

Generation and Reservoirs Statistics

August 16, 2024



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix

August 16, 2024

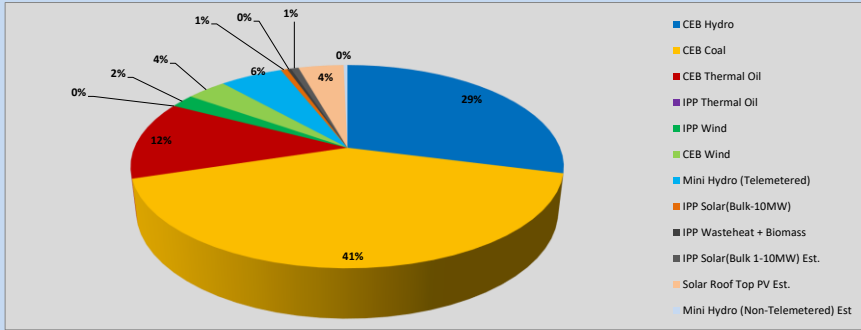


Table 01

| | Generation (MWh) |
|---|------------------|
| CEB Hydro | 13791 |
| CEB Coal | 19580 |
| CEB Thermal Oil | 5947 |
| IPP Thermal Oil | 0 |
| IPP Wind | 1019 |
| CEB Wind | 1705 |
| Mini Hydro (Telemetered) | 2667 |
| IPP Solar (Bulk) | 277 |
| IPP Waste heat + Biomass | 159 |
| Total Generation (Excluding estimated figures) | 45,145 |
| * Estimated unserved energy | 0 |
| * Estimated Mini Hydro (Non telemetered) | 161 |
| * Estimated IPP Solar PV (Bulk 1-10MW) | 328 |
| * Estimated Solar Roof Top PV | 1920 |
| Total Generation (Including estimated figures) | 47,554 |

* Estimated figures of CEB generation report

1.1 Cumulative Dispatch - 2024

Table 02 - Current Month

| Category | Dispatch (GWh) | |
|----------------------|----------------|--------|
| CEB Hydro | 251 | 33.77% |
| CEB Coal | 228 | 30.69% |
| CEB Thermal Oil | 107 | 14.46% |
| IPP Thermal | 27 | 3.57% |
| SPP Wind | 15 | 2.01% |
| CEB Wind | 17 | 2.30% |
| Mini Hydro * | 52 | 6.99% |
| IPP Solar * | 41 | 5.52% |
| IPP Waste heat + BMP | 5 | 0.69% |
| Total | 742 | |

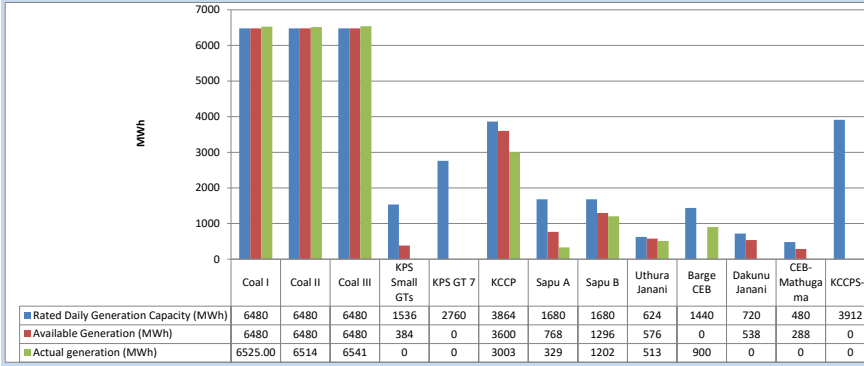
Table 03 - Current Year

| Category | Dispatch (GWh) | |
|-----------------|----------------|--------|
| CEB Hydro | 3,264 | 31.41% |
| CEB Coal | 3,603 | 34.66% |
| CEB Thermal Oil | 1,091 | 10.50% |
| IPP Thermal | 502 | 4.83% |
| SPP Wind | 233 | 2.24% |
| CEB Wind | 232 | 2.23% |
| Mini Hydro * | 739 | 7.11% |
| IPP Solar * | 636 | 6.12% |
| IPP Waste heat | 94 | 0.90% |
| Total | 10,394 | |

