

# Generation and Reservoirs Statistics

December 16, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

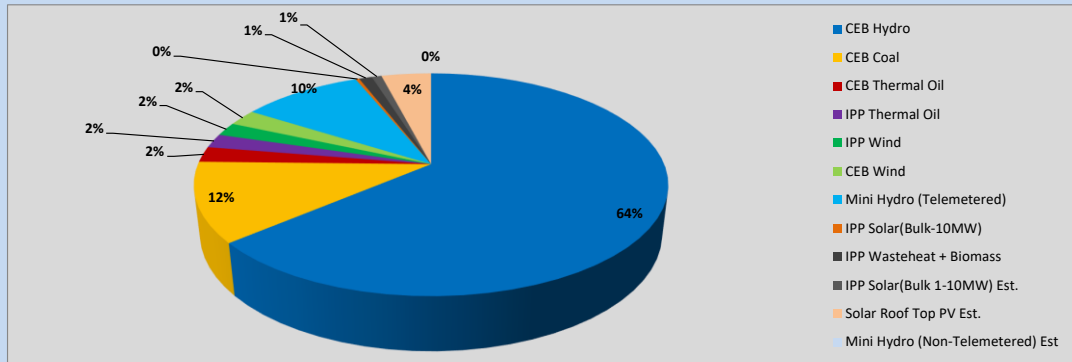


Table 01

	Generation (MWh)
CEB Hydro	24,282
CEB Coal	4,396
CEB Thermal Oil	850
IPP Thermal Oil	777
IPP Wind	743
CEB Wind	903
Mini Hydro (Telemetered)	3,740
IPP Solar (Bulk)	112
IPP Waste heat + Biomass	405
<b>Total Generation (Excluding estimated figures)</b>	<b>36,208</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>38,052</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	404	64.34%
CEB Coal	77	12.28%
CEB Thermal Oil	13	2.08%
IPP Thermal	14	2.31%
SPP Wind	9	1.42%
CEB Wind	13	2.00%
Mini Hydro *	59	9.39%
IPP Solar *	33	5.20%
IPP Waste heat + BMP	6	0.98%
<b>Total</b>	<b>628</b>	

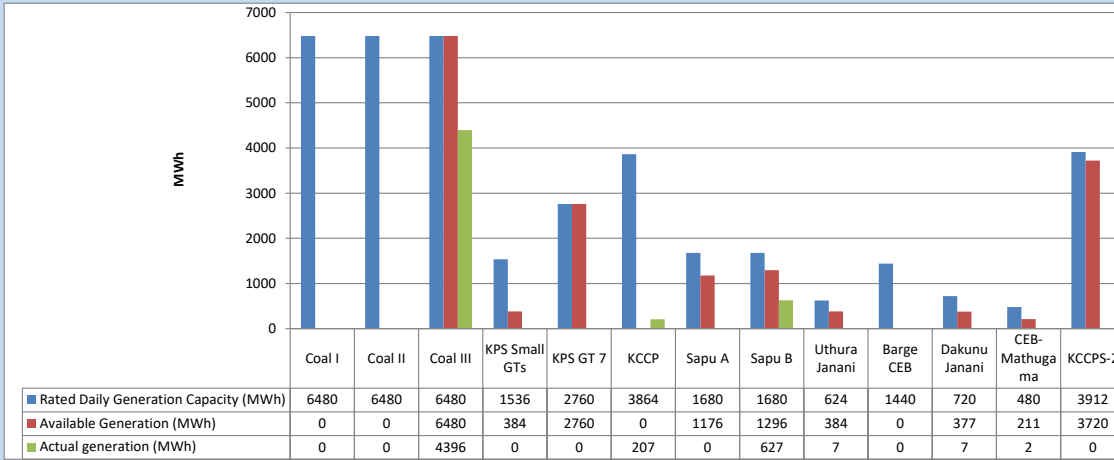
Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	4,228	28.60%
CEB Coal	4,573	30.94%
CEB Thermal Oil	1,968	13.32%
IPP Thermal	1,142	7.72%
SPP Wind	382	2.58%
CEB Wind	375	2.54%
Mini Hydro *	1,131	7.66%
IPP Solar *	835	5.65%
IPP Waste heat	146	0.99%
<b>Total</b>	<b>14,780</b>	

