

Generation and Reservoirs Statistics

November 21, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

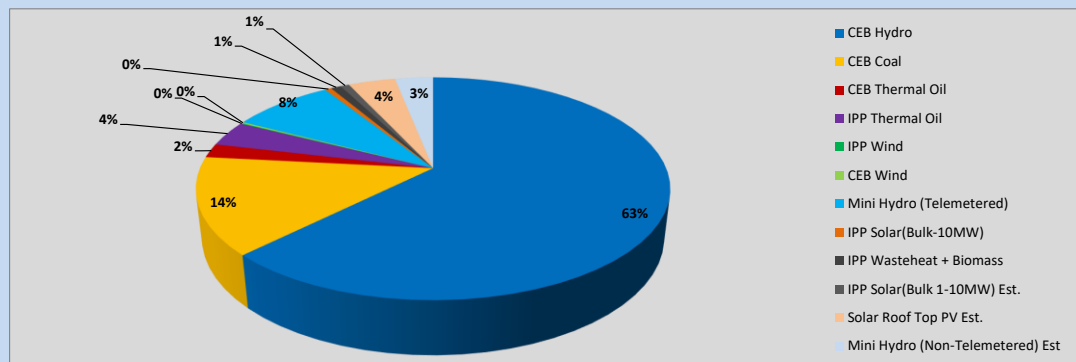


Table 01

	Generation (MWh)
CEB Hydro	26,724
CEB Coal	6,025
CEB Thermal Oil	867
IPP Thermal Oil	1,571
IPP Wind	45
CEB Wind	85
Mini Hydro (Telemetered)	3,546
IPP Solar (Bulk)	226
IPP Waste heat + Biomass	355
Total Generation (Excluding estimated figures)	39,444
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	1325
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1640
Total Generation (Including estimated figures)	42,713

* 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	487	57.70%
CEB Coal	179	21.20%
CEB Thermal Oil	7	0.78%
IPP Thermal	5	0.59%
SPP Wind	6	0.66%
CEB Wind	7	0.82%
Mini Hydro *	102	12.10%
IPP Solar *	46	5.43%
IPP Waste heat + BMP	6	0.72%
Total	845	

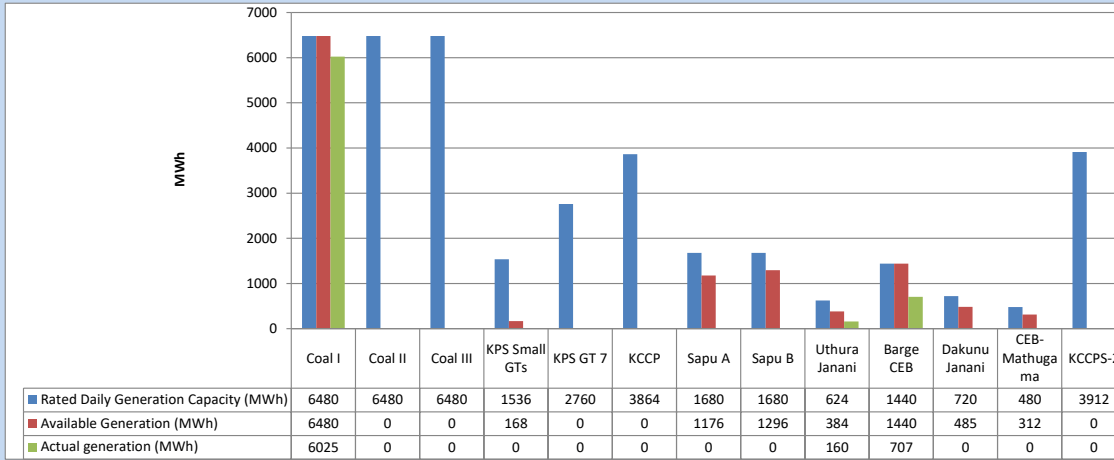
Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	3,589	26.04%
CEB Coal	4,445	32.25%
CEB Thermal Oil	1,951	14.16%
IPP Thermal	1,119	8.12%
SPP Wind	370	2.69%
CEB Wind	359	2.61%
Mini Hydro *	1,029	7.46%
IPP Solar *	783	5.68%
IPP Waste heat	137	0.99%
Total	13,782	

