

# Generation and Reservoirs Statistics

March 20, 2024



PUBLIC UTILITIES COMMISSION OF SRI LANKA

## 1. Daily Generation Mix in MWh

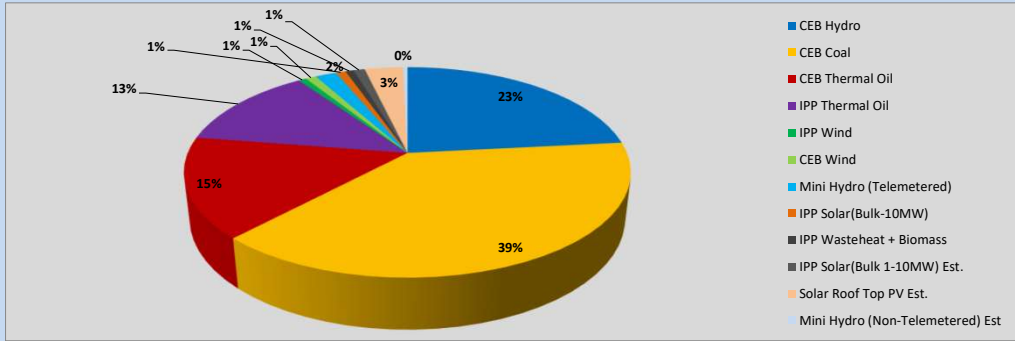


Table 01

|   | Generation (MWh) |
|---|------------------|
| CEB Hydro   | 11,786           |
| CEB Coal  | 19,514           |
| CEB Thermal Oil                                       | 7,789            |
| IPP Thermal Oil                                       | 6,495            |
| IPP Wind  | 340              |
| CEB Wind  | 457              |
| Mini Hydro (Telemetered)                              | 929              |
| IPP Solar (Bulk)                                      | 426              |
| IPP Waste heat + Biomass                              | 362              |
| <b>Total Generation (Excluding estimated figures)</b> | <b>48,098</b>    |
| * Estimated unserved energy                           | 0                |
| * Estimated Mini Hydro (Non telemetered)              | 198              |
| * Estimated IPP Solar PV (Bulk 1-10MW)                | 490              |
| * Estimated Solar Roof Top PV                         | 1670             |
| <b>Total Generation (Including estimated figures)</b> | <b>50,456</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            | 226            | 22.74% |
| CEB Coal             | 404            | 40.70% |
| CEB Thermal Oil      | 152            | 15.31% |
| IPP Thermal          | 107            | 10.80% |
| SPP Wind             | 7              | 0.69%  |
| CEB Wind             | 8              | 0.77%  |
| Mini Hydro *         | 28             | 2.83%  |
| IPP Solar *          | 53             | 5.35%  |
| IPP Waste heat + BMP | 8              | 0.80%  |
| <b>Total</b>         | <b>993</b>     |        |

