

# Generation and Reservoirs Statistics

December 25, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

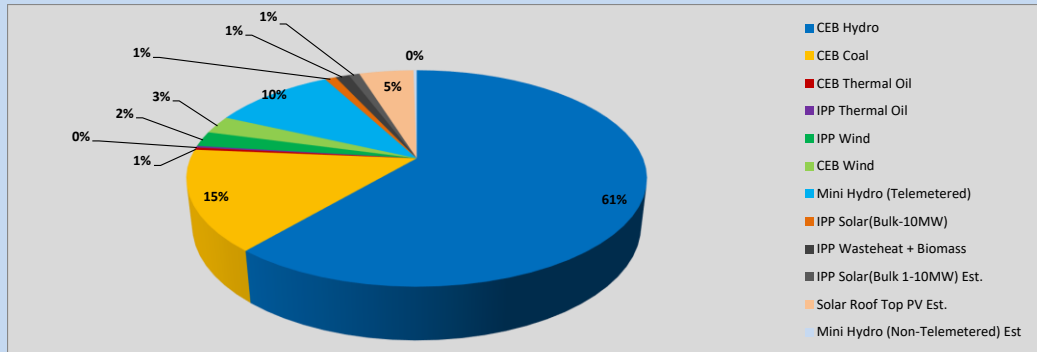


Table 01

	Generation (MWh)
CEB Hydro	20,673
CEB Coal	5,096
CEB Thermal Oil	119
IPP Thermal Oil	87
IPP Wind	765
CEB Wind	903
Mini Hydro (Telemetered)	3,477
IPP Solar (Bulk)	314
IPP Waste heat + Biomass	388
<b>Total Generation (Excluding estimated figures)</b>	<b>31,822</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	93
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1540
<b>Total Generation (Including estimated figures)</b>	<b>33,759</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	615	63.01%
CEB Coal	126	12.86%
CEB Thermal Oil	19	1.95%
IPP Thermal	25	2.60%
SPP Wind	15	1.58%
CEB Wind	22	2.23%
Mini Hydro *	93	9.50%
IPP Solar *	52	5.28%
IPP Waste heat + BMP	10	0.98%
<b>Total</b>	<b>976</b>	

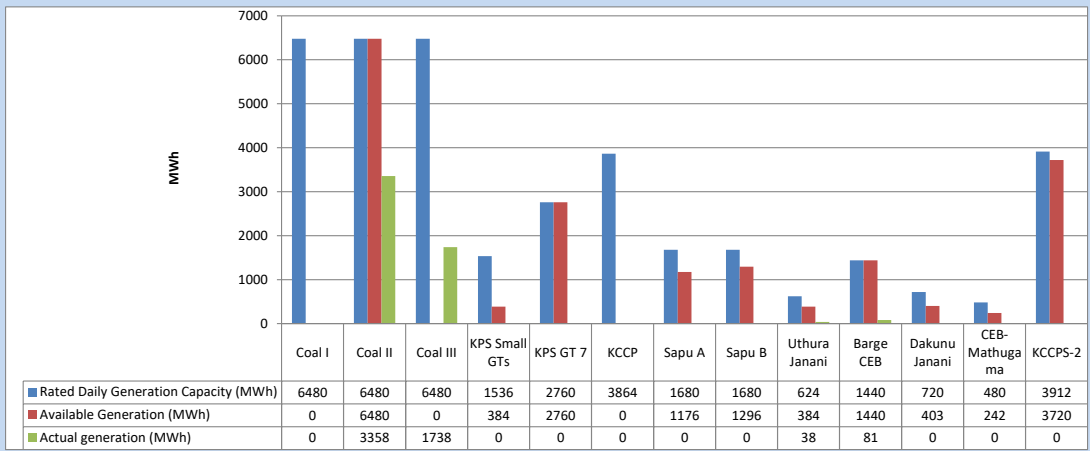
Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	4,437	29.31%
CEB Coal	4,621	30.52%
CEB Thermal Oil	1,974	13.04%
IPP Thermal	1,152	7.61%
SPP Wind	384	2.53%
CEB Wind	384	2.53%
Mini Hydro *	1,182	7.81%
IPP Solar *	854	5.64%
IPP Waste heat	153	1.01%
<b>Total</b>	<b>15,140</b>	

