

# Generation and Reservoirs Statistics

September 15, 2023



**PUBLIC UTILITIES COMMISSION OF SRI LANKA**

## 1. Daily Generation Mix in MWh

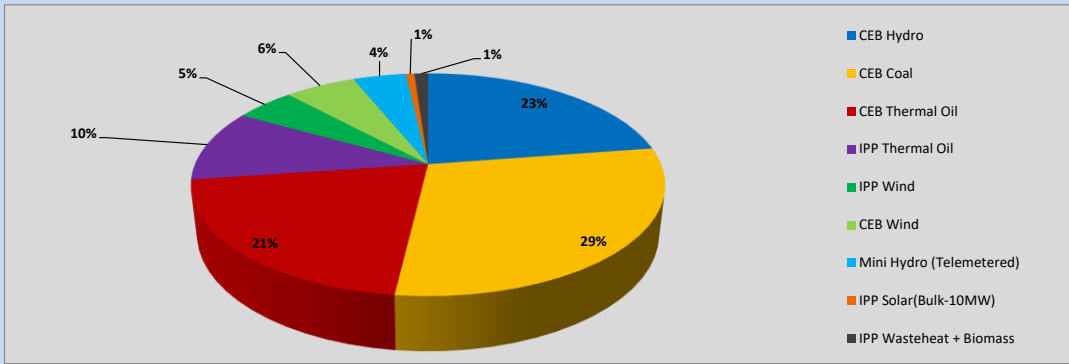


Table 01

	Generation (MWh)
CEB Hydro	8,641
CEB Coal	11,197
CEB Thermal Oil	7,997
IPP Thermal Oil	3,988
IPP Wind	1,861
CEB Wind	2,213
Mini Hydro (Telemetered)	1,651
IPP Solar (Bulk)	270
IPP Waste heat + Biomass	427
<b>Total Generation (Excluding estimated figures)</b>	<b>38,245</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	1989
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	1660
<b>Total Generation (Including estimated figures)</b>	<b>42,198</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	416
IPP Waste heat + Biomass	50
IPP Solar	130
Rooftop Solar* (Ordinary)	267
Rooftop Solar* (LT Bulk)	256
Rooftop Solar* (HT Bulk)	61

Data Source - Monthly Review Report [May-2023]

## 2. Cumulative Dispatch

Following data excludes the contribution from roof top solar, non telemetered solar and mini hydro plants

Table 03 - Current Month

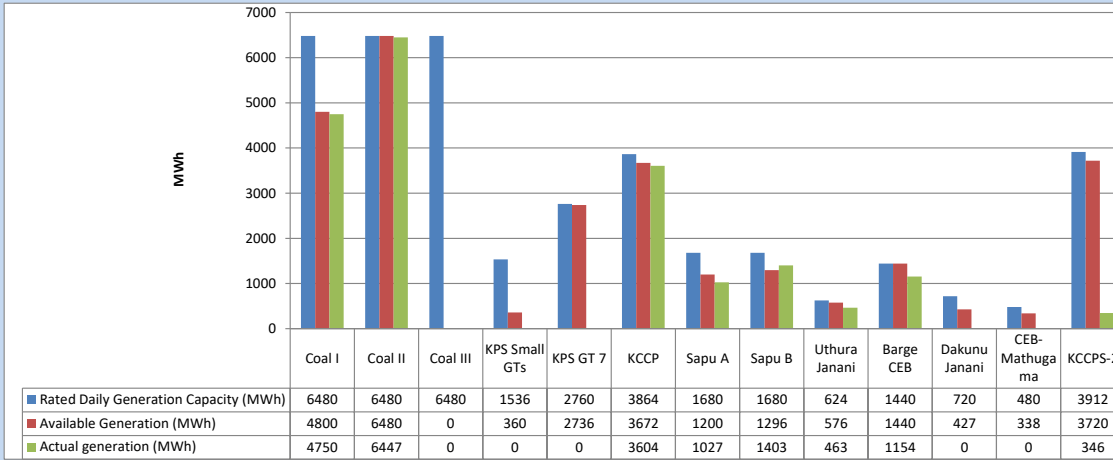
Category	Dispatch (GWh)	
CEB Hydro	123	22.05%
CEB Coal	177	31.59%
CEB Thermal Oil	105	18.78%
IPP Thermal	54	9.74%
SPP Wind	35	6.34%
CEB Wind	33	5.84%
Mini Hydro (Telemetered)	22	4.00%
IPP Solar(Bulk-10MW)	4	0.69%
IPP Waste heat + BMP	5	0.98%
<b>Total</b>	<b>559</b>	

Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,422	24.18%
CEB Coal	3,761	37.54%
CEB Thermal Oil	1,790	17.87%
IPP Thermal	1,045	10.43%
SPP Wind	296	2.95%
CEB Wind	302	3.01%
Mini Hydro (Telemetered)	233	2.32%
IPP Solar(Bulk-10MW)	78	0.78%
IPP Waste heat	93	0.93%
<b>Total</b>	<b>10,019</b>	

### 3. CEB owned Thermal Plant Dispatch

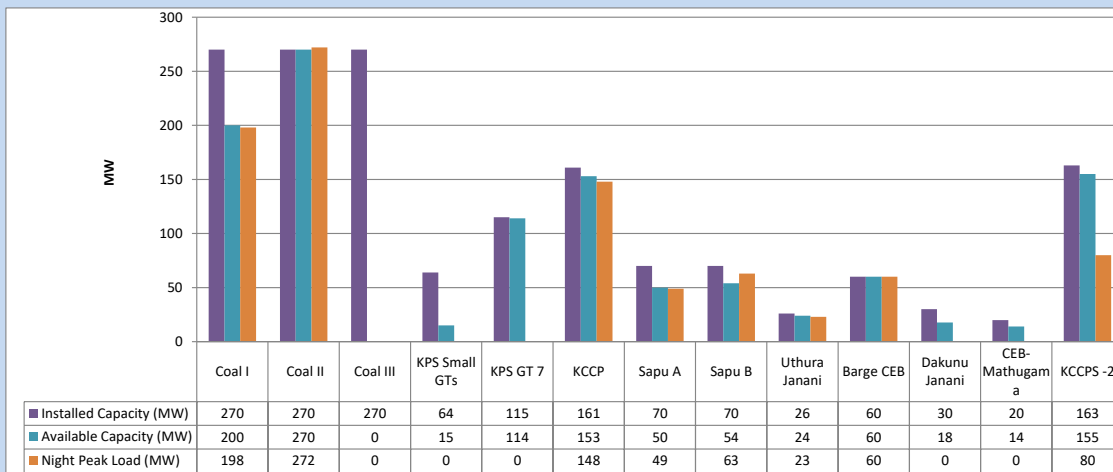
September 15, 2023



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

September 16, 2023

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

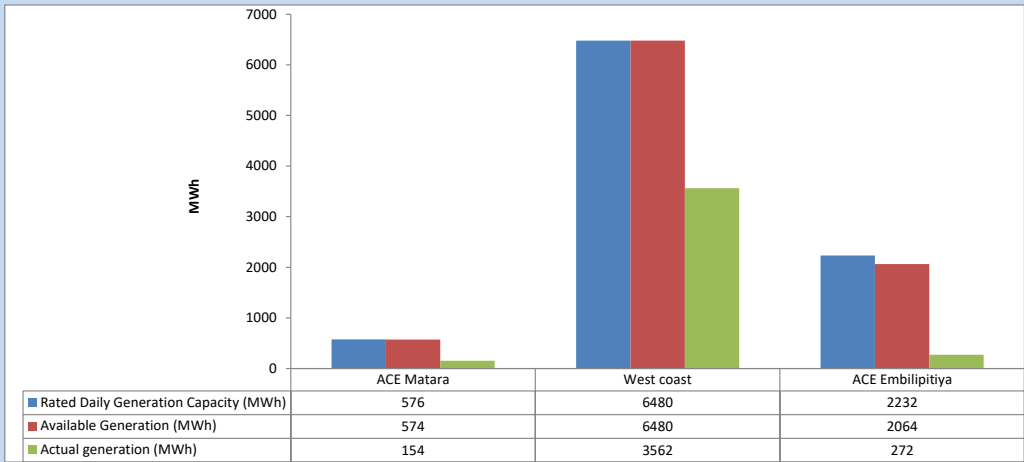


Plant availability is recorded at 6.00 am on

