

Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
World Trade Centre, Centre No.1, 13th floor, Cuffe Parade, Mumbai 400 005.
Tel. No. 022 22163964/65/69 – Fax 022 22163976
E-mail mercindia@mercindia.org.in
Website: www.mercindia.org.in

Case Nos. 82 of 2008 and 86 of 2008

In the matter of
**Petition of M/s. Thane Small Scale Industries Association for indiscriminate increase
in load shedding hours by MSEDCL.**
[Case No. 82 of 2008]
and
**Petition of Prayas (Energy Group) and M/s. Sajag Nagrik Manch, Pune for
indiscriminate increase in load shedding hours by MSEDCL.**
[Case No. 86 of 2008]

Shri V.P. Raja, Chairman
Shri A. Velayutham, Member
Shri S. B. Kulkarni, Member

ORDER

Dated: August 17, 2009

Case No. 82 of 2008

The General Secretary
M/s. Thane Small Scale Industries Association
TSSIA House, Plot No. P-26, Road No. 16/T
Wagle Industrial Estate
Thane 400 604

... Petitioner

vs.

The Managing Director
Maharashtra State Electricity Distribution Company Ltd.
Prakashgad, Bandra (East)
Mumbai 400 051

.....Respondent

Case No. 86 of 2008

Prayas (Energy Group)
Amrita Clinic, Athawale Corner
Lakdipool-Karve Road Junction
Deccan Gymkhana, Karve Road
Pune 411 004



Shri Vivek Velankar
M/s. Sajag Nagrik Manch
1200 Sadashiv Peth
Limaye Wadi
Pune 411 004
E-mail:pranku@pn3.vsnl.net.in

..... Petitioners

vs.

The Managing Director
Maharashtra State Electricity Distribution Company Ltd.
Prakashgad, Bandra (East)
Mumbai 400 051

.....Respondents

M/s. Thane Small Scale Industries Association (TSSIA) submitted a Petition, under affidavit, on September 23, 2008 (numbered as Case No. 82 of 2008) invoking Sections 142 and 146 of the Electricity Act, 2003 against the Maharashtra State Electricity Distribution Company Ltd. (MSEDCL) for undertaking indiscriminate increase in load shedding hours and against MSEDCL's demand for supply of additional energy of 7.2 MU/ day against original demand of 4.8 MU/Day for ensuring zero load shedding in Thane, Navi Mumbai, Vashi and Pune Circles.

2. TSSIA under their Petition have prayed for the following relief:

1. *“Direct MSEDCL to avoid load shedding in Thane, Navi Mumbai & Vashi and Pune, till the state wide demand supply gap is below 4500 MW;*
2. *Direct MSEDCL to restrict quantum of additional power requirement for these areas to 3.9 MUs / day;*
3. *Take action under Section 142 and 146 for violation of MERC Orders in load shedding protocol (Case No. 72 of 2007) and Orders in Case No. 10 of 2008 and 5 of 2008.”*

3. Prayas (Energy Group), Pune and M/s. Sajag Nagrik Manch, Pune submitted a combined Petition, under affidavit, on October 13, 2008 (numbered as Case No. 86 of 2008) seeking invoking Section 142 of the Electricity Act, 2003 against MSEDCL for undertaking indiscriminate increase in load shedding hours and MSEDCL's demand for supply of additional energy of 7.6 MU/day against original demand of 4.8 MU/day for ensuring zero load shedding in Thane, Navi Mumbai, Vashi and Pune Circles.



4. Prayas (Energy Group), Pune and M/s. Sajag Nagrik Manch, Pune under their Petition have prayed for the following relief:

1. *“Direct MSEDCL to restrict quantum of additional power requirement for these areas to 3.9 MUs / day;*
2. *Direct MSEDCL to avoid load shedding in Thane, Navi Mumbai, Vashi and Pune, till the state-wide demand –supply gap is below 4500 MW and interim franchisee is procuring 3.9 MUs / day;*
3. *Clarify that power purchase rate of Rs. 8.54 / unit decided in case 5 and 10 of 2008 should be considered as average rate for the entire contract period and MSEDCL should not insist on average rate on a weekly basis;*
4. *Direct MSEDCL to submit (audited) quarterly reconciliation statement for the actual cost of additional power purchase, requirement and actual recovery of reliability charge, as required as per para 5 of MERC order in Case 5 of 2008, within two weeks.”*

