

Generation and Reservoirs Statistics

October 11, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

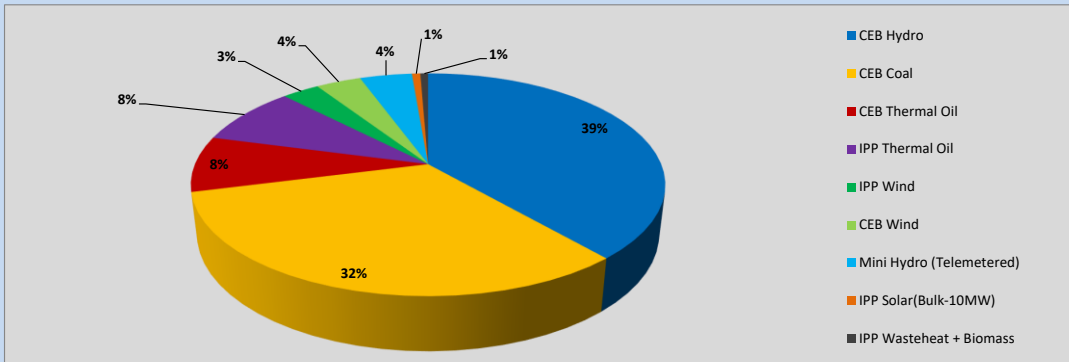


Table 01

| | Generation (MWh) |
|---|------------------|
| CEB Hydro | 14,780 |
| CEB Coal | 12,433 |
| CEB Thermal Oil | 3,103 |
| IPP Thermal Oil | 3,281 |
| IPP Wind | 1,167 |
| CEB Wind | 1,411 |
| Mini Hydro (Telemetered) | 1,630 |
| IPP Solar (Bulk) | 264 |
| IPP Waste heat + Biomass | 242 |
| Total Generation (Excluding estimated figures) | 38,311 |
| * Estimated unserved energy | 0 |
| * Estimated Mini Hydro (Non telemetered) | 3230 |
| * Estimated IPP Solar PV (Bulk 1-10MW) | 304 |
| * Estimated Solar Roof Top PV | 1930 |
| Total Generation (Including estimated figures) | 43,775 |

* Estimated figures of CEB generation report

Table 02

| | Installed Capacity (MW) |
|---|-------------------------|
| CEB Hydro | 1409 |
| CEB Coal | 810 |
| CEB Thermal Oil | 781 |
| IPP Thermal Oil (West Coast, ACE Matara and ACE Embilipitiya) | 387 |
| IPP Wind | 148 |
| CEB Wind | 100 |
| Mini Hydro | 416 |
| IPP Waste heat + Biomass | 50 |
| IPP Solar | 130 |
| Rooftop Solar* (Ordinary) | 267 |
| Rooftop Solar* (LT Bulk) | 256 |
| Rooftop Solar* (HT Bulk) | 61 |

Data Source - Monthly Review Report [May-2023]

2. Cumulative Dispatch

Following data excludes the contribution from roof top solar, non telemetered solar and mini hydro plants

Table 03 - Current Month

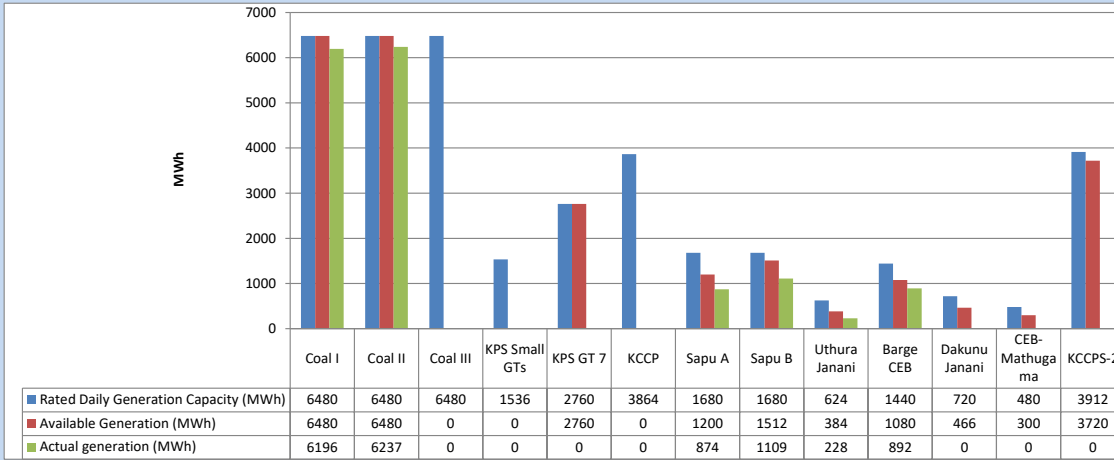
| Category | Dispatch (GWh) | |
|--------------------------|----------------|--------|
| CEB Hydro | 147 | 36.86% |
| CEB Coal | 133 | 33.42% |
| CEB Thermal Oil | 47 | 11.81% |
| IPP Thermal | 11 | 2.78% |
| SPP Wind | 17 | 4.14% |
| CEB Wind | 18 | 4.55% |
| Mini Hydro (Telemetered) | 20 | 5.03% |
| IPP Solar(Bulk-10MW) | 3 | 0.68% |
| IPP Waste heat + BMP | 3 | 0.74% |
| Total | 399 | |