*Including estimated contribution from non telemetered plants

3. CEB owned Thermal Plant Dispatch

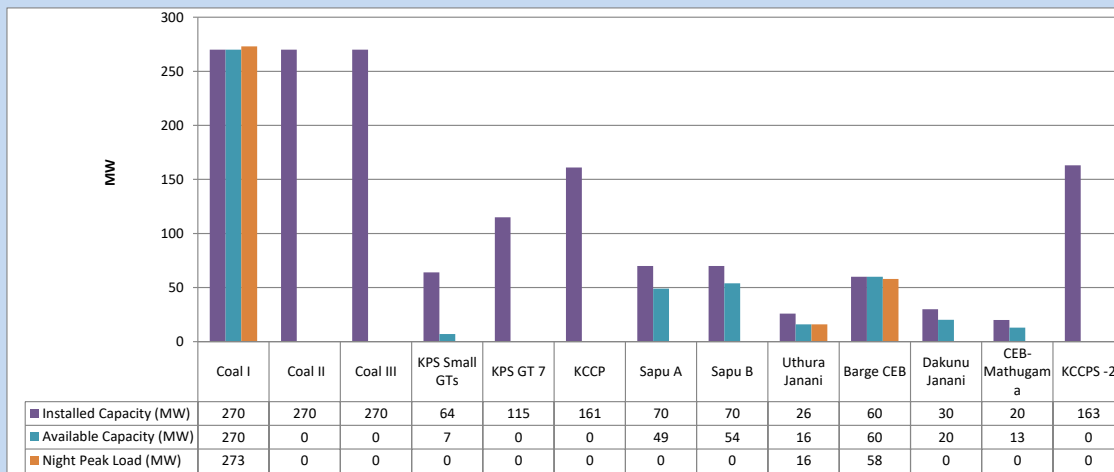
November 21, 2023



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

November 22, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

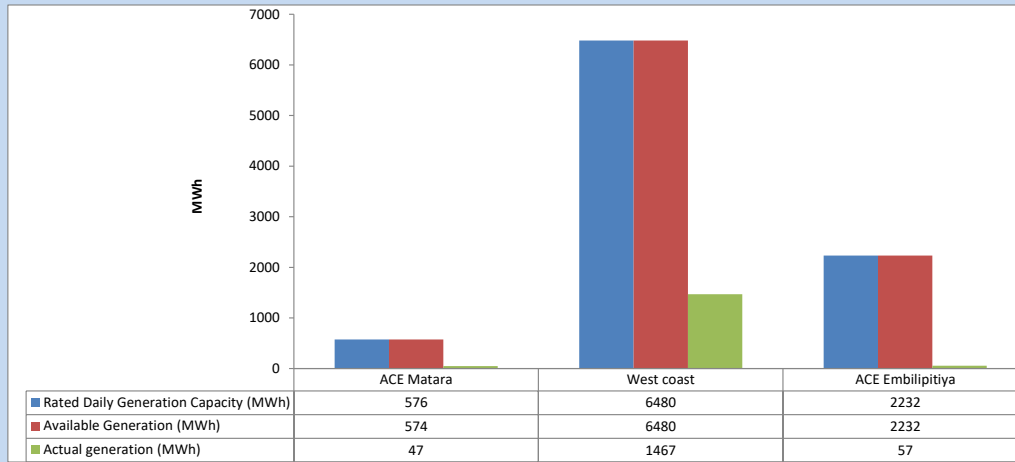


Plant availability is recorded at 6.00 am on

November 22, 2023

5. IPP owned Thermal Plant Dispatch

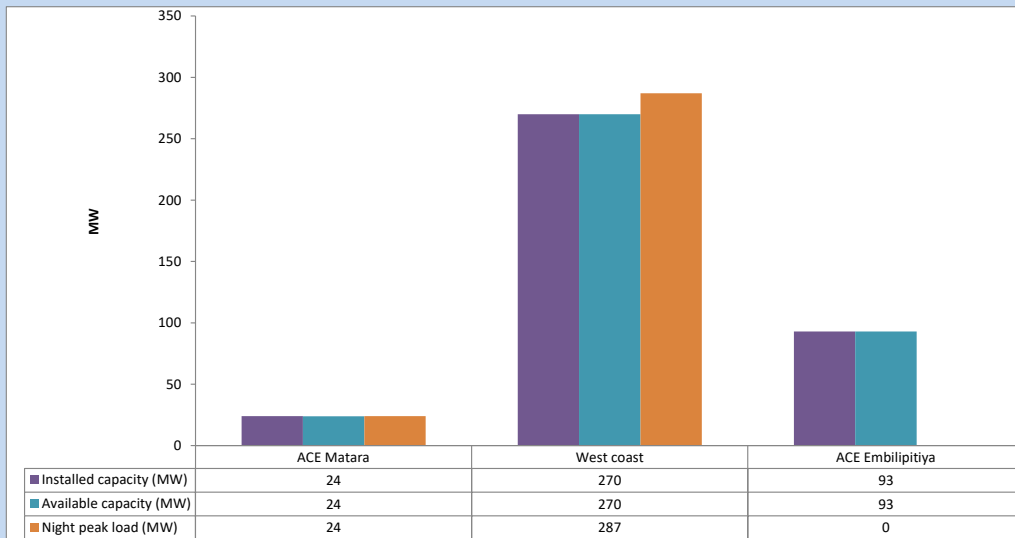
November 21, 2023



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

November 22, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

