Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

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Case No 63 of 2012

In the matter of
Stipulation of Revised Ceiling for Levy of Fuel Adjustment Cost (FAC) by Distribution Licensees in the State of Maharashtra under Regulation 82 of the Maharashtra Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2005

Shri V.P. Raja, Chairman
Shri Vijay L. Sonavane, Member

DRAFT ORDER (SUO-MOTU)

Dated: July__, 2012

Section 62 of the Electricity Act, 2003 (EA 2003) notified on June 10, 2003 stipulates as under:

> *"(4) No tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any* ***fuel surcharge formula as may be specified****."(****emphasis added****)*

2. The Maharashtra Electricity Regulatory Commission ("MERC" or "the Commission") notified the MERC (Terms and Conditions of Tariff) Regulations, 2005 ("MERC Tariff Regulations") on August 26, 2005. Regulation 82 of the MERC Tariff Regulations specifies the methodology for computation of Fuel Adjustment Cost (FAC) Charges and the manner of levy of FAC, as reproduced below:

> ***"82 Fuel surcharge adjustment***
>
> *82.1 With effect from the first day of September, 2005, the Distribution Licensee shall pass on adjustments, due to changes in the cost of power generation and*

power procured due to changes in fuel cost, through the Fuel Adjustment Cost (FAC) formula, as specified below.

82.2 The FAC charge shall be applicable on the entire sale of the Distribution Licensee without any exemption to any consumer.

82.3 The FAC charge shall be computed and charged on the basis of actual variation in fuel costs relating to power generated from own generation stations and power procured during any month subsequent to such costs being incurred, in accordance with these Regulations, and shall not be computed on the basis of estimated or expected variations in fuel costs.

...

82.5 The formula for the calculation of the FAC shall be as given under:

FAC (Rs crores) = ***C*** *+* ***I*** *+* ***B****, Where*

FAC = Fuel Adjustment Cost
C *= Change in cost of own generation and power purchase due to variation in the fuel cost*
I *= Interest on working capital*
B *= Adjustment factor for over-recovery / under-recovery*

Explanation I – for the purpose of this Regulation 82.5, the term ***"C"*** *shall be computed in accordance with the following formula:*

C (Rs. Crores) = $AFC,_{Gen} + AFC,_{PP}$*, Where:*

$AFC,_{Gen}$*: Change in fuel cost of own generation. This change would be computed based on the norms and directives of the Commission, including heat rate, auxiliary consumption, generation and power purchase mix, etc.*

$AFC,_{PP}$*: Change in energy charges of power procured from other sources. This change would be allowed to the extent it satisfies the criteria prescribed in these Regulations and the prevailing tariff order, and subject to applicable norms.*

Explanation II – for the purpose of this Regulation 82.5, the term ***"I"*** *shall mean change in interest on working capital on account of change in fuel cost.*

Explanation III – for the purpose of this Regulation 82.5, the term ***"B"*** *shall be computed in accordance with the following formula:*

B_{J-2} *(Rs. Crores) =* $A_{J-4} + R_{J-2}$

Where:

A_{J-4} : Incremental cost in month "J-4".
R_{J-2} : Incremental cost in month "J-4" actually recovered in month "J-2".

82.6 The monthly FAC charge shall not exceed 10% of the variable component of tariff, <u>or such other ceiling as may be stipulated by the Commission from time to time:</u>

Provided that any excess in the FAC charge over the above ceiling shall be carried forward by the Distribution Licensee and shall be recovered over such future period as may be directed by the Commission.

82.7 The calculation for FAC to be charged for the month "J" shall be as follows:

FAC_J *(Rs crores)* $= C_{J-2} + I_{J-2} + B_{J-2}$

The FAC would be applicable from the month following the month in which the additional costs are calculated.

...

82.9 The total FAC recoverable, as per the formula specified above, shall be recovered from the actual sales in "Rupees per kilowatt-hour" terms:

Provided that in case of unmetered consumers, FAC shall be recoverable based on estimated sales to such consumers, calculated in accordance with such methodology as may be stipulated by the Commission:

Provided further that where the actual distribution losses of the Distribution Licensee exceed the level approved by the Commission, the amount of FAC corresponding to the excess distribution losses (in kWh terms) shall be deducted from the total FAC recoverable.

