

Generation and Reservoirs Statistics

November 30, 2023



PUBLIC UTILITIES COMMISSION OF SRI LANKA

1. Daily Generation Mix in MWh

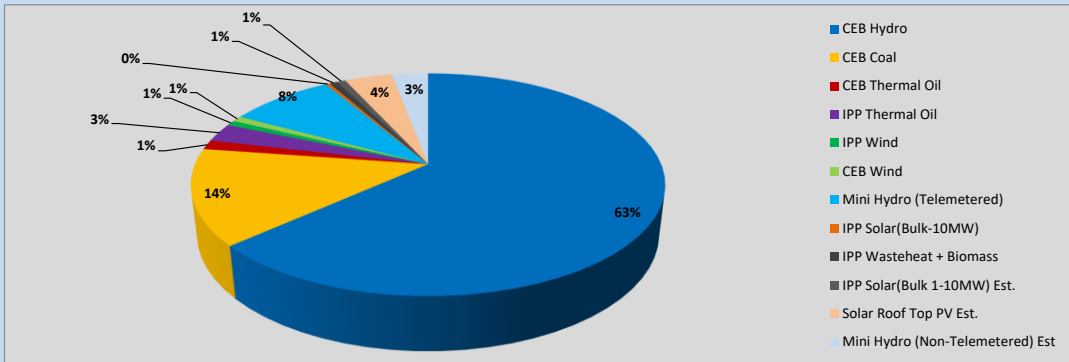


Table 01

| | Generation (MWh) |
|---|------------------|
| CEB Hydro | 26,847 |
| CEB Coal | 5,905 |
| CEB Thermal Oil | 582 |
| IPP Thermal Oil | 1,140 |
| IPP Wind | 321 |
| CEB Wind | 345 |
| Mini Hydro (Telemetered) | 3,617 |
| IPP Solar (Bulk) | 139 |
| IPP Waste heat + Biomass | 275 |
| Total Generation (Excluding estimated figures) | 39,171 |
| * Estimated unserved energy | 0 |
| * Estimated Mini Hydro (Non telemetered) | 1253 |
| * Estimated IPP Solar PV (Bulk 1-10MW) | 304 |
| * Estimated Solar Roof Top PV | 1640 |
| Total Generation (Including estimated figures) | 42,368 |

* 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 | 422 |
| IPP Waste heat + Biomass | 50 |
| IPP Solar | 136 |
| Rooftop Solar (Ordinary) | 277 |
| Rooftop Solar (LT Bulk) | 263 |
| Rooftop Solar (HT Bulk) | 70 |

Data Source - Monthly Review Report [Aug-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 | 722 | 59.38% |
| CEB Coal | 230 | 18.92% |
| CEB Thermal Oil | 10 | 0.86% |
| IPP Thermal | 13 | 1.10% |
| SPP Wind | 8 | 0.70% |
| CEB Wind | 11 | 0.87% |
| Mini Hydro * | 146 | 12.02% |
| IPP Solar * | 65 | 5.38% |
| IPP Waste heat + BMP | 9 | 0.74% |
| Total | 1,216 | |

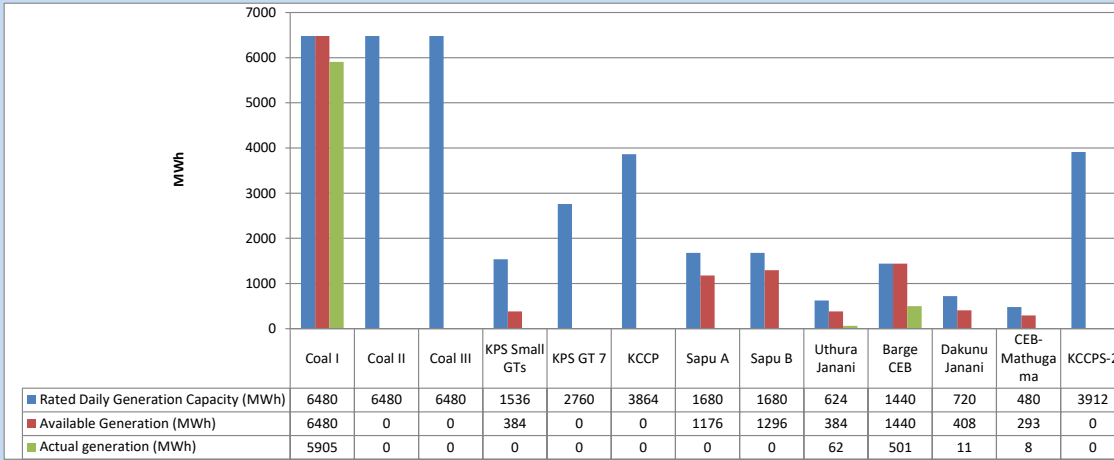
Table 04 - Current Year

| Category | Dispatch (GWh) | |
|-----------------|----------------|--------|
| CEB Hydro | 3,824 | 27.02% |
| CEB Coal | 4,496 | 31.77% |
| CEB Thermal Oil | 1,955 | 13.82% |
| IPP Thermal | 1,127 | 7.96% |
| SPP Wind | 373 | 2.64% |
| CEB Wind | 363 | 2.56% |
| Mini Hydro * | 1,073 | 7.58% |
| IPP Solar * | 803 | 5.67% |
| IPP Waste heat | 140 | 0.99% |
| Total | 14,153 | |

