

Generation and Reservoirs Statistics

December 5, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

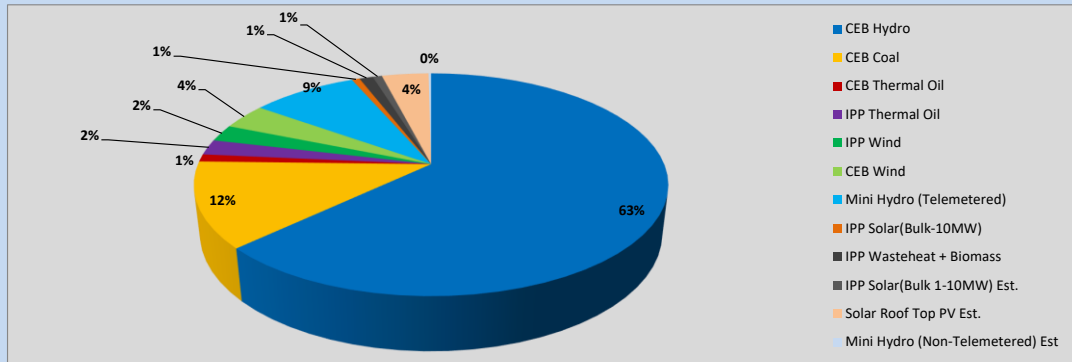


Table 01

	Generation (MWh)
CEB Hydro	25,468
CEB Coal	5,012
CEB Thermal Oil	432
IPP Thermal Oil	902
IPP Wind	985
CEB Wind	1,502
Mini Hydro (Telemetered)	3,487
IPP Solar (Bulk)	258
IPP Waste heat + Biomass	448
Total Generation (Excluding estimated figures)	38,494
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	83
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1,540
Total Generation (Including estimated figures)	40,421

* 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	126	64.59%
CEB Coal	25	13.07%
CEB Thermal Oil	2	1.07%
IPP Thermal	3	1.47%
SPP Wind	3	1.70%
CEB Wind	4	2.23%
Mini Hydro *	19	9.62%
IPP Solar *	10	5.19%
IPP Waste heat + BMP	2	1.05%
Total	195	

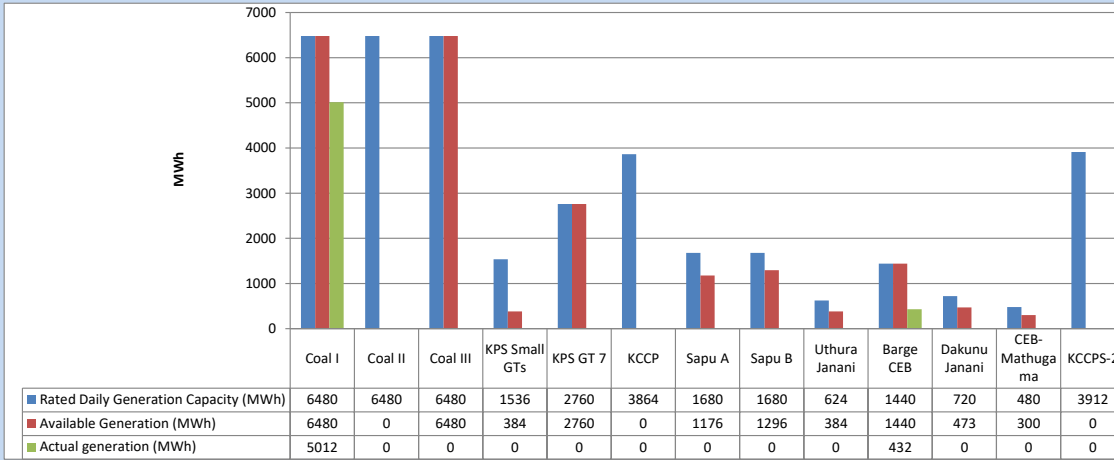
Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	3,950	27.53%
CEB Coal	4,521	31.51%
CEB Thermal Oil	1,957	13.64%
IPP Thermal	1,130	7.88%
SPP Wind	376	2.62%
CEB Wind	367	2.56%
Mini Hydro *	1,091	7.61%
IPP Solar *	813	5.66%
IPP Waste heat	142	0.99%
Total	14,347	