\*Including estimated contribution from non telemetered plants

### 3. CEB owned Thermal Plant Dispatch

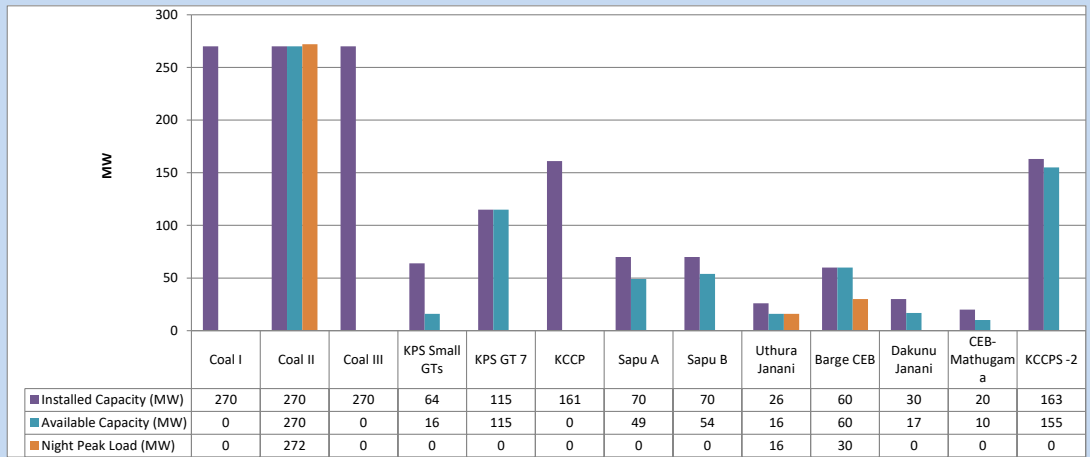
December 25, 2023



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

December 26, 2023

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

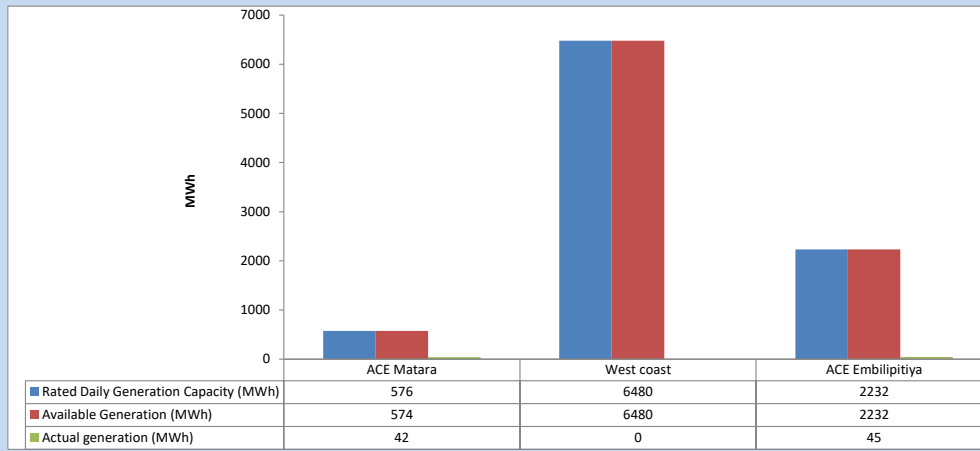


Plant availability is recorded at 6.00 am on

December 26, 2023

### 5. IPP owned Thermal Plant Dispatch

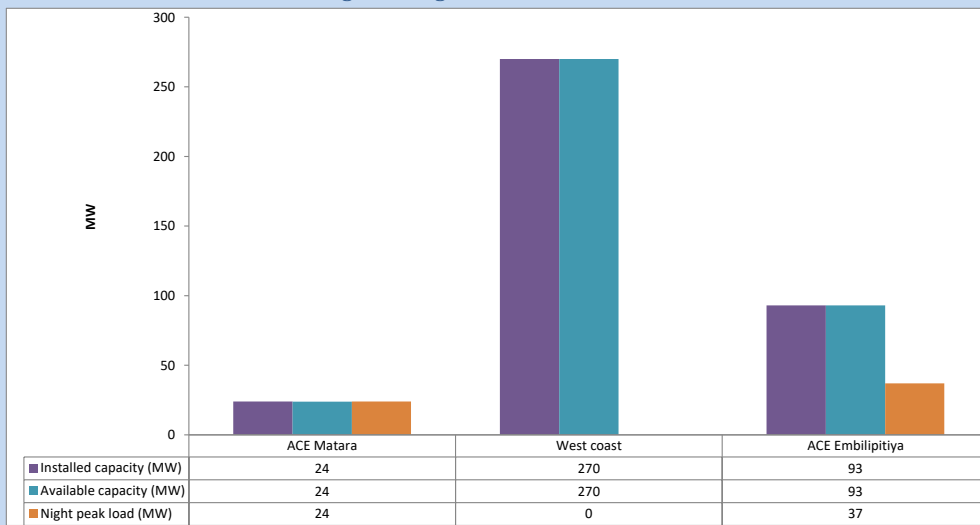