5. TSSIA in its Petition submitted as under:

- a) There has been indiscriminate increase in load shedding by MSEDCL since last few days. MSEDCL has significantly increased load shedding in the State. For example, when State wide demand-supply gap is of the order of 4500 MW; for a division in urban area, as per the Commission’s stipulated load shedding protocol, load shedding of 2.75 Hours is to be carried. As against this, as per the load shedding protocol being implemented by MSEDCL since last few days load shedding of over 5.00 hrs. is being carried out in A divisions of the Other regions. This is a complete violation of the Commission’s load shedding protocol.
- b) MSEDCL in its Petition in Case No.10 of 2008 and Case No.5 of 2008 had projected an additional requirement of 3.9 MU/day to mitigate load shedding in Thane, Vashi and Pune. MSEDCL had also projected that during the period of monsoon, i.e., July, August and September there will be no need for additional power purchase to mitigate load shedding in these areas. As against this, MSEDCL has been steadily increasing the requirement for additional power procurement for these areas. Initially, MSEDCL purchased additional electricity to the tune of 3.9 MU/day, which was increased to 4.8 MU/day and same being increased to around 7.2 MU/day. Thus, instead of zero requirement of additional electricity in the



month of September, MSEDCL is seeking to levy additional cost of nearly Rs. 4 Crore/Day for the consumers in Thane, Vashi and Pune.

- c) Additionally, even when the demand-supply gap at the State level goes below 2000 MW, MSEDCL has not reduced the quantum of electricity requirement to mitigate load shedding.
- d) If the same scenario continues then from the month of October 2008, MSEDCL would demand much higher quantum of additional power requirement to mitigate load shedding in these areas, and in the absence of additional power availability, MSEDCL would resort to large scale load shedding in these areas. Thus, due to MSEDCL's failure to comply with the Commission's stipulated load shedding protocol, consumers in these areas will either be forced to suffer load shedding or if the additional power is procured then the Reliability Charge will increase sharply.
- e) In Case No.10 of 2008 and Case No.5 of 2008, power purchase cost of Rs.8.54/kWh was determined. In order to enable greater flexibility for interim franchisee in procuring power, the rate of Rs.8.54/kWh should be considered as average rate of power purchased over the entire contract period, i.e., upto May 2009, and MSEDCL should not insist on average rate of Rs.8.54/kWh on a weekly basis.

Prayas (Energy Group) and M/s. Sajag Nagrik Manch, Pune submitted a combined Petition, under affidavit, on October 13, 2008 (numbered as Case No. 86 of 2008) on identical issues as that raised in Case No. 82 of 2008 with identical prayers.

6. In its reply filed on November 11, 2008, MSEDCL submitted as under:

- a) MSEDCL is facing huge power crises due to rise in demand and load shedding of the order of 4500 MW to 5900 MW is being implemented in the State. Further Uninterrupted Frequency Replay (URF) operations, Extra High Voltage (EHV) openings/Distress load shedding were taking place, in the month of July, August and September 2008.



- b) The specific reasons for EHV openings are given below:
- Periodic increase in demand from the seasonal agricultural sector due to lesser rainfall.
 - Forced breakdown in Maharashtra State Power Generation Co. Limited/(MSPGCL)/Central Power Sector Units(CPSU) due to planned outages and RGPPL for routine maintenance including renovation and modernisation
 - Restriction for wage of water for Koyna Hydro generation
 - Restriction of availability of gas
- Considering the even changing situation in terms of demand and supply on account of above-mentioned reasons, MSEDCL had to revise load shedding protocol on 12 occasions for the said purpose from Circular No. 11 of 2008 to Circular No. 22 of 2008. Though, in most of circulars the changes made were very nominal except for Circular No.18 of 2008 dated August 13, 2008, which was broadly based on the directions issued by the Commission in its Order dated June 20, 2008.
- c) MSEDCL has filed a Petition on April 22, 2008 wherein Reliability Charges are proposed to be recovered from the consumers of Thane Urban Circle and Vashi Circle- Navi Mumbai. For the purpose of calculating Reliability Charges, MSEDCL has made an assumption that during the months of July, August and September 2008, there would not be any additional requirement of power based on the past experience due to lower demand during the monsoon months. On similar grounds, MSEDCL has submitted the details of recovery of Reliability Charges from consumers of Pune.
- d) However, the actual situation was very different within the State as it is facing an unprecedented rise in demand during these months. Load Shedding of the order of 4500 MW to 5900 MW is being implemented in the State. Further, UFR operations and heavy EHV opening are taking place round the Clock, in the month of July, August and September 2008. During these months, the situation remained precarious due to extra-ordinary mismatch of supply and demand.



