

Generation and Reservoirs Statistics

November 19, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

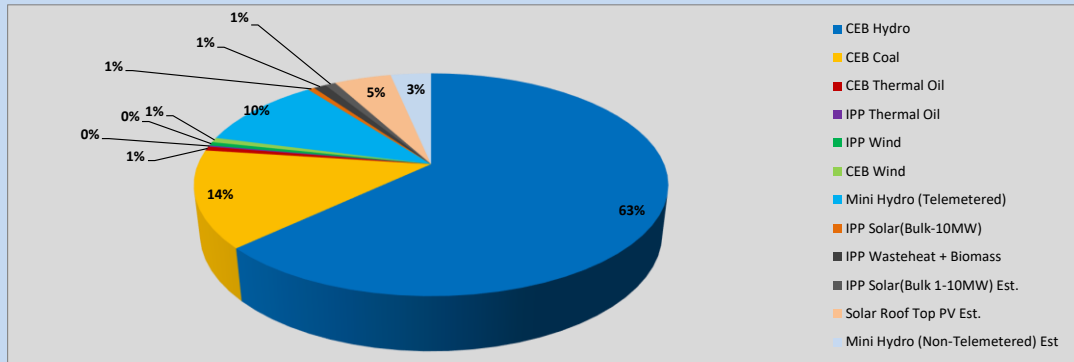


Table 01

	Generation (MWh)
CEB Hydro	22,200
CEB Coal	4,956
CEB Thermal Oil	211
IPP Thermal Oil	68
IPP Wind	189
CEB Wind	243
Mini Hydro (Telemetered)	3,708
IPP Solar (Bulk)	192
IPP Waste heat + Biomass	354
Total Generation (Excluding estimated figures)	32,121
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	1162
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1640
Total Generation (Including estimated figures)	35,227

* 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	436	57.21%
CEB Coal	168	21.99%
CEB Thermal Oil	5	0.68%
IPP Thermal	2	0.29%
SPP Wind	5	0.69%
CEB Wind	6	0.84%
Mini Hydro *	93	12.15%
IPP Solar *	41	5.44%
IPP Waste heat + BMP	5	0.71%
Total	762	

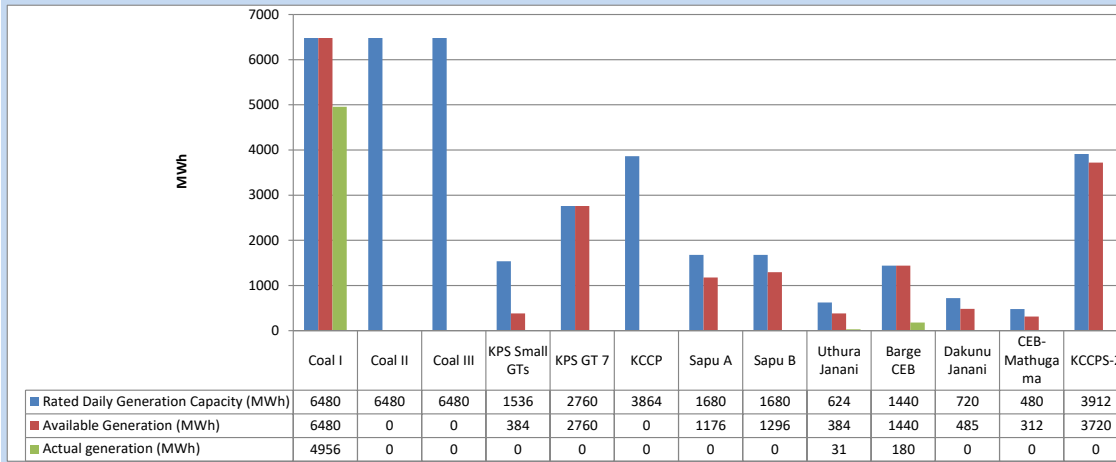
Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	3,538	25.82%
CEB Coal	4,433	32.36%
CEB Thermal Oil	1,950	14.24%
IPP Thermal	1,116	8.15%
SPP Wind	370	2.70%
CEB Wind	359	2.62%
Mini Hydro *	1,019	7.44%
IPP Solar *	779	5.68%
IPP Waste heat	136	0.99%
Total	13,699	

