

# Generation and Reservoirs Statistics

December 19, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

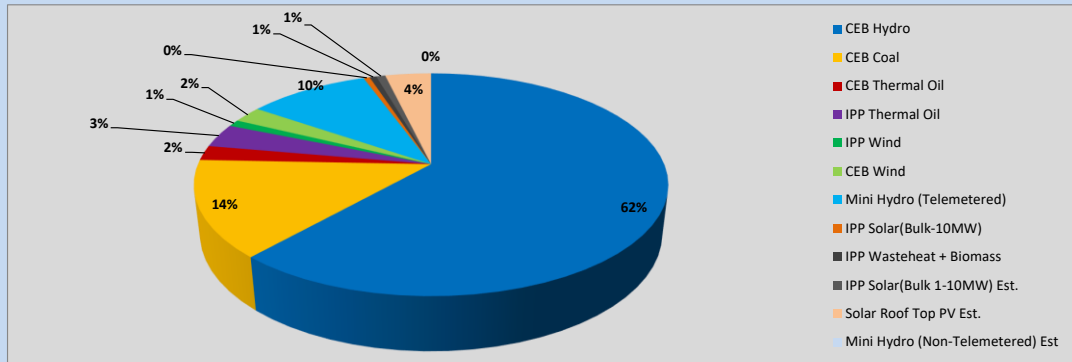


Table 01

	Generation (MWh)
CEB Hydro	25,384
CEB Coal	5,779
CEB Thermal Oil	883
IPP Thermal Oil	1,422
IPP Wind	404
CEB Wind	978
Mini Hydro (Telemetered)	4,070
IPP Solar (Bulk)	209
IPP Waste heat + Biomass	229
<b>Total Generation (Excluding estimated figures)</b>	<b>39,358</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	-
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1540
<b>Total Generation (Including estimated figures)</b>	<b>41,202</b>

\* 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	473	63.71%
CEB Coal	93	12.49%
CEB Thermal Oil	16	2.11%
IPP Thermal	17	2.31%
SPP Wind	11	1.50%
CEB Wind	16	2.14%
Mini Hydro *	71	9.55%
IPP Solar *	39	5.22%
IPP Waste heat + BMP	7	0.97%
<b>Total</b>	<b>743</b>	

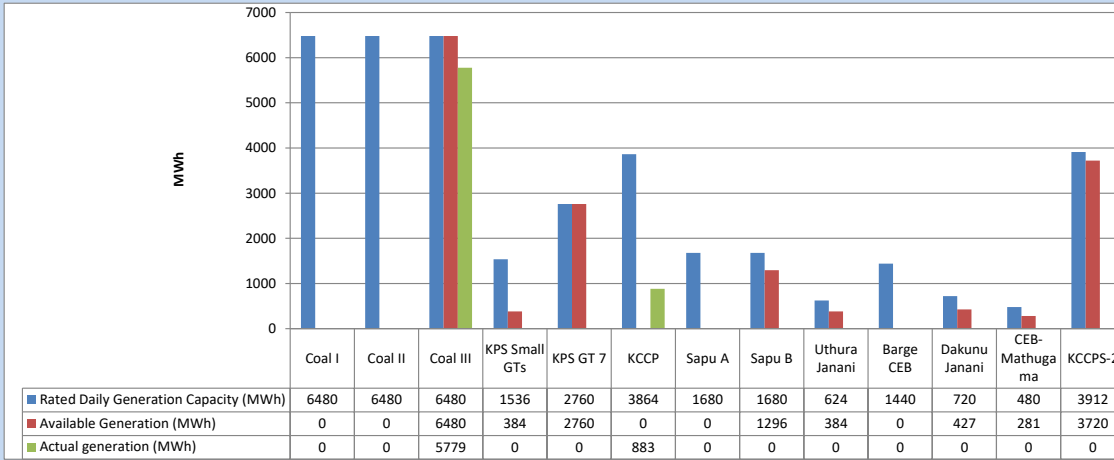
Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	4,296	28.82%
CEB Coal	4,588	30.78%
CEB Thermal Oil	1,970	13.22%
IPP Thermal	1,144	7.67%
SPP Wind	379	2.55%
CEB Wind	378	2.54%
Mini Hydro *	1,160	7.78%
IPP Solar *	841	5.64%
IPP Waste heat	150	1.01%
<b>Total</b>	<b>14,907</b>	

