MSLDC, Kalwa

Note on

Maharashtra Power System Overview, Under frequency operation, Load shedding (Planned and Distress) for the month of May-2015.

Maharashtra system Overview:

The overview of Maharashtra system operation for the month of May-2015 with respect to availability and shortfall is elaborated as under.

- The power supply position for **STATE** in May-15 are given below:-
  - The State *maximum* demand was recorded as 20367 MW (including load shedding of 916 MW) on 11/05/2015 at 16:00Hrs.
  - The State *minimum* demand was recorded as 13869 MW on 01/05/2015 at 19:00Hrs.
  - The State *maximum CATERED* demand was recorded as 20265 MW on 27/05/2015 at 16:00Hrs.
  - The State has Catered 13008 Mus in the Month (Average 419.6 Mus) and max Catered Mus was 439.572 on 27/05/2015.

- The power supply position for **MSEDCL** in May-15 are given below :-
  - The *maximum* demand of MSEDCL was recorded as 17039 MW (including load shedding of 916 MW) on 11/05/2015 at 16:00Hrs.
  - The *minimum* demand of MSEDCL was recorded as 11573 MW on 01/05/2015 at 19:00Hrs.
  - The *maximum CATERED* demand of MSEDCL was recorded as 16978 MW on 27/05/2015 at 16:00Hrs.
  - MSEDCL has Catered 11024 Mus in the Month (Average 355.6 Mus) and max Catered Mus was 373.1 on 27/05/2015.

- The power supply position for **Mumbai system** in May-15 are given below:-

  - The *maximum* demand of MUMBAI SYSTEM was recorded as 3394 MW on 29/05/2015 at 16:00Hrs.

  - The *minimum* demand of MUMBAI SYSTEM was recorded as 1918 MW on 03/05/2015 at 08:00Hrs.

  - The MUMBAI SYSTEM has Catered 1983 Mus in the Month (Average 64.0 Mus) and max Mus Catered was 67.5 on 29/05/2015.

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 916 MW on 11/05/2015 at 16:00 Hrs. and Min. load shedding was recorded as 36 MW on 23/05/2015. Average load shedding quantum for the month was 64.66 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-15.

- RGPPL generation was NIL in May-15. RGPPL generation (Total:-1967MW & MSEDCL share:- 1888 MW) is under shutdown due to gas shortage w.e.f. 29/12/2013.

- 12.449 TMC of Koyna water was utilized for May 2015. And total Koyna water utilization for Water year 13-14 was 71.826 TMC (Including water utilization during gates opening)

- Wind Generation for the month was 536 Mus. Average wind generation was 720 MW/hour.

- The average grid frequency for the month was 48.35 Hz. The Instantaneous Maximum frequency was 50.51 Hz. and Minimum frequency was 49.46 Hz.

- There was no instance of under frequency operation during the month.

- MSPGCL Thermal availability was as high as 6059 MW (hourly max) on 19/05/2015 at 12:00 hrs.

- MSPGCL Thermal availability was as low as 4084 MW (hourly min) on 04/05/2015 at 22:00 hrs.

- Max. Voltage at MSETCL 400 kV Substation was recorded at Bhusawal S/s (432 kV) and Min voltage was recorded at Chakan S/s (346 kV) due to occurrence at Babhaleshwar on 05.05.2015

- There was no planned load shedding in Mumbai area (i.e. BEST, R-Infra-D, and TPC-D) during the month.

Additional Information:-

On 08.05.2014 at 14:52 Hrs.,400 KV Bus bar protection operated at MSETCL Kalwa station. As a result 400kV busbar (lines and ICTs) at Kalwa was affected. This affected power import to MSETCL Borivali through Kalwa. Due to this constraint, Mumbai started drawing power from northern corridor i.e. from MSETCL Boisar. As a result PGCIL Boisar (P-Boi) – MSETCL Boisar (M-Boi) and M-Boi to RInfra Ghodbunder (R-Ghd) started drawing power beyond their capacity.
To maintain the system security, SLDC instructed RInfra to carry out load shedding to limit the line loads. RInfra carried out load shedding to the tune to 214 MW in northern part of Mumbai.
The area affected was Bhayander, Bhaynder-(w), Gorai, Dahisar, Kandivali –W, Malad, Megahawadi, and Part of Saki, Kurla and Chembur.