



महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/MSEDCL/20162017/01616

Date: 1 March, 2017

To,
The Managing Director,
Maharashtra State Electricity Distribution Company Ltd.,
5th Floor, Prakashgad, Plot No. G-9,
Bandra (East),
Mumbai – 400 051

Subject: Prior approval of Fuel Adjustment Charge (FAC) submission of MSEDCL for the month of November, 2016.

Reference: a) MSEDCL's FAC submission for month of November, 2016 vide letter No.2423 dated 2 February, 2017.
b) MSEDCL's recalculated FAC for the period of April to October, 2016 vide letter No. 3535 dated 15 February, 2017

Sir,

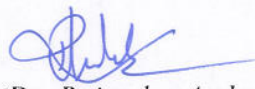
Upon vetting the FAC calculations for the month of November, 2016 as mentioned in the above reference, the Commission has accorded prior approval to MSEDCL for charging FAC to its consumers as shown in the table below:

Month		Z _{FAC} Amount (Rs. Crore)
Standalone Z _{FAC} for November, 2016	A	(119.88)
1 st instalment of refundable part of recalculated FAC for the period of April to October, 2016*	B	(55.88)
Net Z_{FAC} allowed for November, 2016	C=A+B	(175.76)

**The Commission directs MSEDCL to refund FAC of Rs.369.54 Crore (recalculated for the period of April to October, 2016 based on Tariff Order dated 3 November, 2016) in seven equal instalments starting from November, 2016 along with holding cost.*

MSEDCL is hereby allowed to refund the above Z_{FAC} to its consumers in the billing month of March 2017.

Yours faithfully,


(Dr. Rajendra Ambekar)
Director (Tariff), MERC

Encl: Annexure A: Detailed Vetting Report for the month of November 2016.

Cc as enclosed:

Names and Addresses of Institutional Consumer Representatives

Prayas Energy Group, Amrita Clinic, Athawale Corner, Lakdi pool-Karve Road Junction, Deccan Gymkhana, Karve Road, Pune 411 004	The President, Mumbai Grahak Panchayat, Grahak Bhavan, Sant Dynyaneshwar Marg, Behind Cooper Hospital, Vile Parle (West), Mumbai 400 056
The General Secretary, Thane Belapur Industries Association, Plot No.P-14, MIDC, Rabale Village, PO Ghansoli, Navi Mumbai 400 701	The President, Vidarbha Industries Association, 1 st floor, Udyog Bhawan, Civil Lines, Nagpur 440 001
Maharashtra Chamber of Commerce, Industry & Agriculture, Oricon House, 6 th Floor, 12k. Dubash Marg, Fort, Mumbai- 400001 (Nashik Branch) Email: maccia.nsk@gmail.com	Chamber of Marathwada Industries and Agriculture, Bajaj Bhavan, P-2, MIDC Area, Station Road, Aurangabad – 431 005



PRIOR APPROVAL FOR FAC FOR THE MONTH OF NOVEMBER 2016

Subject: Prior approval of Fuel Adjustment Charge (FAC) submission for the month of November, 2016.

Reference: a) MSEDCL's FAC submission for month of November, 2016 vide letter No.2423 dated 2 February, 2017.
b) MSEDCL's recalculated FAC for the period of April to October, 2016 vide letter No. 3535 dated 15 February, 2017

1. Background

1.1 On 3 November, 2016, the Commission has issued Tariff Order for MSEDCL (Case No. 48 of 2016) for approval of True-up of FY 2014-15, provisional True-up for FY 2015-16, and Aggregate Revenue Requirement and Tariff for FY 2016-17 to FY 2019-20. Revised Tariff has been made applicable from 1 November, 2016.

1.2 In this Tariff Order, the Commission has stipulated methodology of vetting FAC as follows:

"8.35 Vetting of Fuel Adjustment Charge levied on consumers

The levy of ZFAC charged to different consumers and the under-recovery/over-recovery of the corresponding costs will be vetted by the Commission on a post-facto basis, considering the submissions made by MSEDCL. However, for the first month after the issue of the present MYT Order, MSEDCL should obtain the Commission's prior approval for levy of ZFAC, to ensure that it is being levied correctly. MSEDCL should submit the ZFAC computations and details of under-recovery/over-recovery of fuel cost variations on a quarterly basis, within 60 days of the close of each quarter, for post-facto approval."

1.3 Vide its letter dated 15 November, 2016, the Commission communicated the excel formats for filing of FAC submissions to all Distribution Licensees. The Commission also directed all Distribution Licensees to submit FAC computations, including details pertaining to variation in fuel cost of generators for the approval of the Commission.