December 25, 2023



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

December 26, 2023

### 6. IPP owned Thermal Plant Loading at the Night Peak

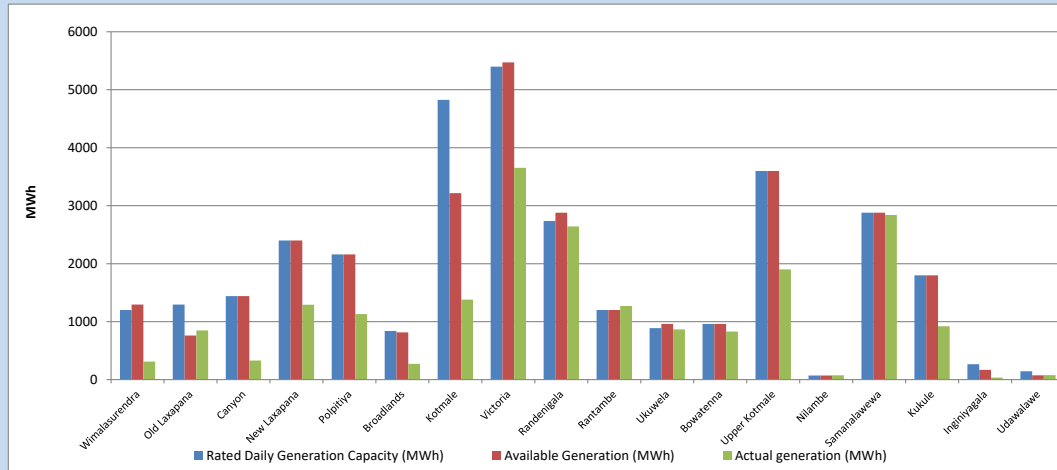


Plant availability is recorded at 6.00 am on

December 26, 2023

## 7. Major Hydro Plant Dispatch

December 25, 2023

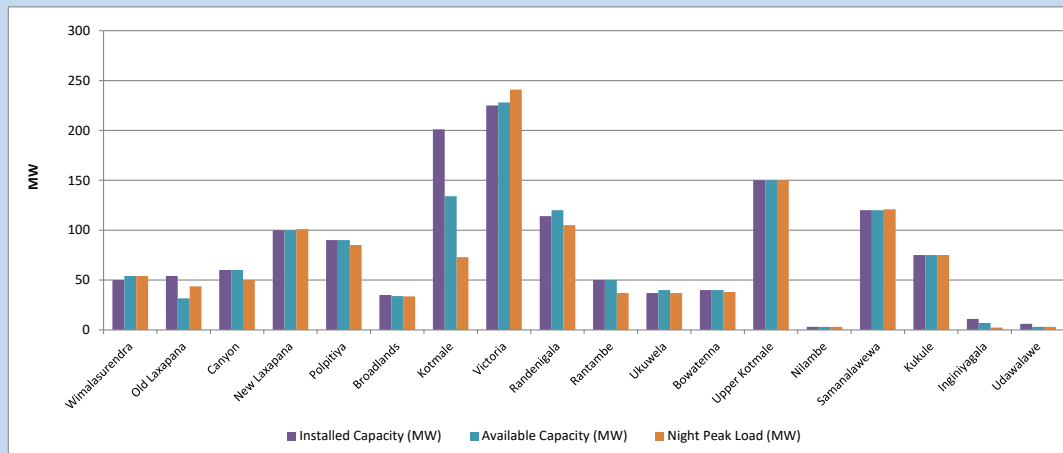


Available Generation is estimated based on plant availability at 6.00am on  
Broadlands power plant is operating in the Commissioning Stage