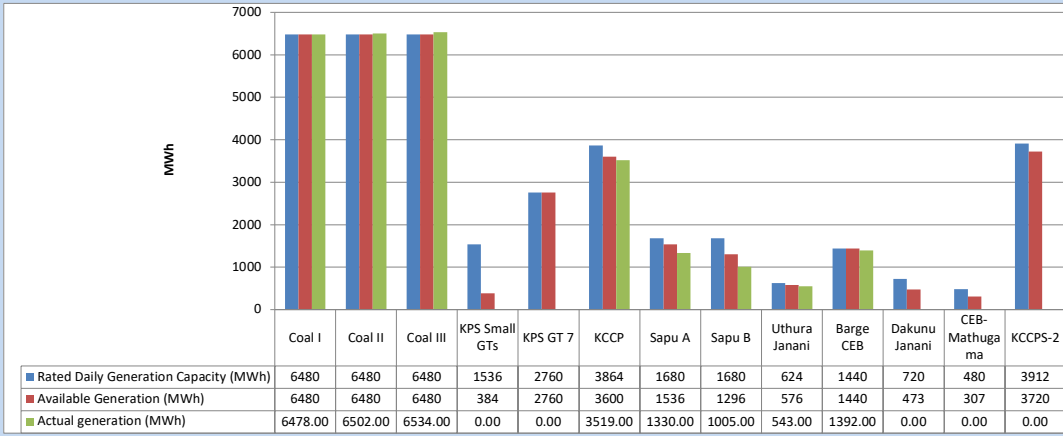
Table 04 - Current Year

| Category        | Dispatch (GWh) |        |
|-----------------|----------------|--------|
| CEB Hydro       | 1,164          | 32.66% |
| CEB Coal        | 1,284          | 36.03% |
| CEB Thermal Oil | 311            | 8.71%  |
| IPP Thermal     | 276            | 7.74%  |
| SPP Wind        | 43             | 1.20%  |
| CEB Wind        | 52             | 1.45%  |
| Mini Hydro *    | 219            | 6.14%  |
| IPP Solar *     | 186            | 5.21%  |
| IPP Waste heat  | 30             | 0.85%  |
| <b>Total</b>    | <b>3,564</b>   |        |

