Generation and Reservoirs Statistics

August 13, 2024

PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix

August 13, 2024

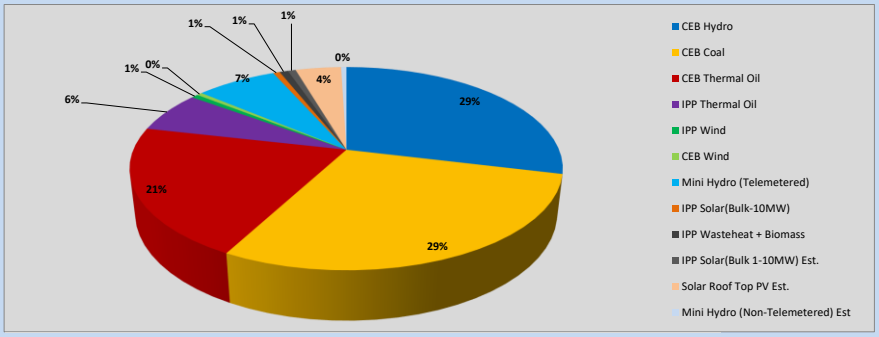


Table 01

	Generation (MWh)
CEB Hydro	13595
CEB Coal	13691
CEB Thermal Oil	9806
IPP Thermal Oil	3086
IPP Wind	288
CEB Wind	228
Mini Hydro (Telemetered)	3397
IPP Solar (Bulk)	283
IPP Waste heat + Biomass	354
Total Generation (Excluding estimated figures)	44,728
* Estimated unserved energy	0
* Estimated Mini Hydro (Non telemetered)	223
* Estimated IPP Solar PV (Bulk 1-10MW)	332
* Estimated Solar Roof Top PV	1920
Total Generation (Including estimated figures)	**47,203**

*** Estimated figures of CEB generation report**

1.1 Cumulative Dispatch - 2024

Table 02 - Current Month

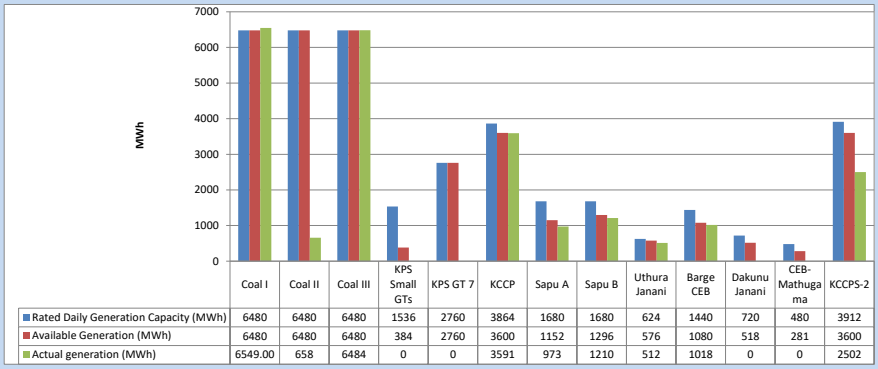
Category	Dispatch (GWh)	
CEB Hydro	214	35.58%
CEB Coal	169	28.20%
CEB Thermal Oil	88	14.66%
IPP Thermal	25	4.14%
SPP Wind	11	1.91%
CEB Wind	12	2.02%
Mini Hydro *	43	7.20%
IPP Solar *	33	5.54%
IPP Waste heat + BMP	5	0.75%
Total	**600**	

Table 03 - Current Year

Category	Dispatch (GWh)	
CEB Hydro	3,227	31.48%
CEB Coal	3,544	34.57%
CEB Thermal Oil	1,072	10.45%
IPP Thermal	501	4.88%
SPP Wind	229	2.24%
CEB Wind	227	2.21%
Mini Hydro *	730	7.12%
IPP Solar *	628	6.13%
IPP Waste heat	93	0.91%
Total	**10,252**	

*Including estimated contribution from non telemetered plants

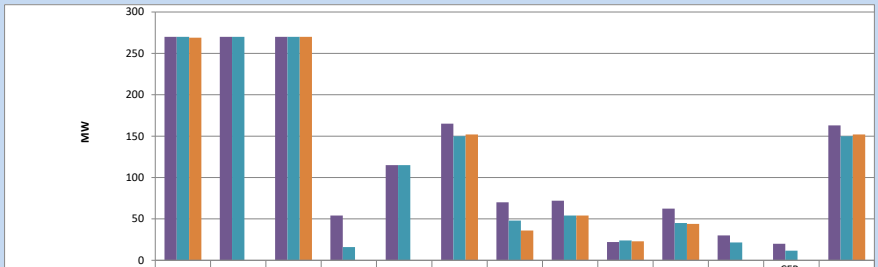
1.2 CEB owned Thermal Plant Dispatch August 13, 2024



