

Generation and Reservoirs Statistics

December 10, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

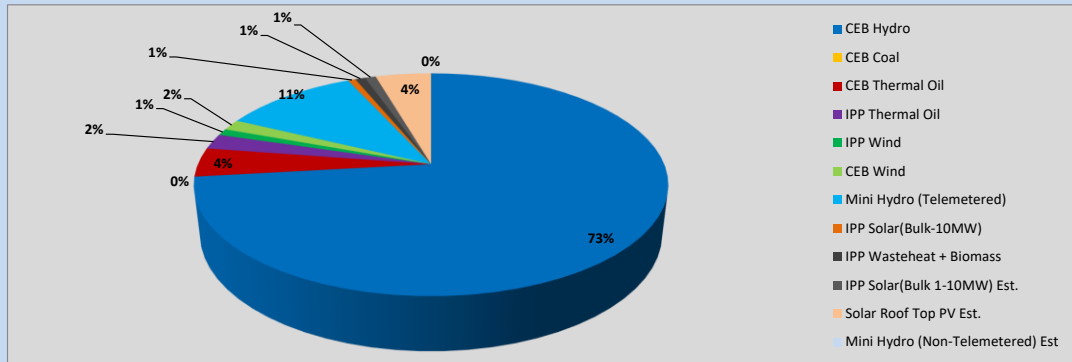


Table 01

	Generation (MWh)
CEB Hydro	24,901
CEB Coal	-
CEB Thermal Oil	1,432
IPP Thermal Oil	757
IPP Wind	328
CEB Wind	538
Mini Hydro (Telemetered)	3,737
IPP Solar (Bulk)	210
IPP Waste heat + Biomass	274
Total Generation (Excluding estimated figures)	32,177
* 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)	34,021

* 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	254	66.04%
CEB Coal	46	11.84%
CEB Thermal Oil	6	1.62%
IPP Thermal	7	1.87%
SPP Wind	4	1.14%
CEB Wind	6	1.52%
Mini Hydro *	37	9.60%
IPP Solar *	21	5.35%
IPP Waste heat + BMP	4	1.02%
Total	385	

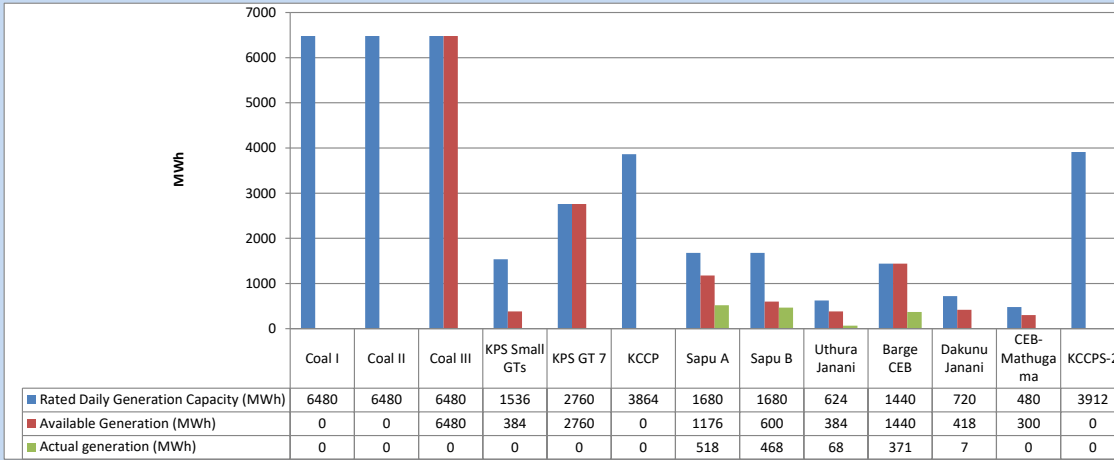
Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	4,078	28.05%
CEB Coal	4,541	31.24%
CEB Thermal Oil	1,962	13.49%
IPP Thermal	1,134	7.80%
SPP Wind	377	2.60%
CEB Wind	369	2.54%
Mini Hydro *	1,109	7.63%
IPP Solar *	823	5.66%
IPP Waste heat	143	0.99%
Total	14,537	