2. Recalculation of FAC for the period April to October 2016:

2.1 In its FAC vetting report dated 10 January, 2017 for the month of July to October, 2016, the Commission has directed MSEDCL as follows:



“Since, FAC for the period of April, 2016 to October, 2016 has been calculated based on the power purchase cost approved for FY 2015-16 in the prevailing Tariff Order dated 26 June, 2015, MSEDCL is directed to recalculate FAC for this period after considering the power purchase cost approved for FY 2016-17 in Tariff Order dated 3 November, 2016 in Case No. 48 of 2016. MSEDCL shall adjust the resultant FAC amount which remains to be recovered / refunded in next FAC billing process.”

2.2 Accordingly, vide letter dated 15 February 2017 MSEDCL submitted recalculated FAC for the month of April to October, 2016 after considering approved power purchase expenses for FY 2016-17 as per MYT Order dated 3 November, 2016. As per MSEDCL, net result of such recalculation is Rs 533.04 crore of FAC to be refunded to the consumers. However MSEDCL has requested the Commission to adjust such refundable FAC at the time of true-up of FY 2016-17 instead of refunding it now. In support of its request, MSEDCL submitted following:

- a. As Tariff Order dated 3 November, 2016 is made applicable from 1 November 2016, MSEDCL has not been able to recover revenue at new Tariff for the period of April, 2016 to October, 2016.
- b. Before 1 November, 2016, Tariff Order dated 26 June, 2015 in Case No. 121 of 2015 was effective and MSEDCL has calculated FAC on the basis of that Order. Therefore, the FAC computation was in accordance with the requirement of the Regulations and Tariff Order.
- c. The Commission has already granted post-facto approval for FAC of April, 2016 to October, 2016. Further as per the instructions of the Commission, FAC for the months of August, 2016 to October, 2016 has not been levied to the Consumers. Due to this, MSEDCL has been deprived off legitimate revenue through FAC for this period.
- d. If FAC for the period of April, 2016 to October, 2016 is recalculated there will be an adverse impact on MSEDCL's revenue. This will result into mismatch of power purchase cost and revenues for the period of April, 2016 to October, 2016.

2.3 MSEDCL has also submitted that if the above request is not acceptable, the Commission may:

- a. Permit MSEDCL to recover FAC/ variation in power purchase cost paid to the Generators including State, Central and IPP's from April, 2016 to October, 2016.
- b. Allow interest on resultant borrowed amount to be passed on to the consumers at the time of Truing up.



2.4 With reference to above request of MSEDCL, the Commission observes as follows:

2.4.1 MSEDCL has contended that due to delay in issuance of Tariff Order, it has not able to recover revenue at revised Tariff during the period of April to October, 2016. The Commission observed that one of the reasons for such delay was late filing of MYT Petition by MSEDCL. The same has been described in Tariff Order dated 3 November, 2016 as follows:

“Regulation 5.1(a) of the MYT Regulations, 2015 required filing of MYT Petitions for the 3rd Control Period by 15 January, 2016. However, considering difficulties raised by various Utilities, the Commission vide Order dated 15 January, 2016 had extended the time up to 15 February, 2016, including for MSEDCL.

Vide letter dated 11 February, 2016, MSEDCL sought further time, but the Commission rejected any further extension. Thereafter, on 3 March, 2016, MSEDCL filed its original MYT Petition, including a prayer for condonation of the delay in filing the Petition. The first TVS was held on 21 March, 2016. Thereafter, a second TVS was held on 29 April, 2016 in which MSEDCL was directed to submit pending replies to data gaps within a week, and to file its revised Petition incorporating its replies to the data gaps and the issues raised during the TVS. However, MSEDCL submitted its revised Petition only on 7 June, 2016 which was admitted by the Commission on 10 June, 2016 for further regulatory process.”

2.4.2 FAC mechanism allows pass-through of variation in power purchase cost of Distribution Licensees to its consumers. Power purchase quantum and cost approved in Tariff Order applicable for period under consideration is used as reference for calculating such variation in power purchase cost.

2.4.3 For the FY 2016-17, the Commission has issued Tariff Order on 3 November, 2016 and made it applicable from 1 November, 2016. Thus for the period of April to October, 2016, Tariff which was approved for FY 2015-16 through earlier MYT Order dated 26 June, 2015 were in force.

2.4.4 Accordingly, for the period of April to October, 2016 (which is part of FY 2016-17), MSEDCL had calculated FAC based on the old Tariff Order dated 26 June, 2015 (which is for FY 2015-16). Subsequent to issuance of Tariff Order dated 3 November, 2016, approved power purchase cost for FY 2016-17 becomes available. At the time of true-up of FY 2016-17, power purchase cost approved in Tariff Order dated 3 November, 2016 will be used as reference for arriving at deviation in actual power purchase cost.

