Generation and Reservoirs Statistics

July 21, 2024

PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix

July 21, 2024

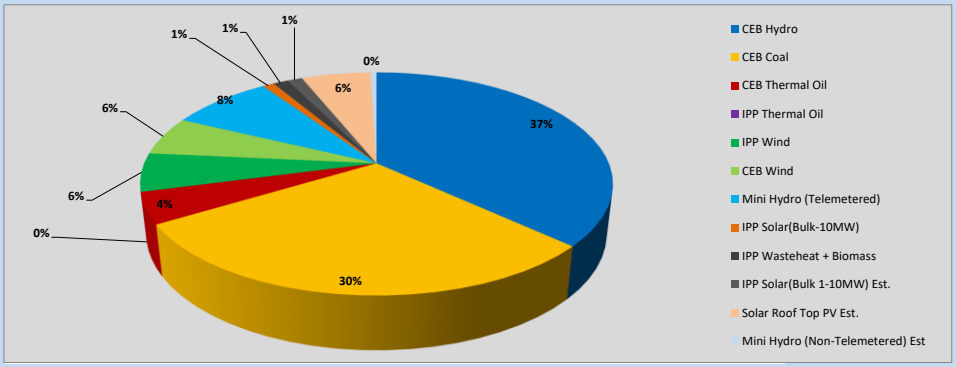


Table 01

		Generation (MWh)
CEB Hydro	CEB Hydro	14133
CEB Coal	CEB Coal	11378
CEB Thermal Oil	CEB Thermal Oil	1736
IPP Thermal Oil	IPP Thermal Oil	0
IPP Wind	IPP Wind	2142
CEB Wind	CEB Wind	2160
Mini Hydro (Telemetered)	Mini Hydro (Telemetered)	3208
IPP Solar (Bulk)	IPP Solar (Bulk)	363
IPP Waste heat + Biomass	IPP Wasteheat + Biomass	465
Total Generation (Excluding estimated figures)		35,585
* Estimated unserved energy		0
* Estimated Mini Hydro (Non telemetered)		193
* Estimated IPP Solar PV (Bulk 1-10MW)		473
* Estimated Solar Roof Top PV		2170
Total Generation (Including estimated figures)		**38,421**

*** Estimated figures of CEB generation report**

1.1 Cumulative Dispatch - 2024

Table 06 - Current Month

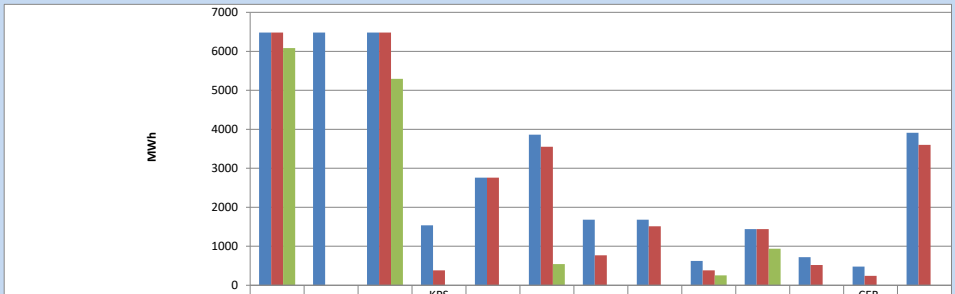
Category	Dispatch (GWh)	
CEB Hydro	340	35.59%
CEB Coal	302	31.63%
CEB Thermal Oil	64	6.67%
IPP Thermal	18	1.90%
SPP Wind	42	4.43%
CEB Wind	41	4.34%
Mini Hydro *	80	8.37%
IPP Solar *	61	6.33%
IPP Waste heat + BMP	7	0.73%
Total	**956**	

Table 07 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	2,848	31.09%
CEB Coal	3,307	36.10%
CEB Thermal Oil	880	9.61%
IPP Thermal	452	4.93%
SPP Wind	194	2.12%
CEB Wind	197	2.16%
Mini Hydro *	629	6.87%
IPP Solar *	567	6.19%
IPP Waste heat	84	0.92%
Total	**9,159**	