\*Including estimated contribution from non telemetered plants

### 3. CEB owned Thermal Plant Dispatch

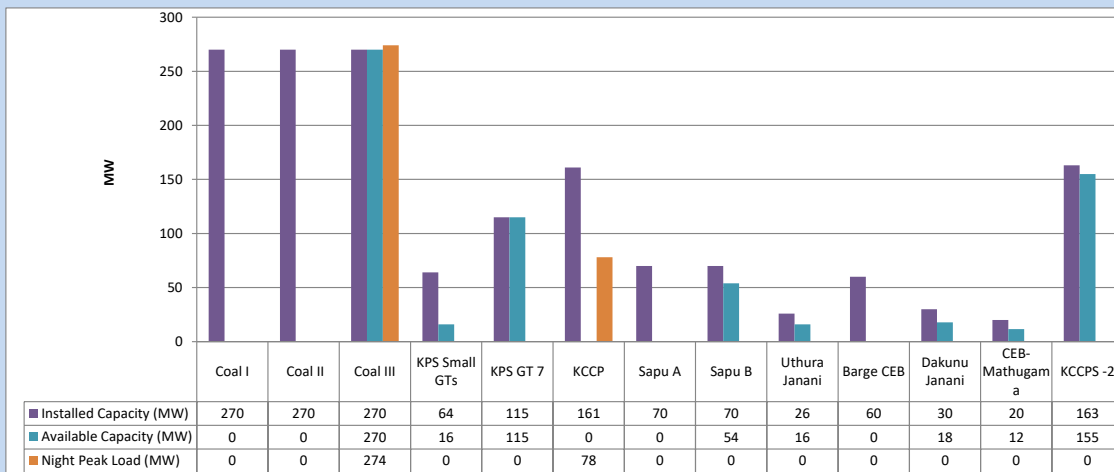
December 19, 2023



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

December 20, 2023

### 4. CEB owned Thermal Plant Loading at the Night Peak

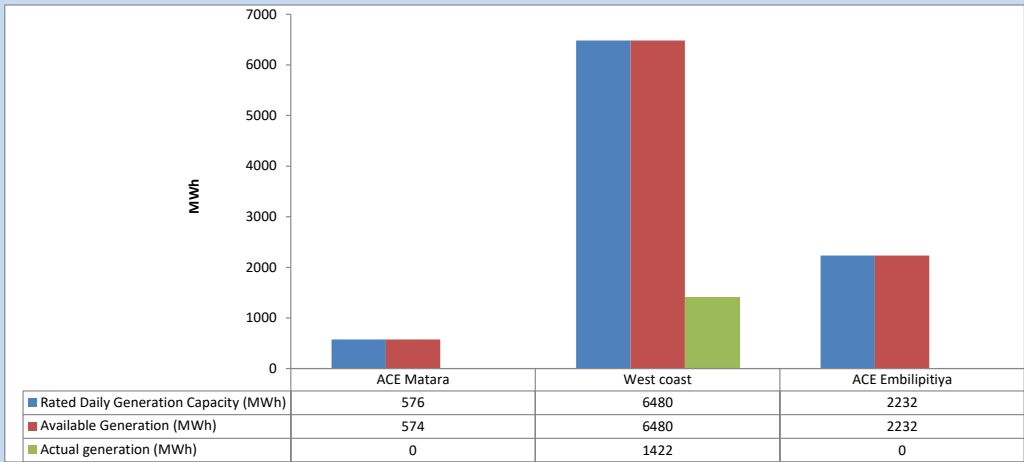


Plant availability is recorded at 6.00 am on

December 20, 2023

5. IPP owned Thermal Plant Dispatch

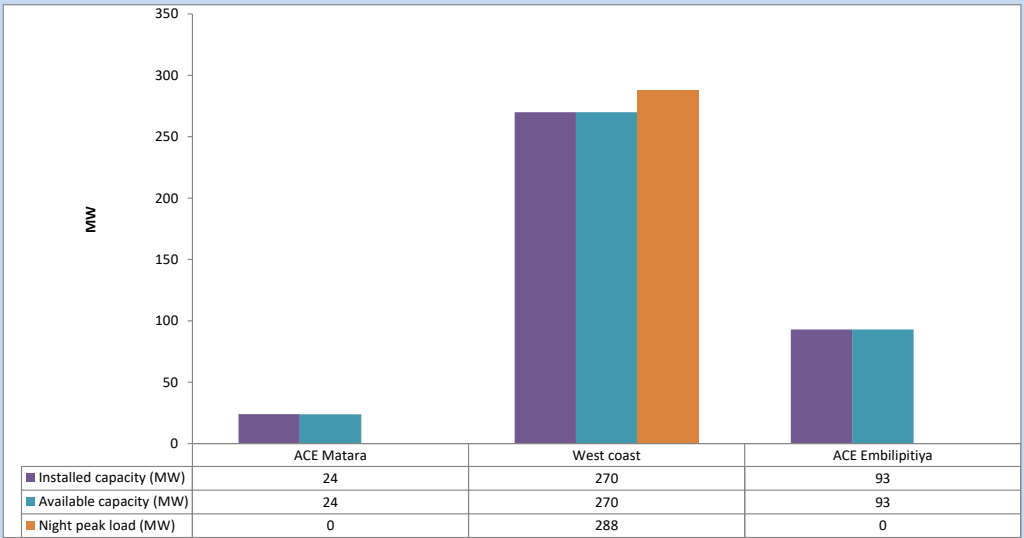
December 19, 2023