*Including estimated contribution from non telemetered plants

3. CEB owned Thermal Plant Dispatch

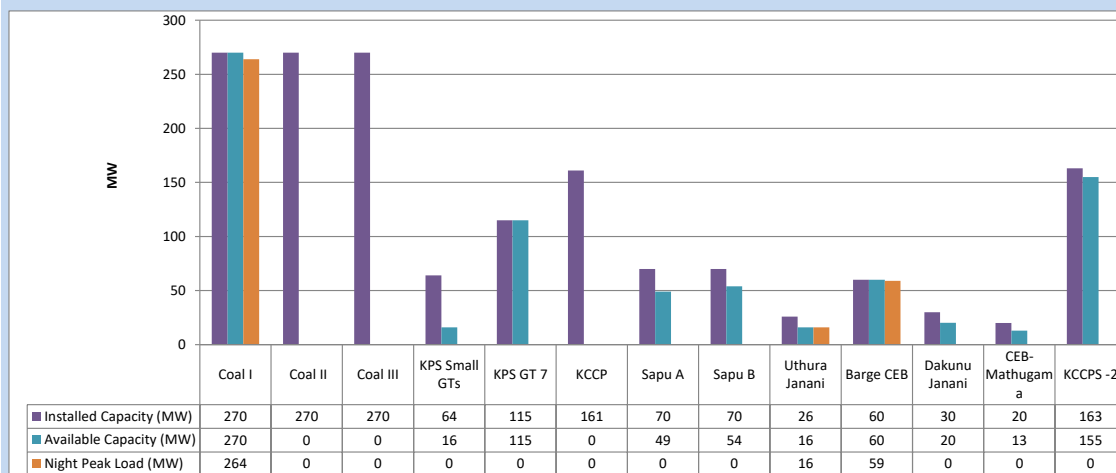
November 19, 2023



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

November 20, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

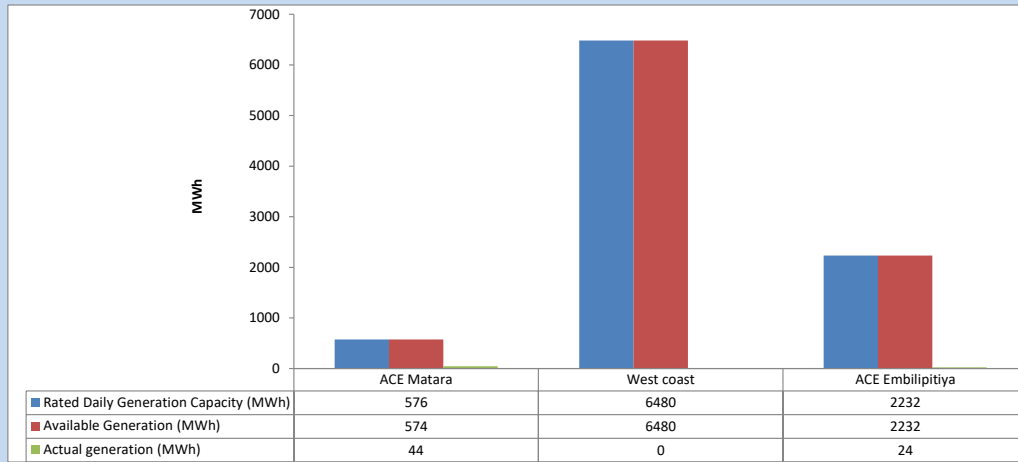


Plant availability is recorded at 6.00 am on

November 20, 2023

5. IPP owned Thermal Plant Dispatch

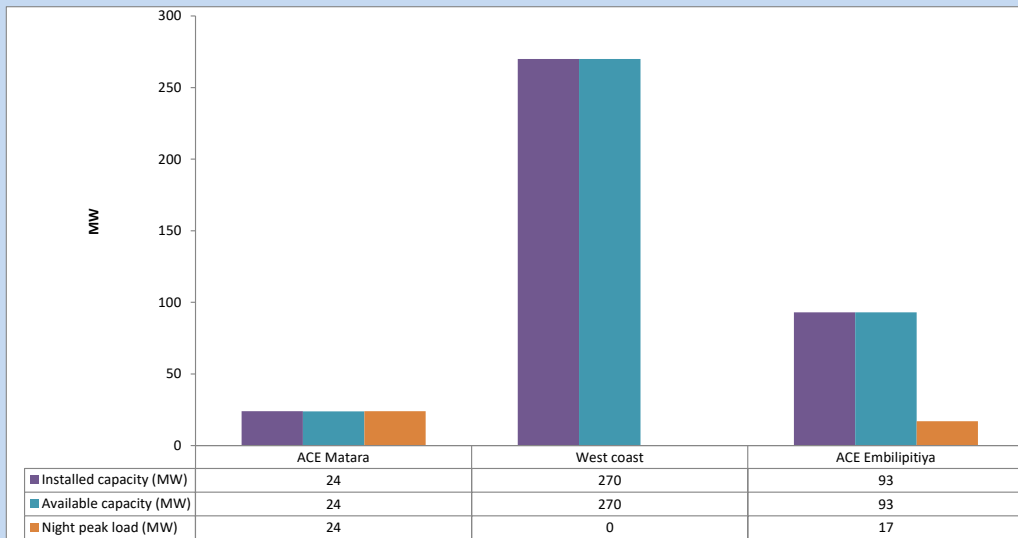
November 19, 2023



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

November 20, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

