

Annexure - A

WHY LOAD SHEDDING ?

Maharashtra State Electricity Distribution Company has been experiencing significant growth in power consumption during last few years in its areas. Despite various efforts put in to meet the demand in the State, the growth in supply has not being sufficient to cater to the rising demand.

To meet the demand supply gap load shedding load shedding has to be implemented

Demand Growth

The demand supply position during last 5 years is as presented below:

Demand Supply (MSEDCL) Scenario in MW at the time of peak demand

Particular	Year 2003-04	Year 2004-05	Year 2005-06	Year 2006-07	Year 2007-2008
Demand (MW)	11357	12749	14061	14825	15689
Availability(MW)	9315	9704	9856	10298	10412
Shortfall(MW)	2042	3045	4205	4527	5277

As can be seen from the above table of demand supply gap, there is an absolute increase of ~1000 MW every year.

Apart from the primary reasons of demand supply gap the specific situational reasons for load shedding are as below,

- Steep periodic increase in demand (Seasonal agricultural requirements)
- Planned outages of plants for routine maintenance including Renovation and modernization (R&M) & Life extension programmes
- Forced outages due to break downs.
- Restriction of usage of Koyna water.
(67.5 TMC of water is allotted for the year (Water year 01.06.2008 to 31.05.2009)
- Restriction of availability of Gas.

Load shedding programme is dynamic in nature and as such has to undergo changes in view of system conditions.

If the demand supply gap is not met by planned load shedding , then distress load shedding is resorted to by opening of EHV lines.

In order to reduce the difficulties of common consumers , EHV lines opening programme is prepared for implementation during emergencies.

The Primary reasons for this distress load shedding are,

- Low generation in State
- Low frequency in the region/State
- Overdrawl by other Constituents causing low frequency
- Tripping of major Transmission lines /units
- Less -Bi-lateral power than contracted power
- Restriction of Transmission Corridor.

MSEDCL is fully aware of its responsibility of supplying reliable and quality power to all consumers. Various short term and long term measures are undertaken byMSEDCL.

DEMAND SIDE MANAGEMENT SCHEMES

MSEDCL is implementing various measures to reduce demand supply gap

- Demand side management schemes

MSEDCL is implementing following Demand side Management schemes

- Single phasing scheme

Single phasing of selected Rural mixed load feeders to overcome the load shedding in Rural single phase light and fan of consumers.

- Gaothan feeder separation Scheme.

In this Scheme , separate feeders are laid in Gaothan (village) as well as for Agricultural pumps so that it will be possible to provide electric supply in Gaothans area. The load shedding of villages on separated gaothan feeders is reduced to 6.5 hrs.

PROGRESS OF DEMAND SIDE MANAGEMENT SCHEMES

Total No. of Villages - 41095
 Ag. Dominated - 31200

Scheme	Villages Target	Villages Benefited (Up to April-08)	Load Management (MW)	Remarks
Single phasing-I	8085	8085	1153	Completed in July-2006
Single phasing-II	3926	3865	582	To be Completed in June-2008
AG. Feeder separation-I	7327	3143	1007	To be Completed in December-2008
AG. Feeder separation-II	8714 2020 Wadis	Contract given on Turn-key basis	-	To be Completed in Jan-2009
Total	28052 2020 Wadis	15093	2742	

FUTURE CAPACITY ADDITION

Capacity addition by MAHAGENCO projects, Central sector projects and by Private sector are as below

YEAR	MAHA GENCO	CENTRAL SECTOR	PRIVATE SECTOR	TOTAL
2007-08	500	819	NIL	1319
2008-09	250	1421	250	1921
2009-10	500	203	2010	2713
2010-11	1500	101	910	2511
2011-12	2940	711	1584	5200
TOTAL	5690	3255	4754	13699

Due to the various measures taken by MSEDCL The power situation will start improving from 2010 , and will become comfortable by 2012. Further with the completion of the feeder separation scheme by Jan. 2009, all the Rural areas and villages will face load shedding for a maximum of only six and half hours which was up to 12 hours earlier.