The main reasons attributable to this situation is explained below:

- The State has not received expected rainfall and due to delay in monsoon, the requirement of power was at an all time high, which is not the situation during monsoon season.
 - RGPPL generation has been inconsistent and generation of ~0-600 MW has been received as against the generation of ~ 1000 MW received in May and June 2008.
 - There has been a rise in demand by about 1800 MW compared to last year's demand for the same period. The Circulars for increase in load shedding protocol was issued by MSEDCL and based on revised protocol, the requirement of additional power in the Zero Load Shedding (ZLS) areas of Thane, Vashi and Pune subsequently increased leading to a rise in additional Reliability Charge for the consumers of these areas.
 - Further, National Grid is operating continuously at low frequency; hence no substantial power is available from National Grid due to Frequency Correction Factor.
 - System being complex in nature it varies on day to day basis; on any addition of power availability the system will first improve, it will improve power factor of the system and frequency also would get improved to some extent.
- e) The demand-supply gap is dynamic situation occurring due to a number of factors such as mismatch in generation and load, system condition, frequency and conditions prevailing at that point in time when there is a demand-supply gap. Hypothetically, even if MSEDCL were to receive the 4500 MW of power, it does not imply that there will be no load shedding in the State. There would be still some amount of load shedding, depending on the system condition and the frequency condition, constraint of the availability of line capacity, based on which the power would be supplied to the consumers. The demand-supply gap is dynamic and ever changing and cannot be used as an indicator for power purchase requirement to be made in particular areas such as ZLS areas of Thane, Vashi and Pune.
- f) The Hon'ble Supreme Court of India vide its Order dated May 13, 2005 has clearly stated that the erstwhile MSEB would deal with the issue of load shedding in consultation with the Commission. At the same time, MSEDCL is also duty bound to take all action as per instructions of State Load Despatch Centre (SLDC)/Regional Load Despatch Centre (RLDC) to take



all necessary, urgent and emergency measures to reduce the overdrawl and most importantly maintain the grid security under Section 33 of the Electricity Act, 2003.

Therefore, because of the dynamic situation of mismatch between generation and load, there is an overdrawl forcing SLDC/RLDC to open EHV lines and thereby urgent threat to the grid security, MSEDCL is duty bound to urgently enhance or adjust the load shedding protocol to maintain the grid security.

However, while making such change to the load shedding protocol, MSEDCL generally follows the broad principles and framework laid down by the Commission; make alteration to the load shedding protocol.

MSEDCL submitted that there is no wilful or manipulative intention to violate the Commission's Orders related to load shedding protocols. Further, the changes have been done, taking into account the grid condition, demand-supply gap, future availability of power, etc.

7. The Commission, vide its Notice dated December 16, 2008, scheduled a combined hearing in the matter on January 6, 2009 in respect of both the above Cases as the issues under the Petitions were identical, and directed the Petitioners to serve copies of their Petitions along with accompaniments to the Respondents and the four authorised Consumer Representatives.

8. During the hearing held on January 6, 2009, Dr. Ashok Pendse, Mumbai Grahak Panchayat, Shri. Shantanu Dixit, Prayas Energy Group, Ms. Ashwini C, Prayas Energy Group and Shri. Vivek V., M/s. Sajag Nagrik Manch appeared on behalf of the Petitioners. Shri. Ravi Prakash, Advocate, appeared for MSEDCL, Shri Ponrathnam and M/s. Hindalco as an Intervener, and three authorised Consumer Representatives, viz., Prayas, Mumbai Grahak Panchayat and Thane Belapur Industries Association were present during the hearing.

9. The Petitioner submitted that there has been large scale load shedding across the State of Maharashtra and even in the most optimistic situation this problem is not going to get solved even in the next three to four years.