*Including estimated contribution from non telemetered plants

3. CEB owned Thermal Plant Dispatch

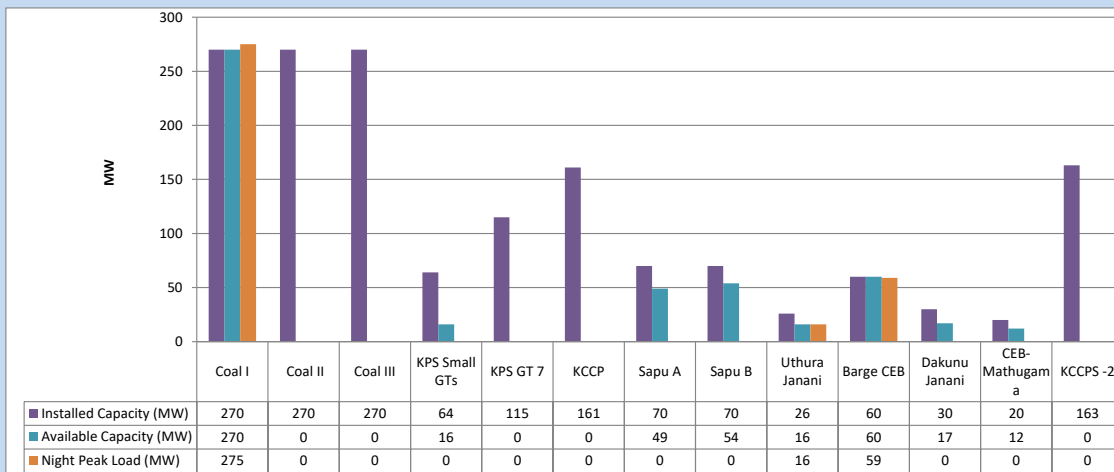
November 30, 2023



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

December 1, 2023

4. CEB owned Thermal Plant Loading at the Night Peak

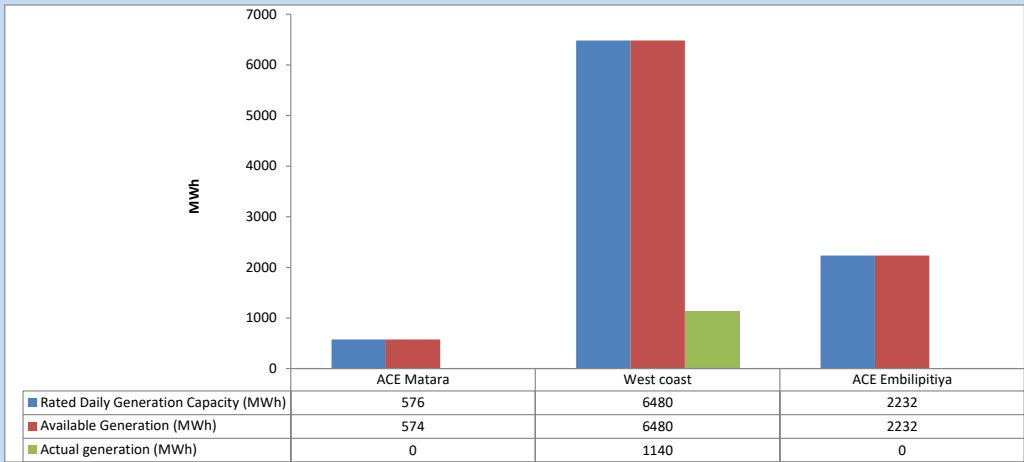


Plant availability is recorded at 6.00 am on

December 1, 2023

5. IPP owned Thermal Plant Dispatch

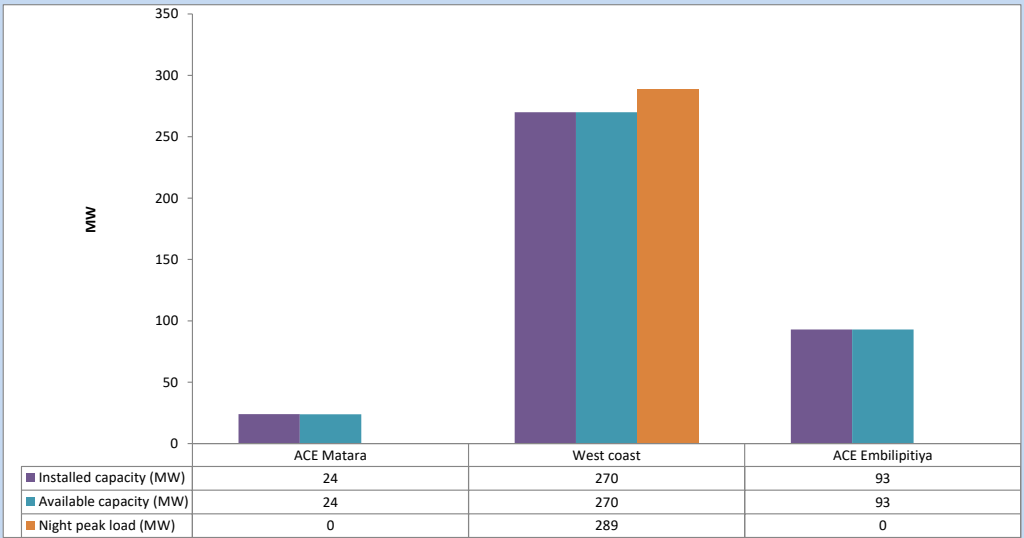
November 30, 2023