2.4.5 Therefore, if FAC for the period of April to October, 2016 which was calculated based on 2015 Tariff Order is not recalculated, then at the time of true-up of FY 2016-17 (which would be based on 2016 Tariff Order) there would be large difference between revenue collected through FAC and variation in power purchase cost. This may result in burdening the consumers / Licensee with carrying cost / holding cost at the time of



true-up. Therefore, vide FAC vetting Order dated 10 January, 2017 the Commission has directed MSEDCL to recalculated FAC for the period of April to October, 2016 based on Tariff Order dated 3 November, 2016. Therefore, resultant recalculated FAC needs to be passed on to the consumers without waiting for true-up of FY 2016-17.

2.4.6 As far as MSEDCL's request of allowing recovery of FAC paid to the Generators including State, Central and IPPs are concerned, it is observed that Central Sector Generating Plants are not regulated by this Commission. Also, IPPs are governed by PPAs signed between the parties. MSPGCL is governed by MYT Regulations, 2015 which allows (Regulations 48) it to bill the energy charges based on actual cost of generation subject to normative performance parameters. Hence, modification in FAC of MSPGCL would not reduce the total payout of MSEDCL towards the energy charge as same has been raised based on actual cost of generation.

2.4.7 Further, MSEDCL's request of allowing interest on resultant borrowed amount to be passed on to the consumers at the time of true-up can only be dealt with as per provisions of MYT Regulations, 2015 at the time of true-up of FY 2016-17.

2.5 In view of the above the Commission is of the opinion that it would not be prudent to consider MSEDCL's request of adjusting refundable FAC for the period of April to October, 2016 at the time of true-up of FY 2016-17 instead of refunding it now.

2.6 The Commission has scrutinised the submissions of MSEDCL and found that FAC of Rs 369.54 Crore is to be refunded to the consumers for the period of April to October, 2016 (Annexure-1). The Commission directs MSEDCL to refund Rs 369.54 crore to its consumers in seven equal instalments with holding cost, as it pertains to the period of seven months (April to October, 2016).

2.7 In the calculation of FAC for the month of November, 2016, the Commission has considered the first instalment of Rs. 52.79 crore (1/7th of Rs. 369.54 crore) of such refundable amount along with holding cost of Rs. 3.09 crore. Thus total refund of Rs. 55.88 crore is considered in FAC calculation for the month of November, 2016.

3. FAC submission for the month of November, 2016:

3.1 Vide its letter dated 2 February, 2017 MSEDCL has filed FAC submission for the month of November, 2016 for prior approval of the Commission. The Commission has scrutinized the submissions provided by MSEDCL.

4. Energy Sales of the Licensee

4.1 The net energy sales within licence area as submitted by MSEDCL in the FAC submission and as approved by the Commission are as shown in the table below.



Consumer Category	Approved in Tariff Order (MU)		Actual (Nov-16) (MU)
	Annual	Monthly	
	(I)	(II=I/4)	(III)
1. Metered Sales			
HT Category			
Industry General	23543.00	1961.92	1760.09
Industry Seasonal	86.00	7.17	9.89
Commercial	2232.00	186.00	154.03
Railway metro monorail	77.00	6.42	1.78
Public water works	1456.00	121.33	154.28
Agriculture pump set	1044.00	87.00	52.46
Agriculture other	0.00	0.00	14.06
Group Housing Society	226.00	18.83	16.70
Temp Supply other	5.00	0.42	0.34
Public Service Govt	192.00	16.00	13.59
Public Service other	806.00	67.17	57.98
MSPGCL Aux Consumption	83.00	6.92	20.01
Other Adjustments			668.15
Sub total	29750.00	2479.17	2923.37
LT Category			
BPL	77.00	6.42	5.98
Residential	19097.00	1591.42	1449.67
Non residential	4416.00	368.00	362.51
Public water works	693.00	57.75	58.87
AG metered pumpset	14924.00	1243.67	957.68
AG metered other	105.00	8.75	9.02
Industry	6606.00	550.50	652.94
Street light	1776.00	148.00	146.96
Temporary supply	18.00	1.50	1.72
Advertisement and hording	3.00	0.25	0.38
Crematorium and burial ground	1.00	0.08	0.13
Public service	318.00	26.50	28.20
Prepaid	14.00	1.17	0.83
Sub Total	48048.00	4004.00	3674.90
Sub Total – Metered Sales	77798.00	6483.17	6598.27
2. Unmetered Sales			
Unmetered Hrs > 1318	5483.00	456.92	414.59
Unmetered Hrs < 1318	3577.00	298.08	302.04
Sub Total – Unmetered Sales	9,060	755.00	716.96
Grand Total (Metered +Unmetered)	86,857	7238.17	7315.23