September 16, 2023

5. IPP owned Thermal Plant Dispatch

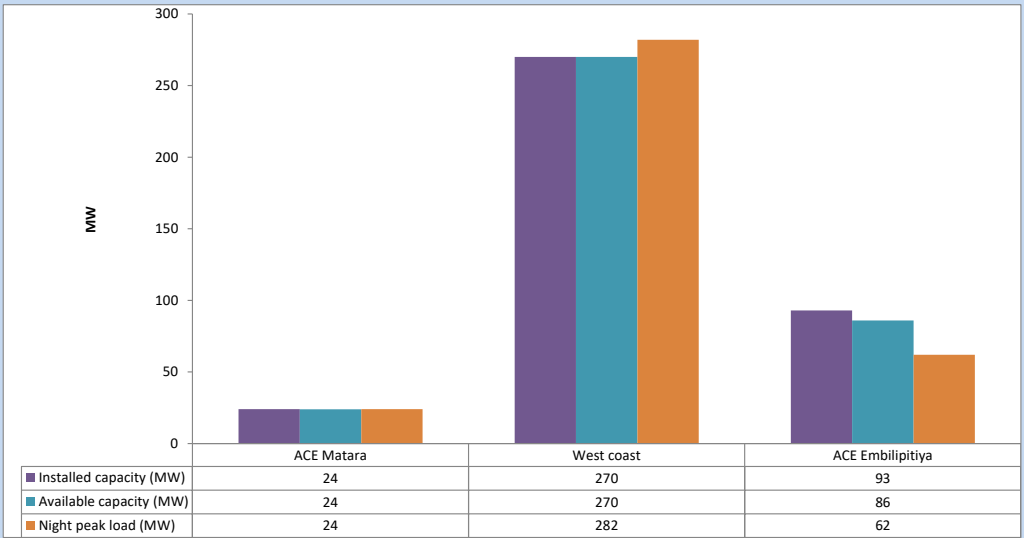
September 15, 2023



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

September 16, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

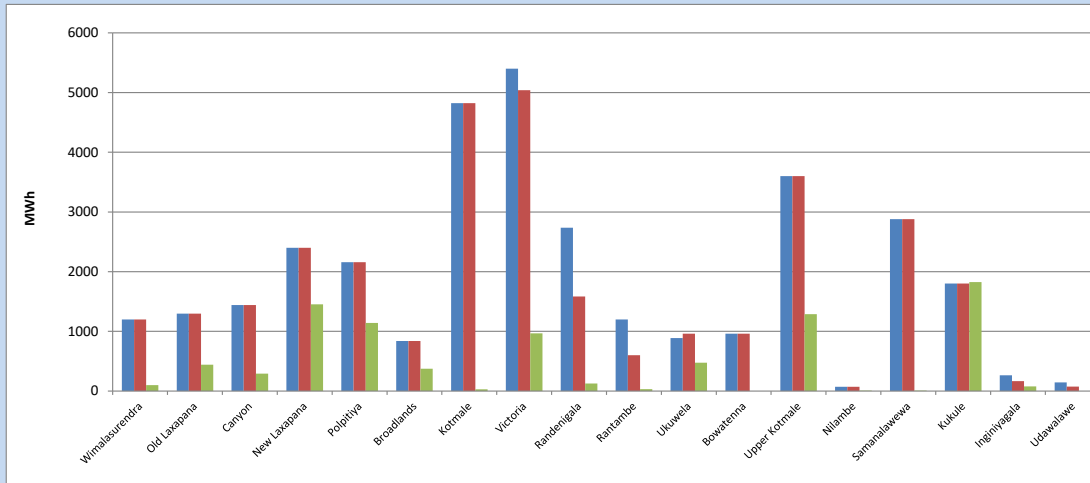


Plant availability is recorded at 6.00 am on

September 16, 2023

### 7. Major Hydro Plant Dispatch

September 15, 2023

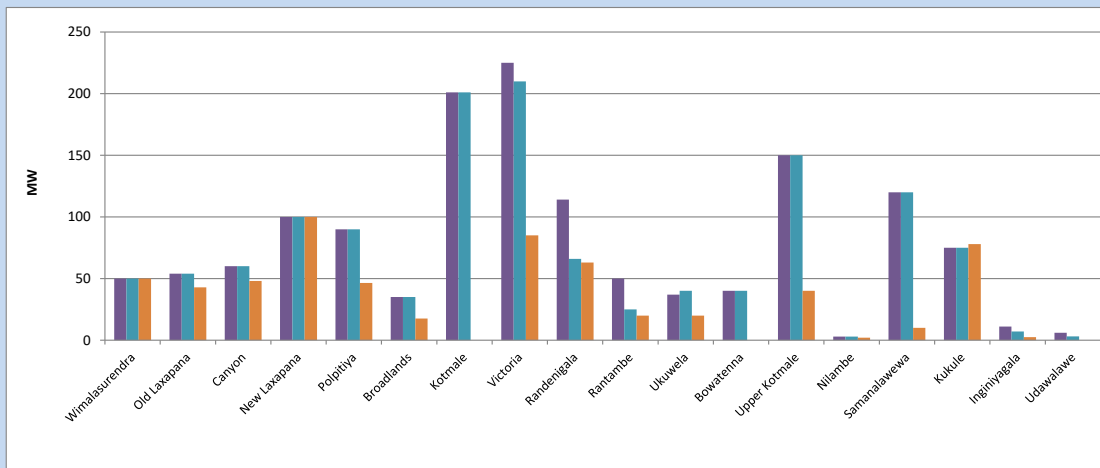


Available Generation is estimated based on plant availability at 6.00am on September 16, 2023  
Broadlands power plant is operating in the Commissioning Stage