*Including estimated contribution from non telemetered plants

3. CEB owned Thermal Plant Dispatch

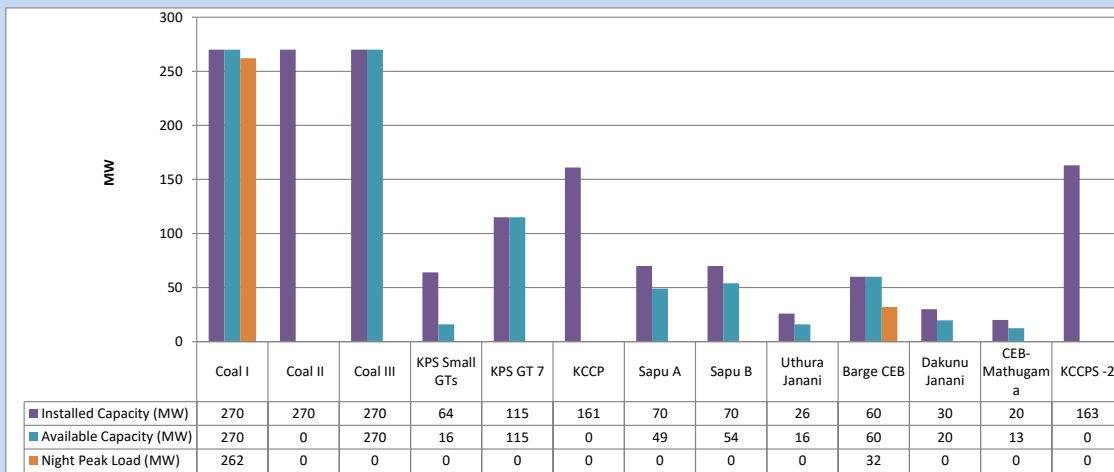
December 5, 2023



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

December 6, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

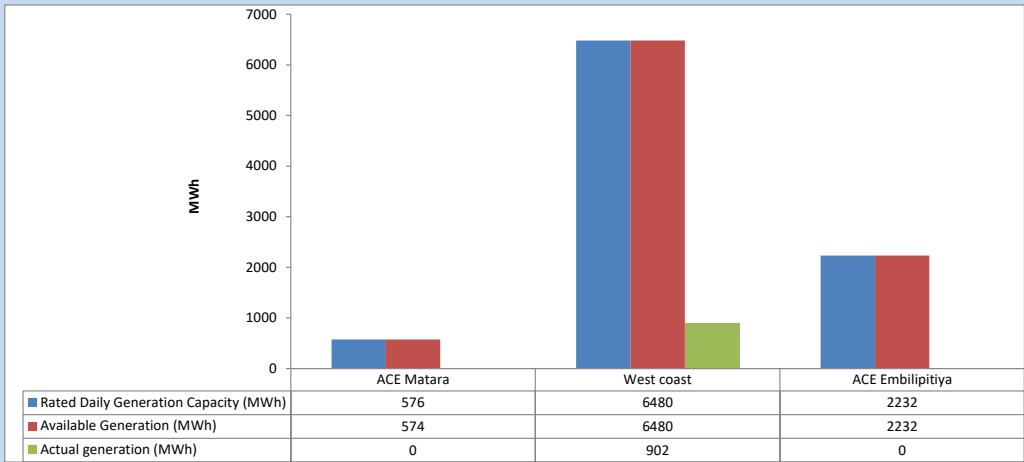


Plant availability is recorded at 6.00 am on

December 6, 2023

5. IPP owned Thermal Plant Dispatch

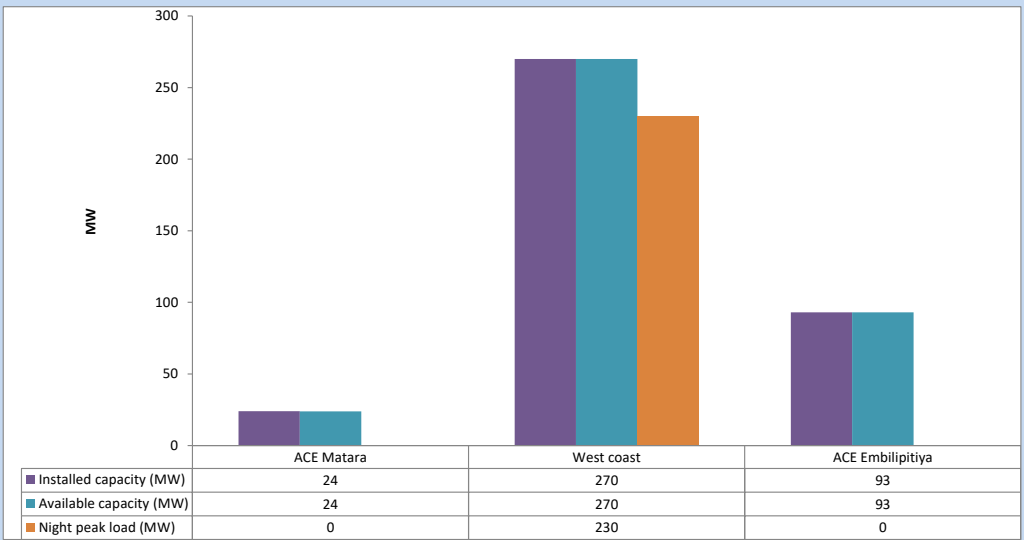
December 5, 2023



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

December 6, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