December 26, 2023

## 8. Major Hydro Plant Loading at Night Peak

December 25, 2023



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

December 26, 2023

## 9. Summary of Major Plant performance

Table 05

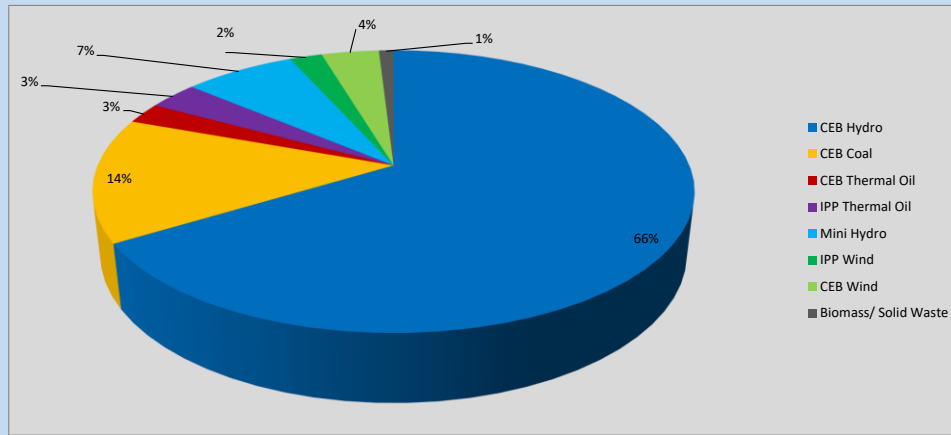
Plant	Installed Capacity (MW)	Plant Availability (MW)	Night peak Load (MW)	Plant Dispatch (MWh)
Wimalasurendra	50	54	54	311
Old Laxapana	54	32	44	848
Canyon	60	60	50	330
New Laxapana	100	100	101	1,291
Polpitiya	90	90	85	1,130
Broadlands	35	34	34	273
Kotmale	201	134	73	1,380
Victoria	225	228	241	3,653
Randenigala	114	120	105	2,642
Rantambe	50	50	37	1,269
Ukuwela	37	40	37	867
Bowatenna	40	40	38	829
Upper Kotmale	150	150	150	1,902
Nilambe	3	3	3	75
Samanalawewa	120	120	121	2,839
Kukule	75	75	75	920
Inginiyagala	11	7	2	36
Udawalawe	6	3	3	78
Puttalam Coal I	270	0	0	0
Puttalam Coal II	270	270	272	3,358
Puttalam Coal III	270	0	0	1,738
KPS Small GTs	64	16	0	0
KPS GT 7	115	115	0	0
KCCP	161	0	0	0
Sapugaskanda A	70	49	0	0
Sapugaskanda B	70	54	0	0
Uthura Janani	26	16	16	38
Barge CEB	60	60	30	81
CEB-Hambantota	30	17	0	0
CEB-Mathugama	20	10	0	0
ACE Matara	24	24	24	42
Asia Power	50	0	0	0
KCCPS -2	163	155	0	0
West Coast	270	270	0	0
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	37	45
Total	3,483	2,489	1,897	31,915

Plant availability is the availability recorded at 6 am on

December 26, 2023

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

December 25, 2023



**Table 06**

CEB Hydro	1269	MW
CEB Coal	272	MW
CEB Thermal Oil	46	MW
IPP Thermal Oil	61	MW
Mini Hydro (Telemetered)	137	MW
IPP Wind	39.8	MW
CEB Wind	70.6	MW
Biomass/ Solid Waste	18	MW

#### Recorded Peak Demand Data

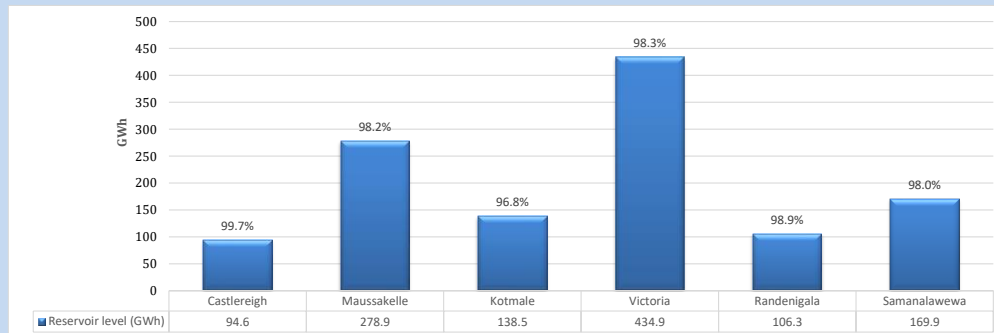
**Table 07**

Night Peak*	1,913	MW
Day Peak Maximum Demand	1,446	MW
Day Peak Minimum Demand	1,069	MW
Off Peak Minimum Demand	1,123	MW

