Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

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Case No. 52 of 2005

In the matter of
Maharashtra State Electricity Distribution Company Limited (MSEDCL) Petition for Review of Regulations relating to FAC formula

Dr Pramod Deo, Chairman
Shri A. Velayutham, Member
Shri S.B.Kulkarni, Member

ORDER

Dated: 21st March, 2006.

The Maharashtra State Electricity Distribution Company Ltd., vide its submission dated 23rd February, 2006 filed a Petition for Review of Regulation 82.6 of MERC (Terms and Conditions of Tariff) Regulations, 2005 relating to cap on Fuel Adjustment Cost Formula.

2. The prayers in the Petition are, inter alia:

a) *"Examine the concerns expressed by the Petitioner for a favourable dispensation as detailed in the Petition.*
b) *In view of the various reasons explained in the Petition, it is respectfully submitted that the Commission may approve the removal of cap on FAC Charges recovery taking into consideration the fuel cost variations and power purchases for full eligible amounts.*
c) *The Commission may kindly consider this Petition expeditiously due to the severe liquidity problems being faced by MSEDCL and approve the removal of cap on FAC Charges recovery to ensure that MSEDCL mitigates the load shedding problem in that State to the extent possible.*
d) *Condone any inadvertent omissions/ errors/ shortcomings and permit MSEDCL to add/ change/ modify/ alter this filing and make further submissions as may be required at a future date.*
e) *Pass such further and other orders, as the Commission may deem fit and proper keeping in view the facts and circumstances of the case".*

3. MSEDCL in its Petition submitted that due to unprecedented power shortage, it is compelled to tap every available source, irrespective of the price. MSEDCL has entered into short-term power purchase agreements with Power Trading Corporation (PTC), Adani Export, NTPC Vidyut Vyapar Nigam, Reliance Energy Trading Limited and Tata Power Trading Company Ltd. As directed by the State Cabinet recently, it has entered into an agreement to purchase about 545 MW of power from NTPC's Kawas and Gandhar power stations, which are expected to cost around Rs 7.45 per unit, based on naphtha.

4. MSEDCL further submitted that it has spent Rs 1060 Crore during April to December 2005 for additional purchase of high cost power (from sources including Kawas, Tata Power Company, Bilateral purchase through traders and Jindal), in addition to its Central sector allocation and other regular purchases.

5. MSEDCL submitted that, as per the MERC (Terms and Conditions of Tariff) Regulations, 2005, MSEDCL is permitted to recover a portion of additional costs through the Fuel Adjustment Charge (FAC) mechanism, which is capped at the level of 10% of energy charges, and hence grossly inadequate to compensate for the balance financial burden after adjusting the financial assistance from the State Government. This cap restricts the permissible recovery through FAC to approximately Rs 80 Crore per month, which may not even cover Maha Genco's fuel cost variation and there is no scope for passing on variation in power purchase cost through FAC. MSEDCL has cited the example that against the additionally incurred power purchase cost of Rs 1060 Crore for the period April to December 2005, the amount recoverable based on FAC charge ceiling is only around Rs 700 Crore, if only power purchase cost variation (and not Maha Genco's fuel cost variation which works out to approx. Rs 80-100 Crore/month) is included in FAC calculation.

6. MSEDCL further submitted that the Hon'ble Commission under Regulation 82.6 of MERC (Terms and Conditions of Tariff) Regulations, 2005 has approved recovery of interest on working capital towards un-recovered FAC amount. However, such recovery of interest only increases the un-recovered amount and the same becomes a notional relief for the Utility due to the recoverable FAC being in excess of the cap and there is no relief in cashflow as the fuel prices seldom show a declining trend due to inflation. MSEDCL submitted that as per Regulation 82.6 of MERC (Terms and Conditions of Tariff) Regulations, 2005, the Commission can restate the cap on FAC recovery and hence has powers to amend the cap.

7. Based on analysis of MSEDCL submission, the Commission observed that MSEDCL has not submitted the details of source-wise actual power purchase from all the sources for the period April to December 2005 and has only submitted the details of additional power purchase from high cost sources. To assess the variation in actual per unit fuel cost with respect to base per unit fuel cost considered in the Tariff Order for FY 2003-04 and total unrecovered amount due to FAC cap, the Commission directed MSEDCL to submit the source-wise actual details of power purchase from all the sources for the period September 2005 to February 2006 and projected details of power purchase from March 2006 to June 2006.