82.10 Calculation of FAC per kWh shall be as per the following formula:

$FAC_{Rs./kWh}$ *= (FAC / (Metered sales + Unmetered consumption estimates + Excess distribution losses)) * 10"(**emphasis added**)*

3. The MERC Tariff Regulations were amended on January 28, 2011, on the aspect of levy of proportionate FAC, as reproduced below:

"(i) For Regulation 82.6 of Tariff Regulations, the following Regulation shall be substituted:

"82.6 ***The monthly FAC charges of a particular tariff category/sub-category/consumption slab shall not exceed 10% of the variable component of***

tariff of that tariff category/sub-category/consumption slab, <u>or such other ceiling as may be stipulated by the Commission from time to time</u>.

Provided that any excess in the FAC charge over the above ceiling shall be carried forward by the Distribution Licensee and shall be recovered over such future period as may be directed by the Commission.

Provided further that in case of un-metered consumers, ceiling of FAC charges shall be calculated by multiplying the ceiling of FAC charges of metered sub-category by the ratio of Average Billing Rate (ABR) of respective un-metered sub-category to ABR of metered sub-category within the same tariff category.

(ii) For Regulation 82.10 of Tariff Regulations, the following Regulation shall be substituted:

"82.10. Calculation of FAC per kWh for a particular tariff category/sub-category/consumption slab shall be as per the following formula:

*FAC_{Cat} Rs/kWh = (FAC / (Metered sales + Unmetered consumption estimates + Excess distribution losses)) * K * 10*

Where:

FAC_{Cat} = FAC for a particular tariff category/sub-category/consumption slab in 'Rupees per kWh' terms.

K = (Energy Charge) / (ACOS)

Where,

Energy Charge = Energy Charge for a particular tariff category / sub-category/ consumption slab under consideration in 'Rupees per kWh' as approved by the Commission in Tariff Order.

*ACOS = Average Cost of Supply in 'Rupees per kWh' as approved for recovery by the Commission in Tariff Order."(**emphasis added**)*

4. It may be noted that though the MERC (Multi Year Tariff) Regulations, 2011 (MERC MYT Regulations) have been notified on February 4, 2011, the retail tariffs of all the Distribution Licensees in the State of Maharashtra are yet to be determined under the MERC MYT Regulations, as a result of which, the FAC mechanism specified under the MERC Tariff Regulations continue to be applicable till such time, the tariffs are determined under the MERC Tariff Regulations.

5. The Distribution Licensees, in their respective ARR and Tariff Petitions or through separate Petitions, have also been praying for either removal of the FAC ceiling or

increase in the FAC ceiling, which have not been granted till date, since the requests were usually based on projected values. However, it has been observed that over the last two to three years, the fluctuations in the fuel prices have led to significant increases in the actual fuel cost during the year, and coupled with new Tariff Regulations being made applicable for Central Sector Utilities like NTPC, it has resulted in a situation where the total FAC chargeable has been significantly higher than that allowed to be recovered from the consumers, on account of the 10% ceiling on levy of FAC, which has led to under-recovery of power purchase expenses by the Distribution Licensees during the year.

6. As reproduced above, Regulation 82.6 of the MERC Tariff Regulations, as amended in January 2011, specifies that the monthly FAC charges of a particular tariff category/sub-category/consumption slab shall not exceed 10% of the variable component of tariff of that tariff category/sub-category/consumption slab, or such other ceiling as may be stipulated by the Commission from time to time.

7. Under the aforesaid Regulations, this Commission can lay down some other ceiling as may be stipulated by the Commission from time to time. Accordingly, the Commission in due discharge of the mandate under Regulation 82.6 of the MERC Tariff Regulations proceeds to stipulate the revised ceiling for levy of FAC by Distribution Licensees in the State of Maharashtra through this draft Order and invites comments and suggestions from various Stakeholders.

Analysis and Ruling

8. The Commission is of the view that a certain appropriate FAC ceiling is required to be stipulated, rather than removing the FAC ceiling altogether, since entire FAC incurred in a particular month cannot be allowed to be passed through without any restriction. At the same time, the FAC ceiling has to be stipulated in such a manner that the FAC incurred by the Distribution Licensee under normal circumstances is allowed to be passed through to the consumers on a regular basis, subject to post-facto approval of the Commission, and only certain spikes due to steep fluctuations in fuel price or other developments may not get passed through directly within the FAC ceiling, for which separate prior approval will have to be obtained by the Distribution Licensees from the Commission.