September 16, 2023

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

September 15, 2023



Plant availability is recorded at 6.00 am on September 16, 2023  
Broadlands power plant is operating in the Commissioning Stage

September 16, 2023

## 9. Summary of Major Plant performance

Table 05

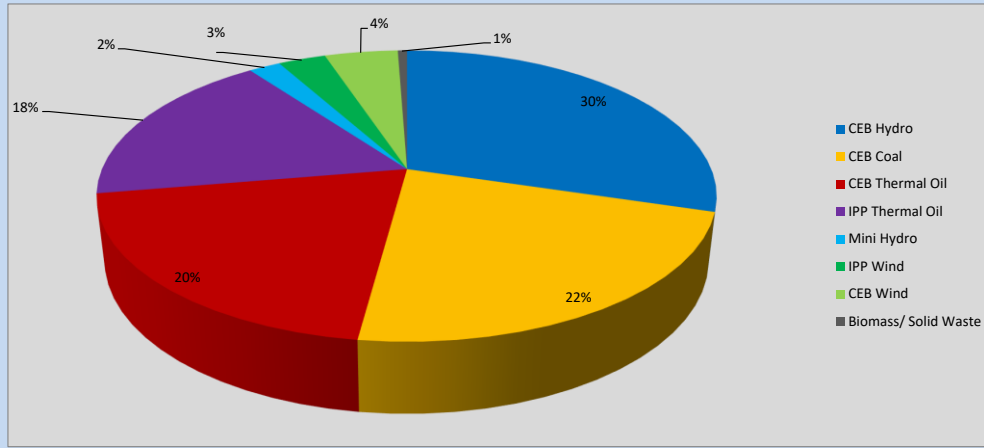
Plant	Installed Capacity	Plant Availability	Night peak Load	Plant Dispatch
	(MW)	(MW)	(MW)	(MWh)
Wimalasurendra	50	50	50	98
Old Laxapana	54	54	43	443
Canyon	60	60	48	292
New Laxapana	100	100	100	1,454
Polpitiya	90	90	47	1,140
Broadlands	35	35	18	373
Kotmale	201	201	0	30
Victoria	225	210	85	968
Randenigala	114	66	63	126
Rantambe	50	25	20	31
Ukuwela	37	40	20	475
Bowatenna	40	40	0	0
Upper Kotmale	150	150	40	1,289
Nilambe	3	3	2	9
Samanalawewa	120	120	10	8
Kukule	75	75	78	1,826
Inginiyagala	11	7	3	79
Udawalawe	6	3	0	0
Puttalam Coal I	270	200	198	4,750
Puttalam Coal II	270	270	272	6,447
Puttalam Coal III	270	0	0	0
KPS Small GTs	64	15	0	0
KPS GT 7	115	114	0	0
KCCP	161	153	148	3,604
Sapugaskanda A	70	50	49	1,027
Sapugaskanda B	70	54	63	1,403
Uthura Janani	26	24	23	463
Barge CEB	60	60	60	1,154
CEB-Hambantota	30	18	0	0
CEB-Mathugama	20	14	0	0
ACE Matara	24	24	24	154
Asia Power	50	0	0	0
KCCPS -2	163	155	80	346
West Coast	270	270	282	3,562
Nothern Power	36	0	0	0
ACE Embilipitiya	93	86	62	272
Total	3,483	2,836	2,097	38,245

Plant availability is the availability recorded at 6 am on

September 16, 2023

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

September 15, 2023



**Table 06**

CEB Hydro	620	MW
CEB Coal	470	MW
CEB Thermal Oil	423	MW
IPP Thermal Oil	368	MW
Mini Hydro (Telemetered)	41	MW
IPP Wind	62	MW
CEB Wind	95.5	MW
Biomass/ Solid Waste	12	MW

#### Recorded Peak Demand Data

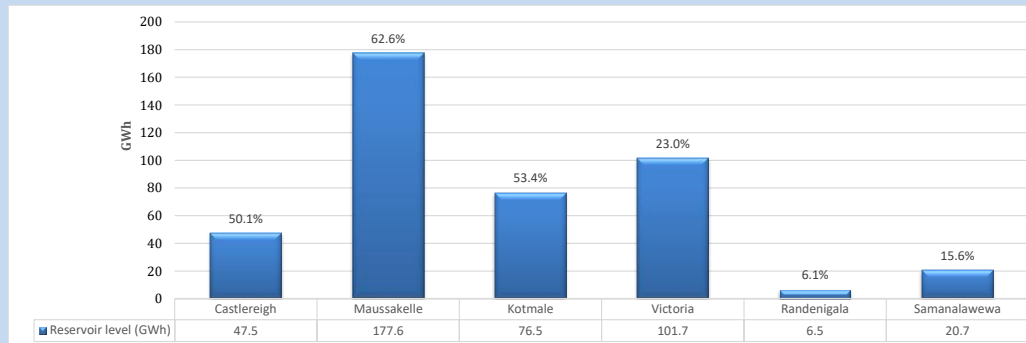
**Table 07**

Night Peak*	2,092	MW
Day Peak Maximum Demand	1,793	MW
Day Peak Minimum Demand	1,452	MW
Off Peak Minimum Demand	1,129	MW