\*Including estimated contribution from non telemetered plants

### 3. CEB owned Thermal Plant Dispatch

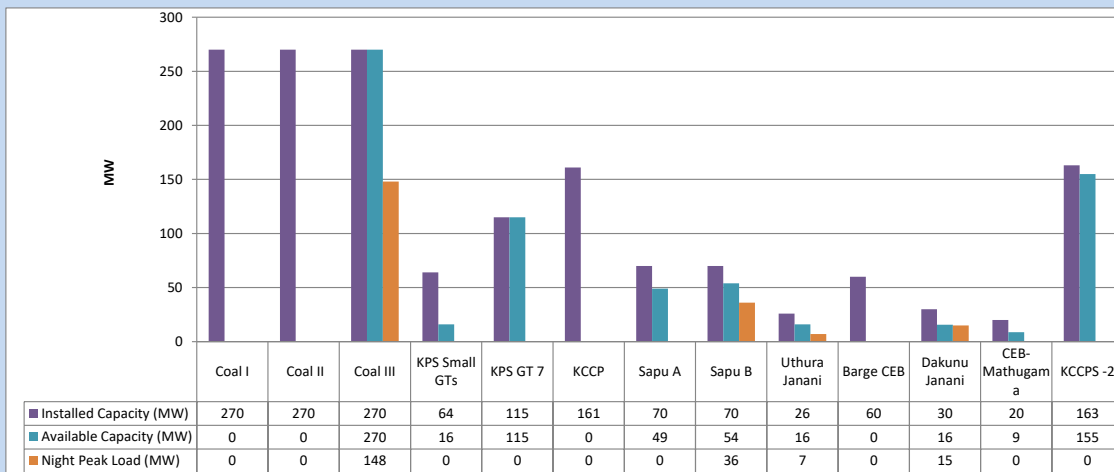
December 16, 2023



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

December 17, 2023

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

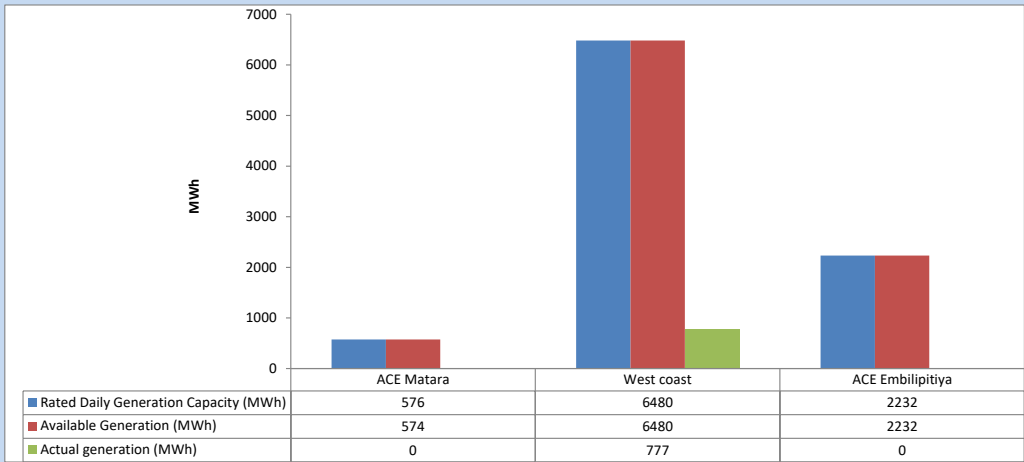


Plant availability is recorded at 6.00 am on

December 17, 2023

5. IPP owned Thermal Plant Dispatch

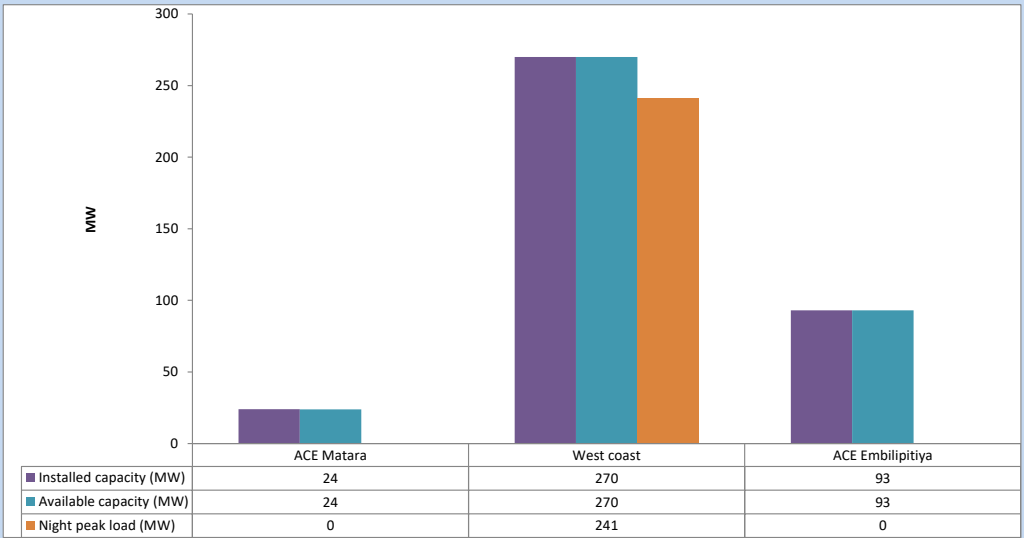
December 16, 2023



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

December 17, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