\*Including estimated contribution from non telemetered plants

### 3. CEB owned Thermal Plant Dispatch

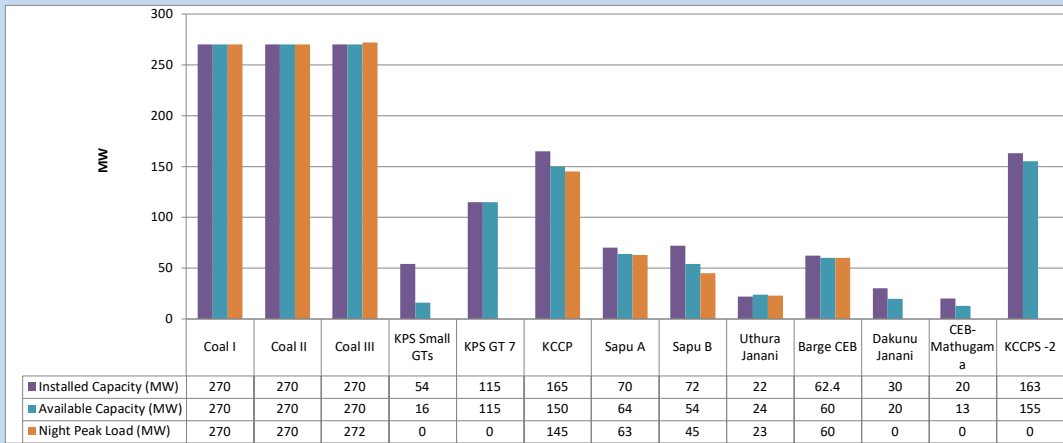
March 20, 2024



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

March 21, 2024

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

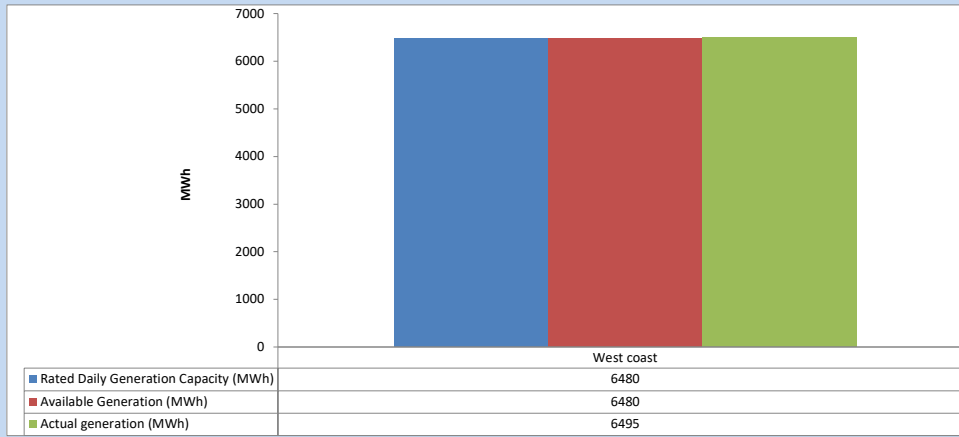


Plant availability is recorded at 6.00 am on

March 21, 2024

### 5. IPP owned Thermal Plant Dispatch

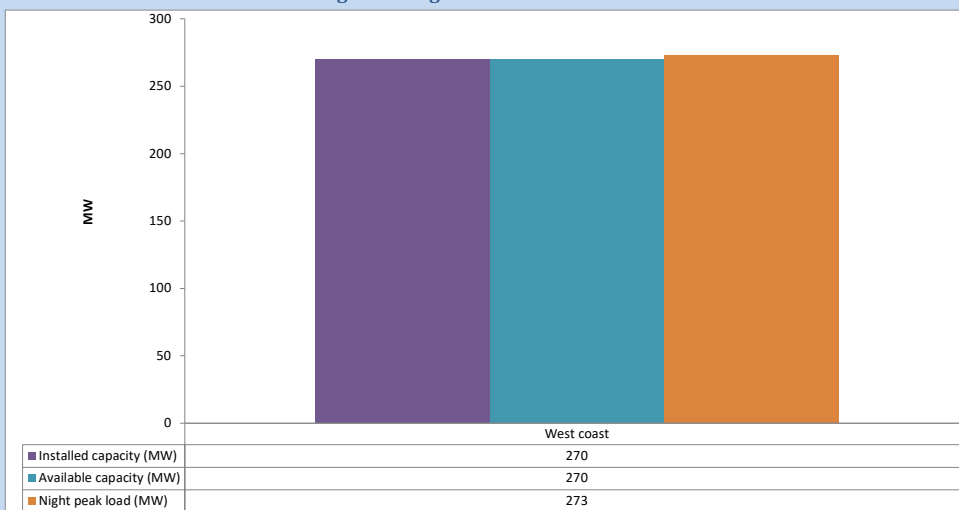
March 20, 2024



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

March 21, 2024

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

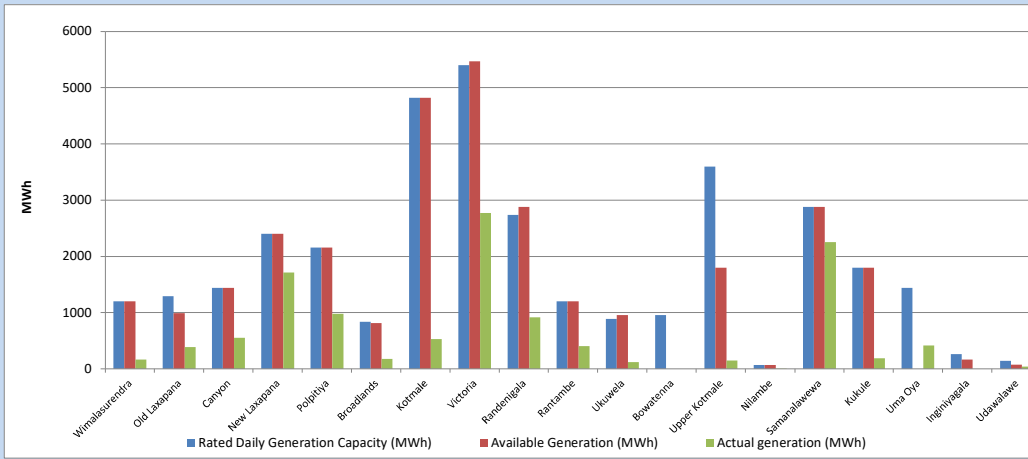


Plant availability is recorded at 6.00 am on

March 21, 2024

## 7. Major Hydro Plant Dispatch

March 20, 2024

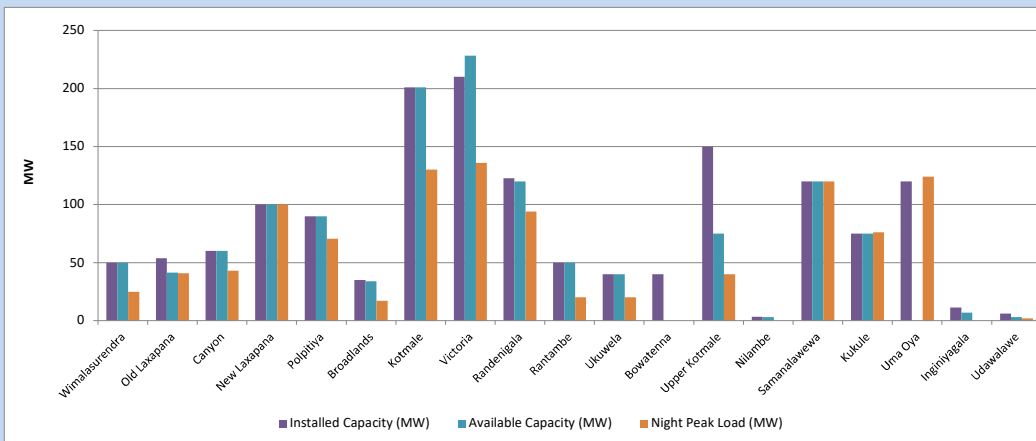


Available Generation is estimated based on plant availability at 6.00am on  
Broadlands power plant is operating in the Commissioning Stage