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

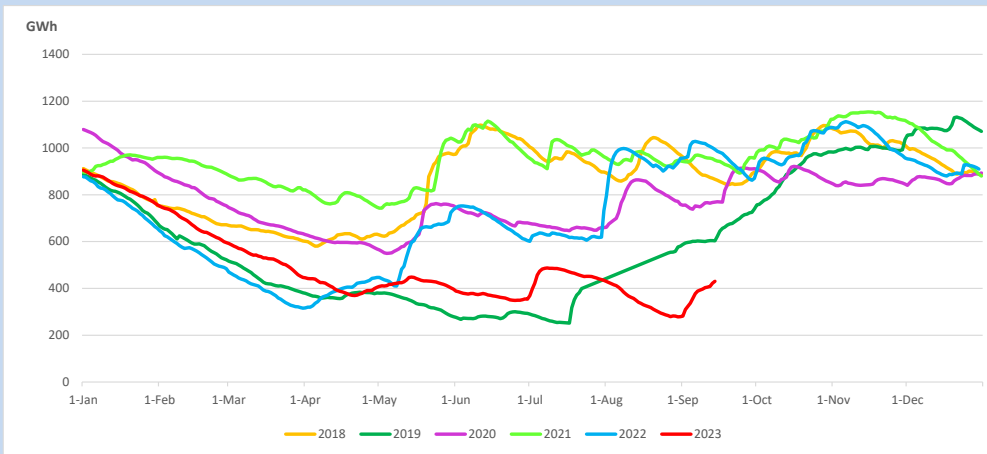
#### Reservoir Levels -

as at 06.00 Hr on September 16, 2023

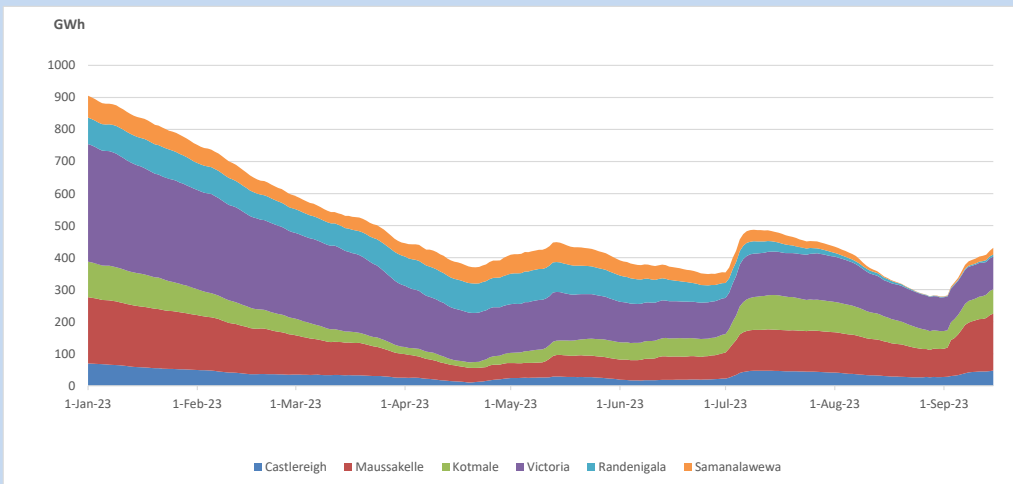


Total Reservoir Level 430.5 GWh  
 % of Total capacity 35.8%

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

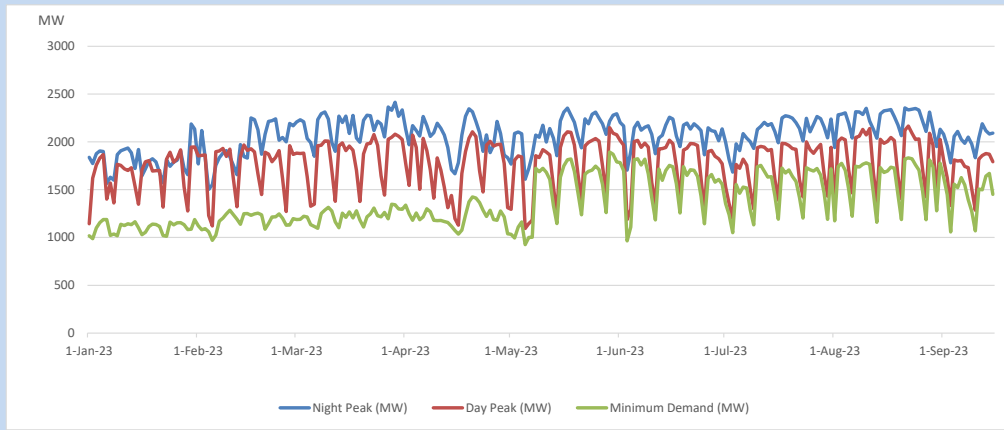


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





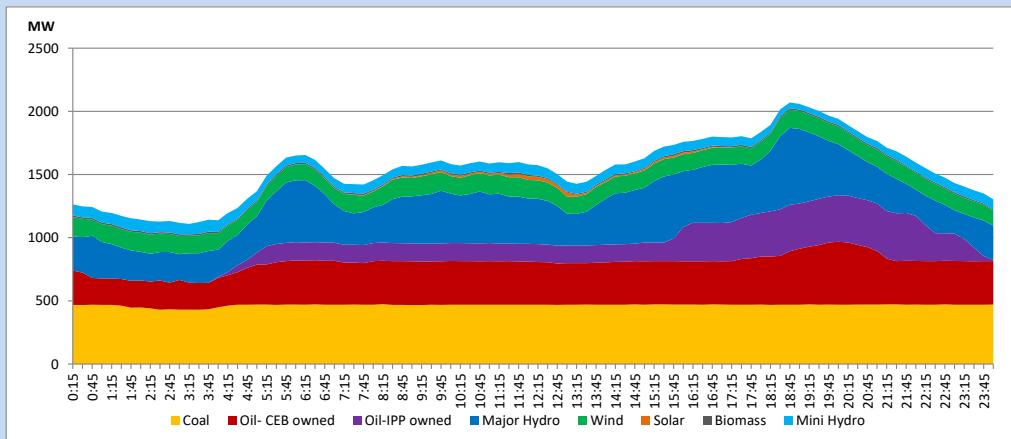
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

