Generation and Reservoirs Statistics

September 29, 2024

PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix

September 29, 2024

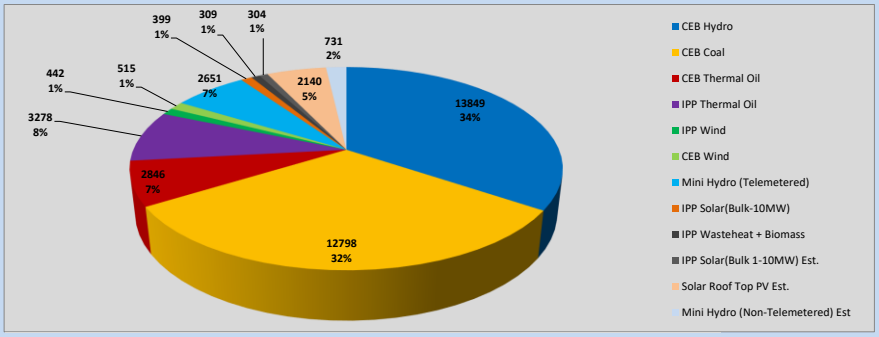


Table 01

	Generation (MWh)
CEB Hydro	13849
CEB Coal	12798
CEB Thermal Oil	2846
IPP Thermal Oil	3278
IPP Wind	442
CEB Wind	515
Mini Hydro (Telemetered)	2651
IPP Solar (Bulk)	399
IPP Waste heat + Biomass	309
Total Generation (Excluding estimated figures)	37,087
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	731
* Estimated IPP Solar PV (Bulk 1-10MW)	304
* Estimated Solar Roof Top PV	2140
Total Generation (Including estimated figures)	**40,262**

*** Estimated figures of CEB generation report**

1.1 Cumulative Dispatch - 2024

Table 02 - Current Month

Category	Dispatch (GWh)	
CEB Hydro	389	29.48%
CEB Coal	509	38.64%
CEB Thermal Oil	65	4.90%
IPP Thermal	48	3.63%
IPP Wind	62	4.72%
CEB Wind	53	4.03%
Mini Hydro *	102	7.71%
IPP Solar *	82	6.26%
IPP Waste heat + BMP	8	0.63%
Total	**1,318**	

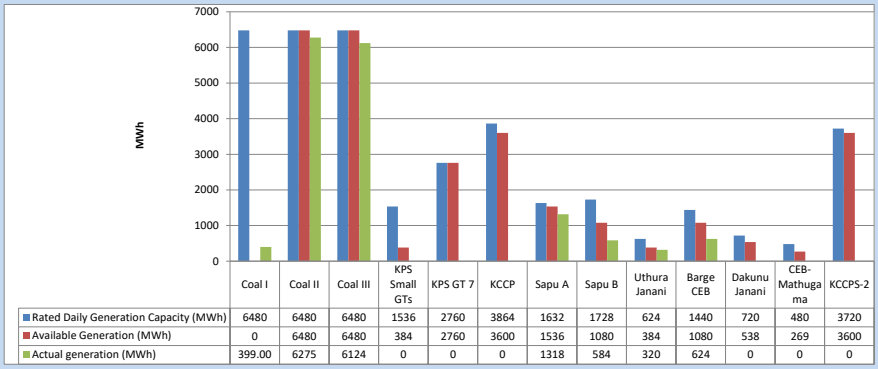
Table 03 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	3,839	30.98%
CEB Coal	4,388	35.41%
CEB Thermal Oil	1,195	9.64%
IPP Thermal	557	4.49%
IPP Wind	311	2.51%
CEB Wind	318	2.57%
Mini Hydro *	927	7.48%
IPP Solar *	743	6.00%
IPP Waste heat	114	0.92%
Total	**12,391**	

