

Generation and Reservoirs Statistics

September 28, 2024



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix

September 28, 2024

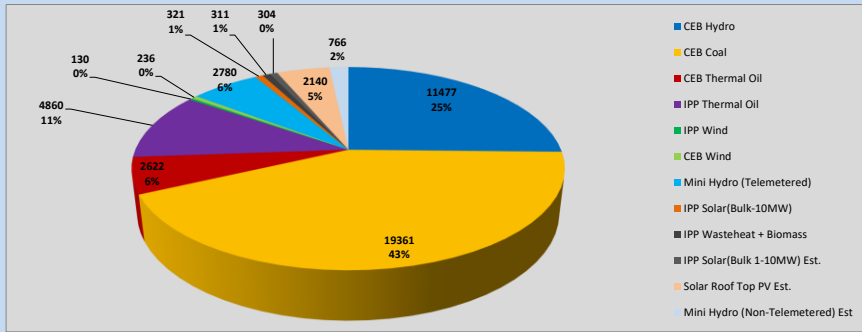


Table 01

	Generation (MWh)
CEB Hydro	11477
CEB Coal	19361
CEB Thermal Oil	2622
IPP Thermal Oil	4860
IPP Wind	130
CEB Wind	236
Mini Hydro (Telemetered)	2780
IPP Solar (Bulk)	321
IPP Waste heat + Biomass	311
Total Generation (Excluding estimated figures)	42,098
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	766
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	2140
Total Generation (Including estimated figures)	45,308

* Estimated figures of CEB generation report

1.1 Cumulative Dispatch - 2024

Table 02 - Current Month

Category	Dispatch (GWh)	
CEB Hydro	375	29.33%
CEB Coal	497	38.85%
CEB Thermal Oil	62	4.83%
IPP Thermal	45	3.49%
IPP Wind	62	4.84%
CEB Wind	53	4.12%
Mini Hydro *	98	7.69%
IPP Solar *	80	6.23%
IPP Waste heat + BMP	8	0.62%
Total	1,278	

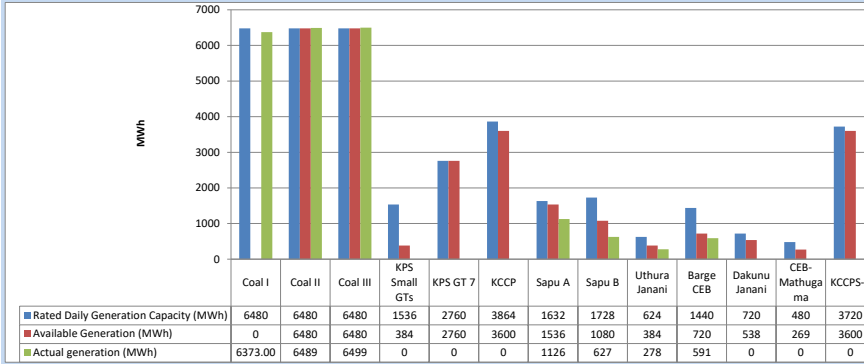
Table 03 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	3,825	30.97%
CEB Coal	4,375	35.42%
CEB Thermal Oil	1,192	9.65%
IPP Thermal	553	4.48%
IPP Wind	311	2.52%
CEB Wind	317	2.57%
Mini Hydro *	923	7.48%
IPP Solar *	741	6.00%
IPP Waste heat	114	0.92%
Total	12,351	

