

# Generation and Reservoirs Statistics

February 20, 2024



PUBLIC UTILITIES COMMISSION OF SRI LANKA

## 1. Daily Generation Mix in MWh

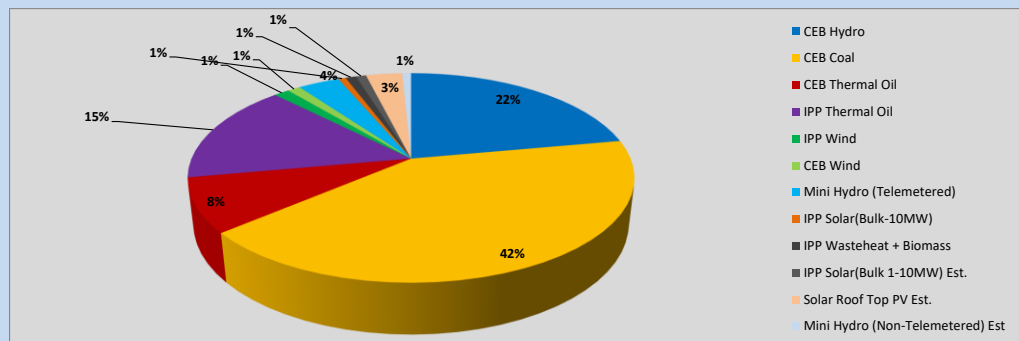


Table 01

	Generation (MWh)
CEB Hydro	10,365
CEB Coal	19,523
CEB Thermal Oil	3,913
IPP Thermal Oil	7,255
IPP Wind	621
CEB Wind	522
Mini Hydro (Telemetered)	1,686
IPP Solar (Bulk)	304
IPP Waste heat + Biomass	429
<b>Total Generation (Excluding estimated figures)</b>	<b>44,618</b>
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	359
* Estimated IPP Solar PV (Bulk 1-10MW)	414
* Estimated Solar Roof Top PV	1470
<b>Total Generation (Including estimated figures)</b>	<b>46,861</b>

\* Estimated figures of CEB generation report

Table 02

	Installed Capacity (MW)
CEB Hydro	1644
CEB Coal	810
CEB Thermal Oil	773.1
IPP Thermal Oil (West Coast, ACE Matara and ACE Embilipitiya)	386.9
IPP Wind	163
CEB Wind	100
Mini Hydro	422
IPP Waste heat + Biomass	54
IPP Solar	137
Rooftop Solar (Ordinary)	293
Rooftop Solar (LT Bulk)	272
Rooftop Solar (HT Bulk)	74

Data Source - Monthly Review Report [Nov-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	217	25.01%
CEB Coal	383	43.99%
CEB Thermal Oil	65	7.51%
IPP Thermal	65	7.50%
SPP Wind	14	1.62%
CEB Wind	17	1.94%
Mini Hydro *	56	6.45%
IPP Solar *	43	4.99%
IPP Waste heat + BMP	8	0.96%
<b>Total</b>	<b>870</b>	

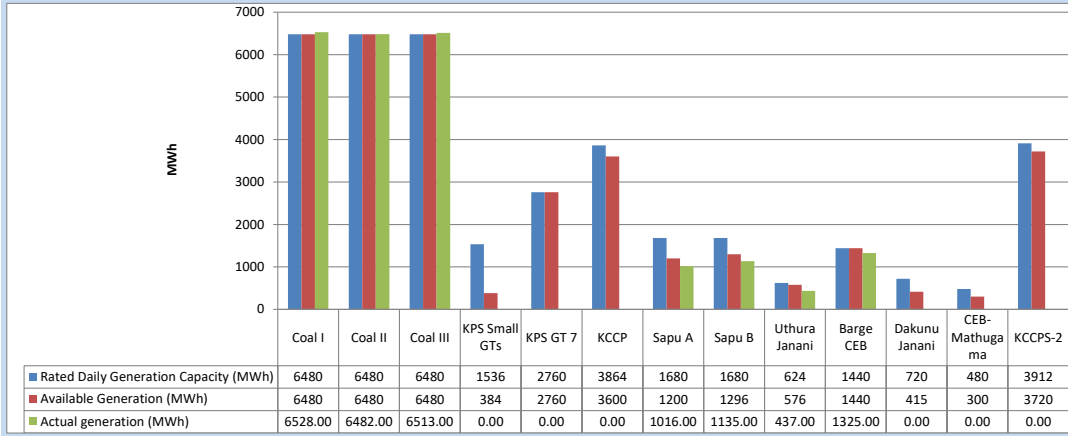
Table 04 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	849	39.19%
CEB Coal	706	32.62%
CEB Thermal Oil	123	5.67%
IPP Thermal	111	5.12%
SPP Wind	31	1.41%
CEB Wind	39	1.79%
Mini Hydro *	175	8.09%
IPP Solar *	113	5.21%
IPP Waste heat	19	0.89%
<b>Total</b>	<b>2,166</b>	

