Note on

<u>Maharashtra Power System Overview, Under frequency operation, Load shedding</u> (planned and Distress) for the month of Jul-2013.

Maharashtra system Overview:

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

- The power supply position for **<u>STATE</u>** in Jul-13 are given below:-
 - The State maximum demand was recorded as 14972 MW (including load shedding of 53 MW) on 02/07/2013 at 11:00Hrs.
 - > The State *minimum* demand was recorded as 10494 MW on 20/07/2013 at 03:00Hrs.
 - The State maximum CATERED demand was recorded as 14919 MW on 02/07/2013 at 11:00Hrs.
 - The State has Catered 9392 Mus in the Month (daily average of 302.96 Mus) and max daily Catered Mus was 327.1 on 02/07/2013.
- The power supply position for <u>MSEDCL</u> in Jul-13 are given below:-
 - The maximum demand of MSEDCL was recorded as 12147 MW (including load shedding of 110 MW) on 02/07/2013 at 9:00Hrs.
 - The minimum demand of MSEDCL was recorded as 8915 MW on 20/07/2013 at 03:00Hrs.
 - The maximum CATERED demand of MSEDCL was recorded as 12041 MW on 08/07/2013 at 21:00Hrs.
 - MSEDCL has Catered 7733.01 Mus in the Month (daily average of 249.45 Mus) and max daily Catered Mus was 269.7 on 02/07/2013.

- The power supply position for <u>Mumbai system</u> in Jul-13 are given below:-
 - The maximum demand of MUMBAI SYSTEM was recorded as 3040 MW on 05/07/2013 at 12:00Hrs.
 - The minimum demand of MUMBAI SYSTEM was recorded as 1471 MW on 29/07/2013 at 04:00Hrs.
 - The MUMBAI SYSTEM has Catered 1659.19 Mus in the Month (daily average of 53.52 Mus) and max daily Mus Catered was on 58.8 on 05/07/2013.

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 682 MW on 06/07/2013 at 13:00 Hrs. and Min load shedding was recorded as 2 MW on 07/07/2013. Average load shedding quantum for the month was 77.25 MW.
- Planned load shedding Group A,B,C,D in MSEDCL were withdrawn throughout the month and sometimes Groups E, F,G1,G2,G3 were implemented for load relief in MSEDCL area upto 09.07.2013 to mitigate the availability in real time. From 10.07.2013 onwards PLR groups E, F, G1, G2 and G3 were also withdrawn for rest of the month. In addition, AG-LM load management scheme was in force for defined hours, as per the load shedding circular and it was also withdrawn many times during night hours.
- There was no distress load shedding due to short fall of supply during the month.

Other Highlights of Maharashtra System in Jul-13.

 MSPGCL Parli TPS generation Units 3,4,5,6 &7 (1130MW) were under shut down due to water shortage w.e.f.15/02/2013. In July-13, Parli Units 6(250MW) and 7(250MW) synchronized on 29/07/2013 and 15/07/2013 respectively.

- RGPPL generation generated 93.18 Mus (Average Generation 3 MW) in Jul-13. RGPPL generation (Total:-1967MW & MSEDCL share:- 1888 MW) shutdown due to gas shortage w.e.f. 16/07/2013.
- 1.217 TMC of Koyna water was utilized for grid conditions in Jul 2013. Koyna gates were opened from 12:30Hrs of 17/07/2013 & continued till Jul-13 end for flood control. Total Koyna water utilization for flood control was 3.515 TMC during this period. Therefore, total water utilization (including utilization for flood water control) for the month of Jul-13 was 4.732 TMC. Water balance for the year 2013-14 in July is 63.848 TMC.
- Wind Generation in Mus for the month was 869 Mus. Average wind generation was 1168 MW/hour.
- The average grid frequency for the month was 50.06 Hz. The Instantaneous Maximum frequency was 50.53 Hz. and Minimum frequency was 49.01Hz.
- There was no instance of under frequency operation during the month.
- MSPGCL Thermal availability was as high as 3844 MW (hourly max) on 02/07/2013 at 12:00 hrs.
- MSPGCL Thermal availability was as low as 2126 MW (hourly min) on 29/07/2013 at 3 hrs.
- Max. Voltage at MSETCL 400 kV Substation was recorded at Bhusawal S/s (441 kV) and Min voltage was recorded at Kolhapur S/s (396 kV).
- There was no planned load shedding in Mumbai area (i.e. BEST, R-Infra-D, and TPC-D) during the month.