*Including estimated contribution from non telemetered plants

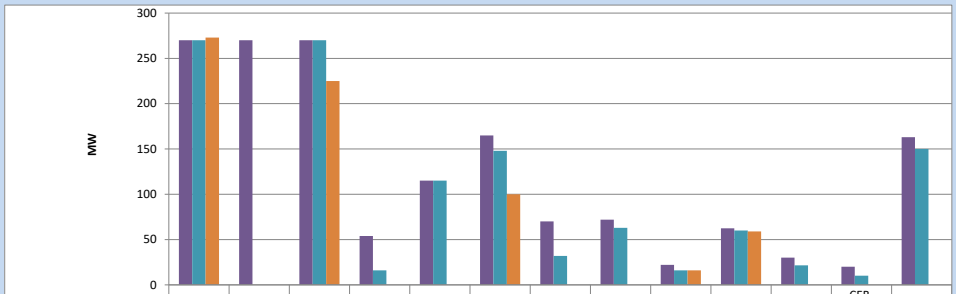
1.2 CEB owned Thermal Plant Dispatch July 21, 2024



	Coal I	Coal II	Coal III	KPS Small GTs	KPS GT 7	KCCP	Sapu A	Sapu B	Uthura Janani	Barge CEB	Dakunu Janani	CEB-Mathugama	KCCPS-2
Rated Daily Generation Capacity (MWh)	6480	6480	6480	1536	2760	3864	1680	1680	624	1440	720	480	3912
Available Generation (MWh)	6480	0	6480	384	2760	3552	768	1512	384	1440	518	242	3600
Actual generation (MWh)	6082.00	0.00	5296.00	0.00	0.00	544.00	0.00	0.00	253.00	939.00	0.00	0.00	0.00

Available Generation is estimated based on plant availability at 6.00am on July 22, 2024

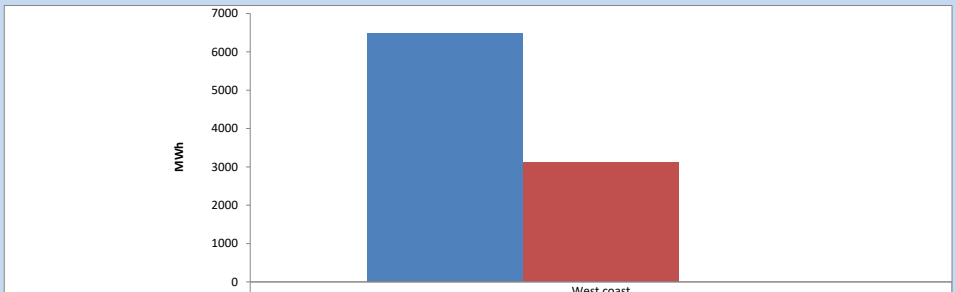
1.3 CEB owned Thermal Plant Loading at the Night Peak July 21, 2024



	Coal I	Coal II	Coal III	KPS Small GTs	KPS GT 7	KCCP	Sapu A	Sapu B	Uthura Janani	Barge CEB	Dakunu Janani	CEB-Mathugama	KCCPS -2
Installed Capacity (MW)	270	270	270	54	115	165	70	72	22	62.4	30	20	163
Available Capacity (MW)	270	0	270	16	115	148	32	63	16	60	22	10	150
Night Peak Load (MW)	273	0	225	0	0	100	0	0	16	59	0	0	0

Plant availability is recorded at 6.00 am on July 22, 2024

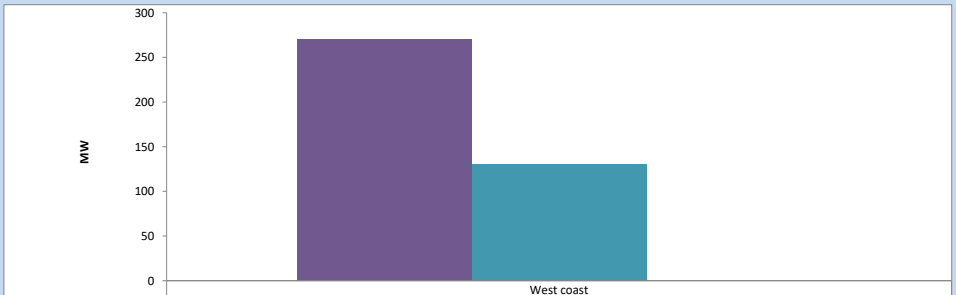
1.4 IPP owned Thermal Plant Dispatch July 21, 2024



	West coast
Rated Daily Generation Capacity (MWh)	6480
Available Generation (MWh)	3120
Actual generation (MWh)	0