*Including estimated contribution from non telemetered plants

1.2 CEB owned Thermal Plant Dispatch

September 28, 2024

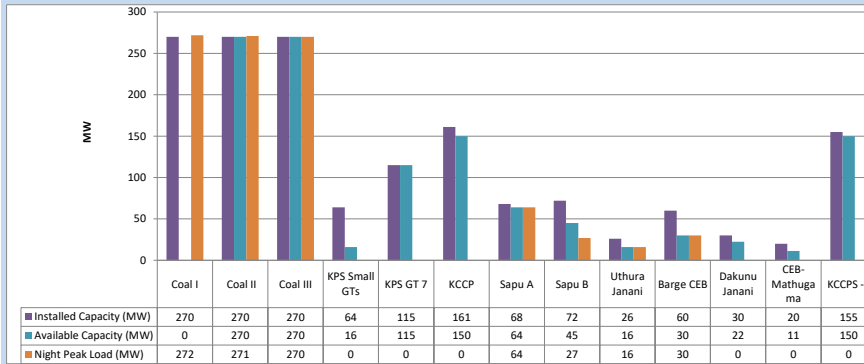


Available Generation is estimated based on plant availability at 6.00am on

September 29, 2024

1.3 CEB owned Thermal Plant Loading at the Night Peak

September 28, 2024

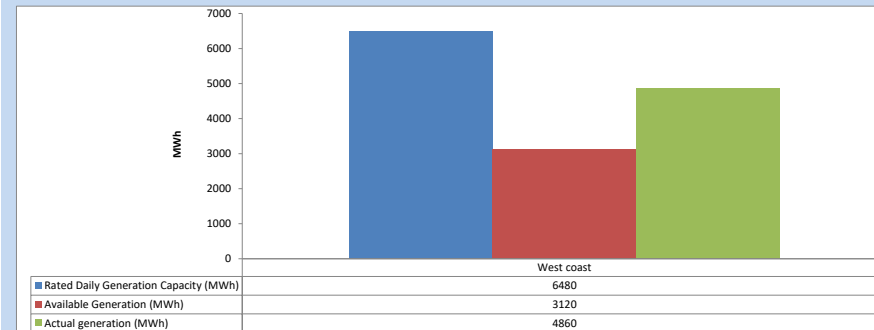


Plant availability is recorded at 6.00 am on

September 29, 2024

1.4 IPP owned Thermal Plant Dispatch

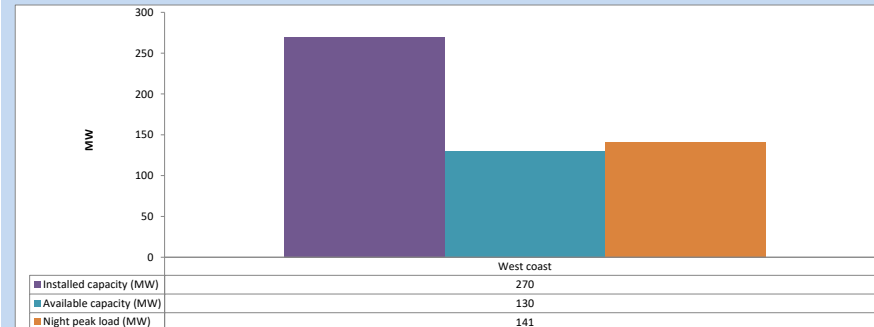
September 28, 2024



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

September 29, 2024

1.5 IPP owned Thermal Plant Loading at the Night Peak

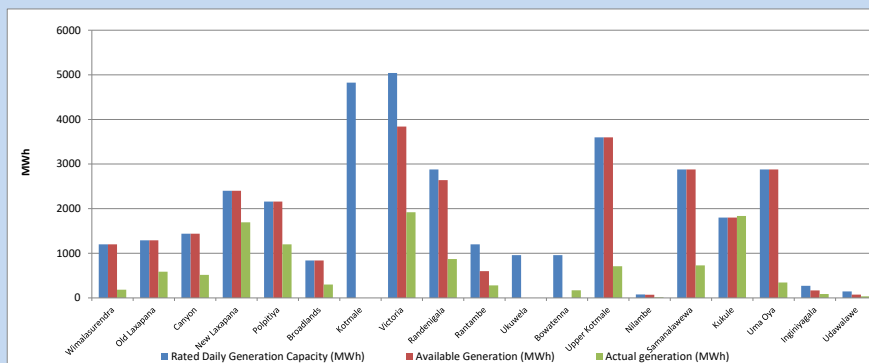


Plant availability is recorded at 6.00 am on

September 29, 2024

1.6 Major Hydro Plant Dispatch

September 28, 2024

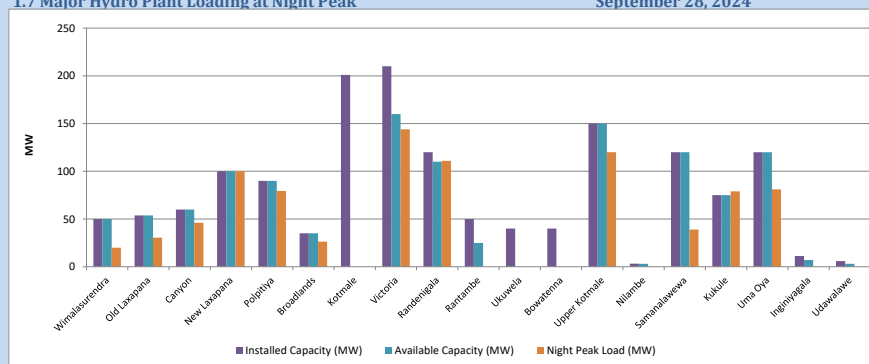


Available Generation is estimated based on plant availability at 6.00am on

September 29, 2024

1.7 Major Hydro Plant Loading at Night Peak

September 28, 2024



Plant availability is recorded at 6.00 am on

September 29, 2024

1.8 Summary of Major Plant performance

September 28, 2024

Table 04

Plant	Maximum Available Total Capacity (MW)	Plant Availability (MW)	Night peak Load (MW)	Plant Dispatch (MWh)
