

# Generation and Reservoirs Statistics

December 20, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

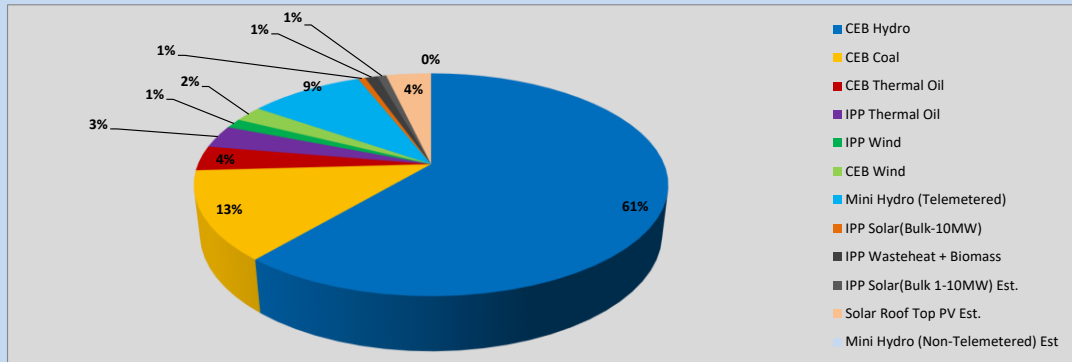


Table 01

	Generation (MWh)
CEB Hydro	25,739
CEB Coal	5,425
CEB Thermal Oil	1,509
IPP Thermal Oil	1,380
IPP Wind	585
CEB Wind	966
Mini Hydro (Telemetered)	3,927
IPP Solar (Bulk)	250
IPP Waste heat + Biomass	427
<b>Total Generation (Excluding estimated figures)</b>	<b>40,208</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>42,052</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	499	63.58%
CEB Coal	98	12.51%
CEB Thermal Oil	17	2.19%
IPP Thermal	19	2.36%
SPP Wind	12	1.49%
CEB Wind	17	2.15%
Mini Hydro *	75	9.54%
IPP Solar *	41	5.21%
IPP Waste heat + BMP	8	0.97%
<b>Total</b>	<b>785</b>	

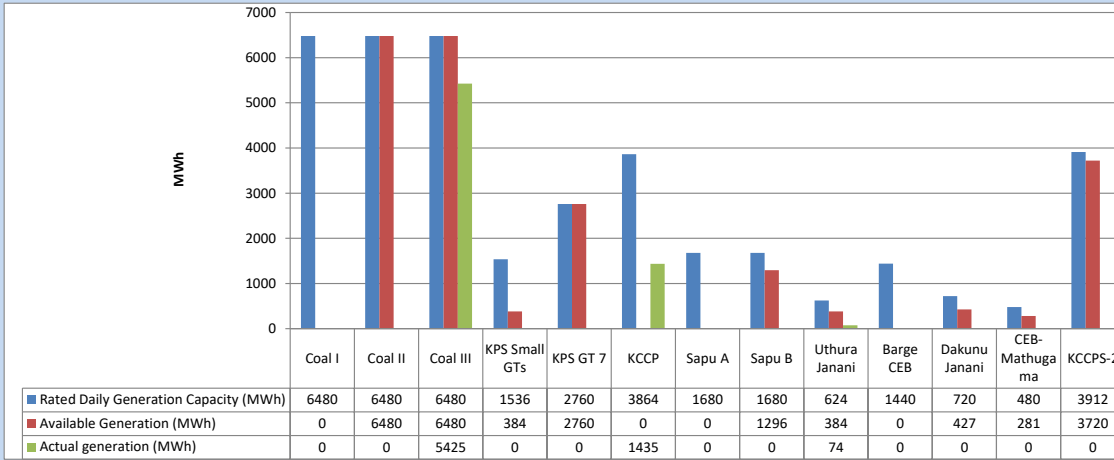
Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	4,321	28.91%
CEB Coal	4,594	30.73%
CEB Thermal Oil	1,972	13.19%
IPP Thermal	1,145	7.66%
SPP Wind	380	2.54%
CEB Wind	379	2.53%
Mini Hydro *	1,164	7.79%
IPP Solar *	843	5.64%
IPP Waste heat	151	1.01%
<b>Total</b>	<b>14,949</b>	