*Including estimated contribution from non telemetered plants

1.2 CEB owned Thermal Plant Dispatch

September 29, 2024

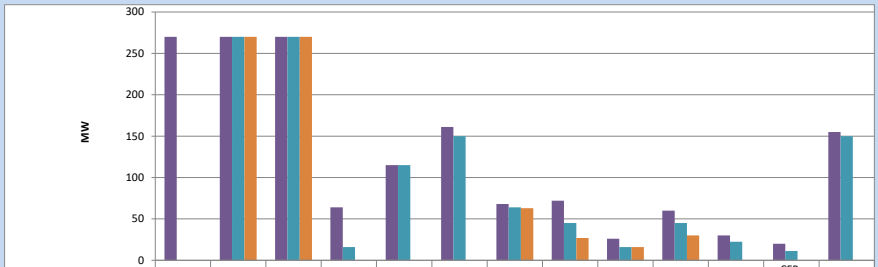


	Coal I	Coal II	Coal III	KPS Small GTs	KPS GT 7	KCCP	Sapu A	Sapu B	Uthura Janani	Barge CEB	Dakunu Janani	CEB-Mathugama	KCCPS-2
Rated Daily Generation Capacity (MWh)	6480	6480	6480	1536	2760	3864	1632	1728	624	1440	720	480	3720
Available Generation (MWh)	0	6480	6480	384	2760	3600	1536	1080	384	1080	538	269	3600
Actual generation (MWh)	399.00	6275	6124	0	0	0	1318	584	320	624	0	0	0

Available Generation is estimated based on plant availability at 6.00am on September 30, 2024

1.3 CEB owned Thermal Plant Loading at the Night Peak

September 29, 2024

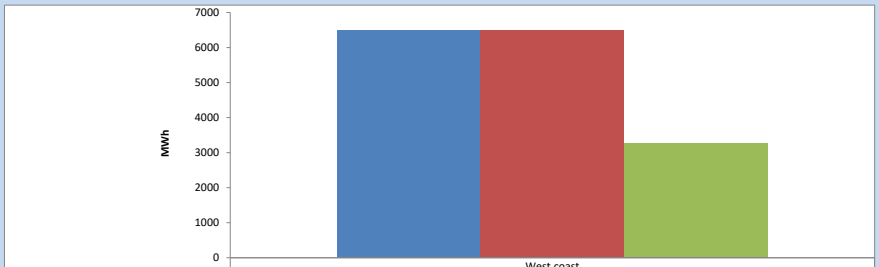


	Coal I	Coal II	Coal III	KPS Small GTs	KPS GT 7	KCCP	Sapu A	Sapu B	Uthura Janani	Barge CEB	Dakunu Janani	CEB-Mathugama	KCCPS -2
Installed Capacity (MW)	270	270	270	64	115	161	68	72	26	60	30	20	155
Available Capacity (MW)	0	270	270	16	115	150	64	45	16	45	22	11	150
Night Peak Load (MW)	0	270	270	0	0	0	63	27	16	30	0	0	0

Plant availability is recorded at 6.00 am on September 30, 2024

1.4 IPP owned Thermal Plant Dispatch

September 29, 2024



	West coast
Rated Daily Generation Capacity (MWh)	6480
Available Generation (MWh)	6480
Actual generation (MWh)	3278

Available Generation is estimated based on plant availability at 6.00am on September 30, 2024

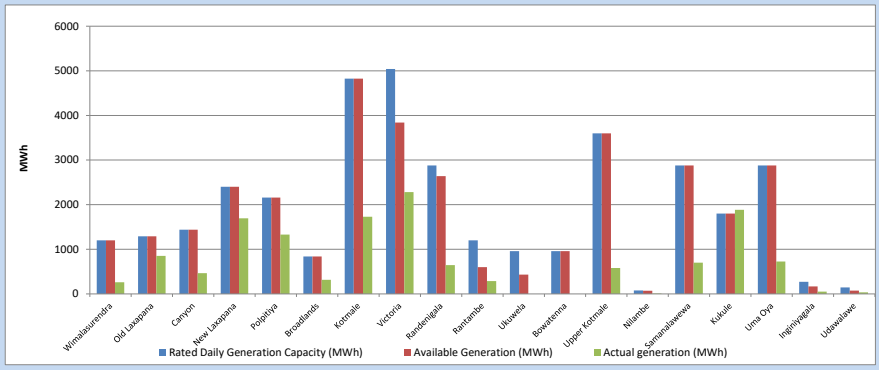
1.5 IPP owned Thermal Plant Loading at the Night Peak

	West coast
Installed capacity (MW)	270
Available capacity (MW)	270
Night peak load (MW)	140