*Including estimated contribution from non telemetered plants

1.2 CEB owned Thermal Plant Dispatch

August 16, 2024

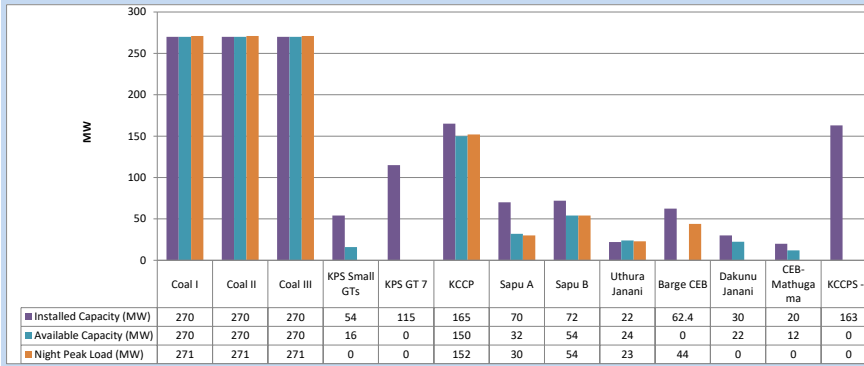


Available Generation is estimated based on plant availability at 6.00am on

August 17, 2024

1.3 CEB owned Thermal Plant Loading at the Night Peak

August 16, 2024

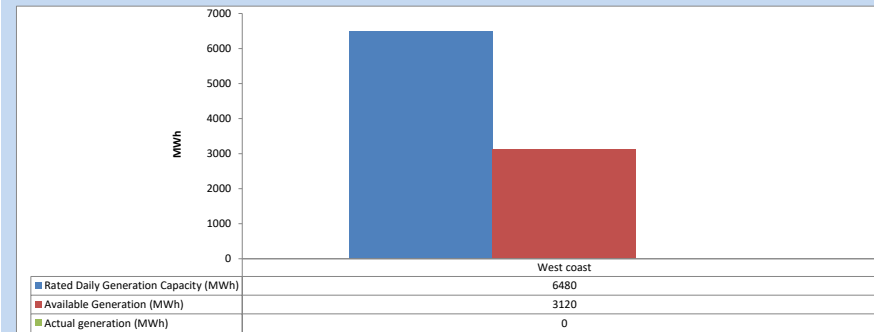


Plant availability is recorded at 6.00 am on

August 17, 2024

1.4 IPP owned Thermal Plant Dispatch

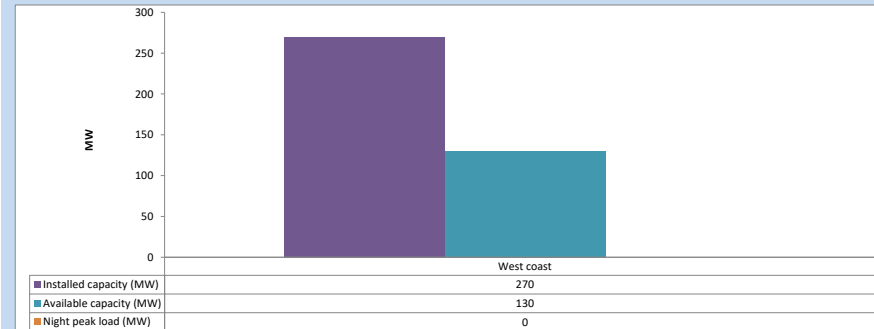
August 16, 2024



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

August 17, 2024

1.5 IPP owned Thermal Plant Loading at the Night Peak

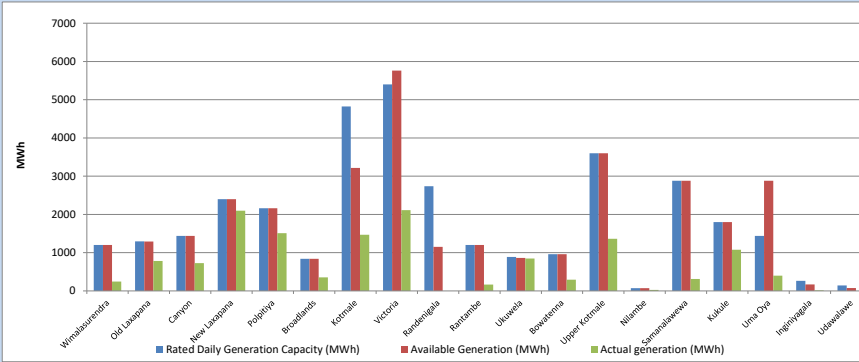


Plant availability is recorded at 6.00 am on

August 17, 2024

1.6 Major Hydro Plant Dispatch

August 16, 2024

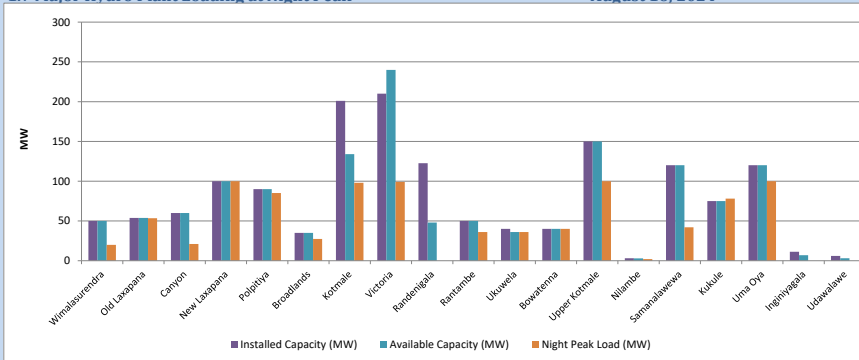


Available Generation is estimated based on plant availability at 6.00am on

August 17, 2024

1.7 Major Hydro Plant Loading at Night Peak

August 16, 2024



Plant availability is recorded at 6.00 am on

August 17, 2024

1.8 Summary of Major Plant performance

August 16, 2024

Table 04

| Plant | Maximum Available Total Capacity (MW) | Plant Availability (MW) | Night peak Load (MW) | Plant Dispatch (MWh) |