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

December 20, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

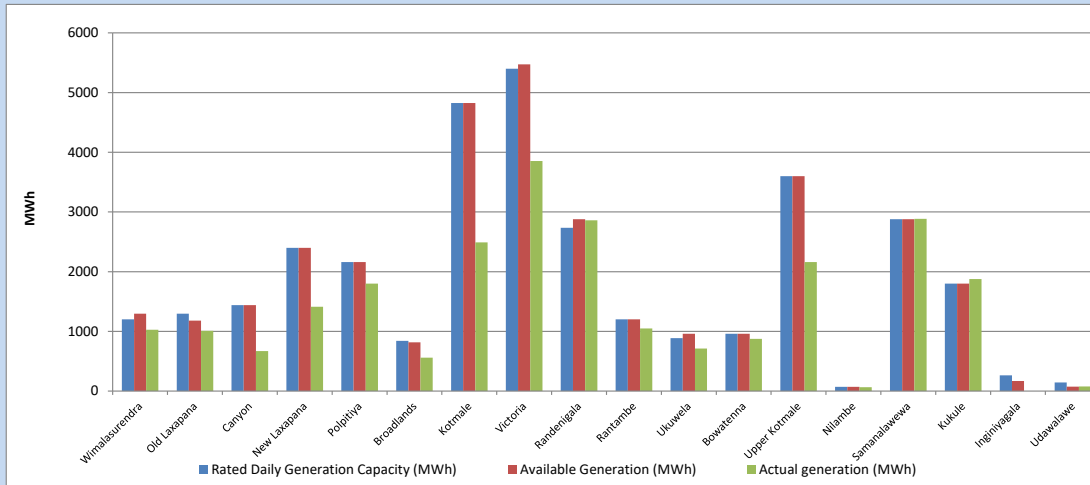


Plant availability is recorded at 6.00 am on

December 20, 2023

### 7. Major Hydro Plant Dispatch

December 19, 2023

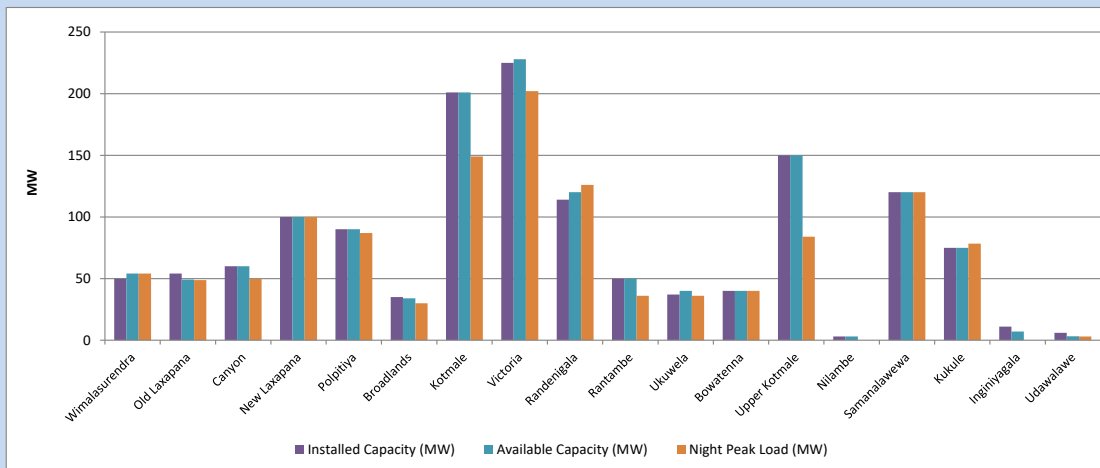


Available Generation is estimated based on plant availability at 6.00am on December 20, 2023  
Broadlands power plant is operating in the Commissioning Stage