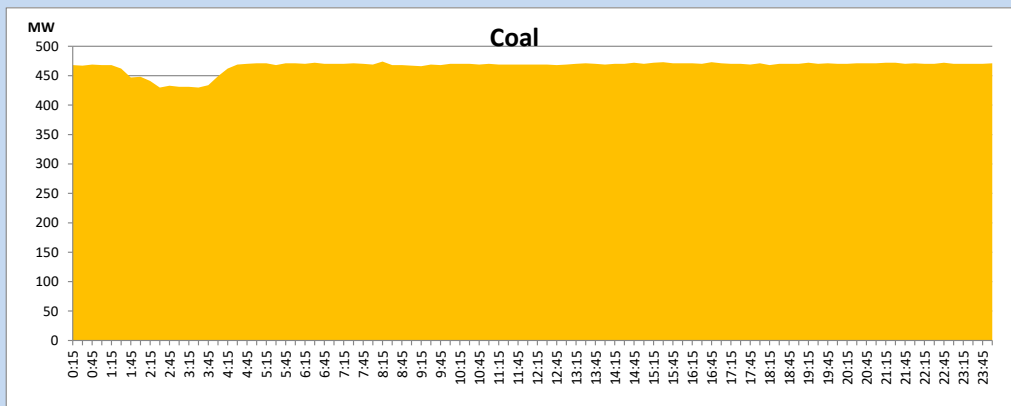
September 15, 2023



Solar and wind data is based on Telemetered Power Stations only

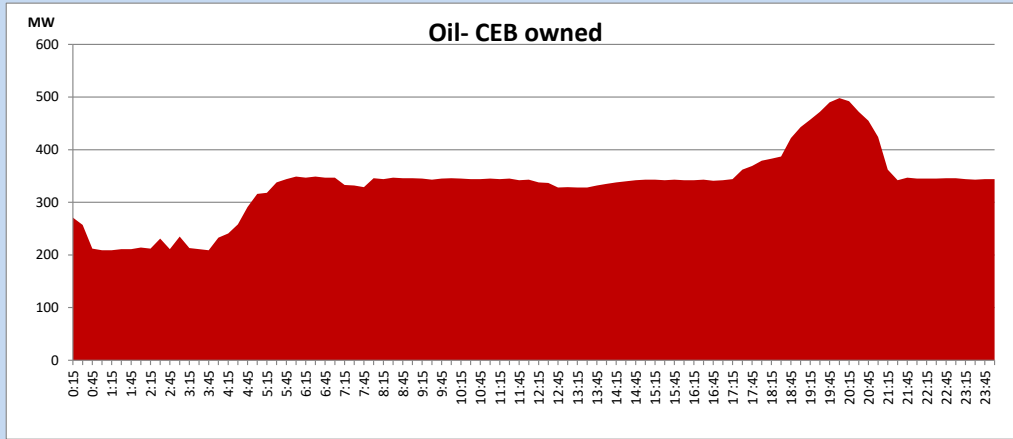
### Coal Generation during

September 15, 2023



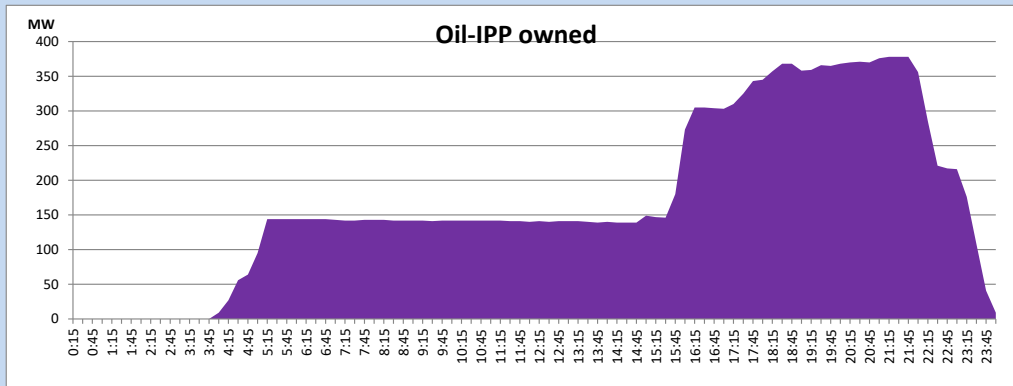
CEB Oil Plant Generation during