Table 04 - Current Year

| Category | Dispatch (GWh) | |
|--------------------------|----------------|--------|
| CEB Hydro | 2,713 | 24.74% |
| CEB Coal | 4,053 | 36.97% |
| CEB Thermal Oil | 1,941 | 17.70% |
| IPP Thermal | 1,106 | 10.09% |
| SPP Wind | 342 | 3.12% |
| CEB Wind | 350 | 3.19% |
| Mini Hydro (Telemetered) | 272 | 2.48% |
| IPP Solar(Bulk-10MW) | 85 | 0.78% |
| IPP Waste heat | 102 | 0.93% |
| Total | 10,963 | |

3. CEB owned Thermal Plant Dispatch

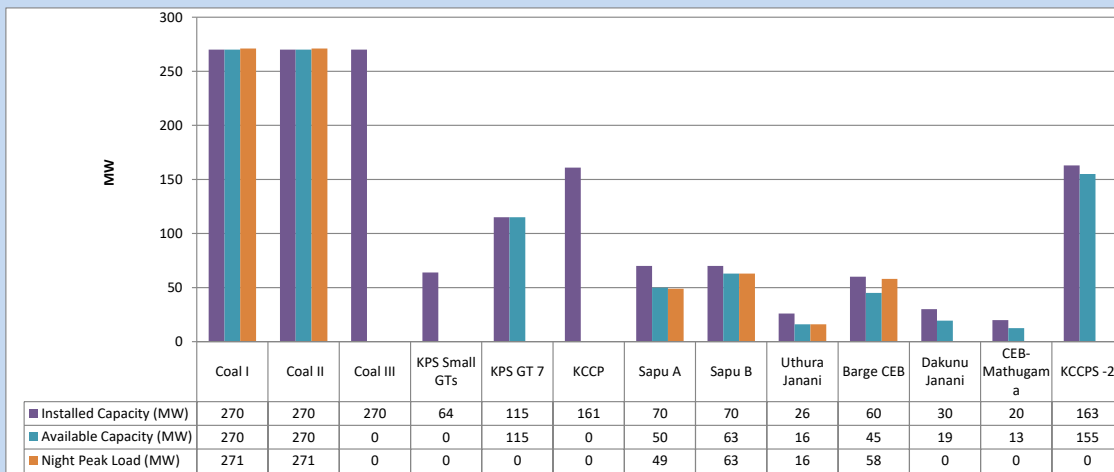
October 11, 2023



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

October 12, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