5. Cost of Power Purchase

5.1 MSEDCL mainly procures power from following sources:

- a. MSPGCL
- b. Central Generating Stations
- c. JSW (Ratnagiri) Energy Ltd.
- d. Adani Power Limited
- e. Mundra UMPP
- f. Indiabulls Power Limited
- g. EMCO Power
- h. Bilateral Procurements (Power Exchange, Traders, etc.)
- i. Renewable Energy Sources
- j. Infirm Power (MSPGCL units under commissioning, other infirm sources)

5.2 While scrutinising MSEDCL's submission, it is observed that MSEDCL has considered inter-state transmission charges as part of power purchase cost. Z_{FAC} mechanism allows only variation in fuel and power purchase cost to be passed on to the consumers. It does not consider variation in transmission charges. Hence, the Commission has excluded transmission charges while calculating FAC for the month of November, 2016.

5.3 The following table shows the variation in average power purchase cost (Rs/kWh) for the month of November, 2016 as compared to average power purchase cost approved in Tariff Order dated 3 November, 2016:

Particulars	Approved for November, 2016 in T.O. dated 3 November, 2016			Actual for November, 2016		
	Net Purchase	Cost	Average Power Purchase Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
Thermal Power Plants	7,913	2,744	3.47	8,366	2,868	3.43
Must Run Sources	1,914	755	3.94	1,422	496	3.49
Total	9,827	3,498	3.56	9,788	3,365	3.44

5.4 The Commission allows the average power purchase cost of Rs.3.44/kWh for the month of November, 2016 as shown in the table above.



6. FAC on account of fuel and power purchase cost (F)

- 6.1 The Commission has worked out the average power purchase cost for the month as shown in above table. The same has been compared with the average power purchase cost approved by the Commission in Tariff Order dated 3November, 2016 and arrived at differential per unit rate at which Z_{FAC} is to be passed on to the consumers.
- 6.2 The following table shows the Z_{FAC} worked out by the Commission on account of difference in fuel and power purchase cost for the month of November, 2016:

S. No.	Particulars	Units	Amount
1	Average power purchase cost approved by the Commission	Rs./kWh	3.56
2	Actual average power purchase cost	Rs./kWh	3.44
3	Change in average power purchase cost (=2 -1)	Rs./kWh	(0.12)
4	Net Power Purchase	MU	9788.02
5	Change in fuel and power purchase cost (=3 x 4/10)	Rs. Crore	(119.88)

7. Adjustment for over recovery/under recovery (B)

- 7.1 The Commission is in the process of providing prior approval of FAC for the first month after issuance of Tariff Order and hence there would not be any adjustment factor for previous months that is to be considered while computing the allowable FAC.

8. Carrying Cost for over recovery/under recovery (B)

- 8.1 As explained in the above paragraph in absence of any adjustment factor for previous month, there is no carrying cost which is to be allowed in FAC for the month of November, 2016.

9. Disallowance due to excess Distribution Loss

- 9.1 Regulation 10.8 of MYT Regulations, 2015 provides for FAC amount to be reduced in case the actual distribution loss for the month exceeds the approved distribution loss. The relevant extract is reproduced as follows.

“10.8 The total Z_{FAC} recoverable as per the formula specified above shall be recovered from the actual sales in terms of “Rupees per kilowatt-hour”:



Provided that, in case of unmetered consumers, the Z_{FAC} shall be recoverable based on estimated sales to such consumers, computed 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 Z_{FAC} corresponding to the excess distribution losses (in kWh terms) shall be deducted from the total Z_{FAC} recoverable”

- 9.2 While scrutinising the FAC submissions, it was observed that MSEDCL has computed the Distribution Loss without excluding energy sales and input to the EHV consumers which contradicts with the MYT Order dated 3 November, 2016. In the said Order, the Commission has excluded EHV sales and adjusted energy injection/drawal at 33 kV to arrive at the energy availability at distribution voltages (33 kV) and correspondingly computed the Distribution Loss. Therefore, vide e-mail dated 22 February, 2017 MSEDCL was asked to submit the revised computations of Distribution Loss. In reply, MSEDCL vide it's e-mail dated 23 February, 2017 submitted the revised computations of Distribution Loss in accordance with the methodology approved in MYT Order dated 3 November, 2016.
- 9.3 In view of the above, the following table provides the comparison of approved and actual Distribution Loss and disallowance due to excess Distribution Loss, if any.