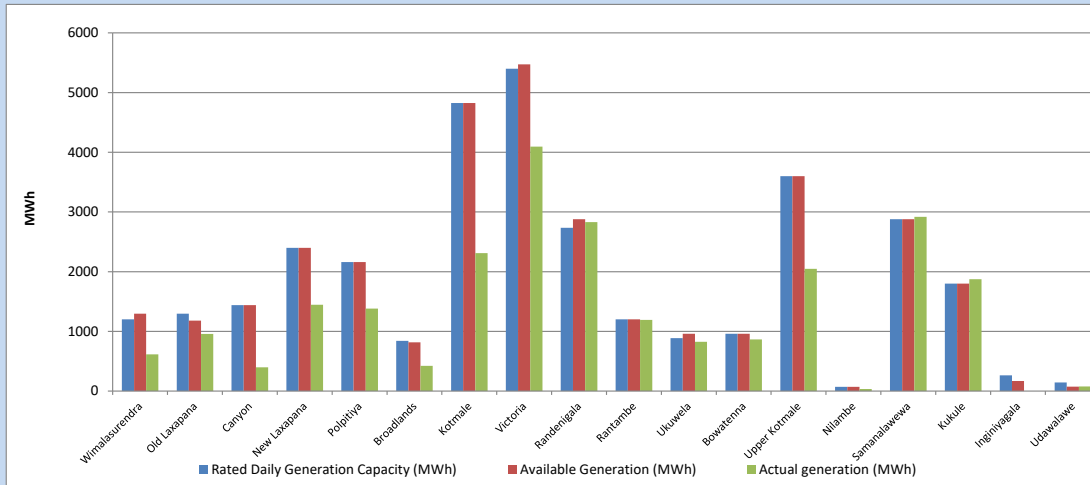


Plant availability is recorded at 6.00 am on

December 17, 2023

### 7. Major Hydro Plant Dispatch

December 16, 2023

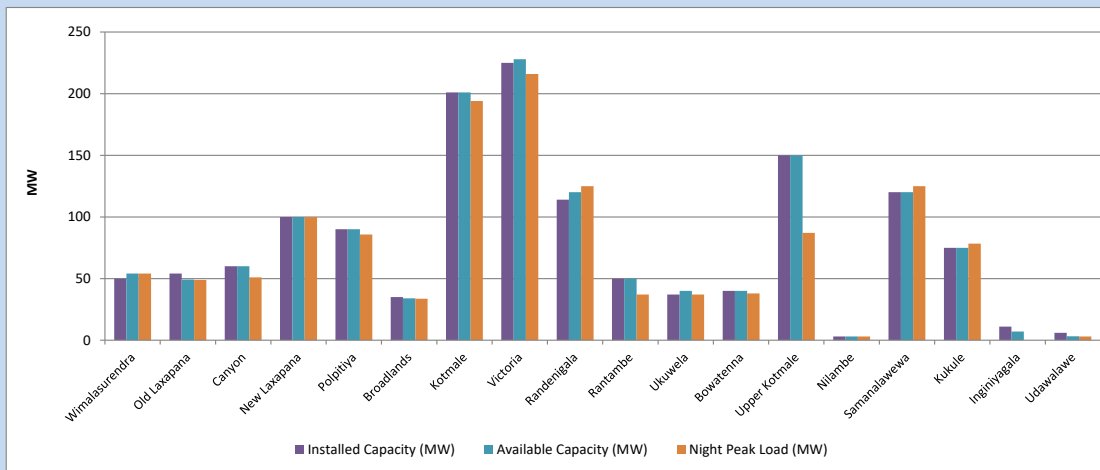


Available Generation is estimated based on plant availability at 6.00am on December 17, 2023  
Broadlands power plant is operating in the Commissioning Stage

December 17, 2023

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

December 16, 2023



Plant availability is recorded at 6.00 am on December 17, 2023  
Broadlands power plant is operating in the Commissioning Stage

