

Generation and Reservoirs Statistics

December 18, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

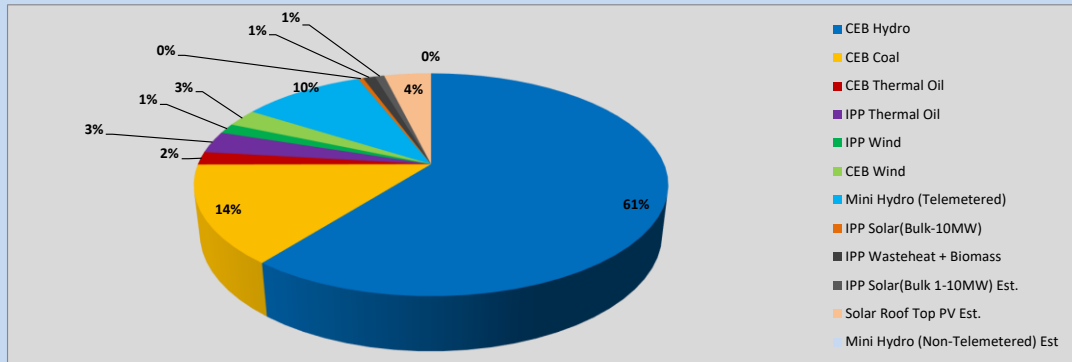


Table 01

	Generation (MWh)
CEB Hydro	24,389
CEB Coal	5,762
CEB Thermal Oil	756
IPP Thermal Oil	1,273
IPP Wind	588
CEB Wind	1,024
Mini Hydro (Telemetered)	4,025
IPP Solar (Bulk)	168
IPP Waste heat + Biomass	399
Total Generation (Excluding estimated figures)	38,384
* 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)	40,228

* 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	448	63.84%
CEB Coal	87	12.40%
CEB Thermal Oil	15	2.11%
IPP Thermal	16	2.24%
SPP Wind	11	1.53%
CEB Wind	15	2.12%
Mini Hydro *	67	9.53%
IPP Solar *	37	5.24%
IPP Waste heat + BMP	7	0.99%
Total	702	

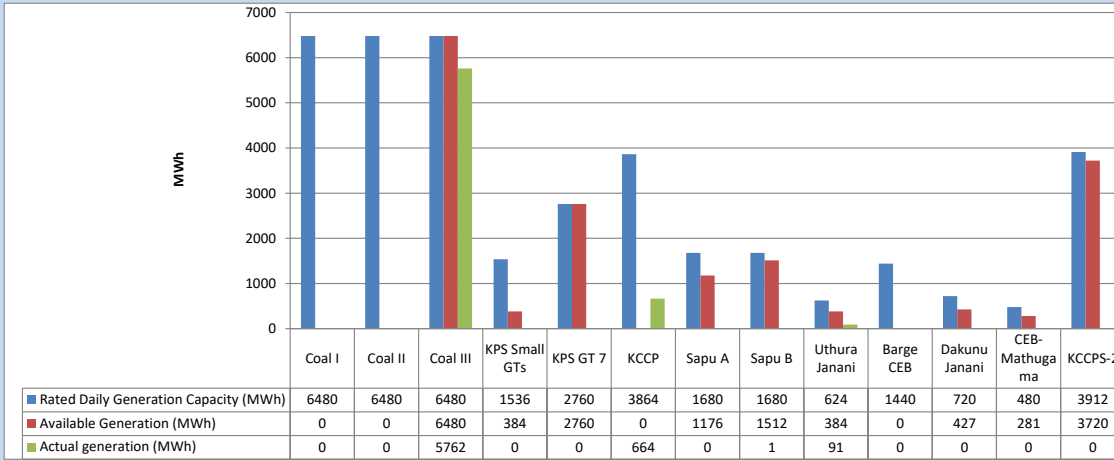
Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	4,272	28.76%
CEB Coal	4,583	30.85%
CEB Thermal Oil	1,970	13.26%
IPP Thermal	1,143	7.69%
SPP Wind	384	2.58%
CEB Wind	378	2.54%
Mini Hydro *	1,139	7.67%
IPP Solar *	839	5.65%
IPP Waste heat	146	0.99%
Total	14,854	