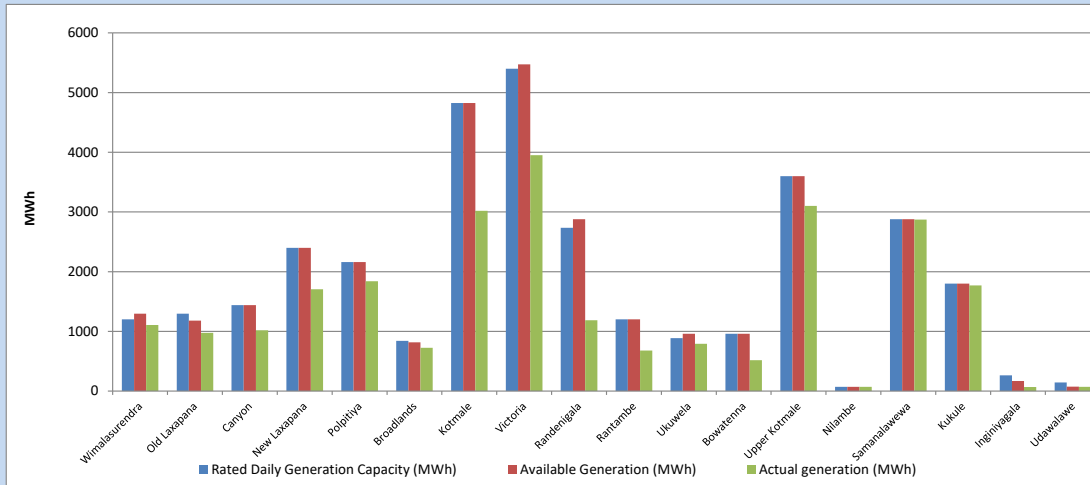


Plant availability is recorded at 6.00 am on

December 6, 2023

7. Major Hydro Plant Dispatch

December 5, 2023

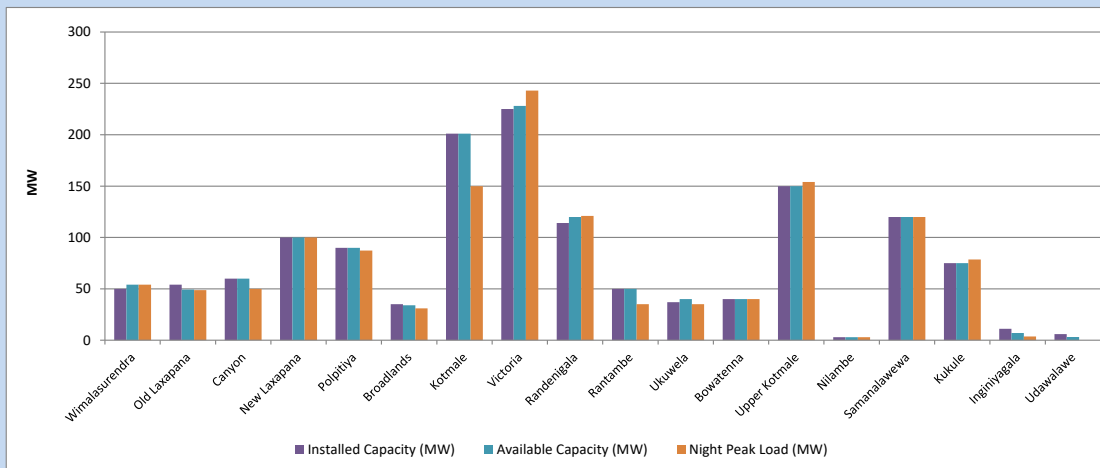


Available Generation is estimated based on plant availability at 6.00am on December 6, 2023
Broadlands power plant is operating in the Commissioning Stage

December 6, 2023

8. Major Hydro Plant Loading at Night Peak

December 5, 2023



Plant availability is recorded at 6.00 am on December 6, 2023
Broadlands power plant is operating in the Commissioning Stage