December 17, 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	615
Old Laxapana	54	49	49	957
Canyon	60	60	51	398
New Laxapana	100	100	100	1,447
Polpitiya	90	90	86	1,380
Broadlands	35	34	34	421
Kotmale	201	201	194	2,310
Victoria	225	228	216	4,095
Randenigala	114	120	125	2,831
Rantambe	50	50	37	1,191
Ukuwela	37	40	37	825
Bowatenna	40	40	38	866
Upper Kotmale	150	150	87	2,047
Nilambe	3	3	3	33
Samanalawewa	120	120	125	2,917
Kukule	75	75	78	1,874
Inginiyagala	11	7	0	0
Udawalawe	6	3	3	76
Puttalam Coal I	270	0	0	0
Puttalam Coal II	270	0	0	0
Puttalam Coal III	270	270	148	4,396
KPS Small GTs	64	16	0	0
KPS GT 7	115	115	0	0
KCCP	161	0	0	207
Sapugaskanda A	70	49	0	0
Sapugaskanda B	70	54	36	627
Uthura Janani	26	16	7	7
Barge CEB	60	0	0	0
CEB-Hambantota	30	16	15	7
CEB-Mathugama	20	9	0	2
ACE Matara	24	24	0	0
Asia Power	50	0	0	0
KCCPS -2	163	155	0	0
West Coast	270	270	241	777
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	0	0
Total	3,483	2,511	1,985	36,209

Plant availability is the availability recorded at 6 am on

December 17, 2023

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

December 16, 2023

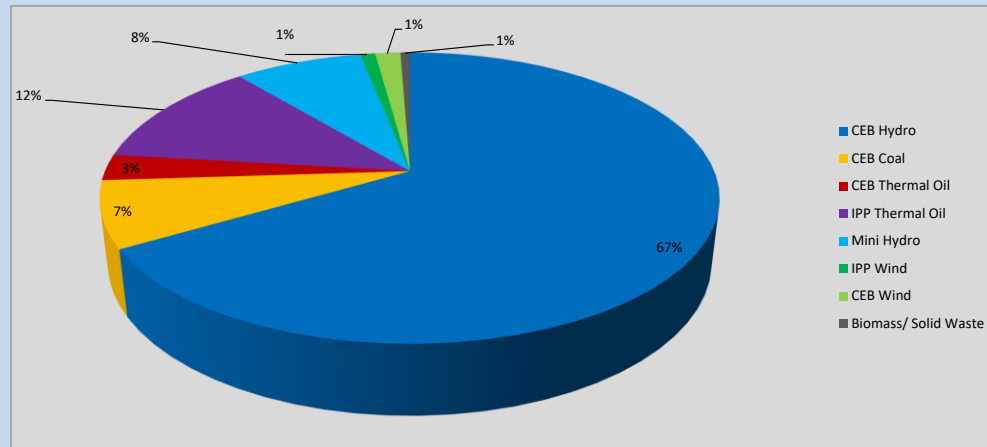


Table 06

CEB Hydro	1331	MW
CEB Coal	148	MW
CEB Thermal Oil	58	MW
IPP Thermal Oil	241	MW
Mini Hydro (Telemetered)	159	MW
IPP Wind	18.6	MW
CEB Wind	31.4	MW
Biomass/ Solid Waste	12	MW

#### Recorded Peak Demand Data

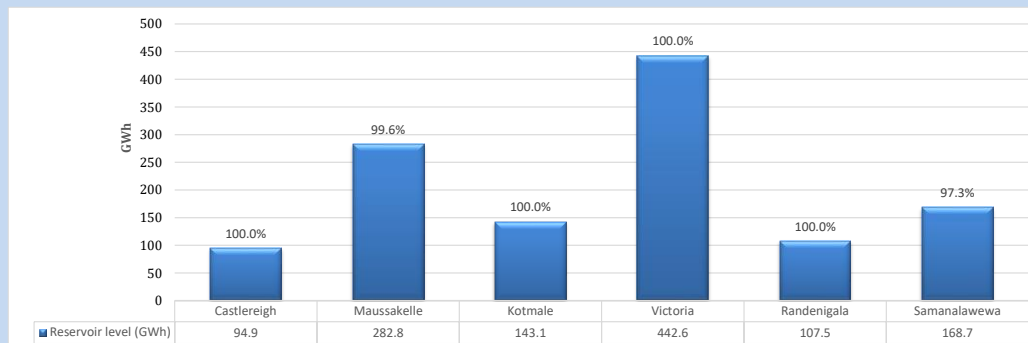
Table 07

Night Peak*	2,000	MW
Day Peak Maximum Demand	1,722	MW
Day Peak Minimum Demand	1,491	MW
Off Peak Minimum Demand	1,076	MW

