



Maharashtra State Electricity Distribution Company Limited
Prakashgad, Plot No. G-9, Bandra (East), Mumbai -400051

No.Dir.(Opr)/LM/ 5251

Date:20.02.2007

To
The Secretary,
Maharashtra State Electricity Regulatory Commission
Mumbai

Respected Madam,

Sub: Violation of Load Shedding Protocol.

Ref: MERC Letter No Case 35 of 2005 /240 dt 31.01.2007

This is in reference to the complaint received from Maharashtra Rajya Irrigation Federation (MRIF) dated 4th January' 2007 by the Hon'ble commission and the above referred letter seeking reply from MSEDCL for deviation from the load shedding protocol.

Hon'ble Commission has stated that as per the complaint received, MSEDCL has resorted to load shedding in excess of 12 hours, above the ceiling imposed by the Hon'ble Commission, in several areas. This excess load shedding is a deviation from the existing Principles & Protocols of load shedding approved by the Hon'ble Commission. Hon'ble Commission has sought a reply giving details of the person who authorized deviation in Load shedding Protocol, action taken by MSEDCL against such person for authorizing the deviation.

At the outset MSEDCL would like to tender unconditional apology before the Hon'ble Commission for the above deviation and would very humbly like to state that despite its wish to be able to supply all the consumers with uninterrupted power supply, it has been compelled to implement drastic emergency load shedding measures due to the prevailing circumstances endangering the system safety and security as described herein under While MSEDCL was in process of approaching the Hon'able Commission with a petition seeking permission to revise its load shedding program, extended load shedding as **an emergency measure** was implemented to ensure the grid safety and security. While the detailed reasoning and justification for revised load shedding requirements has been submitted to the Hon'ble Commission vide petition dated 8th February 2007, a summary of the same is presented below -

1 Rise in Demand & Shortfall to meet the demand

The table below shows that recently there is unprecedented increase of demand in peak hours and shortfall has increased due to no corresponding increase in availability.

Table 1 : Peak Details for the period from Oct 2006 to January 2007

Month	Details	Morning peak (MW)	Evening peak (MW)
Oct-06	Demand	12,731	13,058
	Availability	9,125	9,644
	Shortfall	3,606	3,414
Nov-06	Demand	13,633	13,539
	Availability	8,786	9,765
	Shortfall	4,847	3,774
Dec-06	Demand	14,173	14,245
	Availability	9,680	10,333
	Shortfall	4,493	3,912
Jan-07	Demand	14,669	14,451
	Availability	8,983	10,066
	Shortfall	5,686	4,385
Feb.07	Demand	14749	14580
	Availability	9049	9688
	Shortfall	5700	4892

Due to such huge shortfall, MSEDCL is not in a position to adhere to the Principles & Protocols of Load Shedding approved by the Hon'ble Commission vide its order dated 10th January 2006; and had to resort to additional load shedding as an emergency measure.

2 Reduction in availability of Power due to forced outages of

Generation Plants: -Forced Outages of the generating units and reduced generation from the following: -

- a. Koradi –7 (210 MW) & Chandrapur – 6(500 MW) withdrawn to attend boiler tube leakage work,
- b. Parli-3 (210 MW) – Capital Maintenance work;
- c. Bhusawal – 3 (210 MW)- AOH;
- d. Parli – 4 (210 MW) & Vindhyachal – 6 & 9 (710 MW) – BTL;
- e. Trombay – 6 (500 MW) – Steam line leakage;

- f. Total expected Generation from RGPPL was 1440 MW (2*720). However, RGPPL Commission a single block of 720 MW but generation was limited to 330 MW from 6th January 2006 due to Mage break down;
- g. Koyna generation is restricted to 0.2 TMC (7.6 Mus) per day which can be utilized only during the peak hours;

The above unit outages have resulted into a shortage of about 10 MUs of energy per day.

- 3 Shortage of Power:** -Maharashtra has been experiencing significant growth in power consumption during last few years. Despite various efforts put in by MSEDCL to meet the demand in the State, the growth in supply has not been sufficient to cater to the rising demand. At present Maharashtra State is facing unprecedented power shortage to the extent of approximately 5700 MW. The demand supply scenario faced by MSEDCL for the past years is presented below for further information.