September 15, 2023



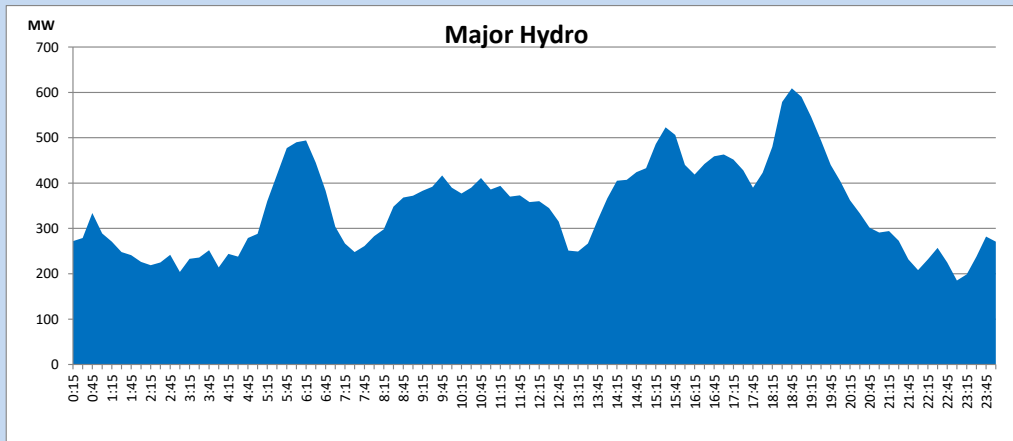
IPP Oil Plant Generation during

September 15, 2023



Major Hydro Generation during

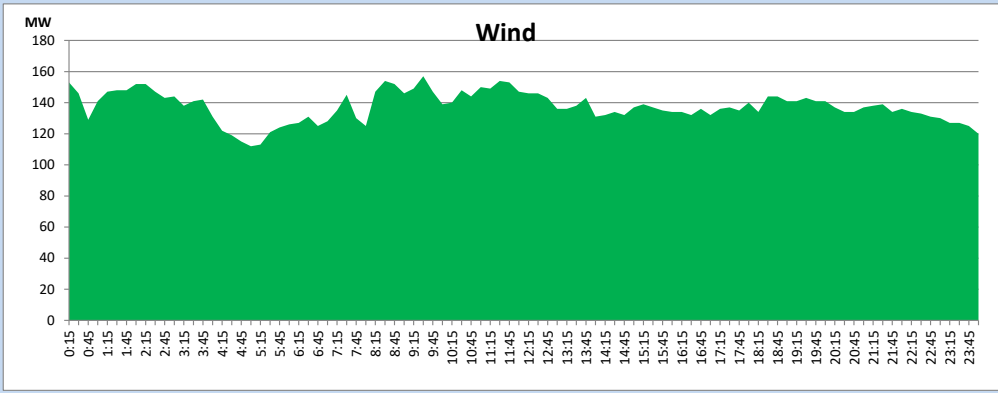
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## Wind Generation during