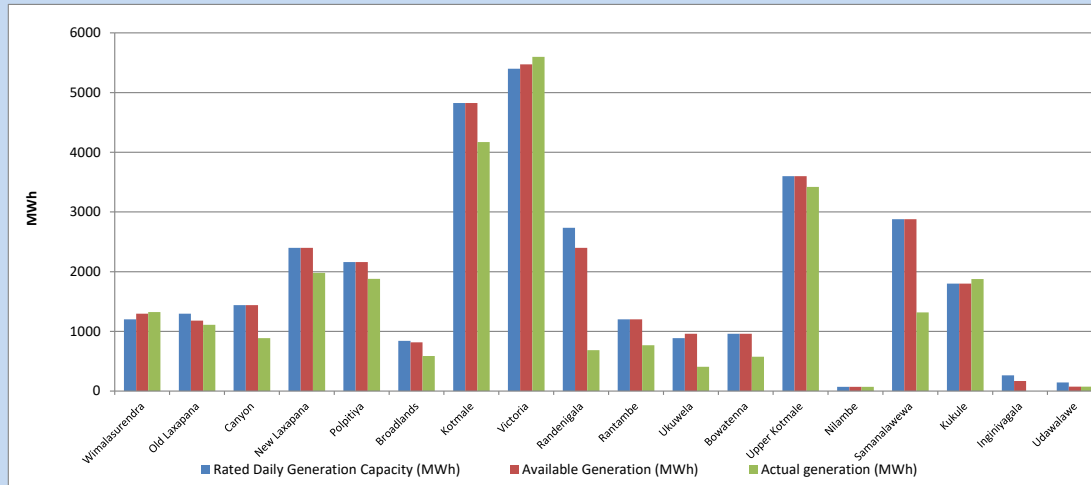


Plant availability is recorded at 6.00 am on

November 22, 2023

7. Major Hydro Plant Dispatch

November 21, 2023

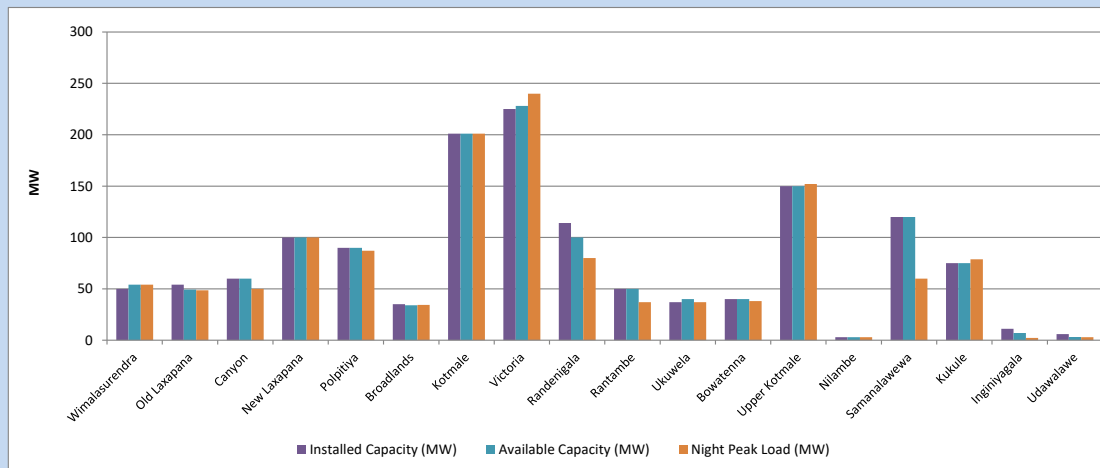


Available Generation is estimated based on plant availability at 6.00am on November 22, 2023
Broadlands power plant is operating in the Commissioning Stage

November 22, 2023

8. Major Hydro Plant Loading at Night Peak

November 21, 2023



Plant availability is recorded at 6.00 am on November 22, 2023
Broadlands power plant is operating in the Commissioning Stage

