

# Generation and Reservoirs Statistics

May 2, 2024



PUBLIC UTILITIES COMMISSION OF SRI LANKA

## 1. Daily Generation Mix in MWh

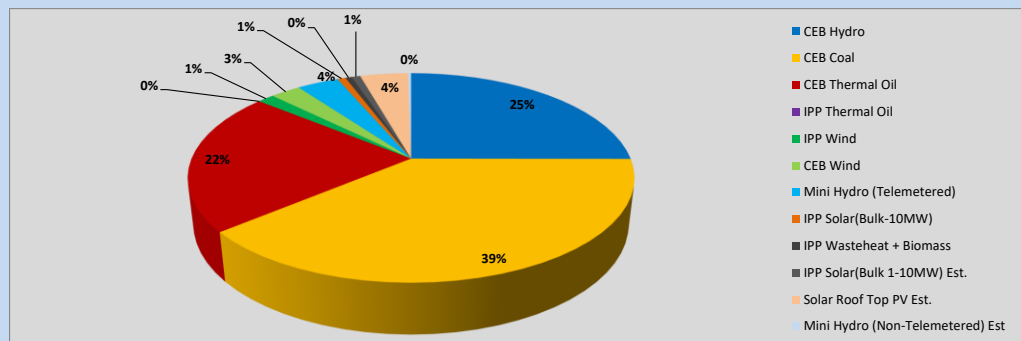


Table 01

|   | Generation (MWh) |
|---|------------------|
| CEB Hydro   | 12,541           |
| CEB Coal  | 19,465           |
| CEB Thermal Oil                                       | 11,009           |
| IPP Thermal Oil                                       | -                |
| IPP Wind  | 720              |
| CEB Wind  | 1,306            |
| Mini Hydro (Telemetered)                              | 1,809            |
| IPP Solar (Bulk)                                      | 357              |
| IPP Waste heat + Biomass                              | 271              |
| <b>Total Generation (Excluding estimated figures)</b> | <b>47,478</b>    |
| * Estimated unserved energy                           | 0                |
| * Estimated Mini Hydro (Non telemetered)              | 131              |
| * Estimated IPP Solar PV (Bulk 1-10MW)                | 380              |
| * Estimated Solar Roof Top PV                         | 2080             |
| <b>Total Generation (Including estimated figures)</b> | <b>50,069</b>    |

\* Estimated figures of CEB generation report

Table 02

|                              | Installed Capacity (MW) |
|------------------------------|-------------------------|
| CEB Hydro                    | 1644                    |
| CEB Coal                     | 810                     |
| CEB Thermal Oil              | 773.1                   |
| 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)     | 293                     |
| Rooftop Solar (LT Bulk)      | 272                     |
| Rooftop Solar (HT Bulk)      | 74                      |

Data Source - Monthly Review Report [Nov-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            | 21             | 22.98% |
| CEB Coal             | 38             | 42.35% |
| CEB Thermal Oil      | 17             | 19.42% |
| IPP Thermal          | 0              | 0.00%  |
| SPP Wind             | 1              | 1.45%  |
| CEB Wind             | 2              | 2.42%  |
| Mini Hydro *         | 4              | 4.73%  |
| IPP Solar *          | 6              | 6.23%  |
| IPP Waste heat + BMP | 0              | 0.42%  |
| <b>Total</b>         | <b>90</b>      |        |