\*Including estimated contribution from non telemetered plants

### 3. CEB owned Thermal Plant Dispatch

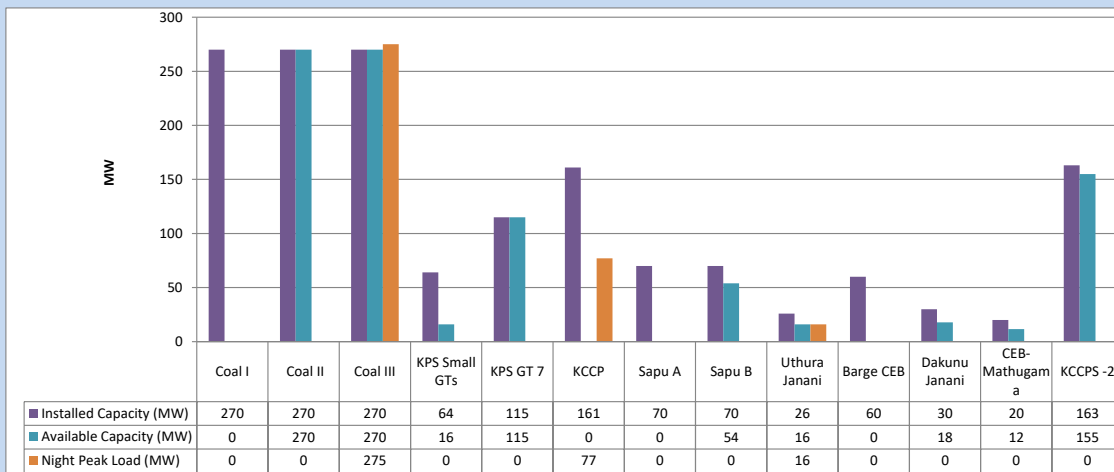
December 20, 2023



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

December 21, 2023

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

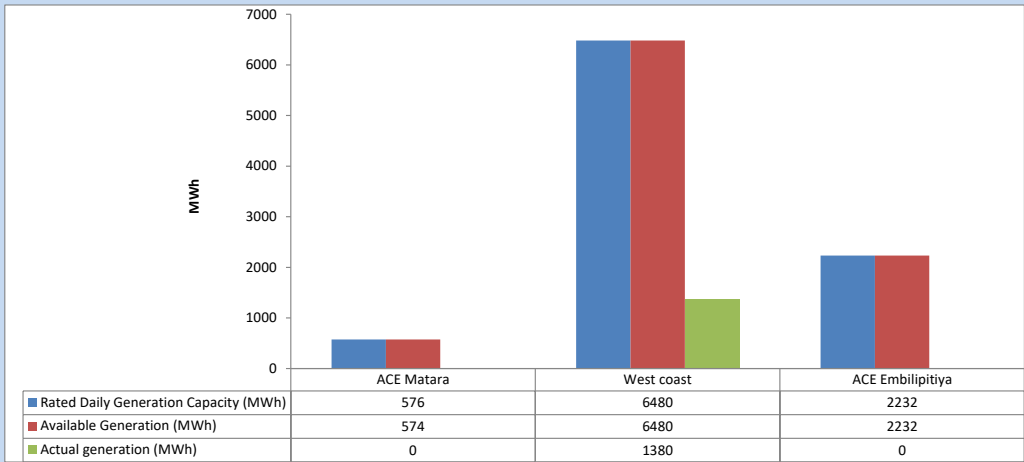


Plant availability is recorded at 6.00 am on

December 21, 2023

5. IPP owned Thermal Plant Dispatch

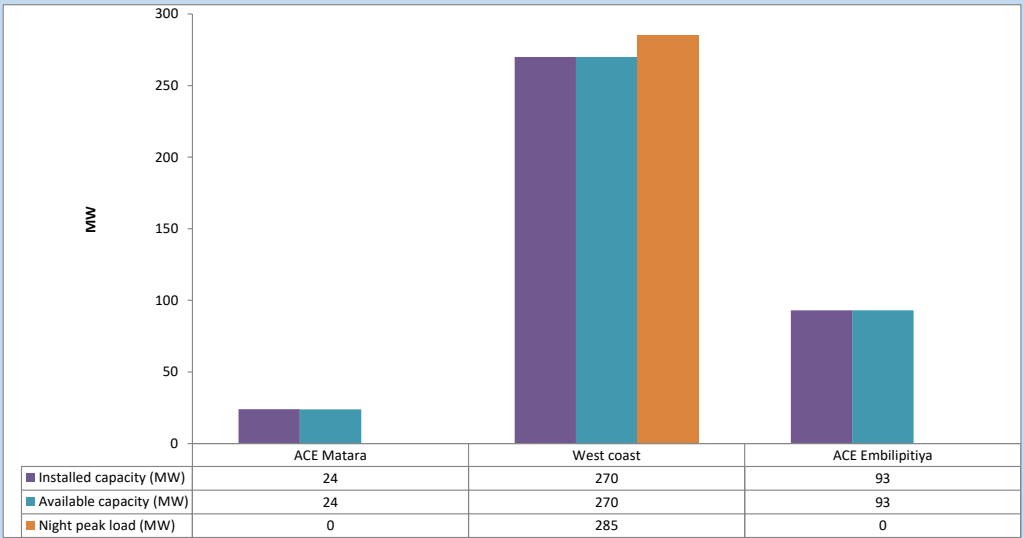
December 20, 2023



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

December 21, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