March 21, 2024

## 8. Major Hydro Plant Loading at Night Peak

March 20, 2024



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

March 21, 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                 | 25              | 164            |
| Old Laxapana       | 54                               | 41                 | 41              | 385            |
| Canyon             | 60                               | 60                 | 43              | 556            |
| New Laxapana       | 100                              | 100                | 100             | 1,715          |
| Polpitiya          | 90                               | 90                 | 71              | 980            |
| Broadlands         | 35                               | 34                 | 17              | 176            |
| Kotmale            | 201                              | 201                | 130             | 530            |
| Victoria           | 210                              | 228                | 136             | 2,772          |
| Randenigala        | 123                              | 120                | 94              | 918            |
| Rantambe           | 50                               | 50                 | 20              | 403            |
| Ukuwela            | 40                               | 40                 | 20              | 121            |
| Bowatenna          | 40                               | 0                  | 0               | 0              |
| Upper Kotmale      | 150                              | 75                 | 40              | 152            |
| Nilambe            | 3                                | 3                  | 0               | 5              |
| Samanalawewa       | 120                              | 120                | 120             | 2,258          |
| Kukule             | 75                               | 75                 | 76              | 190            |
| Uma Oya (Testing ) | 120                              | 0                  | 124             | 419            |
| Inginiyagala       | 11                               | 7                  | 0               | 0              |
| Udawalawe          | 6                                | 3                  | 2               | 42             |
| Puttalam Coal I    | 270                              | 270                | 270             | 6,478          |
| Puttalam Coal II   | 270                              | 270                | 270             | 6,502          |
| Puttalam Coal III  | 270                              | 270                | 272             | 6,534          |
| KPS Small GTs      | 54                               | 16                 | 0               | 0              |
| KPS GT 7           | 115                              | 115                | 0               | 0              |
| KCCP               | 165                              | 150                | 145             | 3,519          |
| Sapugaskanda A     | 70                               | 64                 | 63              | 1,330          |
| Sapugaskanda B     | 72                               | 54                 | 45              | 1,005          |
| Uthura Janani      | 22                               | 24                 | 23              | 543            |
| Barge CEB          | 62                               | 60                 | 60              | 1,392          |
| CEB-Hambantota     | 30                               | 20                 | 0               | 0              |
| CEB-Mathugama      | 20                               | 13                 | 0               | 0              |
| ACE Matara         | 24                               | 0                  | 0               | 0              |
| Asia Power         | 50                               | 0                  | 0               | 0              |
| KCCPS -2           | 163                              | 155                | 0               | 0              |
| West Coast         | 270                              | 270                | 273             | 6,495          |
| Nothern Power      | 36                               | 0                  | 0               | 0              |
| ACE Embilipitiya   | 93                               | 0                  | 0               | 0              |
| <b>Total</b>       | <b>3,594</b>                     | <b>3,048</b>       | <b>2,599</b>    | <b>48,098</b>  |

Note-

Plant availability is the availability recorded at 6 am on

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Installed Capacity is sourced from CEB Annual Report- 2022

