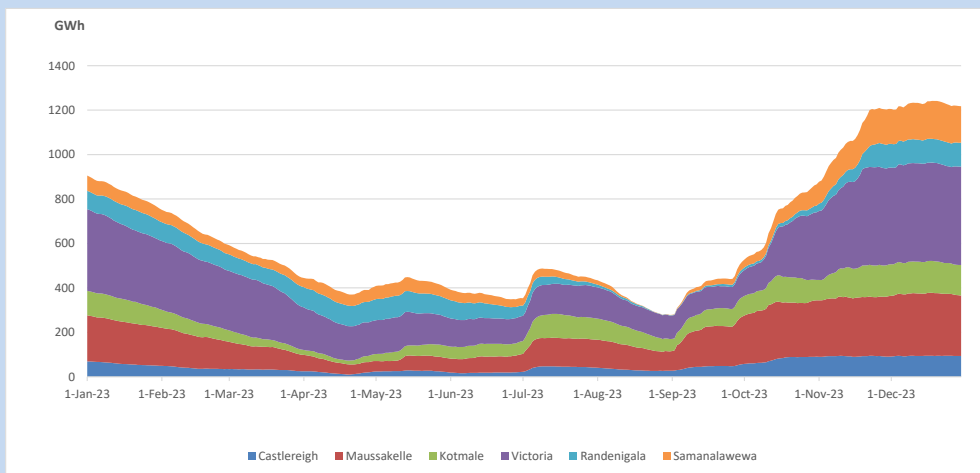


Total Reservoir Level 1217.3 GWh
% of Total capacity 97.8%

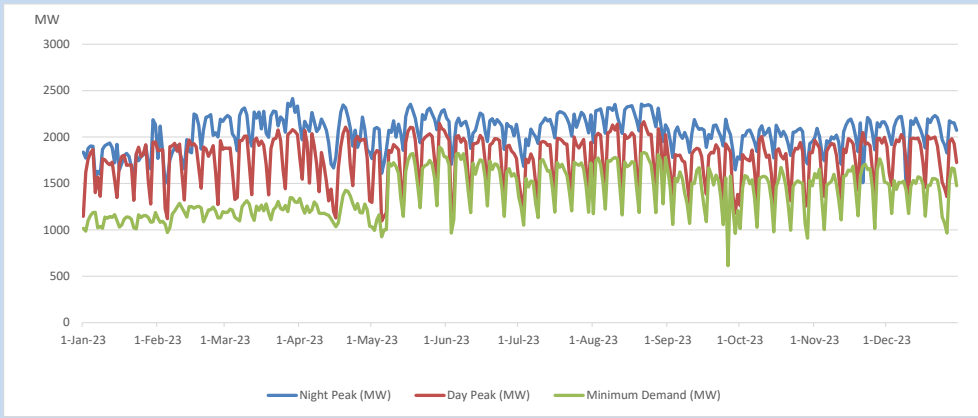
11. Comparison of Total Reservoir Storage Levels with Past Years



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



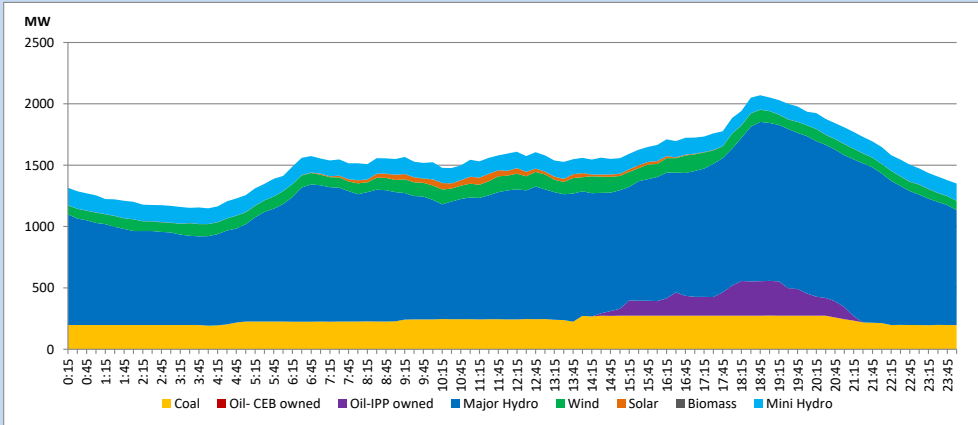
13. Variation of Demand during the current year