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

December 1, 2023

6. IPP owned Thermal Plant Loading at the Night Peak

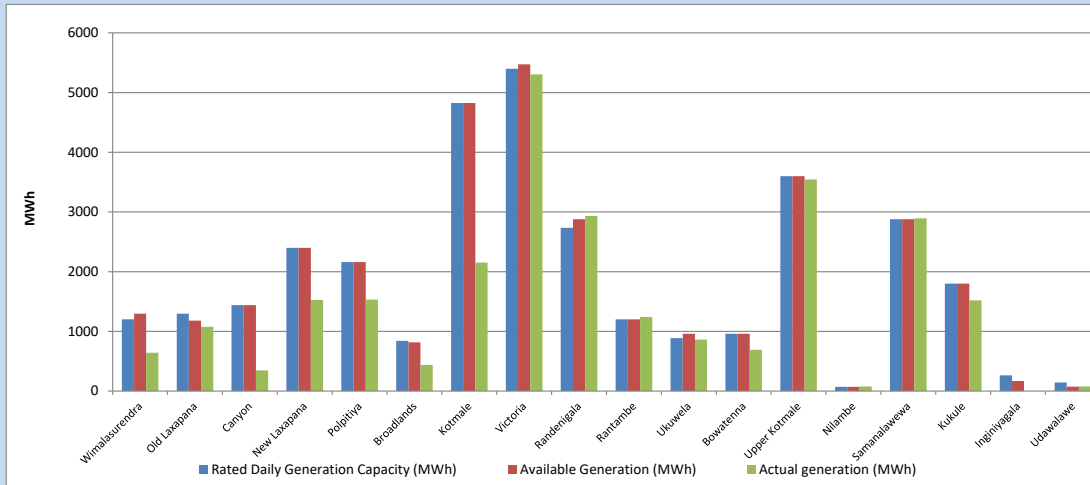


Plant availability is recorded at 6.00 am on

December 1, 2023

7. Major Hydro Plant Dispatch

November 30, 2023

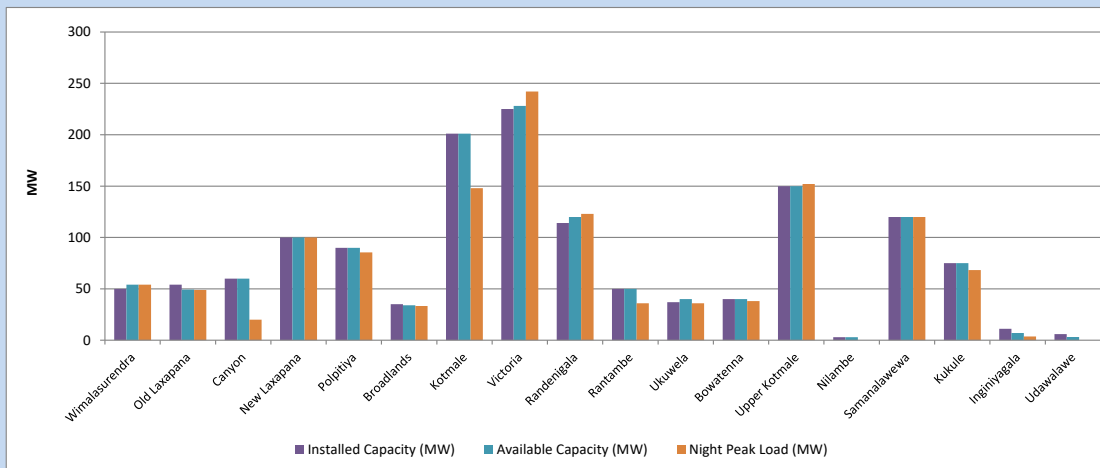


Available Generation is estimated based on plant availability at 6.00am on December 1, 2023
Broadlands power plant is operating in the Commissioning Stage