\*Including estimated contribution from non telemetered plants

### 3. CEB owned Thermal Plant Dispatch

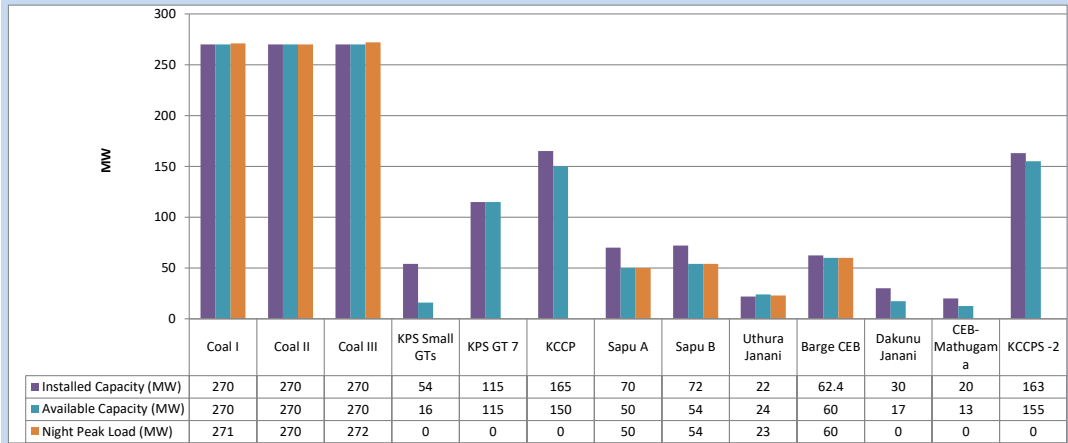
February 20, 2024



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

February 21, 2024

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

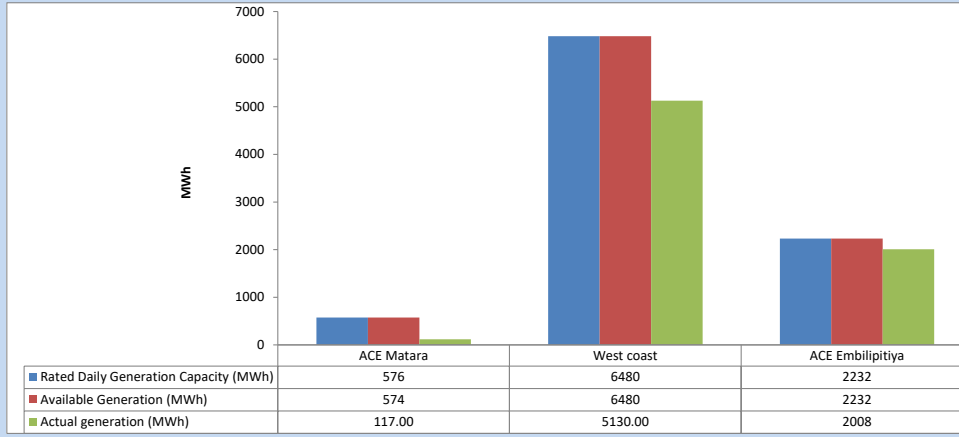


Plant availability is recorded at 6.00 am on

February 21, 2024

### 5. IPP owned Thermal Plant Dispatch

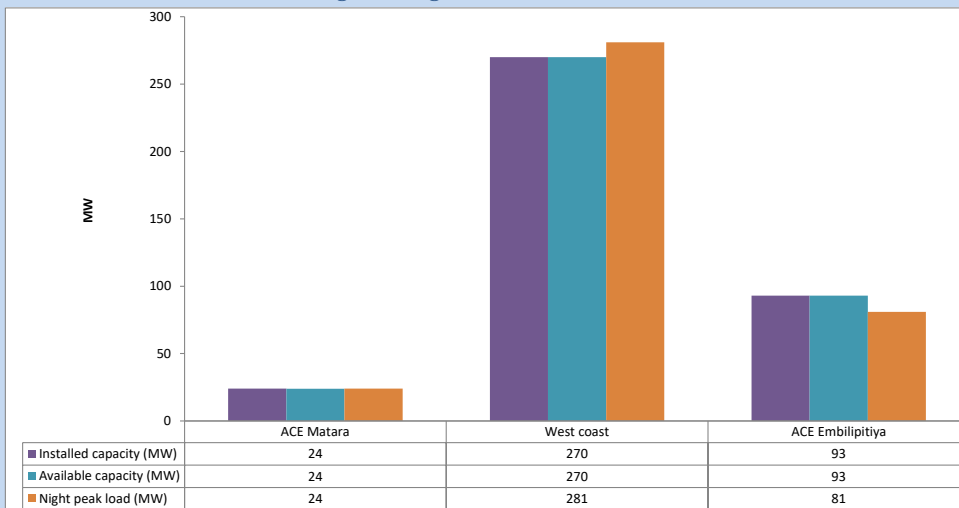