Available Generation is estimated based on plant availability at 6.00am on July 22, 2024

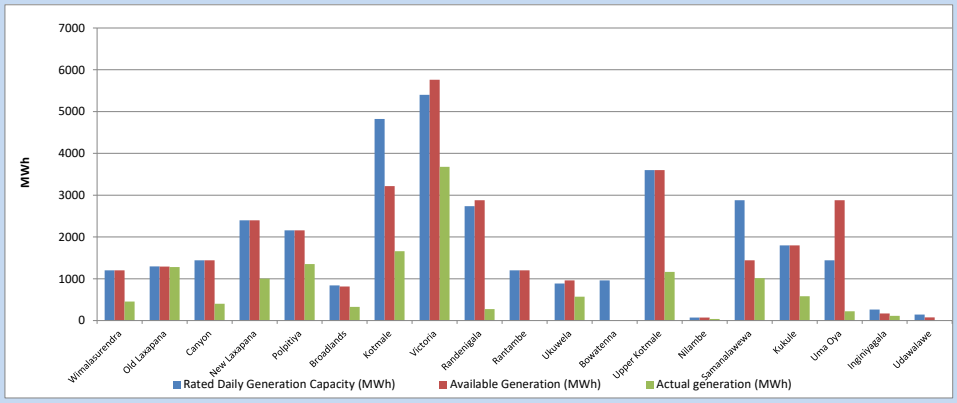
1.5 IPP owned Thermal Plant Loading at the Night Peak



	West coast
Installed capacity (MW)	270
Available capacity (MW)	130
Night peak load (MW)	0

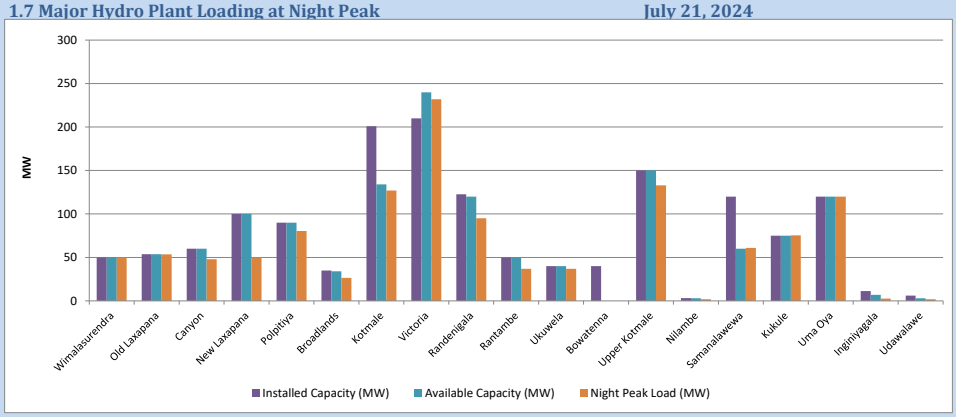
Plant availability is recorded at 6.00 am on July 22, 2024

1.6 Major Hydro Plant Dispatch July 21, 2024



Available Generation is estimated based on plant availability at 6.00am on July 22, 2024

1.7 Major Hydro Plant Loading at Night Peak July 21, 2024



Plant availability is recorded at 6.00 am on July 22, 2024

1.8 Summary of Major Plant performance July 21, 2024

Table 03

Plant	Maximum Available Total Capacity	Plant Availability	Night peak Load	Plant Dispatch
	(MW)	(MW)	(MW)	(MWh)
Wimalasurendra	50	50	50	453
Old Laxapana	54	54	54	1,281
Canyon	60	60	48	401
New Laxapana	100	100	50	1,002
Polpitiya	90	90	80	1,350
Broadlands	35	34	27	329
Kotmale	201	134	127	1,660
Victoria	210	240	232	3,680
Randenigala	123	120	95	273
Rantambe	50	50	37	0
Ukuwela	40	40	37	570
Bowatenna	40	0	0	0
Upper Kotmale	150	150	133	1,164
Nilambe	3	3	2	40
Samanalawewa	120	60	61	1,013
Kukule	75	75	75	583
Uma Oya	120	120	120	222
Inginiyagala	11	7	3	113
Udawalawe	6	3	2	0
Puttalam Coal I	270	270	273	6,082
Puttalam Coal II	270	0	0	0
Puttalam Coal III	270	270	225	5,296
KPS Small GTs	54	16	0	0
KPS GT 7	115	115	0	0
KCCP	165	148	100	544
Sapugaskanda A	70	32	0	0
Sapugaskanda B	72	63	0	0
Uthura Janani	22	16	16	253
Barge CEB	62	60	59	939
CEB-Hambantota	30	22	0	0
CEB-Mathugama	20	10	0	0
ACE Matara	24	0	0	0
Asia Power	50	0	0	0
KCCPS -2	163	150	0	0
West Coast	270	130	0	0
Nothern Power	36	0	0	0
ACE Embilipitiya	93	0	0	0
Sobadhanavi (Testing)	220	0	0	0
Total	3,594	2,692	2,235	35,586