	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	6480	6480	384	2760	3600	1152	1296	576	1080	518	281	3600
Actual generation (MWh)	6549.00	658	6484	0	0	3591	973	1210	512	1018	0	0	2502

Available Generation is estimated based on plant availability at 6.00am on August 14, 2024

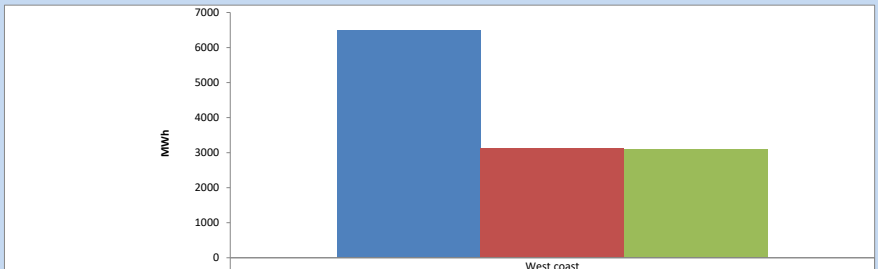
1.3 CEB owned Thermal Plant Loading at the Night Peak August 13, 2024



	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	270	270	16	115	150	48	54	24	45	22	12	150
Night Peak Load (MW)	269	0	270	0	0	152	36	54	23	44	0	0	152

Plant availability is recorded at 6.00 am on August 14, 2024

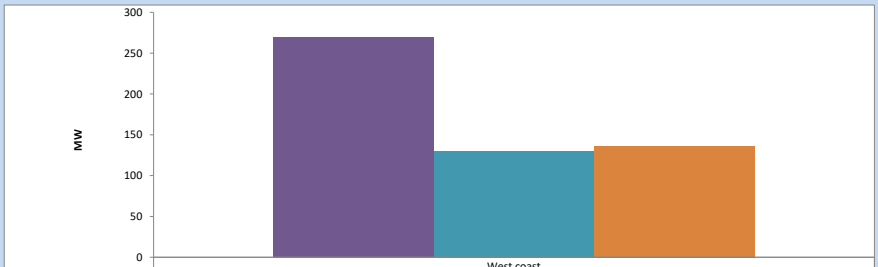
1.4 IPP owned Thermal Plant Dispatch August 13, 2024



	West coast
Rated Daily Generation Capacity (MWh)	6480
Available Generation (MWh)	3120
Actual generation (MWh)	3086

Available Generation is estimated based on plant availability at 6.00am on August 14, 2024

1.5 IPP owned Thermal Plant Loading at the Night Peak

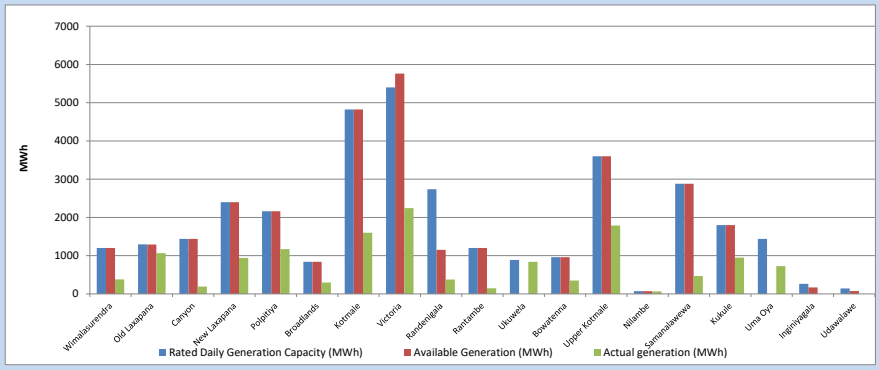


	West coast
Installed capacity (MW)	270
Available capacity (MW)	130
Night peak load (MW)	136