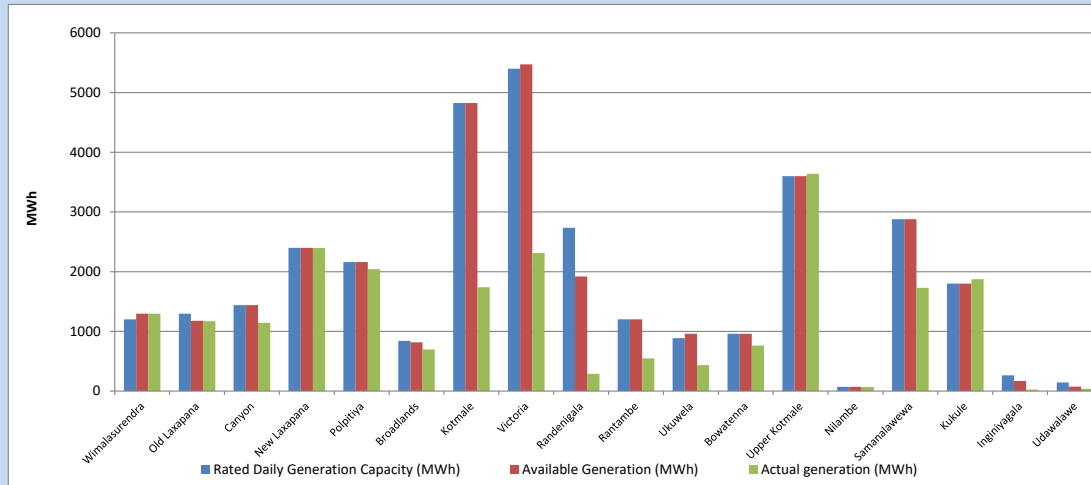


Plant availability is recorded at 6.00 am on

November 20, 2023

7. Major Hydro Plant Dispatch

November 19, 2023

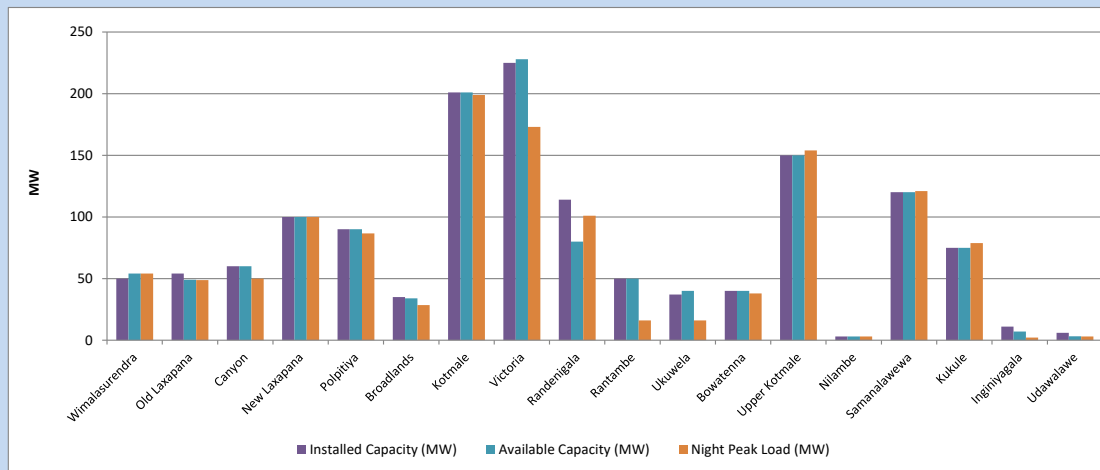


Available Generation is estimated based on plant availability at 6.00am on November 20, 2023
Broadlands power plant is operating in the Commissioning Stage

November 20, 2023

8. Major Hydro Plant Loading at Night Peak

November 19, 2023



Plant availability is recorded at 6.00 am on November 20, 2023
Broadlands power plant is operating in the Commissioning Stage