February 20, 2024



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

February 21, 2024

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

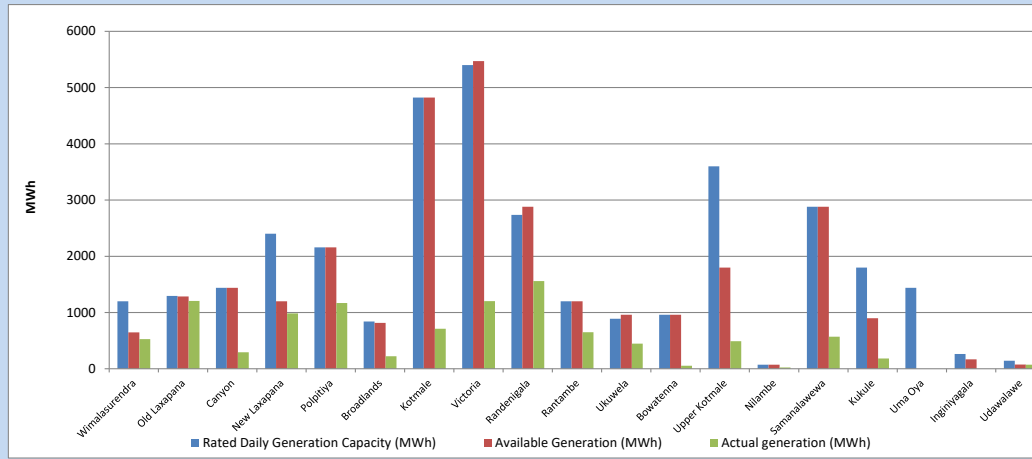


Plant availability is recorded at 6.00 am on

February 21, 2024

## 7. Major Hydro Plant Dispatch

February 20, 2024

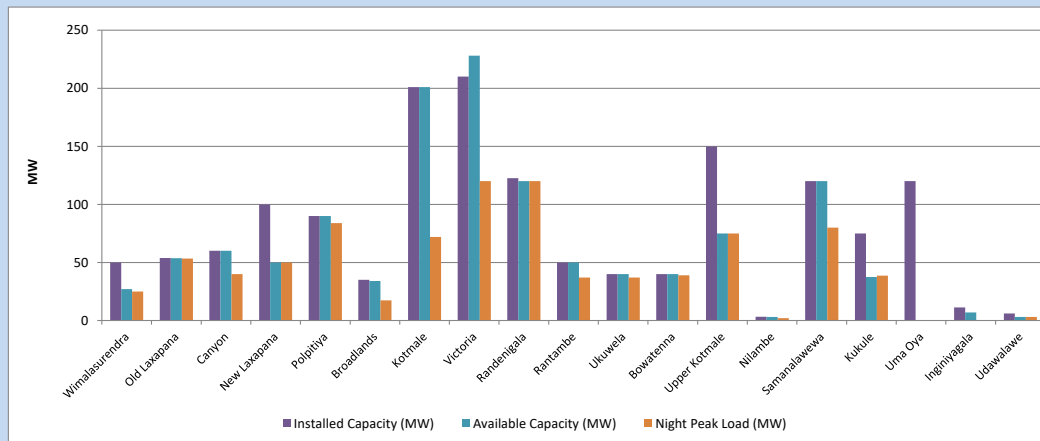


Available Generation is estimated based on plant availability at 6.00am on  
Broadlands power plant is operating in the Commissioning Stage