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

14. Daily Load Curve

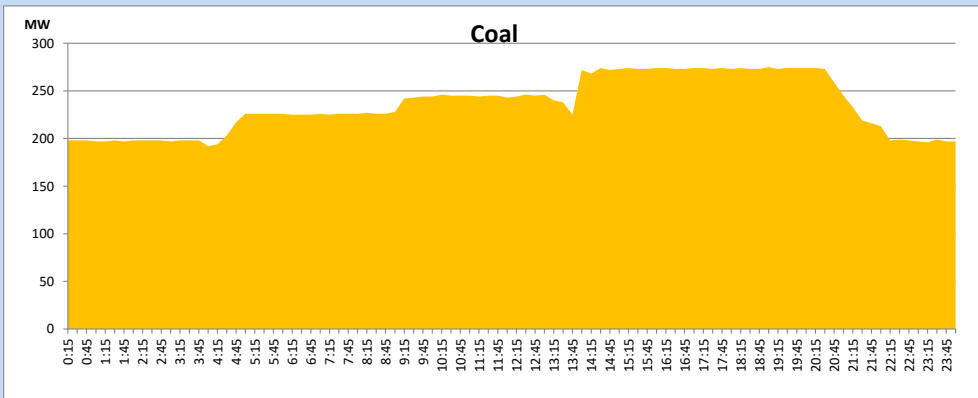
December 30, 2023



Solar and wind data is based on Telemetered Power Stations only

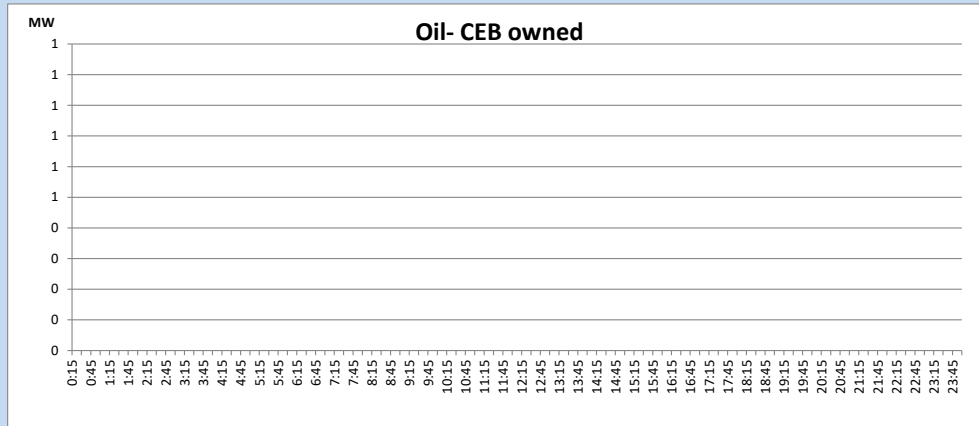
Coal Generation during

December 30, 2023



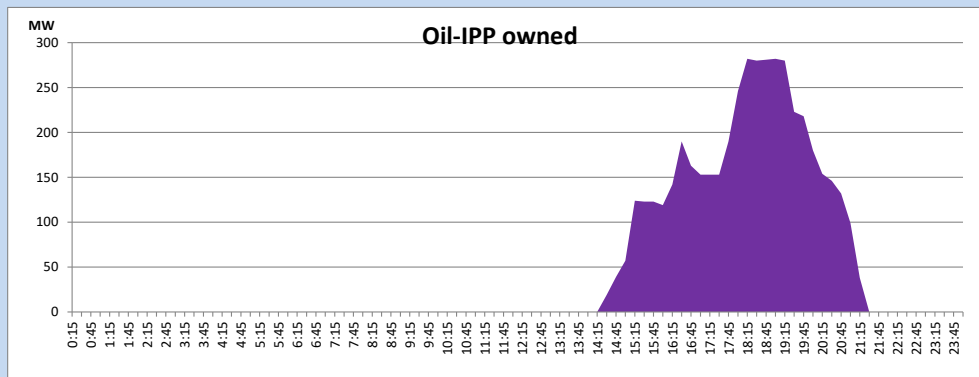
CEB Oil Plant Generation during

December 30, 2023



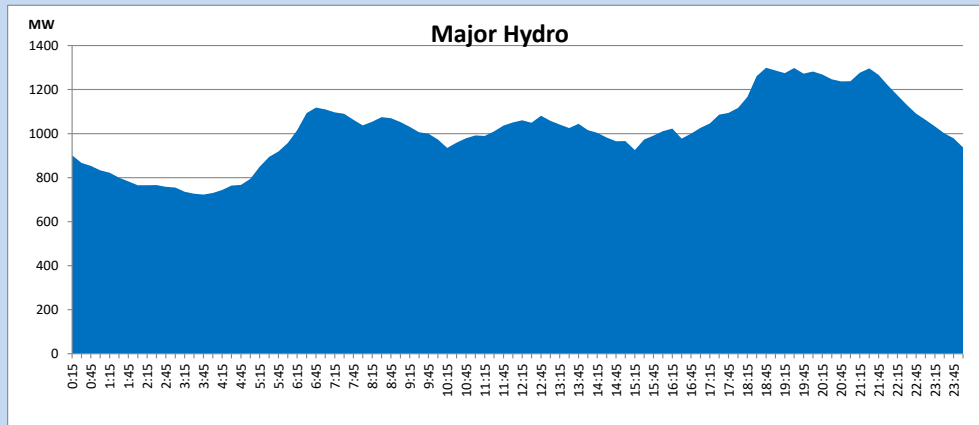
IPP Oil Plant Generation during

December 30, 2023



Major Hydro Generation during

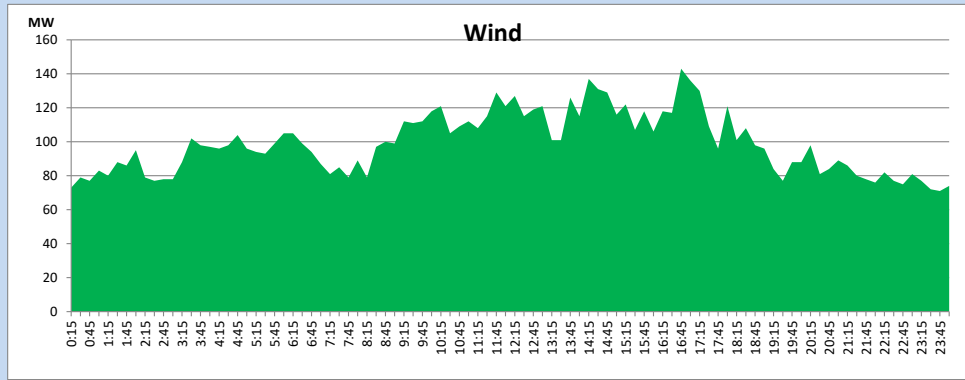
December 30, 2023



Wind Generation during