*Including estimated contribution from non telemetered plants

3. CEB owned Thermal Plant Dispatch

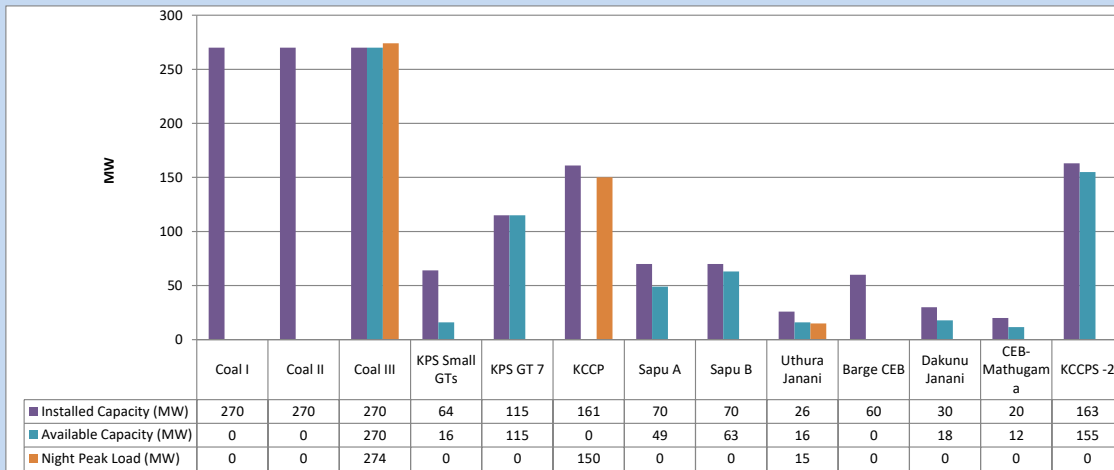
December 18, 2023



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

December 19, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

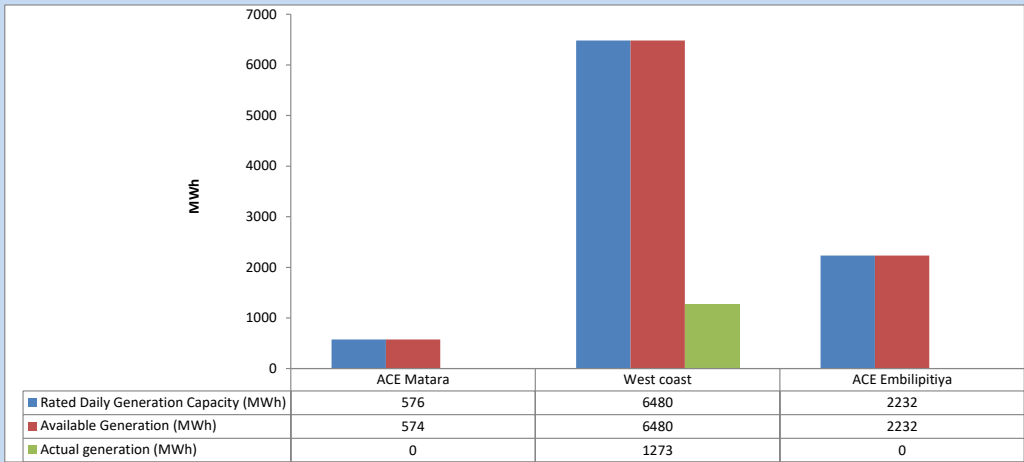


Plant availability is recorded at 6.00 am on

December 19, 2023

5. IPP owned Thermal Plant Dispatch

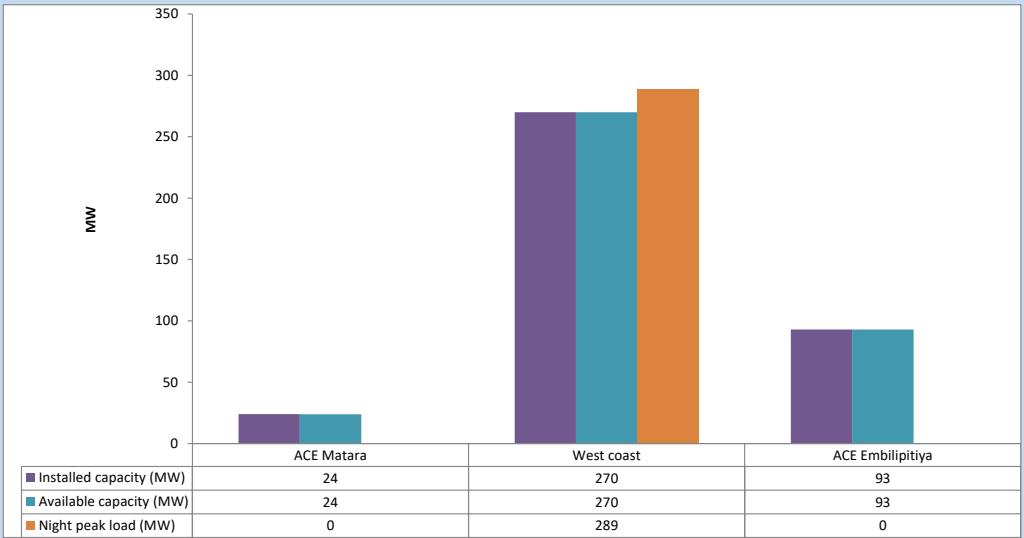
December 18, 2023



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

December 19, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