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

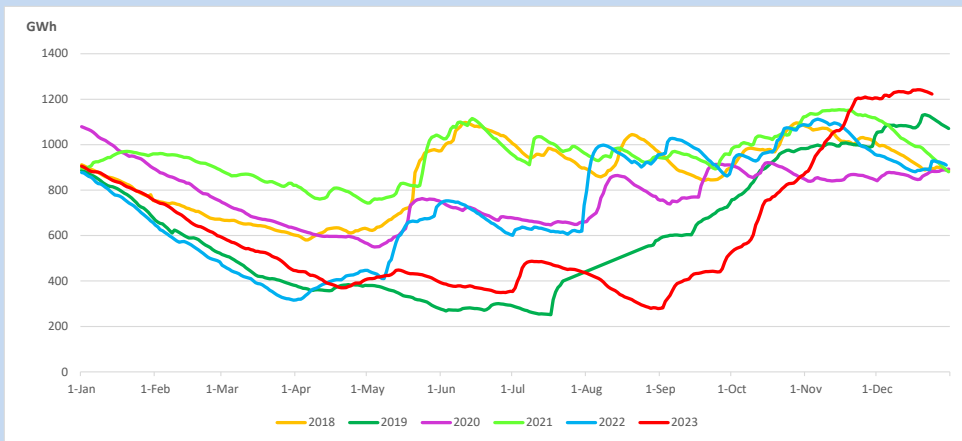
#### Reservoir Levels -

as at 06.00 Hr on December 26, 2023

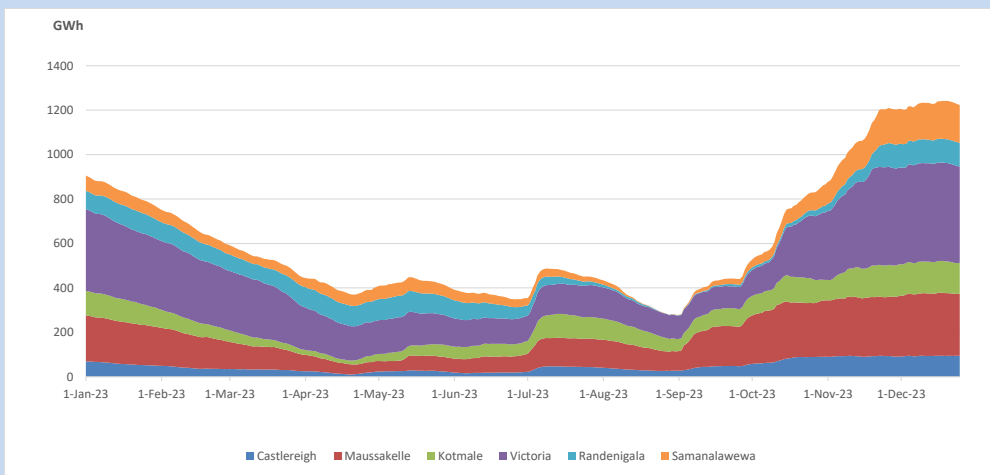


Total Reservoir Level 1223.1 GWh  
% of Total capacity 98.2%

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

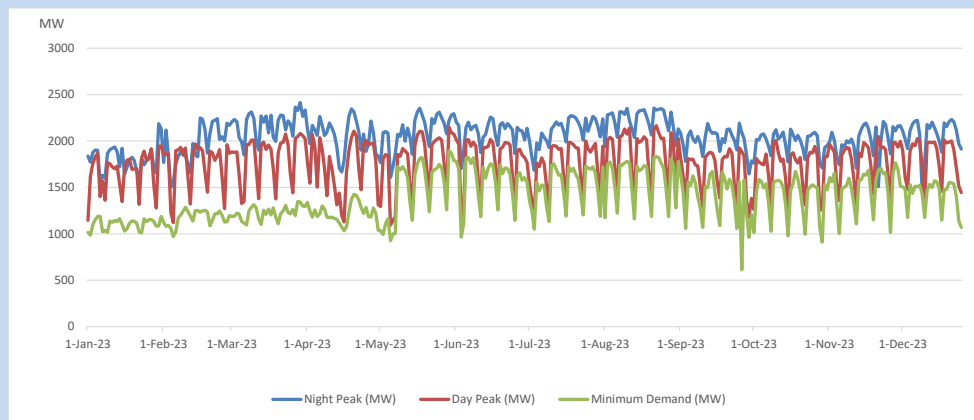


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





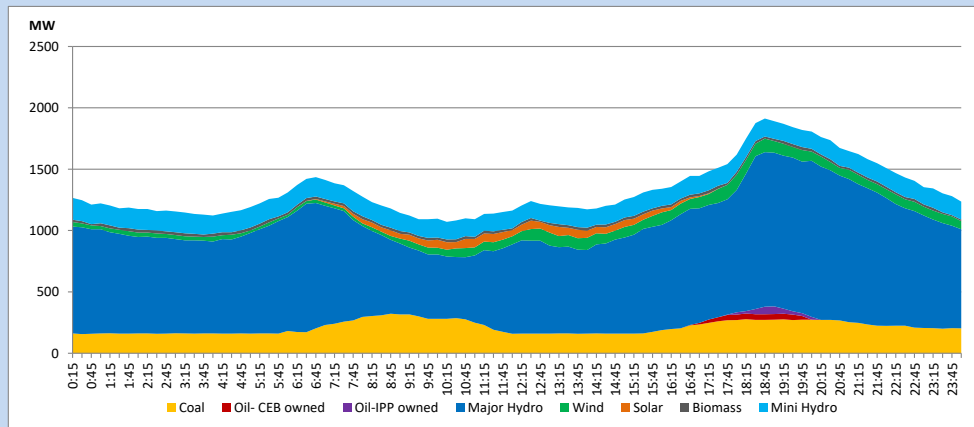
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