Wimalasurendra	50	50	20	185
Old Laxapana	54	54	31	586
Canyon	60	60	46	516
New Laxapana	100	100	100	1,694
Polpitiya	90	90	79	1,200
Broadlands	35	35	26	301
Kotmale	201	0	0	0
Victoria	210	160	144	1,921
Randenigala	120	110	111	870
Rantambe	50	25	0	280
Ukuwela	40	0	0	0
Bowatenna	40	0	0	170
Upper Kotmale	150	150	120	710
Nilambe	3	3	0	12
Samanalawewa	120	120	39	729
Kukule	75	75	79	1,835
Uma Oya	120	120	81	347
Inginiyagala	11	7	0	86
Udawalawe	6	3	0	37
Puttalam Coal I	270	0	272	6,373
Puttalam Coal II	270	270	271	6,489
Puttalam Coal III	270	270	270	6,499
KPS Small GTs	64	16	0	0
KPS GT 7	115	115	0	0
KCCP	161	150	0	0
Sapugaskanda A	68	64	64	1,126
Sapugaskanda B	72	45	27	627
Uthura Janani	26	16	16	278
Barge CEB	60	30	30	591
CEB-Hambantota	30	22	0	0
CEB-Mathugama	20	11	0	0
KCCPS -2	155	150	0	0
West Coast	270	130	141	4,860
Sobadhanavi	220	212	0	0
Total	3,606	2,452	2,147	42,100

Note-

Plant availability is the availability recorded at 6 am on

September 29, 2024

1.9 Contribution to the Night Peak in MW

September 28, 2024

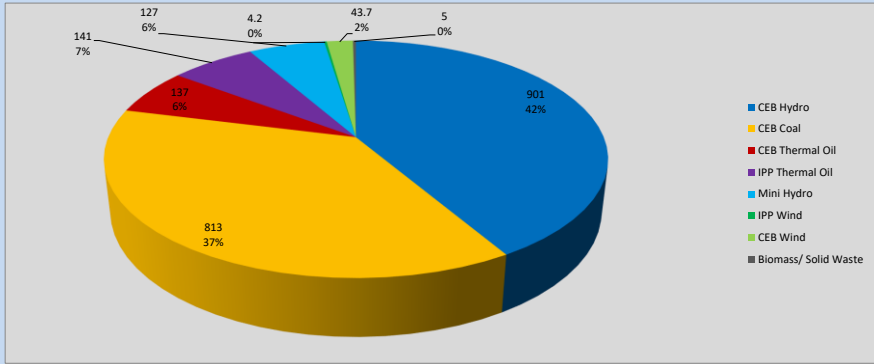


Table 05

CEB Hydro	901	MW
CEB Coal	813	MW
CEB Thermal Oil	137	MW
IPP Thermal Oil	141	MW
Mini Hydro (Telemetered)	127	MW
IPP Wind	4.2	MW
CEB Wind	43.7	MW
Biomass/ Solid Waste	5	MW