*Including estimated contribution from non telemetered plants

3. CEB owned Thermal Plant Dispatch

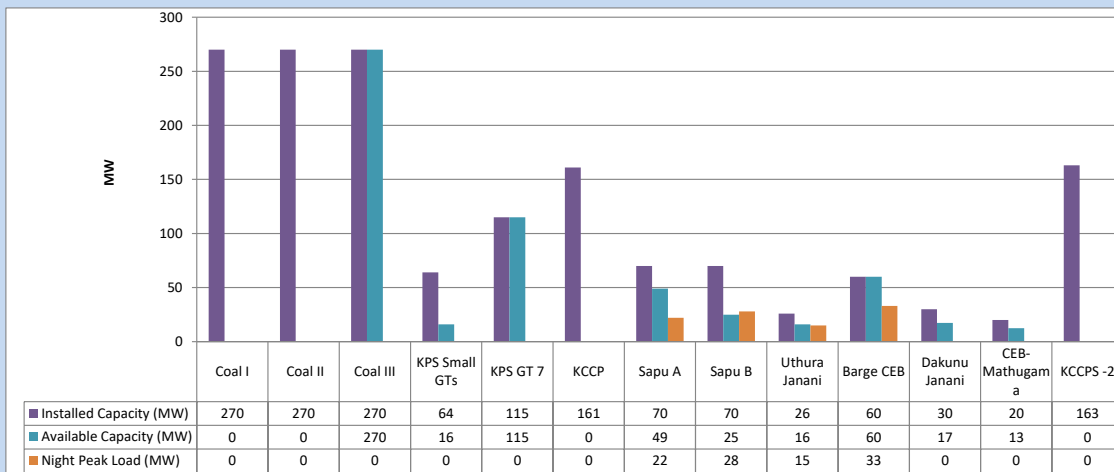
December 10, 2023



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

December 11, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

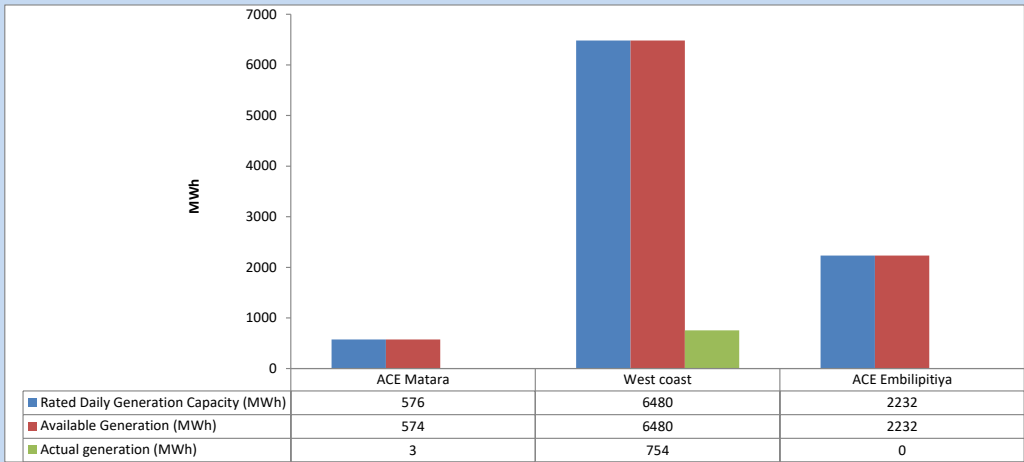


Plant availability is recorded at 6.00 am on

December 11, 2023

5. IPP owned Thermal Plant Dispatch

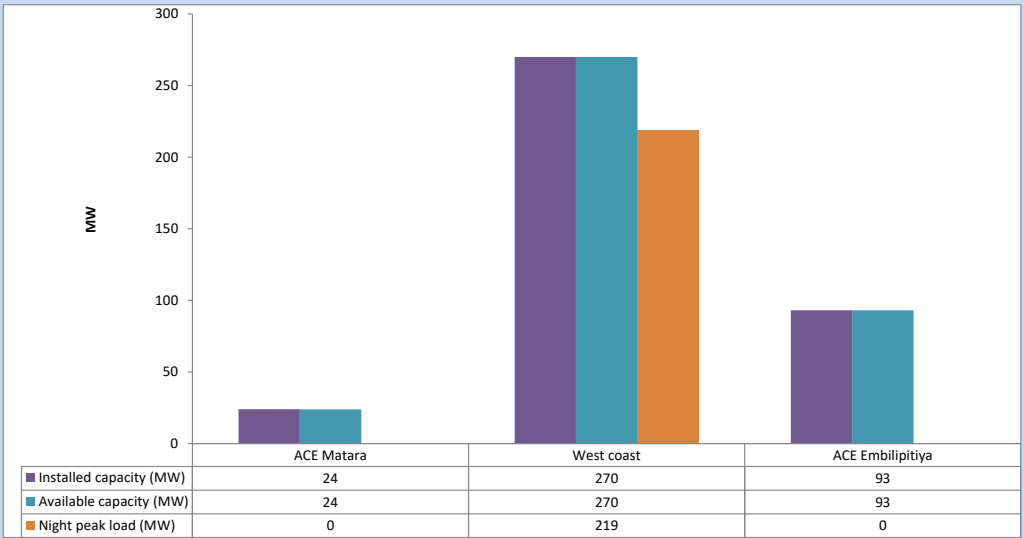
December 10, 2023



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

December 11, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