10. In this scenario two, three things have been observed, i.e., the expensive power in the range of Rs.4 to Rs.8 per kWh is purchased and the consumers are willing to pay to get relief from this unimaginable load shedding.

11. The model is non discriminatory towards other consumers of MSEDCL as the State wise quota has not been diverted to Pune, Thane and Vashi to mitigate load shedding. This is the additional power which has been purchased and this is evident because in the last few months MSEDCL has not purchased any power for Rs 7 or Rs 8 per kWh, whereas these consumers are willing to pay for it and are willing to pay at Rs 8.50/kWh.

12. Second feature of this arrangement has been for small consumers, domestic consumers consuming less than 100 Units in Thane and Vashi, and 300 Units in Pune, as they have been exempted from the levy of Reliability Charge. Further, this model has given significant relief on load shedding to around 1 crore population of the State.

13. The Petitioners state that the original estimate for Pune was 1.8 MU/Day which was increased by the MSEDCL to 8.7 MU/Day in between, and after December 1, 2008 it has been reduced to 2.5 MU/Day. The reduced quantum of power is more than that the original estimate of 1.8 MU/Day. The quantum of power purchase goes up in this manner, which is unjustified and will put extra burden on the consumers, especially in the current industrial slow down scenario; it will not be feasible for the consumers to pay the additional tariff.

14. Apart from unjustified increase in the quantum, if the Commission's approved load shedding protocol would have been in place then the load shedding would be around 2.30 Hours for Group A in Other regions, whereas MSEDCL load shedding in Other areas was initially 3.00 hours and further increased to 4.00 hrs and 5.30 hours.

15. The Commission observed that MSEDCL was entitled to undertake load shedding in the month of May because of non procurement as per the normal system and from July 9, 2008 onwards they were supposed to have zero load shedding in Pune, Thane and Vashi.



16. Shri Ponrathnam as an intervener submitted that load shedding is mentioned neither in Electricity Act, 2003 nor in any Regulation made by the Commission. The EA 2003 as well as Regulations indicate onus on the power distribution companies to comply with quality standards and providing uninterrupted power supply.

17. Shri Ponrathnam further submitted that MSEDCL has appointed TPTCL as an Additional Supply Agency and has purchased electricity in the range of Rs. 7-12/kWh instead of the price less than Rs.2/kWh purchased from the generating stations of MSPGCL.

18. Shri Ponrathnam submitted that it is MSEDCL's obligation to provide uninterrupted power supply as per Maharashtra Electricity Regulatory Commission (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005

19. Shri. Ponrathnam stated that the Commission should direct MSEDCL to pay compensation for the loss incurred due to the failure of MSEDCL not to supply power, under Section 57 of the EA, 2003.

20. Shri. Ponrathnam further submitted that MSEDCL has persistently failed to maintain uninterrupted supply of electricity thereby not conforming to standards regarding quality of electricity to the consumers and hence, the Commission in the interest of the public should invoke Section 24 of EA, 2003.

21. M/s. Hindalco Industries Limited as intervener submitted that it is a consumer of MSEDCL under HT-I continuous industry category and for which it is levied very high base energy charges of Rs.4.30/kWh as per the Commission approved Tariff.

22. The representative of M/s. Hindalco submitted that the Commission's Tariff Order clearly states that HT continuous industries ought not have load shedding/staggering day protocol. The additional procurement of power by MSEDCL is to facilitate continuous supply/zero load shedding in the Thane Urban Circle and Vashi Circle-Navi Mumbai to benefit non-continuous, commercial, domestic HT and LT consumers only. The Commission has clearly mentioned that the consumers benefiting from reduction in load shedding would have to bear the cost of balance power.



23. The representative of M/s. Hindalco submitted that it is discriminatory to impose such Reliability Charges on HT-I continuous consumers having production units at Vashi and Thane circle whereas it not applicable to other consumers of same category in others parts of the State of Maharashtra who are availing continuous power and are not subjected to load shedding.

24. The Commission, vide its letter dated January 13, 2009, directed MSEDCL to submit its substantive reply to the Petition and to the additional submissions made by the Petitioners during the hearing within 15 days, and explain the position on the Interim Franchisee model.