Plant availability is recorded at 6.00 am on September 30, 2024

1.6 Major Hydro Plant Dispatch

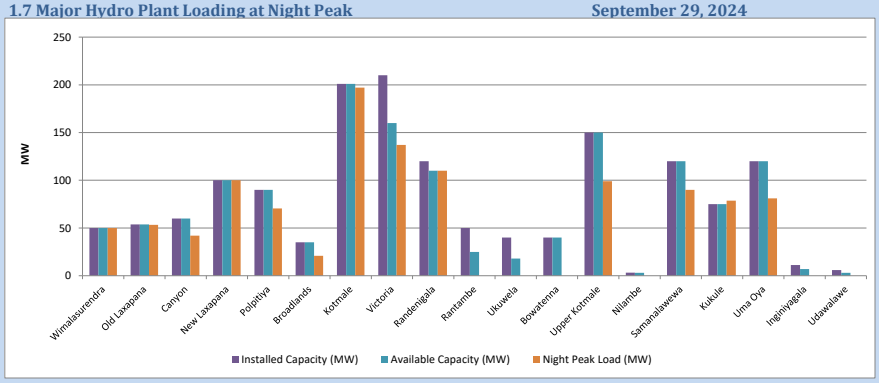
September 29, 2024



Available Generation is estimated based on plant availability at 6.00am on September 30, 2024

1.7 Major Hydro Plant Loading at Night Peak

September 29, 2024



Plant availability is recorded at 6.00 am on September 30, 2024

1.8 Summary of Major Plant performance

September 29, 2024

Table 04

Plant	Maximum Available Total Capacity	Plant Availability	Night peak Load	Plant Dispatch
	(MW)	(MW)	(MW)	(MWh)
Wimalasurendra	50	50	50	260
Old Laxapana	54	54	53	851
Canyon	60	60	42	464
New Laxapana	100	100	100	1,695
Polpitiya	90	90	71	1,330
Broadlands	35	35	21	315
Kotmale	201	201	197	1,730
Victoria	210	160	137	2,283
Randenigala	120	110	110	646
Rantambe	50	25	0	286
Ukuwela	40	18	0	0
Bowatenna	40	40	0	0
Upper Kotmale	150	150	99	581
Nilambe	3	3	0	11
Samanalawewa	120	120	90	700
Kukule	75	75	79	1,885
Uma Oya	120	120	81	726
Inginiyagala	11	7	0	51
Udawalawe	6	3	0	37
Puttalam Coal I	270	0	0	399
Puttalam Coal II	270	270	270	6,275
Puttalam Coal III	270	270	270	6,124
KPS Small GTs	64	16	0	0
KPS GT 7	115	115	0	0
KCCP	161	150	0	0
Sapugaskanda A	68	64	63	1,318
Sapugaskanda B	72	45	27	584
Uthura Janani	26	16	16	320
Barge CEB	60	45	30	624
CEB-Hambantota	30	22	0	0
CEB-Mathugama	20	11	0	0
KCCPS -2	155	150	0	0
West Coast	270	270	140	3,278
Sobadhanavi	220	212	0	0
Total	3,606	2,866	2,133	37,089

Note-
Plant availability is the availability recorded at 6 am on September 30, 2024

1.9 Contribution to the Night Peak in MW

September 29, 2024

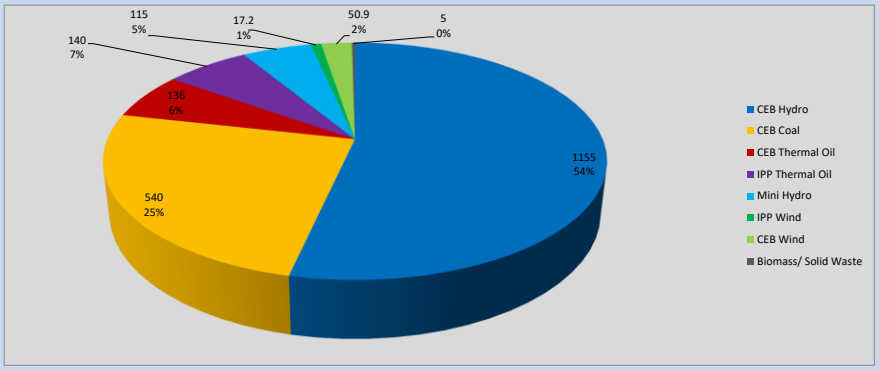


Table 05

CEB Hydro	1155	MW
CEB Coal	540	MW
CEB Thermal Oil	136	MW
IPP Thermal Oil	140	MW
Mini Hydro (Telemetered)	115	MW
IPP Wind	17.2	MW
CEB Wind	50.9	MW
Biomass/ Solid Waste	5	MW