S. No.	Particulars	Units	Approved in Tariff Order	Actual up to Nov-16
1.	LT sales	MU	60,624	38,580
2.	HT sales	MU	24,524	15,352
3.	HT and Renewable Open Access Credit	MU	420	589
4.	Sales to Open Access Consumers (Conventional)	MU	6,165	5,396
5.	Total Sales to Consumers	MU	91,733	59,917
6.	Distribution Loss	%	17.76%	16.34%
7.	Distribution Loss	MU	18,872	11699
8.	Total Energy Available for Sale at 33kV	MU	110,606	71,616
9.	Energy injected and drawn at 33kV	MU	458	349
10.	Net Energy Available for Sale at 33kV	MU	110,147	71,267
11.	Sales at 66 kV level	MU	195	113
12.	Sales at 110 kV/132 kV level	MU	3,018	1,542
13.	Sales at 220 kV/44 kV level	MU	2,868	1,671



S. No.	Particulars	Units	Approved in Tariff Order	Actual up to Nov-16
14.	Net Energy requirement at T<math>\diamond</math>D Periphery	MU	116,228	74,594
15.	Intra-State Transmission Loss	%	3.92%	3.58%
16.	Intra-State Transmission Loss	MU	4,742	2,770
17.	Energy Requirement at G<math>\diamond</math>T Periphery	MU	120,970	77,364
18.	Less: Input for OA consumption	MU	6,826	5,740
19.	Net Energy Requirement at G<math>\diamond</math>T Periphery	MU	114,144	71,623
20.	Power Purchase Quantum from Intra-State sources	MU	81,573	47,876
21.	Power Purchase Quantum from Inter-State sources at Maharashtra Periphery	MU	32,571	23,747
22.	Inter-State Losses	%	3.66%	3.81%
23.	Power Purchase Quantum from Inter-State sources	MU	33,807	24,689
24.	Total Power Purchase Quantum payable	MU	115,380	72,565
25.	Excess Distribution Loss =[Actual Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU		Nil
26.	Disallowance of FAC due to excess Distribution Loss	Rs. Crore		Nil

9.4 As seen from the above table, cumulative Distribution Loss up to the month of November, 2016 is 16.34% which is lower than the approved Distribution Loss of 17.76%. Accordingly, there is no deduction on account of excess distribution loss for the month of November, 2016.

10. Summary of Allowable Z_{FAC}

10.1 The summary of the FAC amount as approved by the Commission for the month of November, 2016 which is allowed to be recovered in the billing month of March, 2017 is as shown in the Table below.

S. No.	Particulars	Units	Nov-16
1.0	Calculation of Z_{FAC}		
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	(119.88)
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	-



S. No.	Particulars	Units	Nov-16
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	-
1.4	Z_{FAC} = F+C+B	Rs. Crore	(119.88)
1.5	1 st instalment of Recalculated net FAC amount of Rs. 369.54 Crore for April to Oct-2016 (with Holding Cost) to be refunded	Rs. Crore	(55.88)
1.6	Net Z_{FAC} for month of November, 2016	Rs. Crore	(175.76)
2.0	Calculation of Z_{FAC} Charge		
2.1	Energy Sales within the License Area (less HT credit Sale)	MU	7,282.24
2.2	Excess Distribution Loss	MU	-
2.3	Z_{FAC} per kWh	Rs./kWh	(0.24)
3.0	Recovery of Z_{FAC}		
3.1	Allowable Z _{FAC}	Rs. Crore	(175.76)
3.2	FAC disallowed corresponding to excess Distribution Loss	Rs. Crore	-
4.0	Total Z_{FAC} based on category wise and slab wise allowed to be recovered	Rs. Crore	(175.76)

11. Recovery from Consumers:

11.1 Regulation 10.9 of MERC MYT Regulations, 2015 provides for methodology of recovery of FAC charge from each category of consumers. The relevant extract is reproduced as below.

"10.9 The Z_{FAC} per kWh for a particular Tariff category/sub-category/consumption slab shall be computed as per the following formula:—

$$Z_{FAC\ Cat} (Rs/kWh) = [Z_{FAC} / (\text{Metered sales} + \text{Unmetered consumption estimates} + \text{Excess distribution losses})] * k * 10,$$

Where:

Z_{FAC Cat} = Z_{FAC} component for a particular Tariff category/sub-category/consumption slab in 'Rupees per kWh' terms;

k = Average Billing Rate / ACOS;

Average Billing Rate = Average Billing Rate for a particular Tariff category/sub-category/consumption slab under consideration in 'Rupees per kWh' as approved by the Commission in the Tariff Order:

Provided that the Average Billing Rate for the unmetered consumers shall be based on the estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:



ACOS = Average Cost of Supply in 'Rupees per kWh' as approved for recovery by the Commission in the Tariff Order:

Provided that the monthly Z_{FAC} shall not exceed 20% of the variable component of Tariff or such other ceiling as may be stipulated by the Commission from time to time:

Provided further that any under-recovery in the Z_{FAC} on account of such ceiling shall be carried forward and shall be recovered by the Distribution Licensee over such future period as may be directed by the Commission....”