December 1, 2023

8. Major Hydro Plant Loading at Night Peak

November 30, 2023



Plant availability is recorded at 6.00 am on December 1, 2023
Broadlands power plant is operating in the Commissioning Stage

December 1, 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 | 54 | 54 | 642 |
| Old Laxapana | 54 | 49 | 49 | 1,076 |
| Canyon | 60 | 60 | 20 | 345 |
| New Laxapana | 100 | 100 | 100 | 1,524 |
| Polpitiya | 90 | 90 | 85 | 1,530 |
| Broadlands | 35 | 34 | 33 | 437 |
| Kotmale | 201 | 201 | 148 | 2,150 |
| Victoria | 225 | 228 | 242 | 5,305 |
| Randenigala | 114 | 120 | 123 | 2,935 |
| Rantambe | 50 | 50 | 36 | 1,240 |
| Ukuwela | 37 | 40 | 36 | 861 |
| Bowatenna | 40 | 40 | 38 | 690 |
| Upper Kotmale | 150 | 150 | 152 | 3,546 |
| Nilambe | 3 | 3 | 0 | 76 |
| Samanalawewa | 120 | 120 | 120 | 2,894 |
| Kukule | 75 | 75 | 68 | 1,518 |
| Inginiyagala | 11 | 7 | 4 | 0 |
| Udawalawe | 6 | 3 | 0 | 78 |
| Puttalam Coal I | 270 | 270 | 275 | 5,905 |
| Puttalam Coal II | 270 | 0 | 0 | 0 |
| Puttalam Coal III | 270 | 0 | 0 | 0 |
| KPS Small GTs | 64 | 16 | 0 | 0 |
| KPS GT 7 | 115 | 0 | 0 | 0 |
| KCCP | 161 | 0 | 0 | 0 |
| Sapugaskanda A | 70 | 49 | 0 | 0 |
| Sapugaskanda B | 70 | 54 | 0 | 0 |
| Uthura Janani | 26 | 16 | 16 | 62 |
| Barge CEB | 60 | 60 | 59 | 501 |
| CEB-Hambantota | 30 | 17 | 0 | 11 |
| CEB-Mathugama | 20 | 12 | 0 | 8 |
| ACE Matara | 24 | 24 | 0 | 0 |
| Asia Power | 50 | 0 | 0 | 0 |
| KCCPS -2 | 163 | 0 | 0 | 0 |
| West Coast | 270 | 270 | 289 | 1,140 |
| Nothern Power | 36 | 0 | 0 | 0 |
| ACE Embilipitiya | 93 | 93 | 0 | 0 |
| Total | 3,483 | 2,305 | 2,146 | 39,171 |

Plant availability is the availability recorded at 6 am on

December 1, 2023

10. Contribution to the Night Peak in MW

November 30, 2023

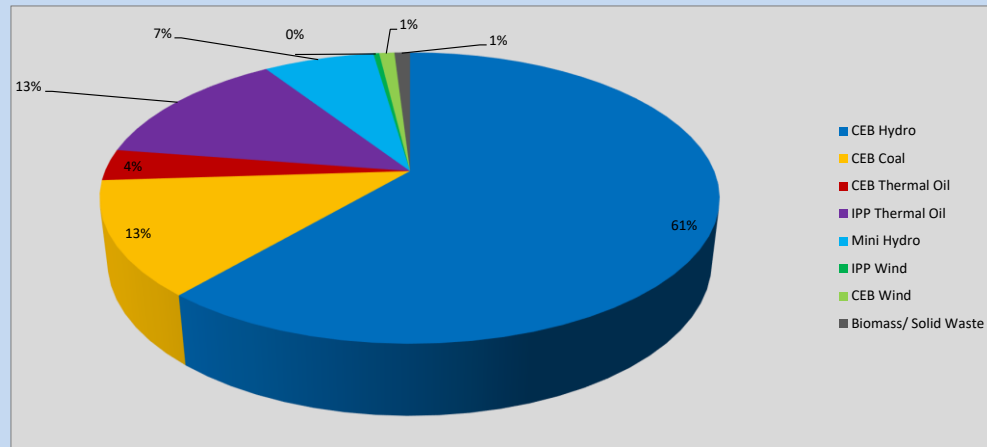


Table 06

| | | |
|--------------------------|------|----|
| CEB Hydro | 1326 | MW |
| CEB Coal | 275 | MW |
| CEB Thermal Oil | 75 | MW |
| IPP Thermal Oil | 289 | MW |
| Mini Hydro (Telemetered) | 149 | MW |
| IPP Wind | 7.9 | MW |
| CEB Wind | 20.5 | MW |
| Biomass/ Solid Waste | 21 | MW |