10. Contribution to the Night Peak in MW

March 20, 2024

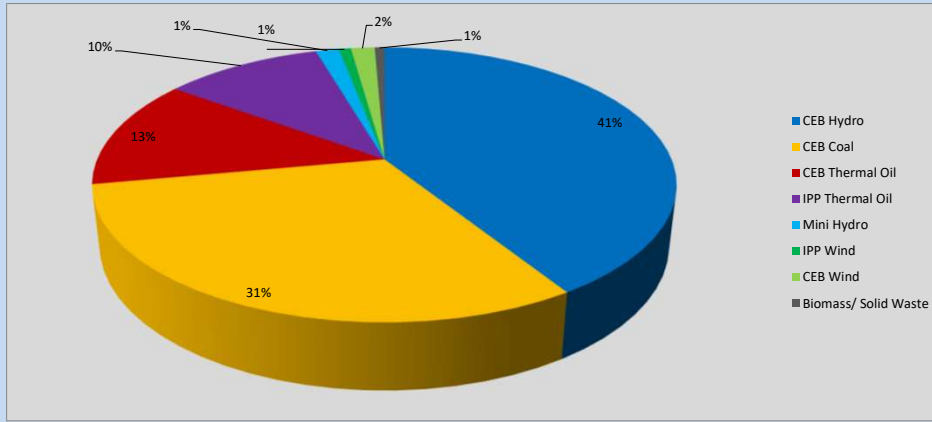


Table 06

|                          |      |    |
|--------------------------|------|----|
| CEB Hydro                | 1070 | MW |
| CEB Coal                 | 812  | MW |
| CEB Thermal Oil          | 336  | MW |
| IPP Thermal Oil          | 273  | MW |
| Mini Hydro (Telemetered) | 40   | MW |
| IPP Wind                 | 20.9 | MW |
| CEB Wind                 | 41   | MW |
| Biomass/ Solid Waste     | 17   | MW |

Recorded Peak Demand Data

Table 07

|                         |       |    |
|-------------------------|-------|----|
| Night Peak*             | 2,610 | MW |
| Day Peak Maximum Demand | 2,389 | MW |
| Day Peak Minimum Demand | 1,817 | MW |
| Off Peak Minimum Demand | 1,587 | MW |