8. Subsequently, MSEDCL vide its letter dated 7th March, 2006 submitted the additional information as directed by the Commission. MSEDCL submitted that the Hon'ble Commission in the Tariff Order for FY 2003-04 has considered power purchase of 16183 MU at a total cost of Rs 3132 Crore and the actual power purchase in FY 2005-06 till December 2005 is 17062 MU at a total cost of Rs 3263 Crore. The power purchase cost of Rs 3263 Crore excludes the cost of power purchase from the Sardar Sarovar Project and the Government of Maharashtra has indicated a single-part tariff of Rs 4.18/unit for purchase from the Sardar Sarovar Project resulting in an impact of Rs 204 Crore for the power purchase made from April 2004 to December 2005.

9. MSEDCL submitted that the actual FAC amount for the month of September 2005 was Rs 135 Crore and FAC per unit to be charged works out to 35 paise/unit and for the month of October 2005, the total FAC amount was Rs171 Crore and FAC per unit works out to 40 paise/unit. As against the actual per unit FAC of 35 paise/unit and 40 paise/unit, MSEDCL as directed by the Commission has levied FAC with the ceiling, i.e., 20 paise/unit and this has resulted in unrecovered FAC of Rs 146 Core for the period of two months (September and October 2005).

10. MSEDCL submitted the comparison of power purchase during the period September 2005 to December 2005 vis-à-vis the power purchase during the same period of last year as follows:

Particulars	**Sept 04 to Dec 04**	**Sept 05 to Dec 05**	**Difference**
Total Power Purchase (MU)	6419.66	7443.57	1023.91
Total Power Purchase Cost (Rs Crore)	1289.12	1527.26	238.14

MSEDCL submitted that one of the reasons for the additional purchase is on account of forced outage of Chandrapur Unit No. 5, which has resulted in an expenditure of Rs 238 Crore to MSEDCL for purchase of 1024 MU.

11. MSEDCL submitted that the projected power purchase (from Central sector and traders) for the period of January 2006 to June 2006 is to the tune of 14000 MU as compared to the procurement of 11000 MU for the equivalent period during last year and this additional power purchase is necessary to reduce the load shedding and to ensure the guidelines of the Commission's Order on principles and protocols of load shedding.

12. MSEDCL further submitted that all the short and medium term power purchase through bilateral contracts is governed by "single-part" tariff and the suppliers are not charging a segregated fixed and variable component and there is no 'take or pay' obligation on account of such purchases. MSEDCL submitted that as the entire power purchase cost on account of such purchases is "variable" in nature, the entire applicable tariff for such purchase should be passed through in the FAC formulation. MSEDCL provided the indicative fixed

costs available for generating Stations in the Eastern region and Southern region from the Tariff Orders of APERC and OERC as follows:

Source	Fixed Cost (paise/unit)
Gridco (FY 2005-06)	45.29
AP Transco (FY 2005-06)	80.56
NTPC Kawas Station	57.00

13. MSEDCL further submitted that it is understood that The Tata Power Company (TPC) has considered such “single part” tariff based power purchase from M/s Jindal Power and Steel Company Limited during the months of September and October 2005 as fully pass through in its FAC charge computations.

14. MSEDCL submitted that considering that the earlier Tariff Order was based on much lower estimates of demand, the approved power purchase is insufficient to cater to the increased load and requested the Commission to allow the total cost of power purchase from sources other than Central Generating Stations through FAC without any ceiling.