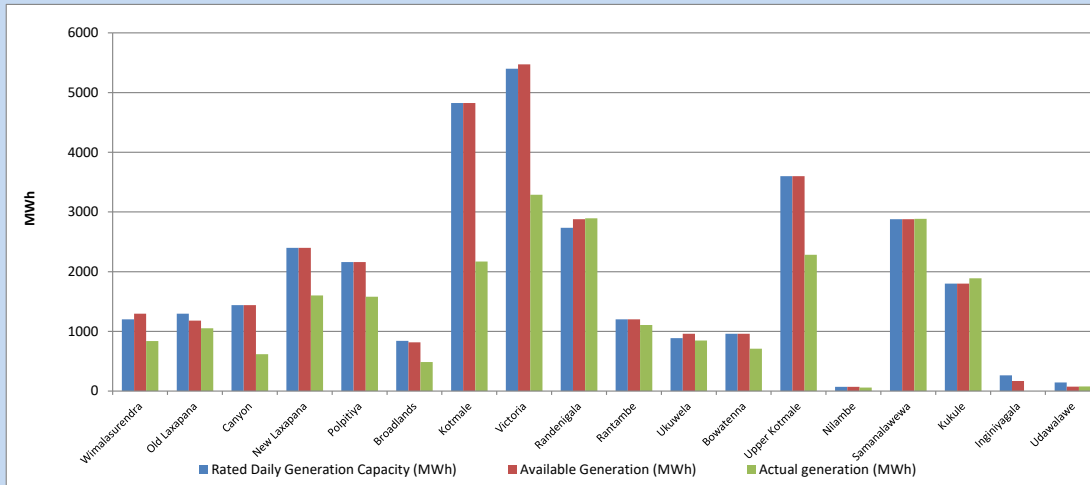


Plant availability is recorded at 6.00 am on

December 19, 2023

7. Major Hydro Plant Dispatch

December 18, 2023

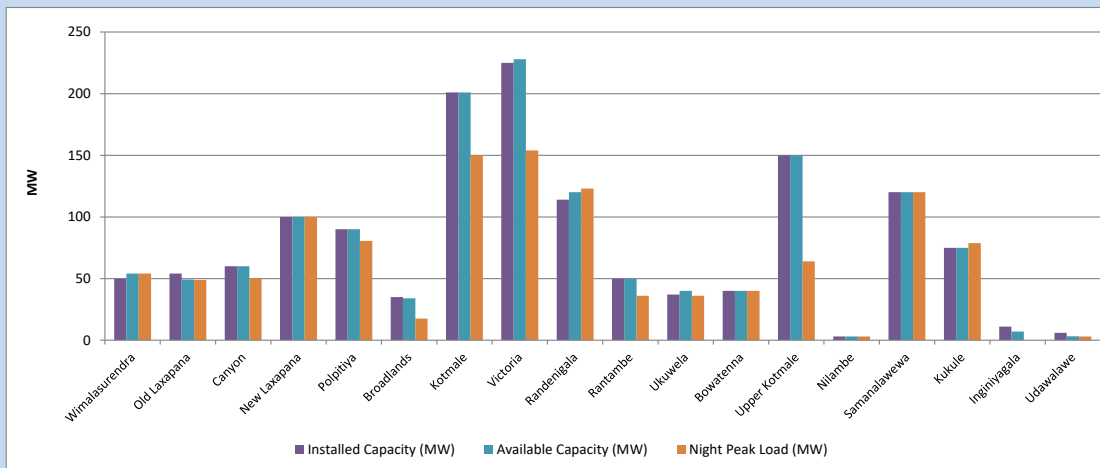


Available Generation is estimated based on plant availability at 6.00am on December 19, 2023
Broadlands power plant is operating in the Commissioning Stage

December 19, 2023

8. Major Hydro Plant Loading at Night Peak

December 18, 2023



Plant availability is recorded at 6.00 am on December 19, 2023
Broadlands power plant is operating in the Commissioning Stage