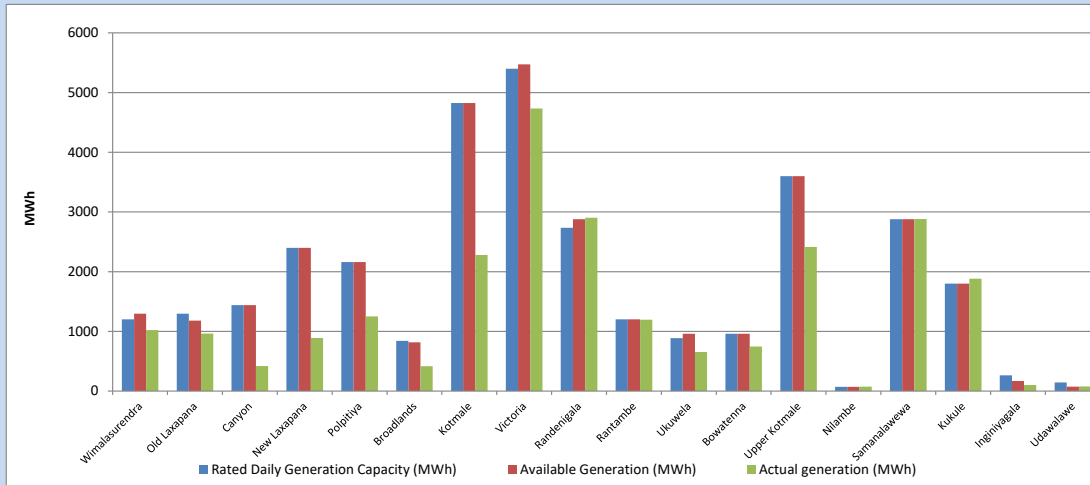


Plant availability is recorded at 6.00 am on

December 11, 2023

7. Major Hydro Plant Dispatch

December 10, 2023

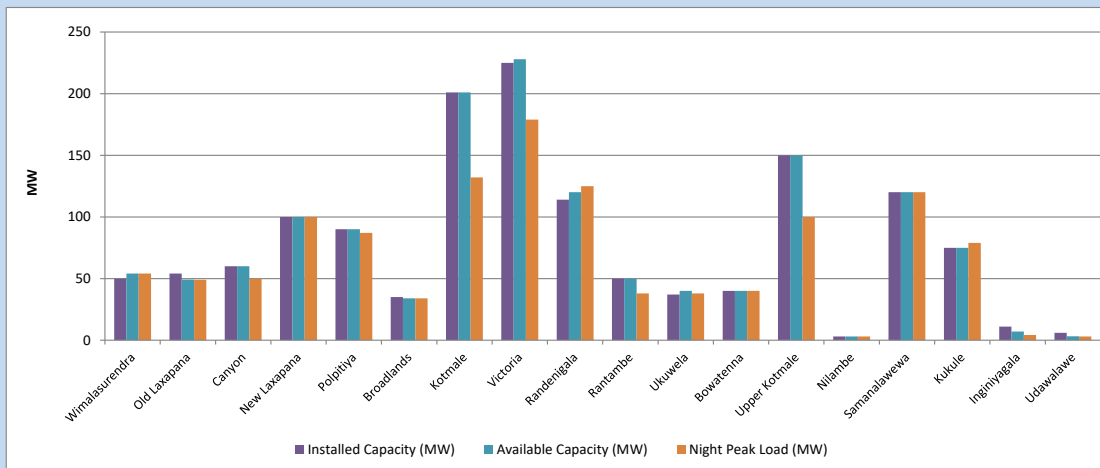


Available Generation is estimated based on plant availability at 6.00am on December 11, 2023
Broadlands power plant is operating in the Commissioning Stage

December 11, 2023

8. Major Hydro Plant Loading at Night Peak

December 10, 2023



Plant availability is recorded at 6.00 am on December 11, 2023
Broadlands power plant is operating in the Commissioning Stage