Recorded Peak Demand Data

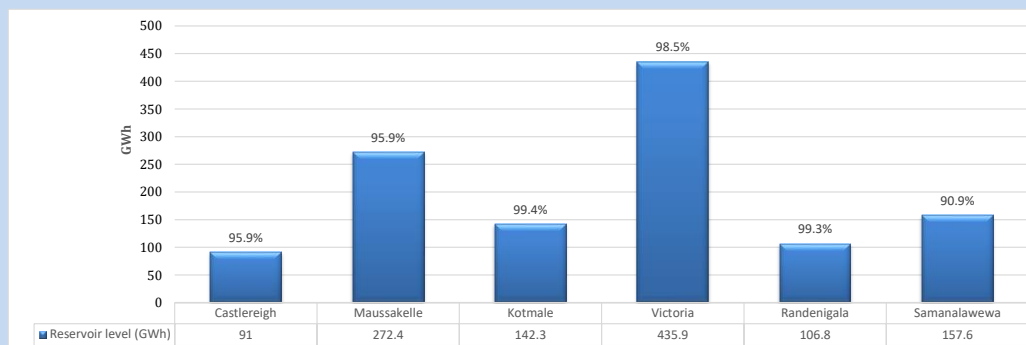
Table 07

| | | |
|-------------------------|-------|----|
| Night Peak* | 2,164 | MW |
| Day Peak Maximum Demand | 1,997 | MW |
| Day Peak Minimum Demand | 1,516 | MW |
| Off Peak Minimum Demand | 1,161 | MW |