November 22, 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	1,323
Old Laxapana	54	49	49	1,111
Canyon	60	60	50	887
New Laxapana	100	100	100	1,979
Polpitiya	90	90	87	1,880
Broadlands	35	34	34	587
Kotmale	201	201	201	4,170
Victoria	225	228	240	5,599
Randenigala	114	100	80	684
Rantambe	50	50	37	767
Ukuwela	37	40	37	406
Bowatenna	40	40	38	575
Upper Kotmale	150	150	152	3,418
Nilambe	3	3	3	72
Samanalawewa	120	120	60	1,316
Kukule	75	75	79	1,876
Inginiyagala	11	7	2	0
Udawalawe	6	3	3	74
Puttalam Coal I	270	270	273	6,025
Puttalam Coal II	270	0	0	0
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	7	0	0
KPS GT 7	115	0	0	0
KCCP	161	0	0	0
Sapugaskanda A	70	49	0	0
Sapugaskanda B	70	54	0	0
Uthura Janani	26	16	16	160
Barge CEB	60	60	58	707
CEB-Hambantota	30	20	0	0
CEB-Mathugama	20	13	0	0
ACE Matara	24	24	24	47
Asia Power	50	0	0	0
KCCPS -2	163	0	0	0
West Coast	270	270	287	1,467
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	0	57
Total	3,483	2,280	2,151	39,444

Plant availability is the availability recorded at 6 am on

November 22, 2023

10. Contribution to the Night Peak in MW

November 21, 2023

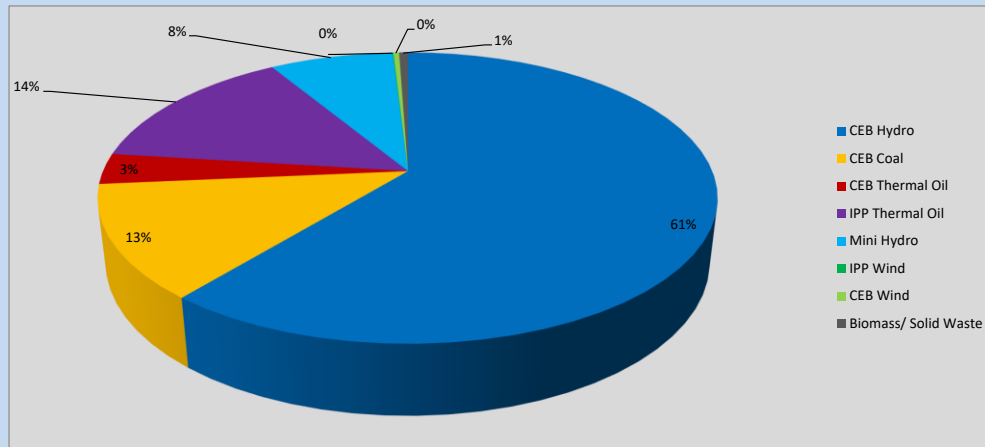


Table 06

CEB Hydro	1320	MW
CEB Coal	273	MW
CEB Thermal Oil	74	MW
IPP Thermal Oil	311	MW
Mini Hydro (Telemetered)	167	MW
IPP Wind	1.1	MW
CEB Wind	7.7	MW
Biomass/ Solid Waste	12	MW

Recorded Peak Demand Data

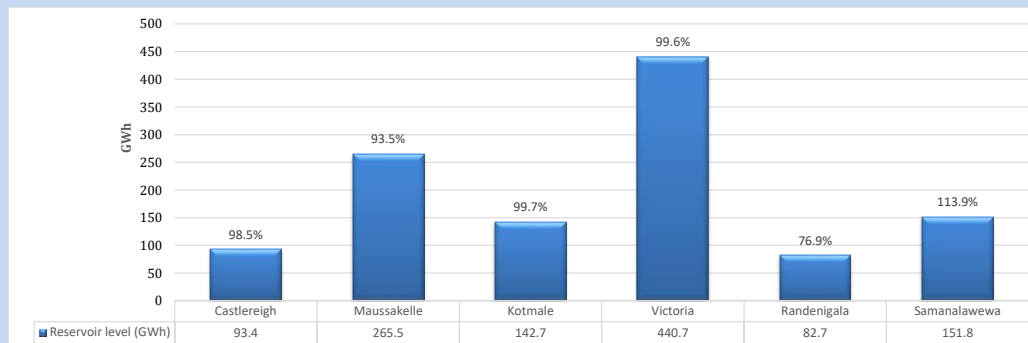
Table 07

Night Peak*	2,165	MW
Day Peak Maximum Demand	2,048	MW
Day Peak Minimum Demand	1,688	MW
Off Peak Minimum Demand	1,154	MW