9. The prevailing FAC ceiling for the Distribution Licensees in the State of Maharashtra, computed at the rate of 10% of average variable tariff of the respective Distribution Licensee, is given in the Table below:

Table 1: Prevalent FAC Ceiling (Average for Licensee as a whole)

Sl.	Distribution Licensee	FAC Ceiling (paise/kWh)
1	Maharashtra State Electricity Distribution Company Limited (MSEDCL)	39.33
2	Reliance Infrastructure Limited (RInfra)	64.20
3	Brihanmumbai Electricity Supply & Transport Undertaking (BEST)	72.29
4	The Tata Power Company Limited (TPC)	49.95

It is to be noted that in accordance with the amendment to the MERC Tariff Regulations, the applicable ceiling is different for different consumer categories/sub-categories/consumption slabs, and amounts to 10% of the variable tariff of that consumer category/sub-category/consumption slab, and the FAC ceiling indicated in the Table above, is the average ceiling for the Distribution Licensee as a whole.

10. Based on the analysis of the monthly FAC allowable and actual FAC allowed to be recovered over the period from April 2009 till date, it is observed that the respective FAC ceiling prevalent for the respective year has been crossed several times, as shown in the Table below:

Table 2: Number of occasions the FAC Ceiling has been crossed

Sl.	Distribution Licensee	Total Number of months for which FAC computations have been vetted	Total Number of months in which FAC ceiling has been crossed$	% of months when the FAC ceiling has been breached	Amount of FAC under-recovery at present* (Rs. Crore)
1	MSEDCL	33	17	52%	932
2	RInfra	27	4	13%	Nil$$
3	BEST	33	21	64%	140
4	TPC	33	31	94%	60

Note: * - based on latest FAC vetting Report, i.e., June 2011 for RInfra, and December 2011 for MSEDCL, BEST, and TPC

$ - on a cumulative basis, since amount of under-recovery in previous months is allowed to be recovered in the subsequent months, subject to the overall FAC ceiling

$$ - RInfra has been passing through FAC Credit (negative FAC) for most of the period under consideration.

11. The impact of the FAC under-recovery as stated above is that the liquidity of the Distribution Licensees is adversely affected, as they have to arrange for these funds from other working capital sources, which adds to the carrying cost, which in turn is passed on to the consumers. Thus, any legitimate expenditure incurred by the Licensees have to be allowed to be recovered from the consumers under the present cost-plus regime, and any delay in permitting recovery of the same only adds to the eventual burden on the consumers in terms of additional carrying cost, which should be minimised to the extent possible. Thus, balance of convenience is in favour of revisiting the FAC ceiling.

12. The reasons for the significant increase in FAC and consequent under-recovery due to the existing FAC ceiling of 10% are several, with some factors being applicable to all the Distribution Licensees in the State, and some factors being applicable to only certain Distribution Licensees. The fuel and power purchase costs have increased significantly over this period on account of increase in prices of domestic coal and imported coal and gas, which has adversely affected all the Distribution Licensees, whereas the increase in the price of power purchased from sources like NTPC on account of implementation of the new Tariff Regulations has adversely affected MSEDCL. In case of TPC, the steep increase in FAC in FY 2010-11 and FY 2011-12 is on account of the sudden increase in the external power procurement to supply to the change-over consumers. In case of RInfra, the migration of consumers to TPC has had a contra effect, and resulted in negative FAC due to the reduction in power purchase expenses vis-a-vis the power purchase expenses considered by the Commission in the extant ARR and Tariff Order.

13. The above developments, coupled with the fact that the retail tariffs of the Distribution Licensees have not been revised for some time on account of several factors including the transition to the MYT framework, deferment sought by certain Distribution Licensees regarding applicability of the MYT regime, etc., though certain interim reliefs have been given in some cases through different Orders after following due regulatory procedure, has contributed to the significant under-recovery of FAC. When the tariffs are revised periodically, the prevailing FAC is merged with the base tariffs and the FAC is equated to zero, since the prevalent fuel costs are considered for projecting the fuel costs at the time of determination of the Aggregate Revenue Requirement (ARR) and Tariffs.

14. Further, it is to be noted that under the MERC MYT Regulations, the Z_{FAC} can be levied by the Distribution Licensee only after prior approval of the Commission, and hence, there is no ceiling on levy of FAC.