December 11, 2023

9. Summary of Major Plant performance

Table 05

Plant	Installed Capacity	Plant Availability	Night peak Load	Plant Dispatch
	(MW)	(MW)	(MW)	(MWh)
Wimalasurendra	50	54	54	1,022
Old Laxapana	54	49	49	962
Canyon	60	60	50	418
New Laxapana	100	100	100	890
Polpitiya	90	90	87	1,250
Broadlands	35	34	34	417
Kotmale	201	201	132	2,280
Victoria	225	228	179	4,732
Randenigala	114	120	125	2,903
Rantambe	50	50	38	1,194
Ukuwela	37	40	38	653
Bowatenna	40	40	40	745
Upper Kotmale	150	150	100	2,414
Nilambe	3	3	3	74
Samanalawewa	120	120	120	2,883
Kukule	75	75	79	1,884
Inginiyagala	11	7	4	102
Udawalawe	6	3	3	78
Puttalam Coal I	270	0	0	0
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	22	518
Sapugaskanda B	70	25	28	468
Uthura Janani	26	16	15	68
Barge CEB	60	60	33	371
CEB-Hambantota	30	17	0	7
CEB-Mathugama	20	13	0	0
ACE Matara	24	24	0	3
Asia Power	50	0	0	0
KCCPS -2	163	0	0	0
West Coast	270	270	219	754
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	0	0
Total	3,483	2,392	1,765	32,177

Plant availability is the availability recorded at 6 am on

December 11, 2023

10. Contribution to the Night Peak in MW

December 10, 2023

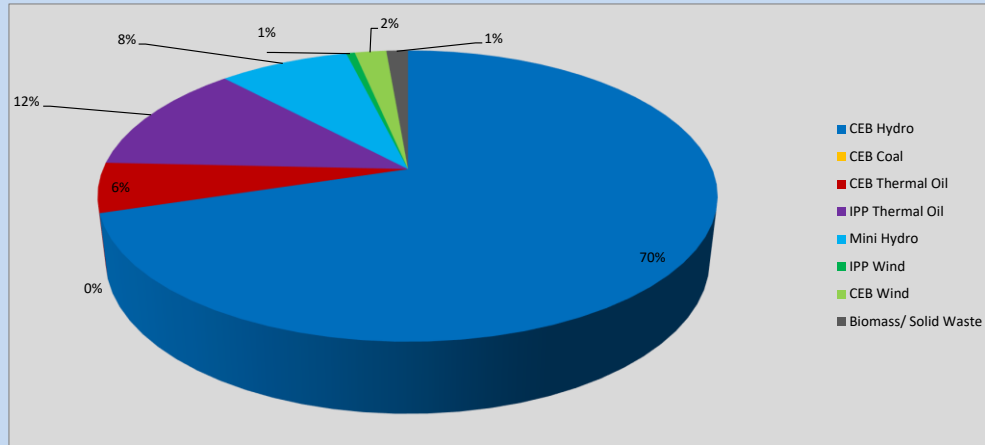


Table 06

CEB Hydro	1249	MW
CEB Coal	0	MW
CEB Thermal Oil	98	MW
IPP Thermal Oil	219	MW
Mini Hydro (Telemetered)	144	MW
IPP Wind	9.6	MW
CEB Wind	35	MW
Biomass/ Solid Waste	24	MW

Recorded Peak Demand Data

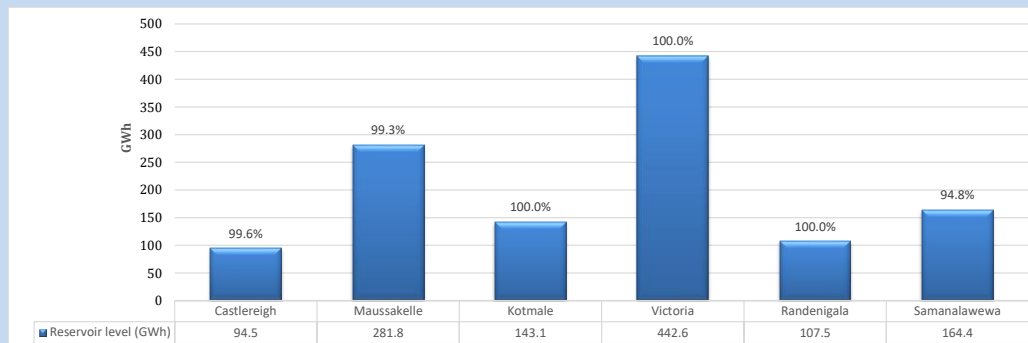
Table 07

Night Peak*	1,779	MW
Day Peak Maximum Demand	1,324	MW
Day Peak Minimum Demand	1,176	MW
Off Peak Minimum Demand	1,133	MW