Plant availability is recorded at 6.00 am on August 14, 2024

1.6 Major Hydro Plant Dispatch

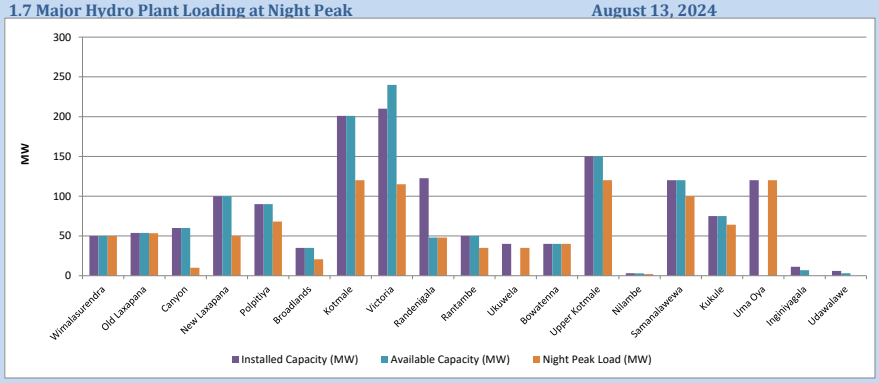
August 13, 2024



Available Generation is estimated based on plant availability at 6.00am on August 14, 2024

1.7 Major Hydro Plant Loading at Night Peak

August 13, 2024



Plant availability is recorded at 6.00 am on August 14, 2024

1.8 Summary of Major Plant performance

August 13, 2024

Table 04

Plant	Maximum Available Total Capacity	Plant Availability	Night peak Load	Plant Dispatch
	(MW)	(MW)	(MW)	(MWh)
Wimalasurendra	50	50	50	379
Old Laxapana	54	54	54	1,065
Canyon	60	60	10	192
New Laxapana	100	100	50	942
Polpitiya	90	90	68	1,170
Broadlands	35	35	21	299
Kotmale	201	201	120	1,600
Victoria	210	240	115	2,244
Randenigala	123	48	48	376
Rantambe	50	50	35	147
Ukuwela	40	0	35	838
Bowatenna	40	40	40	349
Upper Kotmale	150	150	120	1,789
Nilambe	3	3	2	63
Samanalawewa	120	120	100	468
Kukule	75	75	64	949
Uma Oya	120	0	120	725
Inginiyagala	11	7	0	0
Udawalawe	6	3	0	0
Puttalam Coal I	270	270	269	6,549
Puttalam Coal II	270	270	0	658
Puttalam Coal III	270	270	270	6,484
KPS Small GTs	54	16	0	0
KPS GT 7	115	115	0	0
KCCP	165	150	152	3,591
Sapugaskanda A	70	48	36	973
Sapugaskanda B	72	54	54	1,210
Uthura Janani	22	24	23	512
Barge CEB	62	45	44	1,018
CEB-Hambantota	30	22	0	0
CEB-Mathugama	20	12	0	0
ACE Matara	24	0	0	0
Asia Power	50	0	0	0
KCCPS -2	163	150	152	2,502
West Coast	270	130	136	3,086
Nothern Power	36	0	0	0
ACE Embilipitiya	93	0	0	0
Sobadhanavi (Testing)	220	0	0	0
Total	3,594	2,901	2,446	44,728

Note-

Plant availability is the availability recorded at 6 am on August 14, 2024

1.9 Contribution to the Night Peak in MW

August 13, 2024

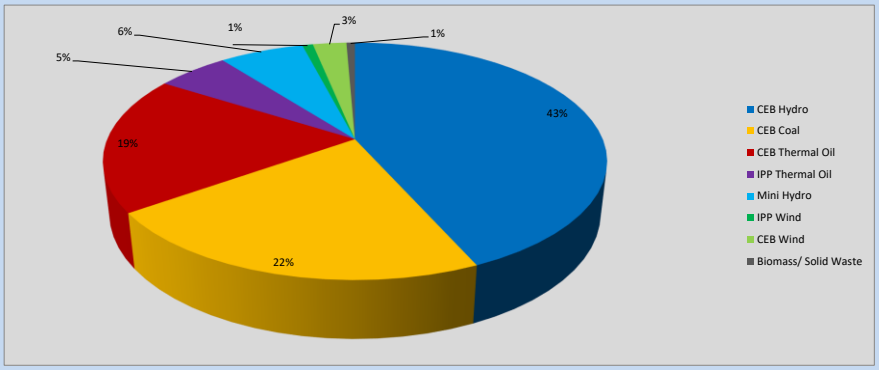


Table 05

CEB Hydro	1065	MW
CEB Coal	539	MW
CEB Thermal Oil	461	MW
IPP Thermal Oil	136	MW
Mini Hydro (Telemetered)	159	MW
IPP Wind	20.1	MW
CEB Wind	63.3	MW
Biomass/ Solid Waste	16	MW