December 30, 2023

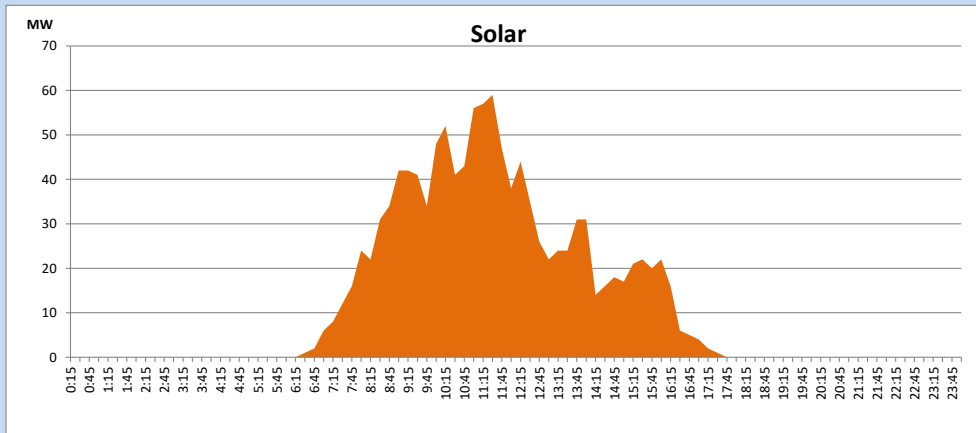
Based on Telemetered Power Stations only



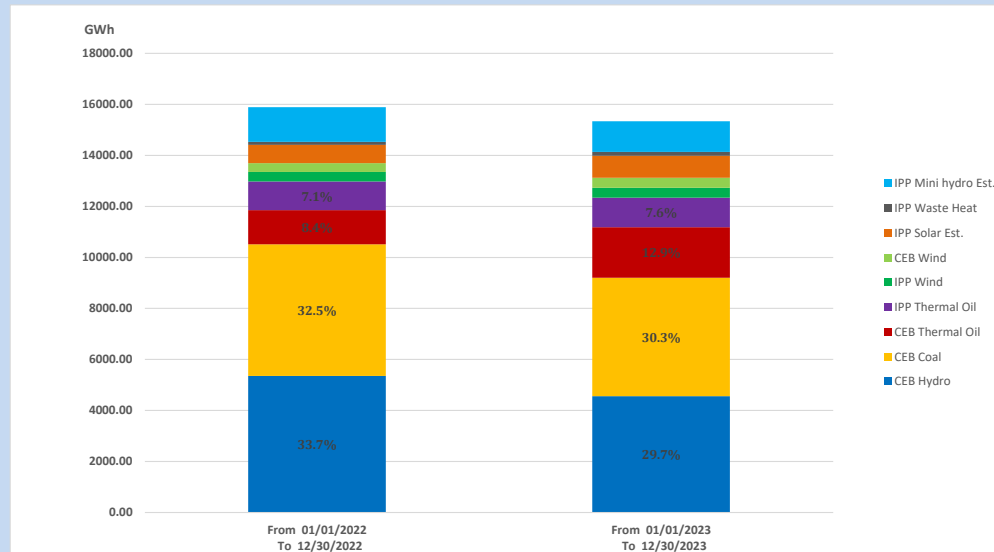
Solar Generation during

December 30, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch
From 01/01/2022 To 12/30/2022
From 01/01/2023 To 12/30/2023

15887 GWh
15340 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 30, 2023

- 1) Rantembe Unit 01 and 02 tripped at 12:38hrs, rejecting 50MW from the system due to operation of gen T/F pressure relief device trip. Rantembe Unit 01 and 02 resumed generation at 13:53hrs and 16:55hrs respectively.
- 2) WPS 132/33kV T/F 03 tripped along with 132kV B/S 01 CB and 33kV F06 at 17:32hrs causing all feeders of 33kV B/S 02 to be dead, due to the operation of O/C and E/F protection. The B/S CB is energized at 17:51hrs and all affected feeders except F06 energized at 17:52hrs. The T/F 03 energized at 17:57hrs.
- 3) Upper Kothmale pond spilling stopped at 09:30hrs.
- 4) Bowathenna, Victoria, and Randenigala reservoirs spilled intermittently and spilling continues to the present hour.
- 5) Rantabe pond spilled intermittently and spilling continues to the present hour.