25. MSEDCL in its reply dated January 9 , 2009 submitted as under:

a) MSEDCL was facing huge power crises due to rise in demand. These have occurred due to the following reasons:

- There was an unusual dry spell during the month of July 2008, when power demand of MSEDCL increased substantially to the level of around 4600 MW, which is unprecedented for any monsoon season in Maharashtra.
- Besides, some Generating sets of Maharashtra State Power Generation Co. Ltd., Central Sector Stations have also been put under overhaul as per a pre-planned strategy, which is usually adopted by all utilities. Thus, there was reduction in the power received from these sources.
- Power generation from RGPPL, Dabhol had also drastically come down from 1200 MW to around 300 MW because of failure of its vital equipments. Hence, the capacity available to meet the demand was far less.
- Further, the National grid is operating continuously at low frequency; hence no substantial power was available from National grid to overdraw. Also, if the frequency drops below the rated frequency, the online capacity (OLC) of the generators reduces, resulting into additional shortfall for the distribution utility.
- Extra High Voltage (EHV) feeders are forced to open in addition to planned load shedding. As a result of this EHV Openings, cities and villages are suffering from Distress load shedding in addition to planned load shedding.

b) There have been frequent changes in the protocol in the months of July 2008 and August 2008 mainly due to the following reasons:



- There were EHV openings to the extent of 500 MW to 1000 MW during the first two weeks of July 2008.
- Thereafter the situation of EHV openings worsened from July 17 to July 24, 2008 to the extent of 2400 MW. During this period, the emergency EHV lines were also opened, indicating the gravity of the situation.

In order to avoid the EHV openings (distress load shedding) and to follow grid discipline, MSEDCL increased the load shedding schedule step by step from July 9, 2008 onwards, in order to restrict overdrawals from the National Grid. Also, instead of intermittent trippings because of distress load shedding, it was decided to go in for increased planned load shedding hours so that the consumers are prepared for the extra load shedding and as far as possible, not subject to Distress Load shedding.

In case of planned load shedding, the consumers are aware of the load shedding hours in advance and they can adjust their lifestyle in accordance with the planned load shedding hours. The EHV openings or Under Frequency trippings are in addition to the planned load shedding. Hence, the consumers get disturbed because of frequent power interruptions at unknown timings.

Thus, with an increased Planned Load Shedding implemented vide Circular Nos. 11 to 20 (July 9, 2008 to September 17, 2008), the EHV openings were stopped from September 3, 2008 and the system became stable. Thereafter from September 18, 2008 till date, the Circular No. 21 onwards, there has been a reduction in the load shedding protocol in a phased manner based on the power situation.

Thus, the requirement of power in the ZLS areas changed according to the power situation prevalent in the system while implementing the circulars.

- c) MSEDCL had filed a petition on April 22, 2008 wherein Reliability Charges were proposed to be recovered from the consumers of Thane Urban Circle and Vashi Circle-Navi Mumbai. For the purpose of calculating Reliability Charges, MSEDCL had made an assumption that during the months of July, August and September there would not be any additional requirement of power based on past experience of low demand during the monsoon months.



However, the actual situation was very different, with the state facing an unprecedented rise in demand during these months. Due to delayed rains and less availability, load shedding of the order of 4500MW to 5900MW was being implemented in the State. Also UFR operations and heavy EHV openings were taking place round the clock, in the month of July, August and Sep 2008.

There has been a rise in demand by about 1000 to 2000 MW compared to last year's demand for the same period. The table below shows the comparative statement of Peak Demand, Availability and shortfall for the period June 2007 to September 2007 and June 2008 to September 2008.

The requirement of power to mitigate Load shedding is based on the number of hours of Load shedding. Based on revised protocol, the requirement of additional power in the ZLS areas of Thane, Vashi and Pune subsequently increased.

MSEDCL also submitted that the load shedding is planned on the power received on firm basis and the power is scheduled for the ZLS areas on a day ahead basis. In case, there is a withdrawal of load shedding, this is done on real time basis and even if the planned load shedding in ZLS area is withdrawn, the power scheduled on day ahead basis for ZLS area cannot be rescheduled. Thus, the cost of this power is to be borne by the consumers of the ZLS area, being the beneficiary of the ZLS model.