Recorded Peak Demand Data

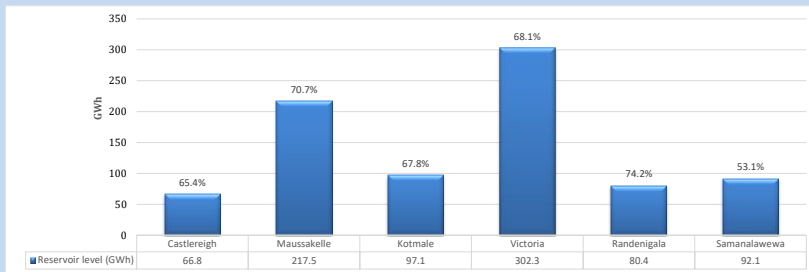
Table 06

Night Peak*	2,172	MW
Day Peak Maximum Demand	2,074	MW
Day Peak Minimum Demand	1,534	MW
Off Peak Minimum Demand	1,504	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 September 29, 2024



Total Reservoir Level 856.2 GWh
% of Total capacity 67.0%

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

September 28, 2024

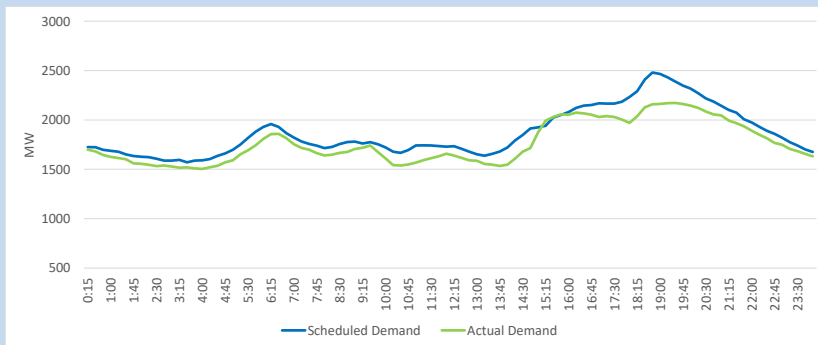
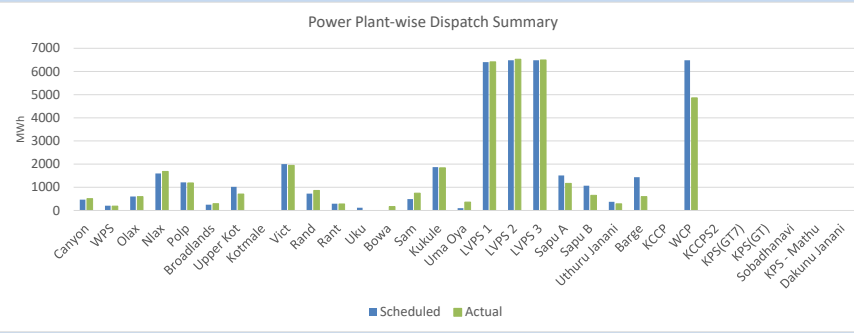


Table 07

Category	Scheduled Dispatch (MWh)	Actual Dispatch (MWh)	Deviation (MWh)
Major Hydro	10,953	11,376	423
CEB Coal	19,365	19,430	65
CEB Thermal Oil	4,392	2,702	(1,690)
IPP Thermal Oil	6,480	4,860	(1,620)
NCRE (Telemetered)	3,657	3,870	213
Total	44,847	42,238	(2,609)