December 19, 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	839
Old Laxapana	54	49	49	1,052
Canyon	60	60	50	619
New Laxapana	100	100	100	1,603
Polpitiya	90	90	81	1,580
Broadlands	35	34	18	487
Kotmale	201	201	150	2,170
Victoria	225	228	154	3,289
Randenigala	114	120	123	2,894
Rantambe	50	50	36	1,108
Ukuwela	37	40	36	846
Bowatenna	40	40	40	709
Upper Kotmale	150	150	64	2,283
Nilambe	3	3	3	58
Samanalawewa	120	120	120	2,884
Kukule	75	75	79	1,890
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	274	5,762
KPS Small GTs	64	16	0	0
KPS GT 7	115	115	0	0
KCCP	161	0	150	664
Sapugaskanda A	70	49	0	0
Sapugaskanda B	70	63	0	1
Uthura Janani	26	16	15	91
Barge CEB	60	0	0	0
CEB-Hambantota	30	18	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	289	1,273
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	0	0
Total	3,483	2,525	2,179	38,384

Plant availability is the availability recorded at 6 am on

December 19, 2023

10. Contribution to the Night Peak in MW

December 18, 2023

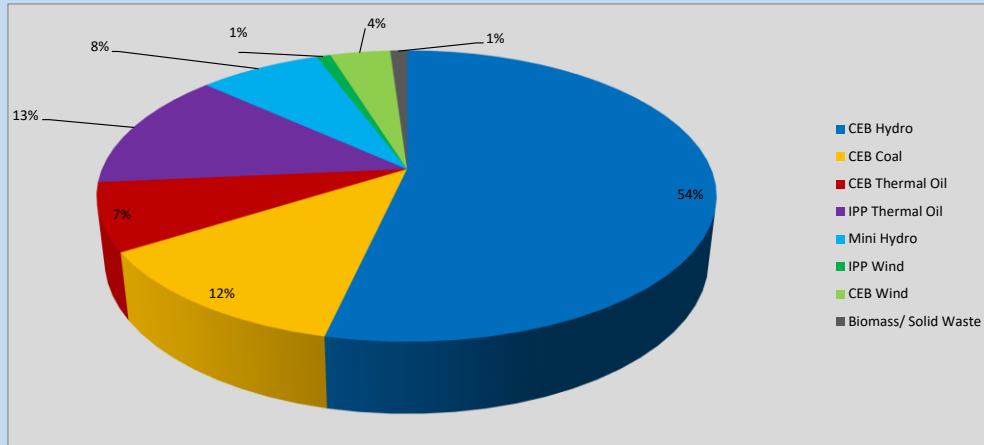


Table 06

CEB Hydro	1176	MW
CEB Coal	274	MW
CEB Thermal Oil	165	MW
IPP Thermal Oil	289	MW
Mini Hydro (Telemetered)	167	MW
IPP Wind	19.5	MW
CEB Wind	82.2	MW
Biomass/ Solid Waste	23	MW

Recorded Peak Demand Data

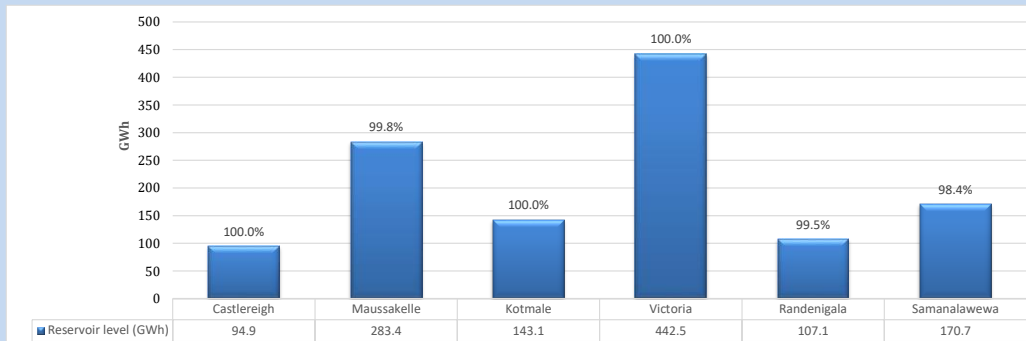
Table 07

Night Peak*	2,196	MW
Day Peak Maximum Demand	2,013	MW
Day Peak Minimum Demand	1,476	MW
Off Peak Minimum Demand	1,018	MW

