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

A. Maharashtra system Overview: -

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

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

Sr No.	Particulars	Recorded Demand/Requirement	Date	Time
1	Max. Demand	26613 MW (with Load shedding 0 MW)	29.10.2024	19:00 Hrs.
2	Min. Demand	18022 MW	13.10.2024	04:00 Hrs.
3	Max. Demand Catered	26613 MW	29.10.2024	19:00 Hrs.
4	Energy Catered	16870 MUs	-	-
5	Max. Energy Catered	587 MUs	08.10.2024	-
6	Avg. Energy Catered	544 MUs	-	-

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

Sr No.	Particulars	Recorded Demand /Requirement	Date	Time
1	Max. Demand	22484 MW (with Load shedding 0 MW)	29.10.2024	19:00 Hrs.
2	Min. Demand	15267 MW	13.10.2024	04:00 Hrs.
3	Max. Demand Catered	22484 MW	29.10.2024	19:00 Hrs.
4	Energy Catered	14227 MUs	1	-
5	Max. Energy Catered	495 MUs	08.10.2024	-
6	Avg. Energy Catered	459 MUs	-	-

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

Sr	Particulars	Recorded	Date	Time
No.	Tarrectians	Demand/Requirement	Date	Time
1	Max. Demand	3944 MW	23.10.2024	16:00 Hrs.
2	Min. Demand	2140 MW	11.10.2024	05:00 Hrs.
3	Energy Catered	2264 MUs	-	-
4	Max. Energy Catered	79 MUs	08.10.2024	-
5	Avg. Energy Catered	73 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 October - 2024 are given below: -

Sr No.	Particulars	Recorded Demand /Requirement	Date	Time
1	Max. Demand	599 MW	21.10.2024	12:00 Hrs.
2	Min. Demand	372 MW	21.10.2024	03:00 Hrs.
3	Energy Catered	380 MUs	-	-
4	Max. Energy Catered	13 MUs	30.10.2024	-
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 less availability of Generation and State Over drawl in real time was 1.546 MUs on 01.10.2024 & 05.10.2024.
- Load shedding due to transmission constraint was **6.00** Mus on several days during the month.

C. Other Highlights of Maharashtra System in October- 2024

- MSPGCL Thermal actual generation was as high as 7549 MW (hourly max) on 18.10.24 and was as low as 4352 MW (hourly min) on 31.10.24.
- Solar Generation for the month was 574 MUs. Maximum Solar generation was 3134 MW at 27.10.24 at 12 Hrs.
- Wind Generation for the month was 237 MUs. Maximum Wind generation was 1064 MW at 11.10.24 at 03 Hrs.
- **2.590** TMC of Koyna water is utilized in the month of October 2024 and total cumulative usage of TMC in Water Year 2024-25 is **18.938** Balance TMC for WY 2024-25 is **48.562** TMC as on 31.10.2024.
- The average grid frequency for the month was 49.99 Hz. The Instantaneous Maximum frequency was 50.38 Hz at 13:03 Hrs on 25.10.2024 and Minimum frequency was 49.59 Hz at 20:33 Hrs on 17.10.2024.
- Max. 765kV Voltage in MSETCL was recorded as **795** kV at Ektuni substation and Min. voltage was recorded as **739** kV at Ektuni & Akola substations.
- Max. 400 kV Voltage in MSETCL was recorded as **435** kV at New Koyna substation and Min. voltage was recorded **380** kV at Chakan substation.
- There was no planned load shedding in Mumbai area (BEST, AEML-D and TPC-D) during the month.
- During the month of October-2024 following major occurrences were reported:
- ➤ On 01.10.2024 at 16:40 Hrs, 220 kV Main Bus -1 at 220 kV Uran s/s tripped on bus bar protection, along with Bus 1 Uran U-7, 220 kV Uran-Apta-2, 220kV Uran-Apta 4, 220 kV Uran-Ulwe-2, 220 KV Uran-ONGC and 50 MVA T/F-1 also tripped. Due to the event 14 MW load loss and 77 MW Generation loss occurred. All tripped elements (except unit-7) and load is restored due to tripping by 17:13 Hrs. Unit-7 is kept out due to turbine vibration high.
- ➤ On 30.10.2024 at 16:22 Hrs, in 220 kV Kalwa S/s Fault occurred on 220 kV Borivali CTRLS line due to B ph LA failure on CTT (Cable termination tower). Due to heavy fault, 220 kV Kalwa Pawane line B ph jumper between Line isolator and CB broken down and grounded & 220 kV Main Bus 2 tripped at Kalwa SS along with 400/220kV ICT 1& 2 at Kalwa. No load loss reported by field. However, during charging of 220kV Kalwa- Colorchem line, LTS operated at Colorchem S/s & 47 MW load loss occurred, load restored at 17:16 Hrs
- During the month of October 2024, the following important elements related to Mumbai/MMR were commissioned:
 - ➤ KVTL Project: LILO of 400 kV Kalwa Talegaon PG at 400 kV Vikhroli S/s completed on 07.10.2024. This forming 400 kV Kalwa Vikhroli line & 400 kV Talegaon PG Vikhroli line.
 - ➤ MUML Project: 220 kV Navi Mumbai PG Apta ckt I & II on 15.10.2024.

220 kV Navi Mumbai PG - Taloja on 15.10.2024.

220 kV Navi Mumbai PG – Print House on 15.10.2024.