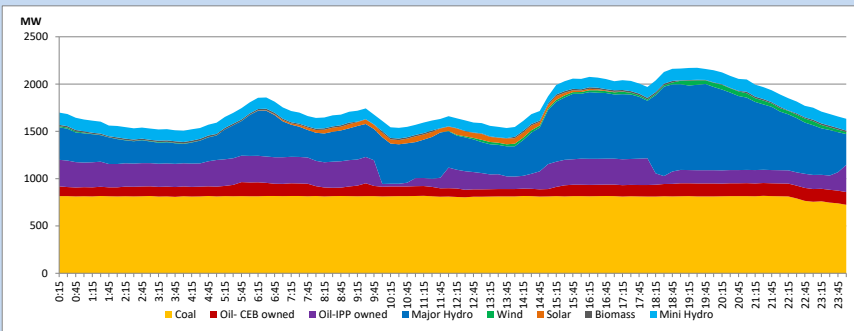
1.12 Power Plant-wise Dispatch Summary

September 28, 2024



1.13 Daily Load Curve

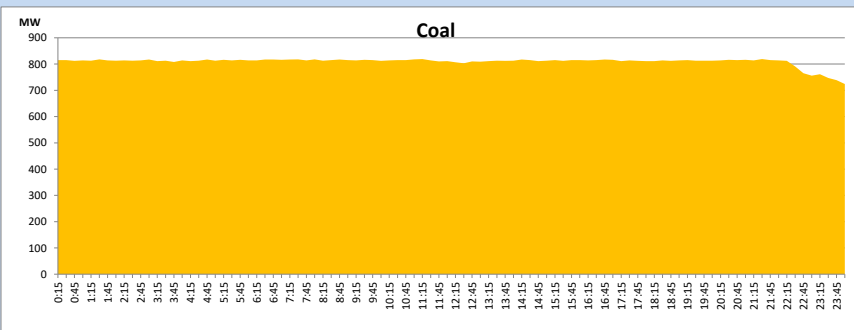
September 28, 2024



Solar and wind data is based on Telemetered Power Stations only

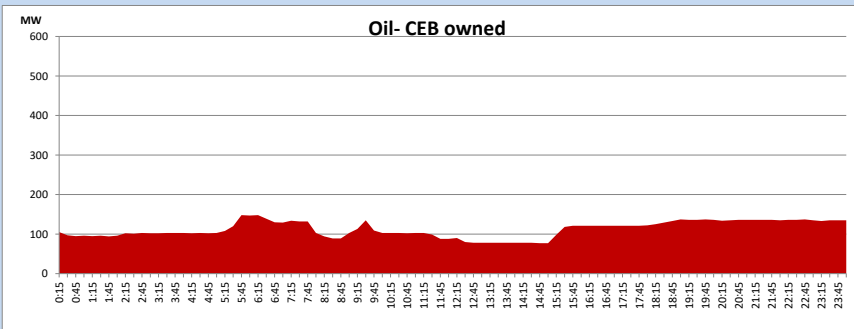
Coal Generation during

September 28, 2024

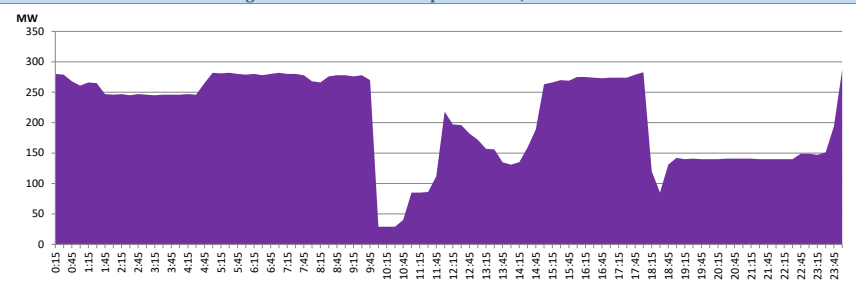


CEB Oil Plant Generation during

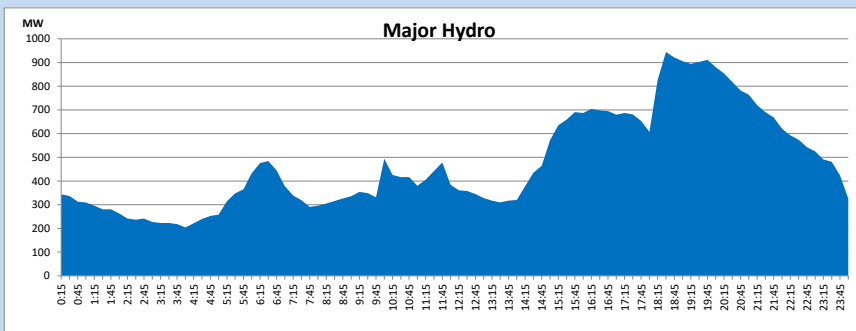
September 28, 2024