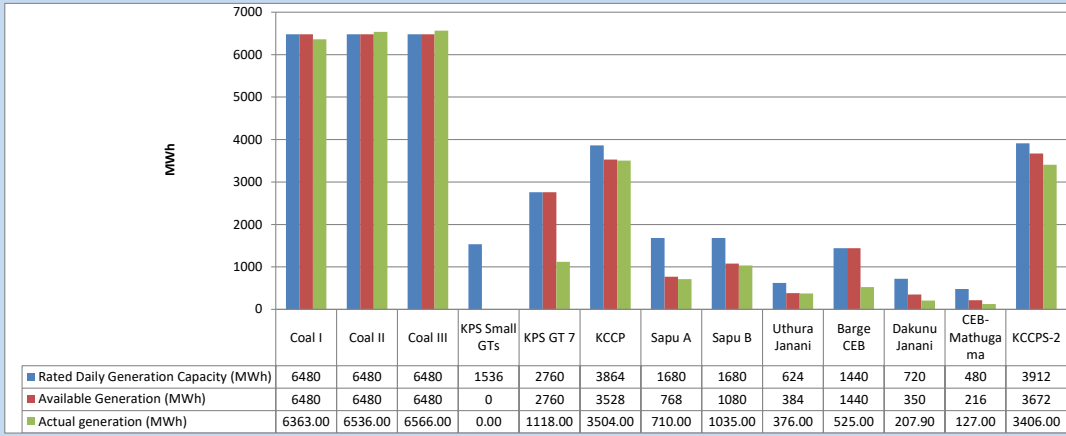
Table 04 - Current Year

| Category        | Dispatch (GWh) |        |
|-----------------|----------------|--------|
| CEB Hydro       | 1,662          | 30.21% |
| CEB Coal        | 1,999          | 36.33% |
| CEB Thermal Oil | 643            | 11.69% |
| IPP Thermal     | 408            | 7.41%  |
| SPP Wind        | 59             | 1.07%  |
| CEB Wind        | 65             | 1.19%  |
| Mini Hydro *    | 315            | 5.73%  |
| IPP Solar *     | 302            | 5.48%  |
| IPP Waste heat  | 49             | 0.90%  |
| <b>Total</b>    | <b>5,502</b>   |        |