Recorded Peak Demand Data

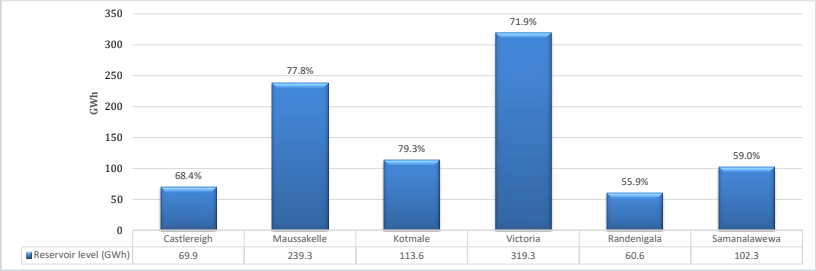
Table 06

Night Peak*	2,459	MW
Day Peak Maximum Demand	2,205	MW
Day Peak Minimum Demand	1,744	MW
Off Peak Minimum Demand	1,436	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 August 14, 2024



Total Reservoir Level 905 GWh
% of Total capacity 70.8%

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

August 13, 2024

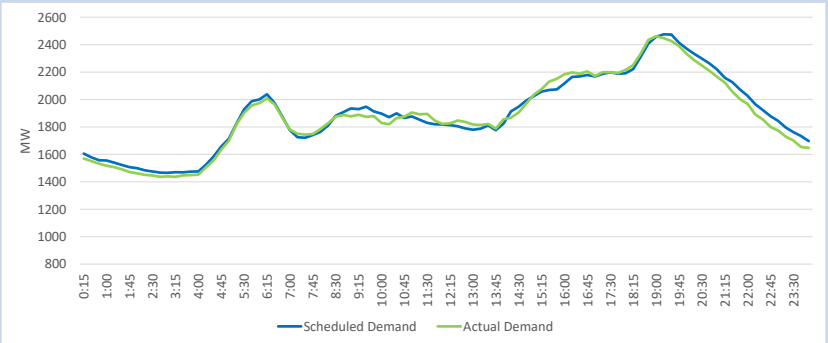
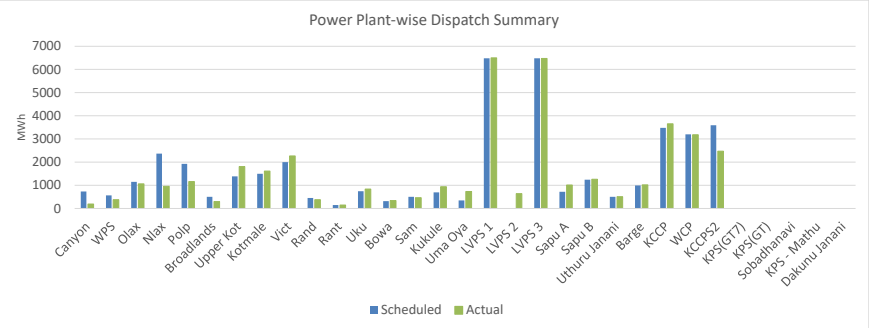


Table 07

Category	Scheduled Dispatch (MWh)	Actual Dispatch (MWh)	Deviation (MWh)
Major Hydro	15,347	13,581	-1766
CEB Coal	12,960	13,617	657
CEB Thermal Oil	10,543	9,928	-615
IPP Thermal Oil	3,201	3,184	-18
NCRE (Telemetered)	3,516	4,905	1388
Total	**45,568**	**45,214**	**-354**