|-----------------------|---------------------------------------|-------------------------|----------------------|----------------------|
| Wimalasurendra | 50 | 50 | 20 | 246 |
| Old Laxapana | 54 | 54 | 53 | 783 |
| Canyon | 60 | 60 | 21 | 725 |
| New Laxapana | 100 | 100 | 100 | 2,098 |
| Polpitiya | 90 | 90 | 85 | 1,510 |
| Broadlands | 35 | 35 | 27 | 353 |
| Kotmale | 201 | 134 | 98 | 1,470 |
| Victoria | 210 | 240 | 99 | 2,111 |
| Randenigala | 123 | 48 | 0 | 0 |
| Rantambe | 50 | 50 | 36 | 164 |
| Ukuwela | 40 | 36 | 36 | 846 |
| Bowatenna | 40 | 40 | 40 | 292 |
| Upper Kotmale | 150 | 150 | 100 | 1,363 |
| Nilambe | 3 | 3 | 2 | 28 |
| Samanalawewa | 120 | 120 | 42 | 314 |
| Kukule | 75 | 75 | 78 | 1,076 |
| Uma Oya | 120 | 120 | 100 | 398 |
| Inginiyagala | 11 | 7 | 0 | 15 |
| Udawalawe | 6 | 3 | 0 | 0 |
| Puttalam Coal I | 270 | 270 | 271 | 6,525 |
| Puttalam Coal II | 270 | 270 | 271 | 6,514 |
| Puttalam Coal III | 270 | 270 | 271 | 6,541 |
| KPS Small GTs | 54 | 16 | 0 | 0 |
| KPS GT 7 | 115 | 0 | 0 | 0 |
| KCCP | 165 | 150 | 152 | 3,003 |
| Sapugaskanda A | 70 | 32 | 30 | 329 |
| Sapugaskanda B | 72 | 54 | 54 | 1,202 |
| Uthura Janani | 22 | 24 | 23 | 513 |
| Barge CEB | 62 | 0 | 44 | 900 |
| 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 | 0 | 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 | 2,665 | 2,353 | 45,146 |