Recorded Peak Demand Data

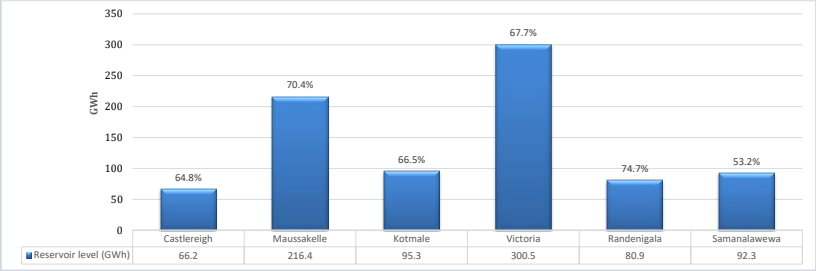
Table 06

Night Peak*	2,159	MW
Day Peak Maximum Demand	1,687	MW
Day Peak Minimum Demand	1,121	MW
Off Peak Minimum Demand	1,408	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 30, 2024



Total Reservoir Level 851.6 GWh
% of Total capacity 66.6%

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

September 29, 2024

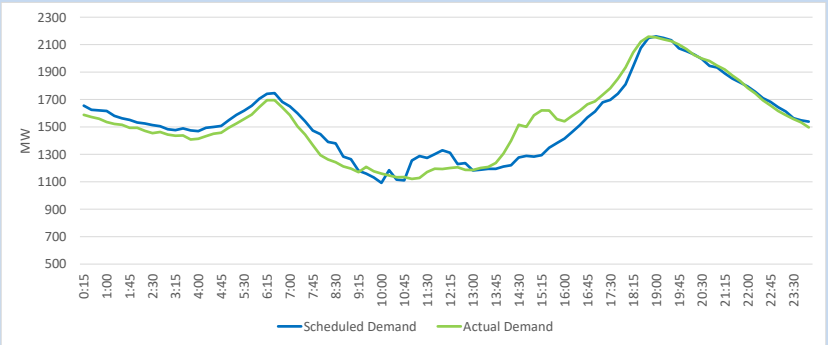
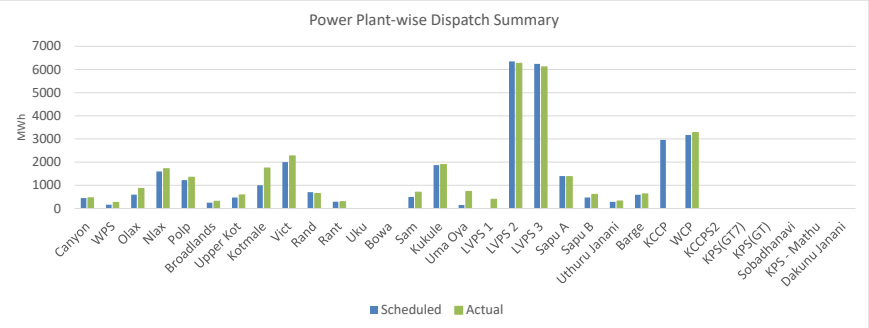


Table 07

Category	Scheduled Dispatch (MWh)	Actual Dispatch (MWh)	Deviation (MWh)
Major Hydro	11,267	13,847	2,579
CEB Coal	12,590	12,766	176
CEB Thermal Oil	5,720	2,937	(2,782)
IPP Thermal Oil	3,172	3,278	106
NCRE (Telemetered)	4,328	4,165	(164)
Total	**37,077**	**36,993**	**(84)**