December 6, 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	1,106
Old Laxapana	54	49	49	975
Canyon	60	60	50	1,018
New Laxapana	100	100	100	1,706
Polpitiya	90	90	87	1,840
Broadlands	35	34	31	725
Kotmale	201	201	150	3,020
Victoria	225	228	243	3,951
Randenigala	114	120	121	1,185
Rantambe	50	50	35	679
Ukuwela	37	40	35	791
Bowatenna	40	40	40	518
Upper Kotmale	150	150	154	3,102
Nilambe	3	3	3	72
Samanalawewa	120	120	120	2,873
Kukule	75	75	79	1,769
Inginiyagala	11	7	4	67
Udawalawe	6	3	0	71
Puttalam Coal I	270	270	262	5,012
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	0	0
Barge CEB	60	60	32	432
CEB-Hambantota	30	20	0	0
CEB-Mathugama	20	13	0	0
ACE Matara	24	24	0	0
Asia Power	50	0	0	0
KCCPS -2	163	0	0	0
West Coast	270	270	230	902
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	0	0
Total	3,483	2,693	2,166	38,494

Plant availability is the availability recorded at 6 am on

December 6, 2023

10. Contribution to the Night Peak in MW

December 5, 2023

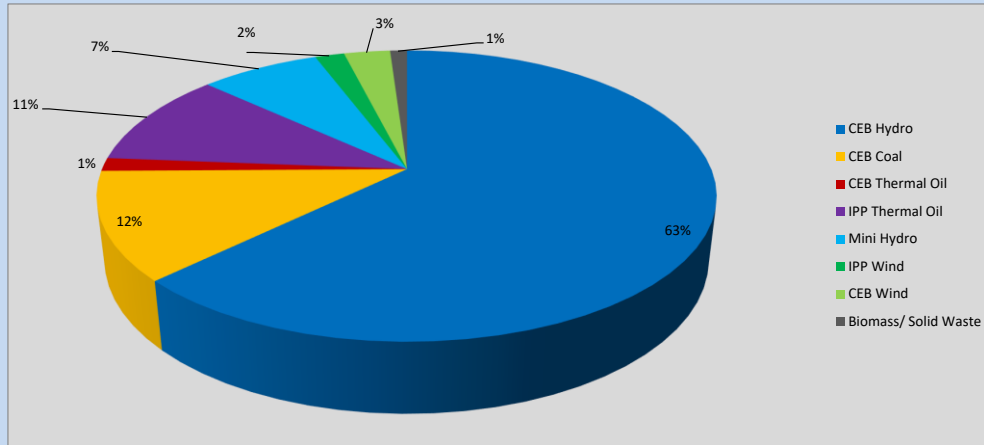


Table 06

CEB Hydro	1370	MW
CEB Coal	262	MW
CEB Thermal Oil	32	MW
IPP Thermal Oil	230	MW
Mini Hydro (Telemetered)	162	MW
IPP Wind	39.8	MW
CEB Wind	62.7	MW
Biomass/ Solid Waste	23	MW

Recorded Peak Demand Data

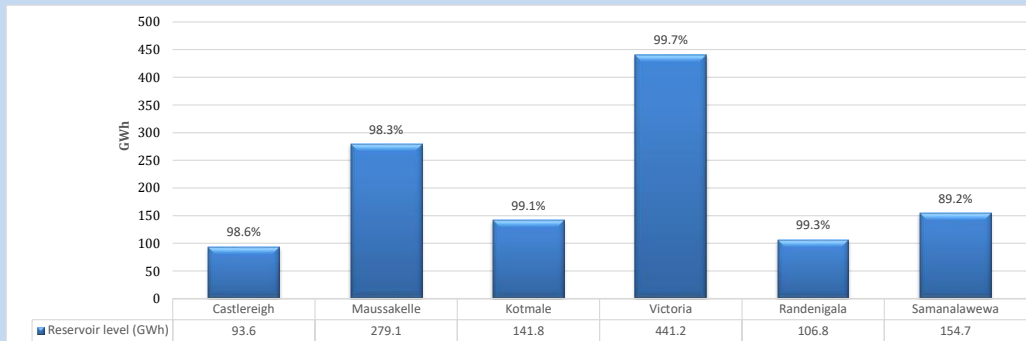
Table 07

Night Peak*	2,182	MW
Day Peak Maximum Demand	1,970	MW
Day Peak Minimum Demand	1,436	MW
Off Peak Minimum Demand	1,057	MW