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

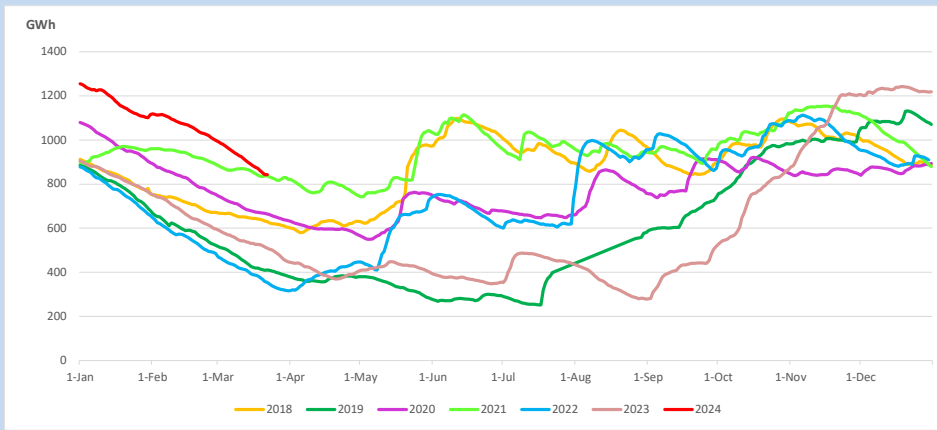
Reservoir Levels -

as at 06.00 Hr on March 21, 2024

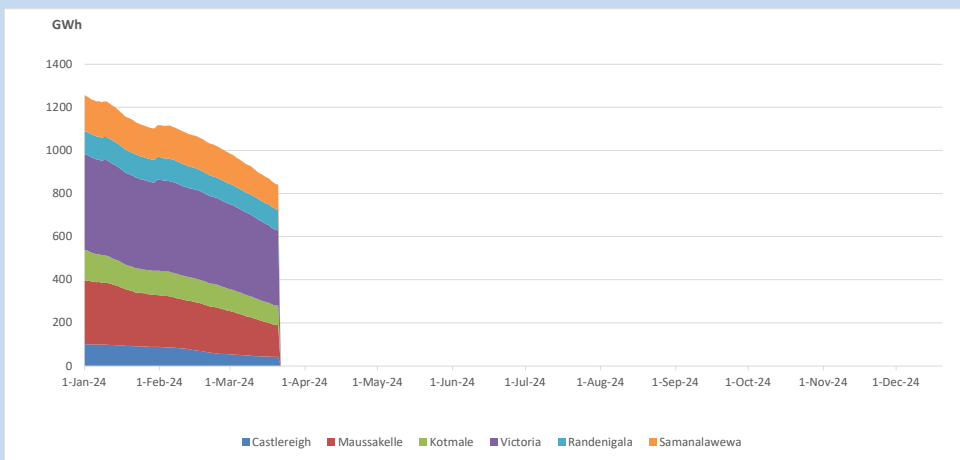


Total Reservoir Level 842.6 GWh  
 % of Total capacity 65.9%

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

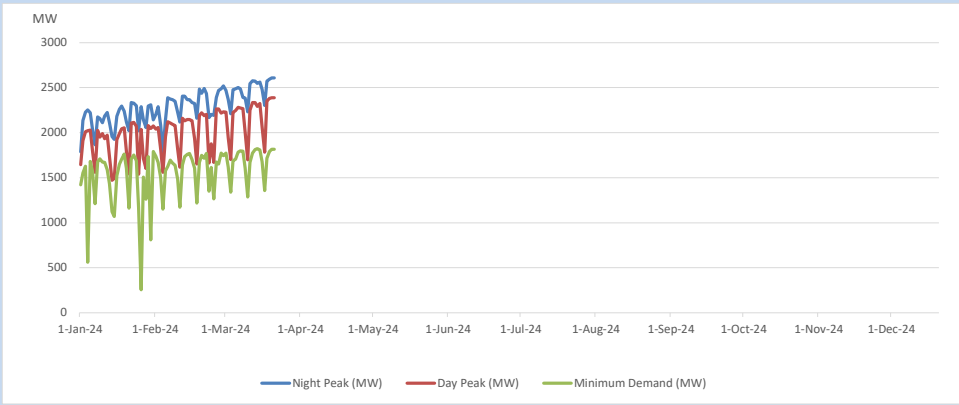


### 12. Variation of Major Hydro Reservoir Levels in the current year (GWh)





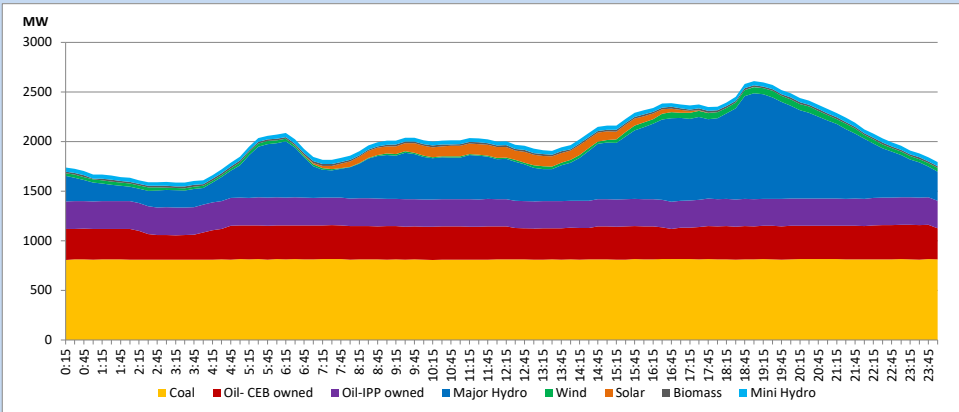
### 13. Variation of Demand during the current year



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

### 14. Daily Load Curve

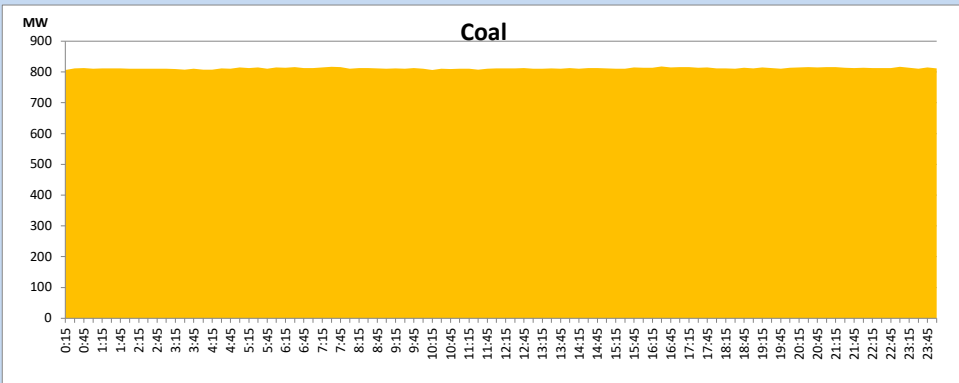
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Solar and wind data is based on Telemetered Power Stations only