February 21, 2024

## 8. Major Hydro Plant Loading at Night Peak

February 20, 2024



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

February 21, 2024

## 9. Summary of Major Plant performance

Table 05

Plant	Maximum Available Total Capacity	Plant Availability	Night peak Load	Plant Dispatch
	(MW)	(MW)	(MW)	(MWh)
Wimalasurendra	50	27	25	528
Old Laxapana	54	54	53	1,205
Canyon	60	60	40	293
New Laxapana	100	50	50	986
Polpitiya	90	90	84	1,170
Broadlands	35	34	17	224
Kotmale	201	201	72	710
Victoria	210	228	120	1,202
Randenigala	123	120	120	1,560
Rantambe	50	50	37	651
Ukuwela	40	40	37	446
Bowatenna	40	40	39	54
Upper Kotmale	150	75	75	489
Nilambe	3	3	2	24
Samanalawewa	120	120	80	569
Kukule	75	38	39	183
Uma Oya (Testing )	120	0	0	0
Inginiyagala	11	7	0	0
Udawalawe	6	3	3	71
Puttalam Coal I	270	270	271	6,528
Puttalam Coal II	270	270	270	6,482
Puttalam Coal III	270	270	272	6,513
KPS Small GTs	54	16	0	0
KPS GT 7	115	115	0	0
KCCP	165	150	0	0
Sapugaskanda A	70	50	50	1,016
Sapugaskanda B	72	54	54	1,135
Uthura Janani	22	24	23	437
Barge CEB	62	60	60	1,325
CEB-Hambantota	30	17	0	0
CEB-Mathugama	20	13	0	0
ACE Matara	24	24	24	117
Asia Power	50	0	0	0
KCCPS -2	163	155	0	0
West Coast	270	270	281	5,130
Nothern Power	36	0	0	0
ACE Embilipitiya	93	93	81	2,008
<b>Total</b>	<b>3,594</b>	<b>3,090</b>	<b>2,423</b>	<b>44,618</b>

Note-

Plant availability is the availability recorded at 6 am on

February 21, 2024

Installed Capacity is sourced from CEB Annual Report- 2022

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

February 20, 2024

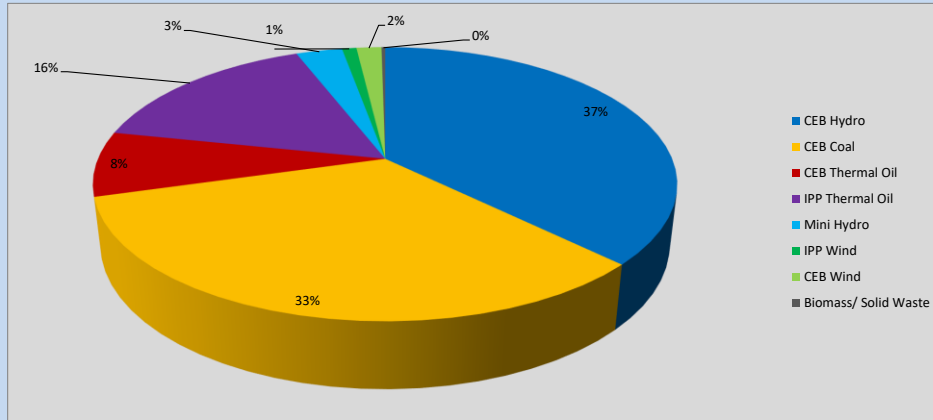


Table 06

CEB Hydro	909	MW
CEB Coal	813	MW
CEB Thermal Oil	187	MW
IPP Thermal Oil	386	MW
Mini Hydro (Telemetered)	74	MW
IPP Wind	23.3	MW
CEB Wind	40.4	MW
Biomass/ Solid Waste	6	MW

