

Note on

**Maharashtra Power System Overview, Under frequency operation, Load shedding (planned and Distress) for the month of Mar-2014.**

**Maharashtra system Overview:**

The overview of Maharashtra system operation for the month Mar-2014 with respect to availability and shortfall is elaborated as under.

- The power supply position for **STATE** in Mar-14 are given below:-
  - The State *maximum* demand was recorded as 19526 MW (including load shedding of 943 MW) on 29/03/2014 at 13:00Hrs.
  - The State *minimum* demand was recorded as 11059 MW on 10/03/2014 at 04:00Hrs.
  - The State *maximum CATERED* demand was recorded as 18803 MW on 26/03/2014 at 16:00Hrs.
  - The State has Catered 11220 Mus in the Month (daily average of 361.9 Mus) and max daily Catered Mus was 406.5 on 27/03/2014.
  
- The power supply position for **MSEDCL** in Mar-14 are given below:-
  - The *maximum* demand of MSEDCL was recorded as 16734 MW (including load shedding of 845 MW) on 29/03/2014 at 16:00Hrs.
  - The *minimum* demand of MSEDCL was recorded as 9584 MW on 10/03/2014 at 04:00Hrs.
  - The *maximum CATERED* demand of MSEDCL was recorded as 15960 MW on 29/03/2014 at 15:00Hrs.
  - MSEDCL has Catered 9575 Mus in the Month (daily average of 308.9 Mus) and max daily Catered Mus was 349.8 on 29/03/2014.

- The power supply position for **Mumbai system** in Mar-14 are given below:-
  - The *maximum* demand of MUMBAI SYSTEM was recorded as 3008 MW on 28/03/2014 at 12:00Hrs.
  - The *minimum* demand of MUMBAI SYSTEM was recorded as 1314 MW on 03/03/2014 at 04:00Hrs.
  - The MUMBAI SYSTEM has Catered 1644 Mus in the Month (daily average of 53.1 Mus) and max daily Mus Catered was 59.0 on 27/03/2014.

#### **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 wef. 16/01/2013 by MSEDCL as per circular No.46 Dated 14/01/2013. 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 1021 MW on 28/03/2014 at 08:00 Hrs. and Min. load shedding was recorded as 0 MW on 21/03/2014. Average load shedding quantum for the month was 253 MW.
- Planned load shedding for load relief is carried out in MSEDCL area to mitigate the availability in real time. In addition, AG-LM load management scheme was in force for defined hours, as per the load shedding circular. All PLR groups A, B, C, D, E, F & G were withdrawn between 18:00hrs. to 22:00hrs for HSC/SSC examinations up to 27<sup>th</sup> Mar 2014.
- There was no distress load shedding due to shortfall of supply during the month.

#### **Other Highlights of Maharashtra System in Mar-14.**

- MSPGCL Parli TPS generation Units 3, is under shut down due to water shortage w.e.f.15/02/2013.
  - RGPPL generation was NIL in Mar-14. RGPPL generation (Total:-1967MW & MSEDCL share:- 1888 MW) is under shutdown due to gas shortage w.e.f. 29/12/2013.
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- 6.743 TMC of Koyna water was utilized for Mar 2014. Wind Generation for the month was 187.4 Mus. Average wind generation was 251.8 MW/hour.
  - The average grid frequency for the month was 49.99 Hz. The Instantaneous Maximum frequency was 50.45 Hz. and Minimum frequency was 49.29 Hz.
  - There was no instance of under frequency operation during the month. On 12<sup>th</sup> Mar 2014 at 19:21Hrs all CGPL, Mundra generating units get tripped, total 3800MW generation lost in the grid, frequency suddenly dropped by 0.67Hz ( i.e. from 49.95Hz to 49.28Hz). Due to which Frequency trend relay (FTR) operated in Vashi zone (Load relief - 334MW).
  - MSPGCL Thermal availability was as high as 6355 MW (hourly max) on 24/03/2014 at 10:00 hrs.
  - MSPGCL Thermal availability was as low as 4227 MW (hourly min) on 02/03/2014 at 04:00 hrs.
  - Max. Voltage at MSETCL 400 kV Substation was recorded at Lamboti S/s (440 kV) and Min voltage was recorded at Lamboti S/s (370 kV).
  - There was no planned load shedding in Mumbai area (i.e. BEST, R-Infra-D, and TPC-D) during the month.
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