15. In this regard, the Hon'ble Appellate Tribunal for Electricity (ATE) in its Order dated November 11, 2011, in OP. No. 1 of 2011, in the matter of Tariff Revision (suo-motu action on the letter received from Ministry of Power) has also ruled that the fuel and power purchase cost is uncontrollable and should be allowed as quickly as possible

> *"64. We also notice that most of the State Commissions have not provided in their Regulations Fuel & Power Purchase Cost Adjustment Formula for allowing the increase in fuel and power purchase cost during the tariff year. The fuel and power purchase cost adjustment mechanism provided in most of the states is after completion of the financial year through a separate proceeding which takes a long time.* ***<u>The power purchase cost is a major expenditure in the ARR of the distribution licensee. The fuel and power purchase cost is also uncontrollable and it has to be allowed as quickly as possible according to the Tariff Policy</u>****. The Electricity Act, 2003 under Section 62(4) has specific provision for amendment of the tariff more frequently than once in any financial year in terms of Fuel Surcharge Formula specified by the Regulations.* ***<u>A major part of power procured by the distribution company comes from the Central Sector Generating Companies whose tariff is regulated by the Central Commission and the State owned Generation Companies whose tariff is regulated by the State Commissions. The Central Commission in its Tariff Regulations has already provided a formula for fuel price adjustment and the charges of the generation companies are increased as and when the fuel prices are increased.</u>*** *In view of the present precarious financial conditions of the distribution companies, it would be necessary that the State Commissions also to provide for Power Purchase Cost Adjustment Formula as intended in the section 62(4) of the Act to compensate the distribution companies for the increase in cost of power procurement during the financial year. In the above situation, as indicated above it has become necessary for this Tribunal to give appropriate directions, to correct this situation by invoking the powers under Section 121 of the Act which is permissible under law...*
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> *65. In view of the analysis and discussion made above, we deem it fit to issue the following directions to the State Commissions:*

...

(vi) Fuel and Power Purchase cost is a major expense of the distribution Company which is uncontrollable. Every State Commission must have in place a mechanism for Fuel and Power Purchase cost in terms of Section 62 (4) of the Act. The Fuel and Power Purchase cost adjustment <u>should preferably be on monthly basis</u> on the lines of the Central Commission's Regulations for the generating companies but in no case exceeding a quarter. Any State Commission which does not already have such formula/mechanism in place must within 6 months of the date of this order must put in place such formula/ mechanism." (<u>emphasis added</u>)

16. The Commission has analysed the FAC Vetting Reports of MSEDCL, RInfra, BEST and TPC for the months from April 2009 to December 2011, in order to assess the appropriate FAC Ceiling level at which, the Distribution Licensees would have been able to recover their entire allowable FAC and there would have been no under-recovery of FAC and related carrying costs. The simulation for this analysis has been done on an iterative basis, and the results of this analysis are given in the Table below:

Table 3: Simulated FAC Ceiling linked to full recovery of FAC

Sl.	**Distribution Licensee**	**FAC Ceiling linked to full recovery of FAC (% of Variable Tariff)**
1	MSEDCL	20%
2	BEST	35%
3	TPC	40%

Note: RInfra does not figure in the above Table, since there is no relevant data for this period, on account of RInfra's FAC being negative for most of this period

17. From the above table, it is evident that since the retail tariffs have not been revised over the last two years by factoring the prevalent fuel and power purchase costs into the ARR and Tariffs, the simulated FAC Ceiling linked to full recovery of FAC works out to be quite high as compared to the extant FAC ceiling of 10%. However, once the retail tariffs are revised, the problem of under-recovery due to presence of the FAC ceiling is

expected to occur at a much smaller scale. Further, a common FAC Ceiling has to be stipulated for all the Distribution Licensees in the State.

18. In view of the above, it is proposed to increase the average FAC Ceiling to 25% of Variable Tariff for all the Distribution Licensees in the State of Maharashtra. The revised FAC ceiling of 25% is the average ceiling for the Distribution Licensee as a whole, and the applicable ceiling will be different for different consumer categories/sub-categories/consumption slabs, equivalent to 25% of the variable tariff of that consumer category/sub-category/consumption slab.

19. It should be noted that merely because the FAC ceiling has been increased, it does not mean that the FAC levels will also increase correspondingly, as the FAC will continue to be computed as at present and validated by the Commission on a post-facto basis, and over-recovery/under-recovery, if any, will be passed on to the consumers through reduction/increase in the FAC chargeable in the subsequent months, along with associated carrying costs. Even in the past, the Distribution Licensees have not charged FAC upto the FAC ceiling of 10% in all the months, despite being allowed to do so had the FAC been incurred till such stipulated limit, and the FAC ceiling has been crossed only in certain months, as summarised in Table 2 above.

20. This Draft Order (*Suo-motu*) is issued to invite suggestions and objections from all stakeholders including Distribution Licensees, consumers of all Distribution Licensees, etc. All stakeholders may submit their views, suggestions and objections on the same. The Commission shall finalize the Order after taking a view on the submissions received from the stakeholders on the draft Order.

(Vijay L. Sonavane) Member	(V. P. Raja) Chairman