\*Including estimated contribution from non telemetered plants

### 3. CEB owned Thermal Plant Dispatch

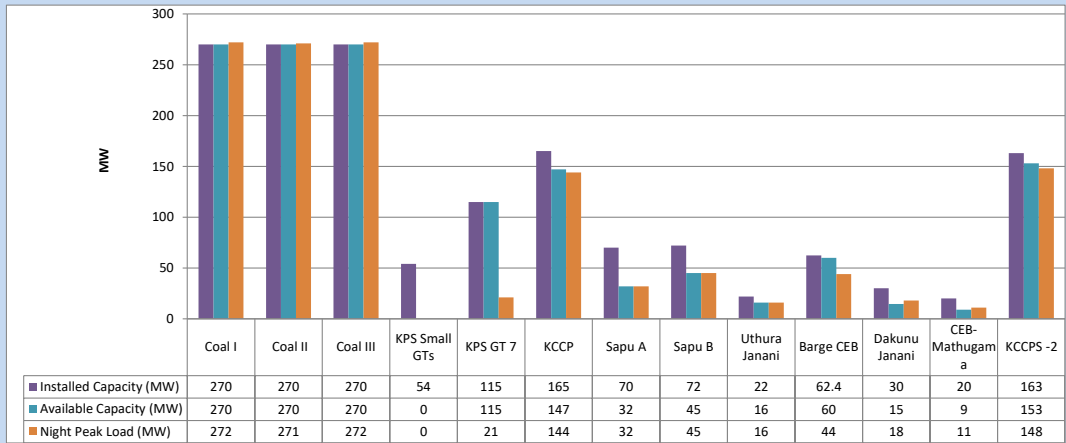
May 2, 2024



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

May 3, 2024

### 4. CEB owned Thermal Plant Loading at the Night Peak

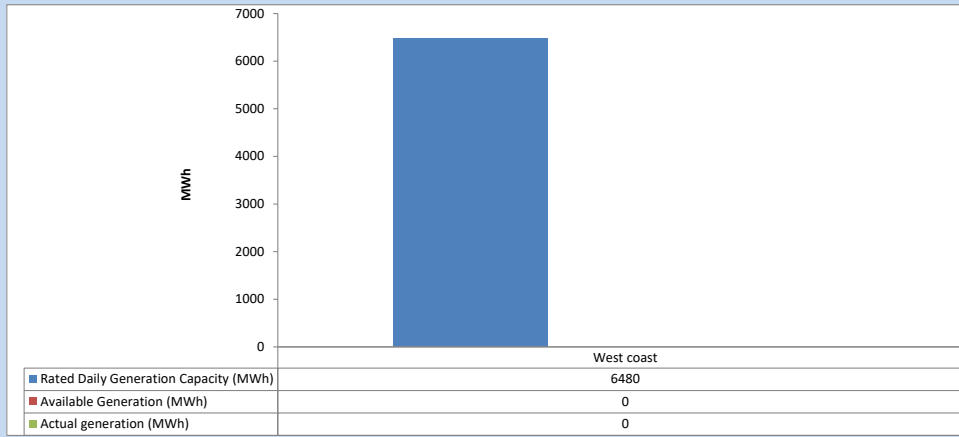


Plant availability is recorded at 6.00 am on

May 3, 2024

### 5. IPP owned Thermal Plant Dispatch

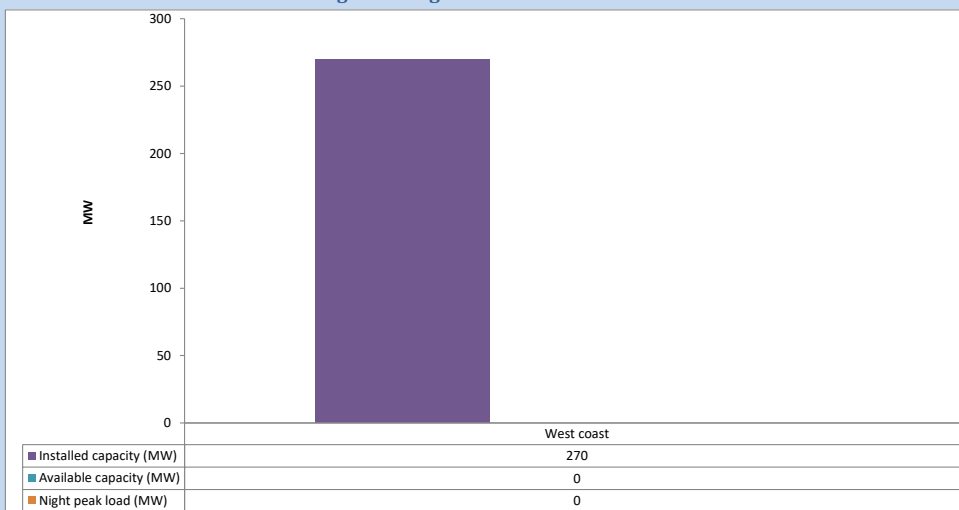
May 2, 2024



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

May 3, 2024

### 6. IPP owned Thermal Plant Loading at the Night Peak

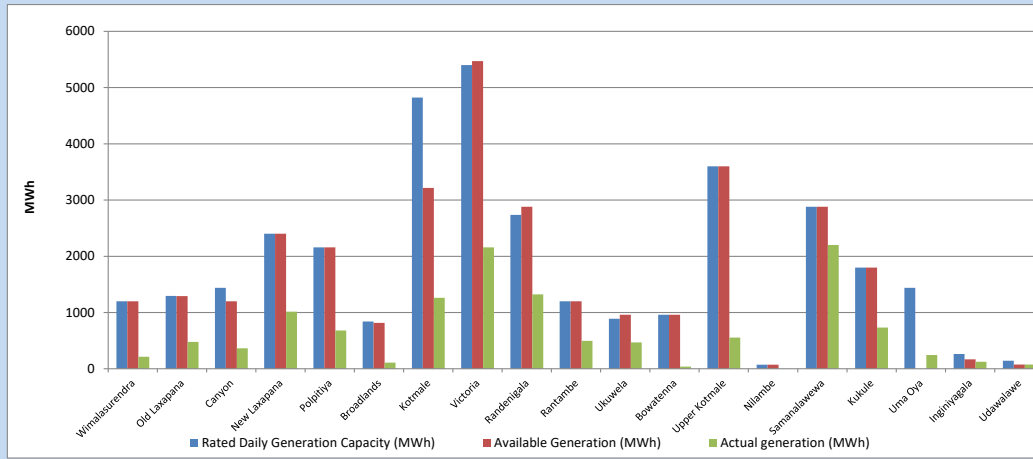


Plant availability is recorded at 6.00 am on

May 3, 2024

### 7. Major Hydro Plant Dispatch

May 2, 2024

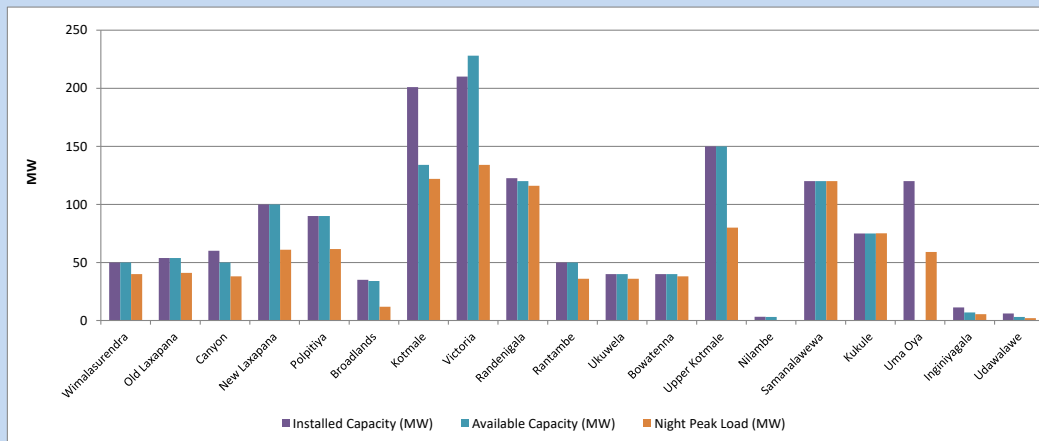


Available Generation is estimated based on plant availability at 6.00am on  
Broadlands power plant is operating in the Commissioning Stage

