

Note on

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

Maharashtra system Overview:

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

- The power supply position for **STATE** in May-14 are given below:-
 - The State *maximum* demand was recorded as 20124 MW (including load shedding of 887 MW) on 07/05/2014 at 13:00Hrs.
 - The State *minimum* demand was recorded as 14385 MW on 01/05/2014 at 19:00Hrs.
 - The State *maximum CATERED* demand was recorded as 19326 MW on 07/05/2014 at 15:00Hrs.
 - The State has Catered 12605 Mus in the Month (Average 406.6 Mus) and max daily Catered Mus was 418.6 on 06/05/2014.

- The power supply position for **MSEDCL** in May-14 are given below:-
 - The *maximum* demand of MSEDCL was recorded as 16897 MW (including load shedding of 803 MW) on 05/05/2014 at 12:00Hrs.
 - The *minimum* demand of MSEDCL was recorded as 12066 MW on 01/05/2014 at 19:00Hrs.
 - The *maximum CATERED* demand of MSEDCL was recorded as 16202 MW on 16/05/2014 at 12:00Hrs.
 - MSEDCL has Catered 10705 Mus in the Month (Average 345.3 Mus) and max daily Catered Mus was 355.9 on 16/05/2014.

- The power supply position for **Mumbai system** in May-14 are given below:-
 - The *maximum* demand of MUMBAI SYSTEM was recorded as 3330 MW on 07/05/2014 at 13:00Hrs.
 - The *minimum* demand of MUMBAI SYSTEM was recorded as 1849 MW on 03/05/2014 at 05:00Hrs.
 - The MUMBAI SYSTEM has Catered 1900 Mus in the Month (Average 61.3 Mus) and max daily Mus Catered was 65.7 on 20/05/2014.

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 1230 MW on 25/05/2014 at 08:00 Hrs. and Min. load shedding was recorded as 0 MW on 27/05/2014. Average load shedding quantum for the month was 404 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 May-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 May-14. RGPPL generation (Total:-1967MW & MSEDCL share:- 1888 MW) is under shutdown due to gas shortage w.e.f. 29/12/2013.
 - 6.763 TMC of Koyna water was utilized for May 2014. And total Koyna water utilization for Water year 13-14 was 82.544 TMC.
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- Wind Generation for the month was 421.5 Mus. Average wind generation was 566.5 MW/hour.
- The average grid frequency for the month was 49.95 Hz. The Instantaneous Maximum frequency was 50.53 Hz. and Minimum frequency was 49.44 Hz.
- There was no instance of under frequency operation during the month.
- MSPGCL Thermal availability was as high as 5958 MW (hourly max) on 02/05/2014 at 13:00 hrs.
- MSPGCL Thermal availability was as low as 3928 MW (hourly min) on 18/05/2014 at 09:00 hrs.
- Max. Voltage at MSETCL 400 kV Substation was recorded at Karad S/s (433 kV) and Min voltage was recorded at Lamboti S/s (355 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 dated 20th May, 2014 at 19:57 Hrs, 400 KV Tiroda-Warora D/C lines tripped on distance protection resulting in to tripping of APML Unit No. 2, 3 & 4 (Total 1940 MW gross) due to loss of supply. There was heavy rains with thunder storm and lightning in Warora, Nagpur & Tiroda area. It was reported that "B" phase Lightning Arrestor of 400 KV Tiroda-Warora-1 burst at Warora end and 400 KV Tiroda-Warora-II tripped only at Tiroda end.

400 KV Tiroda-Warora-II which tripped only at Tiroda end was restored at 20:07 Hrs. i.e. after 10 minutes of incidence and auxiliary supply to APML Tiroda was restored.

APML Unit # 4 was synchronized at 00:53 hrs on 21st May, 2014 and APML Unit # 2 was synchronized at 05:34 hrs on 21st May, 2014. 400 KV Tiroda-Warora-I was restored at 08:58 Hrs on 21st May, 2014 and APML Unit # 3 synchronized at 12:00 Hrs on 21st May, 2014 and normalcy restored.

The detail occurrence report is submitted to MERC by letter no.00796 Dated 21.05.2014