Note-

Plant availability is the availability recorded at 6 am on

August 17, 2024

1.9 Contribution to the Night Peak in MW

August 16, 2024

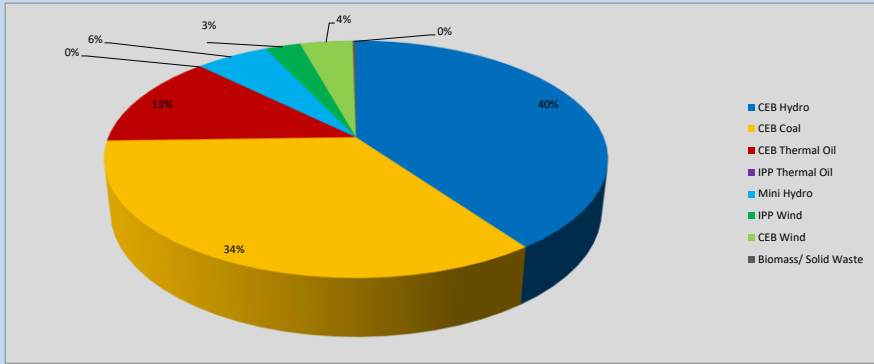


Table 05

| | | |
|--------------------------|------|----|
| CEB Hydro | 948 | MW |
| CEB Coal | 813 | MW |
| CEB Thermal Oil | 303 | MW |
| IPP Thermal Oil | 0 | MW |
| Mini Hydro (Telemetered) | 133 | MW |
| IPP Wind | 64.5 | MW |
| CEB Wind | 95.6 | MW |
| Biomass/ Solid Waste | 6 | MW |

Recorded Peak Demand Data

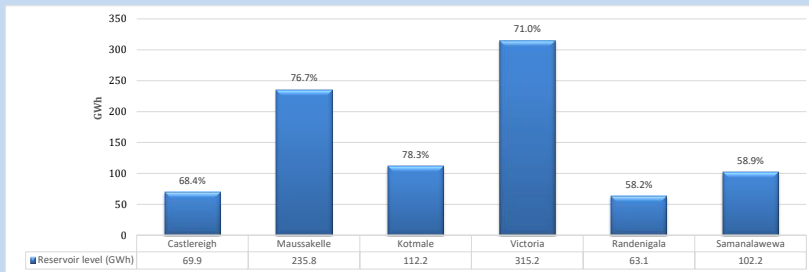
Table 06

| | | |
|-------------------------|-------|----|
| Night Peak* | 2,363 | MW |
| Day Peak Maximum Demand | 2,193 | MW |
| Day Peak Minimum Demand | 1,748 | MW |
| Off Peak Minimum Demand | 1,513 | 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 17, 2024



Total Reservoir Level
% of Total capacity

898.4 GWh
70.3%

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

August 16, 2024

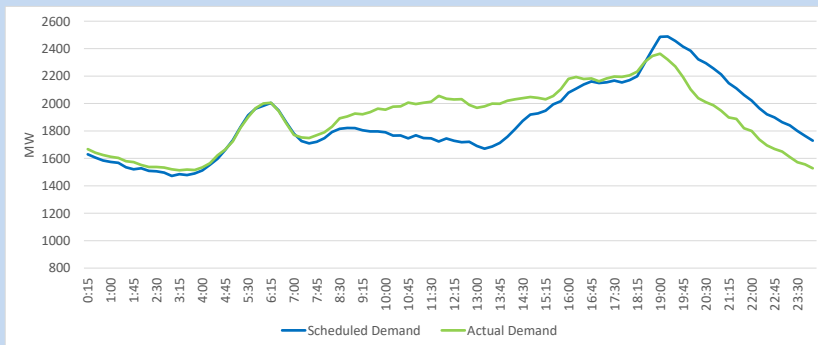
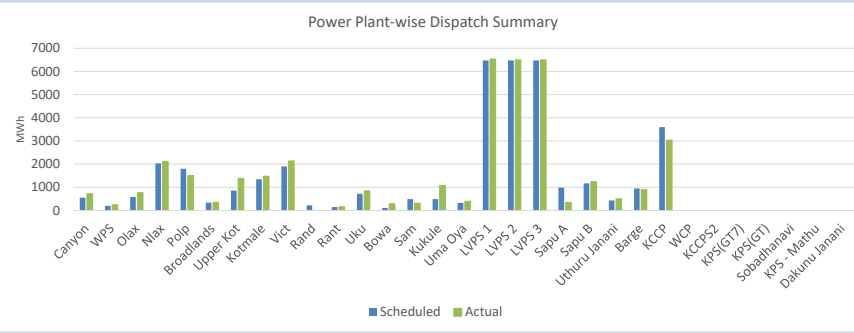