December 20, 2023

### 8. Major Hydro Plant Loading at Night Peak

December 19, 2023



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

December 20, 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	1,027
Old Laxapana Canyon	54	49	49	1,009
New Laxapana	60	60	50	669
Polpitiya	100	100	100	1,412
Broadlands	90	90	87	1,800
Kotmale	35	34	30	559
Victoria	201	201	149	2,490
Randenigala	225	228	202	3,853
Rantambe	114	120	126	2,860
Ukuwela	50	50	36	1,050
Bowatenna	37	40	36	713
Upper Kotmale	40	40	40	874
Nilambe	150	150	84	2,161
Samanalawewa	3	3	0	66
Kukule	120	120	120	2,886
Inginiyagala	75	75	78	1,878
Udawalawe	11	7	0	0
Puttalam Coal I	6	3	3	78
Puttalam Coal II	270	0	0	0
Puttalam Coal III	270	0	0	0
KPS Small GTs	270	270	274	5,779
KPS GT 7	64	16	0	0
KCCP	115	115	0	0
Sapugaskanda A	161	0	78	883
Sapugaskanda B	70	0	0	0
Uthura Janani	70	54	0	0
Barge CEB	26	16	0	0
CEB-Hambantota	60	0	0	0
CEB-Mathugama	30	18	0	0
ACE Matara	20	12	0	0
Asia Power	24	24	0	0
KCCPS -2	50	0	0	0
West Coast	163	155	0	0
Nothern Power	270	270	288	1,422
ACE Embilipitiya	36	0	0	0
Total	93	93	0	0
	3,483	2,467	2,150	39,359

Plant availability is the availability recorded at 6 am on

December 20, 2023

### 10. Contribution to the Night Peak in MW

December 19, 2023

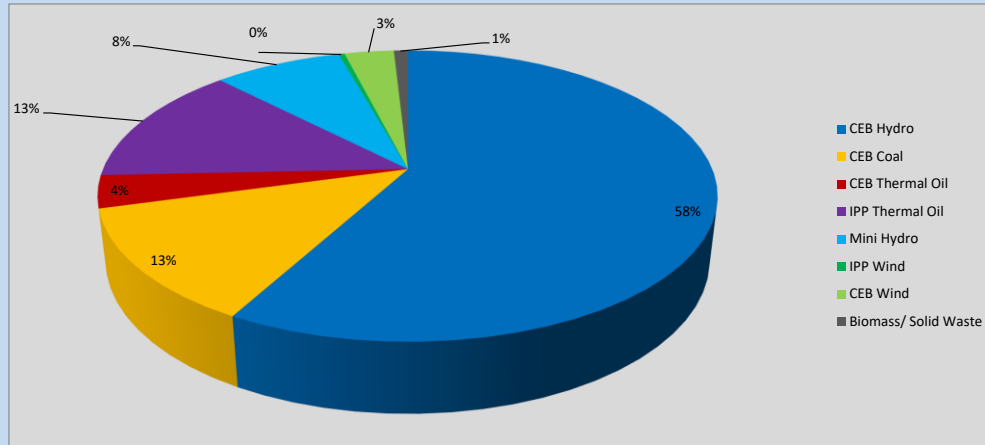


Table 06

CEB Hydro	1250	MW
CEB Coal	274	MW
CEB Thermal Oil	78	MW
IPP Thermal Oil	288	MW
Mini Hydro (Telemetered)	172	MW
IPP Wind	7.9	MW
CEB Wind	66.4	MW
Biomass/ Solid Waste	19	MW

#### Recorded Peak Demand Data

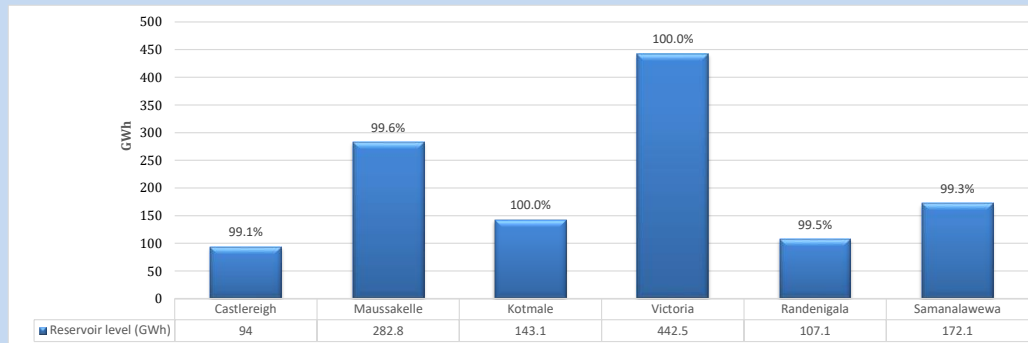
Table 07

Night Peak*	2,156	MW
Day Peak Maximum Demand	1,980	MW
Day Peak Minimum Demand	1,480	MW
Off Peak Minimum Demand	1,104	MW