15. The Commission heard the matter in the presence of authorised consumer representatives and other Distribution Licensees on 8th March, 2006. During the hearing, Shri.Sanjay Bhatia, Managing Director, reiterated the submissions made in the Petition and requested the Commission to remove the cap on recovery of FAC charge, to ensure mitigation of the load shedding problem in the State to a certain extent. He submitted that the Tariff Order for FY 2003-04 allowed Rs.3132 Crore (16183 MU) for power purchase, however the demand has increased substantially as compared to FY 2003-04. He further submitted that to meet the demand, MSEDCL has been trying to purchase short-term power from various sources including West Bengal, Orissa, Andhra Pradesh, etc. He further submitted that, MSEDCL is also purchasing power from Kawas-NTPC plant, the cost of which works out to around Rs.7/- per unit and due to increase in short term power purchase, MSEDCL is spending an additional amount of around Rs 350 Crore towards power purchase and total impact of additional power purchase till June 2006 is estimated at Rs 3000 Crore.

16. Shri Sanjay Bhatia further submitted that MSEDCL is facing severe liquidity crunch and due to the ceiling on recovery of FAC charge, MSEDCL is unable to recover the cost of high cost power purchase through FAC. In case the FAC cap is not removed, MSEDCL will not be able to procure high cost short-term power and hence will be unable to implement the load shedding protocol. As regards purchase of additional power from NTPC Kawas plant based on naphtha as fuel, he submitted that MSEDCL had approached the State Government for funding but the Government asked MSEDCL to approach the Commission for recovery from consumers. He added that if MSEDCL stops buying additional power from NTPC Kawas plant, it will increase the load shedding by around 2 hours. He requested the Commission to remove the FAC cap so that MSEDCL could continue to purchase additional power from NTPC Kawas plant.

17. Shri Shantanu Dixit of Prayas, a Consumer Representative, submitted that when the 10% cap on FAC was fixed, the objective was to curtail the tariff increase to consumers and in case the FAC to be recovered exceeds cap, it needs to be evaluated in much more detail. However, he agreed that considering the increase in fuel prices as compared to baseline fuel cost that was fixed long back in FY 2003-04 during the last tariff determination of MSEB, there is a need to review the FAC Cap. He suggested that the recovery of FAC beyond the cap specified should be decided on case-to-case basis. He submitted that if MSEDCL feels it is justified/necessary, they should submit detailed submissions in FAC formats as prescribed by the Commission and based on the data submitted, the Commission can approve the increase in FAC charge per unit beyond cap on a case-to-case basis. He added that as it involves a large change in tariff, the Commission must issue an Order approving the revised FAC charge, if it is more than/exceeding 10% of the variable charge. He also submitted that there should not be a complete removal of cap as mentioned by MSEDCL as this issue will be for temporary period of 4 months or so and once the new Tariff Order is issued, the base power purchase cost will increase based on prevalent fuel prices.

18. Shri Dixit further submitted that there is a need to look at the entire past record of MSEB/MSEDCL in terms of FAC related issues, whether MSEDCL has made timely submissions of all the data that was required as per Regulations, as per the Commission's Order on FOCA. As regards purchase of additional power from NTPC Kawas Plant, he submitted that the Commission's Order of load shedding is very recent and the Commission has directed that GoM should compensate MSEDCL to the extent of Rs. 100 Crore per month. He submitted that there is no reason to change the approach and GoM should be required to bear the additional cost and the additional cost of power purchase from NTPC Kawas Plant should not be passed on the consumers in the form of FAC.

19. Shri Dixit further submitted that whenever MSEDCL is ready with the FAC workings, the entire data in the detailed data formats as specified by the Commission should be made available on the website by MSEDCL in a timely manner. He added that the data is not uploaded or made available in a timely manner. As regards to increase in power purchase, he submitted that if the increase in FAC is only on account of fuel cost, it can be passed on to the consumers in form of FAC. However, if FAC increase is largely on account of increase in power purchase quantum, the corresponding increase in revenue also needs to be accounted, as when MSEDCL is buying more power it is also selling more power and MSEDCL's revenue is also undergoing change. The entire increase in power post cost cannot be considered as pass though in FAC.

20. Shri Dixit also raised the issue of short term power purchase and submitted that Regulation 25 of MERC (Terms and Conditions of Tariff) Regulations, 2005 permits short term power purchase without prior approval of Commission, but also requires that data relating to the same needs to be submitted to the Commission. He queried as to whether MSEDCL has been submitting the short-term power purchase data to the Commission and whether the Commission has analysed it or not. The Commission after considering the data

submitted by MSEDCL can take a view as to whether the additional power purchase meets the requirement of Section 25 of the Tariff Regulations.