Note-
Plant availability is the availability recorded at 6 am on July 22, 2024

1.9 Contribution to the Night Peak in MW

July 21, 2024

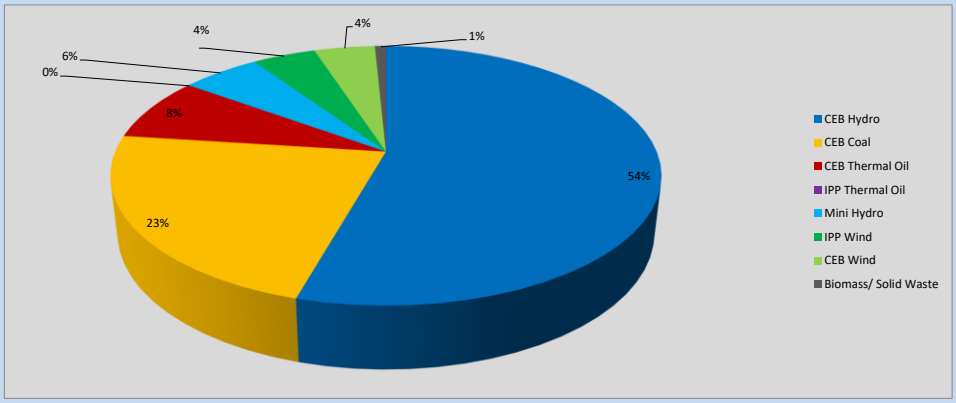


Table 04

CEB Hydro	1196	MW
CEB Coal	498	MW
CEB Thermal Oil	175	MW
IPP Thermal Oil	0	MW
Mini Hydro (Telemetered)	121	MW
IPP Wind	97.7	MW
CEB Wind	93.9	MW
Biomass/ Solid Waste	17	MW

Recorded Peak Demand Data

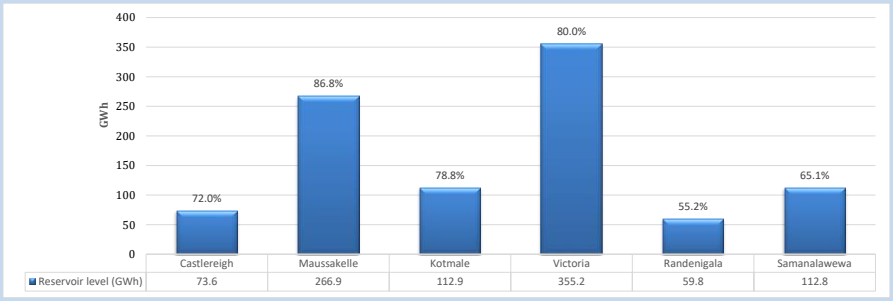
Table 05

Night Peak*	2,199	MW
Day Peak Maximum Demand	1,616	MW
Day Peak Minimum Demand	1,060	MW
Off Peak Minimum Demand	1,340	MW