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

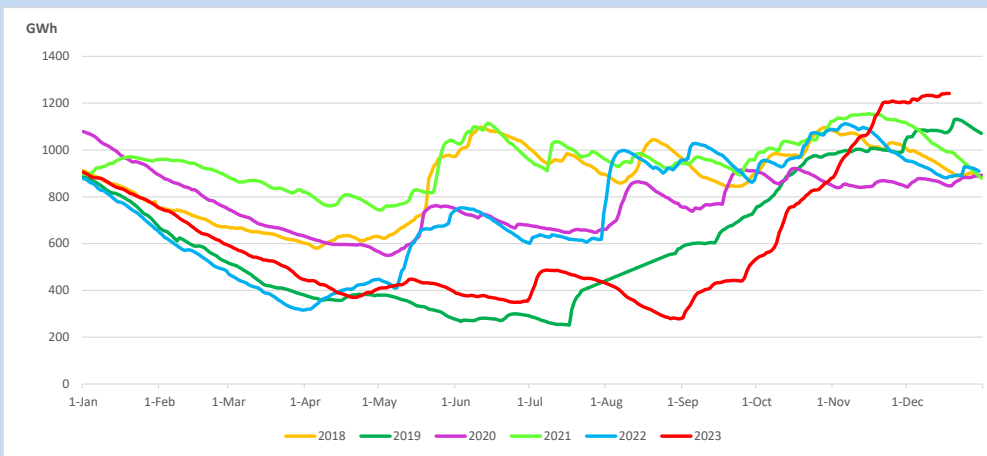
#### Reservoir Levels -

as at 06.00 Hr on December 20, 2023

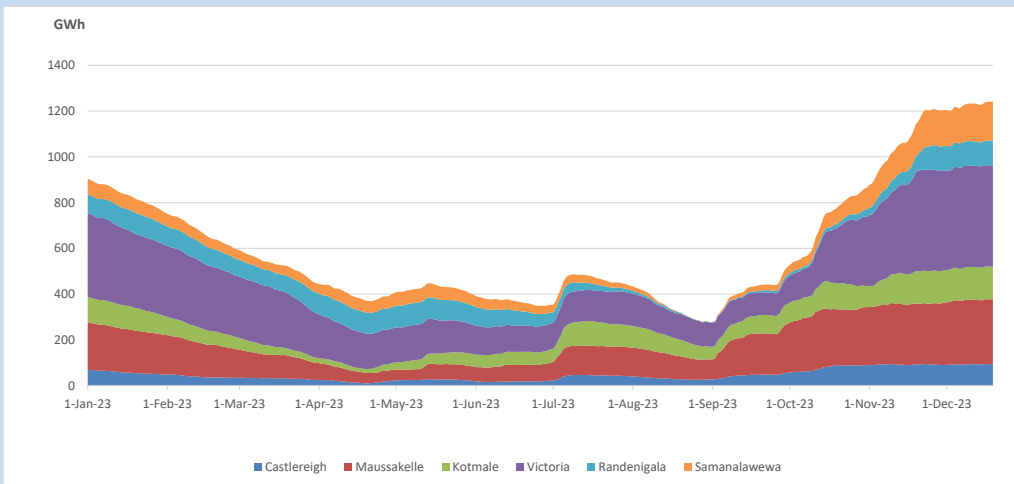


Total Reservoir Level 1241.6 GWh  
% of Total capacity 99.7%

### 11. Comparison of Total Reservoir Storage Levels with Past Years

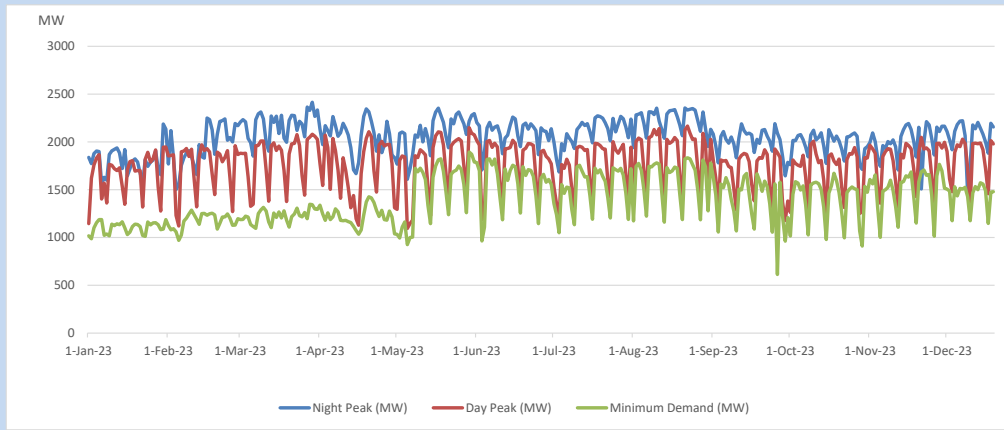


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





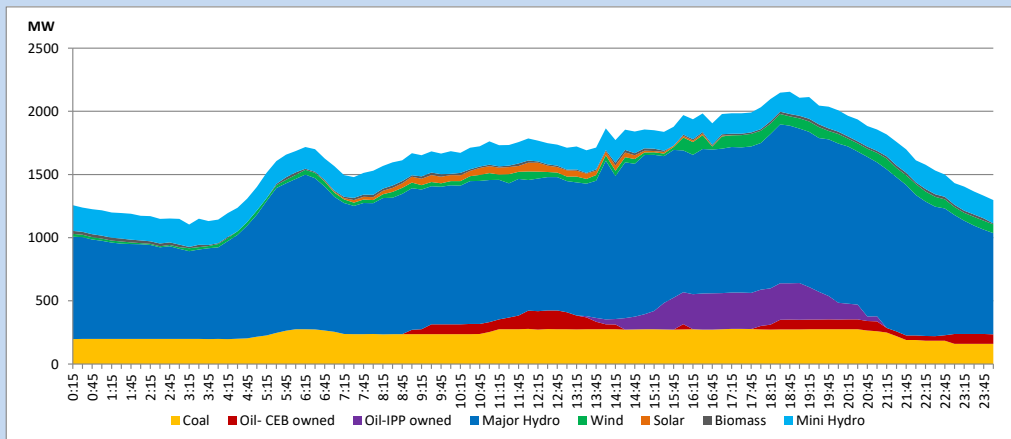
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