November 20, 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	1,295
Old Laxapana Canyon	54	49	49	1,170
New Laxapana	60	60	50	1,144
Polpitiya	100	100	100	2,397
Broadlands	90	90	87	2,040
Kotmale	35	34	29	698
Victoria	201	201	199	1,740
Randenigala	225	228	173	2,313
Rantambe	114	80	101	287
Ukuwela	50	50	16	548
Bowatenna	37	40	16	433
Upper Kotmale	40	40	38	760
Nilambe	150	150	154	3,640
Samanalawewa	3	3	3	69
Kukule	120	120	121	1,730
Inginiyagala	75	75	79	1,874
Udawalawe	11	7	2	26
Puttalam Coal I	6	3	3	36
Puttalam Coal II	270	270	264	4,956
Puttalam Coal III	270	0	0	0
KPS Small GTs	270	0	0	0
KPS GT 7	64	16	0	0
KCCP	115	115	0	0
Sapugaskanda A	161	0	0	0
Sapugaskanda B	70	49	0	0
Uthura Janani	70	54	0	0
Barge CEB	26	16	16	31
CEB-Hambantota	60	60	59	180
CEB-Mathugama	30	20	0	0
ACE Matara	20	13	0	0
Asia Power	24	24	24	44
KCCPS -2	50	0	0	0
West Coast	163	155	0	0
Nothern Power	270	270	0	0
ACE Embilipitiya	36	0	0	0
Total	93	93	17	24
Total	3,483	2,539	1,809	32,121

Plant availability is the availability recorded at 6 am on

November 20, 2023

10. Contribution to the Night Peak in MW

November 19, 2023

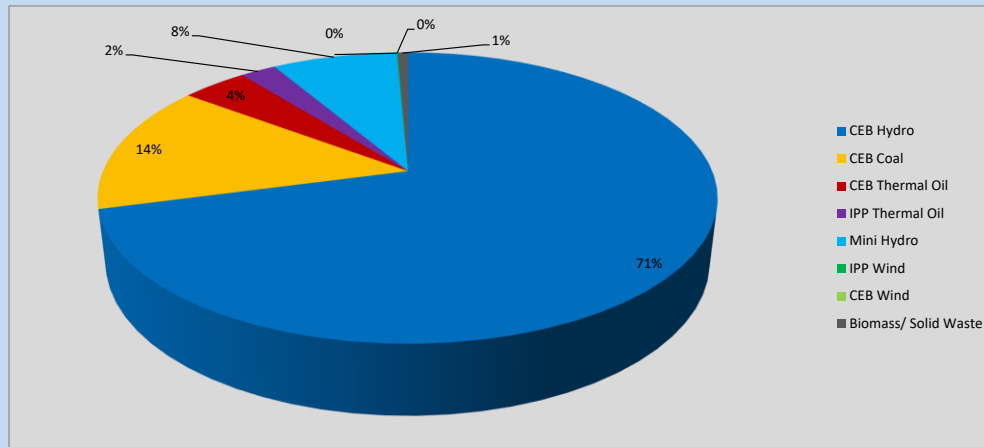


Table 06

CEB Hydro	1305	MW
CEB Coal	264	MW
CEB Thermal Oil	75	MW
IPP Thermal Oil	41	MW
Mini Hydro (Telemetered)	144	MW
IPP Wind	1	MW
CEB Wind	0	MW
Biomass/ Solid Waste	12	MW

Recorded Peak Demand Data

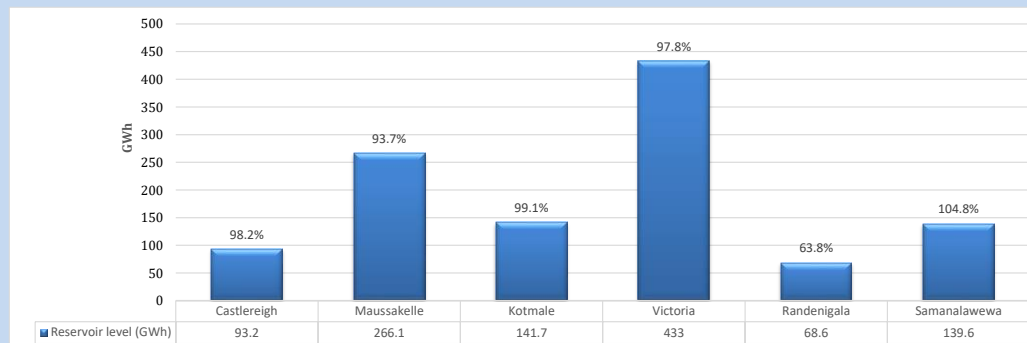
Table 07

Night Peak*	1,841	MW
Day Peak Maximum Demand	1,428	MW
Day Peak Minimum Demand	1,152	MW
Off Peak Minimum Demand	1,085	MW