IPP Oil Plant Generation during September 28, 2024

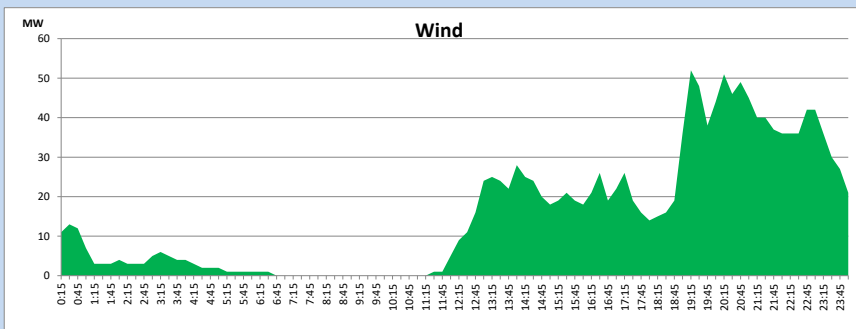


Major Hydro Generation during September 28, 2024



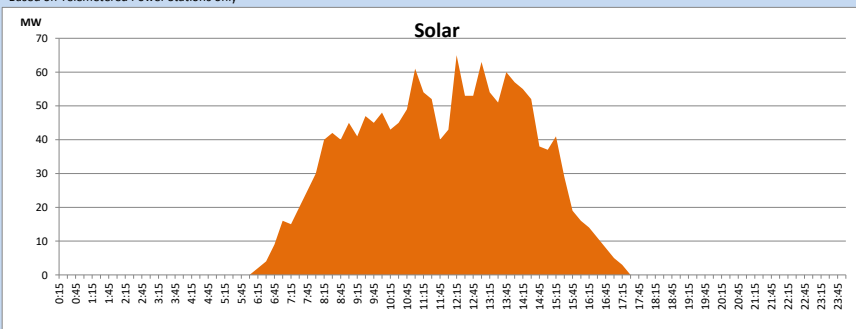
Wind Generation during September 28, 2024

Based on Telemetered Power Stations only



Solar Generation during September 28, 2024

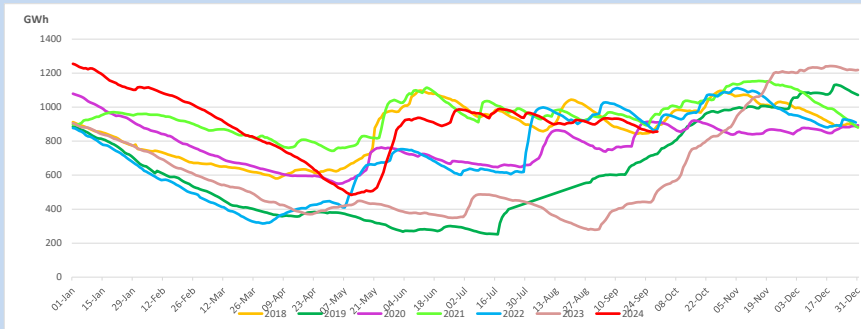
Based on Telemetered Power Stations only



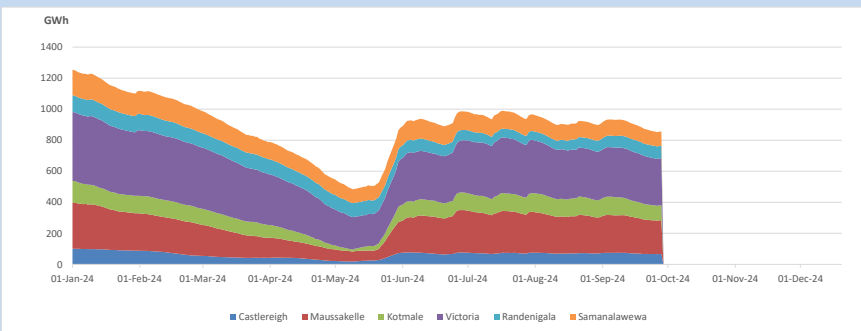
1.14 Major Incidents reported during the day September 28, 2024