May 3, 2024

### 8. Major Hydro Plant Loading at Night Peak

May 2, 2024



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

May 3, 2024

## 9. Summary of Major Plant performance

Table 05

| Plant              | Maximum Available Total Capacity | Plant Availability | Night peak Load | Plant Dispatch |
|--------------------|----------------------------------|--------------------|-----------------|----------------|
|                    | (MW)                             | (MW)               | (MW)            | (MWh)          |
| Wimalasurendra     | 50                               | 50                 | 40              | 213            |
| Old Laxapana       | 54                               | 54                 | 41              | 477            |
| Canyon             | 60                               | 50                 | 38              | 365            |
| New Laxapana       | 100                              | 100                | 61              | 1,015          |
| Polpitiya          | 90                               | 90                 | 62              | 680            |
| Broadlands         | 35                               | 34                 | 12              | 108            |
| Kotmale            | 201                              | 134                | 122             | 1,260          |
| Victoria           | 210                              | 228                | 134             | 2,160          |
| Randenigala        | 123                              | 120                | 116             | 1,323          |
| Rantambe           | 50                               | 50                 | 36              | 495            |
| Ukuwela            | 40                               | 40                 | 36              | 469            |
| Bowatenna          | 40                               | 40                 | 38              | 39             |
| Upper Kotmale      | 150                              | 150                | 80              | 556            |
| Nilambe            | 3                                | 3                  | 0               | 0              |
| Samanalawewa       | 120                              | 120                | 120             | 2,203          |
| Kukule             | 75                               | 75                 | 75              | 733            |
| Uma Oya (Testing ) | 120                              | 0                  | 59              | 245            |
| Inginiyagala       | 11                               | 7                  | 5               | 125            |
| Udawalawe          | 6                                | 3                  | 2               | 75             |
| Puttalam Coal I    | 270                              | 270                | 272             | 6,363          |
| Puttalam Coal II   | 270                              | 270                | 271             | 6,536          |
| Puttalam Coal III  | 270                              | 270                | 272             | 6,566          |
| KPS Small GTs      | 54                               | 0                  | 0               | 0              |
| KPS GT 7           | 115                              | 115                | 21              | 1,118          |
| KCCP               | 165                              | 147                | 144             | 3,504          |
| Sapugaskanda A     | 70                               | 32                 | 32              | 710            |
| Sapugaskanda B     | 72                               | 45                 | 45              | 1,035          |
| Uthura Janani      | 22                               | 16                 | 16              | 376            |
| Barge CEB          | 62                               | 60                 | 44              | 525            |
| CEB-Hambantota     | 30                               | 15                 | 18              | 208            |
| CEB-Mathugama      | 20                               | 9                  | 11              | 127            |
| ACE Matara         | 24                               | 0                  | 0               | 0              |
| Asia Power         | 50                               | 0                  | 0               | 0              |
| KCCPS -2           | 163                              | 153                | 148             | 3,406          |
| West Coast         | 270                              | 0                  | 0               | 0              |
| Nothern Power      | 36                               | 0                  | 0               | 0              |
| ACE Embilipitiya   | 93                               | 0                  | 0               | 0              |
| <b>Total</b>       | <b>3,594</b>                     | <b>2,750</b>       | <b>2,541</b>    | <b>47,478</b>  |