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

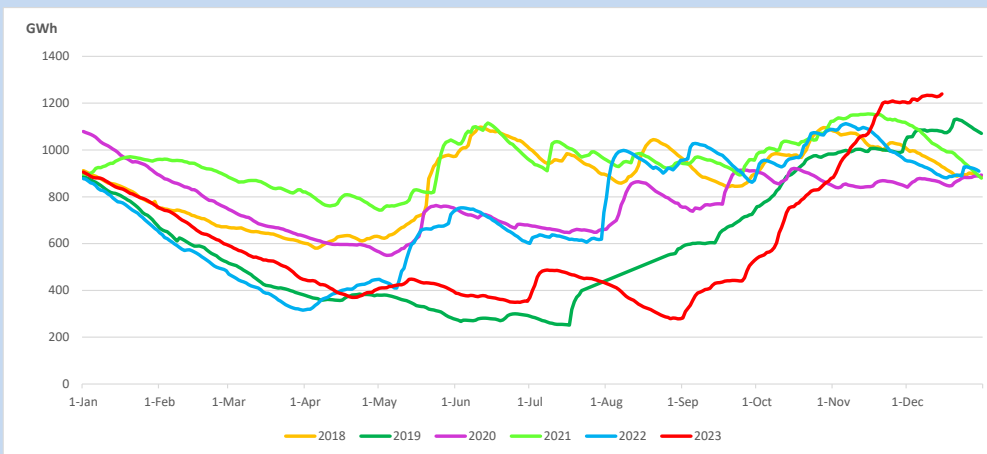
#### Reservoir Levels -

as at 06.00 Hr on December 17, 2023

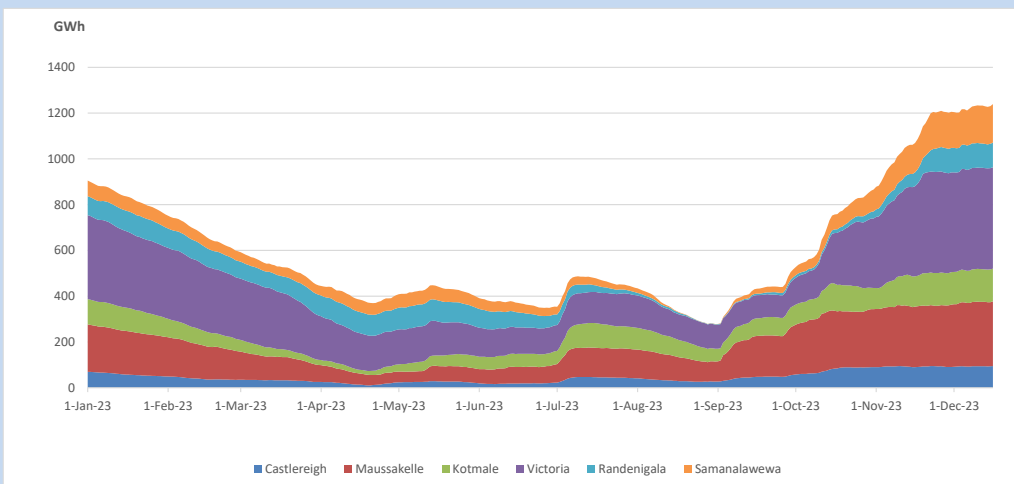


Total Reservoir Level 1239.6 GWh  
 % of Total capacity 99.5%

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

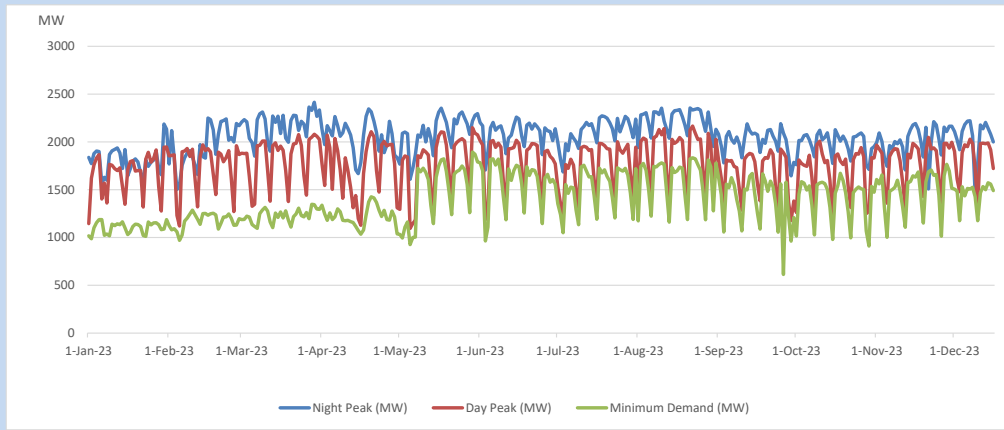


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





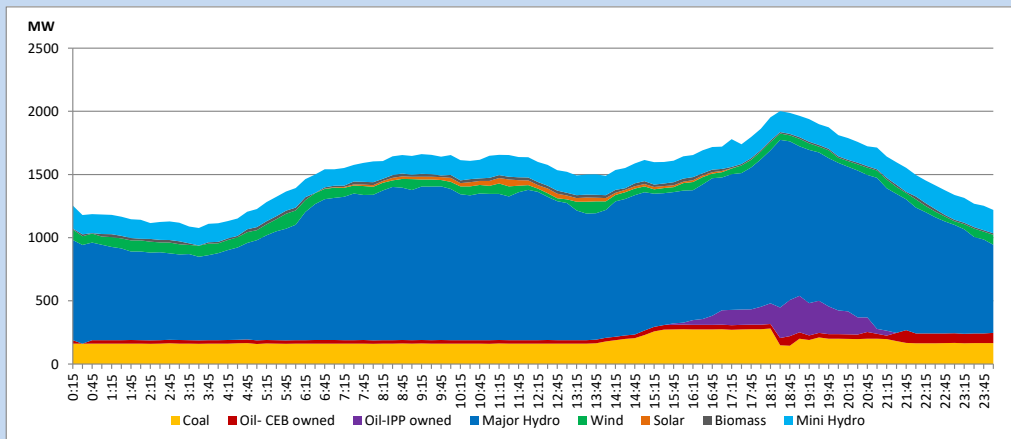
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