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

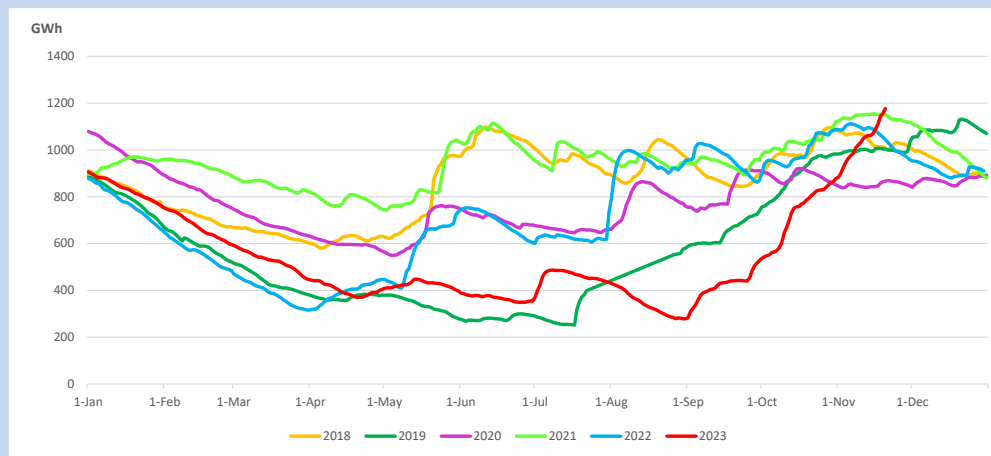
Reservoir Levels -

as at 06.00 Hr on November 22, 2023

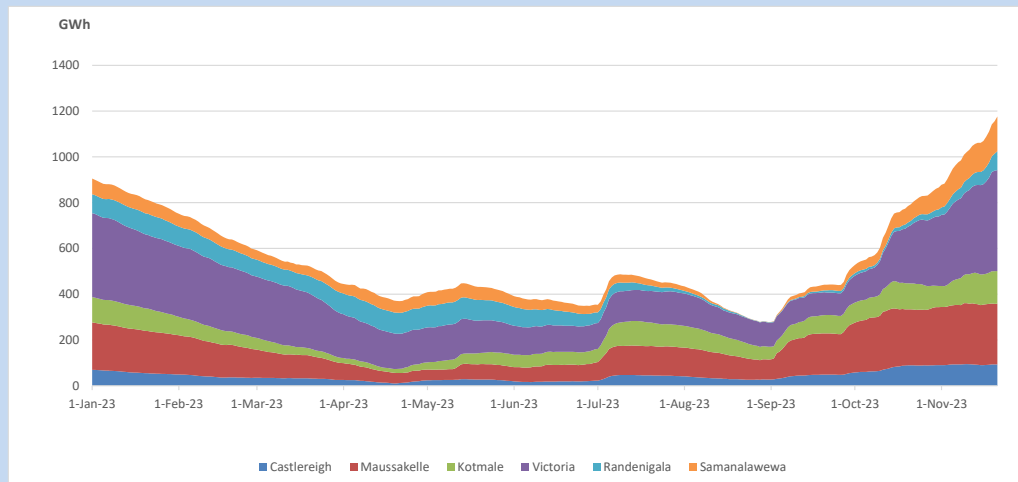


Total Reservoir Level 1176.8 GWh
 % of Total capacity 97.6%

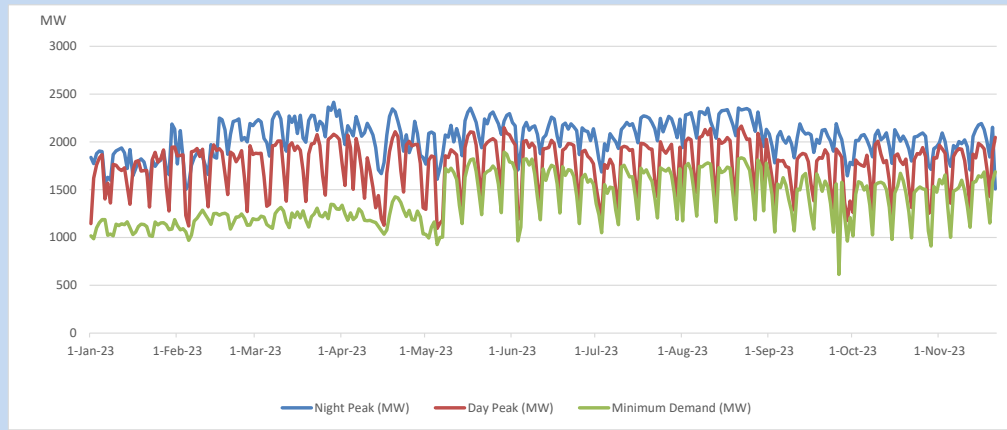
11. Comparison of Total Reservoir Storage Levels with Past Years



