<u>Maharashtra Power System Overview for the month of December – 2024</u>

A. Maharashtra system Overview: -

The overview of Maharashtra system operation for the month of December - 2024 with respect to availability and shortfall is elaborated as under.

• The power supply position for **STATE** in December - 2024 are given below: -

| Sr | Particulars | Recorded Demand/Requirement | Date | Time |
|-----|---------------------|-----------------------------|------------|------------|
| No. | | 1 | | |
| 1 | Max. Demand | 28632 MW | 24.12.2024 | 11:00 Hrs. |
| | | (with Load shedding 0 MW) | | |
| 2 | Min. Demand | 18904 MW | 16.12.2024 | 04:00 Hrs. |
| 3 | Max. Demand | 28632 MW | 24.12.2024 | 11:00 Hrs. |
| | Catered | | | |
| 4 | Energy Catered | 17675 MUs | - | - |
| 5 | Max. Energy | 606 MUs | 05.12.2024 | - |
| | Catered | | | |
| 6 | Avg. Energy Catered | 570 MUs | - | - |

• The power supply position for **MSEDCL** in December - 2024 are given below: -

| Sr No. | Particulars | Recorded Demand /Requirement | Date | Time |
|-----------|------------------------|--------------------------------------|------------|------------|
| 1 | Max. Demand | 25254 MW (with Load shedding 0 MW) | 24.12.2024 | 11:00 Hrs. |
| 2 | Min. Demand | 16404 MW | 15.12.2024 | 24:00 Hrs. |
| 3 | Max. Demand Catered | 25254 MW | 24.12.2024 | 11:00 Hrs. |
| 4 | Energy Catered | 15486 MUs | - | - |
| 5 | Max. Energy Catered | 522 MUs | 05.12.2024 | - |
| 6 | Avg. Energy Catered | 500 MUs | - | - |

• The power supply position for **Mumbai System** in December - 2024 are given below: -

| Sr No. | Particulars | Recorded Demand/Requirement | Date | Time |
|-----------|---------------------|-----------------------------|------------|------------|
| 1 | Max. Demand | 3583 MW | 06.12.2024 | 13:00 Hrs. |
| 2 | Min. Demand | 1577 MW | 25.12.2024 | 04:00 Hrs. |
| 3 | Energy Catered | 1933 MUs | - | - |
| 4 | Max. Energy Catered | 72 MUs | 05.12.2024 | - |
| 5 | Avg. Energy Catered | 58 MUs | - | - |

The power supply position for <u>Other Discoms</u> (Indian Railway, Mind Space, Gigaplex, KRC Infrastructure, Nidar Utilities, MADC, E-ON Phase I, E-ON Phase II, Laxmi Pati) in December - 2024 are given below: -

| Sr No. | Particulars | Recorded Demand /Requirement | Date | Time |
|-----------|------------------------|------------------------------|------------|------------|
| 1 | Max. Demand | 592 MW | 30.12.2024 | 12:00 Hrs. |
| 2 | Min. Demand | 385 MW | 10.12.2024 | 04:00 Hrs. |
| 3 | Energy Catered | 378 MUs | - | - |
| 4 | Max. Energy Catered | 13 MUs | 30.12.2024 | - |
| 5 | Avg. Energy Catered | 12 MUs | - | - |

B. Load shedding in MSEDCL area:

- Revised Feeder wise planned load shedding protocol in MSEDCL, based on MERC Order in Case No.41 of 2012 dt.26.11.2012, is implemented w.e.f. 16/01/2013 by MSEDCL as per circular No.46 Dated 14/01/2013. Circular no. 46 is temporarily modified by circular no 56 dt. 18.04.2022. The hourly load relief quantum is submitted at the end of the day, daily, by LM cell of MSEDCL, Kalwa.
- Planned load shedding for load relief is carried out in MSEDCL area to mitigate the availability in real time if required. AG-LM load management scheme is revised as per load shedding circular w.e.f. 20.04.2022 vide MSEDCL letter no. ED(II)/LM/PLS/09490 dated 18.04.2022, 3 phase supply to AG. loads will be 8/10 Hrs. w.e.f. 20.04.2022.

Load shedding due to transmission constraint was **0.368** Mus on several days during the month.

C. Other Highlights of Maharashtra System in December- 2024

- MSPGCL Thermal actual generation was as high as 7545 MW (hourly max) on 17.12.24 and was as low as 4856 MW (hourly min) on 28.12.24.
- Solar Generation for the month was 554 MUs. Maximum Solar generation was 3313 MW at 14.12.24 at 13 Hrs.
- Wind Generation for the month was 299 MUs. Maximum Wind generation was 1494 MW at 15.12.24 at 01 Hrs.
- 3.637 TMC of Koyna water is utilized in the month of December 2024 and total cumulative usage of TMC in Water Year 2024-25 is 24.710 Balance TMC for WY 2024-25 is 42.790 TMC as on 31.12.2024.
- The average grid frequency for the month was 49.99 Hz. The Instantaneous Maximum frequency was 50.40 Hz at 06:02 Hrs on 15.12.2024 and Minimum frequency was 49.49 Hz at 09:06 Hrs on 22.12.2024.
- Max. 765 kV Voltage in MSETCL was recorded as **793** kV at Ektuni & Akola substations and Min. voltage was recorded as **743** kV at Ektuni substation.
- Max. 400 kV Voltage in MSETCL was recorded as **433** kV at New Koyna substation and Min. voltage was recorded **397** kV at Jaigad substation.
- There was no planned load shedding in Mumbai area (BEST, AEML-D and TPC-D) during the month.

During the month of December-2024 following major occurrences were reported:

- ➤ On 3.12.2024 at 12:31 Hrs, in 220 kV AEML Saki S/s, main bus -2 with bus coupler tripped and load loss of 48 MW occurred for 8 minutes.
- > On 07.12.2024 at 16:36 Hrs, in 220 kV Nerul S/s, LBB operated and substation went in to the dark. Load loss of 75 MW occurred due to this event for 16 minutes
- ➤ On 28.12.2024 at 17:16 Hrs, 220 kV Airoli Knowledge Park S/s got dead due to simultaneous tripping of 220 kV Airoli Knowledge Park Kalwa line at Kalwa end only & 220kV Airoli Knowledge Park Nashik line. During this occurrence 43 MW load loss occurred for 1 Hour 28 minutes.