Table 2 : Demand Supply Scenario in MW at the time of peak demand

Particular	Year 2001-02	Year 2002-03	Year 2003-04	Year 2004-05	Year 2005-06	Year 2006-07 (upto 06.02.07)
Demand	10119	11425	11357	12749	14061	14749
Availability	9103	9004	9315	9704	9856	9049
Shortfall	1016	2421	2042	3045	4205	5700

- 4. Overdrawl by Other States resulting in Shortage for Maharashtra:**
The situation has further worsened due to synchronization of Northern grid with National / Central Grid on 26th August 2006. The Surplus power availability from Eastern Region to Western Region decreased from 25 to 30 MUs per day to 10 MUs per day due to over drawl of available power by north Indian States. Therefore, synchronization has further adversely affected the availability situation for MSEDCL preventing it to provide the energy in accordance with the Load Shedding Principles & Protocols approved by the Hon'ble Commission.
- 5. Unscheduled EHV openings/UFR tripping:** - Demand rise coupled with availability shortfall has necessitated for increase in load shedding hours. The existing availability is not sufficient to meet the demand supply gap even after doing extended load shedding. This has resulted into many

occasions of unscheduled and uncontrolled EHV opening / UFR tripping. This unscheduled tripping operations result into un-preparedness of the consumers to plan for their related activities. This results into public unrest in terms of Morchas, Gherao's Mass agitations etc at various location in Maharashtra and becomes difficult for MSEDCL to face the discontent of the masses.

The revised load shedding programme was implemented from 01.12.06
The details of EHV opening in the month of Dec.06 are enclosed.

6. Direction of SLDC for additional Load Shedding in MSEDCL: - SLDC has also accepted the shortage of power due to various reasons. SLDC has even directed MSEDCL vide its letter CELDK/TECH/SO/T10/1155 dated 10/02/2007 for undertaking increased load shedding to adhere to the provisions of Electricity Act 2003 u/s 33(1) and 33(2). Since, SLDC undertakes the actual load despatch and power availability, it is humbly submitted that such emergency measures are taken in order to avoid power system disruption and binding on M.S.E.D.C.L.

7. Measures taken by MSEDCL: -

7.1 Agricultural consumption plays a very important role in the high & increased demand situation faced by MSEDCL. MSEDCL has already filed before the Hon'ble Commission for the revised load shedding programme for managing the increased agricultural load.

7.2 To **control / manage the increased agricultural load and to ensure grid safety & security**, the following schemes have been implemented:

- a) Single Phasing Scheme
- b) Akshaya Prakash Yojna
- c) Gaothan Feeder Separation Scheme

7.3 The benefits of implementation of each of the scheme are as explained below: -

7.3.1 Single Phasing Scheme: - The power supply to the consumers for single phase is ~20 hours/day and for 3 phase is 8 hours/day.

7.3.2 Akshaya Prakash Yojna: - The power supply to the consumers for single phase is ~22 hours/day and for 3 phase is 10 hours/day.

7.3.3 Gaothan Feeders Separation: - The power supply to the Agricultural feeders is 10 hours/day, while consumers on non agricultural feeders will get assured power for 18 hours.

8. It is humbly submitted to the Hon'ble Commission that MSEDCL has resorted to extended load shedding to cope up with existing demand supply gap. Therefore, MSEDCL would request the Hon'ble Commission to consider the helplessness faced by the utility to meet the power requirement of the consumer.

The petition for introduction of Principles and protocols for load shedding/load management for agricultural schemes has been submitted vide letter No. CE/LM/MERC-PETITION/63 dt.26.01.2007 for kind consideration of the commission.

MSEDCL therefore respectfully submits to the Hon'ble Commission that the non-compliance to the Hon'ble Commission's order are due to the worsening power demand supply situation. Therefore, Hon'ble Commission is requested not to initiate any action against MSEDCL under section 142 of the EA Act 2003 and the deviation be pardoned. MSEDCL would like to assure the Hon. Commission that it will adhere to the directions of the Hon'ble Commission in future.

Director (Operation),
MSEDCL, Mumbai

Copy s.w.r.to :

The Hon. Managing Director, M.S.E.D.C.L., Mumbai.