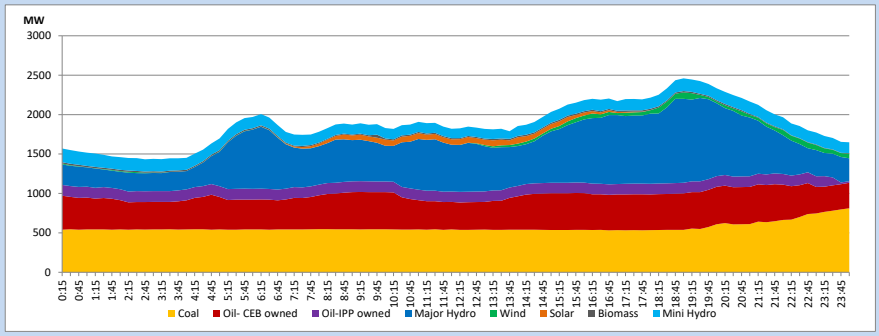
1.12 Power Plant-wise Dispatch Summary

August 13, 2024



1.13 Daily Load Curve

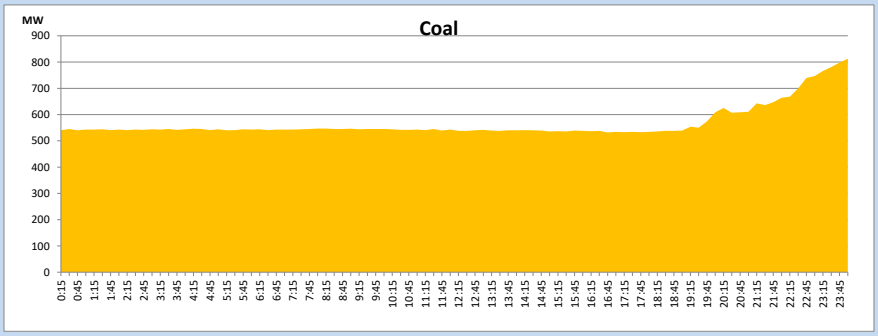
August 13, 2024



Solar and wind data is based on Telemetered Power Stations only

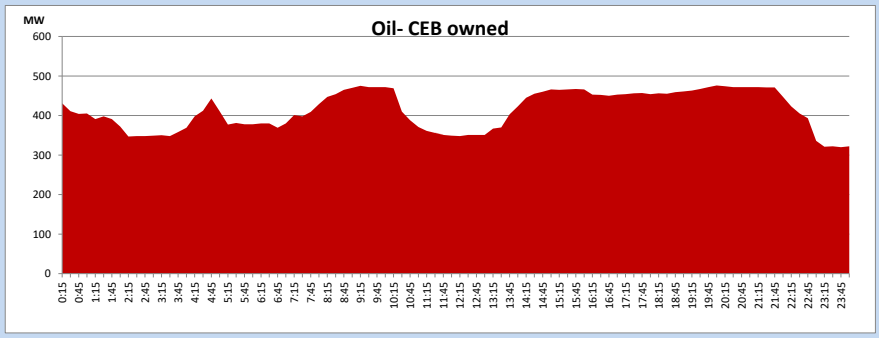
Coal Generation during

August 13, 2024

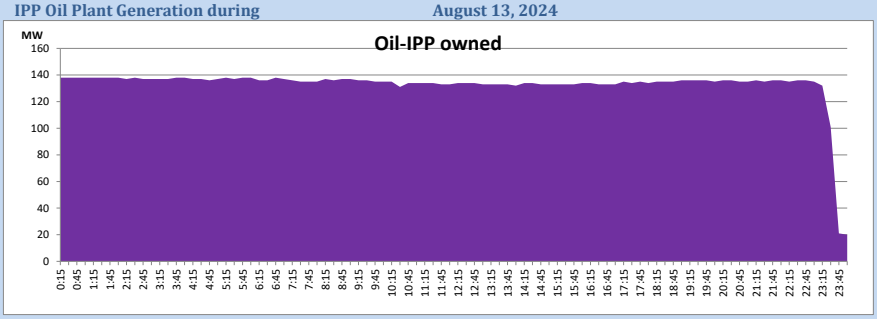


CEB Oil Plant Generation during

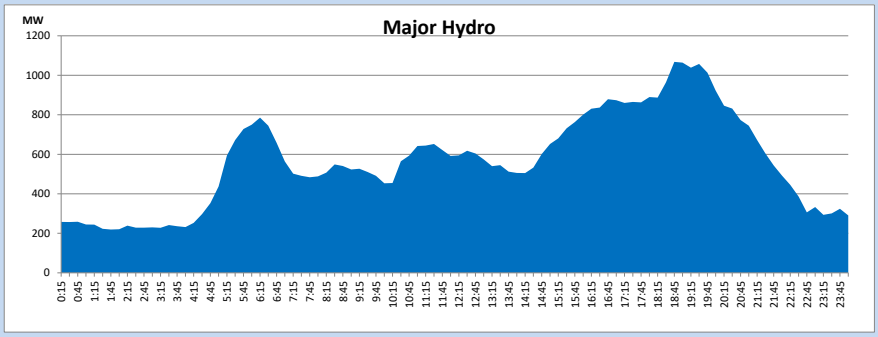
August 13, 2024