### Recorded Peak Demand Data

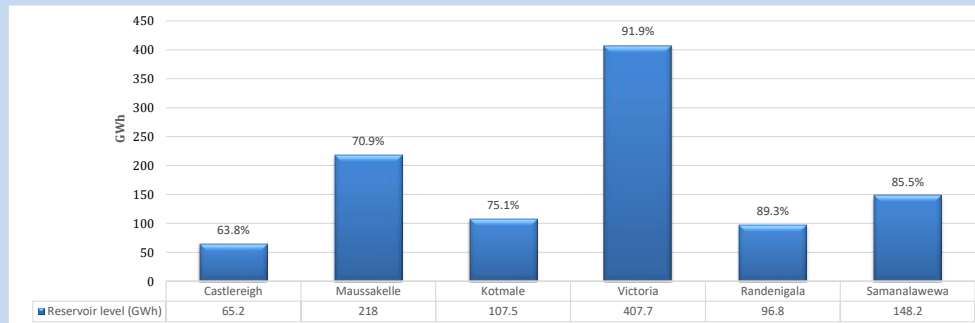
Table 07

Night Peak*	2,439	MW
Day Peak Maximum Demand	2,220	MW
Day Peak Minimum Demand	1,750	MW
Off Peak Minimum Demand	1,435	MW