An abstract of the increase in MUs requirement in Pune, Thane and Vashi with an increase in the load shedding protocol is given below:

Circular Number	Effective from	Effective up to	LS hours		MU required for mitigating load shedding			
			Group A	Group B	Pune	Thane	Vashi	Total
Circular 10	3-May-08	8-Jul-08	3.00	3.45	1.85	0.84	1.21	3.9
Circular 11	9-Jul-08	19-Jul-08	3.75	4.50	2.19	1.04	1.38	4.61
Circular 12	20-Jul-08	23-Jul-08	4.75	5.50	2.64	1.31	1.58	5.53
Circular 13	24-Jul-08	24-Jul-08	5.75	6.50	3.61	1.64	2.42	7.67
Circular 14	24-Jul-08	24-Jul-08	5.75	6.50	3.61	1.64	2.42	7.67
Circular 15	25-Jul-08	7-Aug-08	5.75	6.50	3.48	1.63	2.26	7.37



Circular 16 & 17	08-Aug-08	12-Aug-08	5.75	6.50	3.26	1.60	1.99	6.85
Circular 18	13-Aug-08	26-Aug-08	3.75	4.50	2.40	1.19	1.29	4.88
Circular 19	27-Aug-08	01-Sep-08	4.75	5.50	2.85	1.46	1.49	5.80
Circular 20	02-Sep-08	17-Sep-08	5.75	6.50	3.70	1.77	2.17	7.64
Circular 21	18-Sep-08	07-Nov-08	5.75	6.50	3.70	1.77	2.12	7.59
Circular 22	08-Nov-08	30-Nov-08	4.50	5.50	3.54	1.68	2.09	7.31
Circular 23	01-Dec-08	13-Jan-09	3.25	4.00	2.63	1.23	1.55	5.41
Circular 24	14-Jan-09	till date	2.75	3.50	2.08	0.98	1.21	4.27

d) MSEDCL submitted that demand supply gap is a dynamic situation occurring due to a number of factors such as mismatch in generation and load, system condition, frequency and conditions prevailing at that point in time.

The reasons for the present demand-supply gap not less than 4500 MW is as under:

- i. The system is dynamic, as sometimes the system controller increases the hydro generation more than the schedule generation in order to reduce the impact of load shedding to consumers.
- ii. Further, Maharashtra system also overdraws power from National Grid under Unscheduled Interchange (UI) when the frequency is better. This effort is also to reduce the impact of load shedding to the consumers.
- iii. Certain power is made available through unrequisitioned sources, power exchanges, etc. This power is drawn in order to reduce load shedding.
- iv. The additional power which is received through the above i, ii, iii sources reduces the gap and final Load Shedding is thus reduced.

At times due to i, ii, iii above, there is an additional availability of say 1100 MW, so MSEDCL can carry out load shedding to the tune of 3800 MW, which is seen less than 4500 MW. But the actual gap at this hour is $3800+1100=4900$ MW, and hence a protocol relevant to more than 4500 MW is to be followed to mitigate the gap, even though one feels that gap is less than 4500 MW, based on observation of the Daily System Report (DSR) on the Maharashtra State Load Despatch Centre (MSLDC) website. The website shows the recorded load shedding, i.e. after considering infirm power available at that point of time, where as MSEDCL has to plan the load shedding based on the availability of firm power. MSEDCL implements the protocol as determined by the Commission and the expected Load



relief given in the Order of the Commission corresponds to the Gap (in MW) excluding UI, Day ahead power and Unscheduled Hydro generation.

MSEDCL also submitted that it is following the Scenario No. IV of the Commission's Order dated November 28, 2008 (Case No.77 and 78 of 2008), with effect from January 14, 2009.

- e) MSEDCL submitted that as per the Supreme Court Order dated May 13, 2005, MSEDCL is authorized to decide the load shedding protocol in consultation with the Commission. At the same time, MSEDCL is bound to take all action as per oral/standing instructions of SLDC/RLDC to take all necessary, urgent and emergency measures to reduce the overdrawal and most importantly maintain the grid security under section 33 of the Electricity Act 2003.

Therefore, because of the dynamic situation of mismatch between generation and load, there is an overdrawal forcing SLDC/RLDC to open EHV lines and thereby urgent threat to the grid security, MSEDCL is duty bound to urgently enhance or adjust the load shedding protocol to maintain the grid security.

However, while making change to the load shedding protocol, MSEDCL generally follows the broad principles and framework laid down by the Commission and based on the available information of demand supply scenario, suitable makes alteration to the load shedding protocol.