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

1.10 Reservoir Levels -

as at 06.00 Hr on July 22, 2024



Total Reservoir Level 981.2 GWh
% of Total capacity 76.7%

1.11 Day Ahead Planned Demand Vs Actual Demand (Excluding non telemetered data)

July 21, 2024

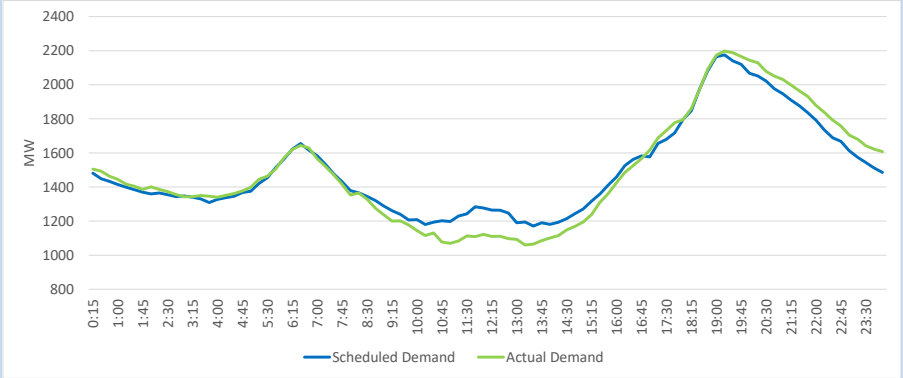
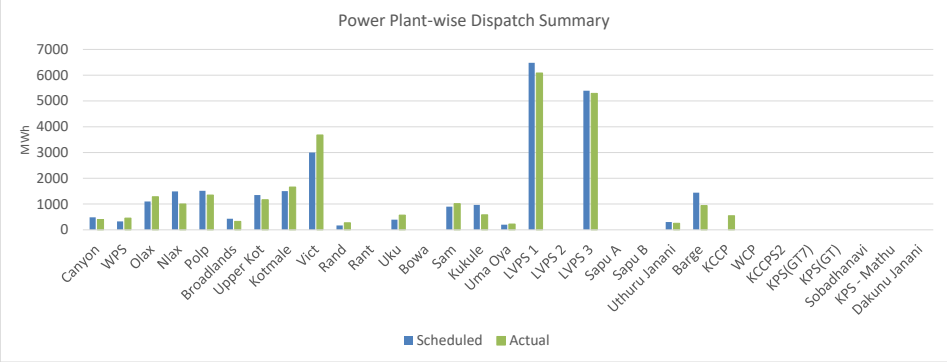


Table 02

Category	Scheduled Dispatch (MWh)	Actual Dispatch (MWh)	Deviation (MWh)
Major Hydro	13,816	13,981	165
CEB Coal	11,880	11,379	-502
CEB Thermal Oil	1,743	1,737	-7
IPP Thermal Oil	-	-	0
NCRE (Telemetered)	8,511	8,694	183
Total	**35,950**	**35,789**	**-161**