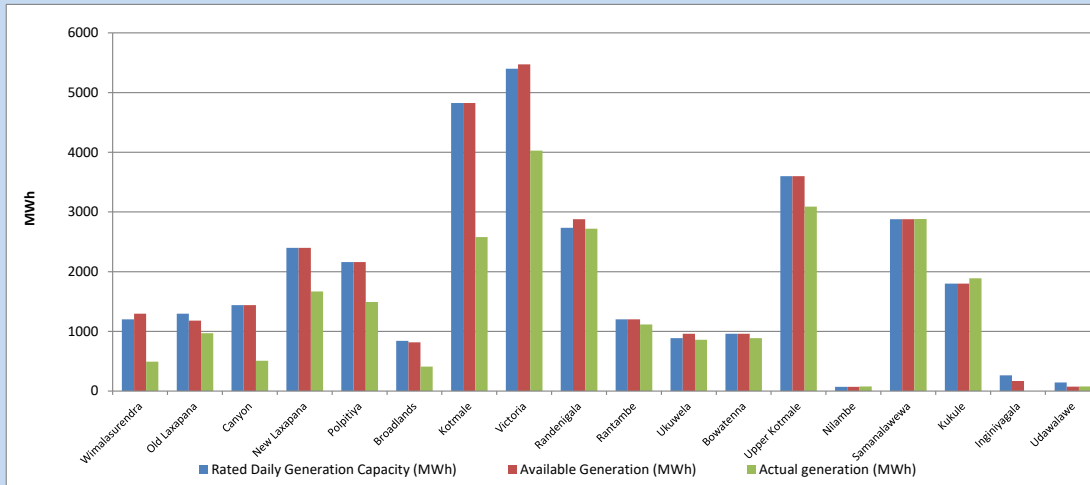


Plant availability is recorded at 6.00 am on

December 21, 2023

### 7. Major Hydro Plant Dispatch

December 20, 2023

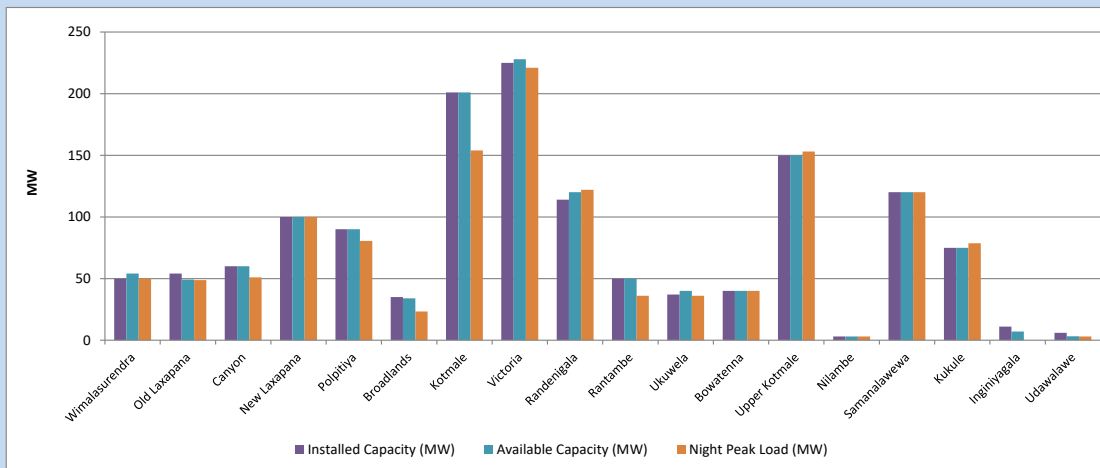


Available Generation is estimated based on plant availability at 6.00am on December 21, 2023  
Broadlands power plant is operating in the Commissioning Stage

December 21, 2023

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

December 20, 2023



Plant availability is recorded at 6.00 am on December 21, 2023  
Broadlands power plant is operating in the Commissioning Stage