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

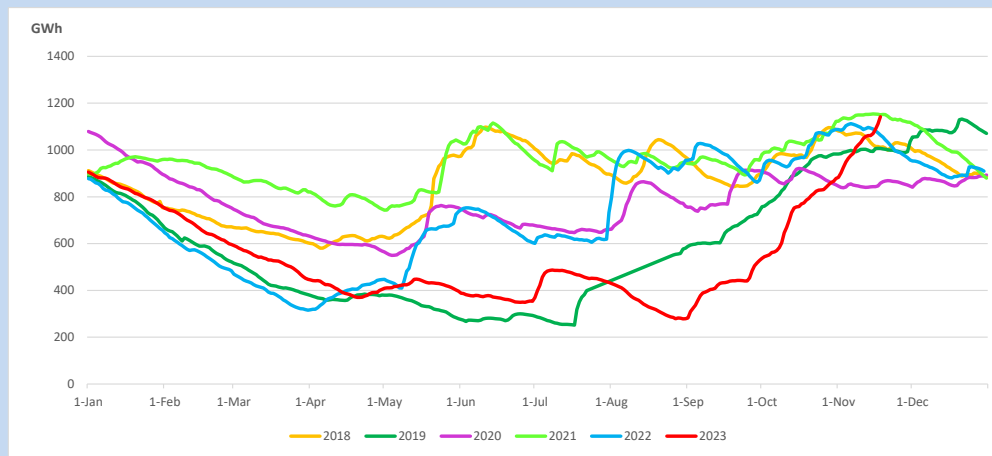
Reservoir Levels -

as at 06.00 Hr on November 20, 2023

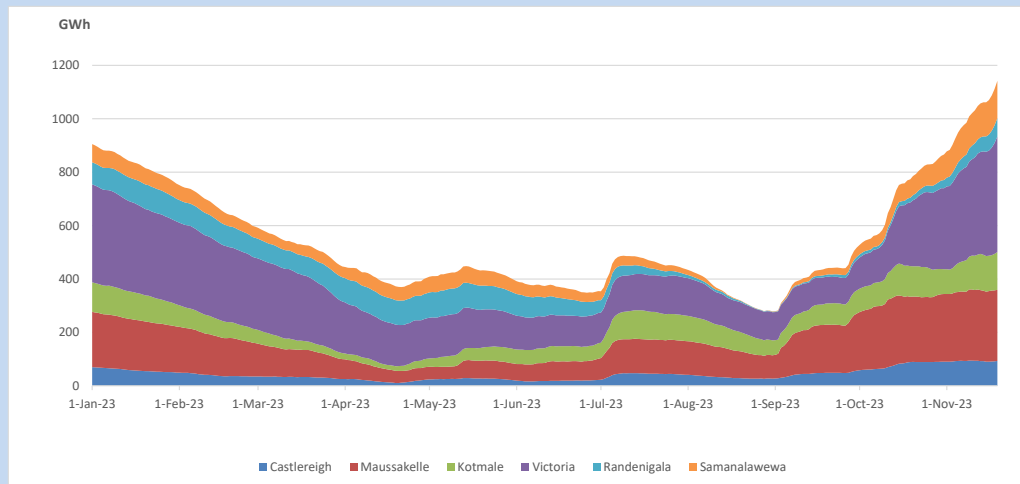


Total Reservoir Level 1142.2 GWh
 % of Total capacity 94.8%

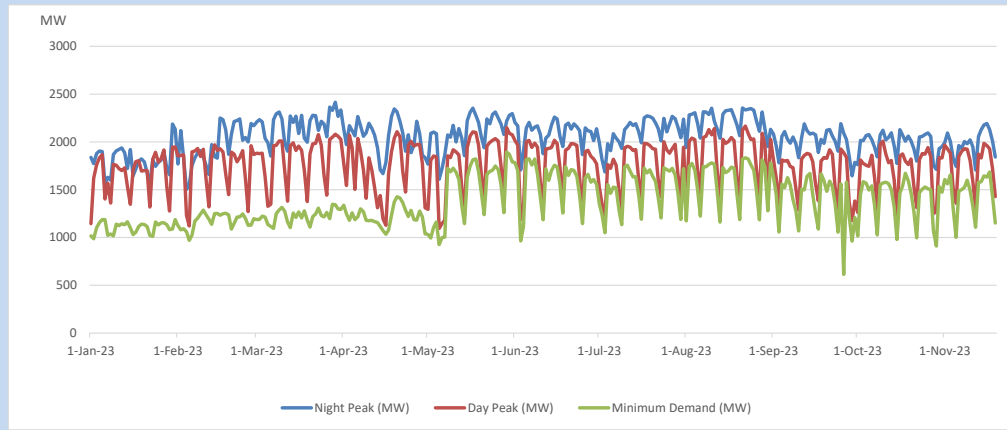
11. Comparison of Total Reservoir Storage Levels with Past Years