Table 07

| Category | Scheduled Dispatch (MWh) | Actual Dispatch (MWh) | Deviation (MWh) |
|--------------------|--------------------------|-----------------------|-----------------|
| Major Hydro | 12,123 | 13,796 | 1,672 |
| CEB Coal | 19,422 | 19,536 | 113 |
| CEB Thermal Oil | 7,138 | 6,029 | (1,109) |
| IPP Thermal Oil | - | - | - |
| NCRE (Telemetered) | 6,178 | 6,124 | (54) |
| Total | 44,861 | 45,484 | 622 |

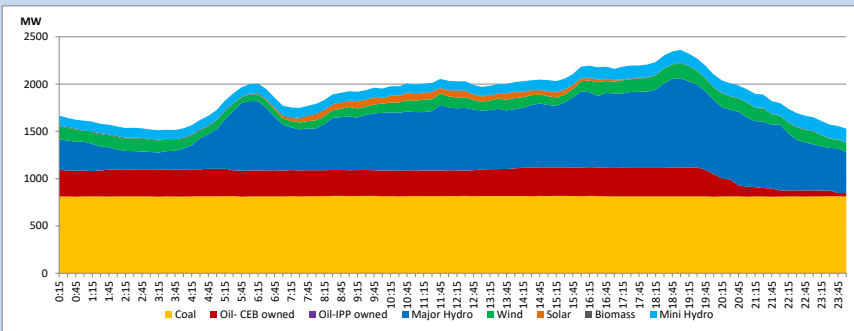
1.12 Power Plant-wise Dispatch Summary

August 16, 2024



1.13 Daily Load Curve

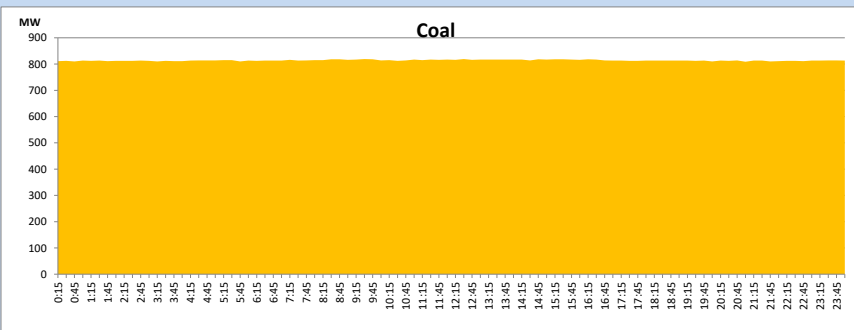
August 16, 2024



Solar and wind data is based on Telemetered Power Stations only