December 21, 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	50	492
Old Laxapana	54	49	49	968
Canyon	60	60	51	508
New Laxapana	100	100	100	1,669
Polpitiya	90	90	81	1,490
Broadlands	35	34	23	410
Kotmale	201	201	154	2,580
Victoria	225	228	221	4,026
Randenigala	114	120	122	2,721
Rantambe	50	50	36	1,116
Ukuwela	37	40	36	858
Bowatenna	40	40	40	888
Upper Kotmale	150	150	153	3,088
Nilambe	3	3	3	77
Samanalawewa	120	120	120	2,882
Kukule	75	75	79	1,888
Inginiyagala	11	7	0	0
Udawalawe	6	3	3	78
Puttalam Coal I	270	0	0	0
Puttalam Coal II	270	270	0	0
Puttalam Coal III	270	270	275	5,425
KPS Small GTs	64	16	0	0
KPS GT 7	115	115	0	0
KCCP	161	0	77	1,435
Sapugaskanda A	70	0	0	0
Sapugaskanda B	70	54	0	0
Uthura Janani	26	16	16	74
Barge CEB	60	0	0	0
CEB-Hambantota	30	18	0	0
CEB-Mathugama	20	12	0	0
ACE Matara	24	24	0	0
Asia Power	50	0	0	0
KCCPS -2	163	155	0	0
West Coast	270	270	285	1,380
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	0	0
Total	3,483	2,737	2,192	40,208

Plant availability is the availability recorded at 6 am on

December 21, 2023

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

December 20, 2023

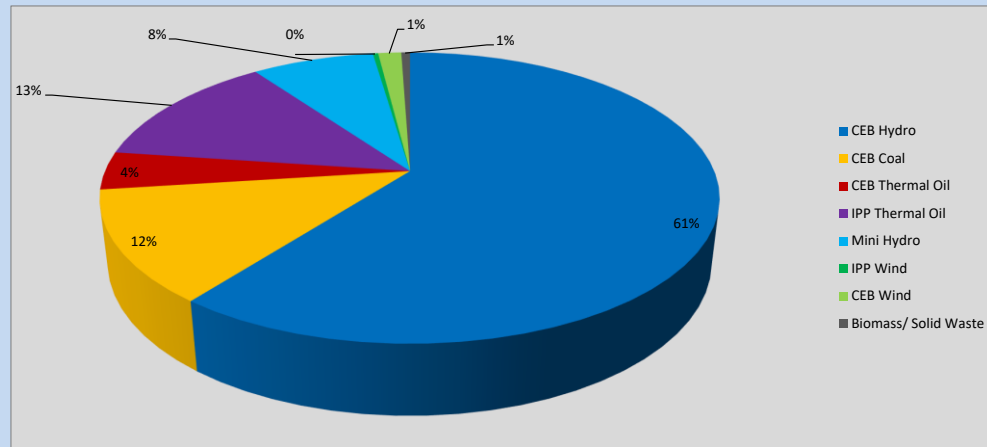


Table 06

CEB Hydro	1337	MW
CEB Coal	275	MW
CEB Thermal Oil	93	MW
IPP Thermal Oil	285	MW
Mini Hydro (Telemetered)	168	MW
IPP Wind	7.3	MW
CEB Wind	31.8	MW
Biomass/ Solid Waste	12	MW

#### Recorded Peak Demand Data

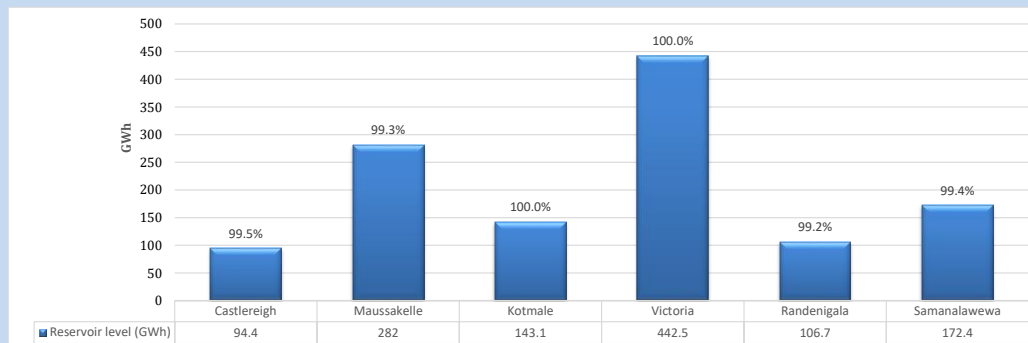
Table 07

Night Peak*	2,209	MW
Day Peak Maximum Demand	1,989	MW
Day Peak Minimum Demand	1,553	MW
Off Peak Minimum Demand	1,135	MW