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

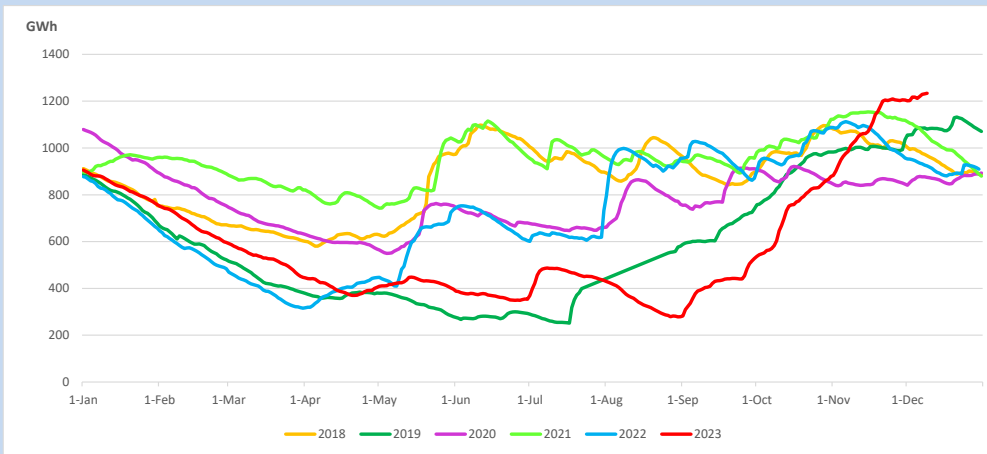
Reservoir Levels -

as at 06.00 Hr on December 11, 2023

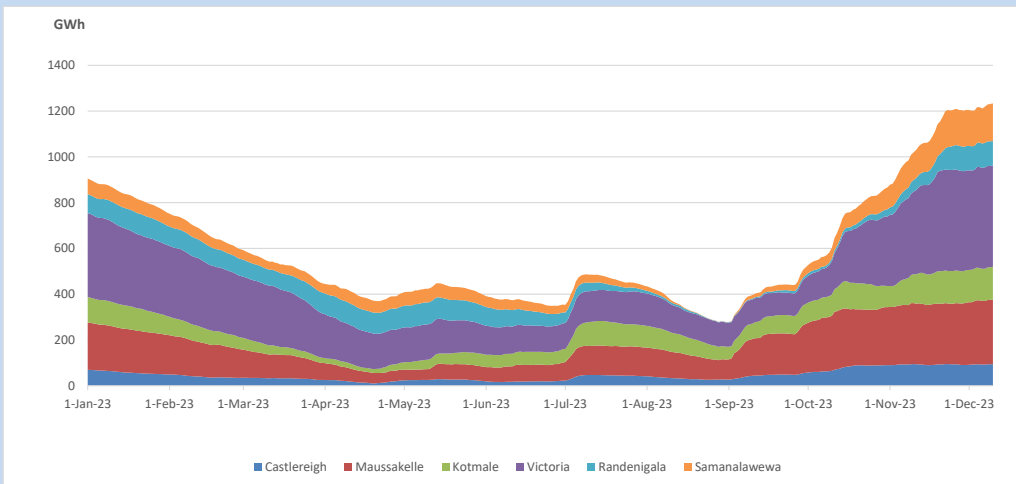


Total Reservoir Level 1233.9 GWh
 % of Total capacity 99.1%

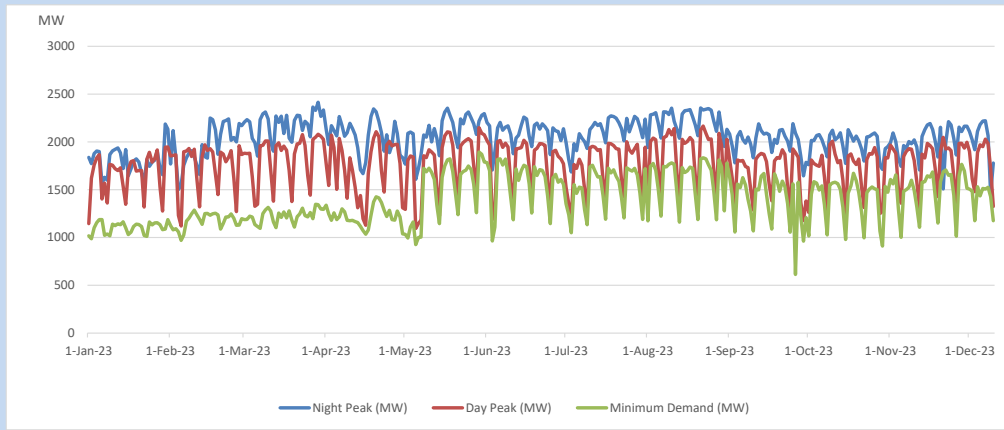
11. Comparison of Total Reservoir Storage Levels with Past Years