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

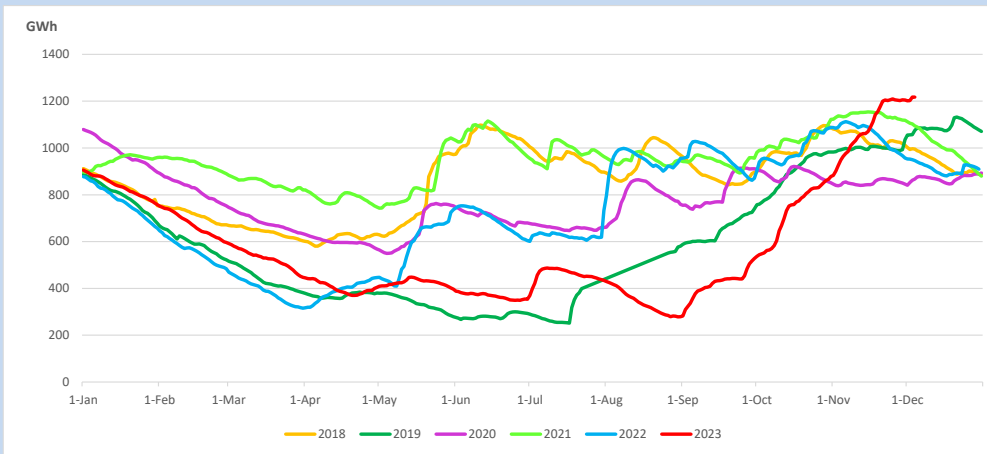
Reservoir Levels -

as at 06.00 Hr on December 6, 2023

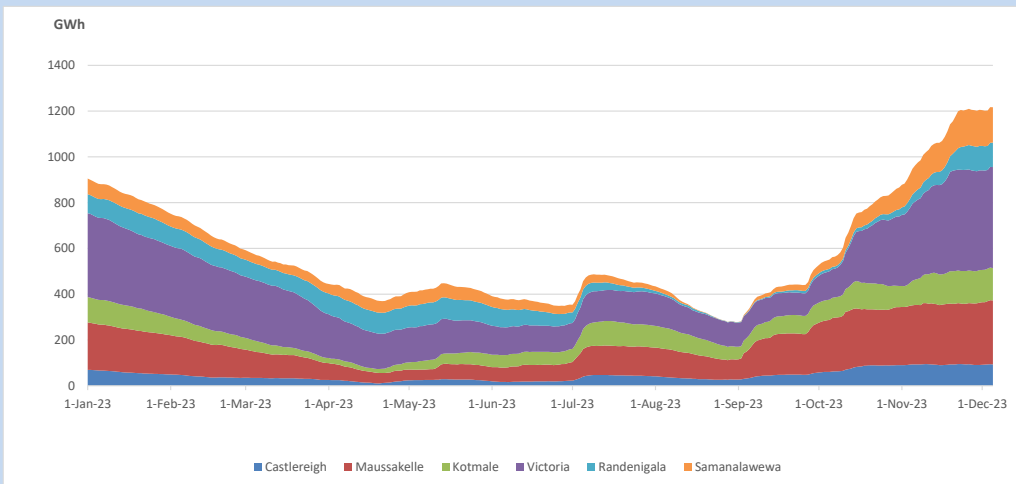


Total Reservoir Level 1217.2 GWh
% of Total capacity 97.7%

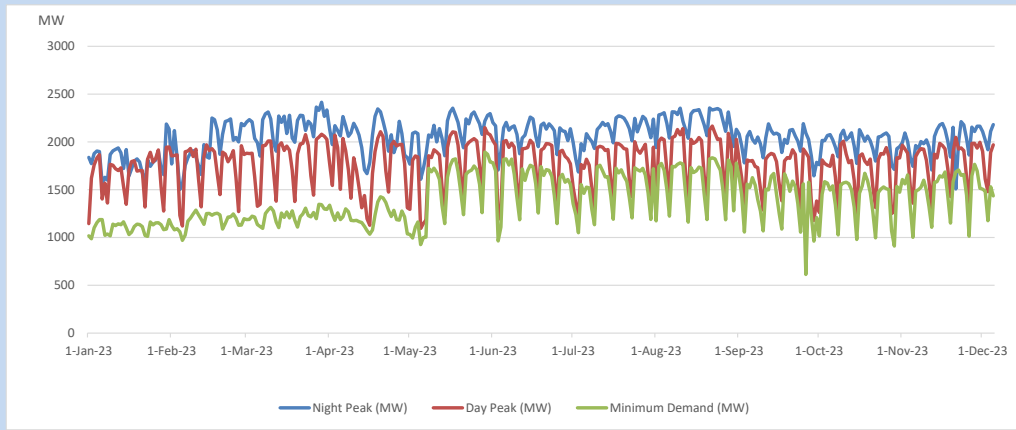
11. Comparison of Total Reservoir Storage Levels with Past Years