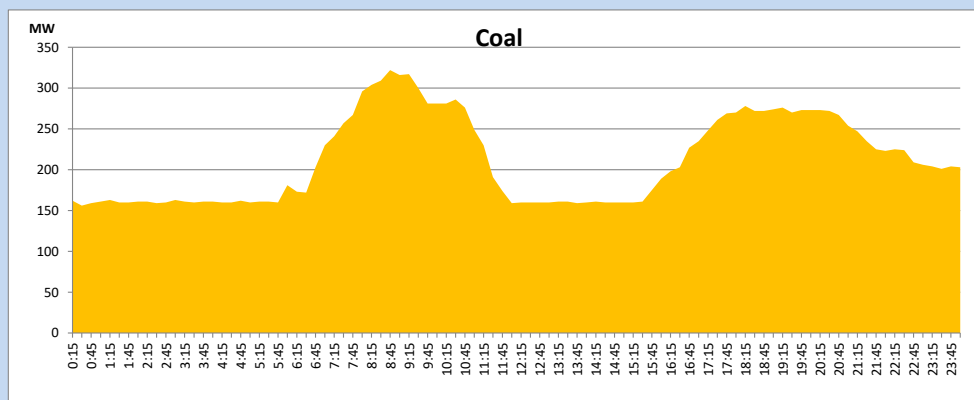
December 25, 2023



Solar and wind data is based on Telemetered Power Stations only

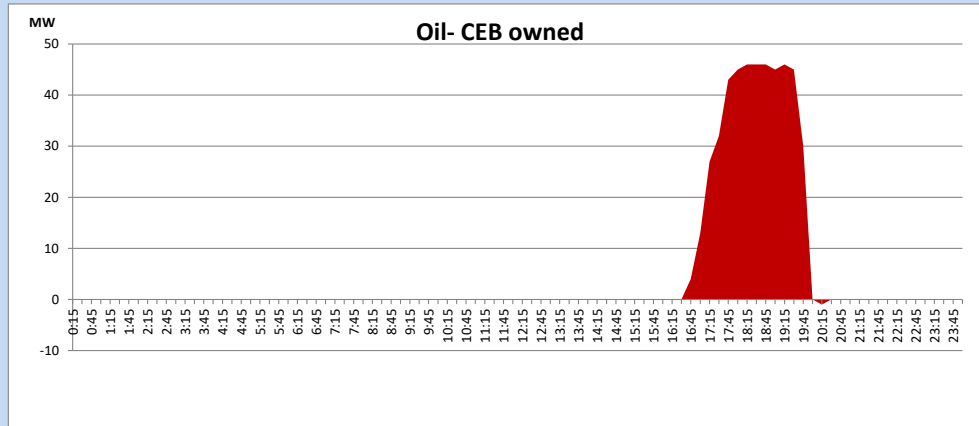
### Coal Generation during

December 25, 2023



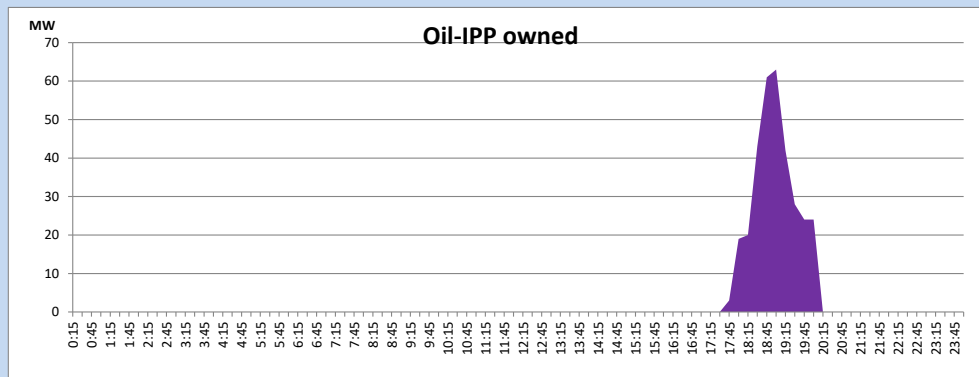
CEB Oil Plant Generation during

December 25, 2023



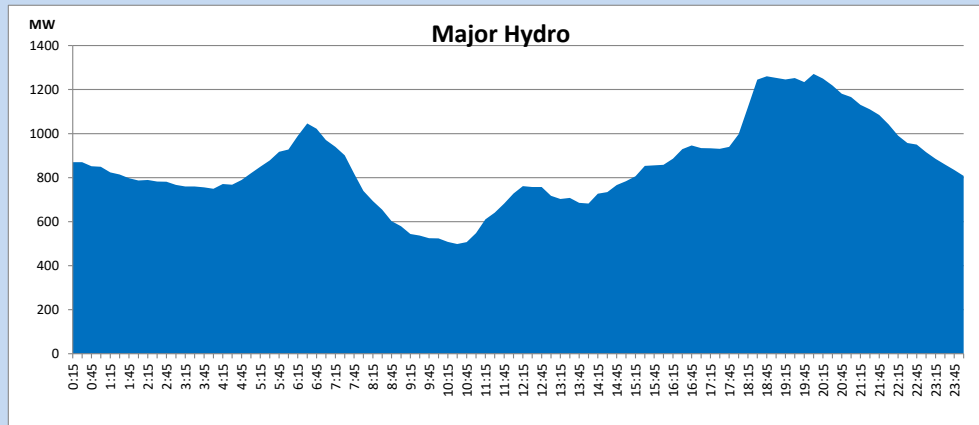
IPP Oil Plant Generation during

December 25, 2023



Major Hydro Generation during