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

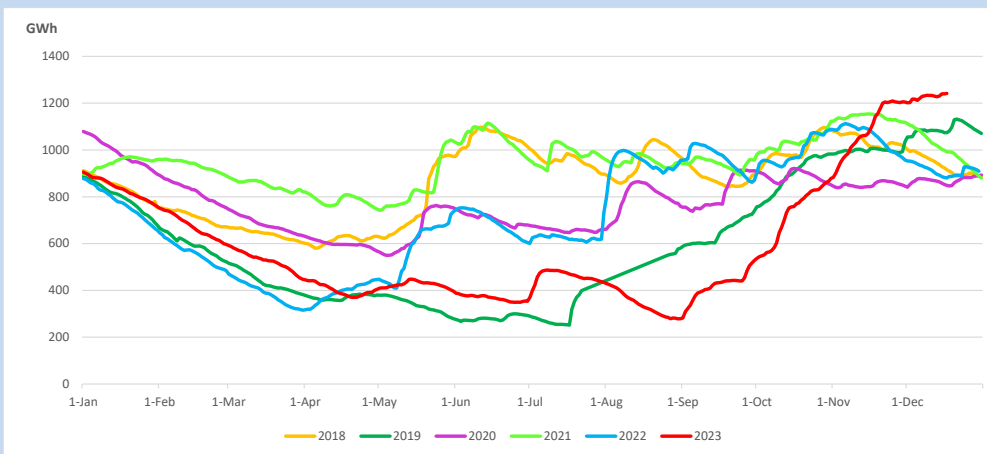
Reservoir Levels -

as at 06.00 Hr on December 19, 2023

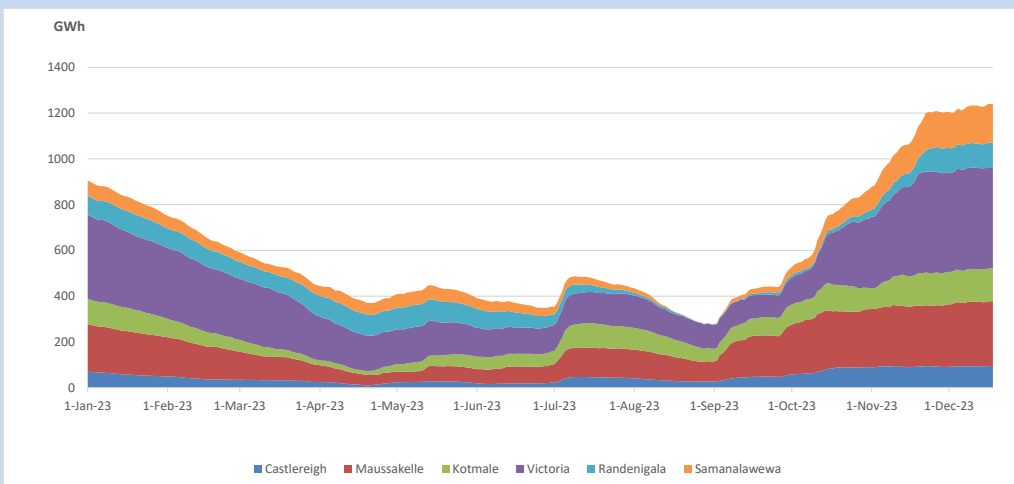


Total Reservoir Level 1241.7 GWh
 % of Total capacity 99.7%

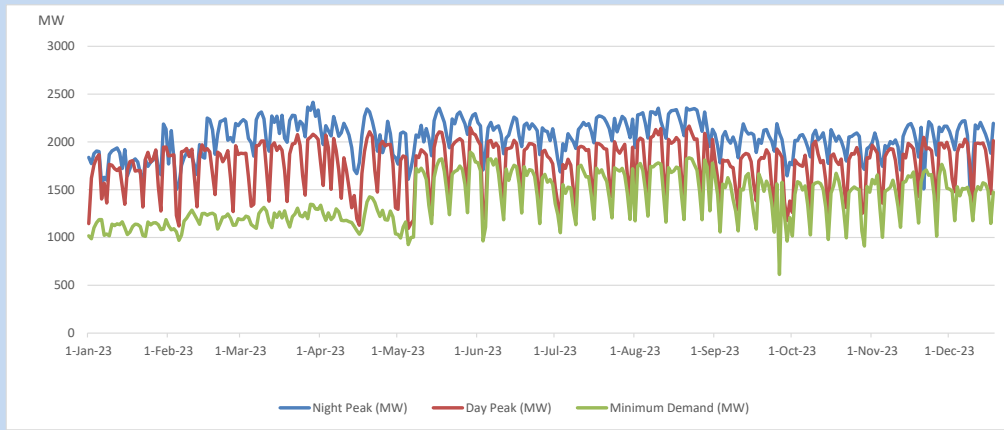
11. Comparison of Total Reservoir Storage Levels with Past Years