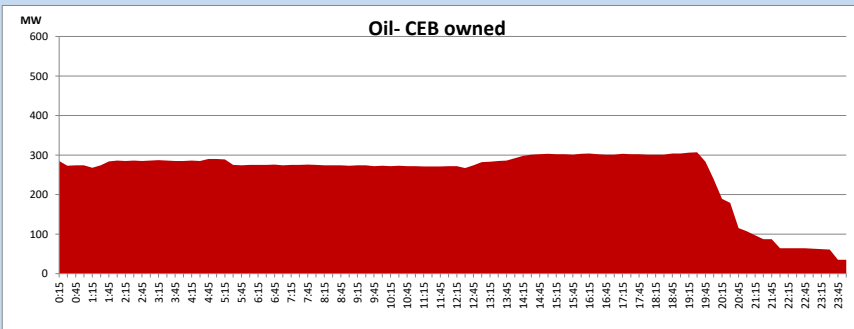
Coal Generation during

August 16, 2024

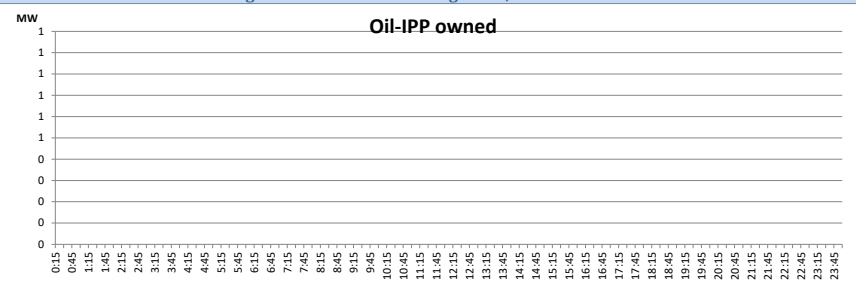


CEB Oil Plant Generation during

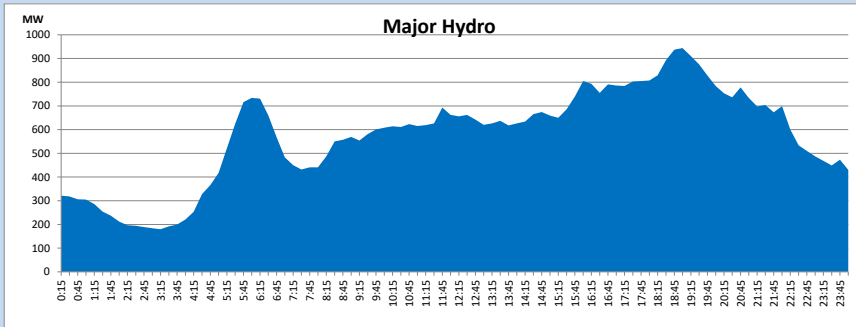
August 16, 2024



IPP Oil Plant Generation during August 16, 2024

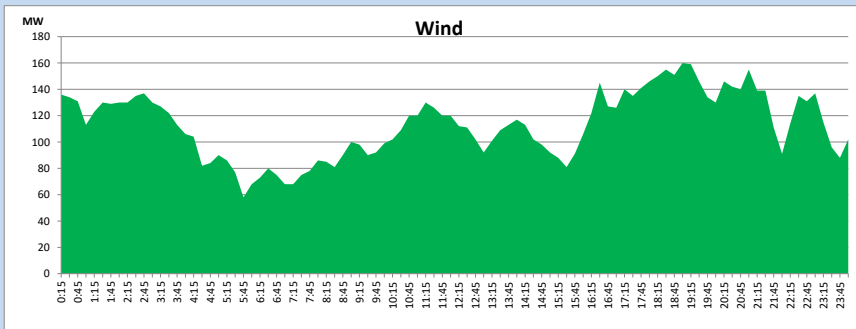


Major Hydro Generation during August 16, 2024



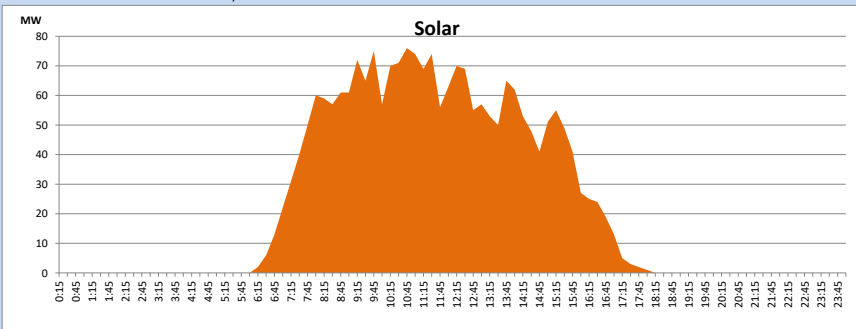
Wind Generation during August 16, 2024

Based on Telemetered Power Stations only



Solar Generation during August 16, 2024

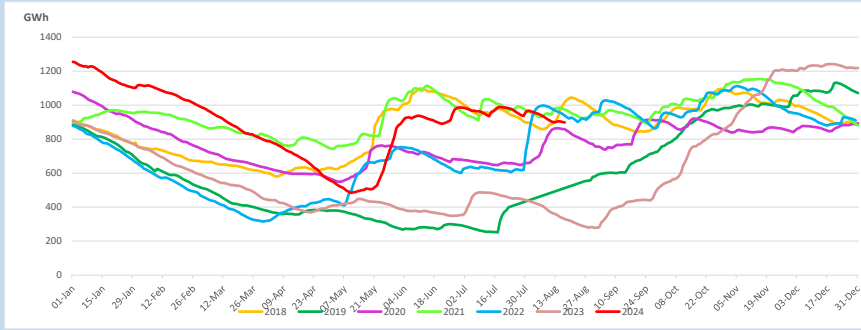
Based on Telemetered Power Stations only