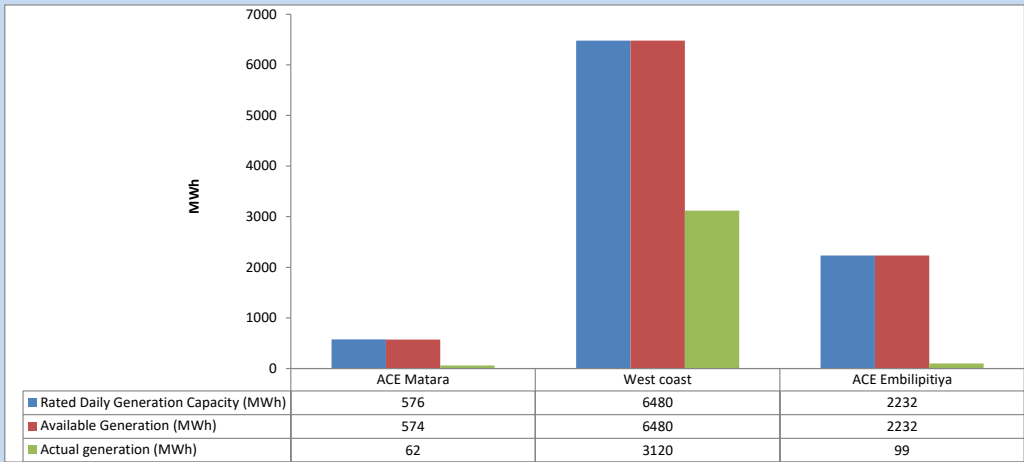


Plant availability is recorded at 6.00 am on

October 12, 2023

5. IPP owned Thermal Plant Dispatch

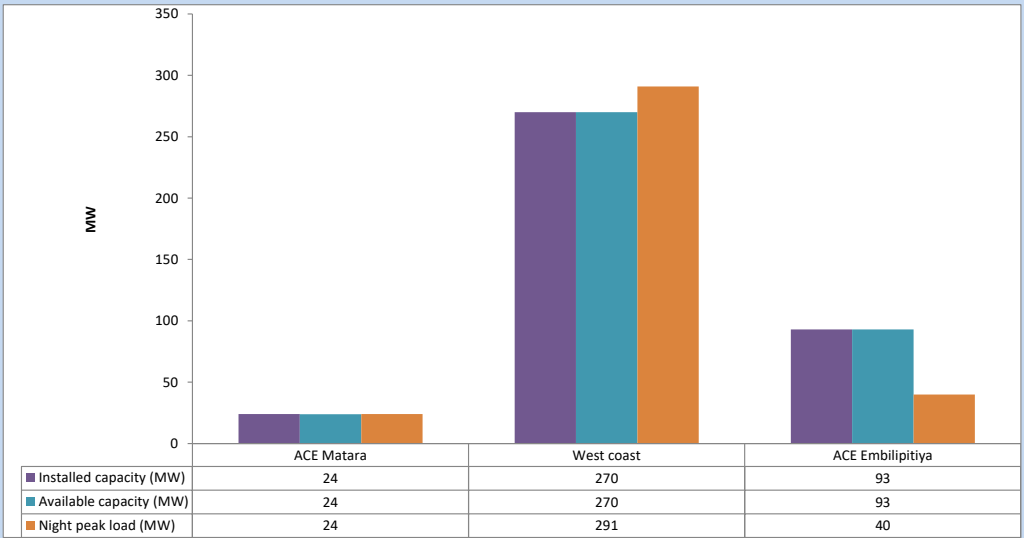
October 11, 2023



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

October 12, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

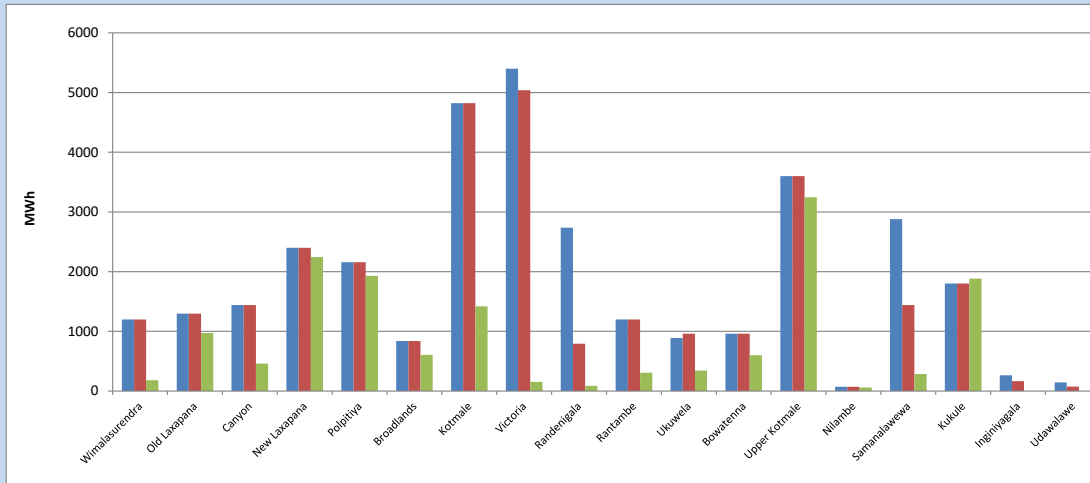


Plant availability is recorded at 6.00 am on

October 12, 2023

7. Major Hydro Plant Dispatch

October 11, 2023

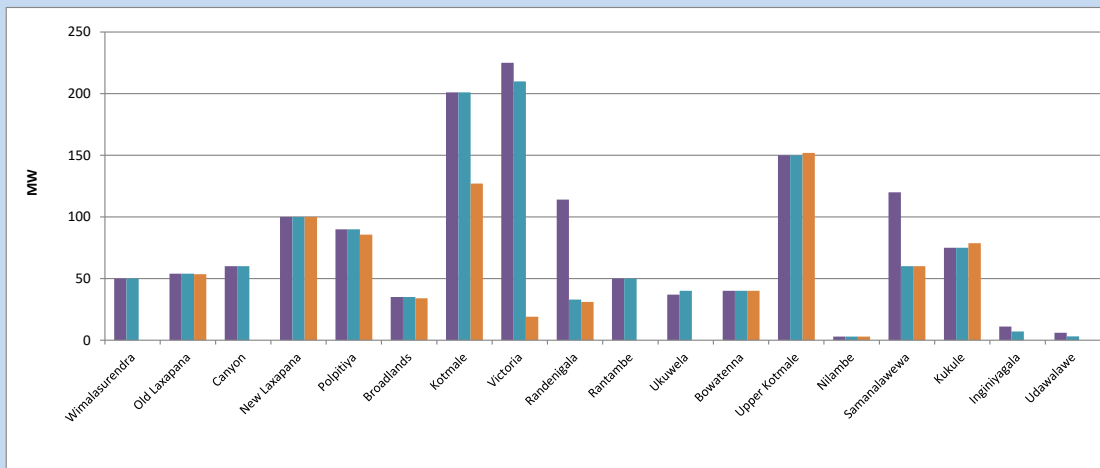


Available Generation is estimated based on plant availability at 6.00am on October 12, 2023
Broadlands power plant is operating in the Commissioning Stage