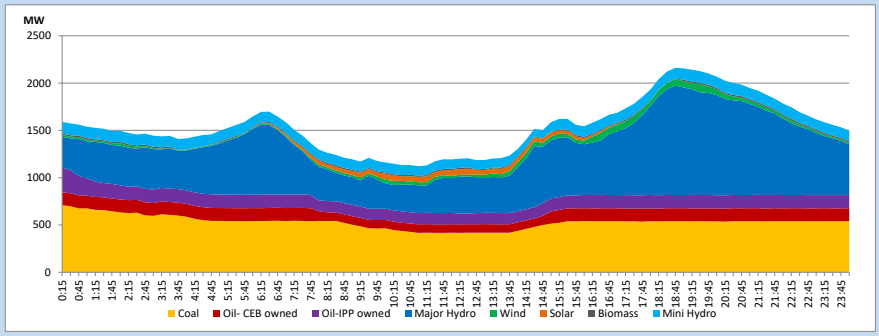
1.12 Power Plant-wise Dispatch Summary

September 29, 2024



1.13 Daily Load Curve

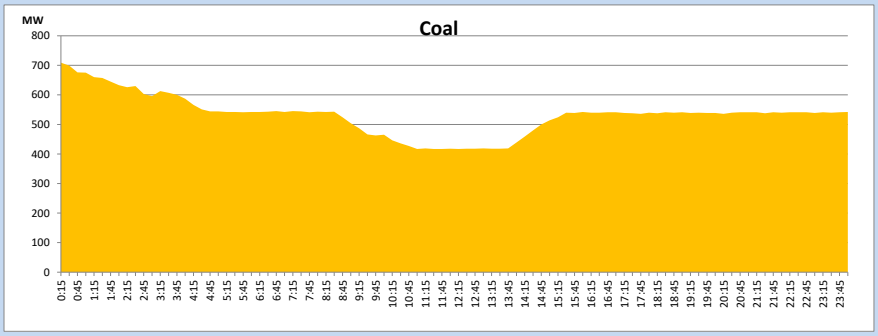
September 29, 2024



Solar and wind data is based on Telemetered Power Stations only

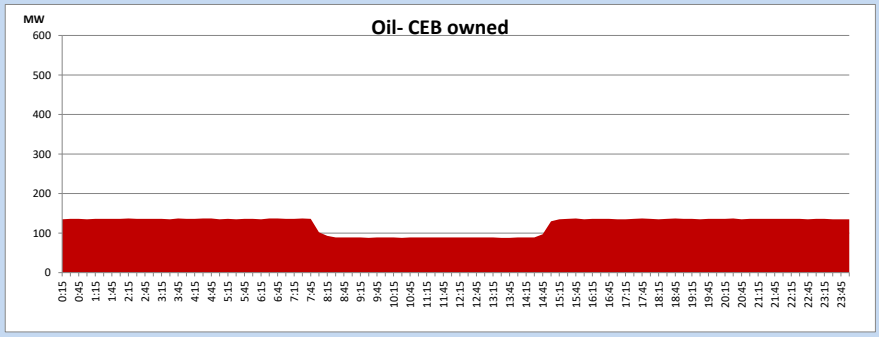
Coal Generation during

September 29, 2024

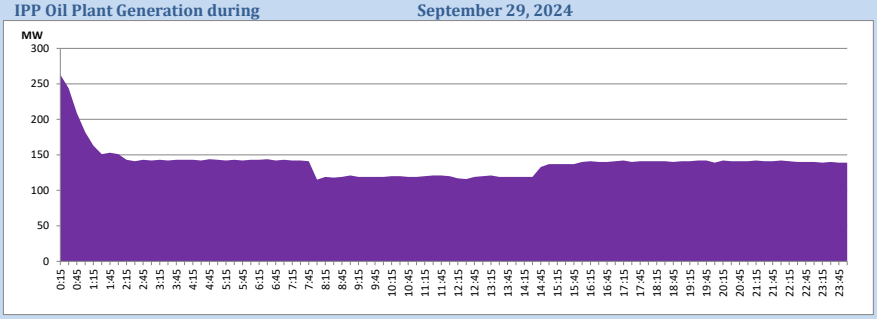


CEB Oil Plant Generation during

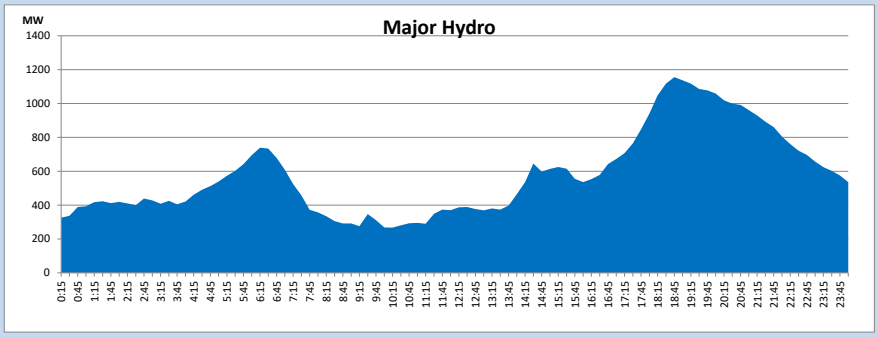
September 29, 2024