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



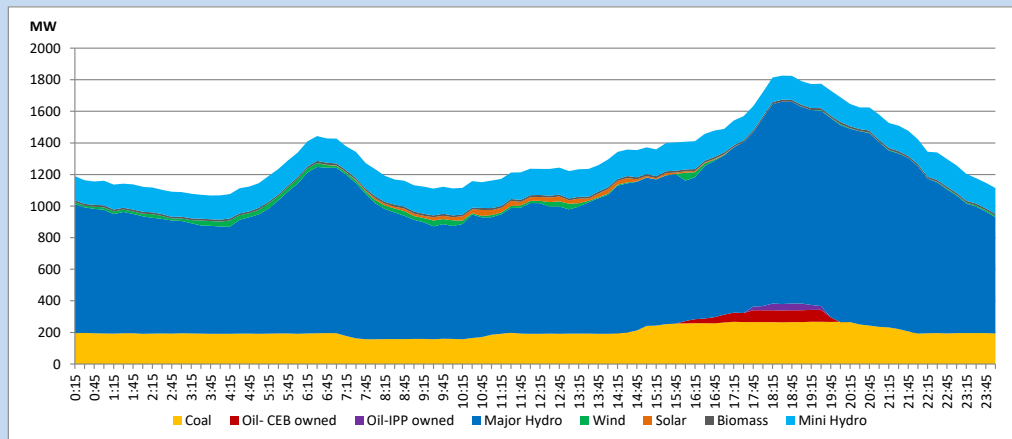
13. Variation of Demand during the current year