October 12, 2023

8. Major Hydro Plant Loading at Night Peak

October 11, 2023



Plant availability is recorded at 6.00 am on October 12, 2023
Broadlands power plant is operating in the Commissioning Stage

October 12, 2023

9. Summary of Major Plant performance

Table 05

| Plant | Installed Capacity | Plant Availability | Night peak Load | Plant Dispatch |
|-------------------|--------------------|--------------------|-----------------|----------------|
| | (MW) | (MW) | (MW) | (MWh) |
| Wimalasurendra | 50 | 50 | 0 | 182 |
| Old Laxapana | 54 | 54 | 54 | 972 |
| Canyon | 60 | 60 | 0 | 459 |
| New Laxapana | 100 | 100 | 100 | 2,244 |
| Polpitiya | 90 | 90 | 86 | 1,930 |
| Broadlands | 35 | 35 | 34 | 606 |
| Kotmale | 201 | 201 | 127 | 1,420 |
| Victoria | 225 | 210 | 19 | 154 |
| Randenigala | 114 | 33 | 31 | 88 |
| Rantambe | 50 | 50 | 0 | 306 |
| Ukuwela | 37 | 40 | 0 | 344 |
| Bowatenna | 40 | 40 | 40 | 599 |
| Upper Kotmale | 150 | 150 | 152 | 3,246 |
| Nilambe | 3 | 3 | 3 | 61 |
| Samanalawewa | 120 | 60 | 60 | 285 |
| Kukule | 75 | 75 | 79 | 1,884 |
| Inginiyagala | 11 | 7 | 0 | 0 |
| Udawalawe | 6 | 3 | 0 | 0 |
| Puttalam Coal I | 270 | 270 | 271 | 6,196 |
| Puttalam Coal II | 270 | 270 | 271 | 6,237 |
| Puttalam Coal III | 270 | 0 | 0 | 0 |
| KPS Small GTs | 64 | 0 | 0 | 0 |
| KPS GT 7 | 115 | 115 | 0 | 0 |
| KCCP | 161 | 0 | 0 | 0 |
| Sapugaskanda A | 70 | 50 | 49 | 874 |
| Sapugaskanda B | 70 | 63 | 63 | 1,109 |
| Uthura Janani | 26 | 16 | 16 | 228 |
| Barge CEB | 60 | 45 | 58 | 892 |
| CEB-Hambantota | 30 | 19 | 0 | 0 |
| CEB-Mathugama | 20 | 13 | 0 | 0 |
| ACE Matara | 24 | 24 | 24 | 62 |
| Asia Power | 50 | 0 | 0 | 0 |
| KCCPS -2 | 163 | 155 | 0 | 0 |
| West Coast | 270 | 270 | 291 | 3,120 |
| Nothern Power | 36 | 0 | 0 | 0 |
| ACE Embilipitiya | 93 | 93 | 40 | 99 |
| Total | 3,483 | 2,664 | 2,007 | 38,311 |

Plant availability is the availability recorded at 6 am on

October 12, 2023

10. Contribution to the Night Peak in MW

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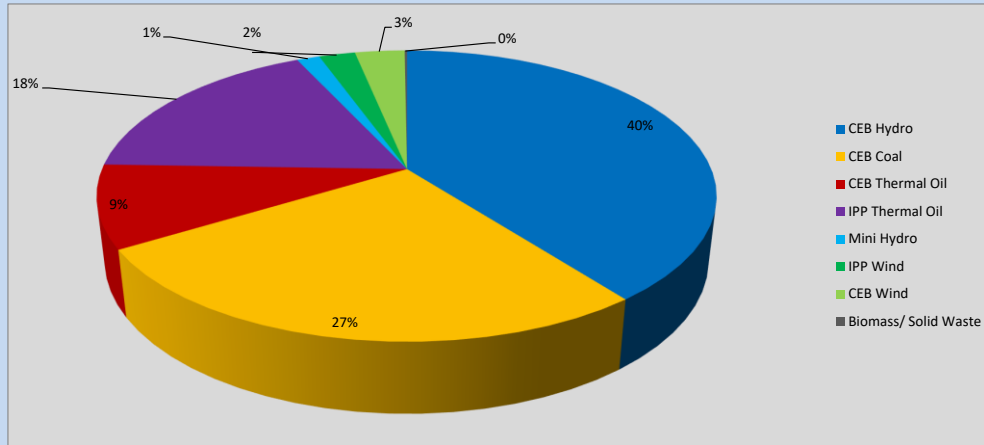


Table 06

| | | |
|--------------------------|------|----|
| CEB Hydro | 799 | MW |
| CEB Coal | 542 | MW |
| CEB Thermal Oil | 186 | MW |
| IPP Thermal Oil | 355 | MW |
| Mini Hydro (Telemetered) | 29 | MW |
| IPP Wind | 45.6 | MW |
| CEB Wind | 62.6 | MW |
| Biomass/ Solid Waste | 3 | MW |