- 11.2 The Commission has worked out FAC per unit for each category of consumer based on the formula provided in the above Regulations. The Commission observed that there is an under recovery of Z_{FAC} in absolute terms on considering category wise per unit FAC worked out and category wise actual sales for the month of November, 2016.
- 11.3 The variation in FAC in absolute terms is due to formula error of Z_{FAC} computed on per unit basis. The variation however is taken care in the adjustment factor of subsequent months
- 11.4 The following table shows per unit Z_{FAC} to be charged to the consumers of MSEDCL for the billing month of March, 2017.

Table A - Fuel Adjustment Charges for the Month of November, 2016 to be levied in March, 2017

Sr. No.	Categories	Z_{FAC} to be levied in Billing Month of March, 2017 (Rs./kWh)
	LT Category	
1	Domestic (LT-1)	
A	BPL (0-30 Units)	(0.05)
B	Consumption > 30 Units per month	
i	1-100 Units	(0.18)
ii	101-300 Units	(0.31)
iii	301-500 Units	(0.42)
iv	500-1000 Units	(0.48)
v	Above 1000 Units	(0.53)
2	Non Domestic (LT-2)	
A	0-20 KW	
a	0-200 Units	(0.32)
b	Above 200 units	(0.44)
B	>20-50 KW	(0.49)
C	>50 KW	(0.60)



Sr. No.	Categories	Z _{FAC} to be levied in Billing Month of March, 2017 (Rs./kWh)
LT Category		
3	Public Water Works (LT-III)	
A	0-20 KW	(0.13)
B	20-40 KW	(0.18)
C	40-50 KW	(0.23)
4	Agriculture (LT-IV)	
A	Unmetered Tariff	
1	Zone1	
	A) 0-5 HP (Rs./HP/Month)	(0.09)
	B) 5-7.5 HP (Rs./HP/Month)	(0.10)
	C) Above 7.5 HP (Rs./HP/Month)	(0.11)
2	Zone2	
	A) 0-5 HP (Rs./HP/Month)	(0.07)
	B) 5-7.5 HP (Rs./HP/Month)	(0.07)
	C) Above 7.5 HP (Rs./HP/Month)	(0.08)
B	Metered Tariff (Pumpsets)	(0.12)
C	Metered Tariff (Others)	(0.18)
5	LT Industries (LT-V)	
A	Power loom	
i	0-20 KW	(0.21)
ii	Above 20 KW	(0.27)
B	General	
i	0-20 KW	(0.24)
ii	Above 20 KW	(0.34)
6	Street Light (LT-VI)	
A	Grampanchayat A, B & C Class Municipal Council	(0.20)
B	Municipal corporation Area	(0.25)
7	Temporary Connection (LT-VII)	
A	Temporary Connection (Religious)	(0.18)
B	Temporary Connection (Other Purposes)	(0.53)
8	Advertising and Hording (LT-VIII)	(0.67)
9	Crematorium & Burial (LT-IX)	(0.17)
10	Public Services (LT X)	
A	Government	
a	0-20 KW	



Sr. No.	Categories	Z _{FAC} to be levied in Billing Month of March, 2017 (Rs./kWh)
LT Category		
i	0-200 Units	(0.31)
ii	Above 200 units	(0.28)
b	>20-50 KW	(0.39)
c	>50 KW	(0.39)
B	Others	
a	0-20 KW	
i	0-200 Units	(0.25)
ii	Above 200 units	(0.33)
b	>20-50 KW	(0.38)
c	>50 KW	(0.39)

Table B - Fuel Adjustment Charges for the Month of November, 2016 to be levied in March, 2017