Note-

Plant availability is the availability recorded at 6 am on

May 3, 2024

Installed Capacity is sourced from CEB Annual Report- 2022

### 10. Contribution to the Night Peak in MW

May 2, 2024

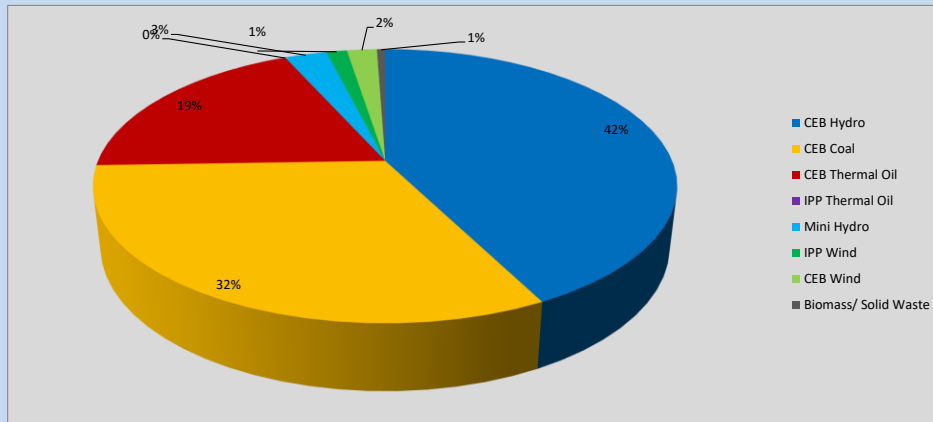


Table 06

|                          |      |    |
|--------------------------|------|----|
| CEB Hydro                | 1081 | MW |
| CEB Coal                 | 815  | MW |
| CEB Thermal Oil          | 479  | MW |
| IPP Thermal Oil          | 0    | MW |
| Mini Hydro (Telemetered) | 71   | MW |
| IPP Wind                 | 34.6 | MW |
| CEB Wind                 | 50.5 | MW |
| Biomass/ Solid Waste     | 14   | MW |

### Recorded Peak Demand Data

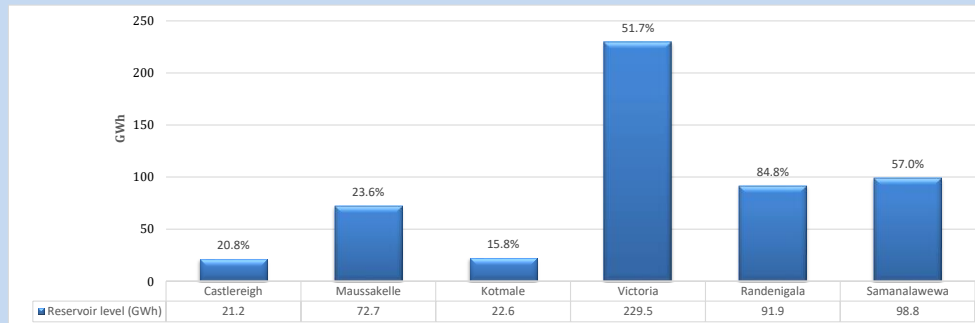
Table 07

|                         |       |    |
|-------------------------|-------|----|
| Night Peak*             | 2,545 | MW |
| Day Peak Maximum Demand | 2,396 | MW |
| Day Peak Minimum Demand | 1,658 | MW |
| Off Peak Minimum Demand | 1,411 | MW |