MSEDCL humbly submits that there is no willful or manipulative intention in violation of the MERC Orders in load shedding protocols and the changes have been done, taking into account the grid condition, demand supply gap, future availability of power, etc.

- f) MSEDCL submitted that there was a meeting held with interim franchisees and it was decided that the power purchase rate as determined by the Commission would be taken as an average rate over the entire contract period, instead of per Unit rate on a weekly basis.

During the implementation of ZLS models, MSEDCL has come across certain conditions/ situations which impeded the smooth running of the model. MSEDCL would wish to highlight these issues as under:



Issue of Scheduling of Power by Trader of Interim Franchisee:

- It has been observed on a number of occasions that M/s. TPTCL has not informed the schedule of power and quantum of power in time, such that MSEDCL is not in a position to give the proportionate load relief to the consumers of the specific ZLS areas. It has been requested to them from time to time to submit the availability before 17.00 hours, else it results in MSEDCL giving load relief on the subsequent day, which is not in the interest of the consumers.
- There have been instances when MSEDCL is in a position where it can withdraw the planned load shedding due to better availability of power. However, it is observed that M/s. TPTCL continues to purchase power from Indian Energy Exchange (IEX) without consultation of MSEDCL. This leads to power purchase being allotted to the ZLS areas, despite the planned load shedding being withdrawn in the real time situation.
- MSEDCL vide dated September 22, 2008 has been sent to TPTCL, informing about this situation and agreement has been reached with TPTCL in this matter.

26. The Commission vide its letter dated March 12, 2009 directed MSEDCL to submit additional information/ data gaps in regard Case No. 82 and 86 of 2008.

27. MSEDCL in its reply filed on April 9, 2009 submitted as under:

- a) The load shedding protocol generally prescribes the maximum duration (hours) of load shedding to be implemented in a particular group (i. e. A, B, C, D or E). However, the entire area covered under a particular Group (say a Village, Town or City) is not subjected to load shedding at a time, but is divided in 2/3/ 4 sections as per requirement of desired load relief. Load Shedding is carried out in every such section for the duration as per prevailing load shedding protocol, but during different time of the day. For example, if we consider a town which is categorized as “C” group and if the prevailing protocol of Load Shedding prescribes 3 hours load shedding, the said town for the purpose of effecting load shedding is divided into four sections and every day load shedding is carried out in each such section for 3 hours but at different time of the day; viz. say Section 1 from 0600 hrs to 0900 hrs; Section 2 from 0900 hrs to 1200 hrs, Section 3 from 1200 hrs to 1500 hrs & section 4 from 1500 hrs to 1800 hrs.
- b) In nutshell it can be said that the load shedding in a particular City/Town is done on rotational basis in the different parts of such City/Town such that each consumer is subjected to load shedding hours corresponding to its group. However, in real time situation, if the demand– supply gap situation during



morning 6.00 hrs. to 10.00 hrs. has improved for one or the other reasons, load shedding during these hours is proportionately withdrawn and the consumers situated in Section 1 experience 100% withdrawal of load shedding, whereas the consumers situated in Section 2 experience 33% withdrawal of load shedding. As compared to this the consumers situated in Section 3 and Section 4 are subjected to 100% Load shedding. Other day the situation can be vice-a-versa and sometimes if the demand–supply gap situation improves during evening hours, consumers situated in Section 3/Section 4 are benefited proportionately. Thus, whenever system condition permits, planned load shedding is withdrawn either partially or fully depending upon the situation. In such circumstances, it therefore can happen that, on a particular day, some of the consumers in a City might have been subjected to 100% load shedding, whereas on the same day some other consumers might have been benefited by 100% load shedding withdrawal. Due to dynamism of the system it is not possible to withdraw the load shedding through out the day; therefore it is not possible to give exact picture in terms of load shedding hours carried out in each day for each group as it would differ for the different parts based on the real time situation.