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



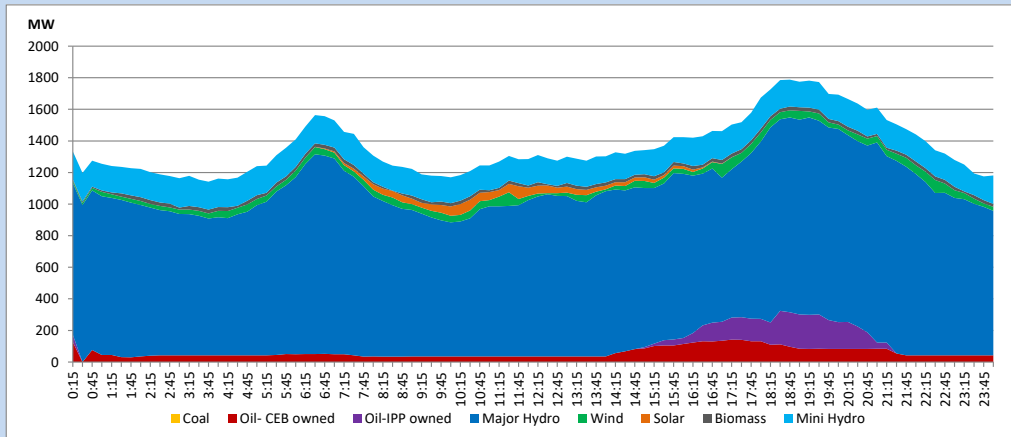
13. Variation of Demand during the current year