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

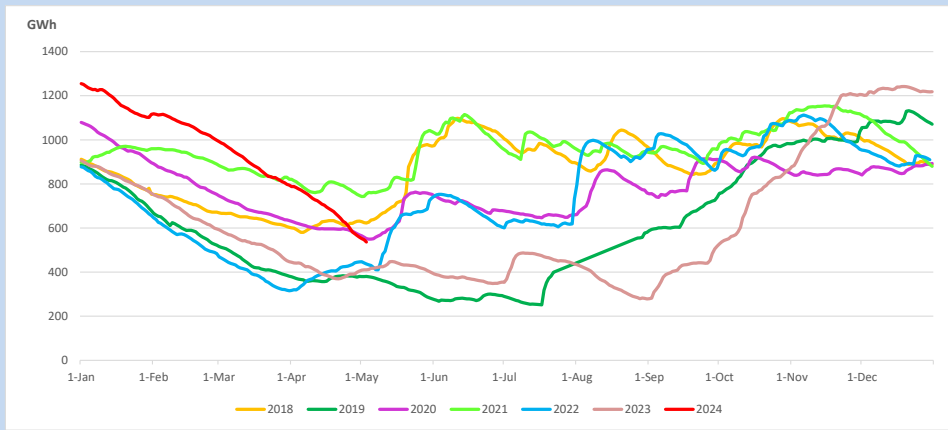
### Reservoir Levels -

as at 06.00 Hr on May 3, 2024

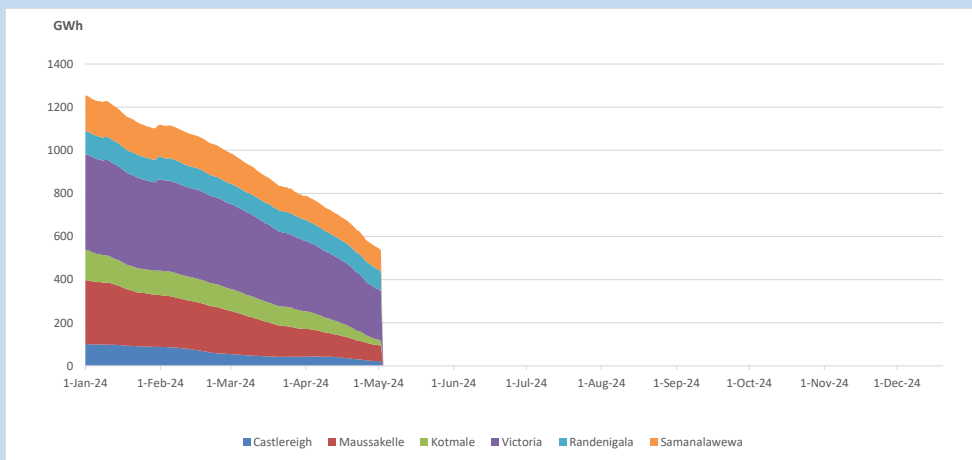


Total Reservoir Level 536.7 GWh  
% of Total capacity 42.0%

### 11. Comparison of Total Reservoir Storage Levels with Past Years

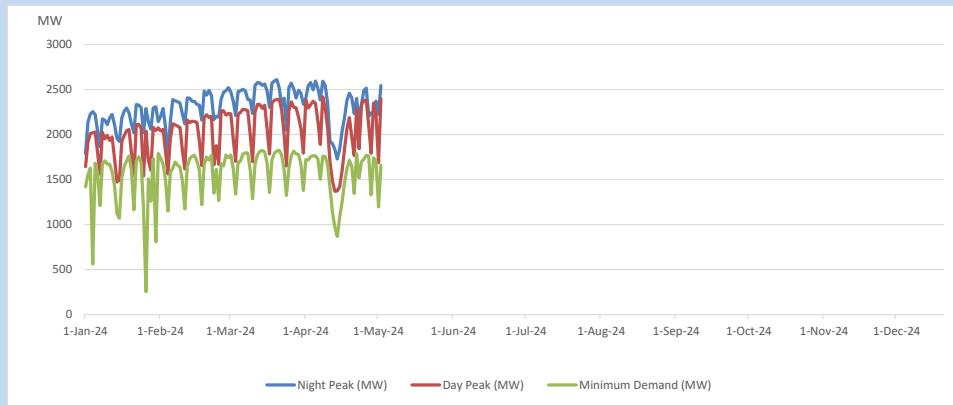


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





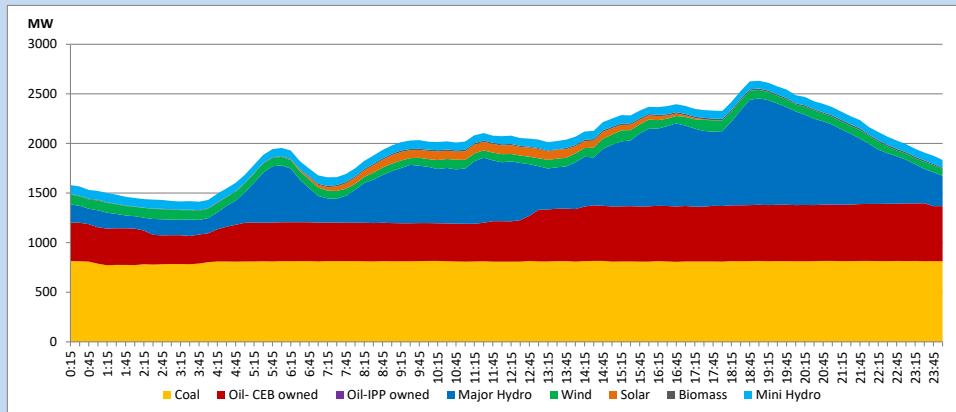
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

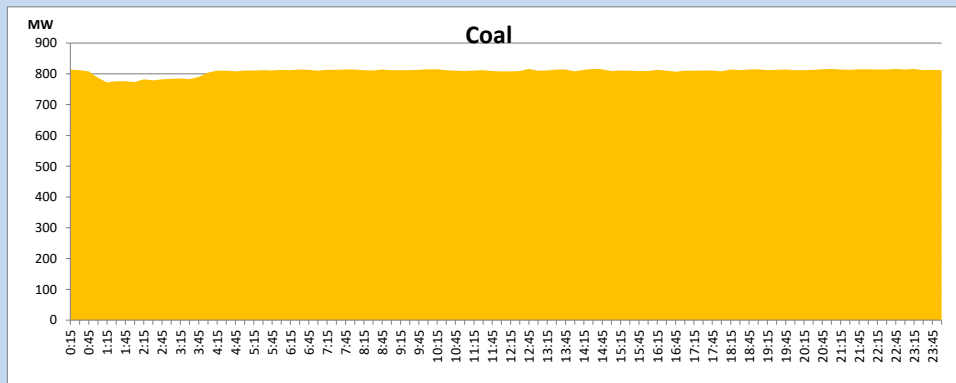
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Solar and wind data is based on Telemetered Power Stations only