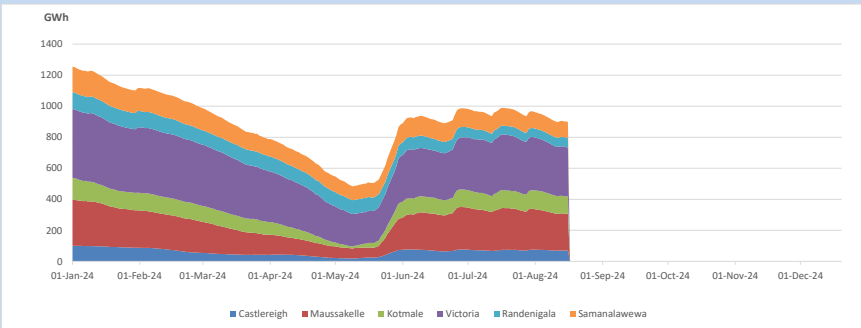
1.14 Major Incidents reported during the day August 16, 2024

- 1) Ukuwela 132/33kV T/F 02 tripped from both sides at 07:40hrs due to LV restricted ground fault. T/F 02 is yet to be normalized.
- 2) Ukuwela 132/33kV T/F 03, which was tripped on 22.05.2024, normalized at 16:39hrs.
- 3) Power Barge Unit 03 tripped at 20:28hrs due to main bearing module failure. Consequently, Units 01 and 04 performed a forced shut down at 20:44hrs and 20:47hrs, respectively. Power Barge unit 01, 03 and 04 are yet to resume generation.
- 4) Kukule Ganga pond spilling started at 01:18hrs (17.08.2024) and continues to the present hour.

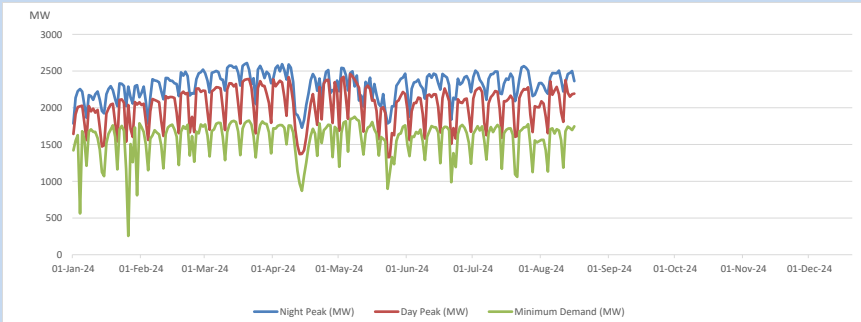
2. Comparison of Total Reservoir Storage Levels with Past Years



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

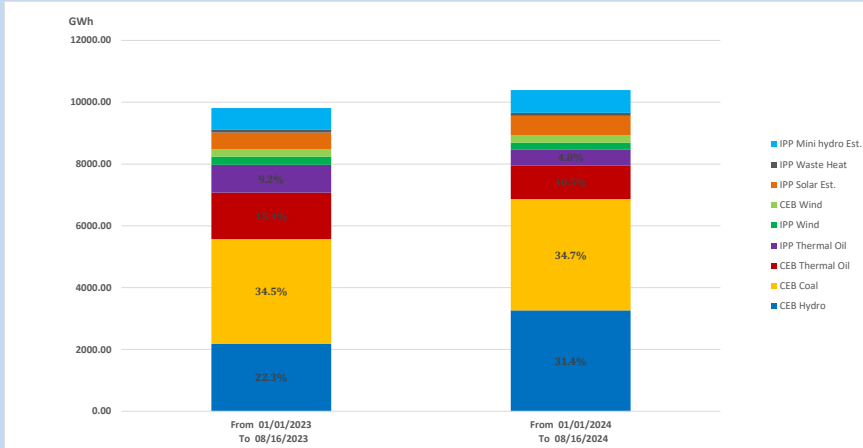


4. Variation of Demand during the current year



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 08/16/2023

9811 GWh

From 01/01/2024 To 08/16/2024

10394 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 | 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]