Recorded Peak Demand Data

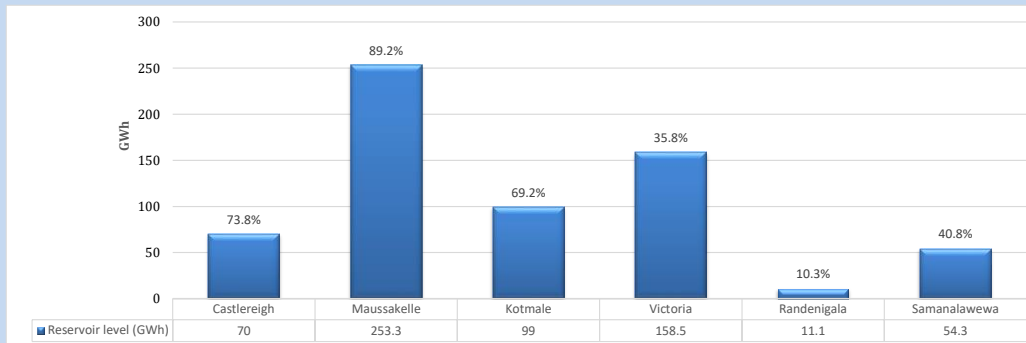
Table 07

| | | |
|-------------------------|-------|----|
| Night Peak* | 2,022 | MW |
| Day Peak Maximum Demand | 1,872 | MW |
| Day Peak Minimum Demand | 1,578 | MW |
| Off Peak Minimum Demand | 1,157 | MW |