- 1) LVPS Unit 01 released for type A overhaul for 100days. The unit desynchronized from the system at 04:35hrs (29.09.2024).
- 2) Sapugaskanda PS B Stage I made unavailable at 06:30hrs due to fault in hot water system. The Stage I yet to resume generation.
- 3) WCP ST tripped at 09:49hrs rejecting 90MW from the system and subsequently deloaded to 30MW. System frequency dropped to 48.5Hz and the system recovered by operating UFLS Stage II. All affected feeders were normalized by 10:00hrs. The ST resumed generation at 11:32hrs.
- 4) O'Haba - N'Anu 132kV cct. tripped from both ends at 13:48hrs causing O'Anu GSS to be dead. O'Anu GSS and the cct were normalized by 14:00hrs and 14:10hrs.
- 5) N'Laxa - Balan 132kV cct 01 & 02 A/R from all ends and the cct 01 tripped from N'Laxa end at 15:00hrs. The cct. normalized at 16:23hrs.
- 6) Kukula - Mathugama 132kV cct 02 tripped from both ends at 16:15hrs. At the same time, Kukula Unit 02 tripped by rejecting 39MW from the system. The cct normalized by 16:31hrs and the plant resumed generation at 17:33hrs.
- 7) Athurugiriya - Thulhiriya - New Polpitiya 132kV cct tripped and A/R from all ends at 17:00hrs due to the operation of distance protection.
- 8) WCP GT 02 tripped at 18:10hrs rejecting 92MW from the system. Subsequently WCP de-loaded from 190MW to 80MW. The GT resumed generation at 22:43hrs.
- 9). Kukule Ganga pond spilling continues to the present hour.

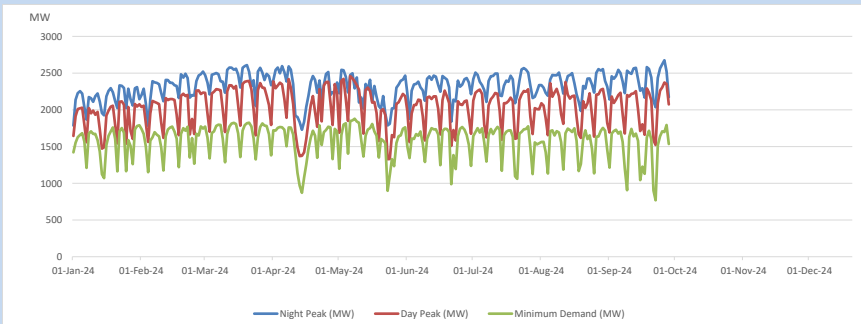
2. Comparison of Total Reservoir Storage Levels with Past Years



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

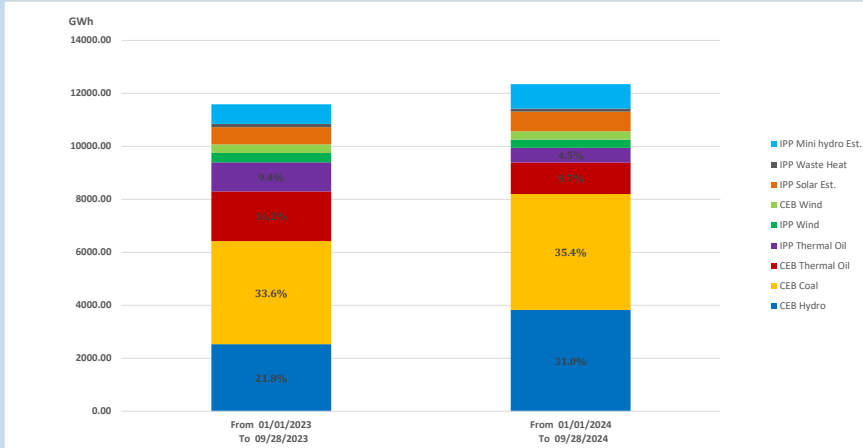


4. Variation of Demand during the current year



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 09/28/2023

11590 GWh

From 01/01/2024 To 09/28/2024

12351 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 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

6. Installed System Capacity

Table 09

	Installed Capacity (MW)
CEB Hydro	1535
CEB Coal	810
CEB Thermal Oil	771
IPP Thermal Oil (West Coast & Sobadhanavi)	490
IPP Wind	163
CEB Wind	100
Mini Hydro	422
IPP Waste heat + Biomass	54
IPP Solar	137
Rooftop Solar (Ordinary)	343
Rooftop Solar (LT Bulk)	289
Rooftop Solar (HT Bulk)	84

Data Source - Monthly Review Report - May 2024 for NCRE installed capacities