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

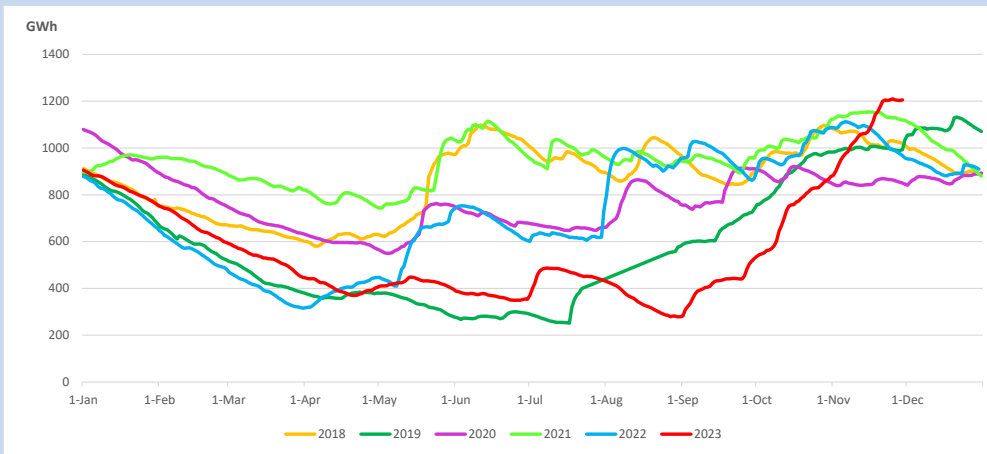
Reservoir Levels -

as at 06.00 Hr on December 1, 2023

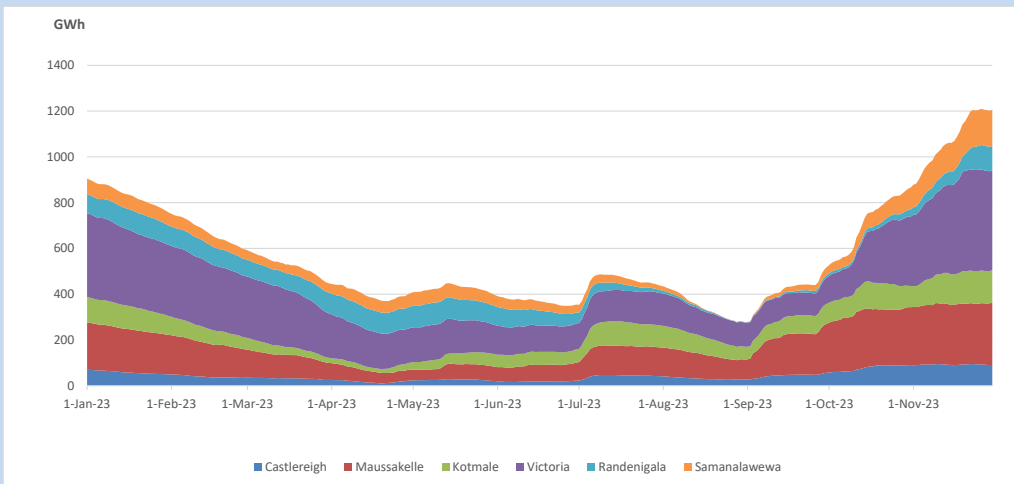


Total Reservoir Level 1206 GWh
% of Total capacity 96.8%

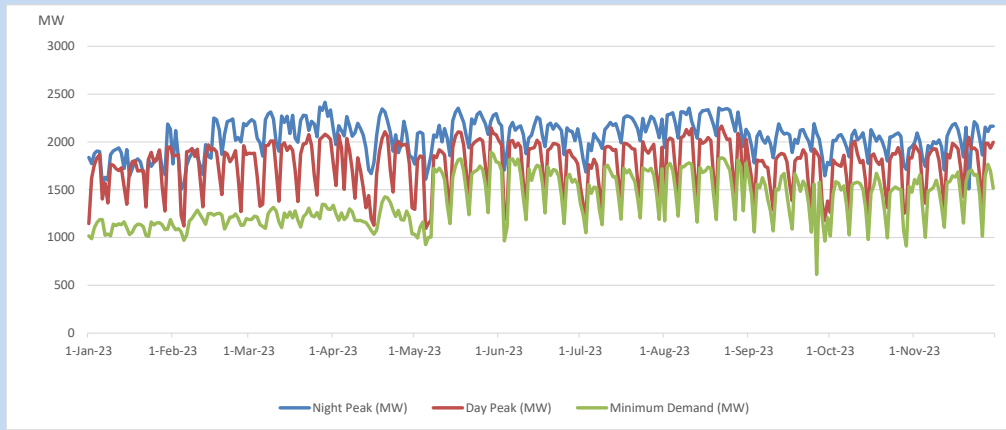
11. Comparison of Total Reservoir Storage Levels with Past Years



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



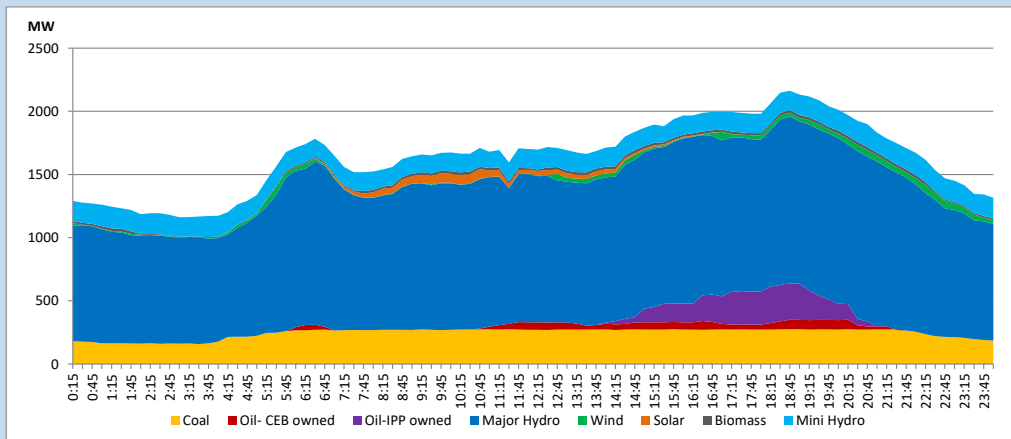
13. Variation of Demand during the current year



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

14. Daily Load Curve

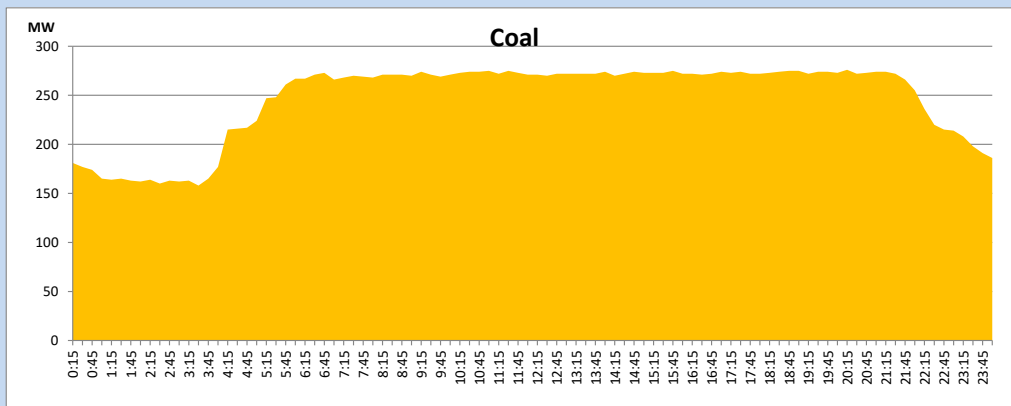
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Solar and wind data is based on Telemetered Power Stations only