September 15, 2023

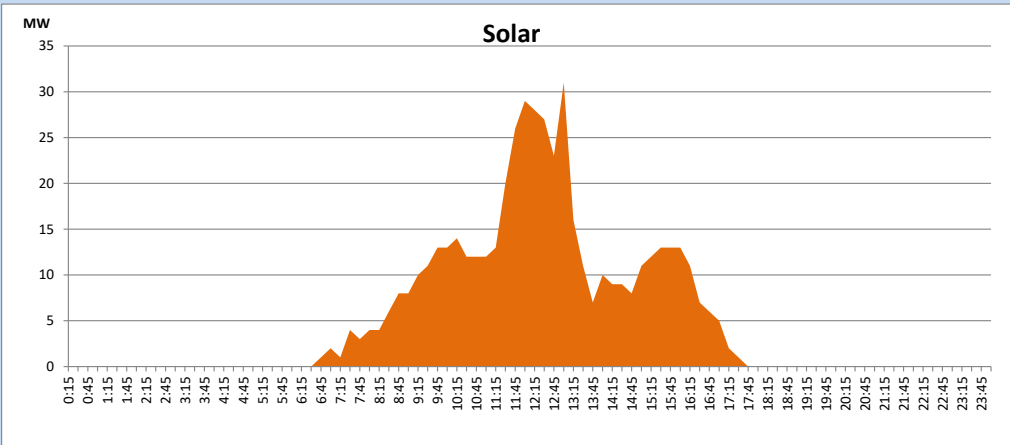
Based on Telemetered Power Stations only



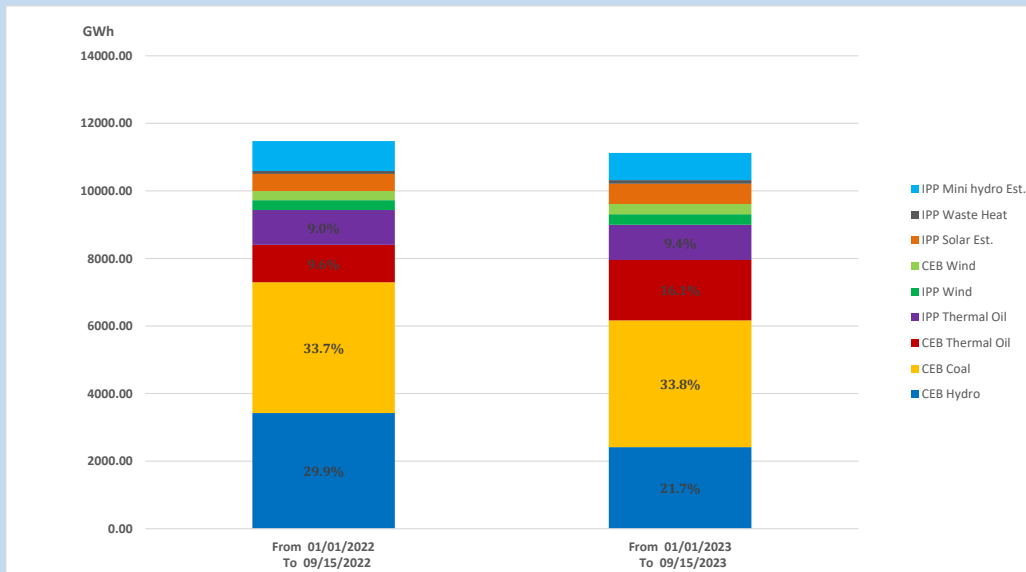
## Solar Generation during

September 15, 2023

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



### Cumulative dispatch

From 01/01/2022 To 09/15/2022

11477 GWh

From 01/01/2023 To 09/15/2023

11122 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**

<b>Power Station</b>	<b>Primary Fuel</b>
<b>CEB Thermal</b>	
<b>Sapugaskanda 1</b>	Heavy Fuel
<b>Sapugaskanda 2</b>	Heavy Fuel
<b>Kelanitissa Small Gas Turbines</b>	Auto Diesel
<b>GT 7 - Kelanitissa</b>	Auto Diesel
<b>Kelanitissa CCY</b>	Naphtha or Diesel
<b>Lakvijaya 1</b>	Coal
<b>Lakvijaya 2</b>	Coal
<b>Lakvijaya 3</b>	Coal
<b>Uthuru Janani</b>	Heavy Fuel
<b>Barge CEB</b>	Heavy Fuel
<b>KCCPS -2</b>	Auto Diesel

<b>Power Station</b>	<b>Primary Fuel</b>
<b>Private Thermal</b>	
<b>West Coast</b>	Auto Diesel / Heavy Fuel
<b>ACE Matara</b>	Heavy Fuel
<b>ACE Embilipitiya</b>	Heavy Fuel

**Major Incidents reported during the day**

September 15, 2023

- 1) Kukule pond Spilling continues to the present hour.