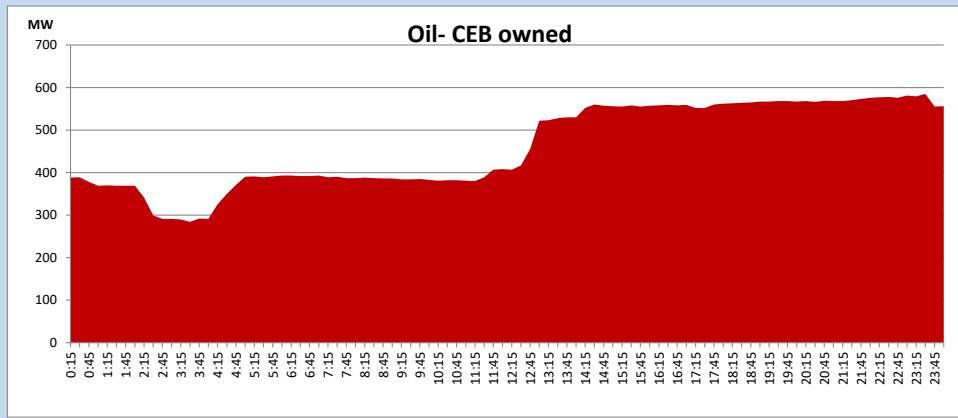
### Coal Generation during

May 2, 2024



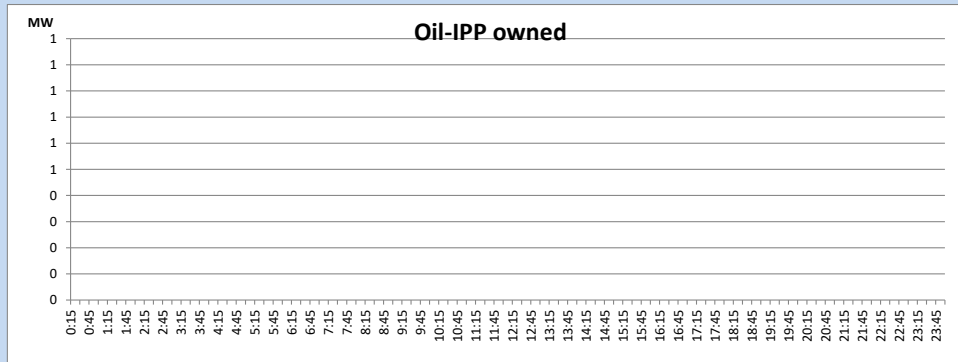
CEB Oil Plant Generation during

May 2, 2024



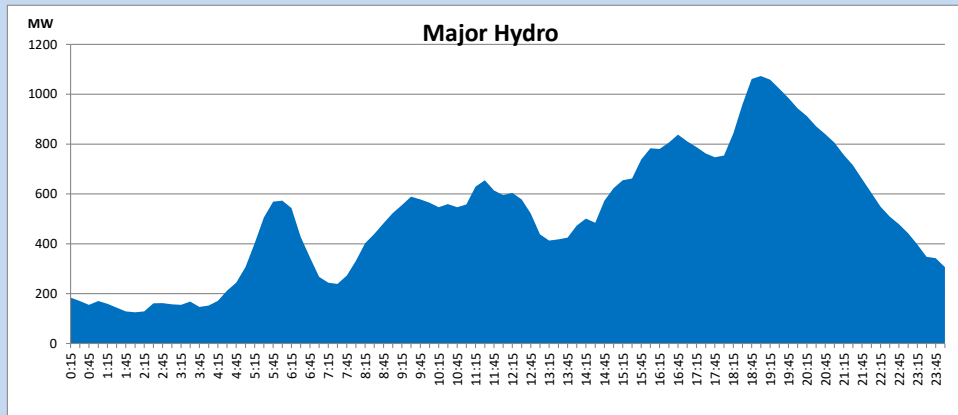
IPP Oil Plant Generation during

May 2, 2024



Major Hydro Generation during

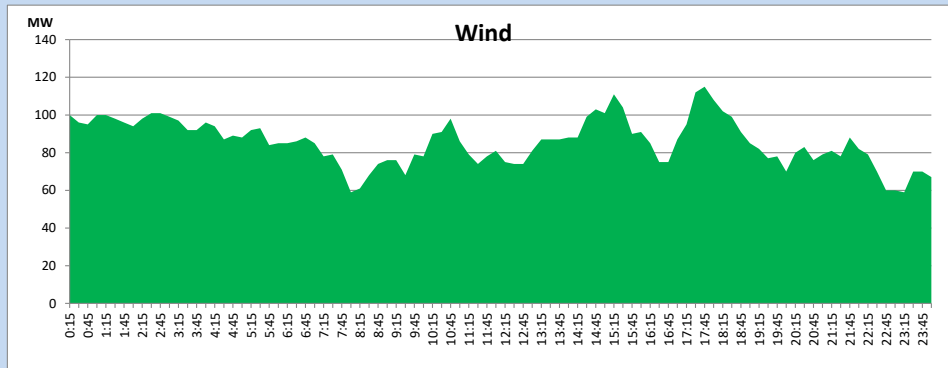
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## Wind Generation during

May 2, 2024

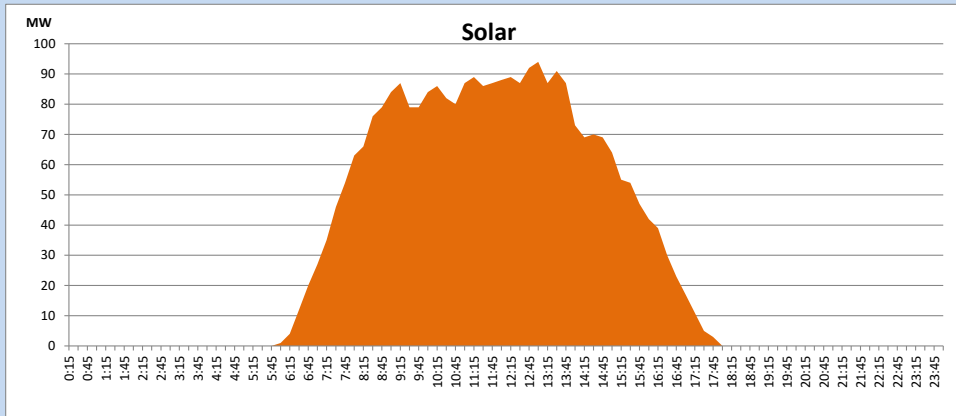
Based on Telemetered Power Stations only



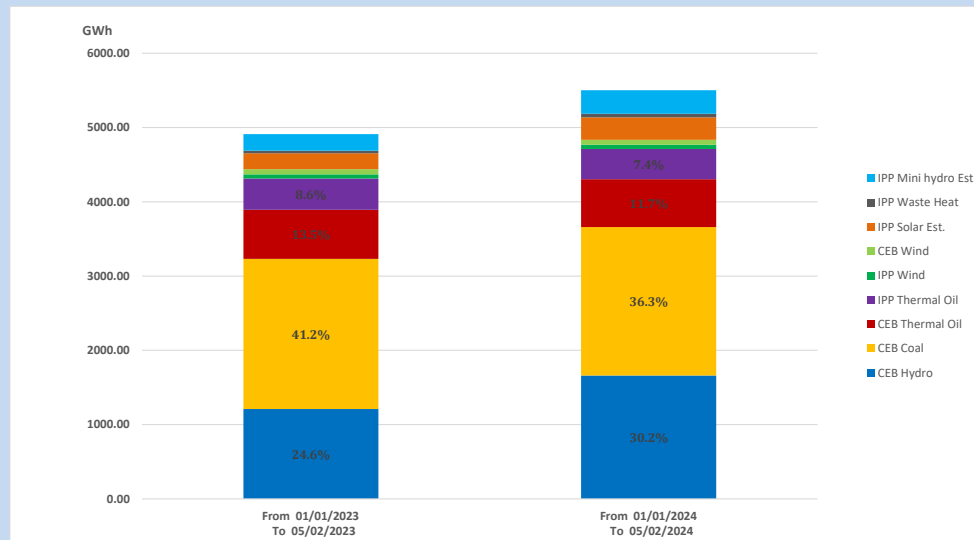
## Solar Generation during

May 2, 2024

Based on Telemetered Power Stations only



## 15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch  
From 01/01/2023 To 05/02/2023  
From 01/01/2024 To 05/02/2024

4911 GWh  
5502 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 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 |

Major Incidents reported during the day

May 2, 2024

- 1) New Anuradhapura – LVPS 220kV cct 01, which was tripped on 01.05.2024 was normalized at 16:57hrs.
- 2) Uma Oya unit 02 tripped at 17:17hrs rejecting 60MW from the system, due to high stator winding temperature. The unit resumed generation at 17:59hrs.