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



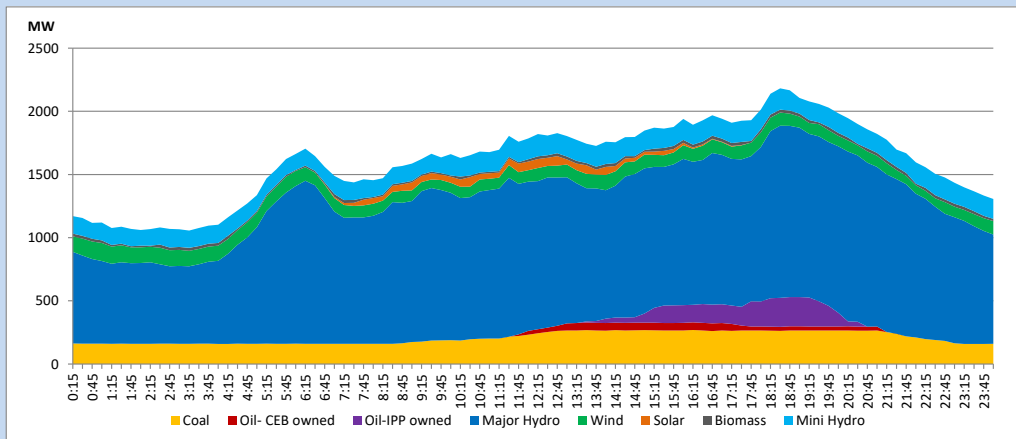
13. Variation of Demand during the current year