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

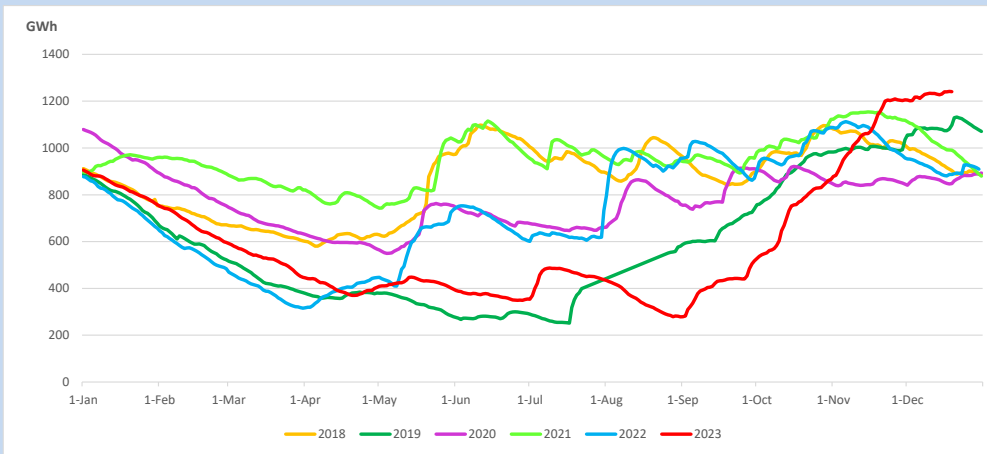
#### Reservoir Levels -

as at 06.00 Hr on December 21, 2023

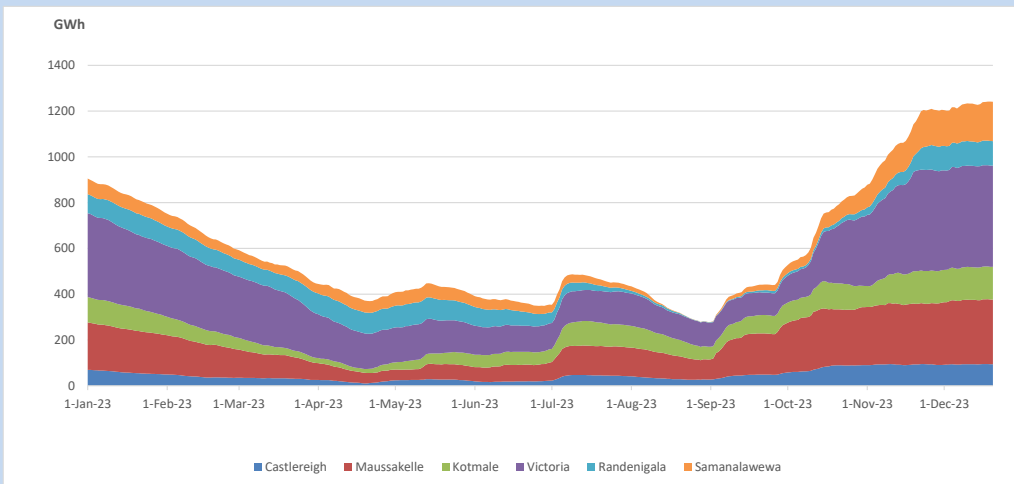


Total Reservoir Level 1241.1 GWh  
 % of Total capacity 99.6%

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

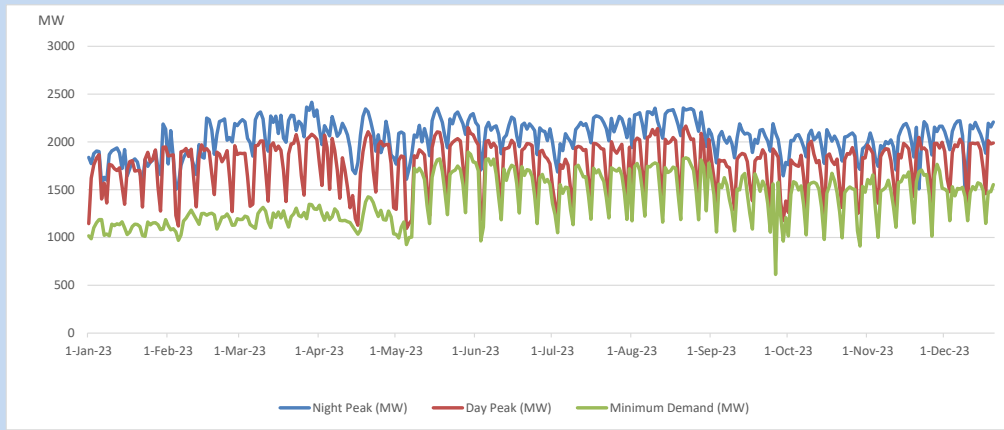


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





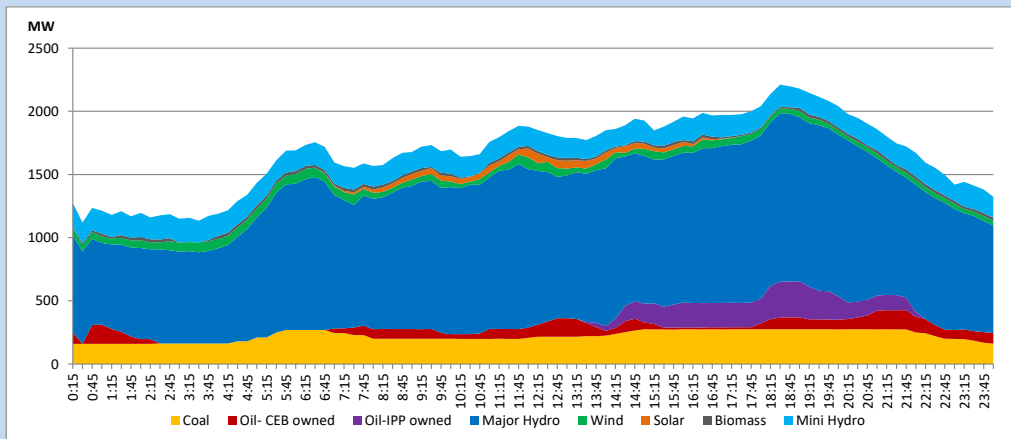
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