IPP Oil Plant Generation during **August 13, 2024**

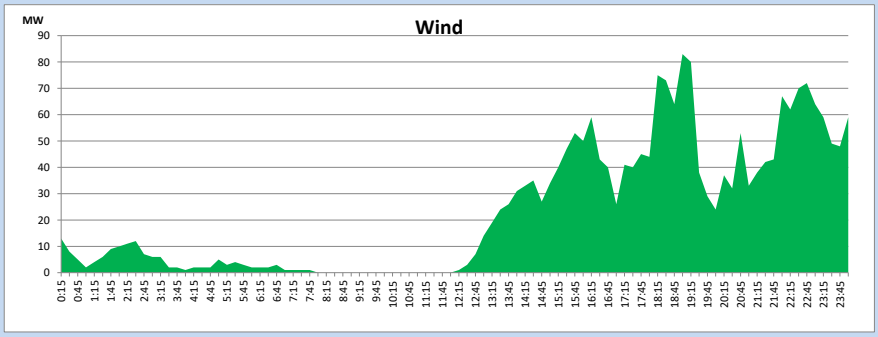


Major Hydro Generation during **August 13, 2024**



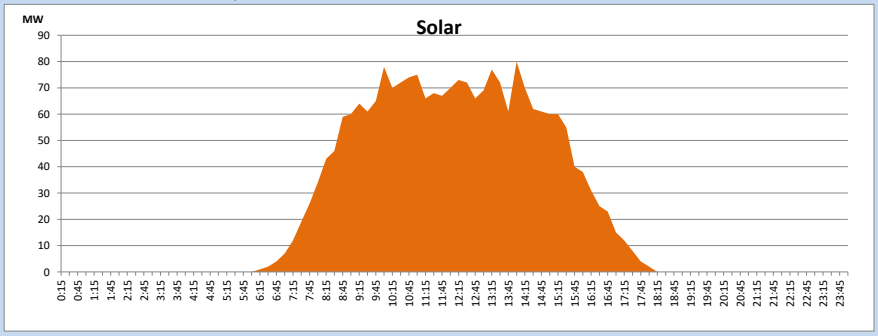
Wind Generation during **August 13, 2024**

Based on Telemetered Power Stations only



Solar Generation during **August 13, 2024**

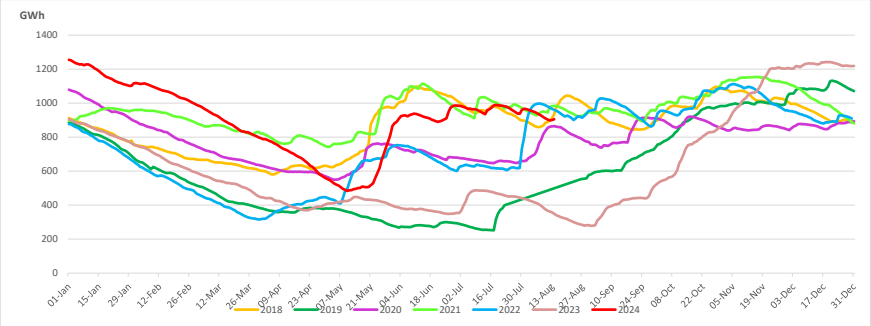
Based on Telemetered Power Stations only



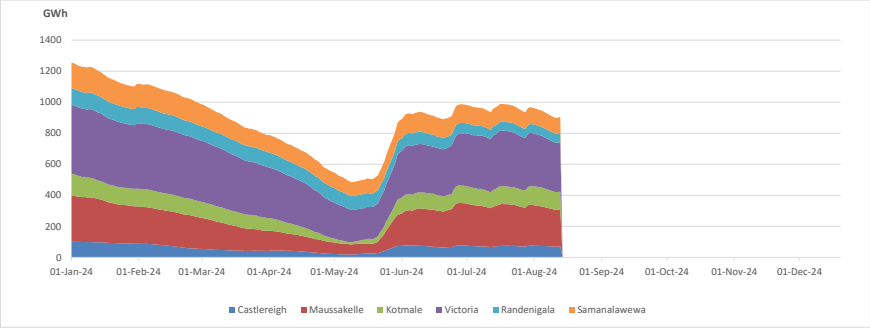
1.14 Major Incidents reported during the day **August 13, 2024**