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



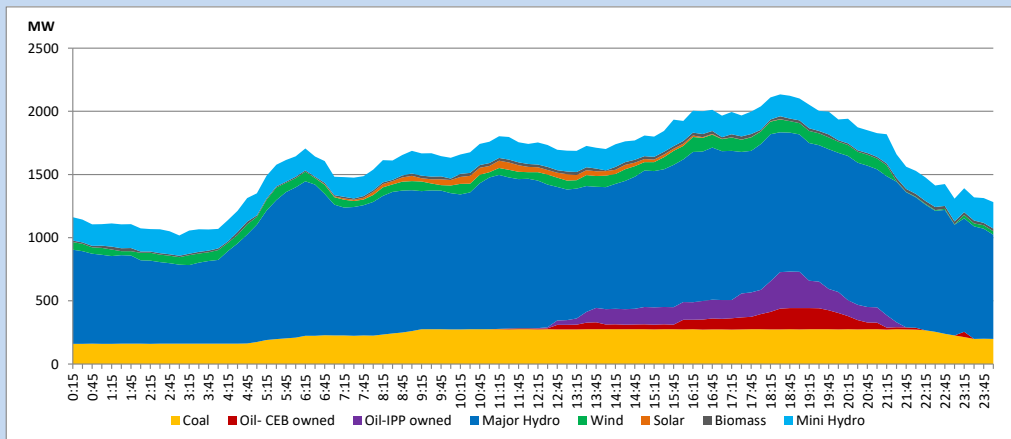
13. Variation of Demand during the current year