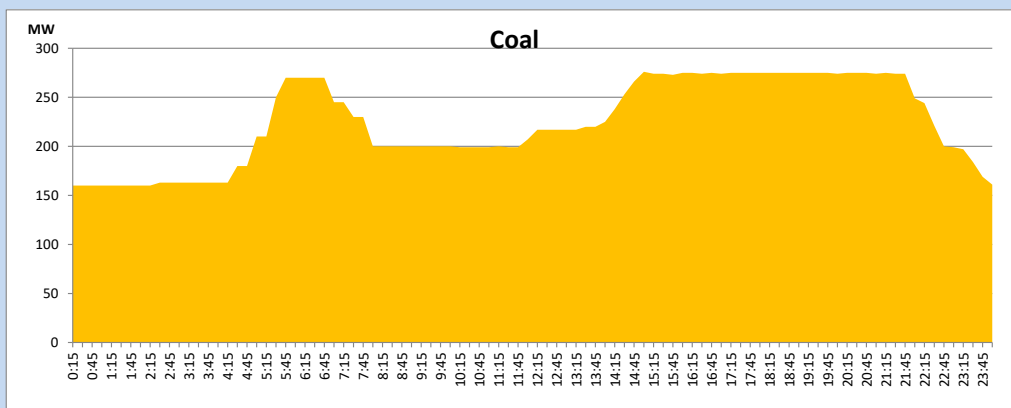
December 20, 2023



Solar and wind data is based on Telemetered Power Stations only

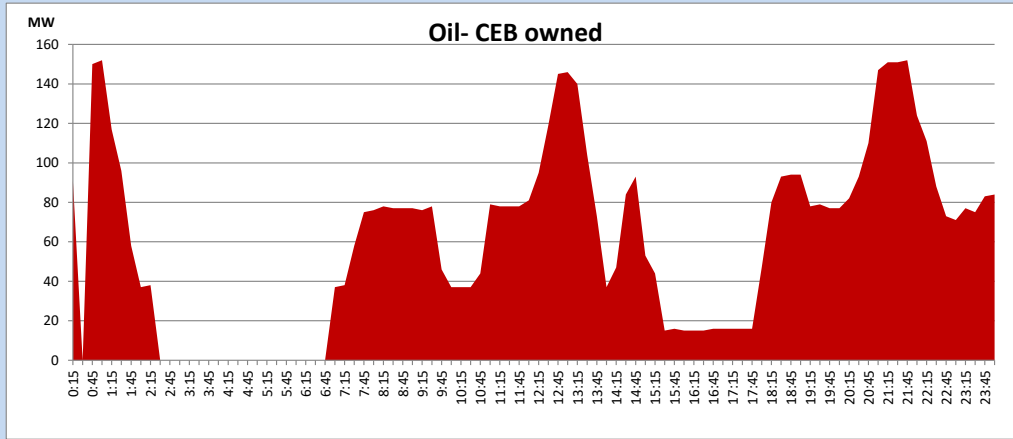
### Coal Generation during

December 20, 2023



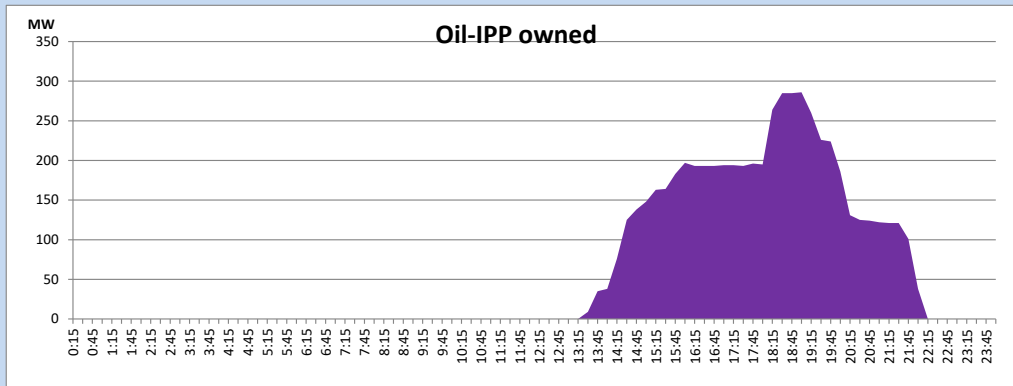
CEB Oil Plant Generation during

December 20, 2023



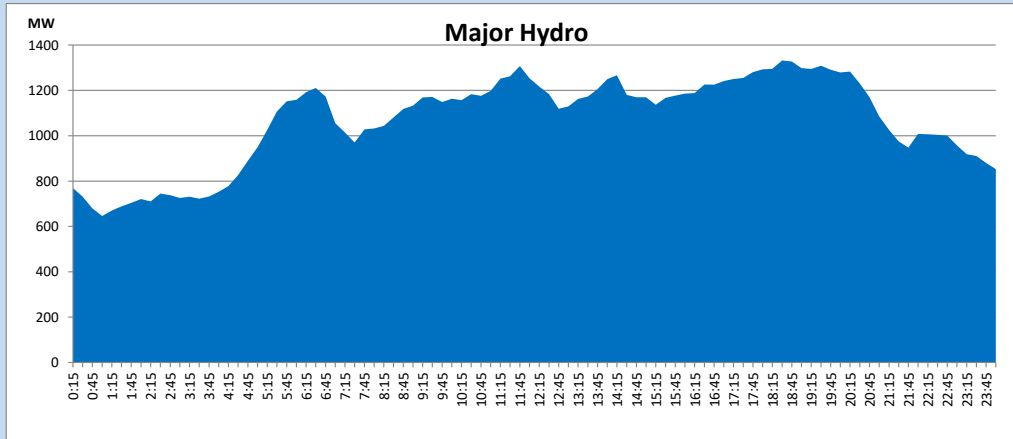
IPP Oil Plant Generation during

December 20, 2023



Major Hydro Generation during

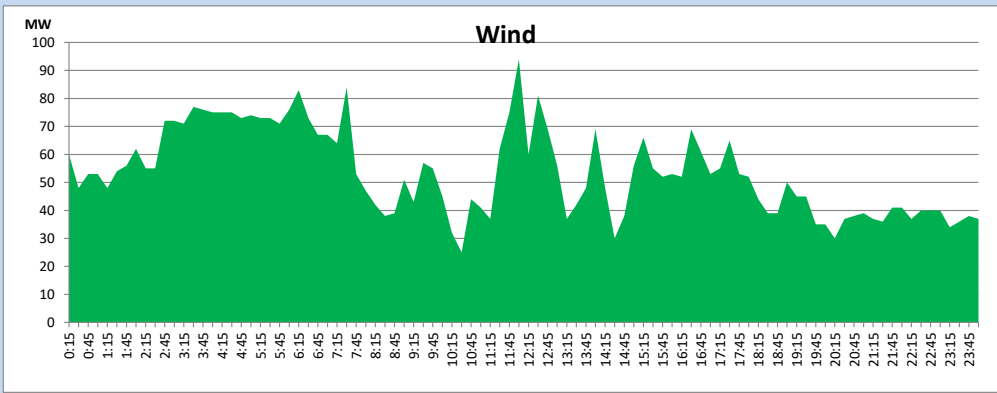
December 20, 2023