21. Dr Ashok Pendse of Mumbai Grahak Panchayat submitted that as per the FAC mechanism, the cap on FAC Charges is 10% of variable charge and as per Tariff order for FY 2003-04, it works out to 28 paise/Unit. However, during last two years, there have been instances when FAC charge has gone beyond 28 paise/unit. He submitted that at that instance, MSEB should have approached the Commission, but over a period of two years MSEB/MSEDCL has not approached the Commission. He submitted that the issue here is not a removal of FAC cap, the issue is recovery of costs of short-term power purchase to mitigate emergency situation, which is different from the fuel adjustment. Referring to the innovative methodology of T&D loss charge, Dr.Pendse submitted that an additional charge may be levied to recover the additional cost of short term power purchase to mitigate the emergency situation of shortfall in supply. He suggested that a separate account of this additional charge should be maintained for 3-4 months and consumer should be made aware that they have to pay more due to the shortfall in power supply in an unprecedented situation.

22. Dr. S.L. Patil of Thane Belapur Industries Association submitted that the recovery of additional high power purchase cost is essentially more or less like a deficit management plan; and charge thereof, for which there should be a separate mechanism. He submitted that there is a need to examine where the additional power purchase is being utilized and in case it is being utilized to meet the rural demand, which is not revenue bearing for MSEDCL then the State Government should reimburse the cost of additional power purchase and it should not be passed on to consumers. He suggested that a deficit management charge may be introduced for next 3-4 months to meet the cost of additional power purchase.

23. The Commission queried as to under which provision of the Act, the deficit management charge can be levied. Dr.Pendse submitted that the deficit management charge could be levied in the same manner as load management charge was levied last year. Mr.Dixit submitted that what Dr.Pendse is suggesting that consumer should be made aware as to the reasons for the increase in the cost, which in this case is essentially arising out of the emergency situation for which MSEDCL has to purchase high cost power. He submitted that this objective can be achieved by the Commission by passing a detailed Order while approving FAC to be levied for each month, if FAC to be levied is above 10% of variable charge.

24. Shri J.D Kulkarni of Tata Power Company (TPC), TPC submitted that TPC had filed a Petition in September 2005 for removal of FAC cap and the Order was issued by the Commission in November, 2005 on the same. He opined that if the entire increase in fuel costs is not passed on to consumers, it is difficult for the Utility to run the business. He added that TPC has around Rs 300 Crore of unrecovered FAC, which will be recovered next year. He submitted that in TPC's opinion, FAC cap should be removed and the entire increase in fuel prices should be passed on to consumers.

25. Shri Sanjay Bhatia of MSEDCL submitted that MSEDCL has already submitted its ARR Petition for FY 2006-07 to the Commission and MSEDCL is following all the Orders of the Commission. He opined that there is no need of FAC Order every month, as the Commission will examine the entire power purchase cost while processing the ARR Petition. Shri Bhatia referred to the provision of National Tariff Policy, as follows "*Uncontrollable costs should be recovered speedily to ensure that future consumers are not burdened with past costs. Uncontrollable costs would include (but not limited to) fuel costs, costs on account of inflation, taxes and cess, variations in power purchase unit costs including on account of hydro-thermal mix in case of adverse natural events"*.

26. The Commission opined that the National Tariff Policy stipulates the speedy recovery of uncontrollable costs, but the Electricity Act 2003 (EA 2003) permits only the variation in fuel costs to be passed through to consumers and the Commission's Regulations are in consonance with the provisions of EA 2003. The Commission asked MSEDCL to clarify the legal position on the aspect of levy of separate charge for recovery of additional short-term power purchase costs to meet the emergency situation of supply shortfall.