Sr. No.	Categories	Z _{FAC} to be levied in Billing Month of March, 2017 (Rs./kWh)
HT Category		
1	HT Category – EHV (66 kV & Above)	
A	HT I(A): HT - Industry (General)	(0.30)
B	HT I(B): HT - Industry (Seasonal)	(0.43)
C	HT II: HT – Commercial	(0.49)
D	HT III: HT - Railways/Metro/Monorail	(0.34)
E	HT IV: HT - Public Water Works (PWW)	(0.25)
F	HT V(A): HT - Agricultural – Pumpsets	(0.15)
G	HT V(B): Agricultural – Others	(0.19)
H	HT VI: HT - Group Housing Society (Residential)	(0.28)
I	HT VIII (A): HT - Temporary Supply Religious (TSR)	0.00
J	HT VIII(B): HT - Temporary Supply Others (TSO)	(0.49)
K	HT IX(A): HT - Public Services-Government	(0.31)
L	HT IX(B): HT - Public Services-Others	(0.39)
2	HT Category –33 kV	
A	HT I(A): HT - Industry (General)	(0.30)
B	HT I(B): HT - Industry (Seasonal)	(0.43)
C	HT II: HT – Commercial	(0.47)
D	HT III: HT - Railways/Metro/Monorail	(0.32)
E	HT IV: HT - Public Water Works (PWW)	(0.23)
F	HT V(A): HT - Agricultural – Pumpsets	(0.13)
G	HT V(B): Agricultural – Others	(0.19)
H	HT VI: HT - Group Housing Society (Residential)	(0.26)



I	HT VIII (A): HT - Temporary Supply Religious (TSR)	0.00
J	HT VIII(B): HT - Temporary Supply Others (TSO)	(0.47)
K	HT IX(A): HT - Public Services-Government	(0.29)
L	HT IX(B): HT - Public Services-Others	(0.37)
2	HT Category –22 kV and 11 kV	
A	HT I(A): HT - Industry (General)	(0.33)
B	HT I(B): HT - Industry (Seasonal)	(0.46)
C	HT II: HT – Commercial	(0.50)
D	HT III: HT - Railways/Metro/Monorail	(0.35)
E	HT IV: HT - Public Water Works (PWW)	(0.26)
F	HT V(A): HT - Agricultural – Pumpssets	(0.16)
G	HT V(B): Agricultural – Others	(0.19)
H	HT VI: HT - Group Housing Society (Residential)	(0.29)
I	HT VIII (A): HT - Temporary Supply Religious (TSR)	0.00
J	HT VIII(B): HT - Temporary Supply Others (TSO)	(0.50)
K	HT IX(A): HT - Public Services-Government	(0.32)
L	HT IX(B): HT - Public Services-Others	(0.40)



Annexure – 1
Recalculation of FAC for April, 2016 to October, 2016

1. MSEDCL vide letter dated 15 February 2017 submitted recalculated FAC for April to October, 2016 on basis of the power purchase cost for FY 2016-17 approved by the Commission in Tariff Order dated 3 November, 2016 in Case No. 48 of 2016. As per this submission, FAC of Rs 533.04 crore is to be refunded to the consumers for this period.
2. The Commission has scrutinised the recalculate FAC as submitted by MSEDCL. It is observed that MSEDCL has considered inter-state transmission charges as part of power purchase cost. Z_{FAC} mechanism allows only variation in fuel and power purchase cost to be passed on to the consumers. It does not consider variation in transmission charges. Hence, the Commission has excluded transmission charges and has recalculated the FAC for April, 2016 to October, 2016 as shown in Tables below:

A. Computation of Change in Power Purchase Cost

Particulars	Unit	April 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
Weighted Average actual rate of power purchase	Rs./kWh	3.62	3.62	3.67	3.80	3.65	3.53	3.35
Weighted Average approved rate of power purchase as per MYT Order dated 3 November 2016	Rs./kWh	3.68	3.60	3.80	3.90	3.78	3.63	3.33
Variation in rate of power purchase	Rs./kWh	0.06	(0.02)	0.13	0.09	0.13	0.10	(0.02)
Net Power Purchase	MU	9956	9722	8716	7955	8533	8705	9262
Change in power purchase cost	Rs. Crore	58.22	(23.19)	112.15	74.43	106.97	88.10	(19.30)

B. Computation of Adjustment Factor

Particulars	Unit	April 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
Incremental cost allowed to be recovered in Month	Rs. Crore	-	-	-	99.77	(36.77)	58.13	(79.80)
Incremental cost actually recovered in month	Rs. Crore	-	-	-	251.26	225.46	151.69	112.46
Adjustment Factor under recovery /over recovery*	Rs. Crore	-	-	-	(151.50)	(262.23)	(93.56)	(192.25)
FBSM impact for previous months	Rs. Crore	55.12	0.00	7.70	-	-	24.12	-
FAC Refund for FY 2015-16 with interest	Rs. Crore	-	0.00	(61.71)	-	-	-	-
Refund of Incentive claim of excess distribution loss disallowed by the Commission	Rs. Crore	-	0.00	-	-	-	(11.53)	-
Net Adjustment Factor	Rs. Crore	55.12	0.00	(54.02)	(151.50)	(262.23)	(80.97)	(192.25)



*As FAC amount actually recovered during the month of April 2016 to June 2016 was pertaining to the period of January 2016 to March 2016 (part of FY 2015-16), adjustment factor on account of over/under recovery for these months have not been considered while re-calculating FAC for April 2016 to October 2016 (part of FY 2016-17).