IPP Oil Plant Generation during September 29, 2024

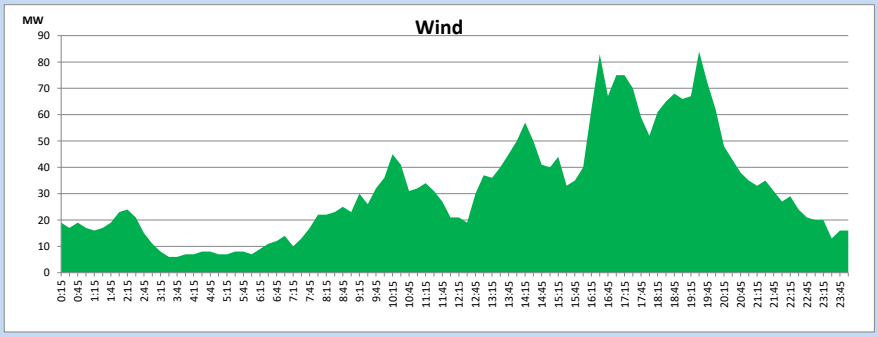


Major Hydro Generation during September 29, 2024



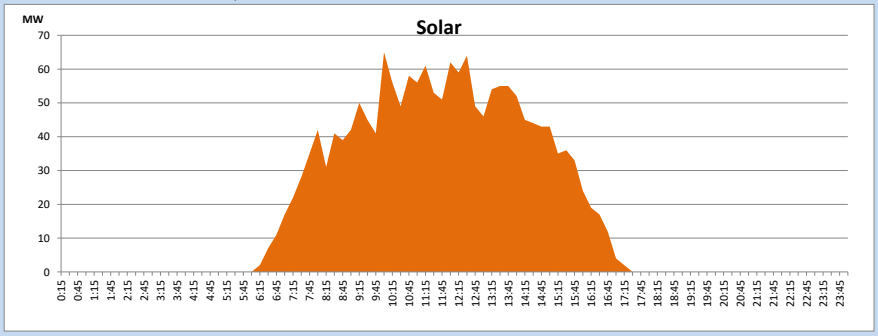
Wind Generation during September 29, 2024

Based on Telemetered Power Stations only



Solar Generation during September 29, 2024

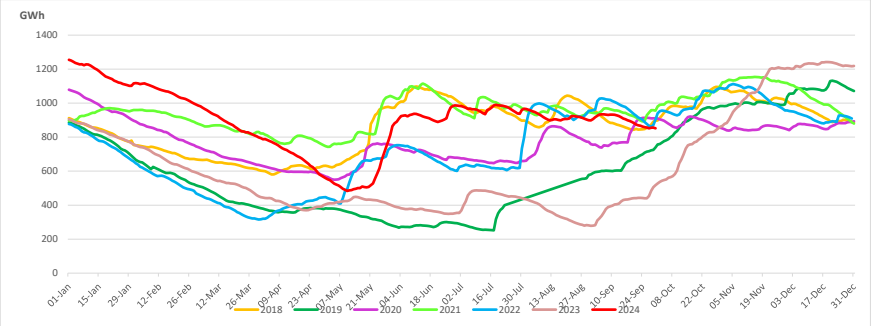
Based on Telemetered Power Stations only



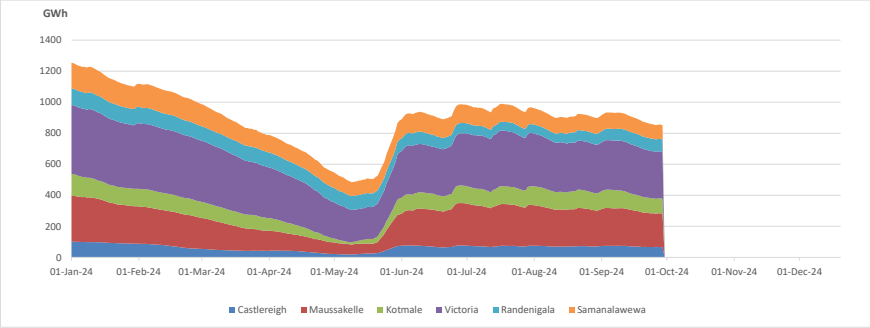
1.14 Major Incidents reported during the day September 29, 2024