27. MSEDCL has filed the application under Regulation 82.6 of MERC (Terms and Conditions of Tariff) Regulations, 2005. Regulation 82.6 of MERC (Terms and Conditions of Tariff) Regulations, 2005 stipulate, *"The monthly FAC charge shall not exceed 10% of the variable component of tariff, or such other ceiling as may be stipulated by the Commission from time to time"*

28. Based on MSEDCL submissions, the Commission observed that MSEDCL has considered the total cost of additional power purchase from high cost sources during the period April 2005 to December 2005 to the extent of Rs 1060 Crore as recoverable through FAC. The principle of FAC is to pass on the variation in per unit fuel cost with respect to the base per unit fuel cost considered in the Tariff Order for FY 2003-04. This aspect has been clarified to MSEDCL vide the Commission's letters dated 5th May 2003 and 1st September 2004. Further, the Commission had also advised the erstwhile MSEB to file the ARR and Tariff Petition so as to effectively address this issue but MSEB did not file its ARR and Tariff Petition for FY 2004-05 and FY 2005-06. The issue of under recovery and exceeding of the FAC ceiling is therefore the direct result of not applying for revision of tariff in time.

29. The FAC formula allows for recovery/refund of incremental/reduction in cost actually incurred as compared to the base fuel cost considered for determination of the variable cost of generation and power purchase in the Tariff Order (in this case the last Tariff Order was issued on 1st December 2003). However, for some of the sources of power purchase such as traders, bilateral sources, TPC and CPP, the break up of total cost per unit into fixed and variable component is not available as the tariff applicable is a single part tariff. The principle of FAC is to pass on the variation in per unit fuel cost with respect to the base per unit fuel cost, considered in the Tariff Order. To assess the prevailing per unit fuel cost (variable cost), the normative fixed cost per unit needs to be deducted from the total cost per unit for the sources for which break up of fixed and variable cost is not available.

Further, the normative fixed cost per unit to be deducted for arriving at the per unit variable cost needs to be a fixed number and not as percentage of the total cost, as the fixed cost as a percentage of the total cost per unit would keep varying as fuel cost increases. The Commission is of the opinion that it would be appropriate to consider the normative fixed cost as 69.6 paise/kWh, based on the Tariff Order for FY 2003-04. The Commission directs MSEDCL to deduct this normative fixed cost per unit from the total cost per unit for the sources for which break up is not available, while estimating the change in fuel costs to be recovered through FAC.

30. As regards approval of short term power purchase, the provisions of Regulation 25.2 of MERC (Terms and Conditions of Tariff) Regulations, 2005 stipulates "*any variation, during any quarter of a financial year, in the quantum or cost of power procured and power procurement from a source other than a previously approved source, in excess of five (5) percent of the quantum or cost, as the case may be, of power procurement for such quarter, as approved by the Commission in the power procurement plan of the Distribution Licensee, shall be only with the prior approval of the Commission.*" MSEDCL, vide its letter dated 3rd October, 2005, submitted the details of short term power purchase for the month of October 2005 and the total short term power purchase for October 2005 was estimated at 375.49 MU. The estimated power purchase during the month of October 2005 was less than 5% of the quarterly power requirement of MSEDCL (783 MU), as approved by the Commission in Tariff Order for FY 2003-04. The Commission vide its letter No. MERC/Case No. 52 of 2005/0456 dated 2nd March 2006, directed MSEDCL to submit month-wise estimated total power purchase by MSEDCL for the period October to December 2005. The Commission also directed MSEDCL to submit the proposal in accordance with Regulation 25.2 of MERC (Terms and Conditions of Tariff) Regulations, 2005 for the approval of the Commission, in case the quantum of estimated short term power purchase for the quarter October to December 2005 is in excess of 5% of quarterly power requirement of MSEDCL (783 MU), as approved by the Commission in Tariff Order for FY 2003-04. However, MSEDCL has not submitted any proposal for approval of short-term power purchase for the approval of the Commission.

31. As regards the existing ceiling on recovery of FAC charge, the Commission would like to clarify that based on the Tariff Order of MSEB for FY 2003-04, the existing FAC cap is 20 paise/unit and not 28 paise/unit as mentioned by Mumbai Grahak Panchayat.