C. Computation of Carrying/ Holding Cost

Particulars	Unit	April 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
Adjustment Factor for under/over-recovery	Rs. Crore	0.00	0.00	0.00	(151.50)	(262.23)	(93.56)	(192.25)
Interest Rate	%	10.80%	10.80%	10.80%	10.80%	10.80%	10.80%	10.80%
Carrying/ (Holding) Cost @ 10.80%	Rs. Crore	0.00	0.00	0.00	(2.73)	(4.72)	(1.68)	(3.46)

D. Computation of FAC

Particulars	Unit	April 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
Change in power purchase cost	Rs. Crore	58.22	(23.19)	112.15	74.43	106.97	88.10	(19.30)
Adjustment Factor for under/over-recovery	Rs. Crore	55.12	-	(54.02)	(151.50)	(262.23)	(80.97)	(192.25)
Carrying/Holding cost on Adjustment Factor	Rs. Crore	-	-	-	(2.73)	(4.72)	(1.68)	(3.46)
LT Power Loom Refund	Rs. Crore	(13.58)	(13.58)	-	-	-	-	-
Recomputed Fuel Adjustment Cost	Rs. Crore	99.77	(36.77)	58.13	(79.80)	(159.98)	5.45	(215.02)

3. In the above computations, Adjustment Factor is computed in accordance with Regulation 10.7 of MERC MYT Regulations, 2015. The relevant extract is reproduced below:

“10.7 The calculation for FAC to be charged for the month “n” is as follows:—

$$ZFAC_n (\text{Rs crore}) = F_{n-2} + C_{n-2} + B_{n-2}$$

Where, F_{n-2} = Change in fuel cost of own generation and cost of power purchase for the month “n-2”, and shall be computed as

$$F(\text{Rs. Crore}) = A_{FC,Gen} + A_{FC,PP}$$

Where,

$A_{FC,Gen}$ = Change in fuel cost of own generation, to be computed based on the directives and norms approved by the Commission, including heat rate, auxiliary consumption, etc.;

$A_{FC,PP}$ = Change in variable and/or fixed cost of power procured from other sources, which would be allowed to the extent it satisfies the criteria prescribed in these Regulations and the prevailing Tariff Order, and subject to applicable norms;

C_{n-2} = Carrying cost for any under recovery/over recovery for the month “n-2”;



$$B_{n-2}(\text{Rs. Crore}) = ZFAC_{n-4} - R_{n-2}$$

Where:

B_{n-2} = Adjustment factor for over-recovery / under-recovery for the month "n-2";

$ZFAC_{n-4}$ = ZFAC for the month "n-4";

R_{n-2} = ZFAC for the month "n-4" actually recovered in the month "n-2":

{Emphasis Added}

4. In view of the above Regulations, the impact of recalculated FAC for the months of April, May, June and July, 2016 to be levied in the months of July, August, September and October have already been considered while computing the Adjustment Factor for these months. Accordingly, FAC for the months of August, September and October, 2016 is remain to be accounted for. Therefore, the net FAC remaining to be levied/ refunded is as follows:

Particulars	Amount (Rs. Crore)
Recomputed FAC for August, 2016	(159.98)
Recomputed FAC for September, 2016	5.45
Recomputed FAC for October, 2016	(215.02)
Total FAC to be levied/ (refunded)	(369.54)

5. Further, the Commission in this report has directed MSEDCL to refund recalculated FAC of Rs.369.54 Crore in seven equal instalments starting from FAC for the month of November, 2016 along with holding cost. The detailed computation of holding cost is shown below:

Particulars	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17
Interest Rate	10.80%	10.80%	10.80%	10.80%	10.80%	10.80%	10.80%
Opening Balance	(369.54)	(316.75)	(263.96)	(211.17)	(158.38)	(105.58)	(52.79)
Refund	(52.79)	(52.79)	(52.79)	(52.79)	(52.79)	(52.79)	(52.79)
Closing Balance	(316.75)	(263.96)	(211.17)	(158.38)	(105.58)	(52.79)	-
Holding Cost*	(3.09)	(2.61)	(2.14)	(1.66)	(1.19)	(0.71)	(0.24)
Refund with Holding Cost (Rs crore)	(55.88)	(55.41)	(54.93)	(54.45)	(53.98)	(53.50)	(53.03)

*Holding cost has been computed considering the average of opening and closing balance.



