Note on

<u>Maharashtra Power System Overview, under frequency operation, Load shedding (Planned and Distress) for the month of December - 2022</u>

Maharashtra system Overview: -

The overview of Maharashtra system operation for the month of December - 2022 with respect to availability and shortfall is elaborated as under.

The power supply position for <u>STATE</u> in December - 2022 are given below: -

Sr No.	Particulars	Recorded Demand/Requirement	Date	Time
1	Max. Demand	27234 MW (with Load shedding 0 MW)	27.12.2022	11:00 Hrs.
2	Min. Demand	18021 MW	12.12.2022	03:00 Hrs.
3	Max. Demand Catered	27234 MW	27.12.2022	11:00 Hrs.
4	Energy Catered	16823 MUs		
5	Max. Energy Catered	559 MUs	17.12.2022	
6	Avg. Energy Catered	543 MUs		

• The power supply position for **MSEDCL** in December - 2022 are given below: -

Sr No.	Particulars	Recorded Demand /Requirement	Date	Time
1	Max. Demand	24067 MW (with Load shedding 0 MW)	27.12.2022	11:00 Hrs.
2	Min. Demand	15955 MW	12.12.2022	01:00 Hrs.
3	Max. Demand Catered	24067 MW	27.12.2022	11:00 Hrs.
4	Energy Catered	14738 MUs		
5	Max. Energy Catered	491 MUs	28.12.2022	
6	Avg. Energy Catered	475 MUs		

• The power supply position for **Mumbai system** in December - 2022 are given below: -

Sr No.	Particulars	Recorded Demand/Requirement	Date	Time
1	Max. Demand	3313 MW	14.12.2022	12:00 Hrs.
2	Min. Demand	1451 MW	26.12.2022	04:00 Hrs.
3	Energy Catered	1792 MUs		
4	Max. Energy Catered	66 MUs	16.12.2022	
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 March - 2022 are given below: -

Sr No.	Particulars	Recorded Demand /Requirement	Date	Time
1	Max. Demand	464 MW (with Load shedding 0 MW)	16.12.2022	19:00 Hrs.
2	Min. Demand	275 MW	06.12.2022	04:00 Hrs.
3	Max. Demand Catered	464 MW	16.12.2022	19:00 Hrs.
4	Energy Catered	293 MUs		
5	Max. Energy Catered	10 MUs	30.12.2022	
6	Avg. Energy Catered	9 MUs		

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.
- Max. load shedding was recorded as 220 MW and Min. load shedding was recorded as 0 MW. LTS operated due
 to overloading of ICT 1 at 400kV Chakan as ICT 3 tripped due to sparking on 89A R ph PG isolator and ICT I had
 tripped simultaneously.
- 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.

Other Highlights of Maharashtra System in December - 2022

- 6.138 TMC of Koyna water is utilized for December 2022.
- Wind Generation for the month was 271 MUs. Average wind generation was 365 MW/hour.
- The average grid frequency for the month was 50 Hz. The Instantaneous Maximum frequency was 50.54 Hz and Minimum frequency was 49.41 Hz.
- There was an instance of under frequency operation (48.8 Hz, 49.0 Hz, 49.2 Hz & 49.4 Hz) during the month. On 25.12.2022, the frequency was on lower side during the time period ranging from 09:04 hrs to 10:18 hrs. and dropped to 49.4 Hz causing UFR operation in various parts.
- MSPGCL Thermal actual generation was as high as 7407 MW (hourly max) on 29.12.22 at 12:00 hrs.
- MSPGCL Thermal actual generation was as low as 4716 MW (hourly min) on 09.12.22 at 02:00 hrs.
- Max. Voltage at 765kV Substation was recorded as 793 at 765KV Akola substation and Min. voltage was recorded as 744 kV at 765kV Ektuni substation.
- Max.Voltage at MSETCL 400 kV Substation recorded as 439kV at 400KV Kalwa and Min. voltage was recorded 380 kV at 400KV Lonikand II substation.
- There was no planned load shedding in Mumbai area (BEST, AEML-D and TPC-D) during the month.