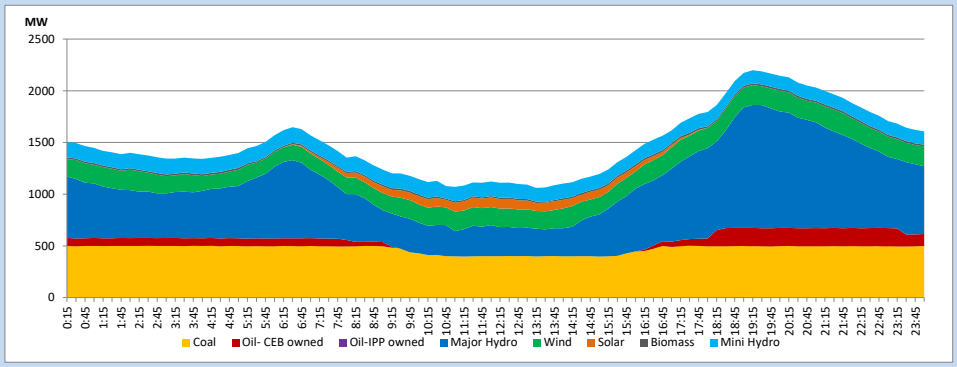
1.12 Power Plant-wise Dispatch Summary

July 21, 2024



1.13 Daily Load Curve

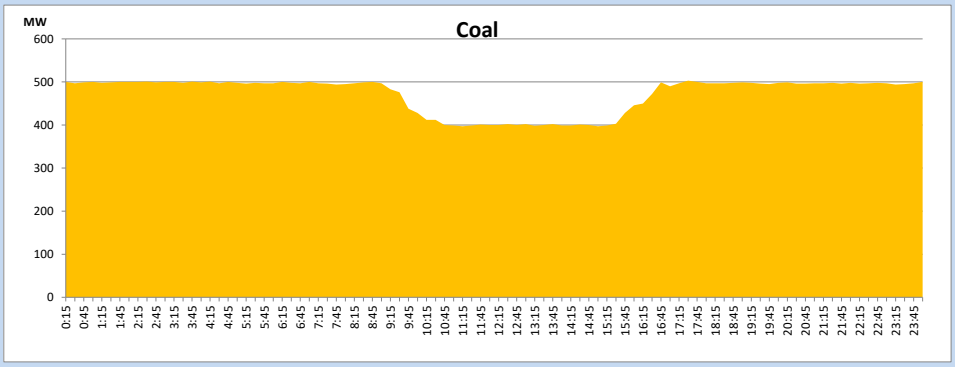
July 21, 2024



Solar and wind data is based on Telemetered Power Stations only

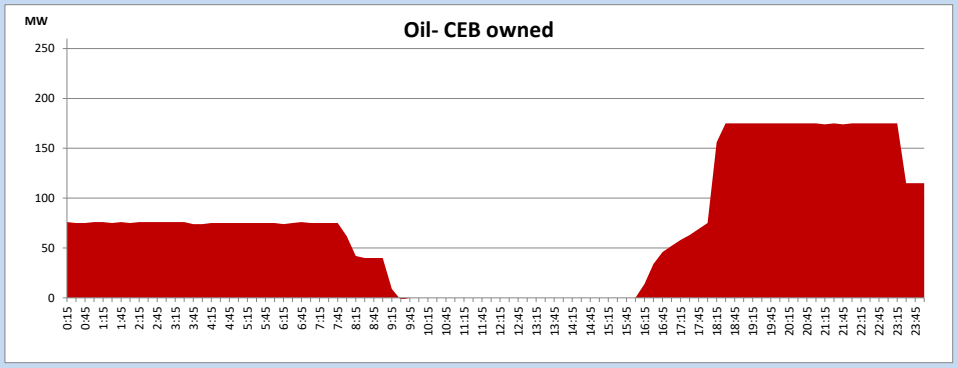
Coal Generation during

July 21, 2024

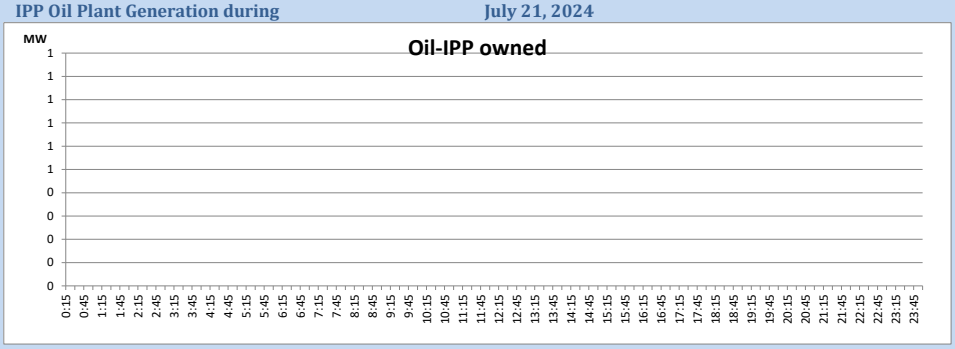


CEB Oil Plant Generation during

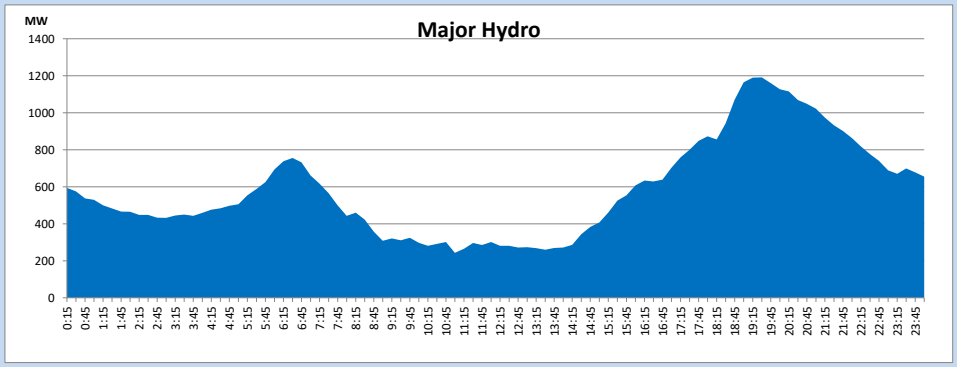
July 21, 2024



IPP Oil Plant Generation during July 21, 2024

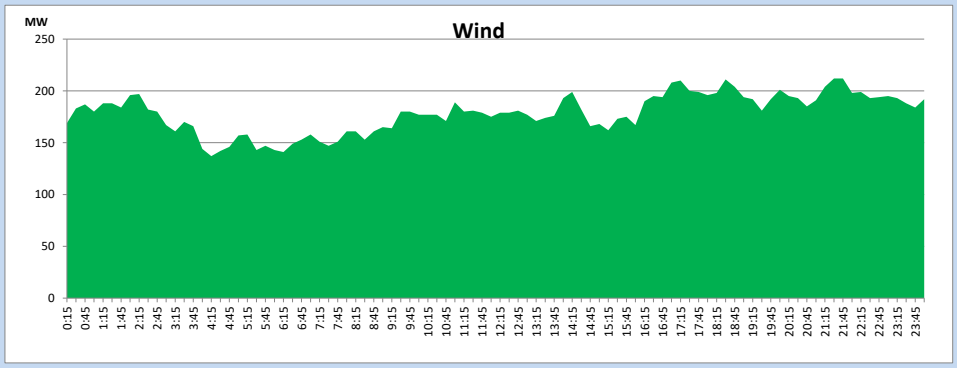


Major Hydro Generation during July 21, 2024



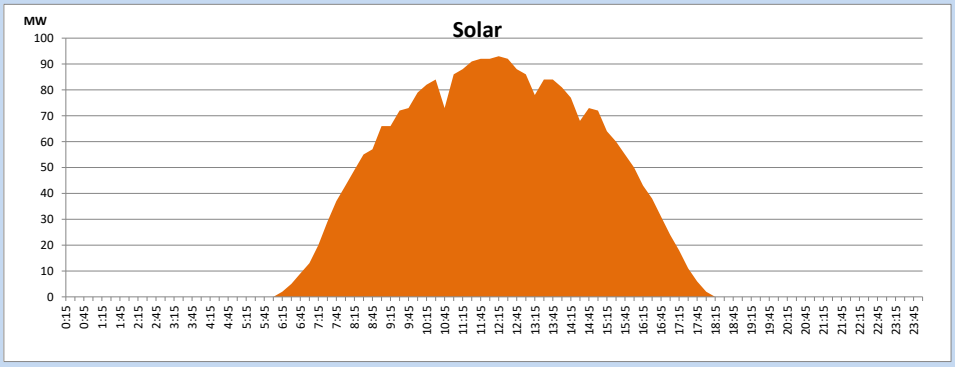
Wind Generation during July 21, 2024

Based on Telemetered Power Stations only