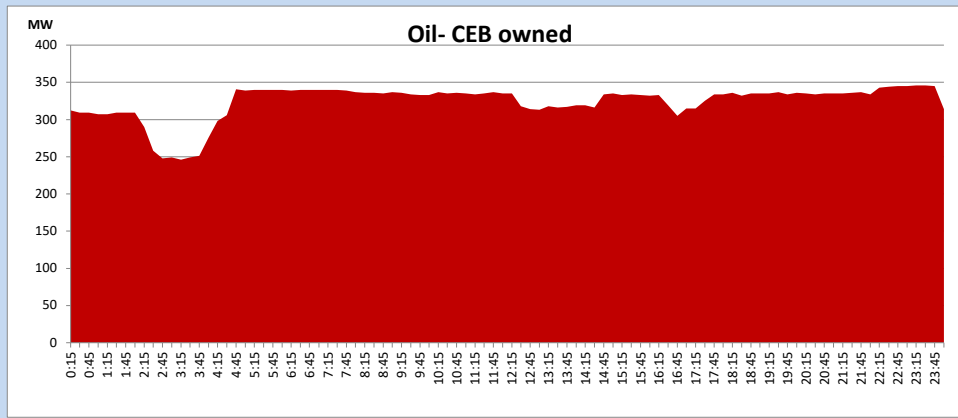
### Coal Generation during

March 20, 2024



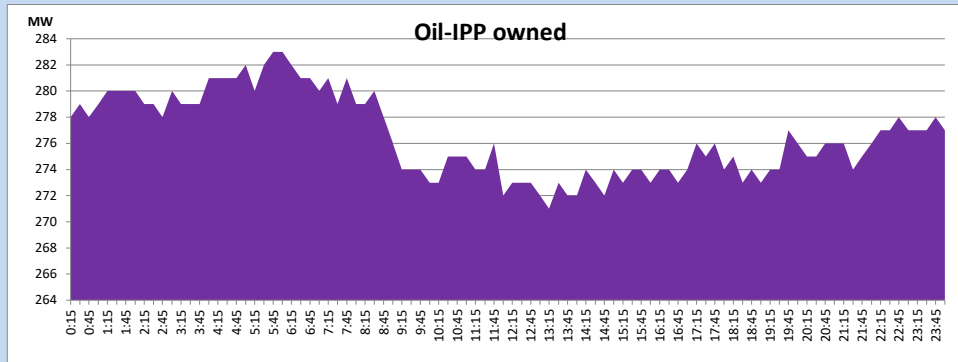
CEB Oil Plant Generation during

March 20, 2024



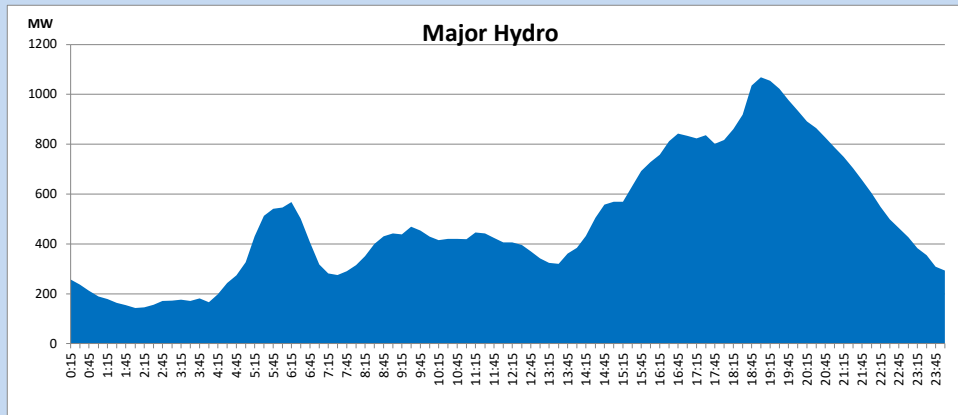
IPP Oil Plant Generation during

March 20, 2024



Major Hydro Generation during

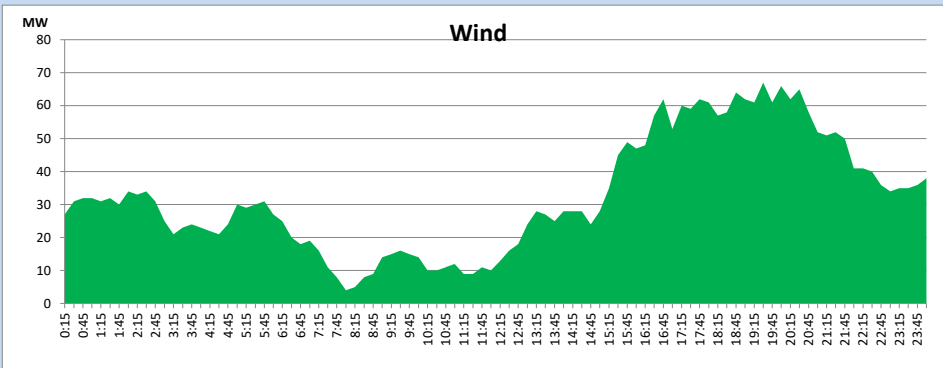
March 20, 2024



### Wind Generation during

March 20, 2024

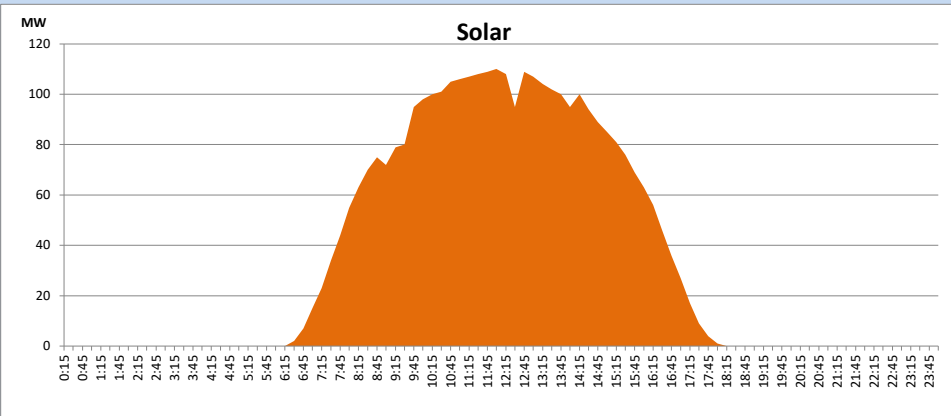
Based on Telemetered Power Stations only



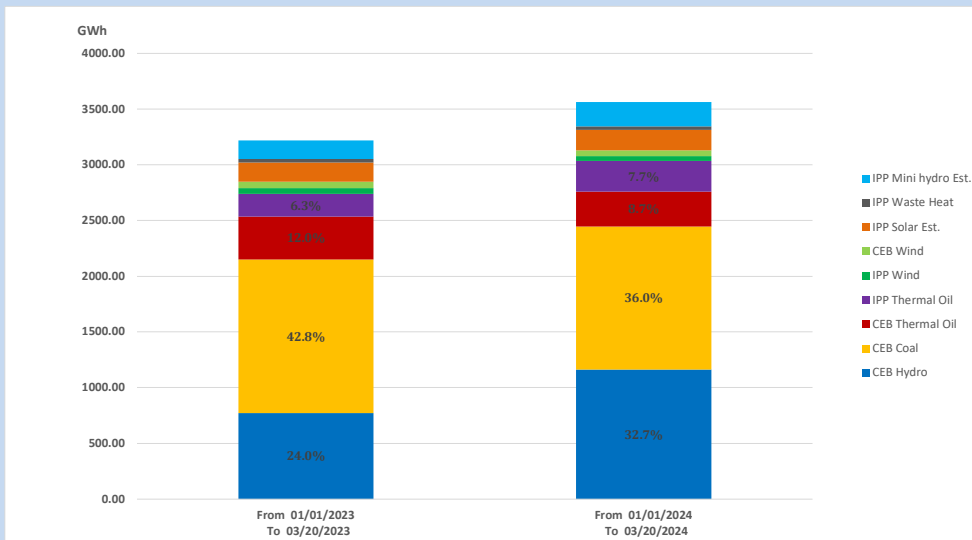
### Solar Generation during

March 20, 2024

Based on Telemetered Power Stations only



### 15. Cumulative Dispatch Comparison with Last Year



Cumulative dispatch  
 From 01/01/2023 To 03/20/2023  
 From 01/01/2024 To 03/20/2024

3219 GWh  
 3564 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 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

March 20, 2024

- 1) Rantambe unit 01 tripped at 13:07hrs rejecting 15MW from the system due to the high damping alarm. The unit 01 resumed generation at 14:14hrs