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

14. Daily Load Curve

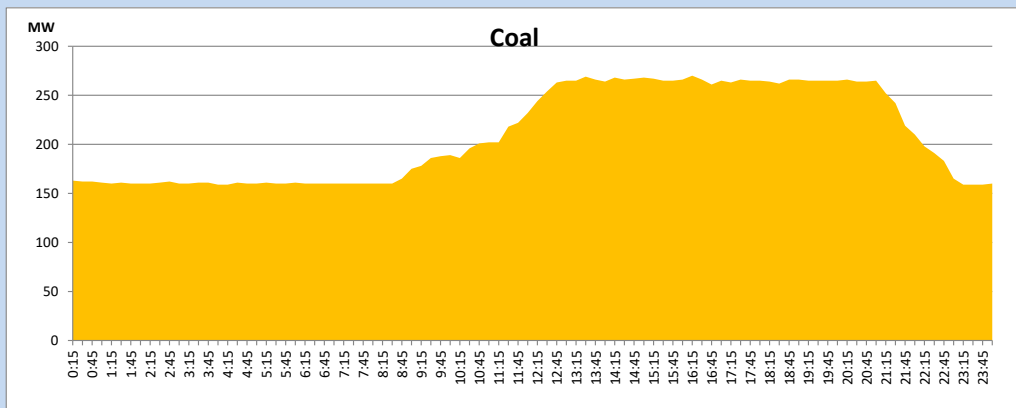
December 5, 2023



Solar and wind data is based on Telemetered Power Stations only

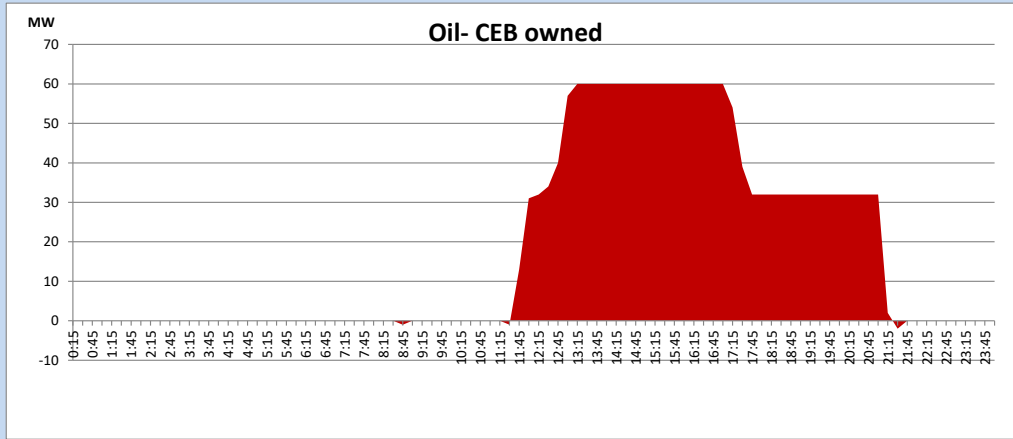
Coal Generation during

December 5, 2023



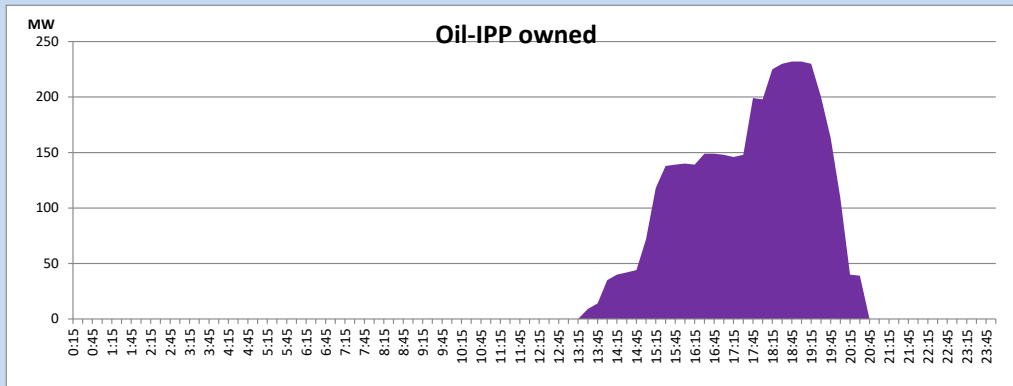
CEB Oil Plant Generation during

December 5, 2023



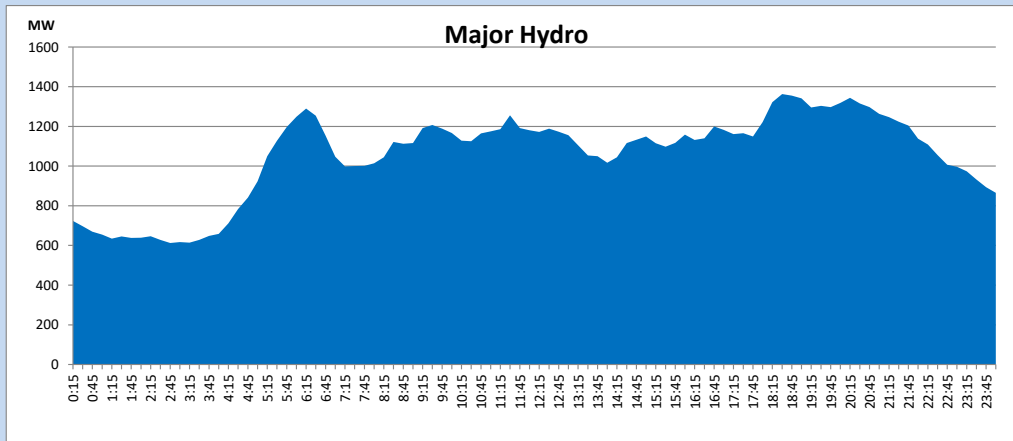
IPP Oil Plant Generation during

December 5, 2023



Major Hydro Generation during

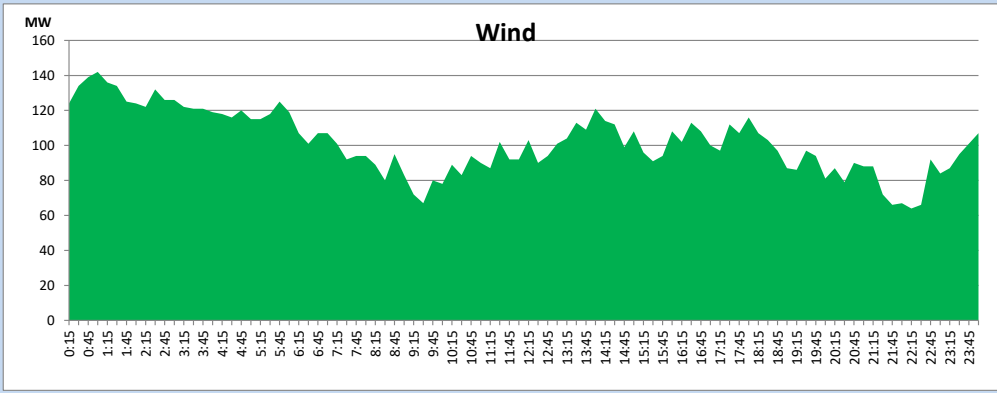
December 5, 2023



Wind Generation during

December 5, 2023

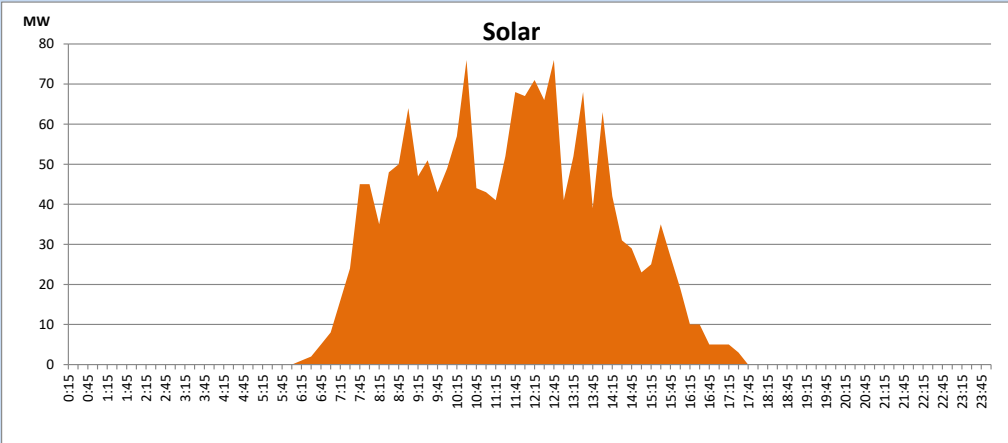
Based on Telemetered Power Stations only



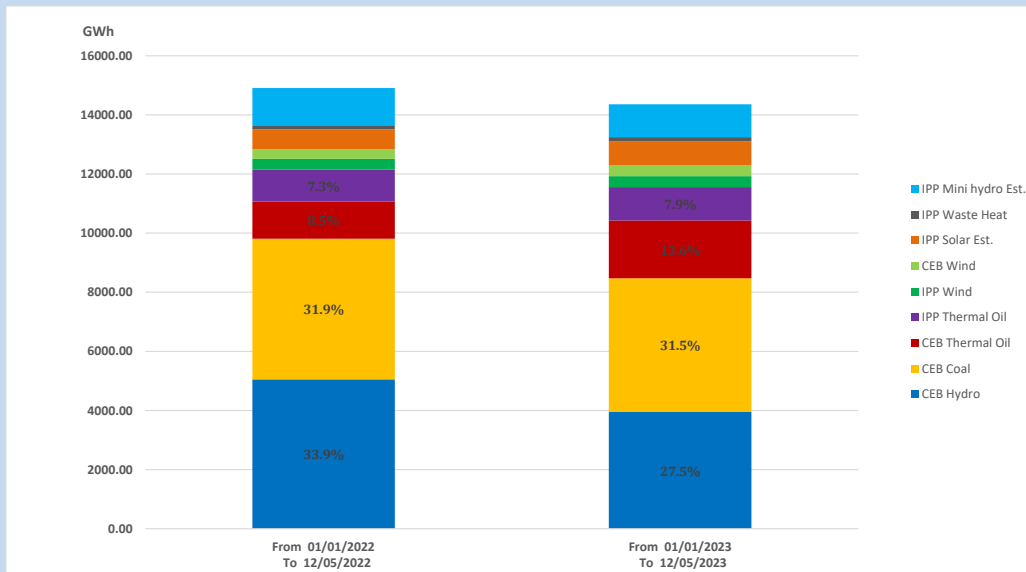
Solar Generation during

December 5, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch

From 01/01/2022 To 12/05/2022

14906 GWh

From 01/01/2023 To 12/05/2023

14358 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 5, 2023