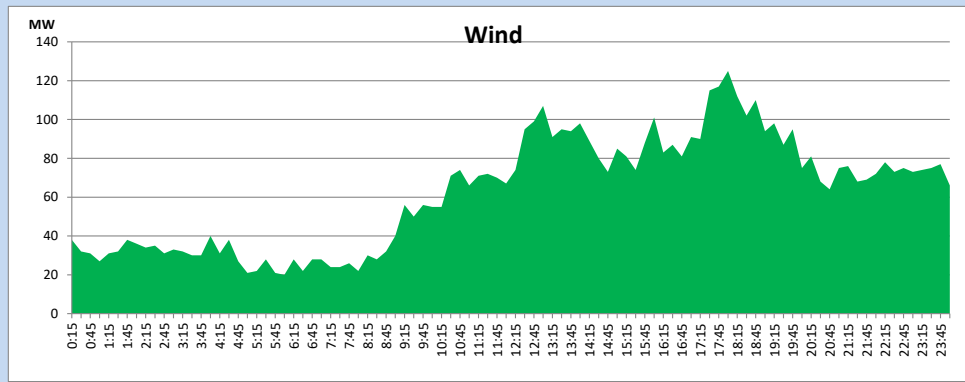
December 25, 2023



## Wind Generation during

December 25, 2023

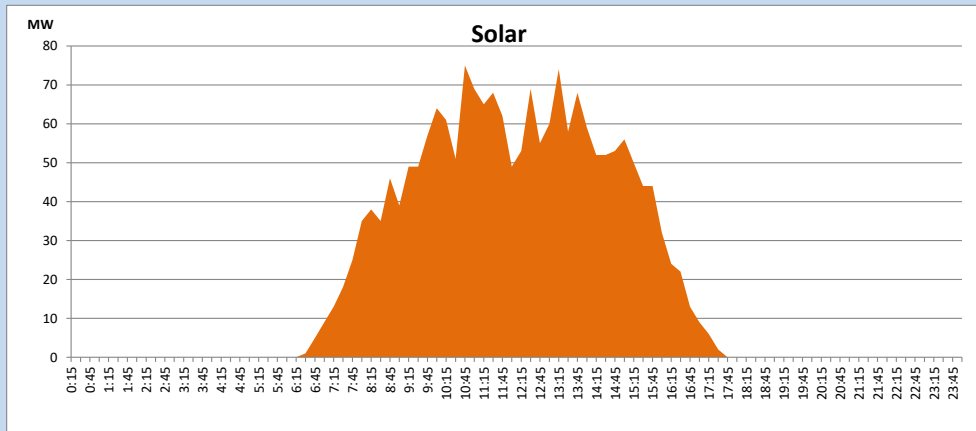
Based on Telemetered Power Stations only



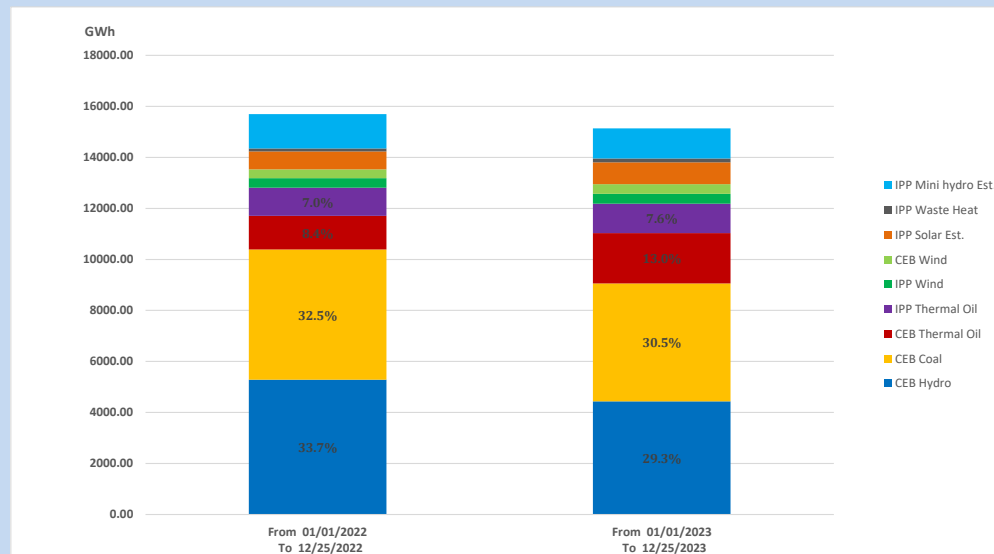
## Solar Generation during

December 25, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch  
From 01/01/2022 To 12/25/2022  
From 01/01/2023 To 12/25/2023

15693 GWh  
15140 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 25, 2023

- 1) Lakvijaya PS unit 3 made a forced shutdown and desynchronized from the system at 11:59hrs due to a soot blower repair. Lakvijaya unit 03 is yet to resume generation.
- 2) New Anuradhapura -Trinco 132kV cct manually switched off at 17:41hrs to remove a kite entangled in trinco GSS. New anuradhapura - Trinco 132kV cct restored at 19:14hrs.
- 3) Lakvijaya PS unit minimum load has restricted to 250MW(gross), due to a failure of HP heater No. 03.