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

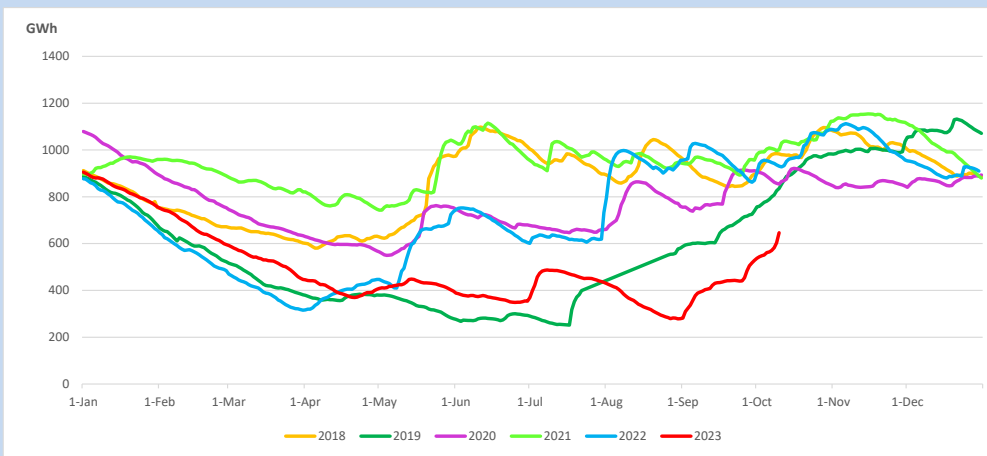
Reservoir Levels -

as at 06.00 Hr on October 12, 2023

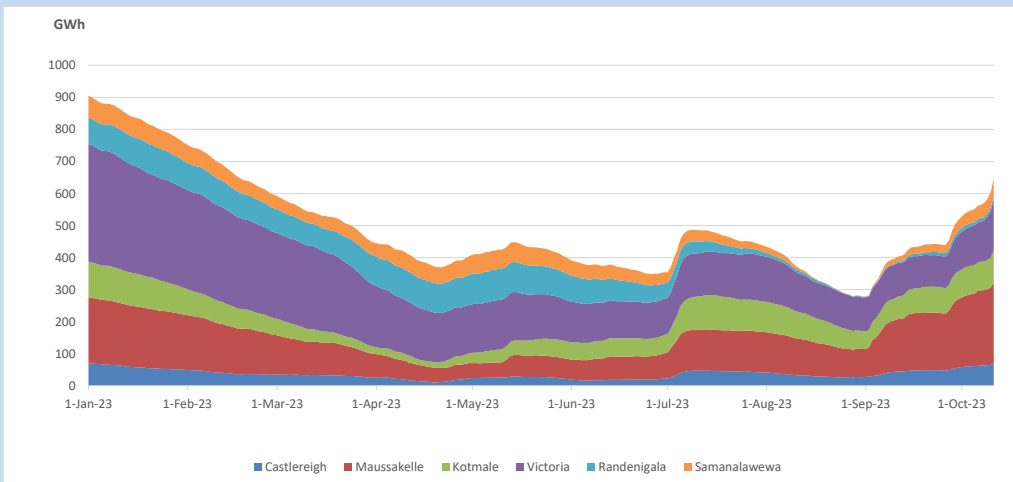


Total Reservoir Level 646.2 GWh
% of Total capacity 53.6%

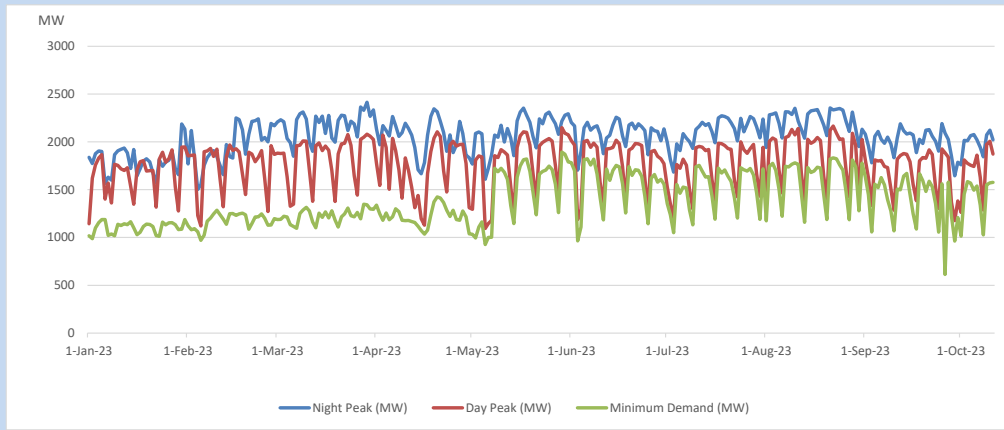
11. Comparison of Total Reservoir Storage Levels with Past Years



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



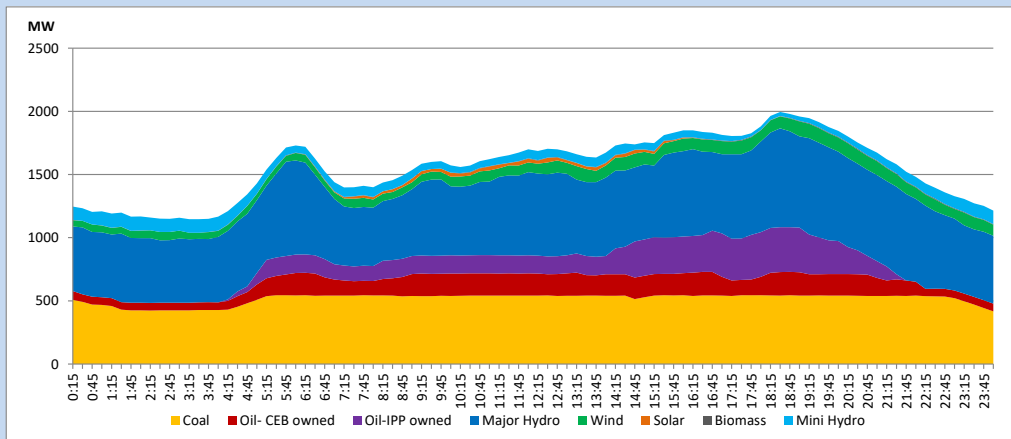
13. Variation of Demand during the current year



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

14. Daily Load Curve

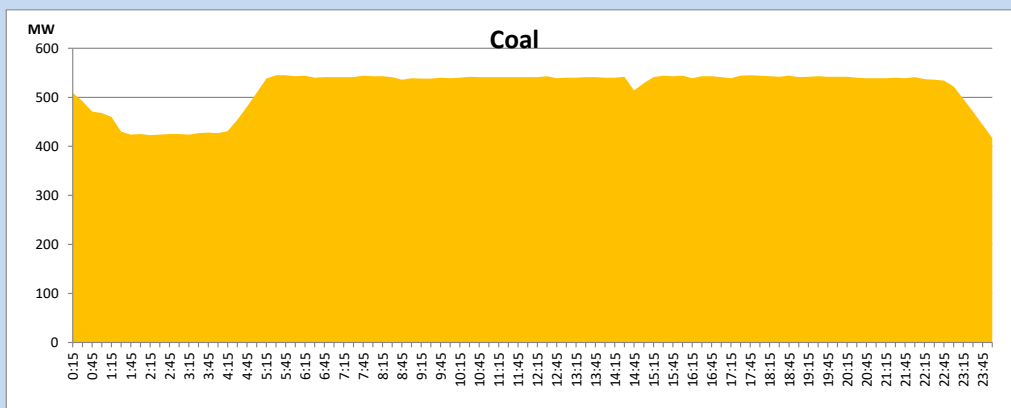
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Solar and wind data is based on Telemetered Power Stations only