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

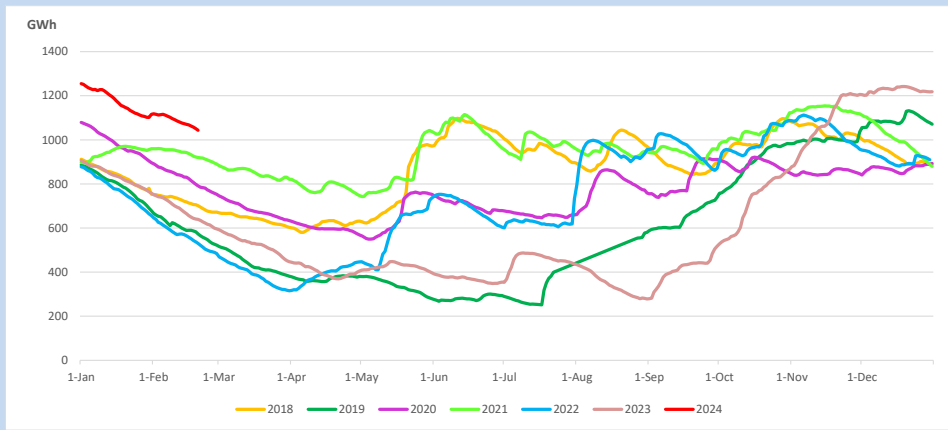
### Reservoir Levels -

as at 06.00 Hr on February 21, 2024

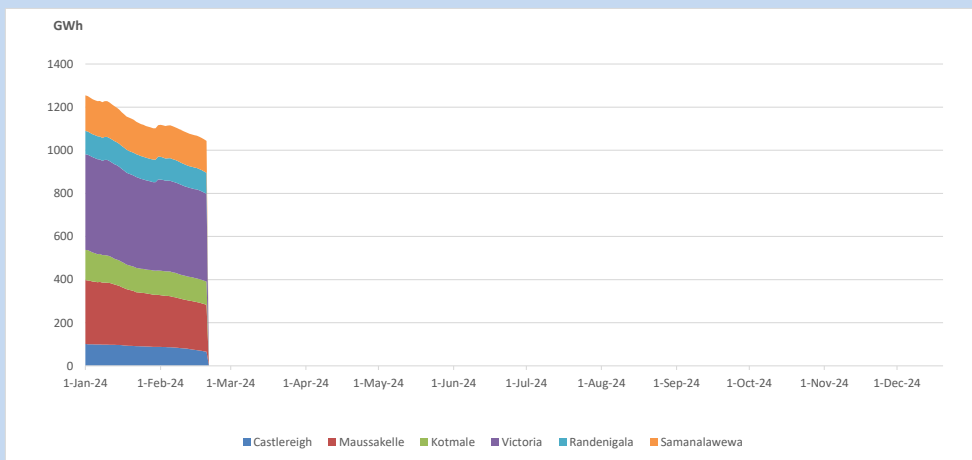


Total Reservoir Level 1043.4 GWh  
% of Total capacity 81.6%

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

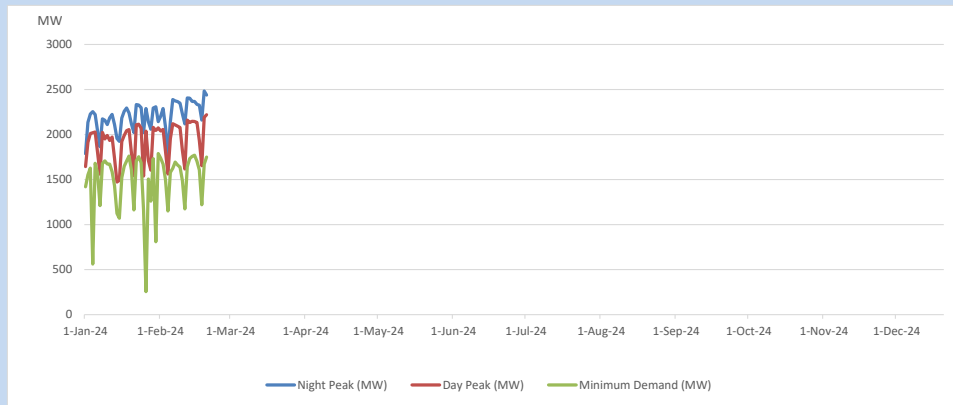


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





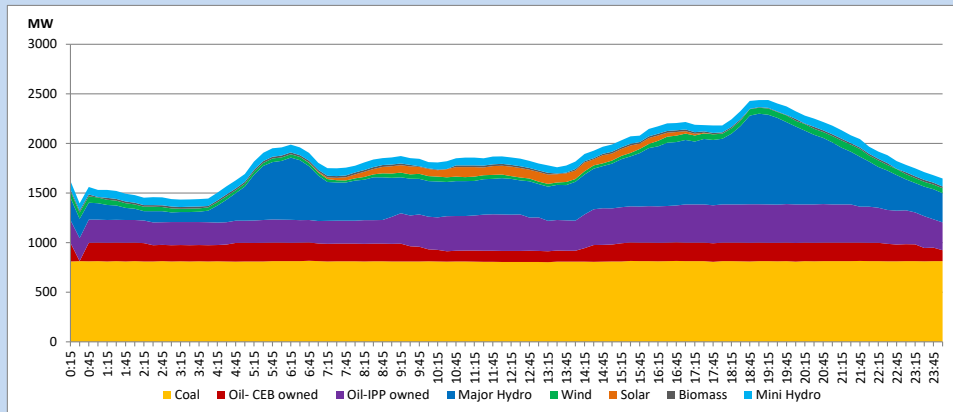
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