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

14. Daily Load Curve

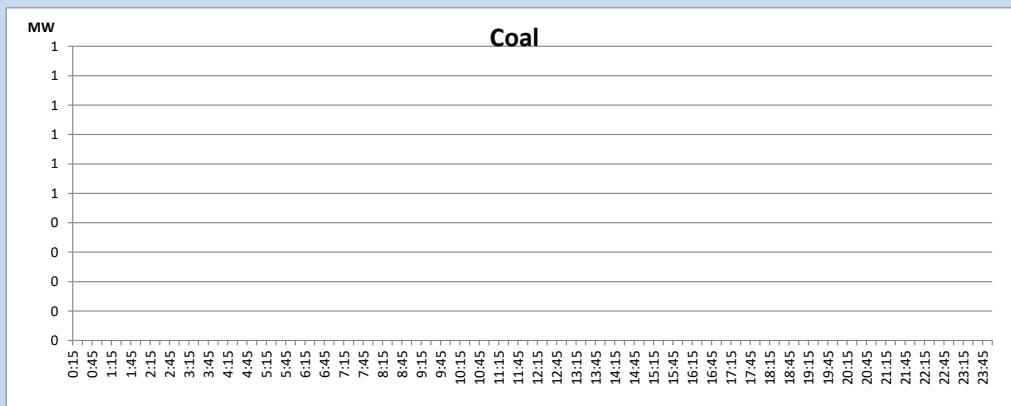
December 10, 2023



Solar and wind data is based on Telemetered Power Stations only

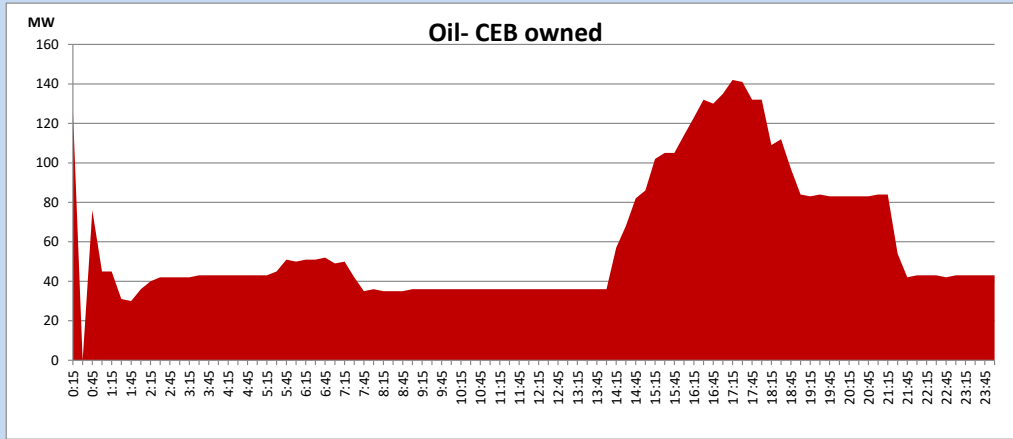
Coal Generation during

December 10, 2023



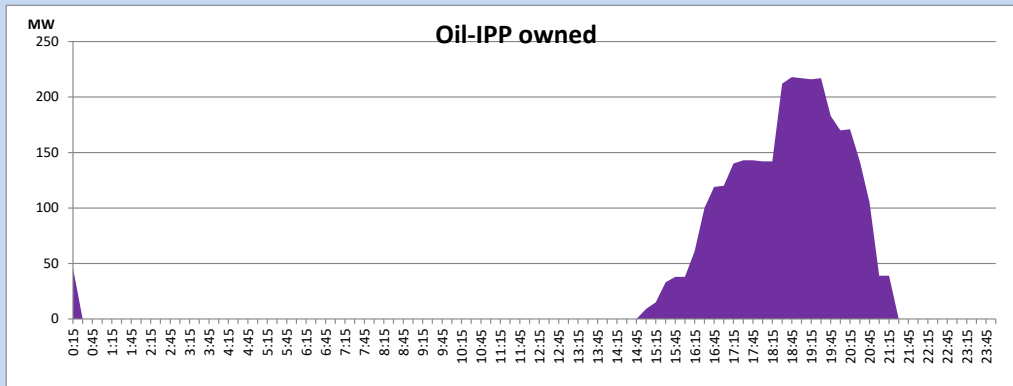
CEB Oil Plant Generation during

December 10, 2023



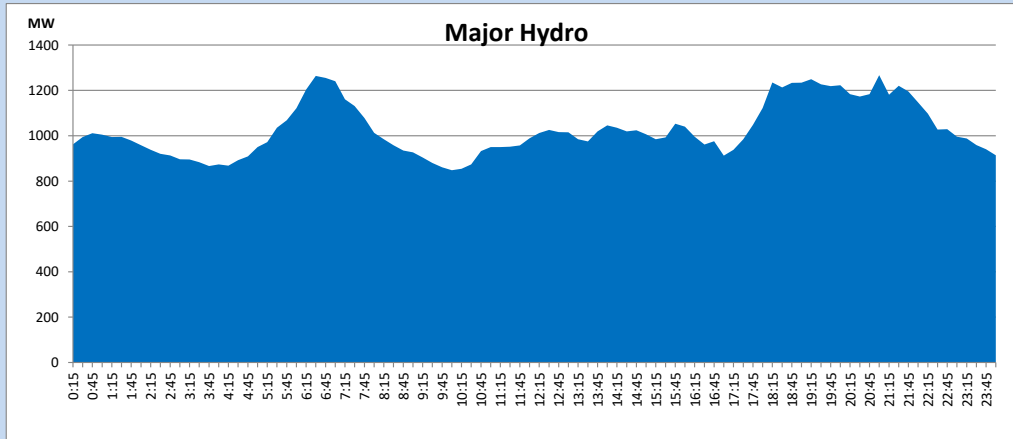
IPP Oil Plant Generation during

December 10, 2023



Major Hydro Generation during

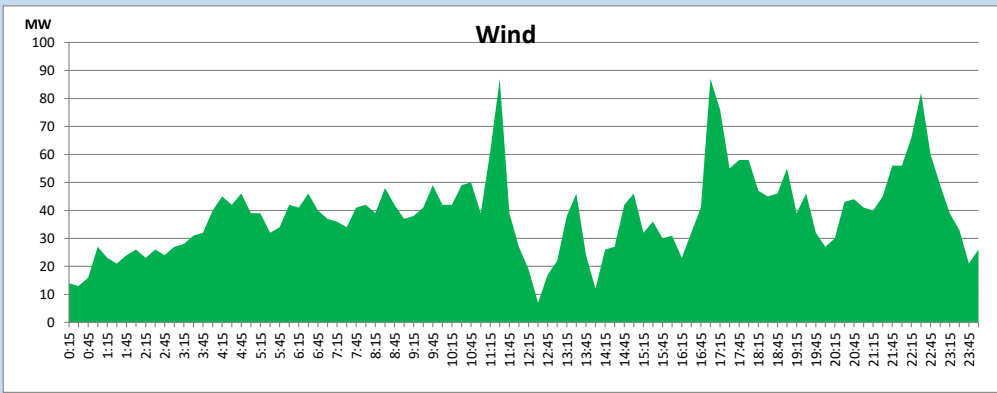
December 10, 2023



Wind Generation during

December 10, 2023

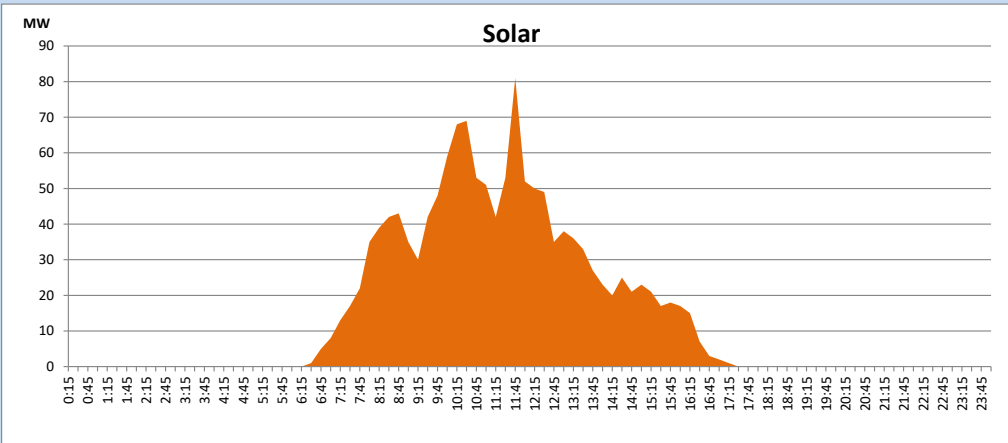
Based on Telemetered Power Stations only



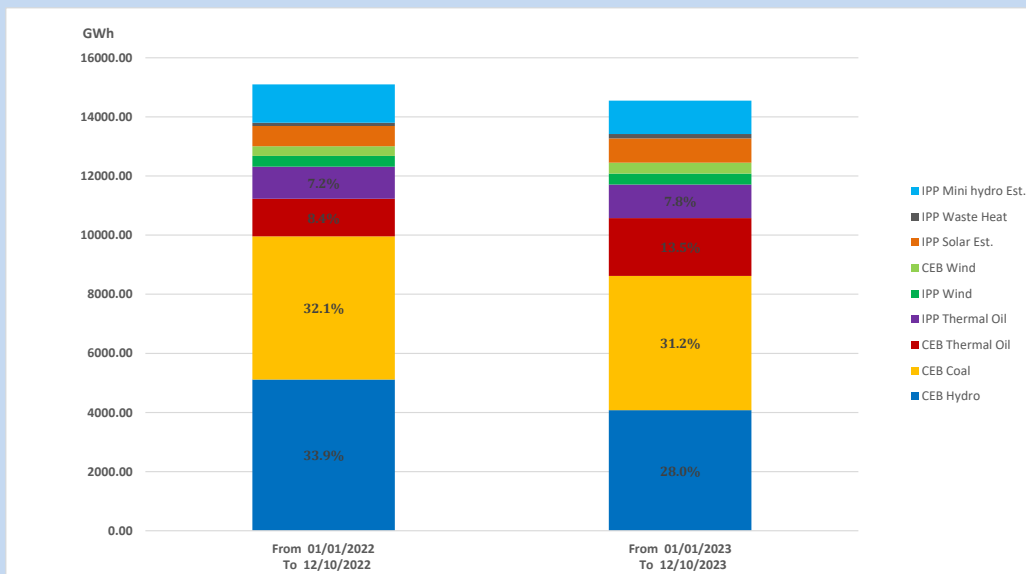
Solar Generation during

December 10, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch

From 01/01/2022 To 12/10/2022

15099 GWh

From 01/01/2023 To 12/10/2023

14548 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 10, 2023

- 1) New Galle 132/33kV T/F 02 tripped at 6:44hrs due to operation of REF protection. New galle T/F 02 restored at 7:14hrs.