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

14. Daily Load Curve

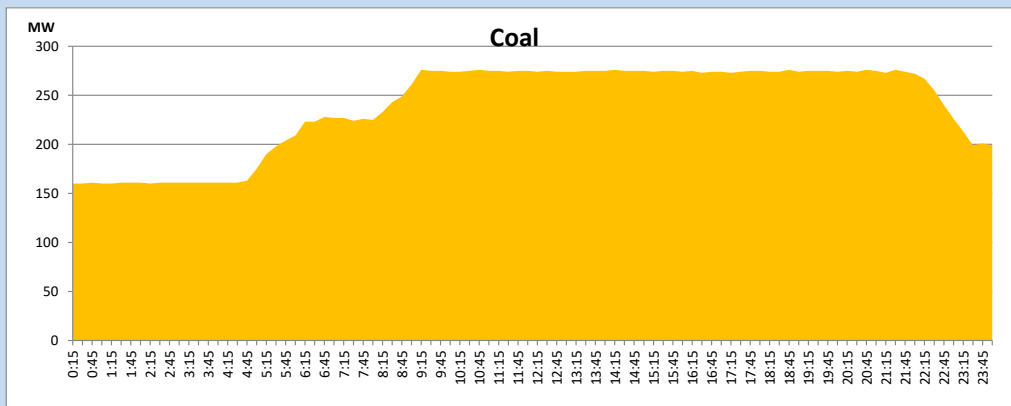
December 18, 2023



Solar and wind data is based on Telemetered Power Stations only

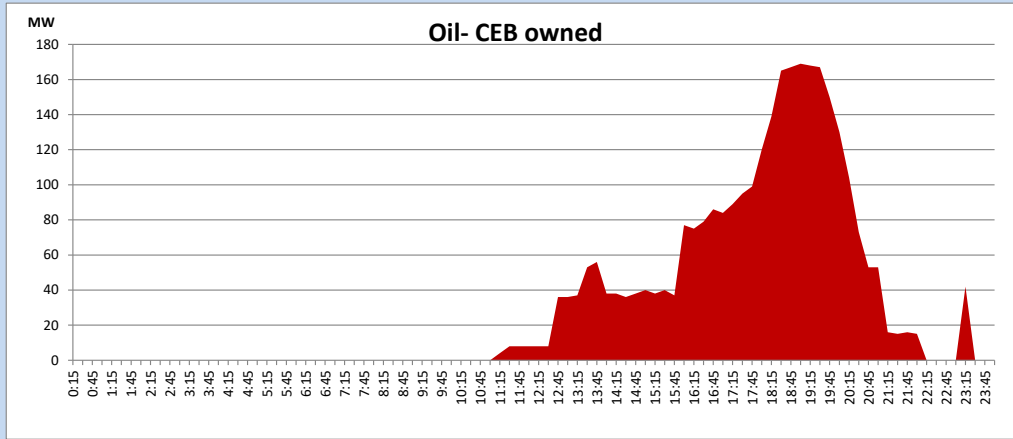
Coal Generation during

December 18, 2023



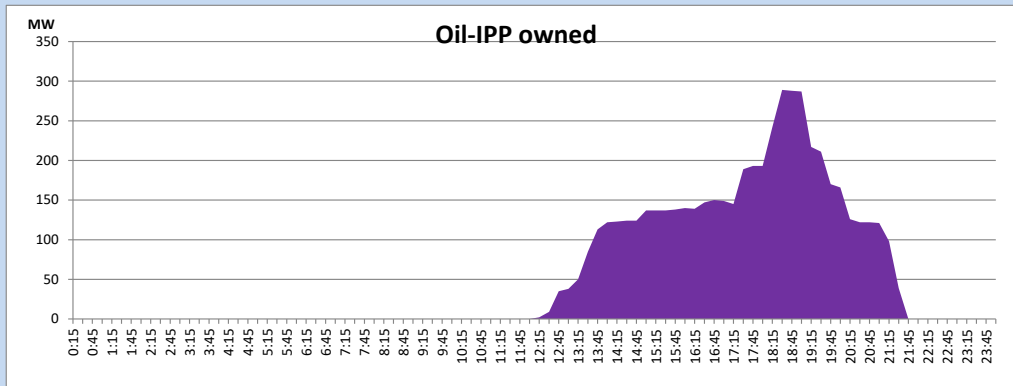
CEB Oil Plant Generation during

December 18, 2023



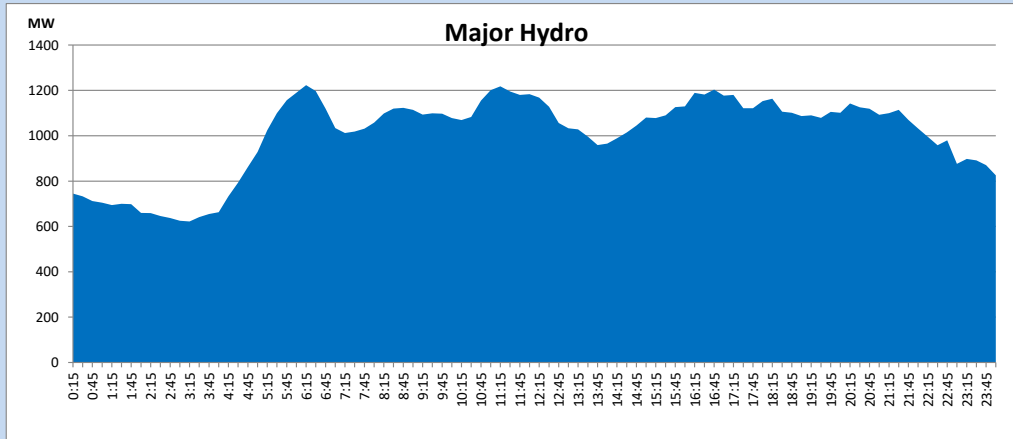
IPP Oil Plant Generation during

December 18, 2023



Major Hydro Generation during

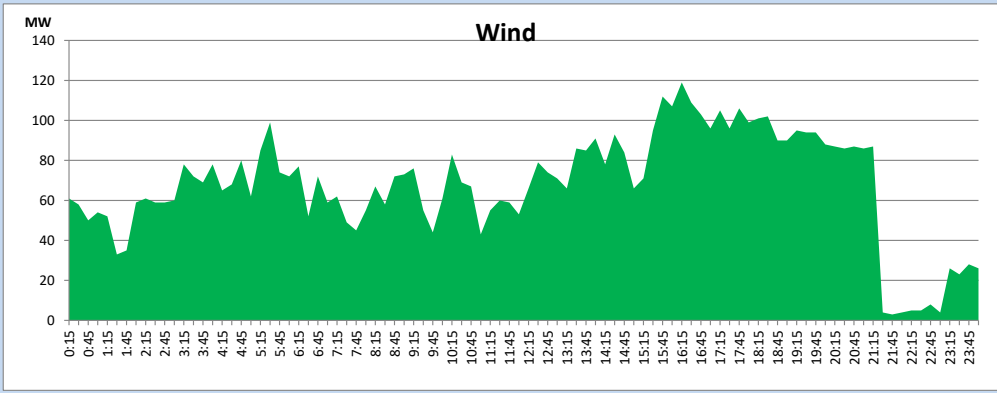
December 18, 2023



Wind Generation during

December 18, 2023

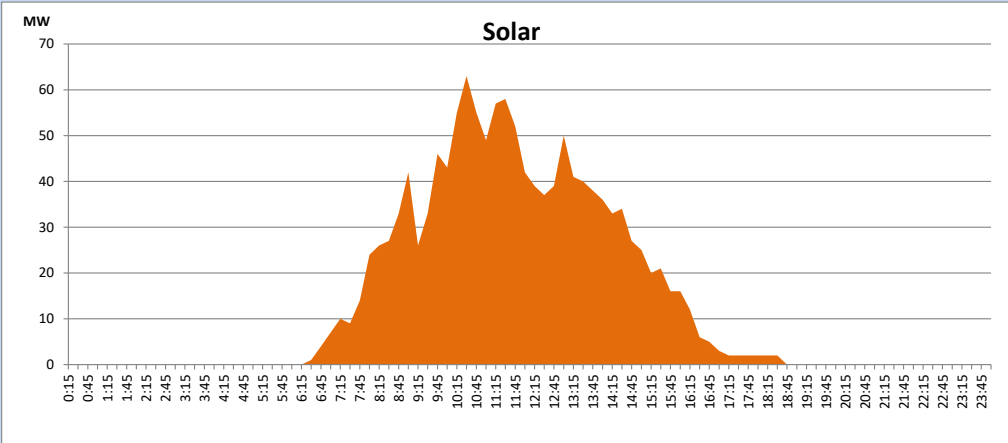
Based on Telemetered Power Stations only



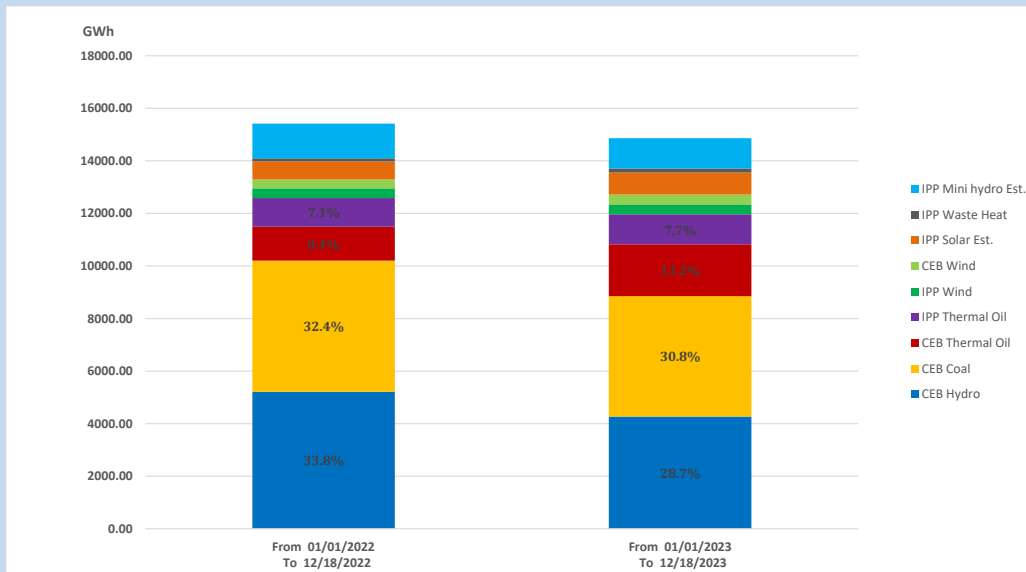
Solar Generation during

December 18, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch

From 01/01/2022 To 12/18/2022

15418 GWh

From 01/01/2023 To 12/18/2023

14865 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 18, 2023

- 1) Kothmale, Victoria, and Randenigala reservoirs spilled intermittently. Randenigala reservoir spilling stopped at 03:57hrs (19.12.2023). Kothmale and Victoria reservoirs spilling continues to the present hour.
- 2) Kukule pond spilling started at 18:15hrs and continues to the present hour.
- 3) Maussakele reservoir spilling started at 19:23hrs and stopped at 00:10hrs (19.12.2023). Castlereigh reservoir spilling started at 02:23hrs (19.12.2023) and continues to the present hour.
- 4) Samanalawewa reservoir spilling started at 22:13hrs and spilling stopped at 05:45hrs (19.12.2023).
- 5) Upper Kothmale pond spilled intermittently and spilling continues to the present hour.
- 6) Kotugoda 220/132/33kV T/F 01 tripped at 22:56hrs from all sides due to operation of lockout relay. T/F 01 restored at 23:31hrs and tripped again at 23:52hrs from all sides due to operation of lockout relay. Kotugoda 220/132/33kV T/F 01 is yet to be restored.