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



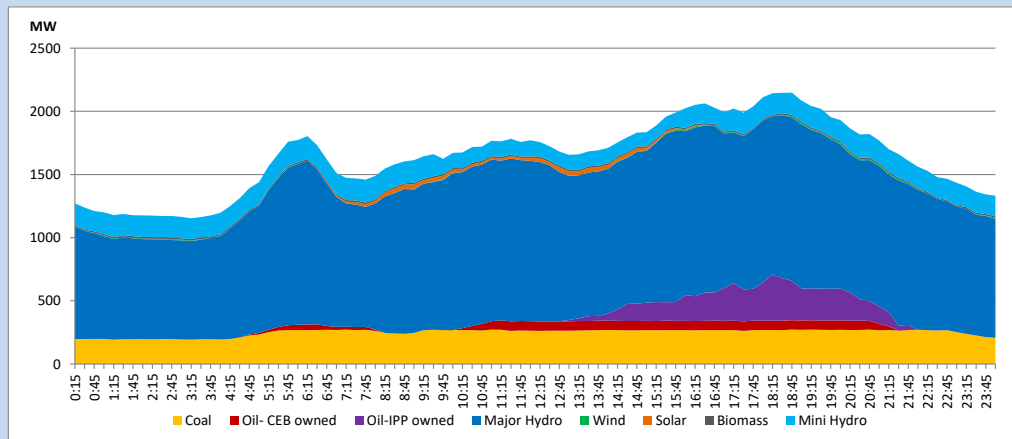
13. Variation of Demand during the current year