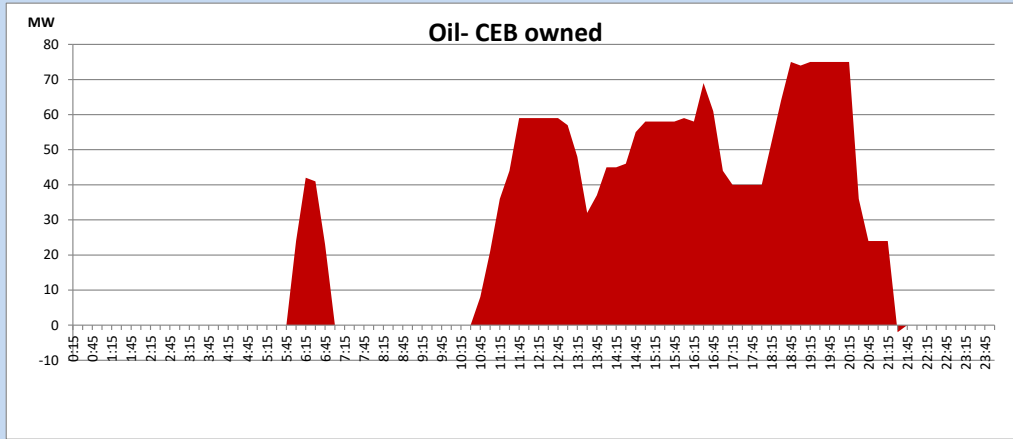
Coal Generation during

November 30, 2023



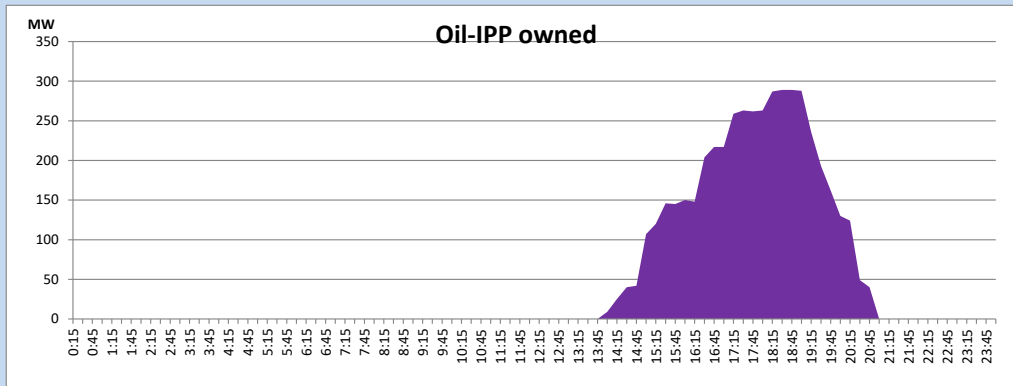
CEB Oil Plant Generation during

November 30, 2023



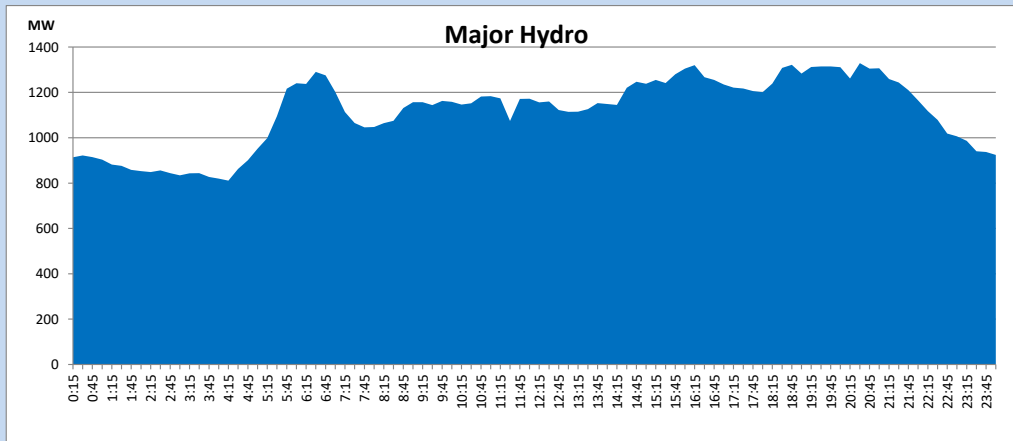
IPP Oil Plant Generation during

November 30, 2023



Major Hydro Generation during

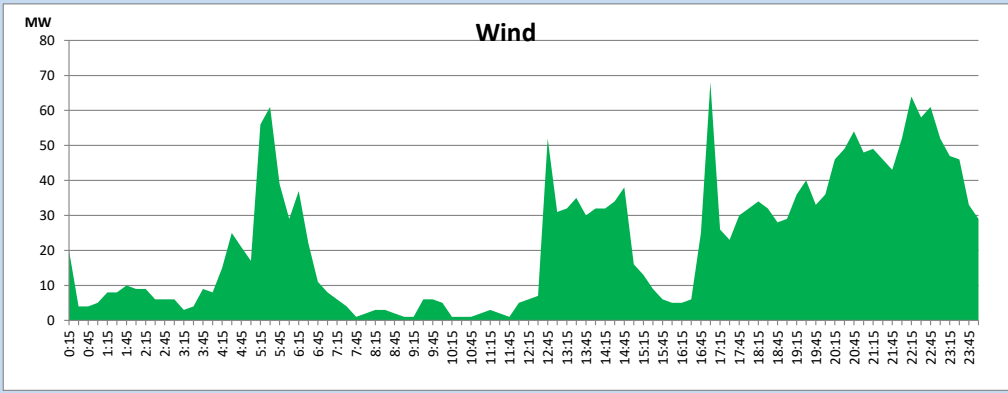
November 30, 2023



Wind Generation during

November 30, 2023

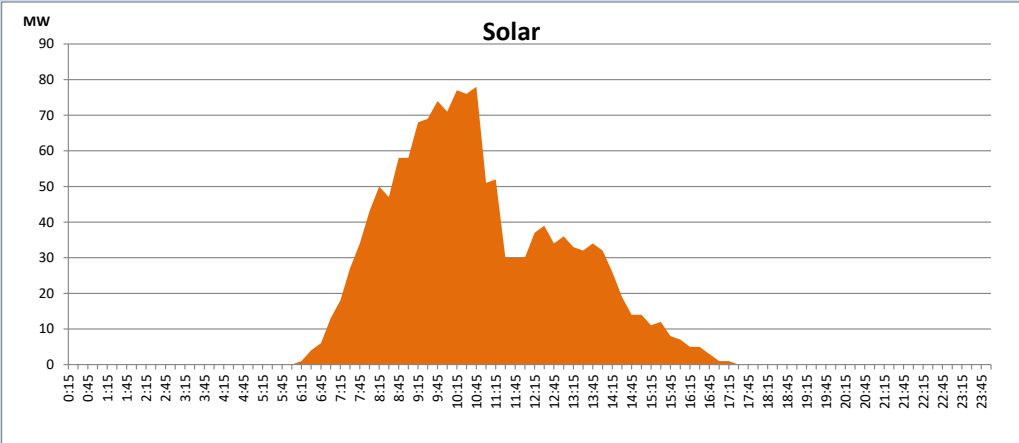
Based on Telemetered Power Stations only



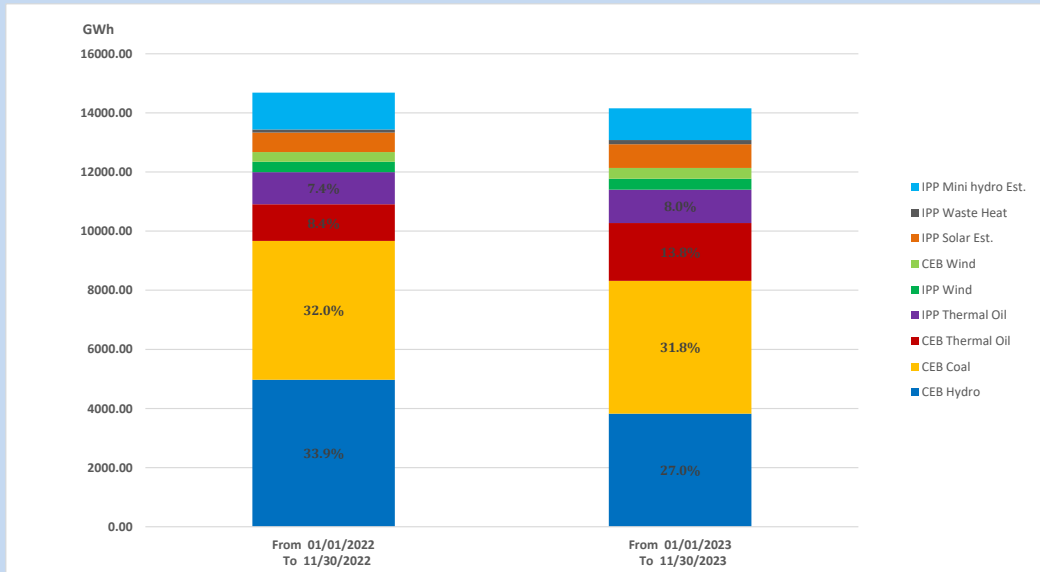
Solar Generation during

November 30, 2023

Based on Telemetered Power Stations only



15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch

From 01/01/2022 To 11/30/2022

14684 GWh

From 01/01/2023 To 11/30/2023

14153 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

November 30, 2023

- 1) Hambanthota – Embilipitiya 132kV both ccts tripped at 11:05hrs only from Embilipitiya end due to the operation of O/C protection (due to fault of Hambanthota 33kV feeder 10), and subsequently Hambanthota GSS became dead due to cascaded tripping of New Polpitiya – Polpitiya 132kV cct from New Polpitiya end, Athurugiriya – Padukka 132kV cct from Padukka end and
- 2) WPS GSS 132/33kV T/F 01 tripped from both ends at 16:02hrs due to the operation of differential protection. The T/F is yet to be normalized.
- 3) New Polpitiya 220/132/33kV T/F 02 tripped from all 3 ends at 17:50hrs due to the operation of mechanical protection. The T/F is yet to be normalized.