- 1) Randenigala unit 01 was made unavailable at 11:17hrs due to MIV fault. Randenigala unit 01 resumed generation at 11:59hrs.
- 2) N'Anu - Trinco 132kV cct tripped and A/R from both ends due to the operation of differential protection at 13:13hrs.
- 3) WPS GSS 132/33kV T/F 03 and 33kV B/S 02 tripped at 15:01hrs along with WPS 33kV feeder 06 causing 33kV feeder 01, 02, 03,04,05,07 & 08 to be dead due to the operation of O/C & E/F protection. 33kV B/S 02 energized at 15:33hrs and 33kV feeders 01, 02, 03,04,05,07 & 08 normalized by 15:35hrs. 33kV Feeder 06 normalized at 15:44hrs and T/F 03 normalized at 16:20hrs.
- 4) Valachchenai 132/33kV T/F 02 and 33kV B/S tripped at 05:40hrs (06.12.2023) along with 33kV feeder 04 causing 33kV feeder 02, 06, & 08 to be dead, due to the operation of E/F protection. Valachchenai 132/33kV T/F 02 and 33kV B/S normalized at 05:58hrs (06.12.2023). All affected feeders were normalized by 06:03hrs (06.12.2023).
- 5) Upper Kothmale pond spilling stopped at 8:38hrs and Kukule pond spilling continues to the present hour.