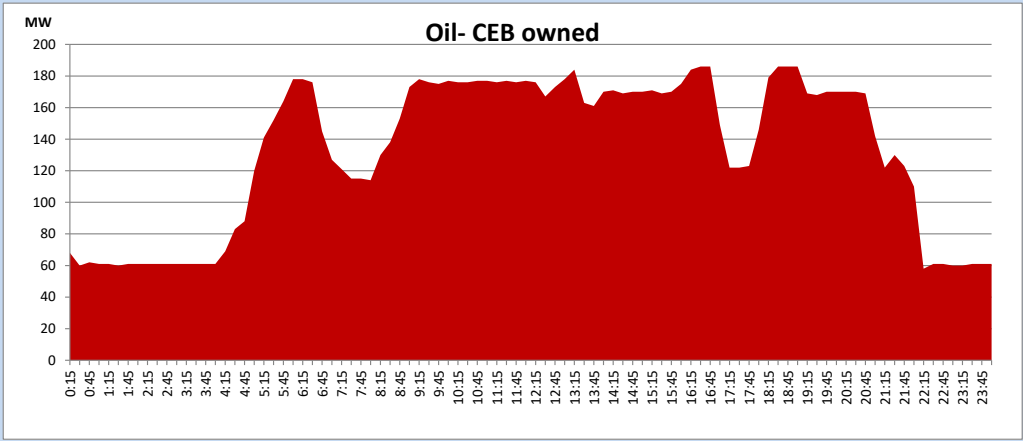
Coal Generation during

October 11, 2023



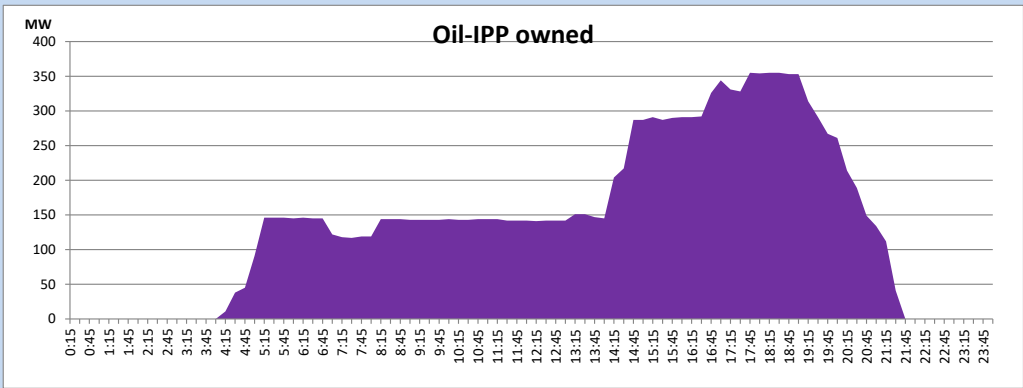
CEB Oil Plant Generation during

October 11, 2023



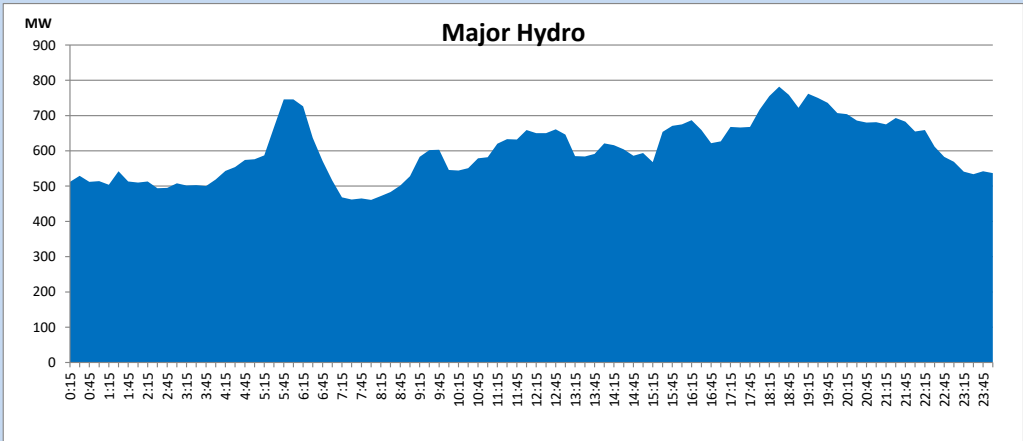
IPP Oil Plant Generation during

October 11, 2023



Major Hydro Generation during

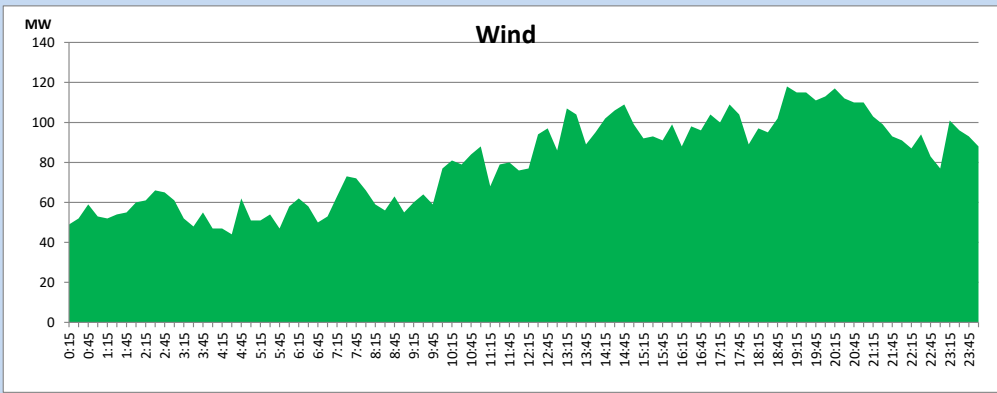
October 11, 2023



Wind Generation during

October 11, 2023

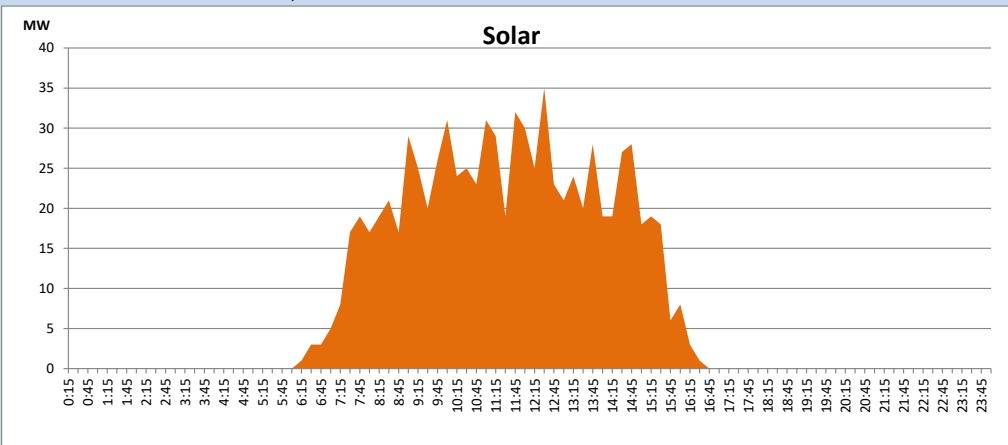
Based on Telemetered Power Stations only



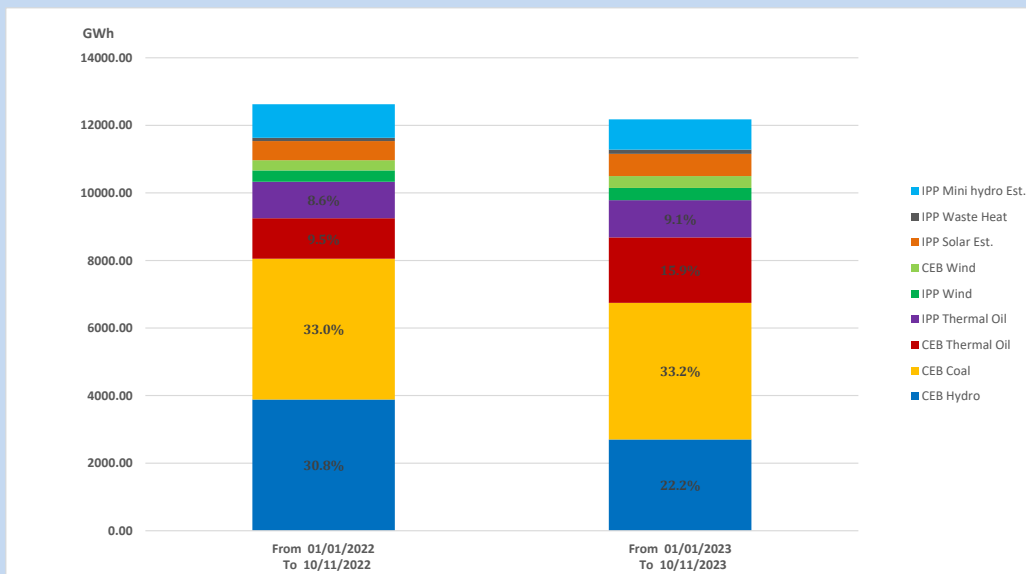
Solar Generation during

October 11, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch

From 01/01/2022 To 10/11/2022

12623 GWh

From 01/01/2023 To 10/11/2023

12178 GWh

The above figures are including contribution from roof top solar, non telemetered solar and mini hydro plants (figures have been adjusted based on the data from the CEB monthly review reports.)

Thermal 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 |
| ACE Matara | Heavy Fuel |
| ACE Embilipitiya | Heavy Fuel |

Major Incidents reported during the day

October 11, 2023

- 1) Ukuwela both units made unavailable from time to time due to the blockage of Polgolla intake. Only one unit at Ukuwela PS is available at the present hour.
- 2) At 14:36hrs, system frequency dropped to 48.80Hz due to the tripping of embedded generation. Simultaneously, LVPS Unit 01 rapidly de-loaded to 240MW(Net.) due to a tripping of a coal feeder. LVPS Unit 01 reached full load by 15:15hrs
- 3) At 14:49hrs and 15:25hrs, system frequency dropped to 49.32Hz and 49.35Hz respectively due to the tripping of embedded generation
- 4) Laxapana pond spilling started at 15:30hrs and stopped at 19:37hrs. Norton pond spilling started at 16:43hrs and stopped at 22:00hrs. Broadlands pond spilling started at 17:24hrs and stopped at 22:39hrs.
- 5) Upper Kotmale pond spilling started at 22:26hrs and continues to the present hour
- 6) Kukule pond spilling continues to the present hour