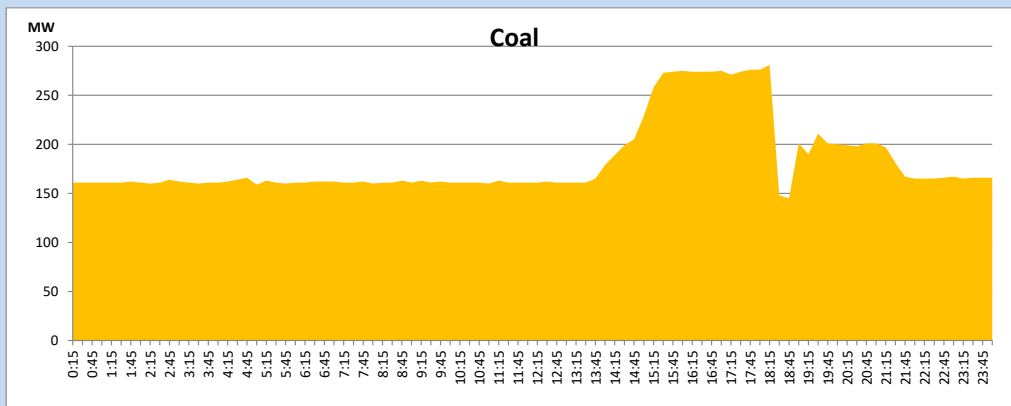
December 16, 2023



Solar and wind data is based on Telemetered Power Stations only

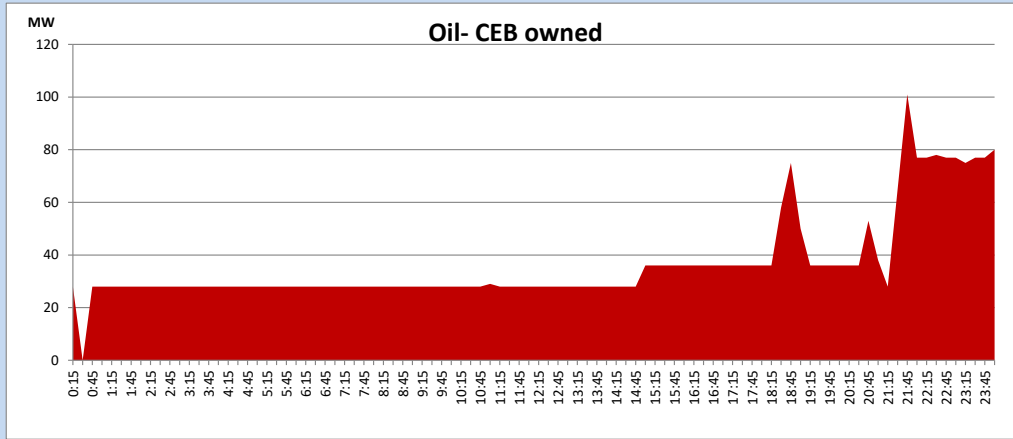
### Coal Generation during

December 16, 2023



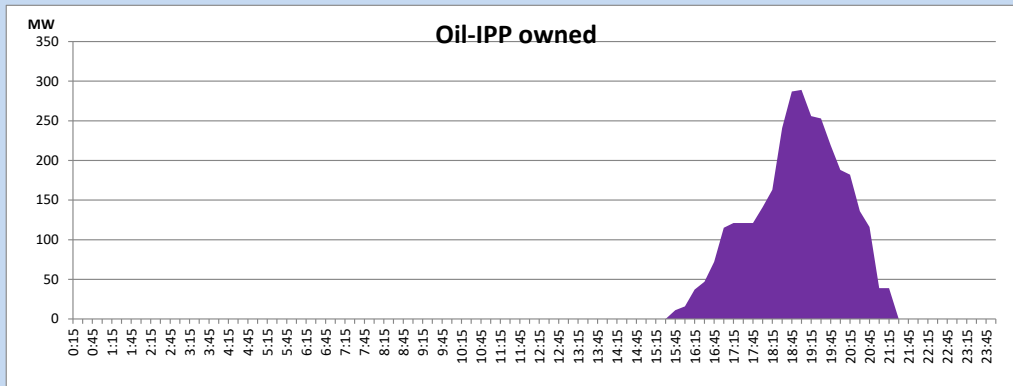
CEB Oil Plant Generation during

December 16, 2023



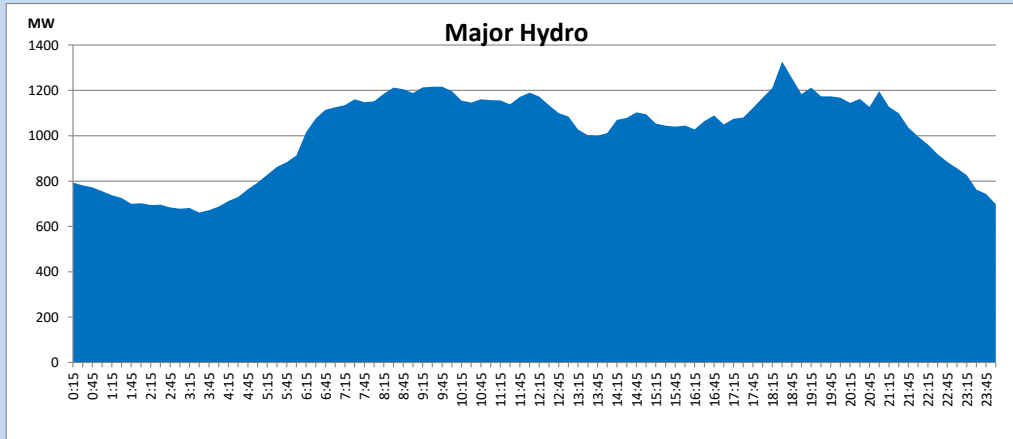
IPP Oil Plant Generation during

December 16, 2023



Major Hydro Generation during

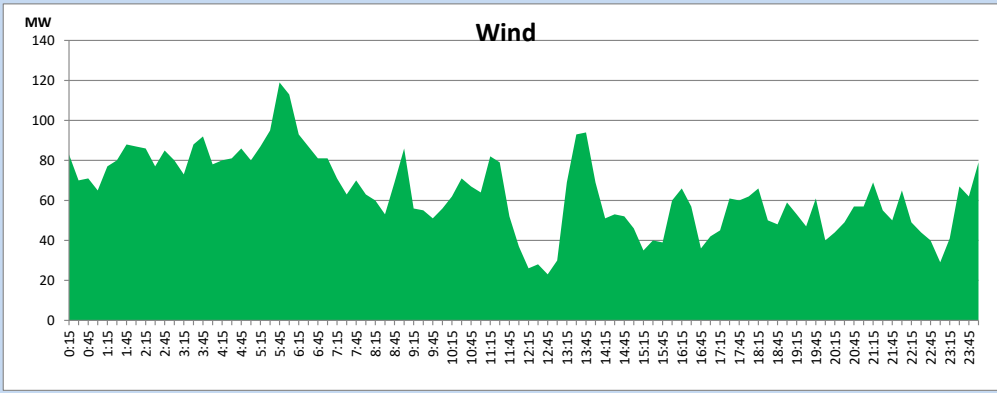
December 16, 2023



## Wind Generation during

December 16, 2023

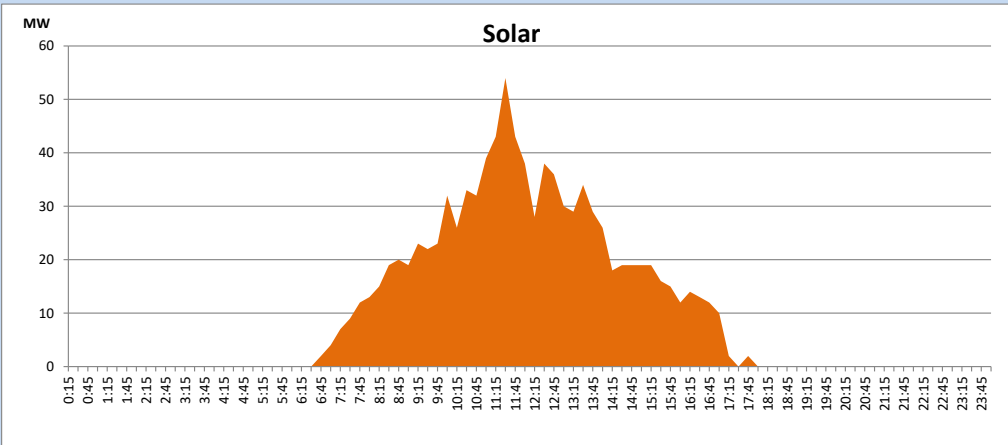
