

Note on

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

Maharashtra system Overview:

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

- The power supply position for **STATE** in Sep-13 are given below:-
 - The State *maximum* demand was recorded as 17436 MW (including load shedding of 991 MW) on 04/09/2013 at 12:00Hrs.
 - The State *minimum* demand was recorded as 10734 MW on 19/09/2013 at 03:00Hrs.
 - The State *maximum CATERED* demand was recorded as 16732 MW on 05/09/2013 at 11:00Hrs.
 - The State has Catered 9918 Mus in the Month (daily average of 330.61 Mus) and max daily Catered Mus was 362 on 04/09/2013.
- The power supply position for **MSEDCL** in Sep-13 are given below:-
 - The *maximum* demand of MSEDCL was recorded as 14773 MW (including load shedding of 741 MW) on 08/09/2013 at 12:00Hrs.
 - The *minimum* demand of MSEDCL was recorded as 9002 MW on 19/09/2013 at 03:00Hrs.
 - The *maximum CATERED* demand of MSEDCL was recorded as 14137 MW on 08/09/2013 at 11:00Hrs.
 - MSEDCL has Catered 8262.28 Mus in the Month (daily average of 275.4 Mus) and max daily Catered Mus was 307.2 on 08/09/2013.

- The power supply position for **Mumbai system** in Sep-13 are given below:-
 - The *maximum* demand of MUMBAI SYSTEM was recorded as 3001 MW on 13/09/2013 at 12:00Hrs.
 - The *minimum* demand of MUMBAI SYSTEM was recorded as 1581 MW on 20/09/2013 at 05:00Hrs.
 - The MUMBAI SYSTEM has Catered 1656.022 Mus in the Month (daily average of 55.2 Mus) and max daily Mus Catered was on 59.1 on 13/09/2013.

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 1076 MW on 04/09/2013 at 09:00 Hrs. and Min. load shedding was recorded as 50 MW on 09/09/2013. Average load shedding quantum for the month was 193.80 MW.
- Planned load shedding Group B, C, D in MSEDCL were implemented in the starting of the month and Groups E, F, G1, G2, G3 were implemented for load relief 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 during the Ganpati festival.
- There was no distress load shedding due to shortfall of supply during the month.

Other Highlights of Maharashtra System in Sep-13.

- MSPGCL Parli TPS generation Units 3, 5 (420MW) were under shut down due to water shortage w.e.f.15/02/2013. In Sep-13, Parli Unit 5(210MW) synchronized on 23/09/2013.
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- RGPPL generation was NIL in Sep-13. RGPPL generation (Total:-1967MW & MSEDCL share:- 1888 MW) shutdown due to gas shortage w.e.f. 16/07/2013.
 - 6.695 TMC of Koyna water was utilized for the month and wind Generation in Mus for the month was 321.7 Mus. Average wind generation was 447 MW/hour.
 - The average grid frequency for the month was 50.00 Hz. The Instantaneous Maximum frequency was 50.6 Hz. and Minimum frequency was 49.20 Hz.
 - There was one instance of under frequency operation on 04/09/2013 at 49.20Hz (as per the revised settings) during the month. Maharashtra was under drawing at the event.
 - MSPGCL Thermal availability was as high as 4477 MW (hourly max) on 09/09/2013 at 21:00 hrs.
 - MSPGCL Thermal availability was as low as 3017 MW (hourly min) on 22/09/2013 at 13:00 hrs.
 - Max. Voltage at MSETCL 400 kV Substation was recorded at Aurangabad S/s (440 kV) and Min voltage was recorded at Lamboti S/s (375 kV).
 - There was an tripping event in the Mumbai area on 20/09/2013 at 17:20Hrs due to tripping of 220kV Salsette - Borivali line-1. At 18:20 Hrs 220kV TPC Salsette - Borivali line-2 tripped. Due to tripping of these lines, 220kV MSETCL Kalwa – Borivli and Bhandup - Mulund line got overloaded. Immediately MSLDC instructed R-Infra & TPC for load shedding to avoid cascading effect which might have led to major blackout in Mumbai. Maximum load relief in Rinfra area during the period was around 193MW. During the period from 18:30 Hrs to 23:23Hrs rotational load shedding at 11kV level was carried out by RInfra in Malad, Kandivli, Borivli, Dahisar, Jogeshwari, Juhu, Kurla, Chembur & Saki area to limit the loading on the critical transmission lines.
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