## Wind Generation during

December 20, 2023

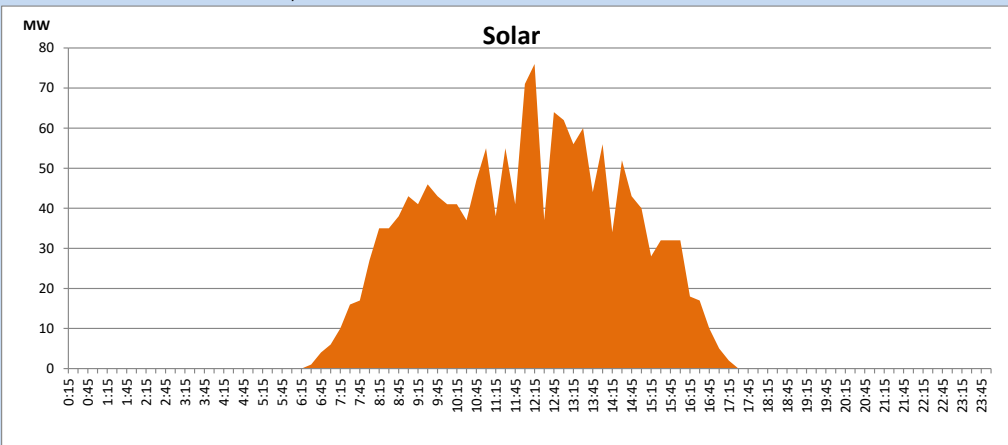
Based on Telemetered Power Stations only



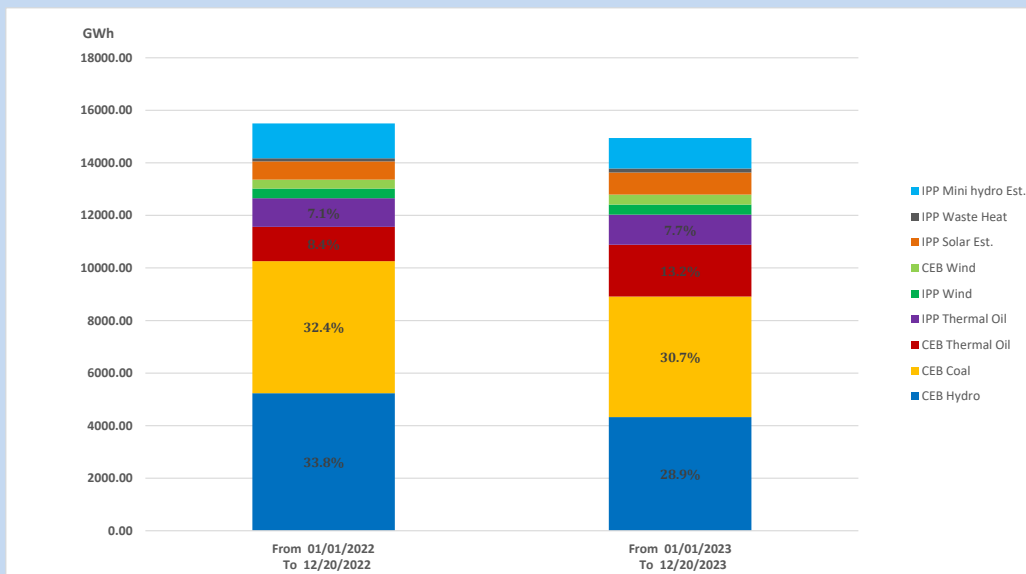
## Solar Generation during

December 20, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 12/20/2022

15500 GWh

From 01/01/2023 To 12/20/2023

14949 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 20, 2023

- 1) Bowathenna reservoir spilling started at 6:00hrs and spilling stopped at 13:00hrs.
- 2) Upper Kothmale and Kukule ponds, spilling stopped at 15:02hrs and 16:30hrs respectively.
- 3) Mannar GSS 220/33kV T/F 01 tripped from both ends due to the operation of differential protection at 17:38hrs causing Mannar GSS to be dead. The T/F was normalized at 20:52hrs and all affected 33kV feeders were normalized by 21:40hrs.
- 4) Randenigala reservoir spilled intermittently and spilling stopped at 23:02hrs.
- 5) Victoria reservoir spilled intermittently and spilling stopped at 05:28hrs (21.12.2023).