Based on Telemetered Power Stations only



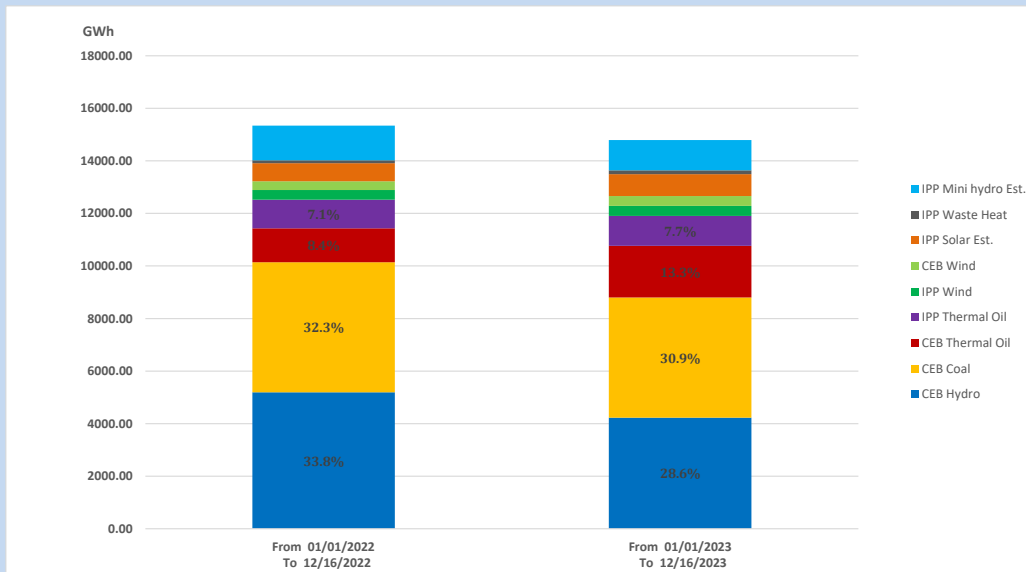
## Solar Generation during

December 16, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 12/16/2022

15340 GWh

From 01/01/2023 To 12/16/2023

14792 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 16, 2023

- 1) New Habarana 220kV BC manually switched off at 16:39hrs due to a TCS unhealthy alarm. New Habarana 220kV BC normalized at 18:50hrs.
- 2) LVPS Unit 03 was run backed at 18:12hrs to 145MW (net) due to tripping of a boiler feed water pump. LVPS Unit 03 made its full load available at 18:40hrs.
- 3) Thulhiriya 132/33kV T/F 02 tripped from both ends at 23:50hrs due to operation of PRV. The T/F is yet to be normalized.
- 4) Kothmale, Victoria, and Randenigala Reservoirs spilled intermittently and spilling continues to the present hour.
- 5) Castlereagh reservoir spilling started at 19:15hrs and spilling continues to the present hour.
- 6) Bowathanna reservoir spilling started at 02:00hrs and spilling stopped at 05:45hrs (17.12.2023).
- 7) Kukule and Upper Kothmale pond spilling continues to the present hour.