

Note on

**Maharashtra Power System Overview, Under frequency operation, Load shedding (planned and Distress) for the month of Dec-2013.**

**Maharashtra system Overview:**

The overview of Maharashtra system operation for the month Dec-2013 with respect to availability and shortfall is elaborated as under.

- The power supply position for **STATE** in Dec-13 are given below:-
  - The State *maximum* demand was recorded as 18474 MW (including load shedding of 846 MW) on 02/12/2013 at 12:00Hrs.
  - The State *minimum* demand was recorded as 12203 MW on 13/12/2013 at 03:00Hrs.
  - The State *maximum CATERED* demand was recorded as 17628 MW on 02/12/2013 at 12:00Hrs.
  - The State has Catered 11036 Mus in the Month (daily average of 356 Mus) and max daily Catered Mus was 368.9 on 02/12/2013.
  
- The power supply position for **MSEDCL** in Dec-13 are given below:-
  - The *maximum* demand of MSEDCL was recorded as 15865 MW (including load shedding of 809 MW) on 29/12/2013 at 12:00Hrs.
  - The *minimum* demand of MSEDCL was recorded as 10801 MW on 13/12/2013 at 03:00Hrs.
  - The *maximum CATERED* demand of MSEDCL was recorded as 15056 MW on 29/12/2013 at 12:00Hrs.
  - MSEDCL has Catered 9517 Mus in the Month (daily average of 307 Mus) and max daily Catered Mus was 316.5 on 26/12/2013.

- The power supply position for **Mumbai system** in Dec-13 are given below:-
  - The *maximum* demand of MUMBAI SYSTEM was recorded as 2950 MW on 02/12/2013 at 12:00Hrs.
  - The *minimum* demand of MUMBAI SYSTEM was recorded as 1199 MW on 23/12/2013 at 04:00Hrs.
  - The MUMBAI SYSTEM has Catered 1519 Mus in the Month (daily average of 49 Mus) and max daily Mus Catered was on 57.8 on 02/12/2013.

#### **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 1201 MW on 19/12/2013 at 08:00 Hrs. and Min. load shedding was recorded as 0 MW on 27/12/2013. Average load shedding quantum for the month was 438.3 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.
- There was no distress load shedding due to shortfall of supply during the month.

#### **Other Highlights of Maharashtra System in Dec-13.**

- MSPGCL Parli TPS generation Units 3, is under shut down due to water shortage w.e.f.15/02/2013.
  - RGPPL generation generated 145.6 MUs (Average Generation 195.74 MW) in Dec-13. 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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- 8.180 TMC of Koyna water was utilized for Dec 2013. Wind Generation in Mus for the month was 120.9 Mus. Average wind generation was 164 MW/hour.
- The average grid frequency for the month was 50.00 Hz. The Instantaneous Maximum frequency was 50.67 Hz. and Minimum frequency was 49.30 Hz.
- There was no instance of under frequency operation during the month.
- MSPGCL Thermal availability was as high as 5279 MW (hourly max) on 10/12/2013 at 19:00 hrs.
- MSPGCL Thermal availability was as low as 3260 MW (hourly min) on 07/12/2013 at 06:00 hrs.
- Max. Voltage at MSETCL 400 kV Substation was recorded at Bhusawal S/s (438 kV) and Min voltage was recorded at Lamboti S/s (383 kV).
- There was no planned load shedding in Mumbai area (i.e. BEST, R-Infra-D, and TPC-D) during the month.

#### **Additional Information:-**

On **12<sup>th</sup> Jan 2013** at **16:29Hrs**, 110kV Trombay bus fault zone 2 & 3 operated which resulted in loss of major input i.e. ICT-4 from Trombay 220kV & MSETCL ICTs. Hence, the entire load catered from Trombay got shifted to Khopoli-Mankhurd-Parel\_Trombay corridor. This resulted in overloading of 110kV Khopoli-Mankhurd / Parel-Mankhurd. Khopoli-Mankhurd line tripped at Khopoli on overload at 16:36Hrs causing total shutdown to 110kV Trombay bus. Due to which Trombay, Chembur, Parel, Mahalaxmi, Grant road and Mankhurd area affected approximately around **240 MW**. Restoration started from 16:40Hrs., all the lines were restored on 16:57 Hrs. and Supply restored to affected area.

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