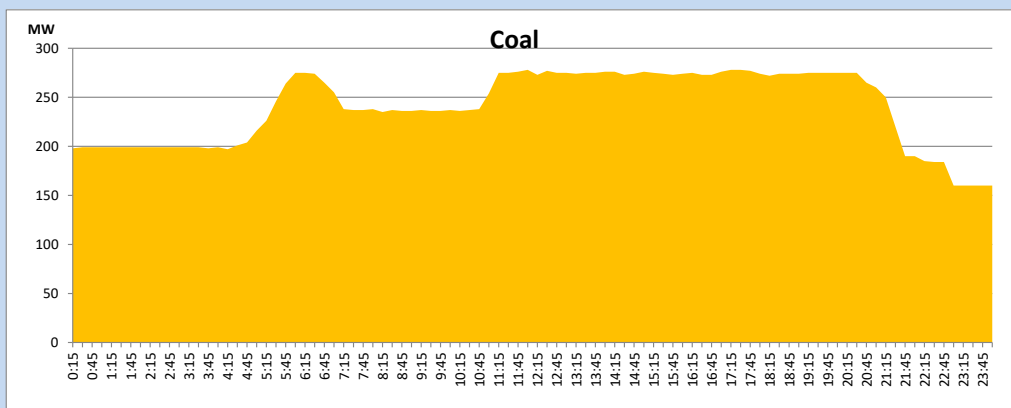
December 19, 2023



Solar and wind data is based on Telemetered Power Stations only

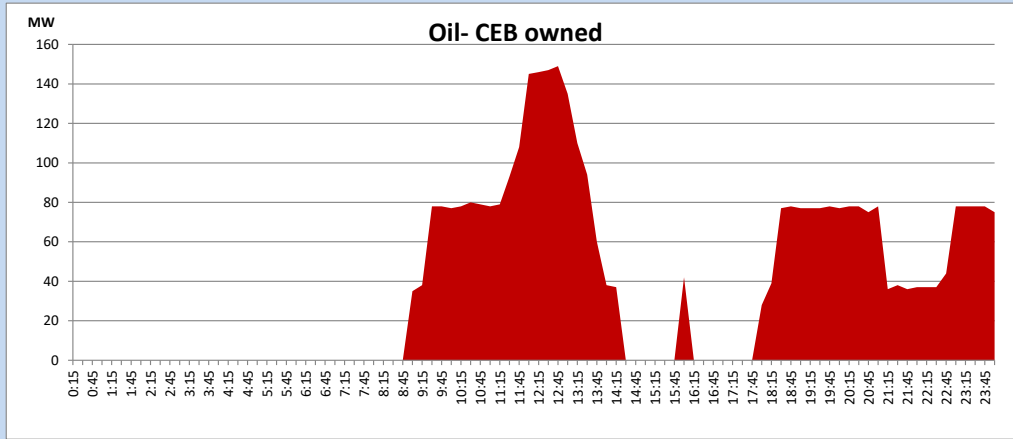
### Coal Generation during

December 19, 2023



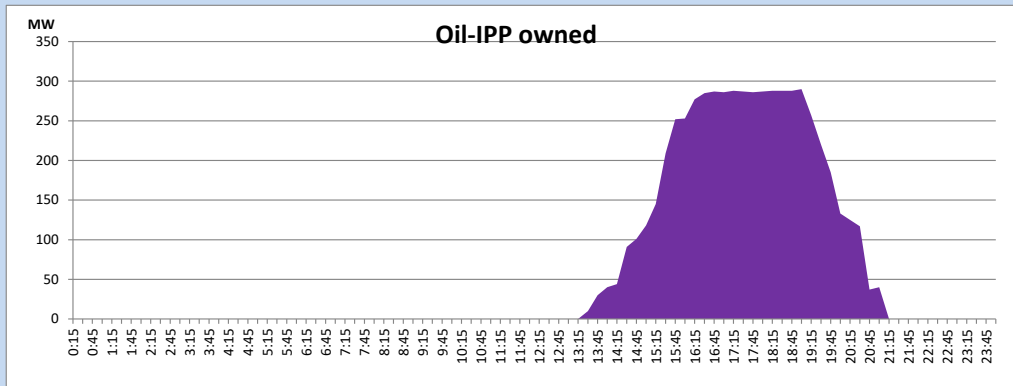
CEB Oil Plant Generation during

December 19, 2023



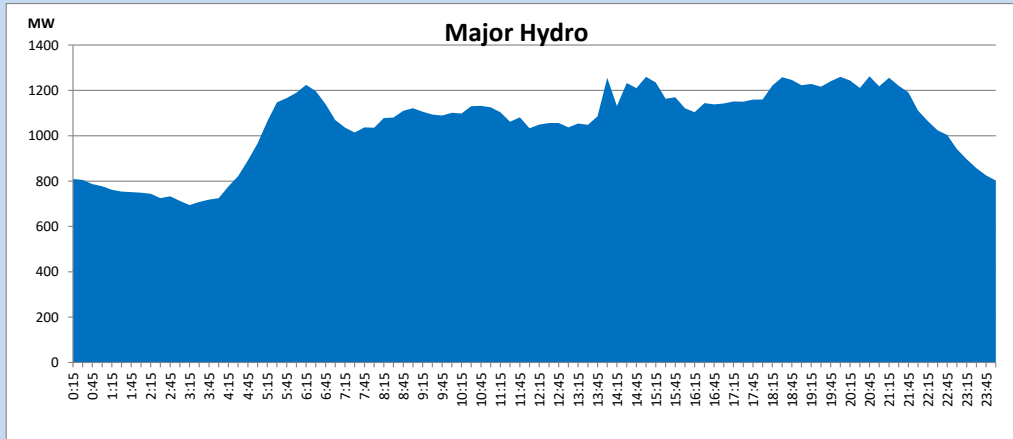
IPP Oil Plant Generation during

December 19, 2023