1). Kukule pond spilling stopped at 10:00hrs.
2). Maliboda - Polpitiya and Broadlands - Maliboda 132kV ccts tripped & AR from both ends at 13:56hrs due to the operation of distance protection. At the same time,
Maliboda 132/33 kV T/F 01 and 02 tripped from both ends due to the operation of DOC protection, causing Maliboda GSS to be dead. Both 132/33 kV T/Fs were restored by 14:43hrs and all affected feeders were normalized by 14:54hrs.
3). Athurugiriya - Thulhiriya - Polpitiya 132 kV cct and Athurugiriya - Thulhiriya - New Polpitiya 132 kV cct tripped & AR twice from all three ends at 14:08 hrs and 14:37hrs respectively due to the operation of distance protection.
4). Broadlands - Seethawaka 132kV cct tripped from both ends and Broadlands - Maliboda 132 kV cct tripped from Broadlands end and tripped & A/R from Maliboda end at 14:22hrs due to the operation of distance protection, causing Broadlands PS to be dead. Broadlands - Maliboda 132 kV cct was restored at 14:41hrs, and Broadlands - Seethawaka 132kV cct was restored at 21:00hrs.
5). Kosgama - Polpitiya 132kV cct tripped and A/R from both ends at 14:23hrs due to the operation of distance protection.
6). Biyagama - Kotmale 220kV cct 01 & 02 tripped and A/R from both ends at 14:29hrs due to the operation of differential protection.

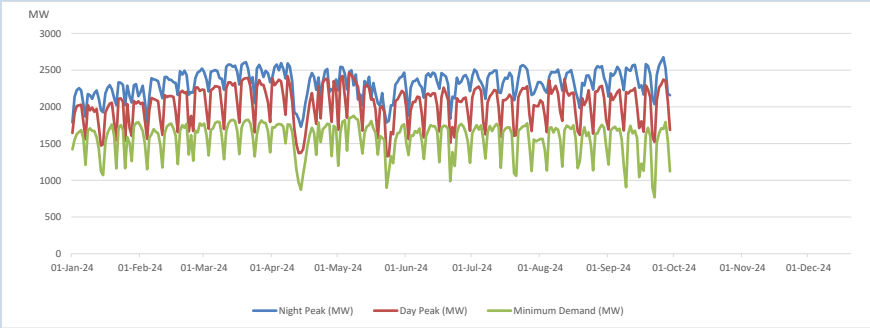
2. Comparison of Total Reservoir Storage Levels with Past Years



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

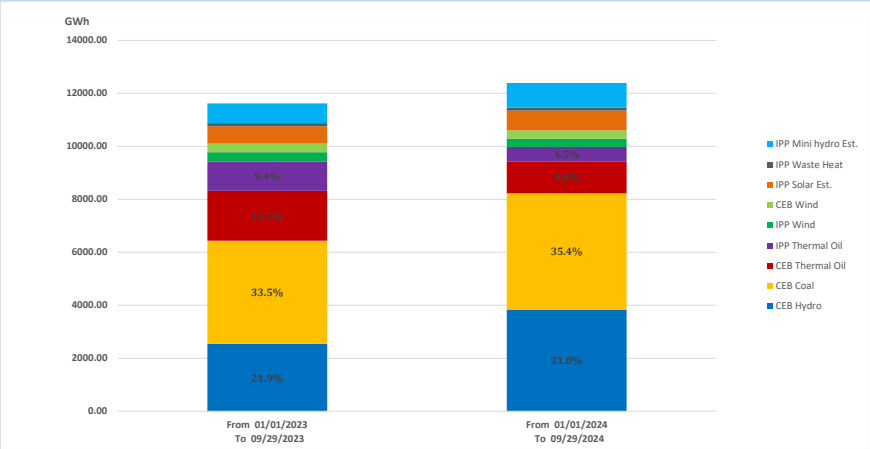


4. Variation of Demand during the current year



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 09/29/2023 **11621 GWh**

From 01/01/2024 To 09/29/2024 **12391 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

6. Installed System Capcity

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