Solar Generation during July 21, 2024

Based on Telemetered Power Stations only

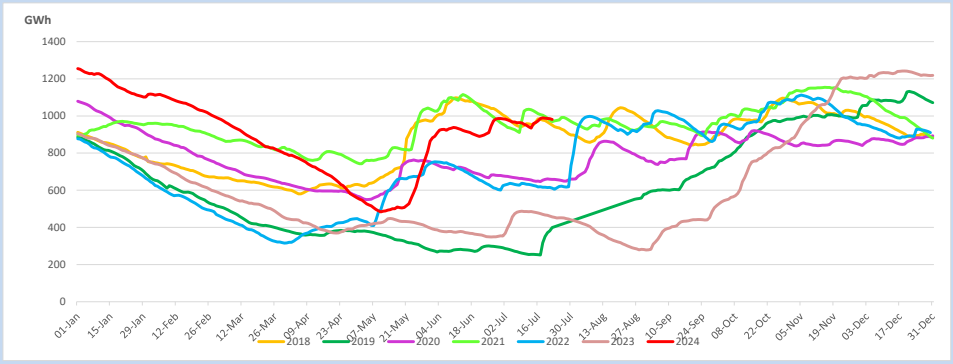


1.14 Major Incidents reported during the day July 21, 2024

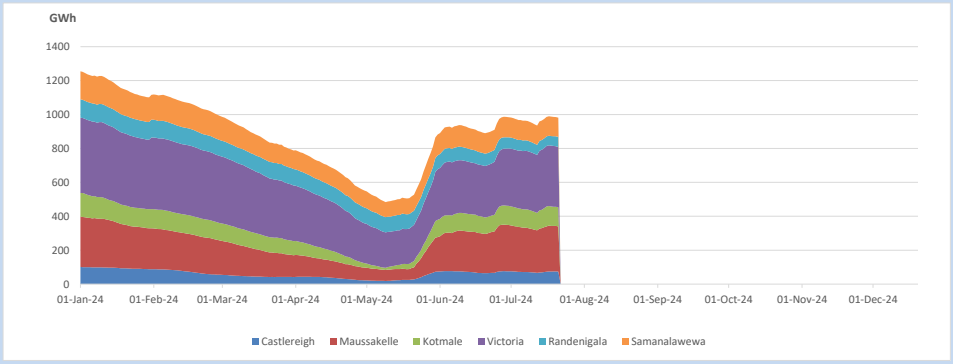
1) At 10:43hrs system frequency dropped to 47.99Hz due to the rejection of embedded generation. Subsequently system recovered with the operation of UFLS Stage IV, and all affected feeders were normalized by 11:00hrs.
2) At 13:21hrs system frequency dropped to 48.05Hz due to the rejection of embedded generation. Subsequently system recovered with the operation of UFLS Stage III, and all affected feeders were normalized by 13:33hrs.
3) New Laxapana unit 02 failed to synchronize after Canyon pond cleaning work at 16:00hrs due to CB failure. The unit 02 resumed generation at 19:33hrs.