Major Hydro Generation during

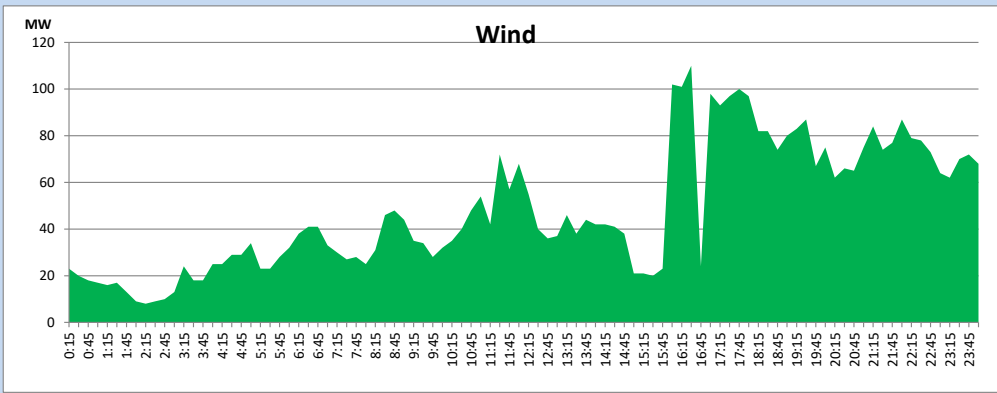
December 19, 2023



## Wind Generation during

December 19, 2023

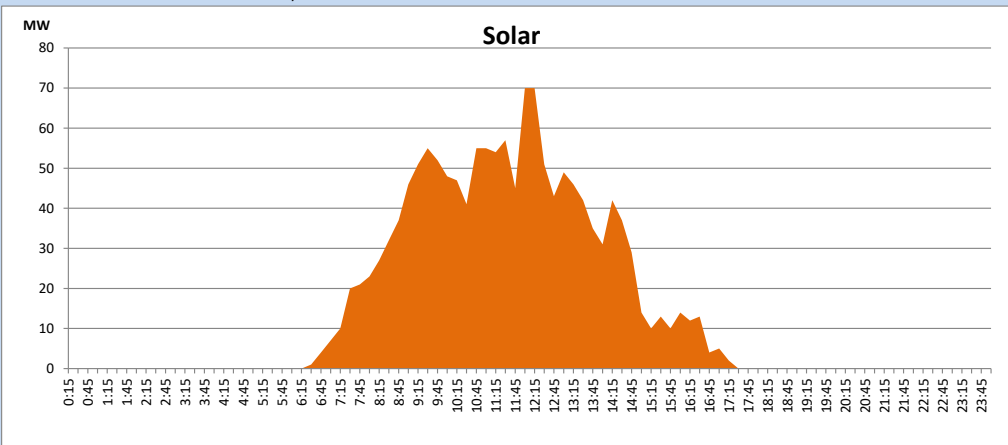
Based on Telemetered Power Stations only



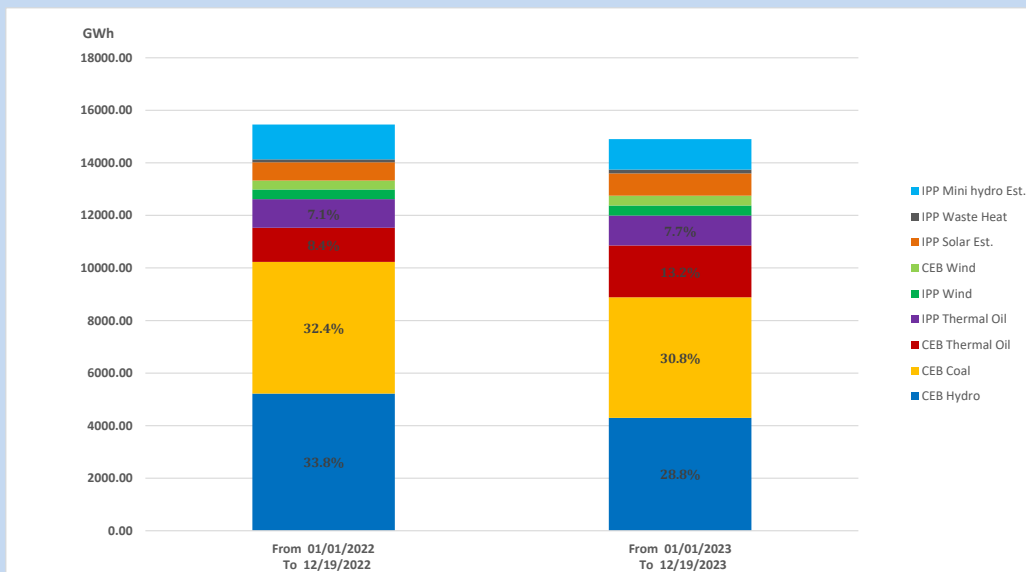
## Solar Generation during

December 19, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 12/19/2022

15458 GWh

From 01/01/2023 To 12/19/2023

14907 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 19, 2023

- 1) Castlereigh and Kothmale both reservoirs spilling stopped at 08:00hrs.
- 2) Kotugoda 220/132/33kV T/F 01 which tripped on 18.12.2023, was restored at 14:36hrs.
- 3) Victoria reservoir spilled intermittently and continues to the present hour.
- 4) Kukule and Upper Kothmale ponds, spilling continues to the present hour.