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

14. Daily Load Curve

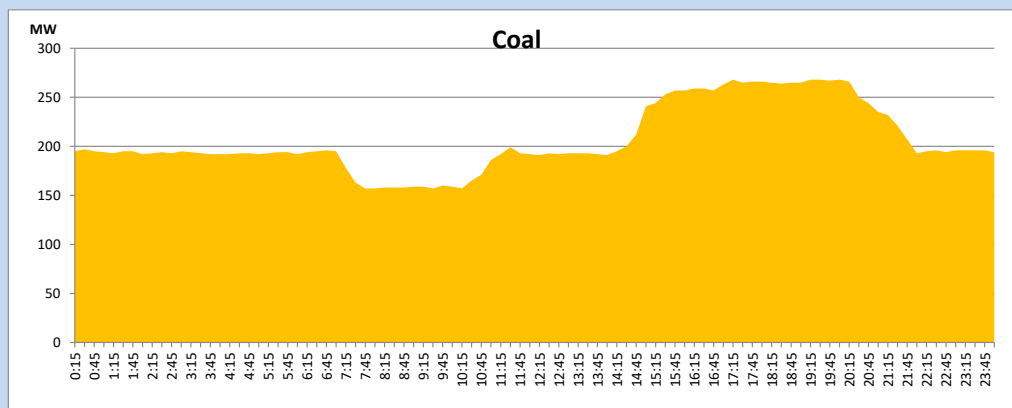
November 19, 2023



Solar and wind data is based on Telemetered Power Stations only

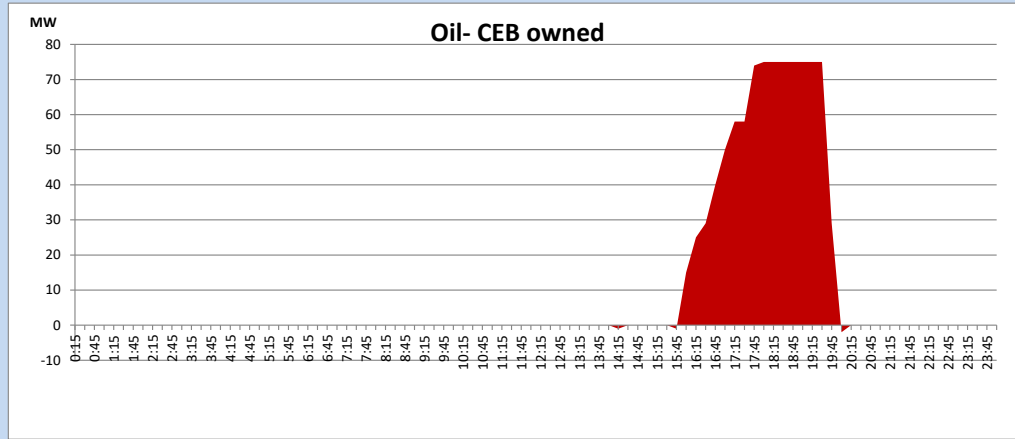
Coal Generation during

November 19, 2023



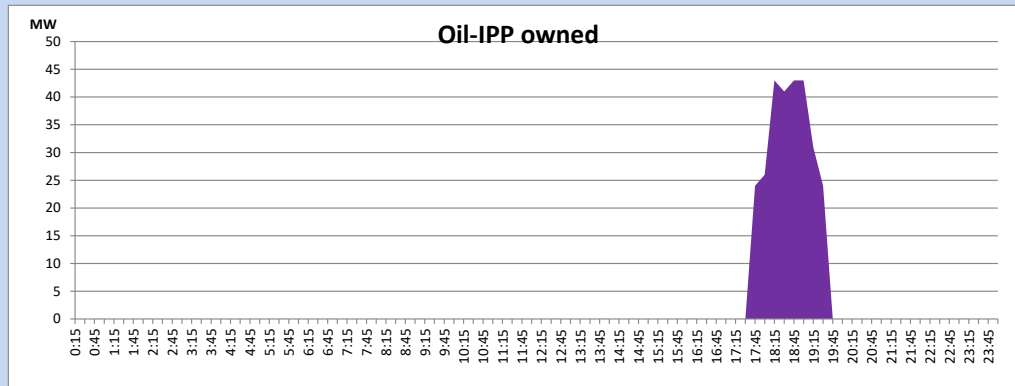
CEB Oil Plant Generation during

November 19, 2023



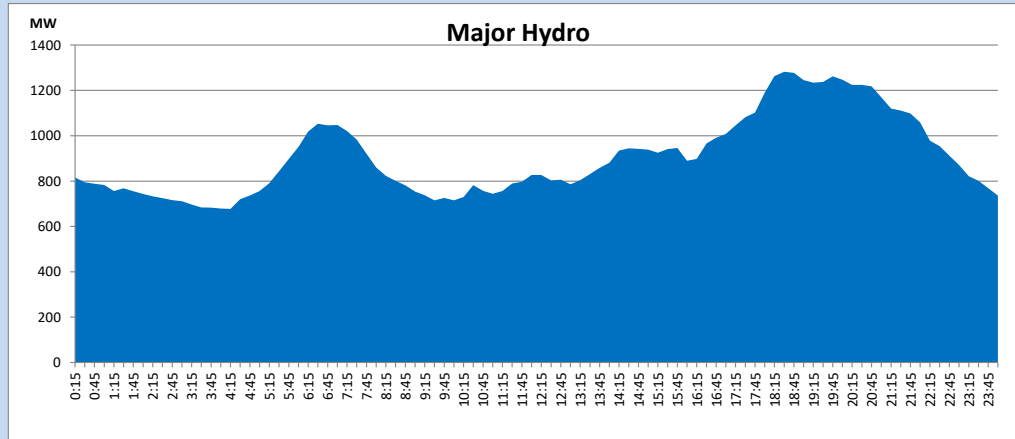
IPP Oil Plant Generation during

November 19, 2023



Major Hydro Generation during

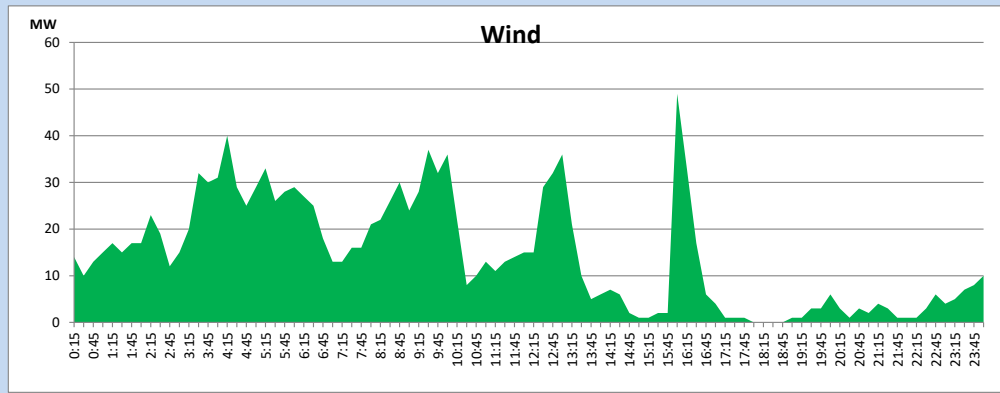
November 19, 2023



Wind Generation during

November 19, 2023

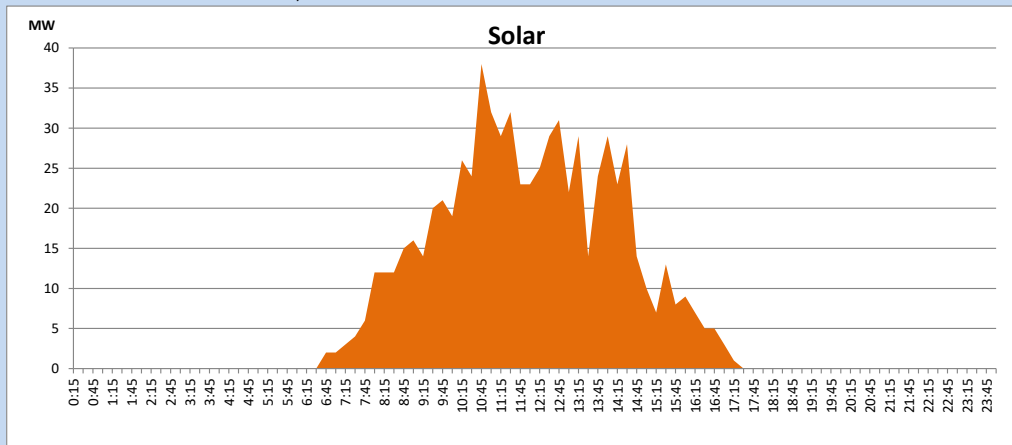
Based on Telemetered Power Stations only



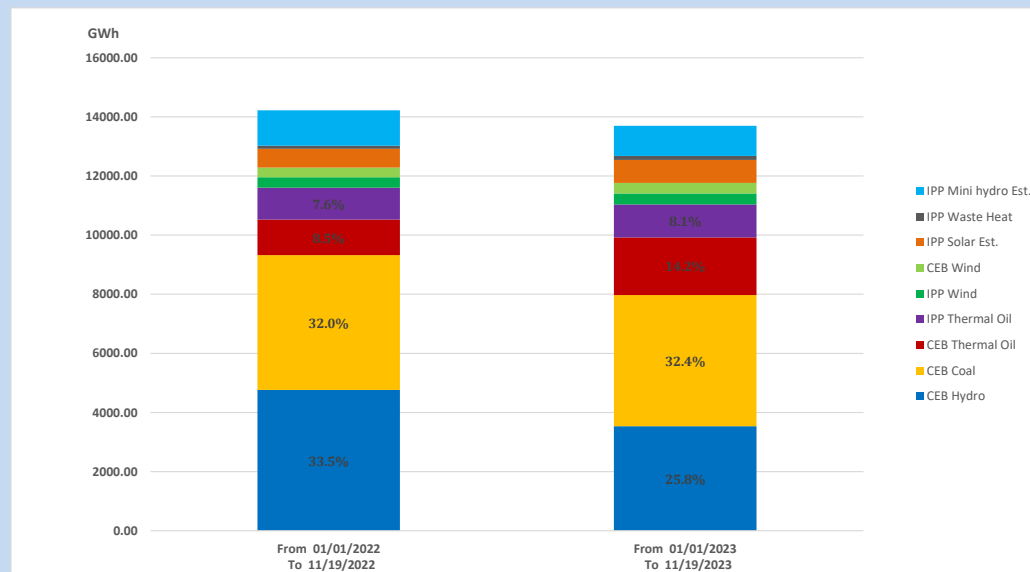
Solar Generation during

November 19, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch
 From 01/01/2022 To 11/19/2022
 From 01/01/2023 To 11/19/2023

14224 GWh
 13699 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 19, 2023

- 1) Kappalturai - N'anu 132kV cct tripped and A/R from Kappalturai end at 06:10hrs due to the operation of distance protection.
- 2) At 11:37hrs system frequency dropped to 48.73Hz due to the rejection of embedded generation. Subsequently system recovered with the operation of UFLS Stage I, and all affected feeders were normalized by 11:47hrs.
- 3) New Chilaw 220/132kV T/F 02 which was tripped at 01:13hrs was normalized at 15:05hrs.
- 4) Pannipitiya – Ratmalana 132kV cct 02 tripped from Ratmalana end and Tripped & A/R from Pannipitiya end at 16:09hrs due to the operation of Distance protection. The cct was normalized at 16:16hrs.
- 5) Kukule pond spilling stopped at 21:24hrs and Upper Kothmale pond spilling continues to the present hour.