1) N'Laxapana unit 01 and 02 tripped at 7:15hrs and 7:16hrs, respectively, rejecting 40MW each from the system, due to governor air compressor failure. N'Laxapana unit 01 resumed generation at 16:00hrs and unit 02 resumed generation at 19:46hrs.
2) KCCPS2 ST (which was tripped at 4:58hrs) resumed generation at 6:50hrs. KCCPS2 St tripped again at 10:29hrs, rejecting 50MW from the system and subsequently, KCCPS2 de-loaded to 68MW. KCCPS2 ST resumed generation at 13:31hrs.
3) Chunnakum 132/33kV T/F 03 tripped from both sides at 9:19hrs along with 33kV feeder 08 due to the operation of O/C & E/F protection. Chunnakum T/F 03 normalized at 10:11hrs.
4) LVPS unit 02 Synchronized at 19:04hrs and reached full load by 23:59hrs.
5) Ukuwela both units performed a forced shutdown at 1:42hrs (14/08/2024) due to a severe head loss at polgolla barrage. Ukuwela both units are yet to resume generation.
6) Uma Oya both units made unavailable at 2:03hrs (14/08/2024) due to the out of service of SCADA at PS. Uma Oya both units are yet to resume generation.

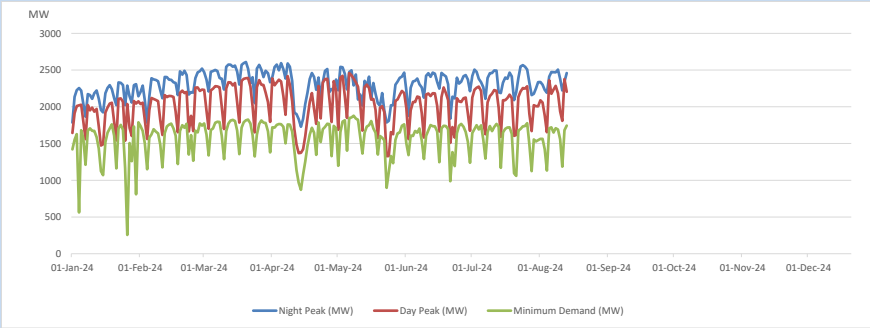
2. Comparison of Total Reservoir Storage Levels with Past Years



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

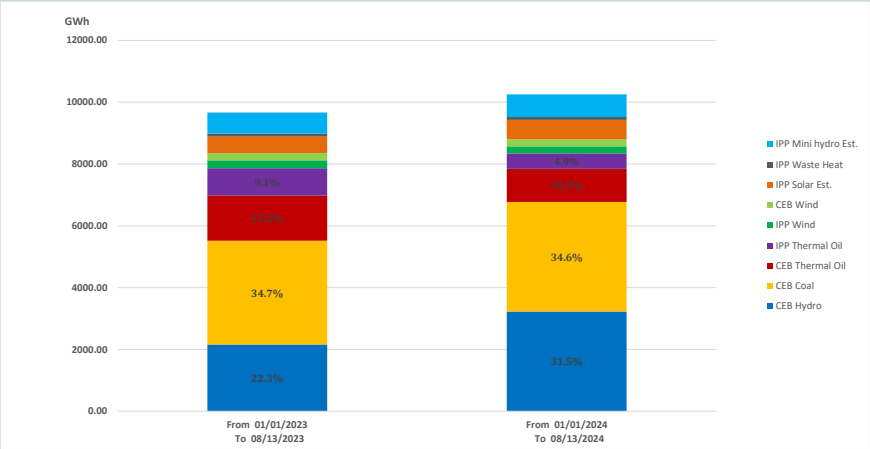


4. Variation of Demand during the current year



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 08/13/2023 **9667 GWh**

From 01/01/2024 To 08/13/2024 **10252 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	1530
CEB Coal	810
CEB Thermal Oil	786
IPP Thermal Oil (West Coast)	270
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 [Mar-2024]