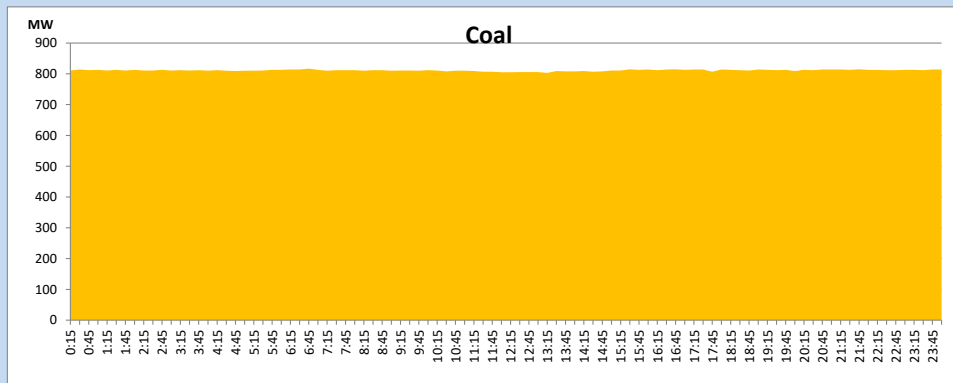
February 20, 2024



Solar and wind data is based on Telemetered Power Stations only

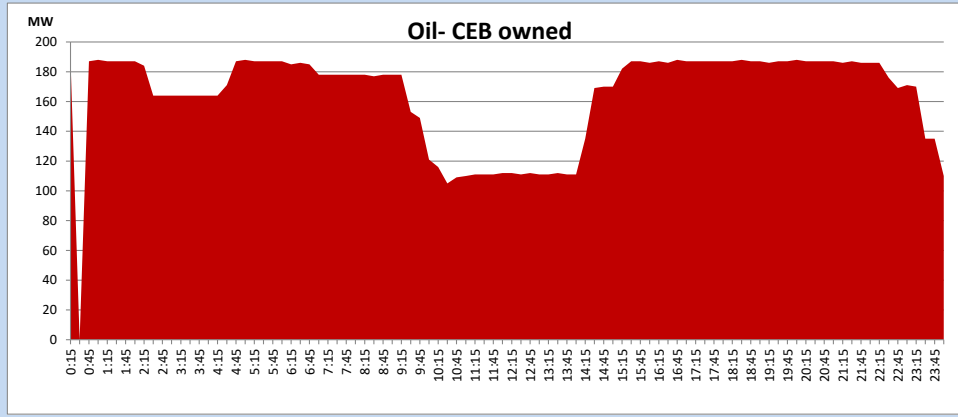
### Coal Generation during

February 20, 2024



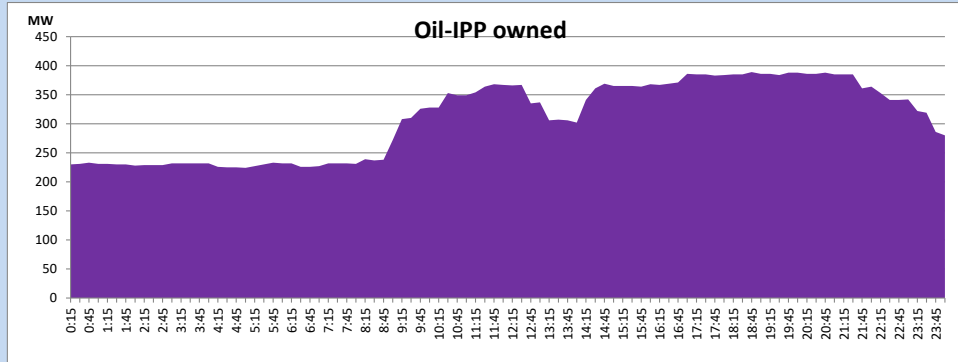
CEB Oil Plant Generation during

February 20, 2024



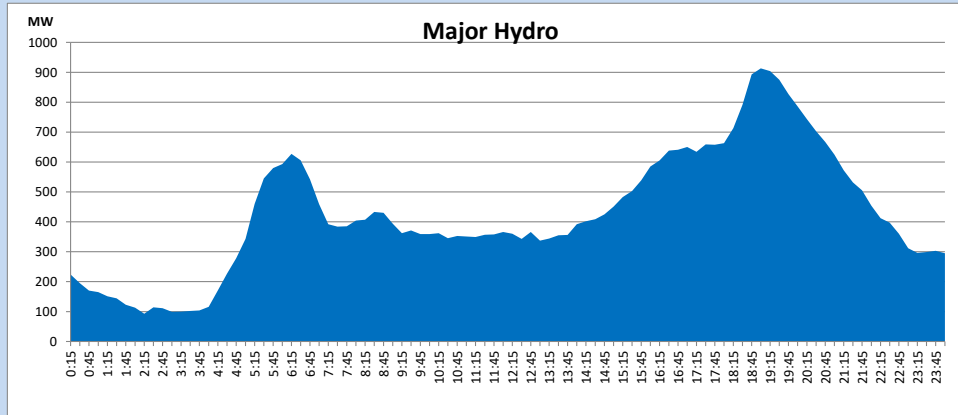
IPP Oil Plant Generation during

February 20, 2024



Major Hydro Generation during

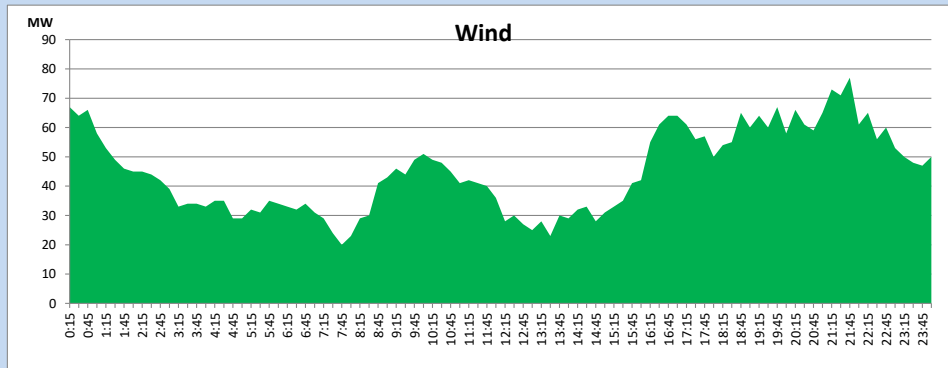
February 20, 2024



## Wind Generation during

February 20, 2024

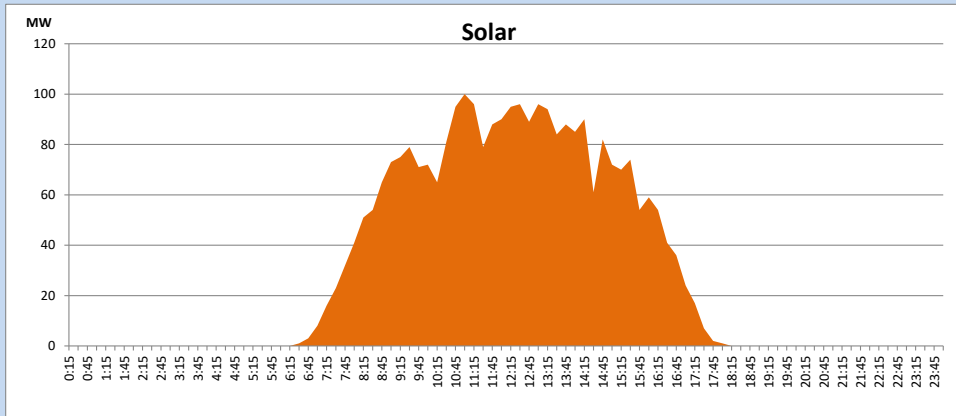
Based on Telemetered Power Stations only



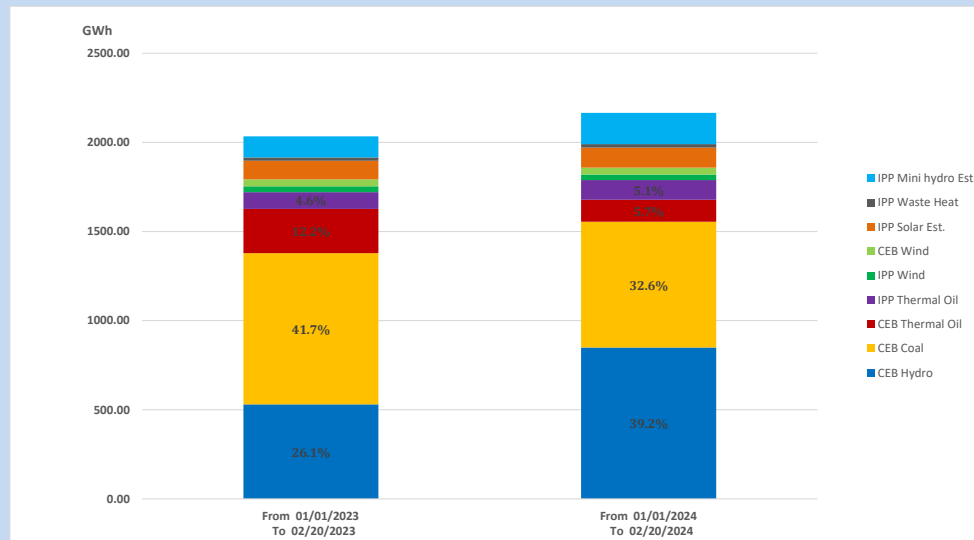
## Solar Generation during

February 20, 2024

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch  
From 01/01/2023 To 02/20/2023  
From 01/01/2024 To 02/20/2024

2034 GWh  
2166 GWh

The above figures are including contribution from roof top solar, non telemetered solar and mini hydro plants)  
Unserviced energy due to power cuts has been excluded in 2023

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

February 20, 2024

- 1) Ukuwela 132/33kV T/F 03 tripped from 132kV side only at 14:46hrs due to the operation of phase directional block. The T/F is yet to be normalized.
- 2) Embilipitiya GSS 132/33kV T/F 01 tripped from both sides along with 33kV F02 at 17:45hrs due to the operation of Inter Trip from 33kV. This caused 33kV B/S 01 and all connected feeders to be dead. The T/F, 33kV B/S and 33kV F01, F03, F08 were normalized by 17:59hrs and 33kV F02 was normalized at 18:29hrs.
- 3) WCP GT 02 tripped at 00:59hrs (21.02.2024) rejecting 90 MW from the system due to DCS communication failure. Subsequently system recovered with the operation of UFLS Stage I, and all affected feeders were normalized by 01:12hrs (21.02.2024). At the same time, WCP GT 01 & ST performed a forced shutdown due to communication failure. WCP resumed generation at 5:04hrs (21.02.2024).