- c) The actual power requirement is based on average load profile which changes periodically, and hence power requirement depends on demand which varies from time to time for the day due to atmospheric, seasonal changes, etc. Therefore, power requirement is considered on a daily basis and not on hourly basis.
- d) MSEDCL has collected the Actual power available from the pool without ZLS model in Thane/Vashi/Pune Circle data from Maharashtra State Electricity Transmission Company Ltd. (MSETCL), which has provided the same on monthly basis.
- e) The quantum of power to be procured by Interim Franchisee, which would be sufficient to mitigate load shedding in Pune/Thane/Vashi Region has been determined based on the protocol of load shedding then prevailing when the ZLS Model was finalized. Accordingly, the Interim Franchisee has entered into a Tri-Partite Agreement with MSEDCL and Trader, which prescribes to forward the requirement on daily basis. MSEDCL generally follows the load shedding protocol based on the availability of firm power on a given day. According to such protocol, the requirement of power for mitigating load shedding in Pune and Thane/Vashi area is determined and informed to the Trader on day ahead basis. Simultaneously MSEDCL makes effort to procure as much infirm power is possible from different sources; including overdrawing power from National Grid under UI when the frequency is better. If as a consequence of such efforts, the



demand-supply gap reduces below the demand-supply gap that has been considered for determining the load shedding protocol to be followed, obviously such situation results into withdrawal of load shedding during real time implementation of the load shedding protocol. At such point of time, which is dynamic in nature and can occur during any time of the day, the power scheduled by the Interim Franchisee from the Trader on day ahead basis can neither be curtailed not can be stopped.

28. Having heard the Parties and after considering the material placed on record, the Commission is of the view that the matter is linked to the overall load shedding in the State of Maharashtra undertaken by MSEDCL subsequent to the issue of the Tariff Order dated May 31, 2008 (Operative Order) and detailed Order dated June 20, 2008. In this regard, the Commission has issued a separate Order dated November 28, 2008, on Petitions filed by MSEDCL in Case No. 77 and 78 of 2008, wherein the issue of appropriateness of load shedding undertaken by MSEDCL after the issue of the above-said Tariff Order and the load shedding protocol to be followed in future have been detailed. It should also be noted that the MSEDCL had filed an Appeal (numbered as Appeal No. 173 of 2008) before the Honourable Appellate Tribunal for Electricity (ATE), and the ATE has dismissed the matter vide its Judgment dated July 31, 2009.

29. As the period referred by the Petitioner for indiscriminate increase in load shedding hours was July 2008 onwards, the issue has been detailed out in Case No. 77 & 78 of 2008. Thus, there is no need to go any further into the appropriateness of the implementation of the load shedding protocol or the zero load shedding scheme during this period.

30. Further, the validity of the Commission's Orders in Case No. 5 of 2008 and Case No. 10 of 2008 related to appointment of interim franchisee for Pune, Vashi Circle–Navi Mumbai and Thane Urban Circle was only upto May 31, 2009, which has been subsequently extended till the time the Commission decides on MSEDCL's Petition dated June 15, 2009 in Case No. 31 of 2009 for withdrawal of load shedding in the headquarters of Revenue Divisions of Thane, Vashi, Nasik, Aurangabad, Nagpur, Pune and Amravati in the MSEDCL license area. In this regard, the Commission is of the view that the authorized Consumer Representatives, who are also one of the Petitioners in this matter, have on the one hand filed Petitions against MSEDCL for non-compliance of the Commission's Orders for load shedding and zero load shedding, and on the other hand,



have supported MSEDCL's request for extension of the very same Orders and also supported MSEDCL's new Petition in Case No. 31 of 2009. The Commission's Orders in Case No. 5 of 2008 and Case No. 10 of 2008 cover the broad methodology and principles of zero load shedding scheme and for specific areas that were willing to pay additional charges which only the Commission can determine. Given the nature of load shedding, there are bound to be certain implementation issues and the Commission does not want to get into day-to-day operational matters of implementation. The Commission had also stated so clearly during the deliberations of the Petition. The authorized Consumer Representatives or Interim Franchisees may therefore take up the day-to-day issues of the implementation of the zero load shedding schemes with MSEDCL's management at appropriate levels and resolve them in mutually acceptable manner.

Accordingly, Petitions filed by TSSIA, Prayas (Energy Group) and M/s. Sajag Nagrik Manch, Pune in Case No. 82 of 2008 and 86 of 2008 stands disposed of.

Sd/-
(S.B. Kulkarni)
Member

Sd/-
(A. Velayutham)
Member

Sd/-
(V.P. Raja)
Chairman



(P.B. Patil)
Secretary, MERC