4) LVPS 03 reached full load at 00:33hrs (22.07.2024)

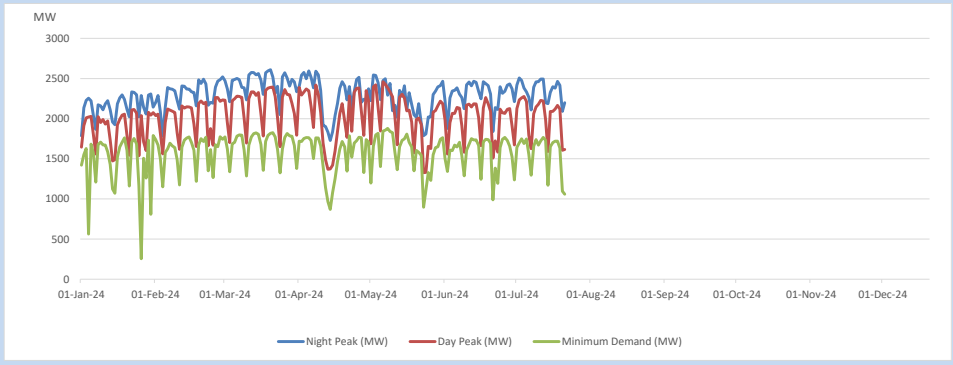
2. Comparison of Total Reservoir Storage Levels with Past Years



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

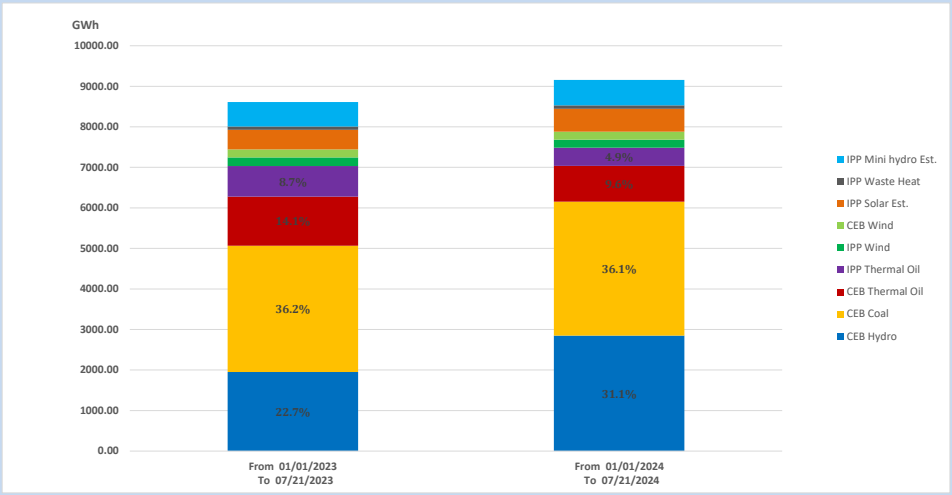


4. Variation of Demand during the current year



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

5. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch

From 01/01/2023 To 07/21/2023	**8610 GWh**
From 01/01/2024 To 07/21/2024	**9159 GWh**

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

Thermal Power 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
Sobadhanavi	Auto Diesel