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

14. Daily Load Curve

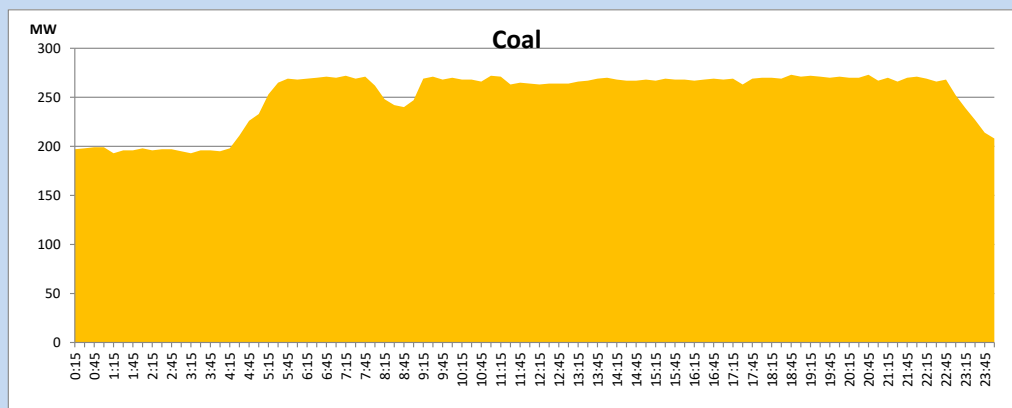
November 21, 2023



Solar and wind data is based on Telemetered Power Stations only

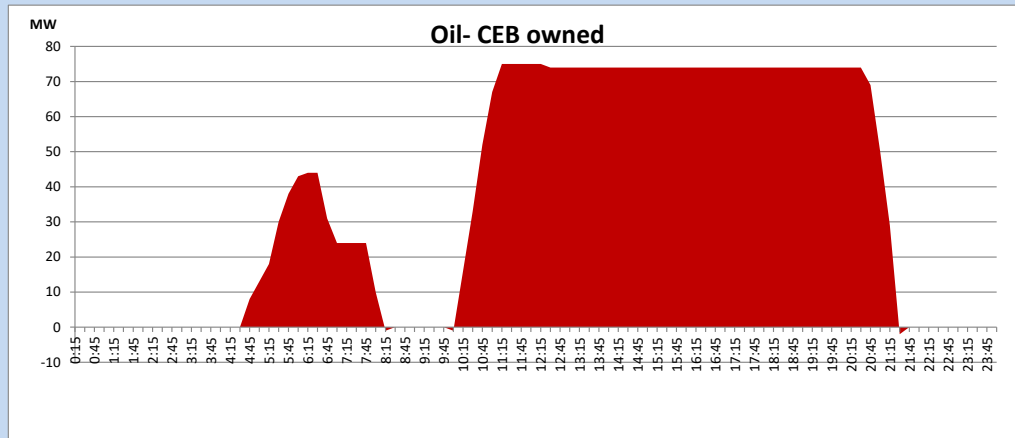
Coal Generation during

November 21, 2023



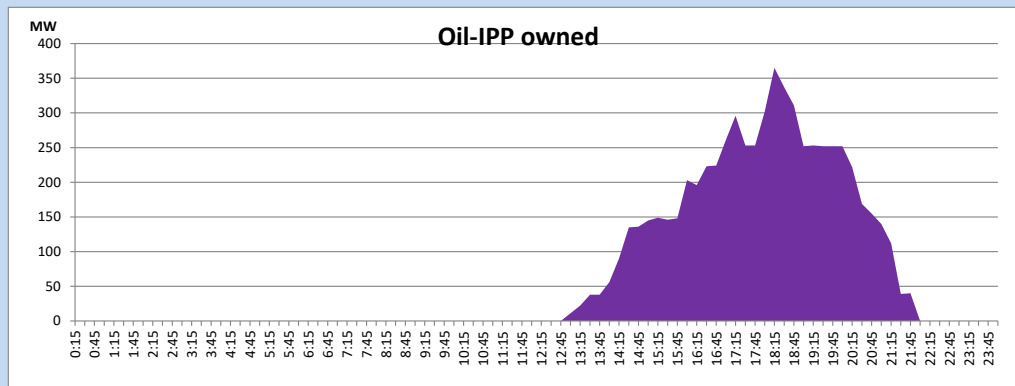
CEB Oil Plant Generation during

November 21, 2023



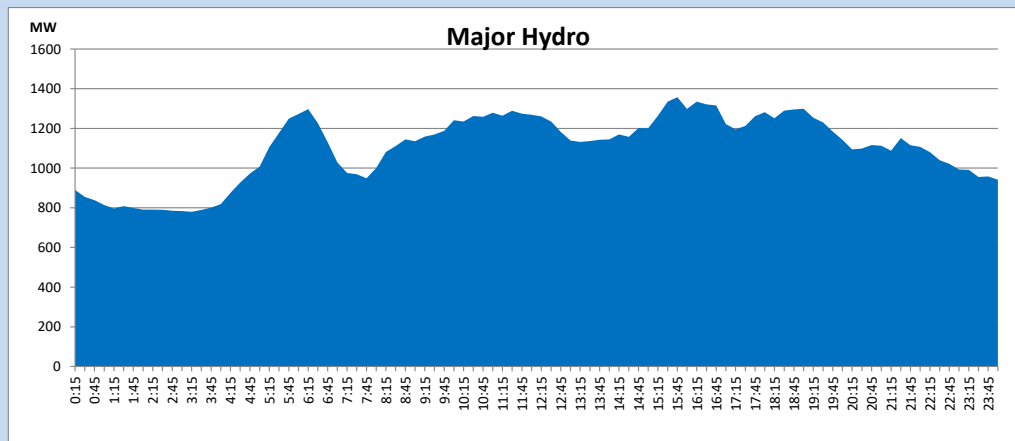
IPP Oil Plant Generation during

November 21, 2023



Major Hydro Generation during

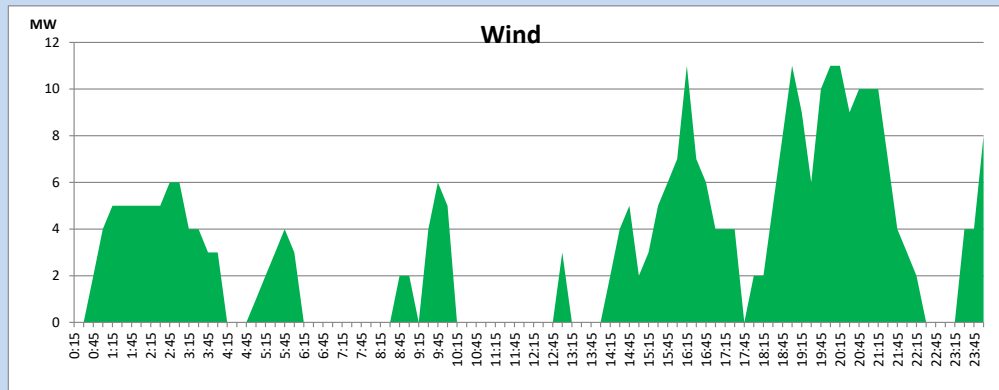
November 21, 2023



Wind Generation during

November 21, 2023

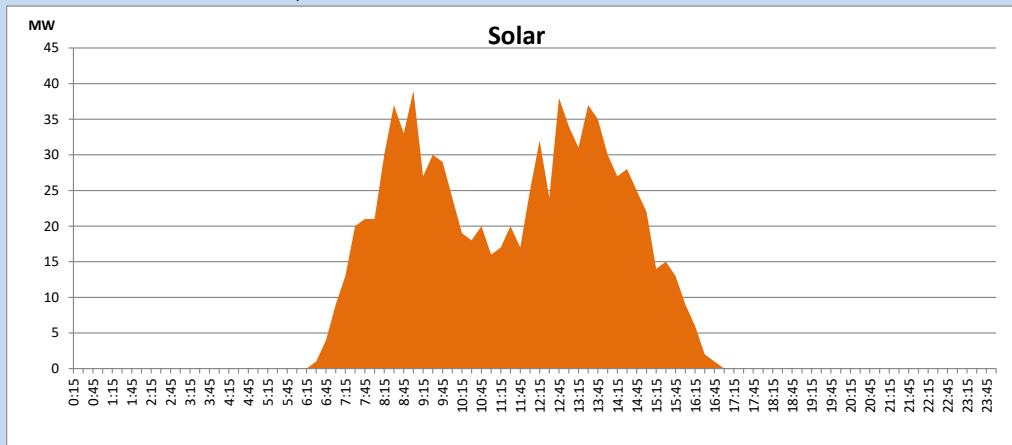
Based on Telemetered Power Stations only



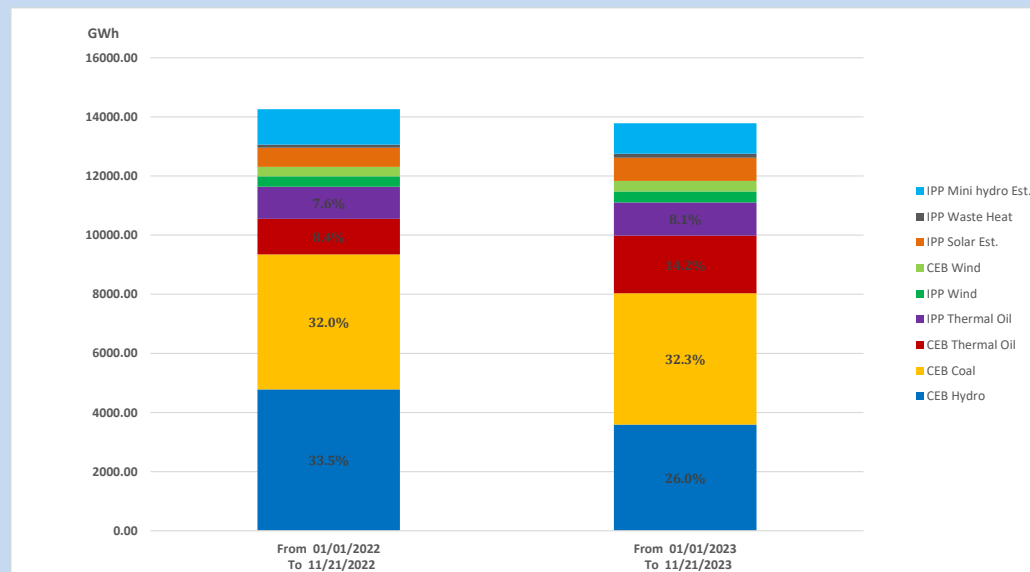
Solar Generation during

November 21, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch
 From 01/01/2022 To 11/21/2022
 From 01/01/2023 To 11/21/2023

14260 GWh
 13782 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

November 21, 2023

- 1) Biyagama 220/33kV T/F 04 tripped from both ends at 09:25hrs with the indication of LVREF trip. The T/F was normalized at 12:29hrs.
- 2) Kotugoda 220/132/33kV T/F 01 tripped from all ends at 14:21hrs causing feeders 01, 02, 04, 07 & 09 to be dead. The T/F 01 normalized at 17:09hrs and all feeders were normalized by 17:22hrs.
- 3) Badulla – Rantabe 132kV cct 01 tripped and A/R from both ends at 17:38hrs due to the operation of distance protection.
- 4) Kosgama – Polpitiya PS 132kV cct tripped and A/R from both ends at 19:49hrs due to the operation of distance protection. System frequency dropped to 49.44Hz due to this disturbance.
- 5) Victoria reservoir spilling and Upper Kothmale, Kukula ponds spilling continue to the present hour.