- 2) Kappalthurai - Trinco 132kV cct tripped at 14:46hrs due to operation of Distance Protection. Kappalthurai - Trinco cct restored at 15:07hrs.
- 3) Athurugiriya - New Polpitiya - Thulhiriya 132kV cct and Athurugiriya - Polpitiya - Thulhiriya 132kV cct tripped and A/R at 15:41hrs due to operation of Distance protection.
- 4) Puttalam 132/33kV T/F 02 tripped at 19:37hrs from all ends along with 33kV B/S CB due to operation of E/F protection, causing 33kV feeders 05, 06 & 08 to be dead. At the same time 33kV feeder 07 CB blast was reported. Puttalam 33kV B/S CB & T/F 02 restored at 20:36hrs and all affected feeders, except feeder 07 restored by 20:45hrs. 33kV feeder 07 is yet to be restored.
- 5) At 20:56hrs, system frequency dropped to 49.3Hz due to the tripping of embedded generation.
- 6) Kukule pond spilled intermittently and spilling continues to the present hour. Upper Kothmale pond spilled intermittently & stopped at 4:46hrs (11.12.23).
- 7) Victoria, Kothmale and Randenigala reservoirs spilled intermittently. Kothmale and Victoria reservoirs spilling stopped at 06:15 & 06:34hrs, respectively. Randenigala reservoir spilling continues to the present hour.