32. Regarding purchase of additional power from NTPC Kawas based plant with naphtha as fuel, the Commission in its Order dated 10th January, 2006 in the matter of Revision in the Principles and Protocol of Load Shedding opined that "*the difference in power purchase rate between the rate approved by the Commission and the prevailing rate of Kawas and Gandhar would have to be absorbed under the GoM grant/subsidy and would not be allowed under the FAC mechanism*". However, MSEDCL submitted that they had approached the State Government for funding of additional cost for power purchase from NTPC Kawas Plant and the State Government has asked them to approach the Commission for approval of recovery of additional power purchase costs from consumers. The Commission is of the opinion that

MSEDCL cannot take this plea and at the same time resort to short term power purchase without prior approval of the Commission. However, considering MSEDCL statement that without the power purchase from NTPC Kawas plant with naphtha as fuel, it would not be able to meet the parameters of supply of power as per the Commission's Order on Revised Protocol of load shedding, the Commission finds justification for the cost of power purchase from Kawas Station of NTPC to be allowed under FAC mechanism to mitigate the need for additional load shedding in the prevailing emergency situation of supply shortfall.

33. As regards the actual under recovery of FAC, MSEDCL submitted that the extent of actual FAC under-recovery for the month of September 2005 and October 2005 is Rs 146 Crore. As per MSEDCL submission, the FAC per unit to be charged works out to 35 paise/unit for the month of September 2005 and 40 paise/unit for the month of October 2005. MSEDCL submitted the actual FAC data and per unit FAC to be charged for the month of September 2005 for vetting by the Commission. Based on the vetting of FAC data by the Commission for the month of September 2005, the FAC per unit to be charged for the month of September works out to 28 paise/unit as against 35 paise/unit as estimated by MSEDCL.

34. The Commission has examined the details of actual source wise power purchase for the period October 2005 to February 2006. Based on the details submitted by MSEDCL, it is observed that the FAC charge to be levied on consumers works out in the range of 40 paise/unit – 80 paise/unit, though detailed vetting of the costs have not been done, as MSEDCL is yet to submit the FAC data in required formats for vetting by the Commission. The FAC charge of 40-80 paise/unit is based on the generation and power purchase data as submitted by MSEDCL, and does not factor the disallowance of increase in fuel cost of generation towards normative parameters such as heat rate, transit loss and T&D losses.

35. Based on actual FAC per unit for the month of September 2005 as approved by the Commission and the FAC per unit to be charged to the consumers based on generation and power purchase cost data submitted by MSEDCL, the Commission is of the opinion that there is a need to modify the FAC ceiling to improve the liquidity position of MSEDCL and to enable MSEDCL to continue the short term power purchase to mitigate the load shedding to the extent possible. Considering the quantum of FAC to be recovered based on data submitted by MSEDCL, the enhancement of ceiling from 10% of variable charge to say 20% of variable charge will not suffice. However, it may not be appropriate to completely remove the FAC ceiling and permit MSEDCL to levy a substantial high charge as FAC to consumers, without prior approval of the Commission.

36. The Commission will approve the FAC to be recovered by MSEDCL in excess of existing ceiling on recovery through FAC charge, i.e., 10% of variable charge, after detailed vetting of the actual FAC data on case-to-case basis. However, this mechanism will only be applicable in case of MSEDCL till the Commission issues the Order on ARR and Tariff of MSEDCL for FY 2006-07. MSEDCL has already filed the ARR Petition for FY 2006-07 and the Commission will consider the same while determining the power purchase costs of MSEDCL.

37. The Commission directs the MSEDCL to submit the details of FAC Computations in the formats prescribed by the Commission for vetting for the period October 2005 to January 2006 by 25th March 2006. For subsequent months, i.e., from February 2006, the MSEDCL should submit the details of FAC computations for vetting in a timely manner, if it is serious to mitigate its projected liquidity problems. The Commission, after vetting the FAC computations submitted by MSEDCL, will approve the FAC charge to be recovered in excess of the existing FAC cap.

38. The Commission also directs MSEDCL to submit a Petition for post facto approval of short-term power purchase for the period October 2005 to March 2006 and submit a separate Petition for prior approval of short-term power purchase for the next quarter i.e. April 2006 to June 2006 by 25th March, 2006.

With this Order, the Commission disposes the Application of Maharashtra State Electricity Distribution Company Limited.

Sd/-	Sd/-	Sd/-
(S.B. Kulkarni)	(A. Velayutham)	(Dr Pramod Deo)
Member	Member	Chairman, MERC

(Malini Shankar)
Secretary, MERC