



# महाराष्ट्र विद्युत नियामक आयोग

## Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/20162017/01332

Date: 10 January, 2017

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

**Subject:** Post Facto approval of FAC submissions of MSEDCL for the month of July, 2016 to October, 2016.

**Reference:** a) FAC submission for July, 2016 vide letter No.36363 dated 06.12. 2016  
b) FAC submission for August, 2016 vide letter No.350 dated 05.01.2017  
c) FAC submission for September, 2016 vide letter No.348 dated 05.01.2017  
d) FAC submission for October, 2016 vide letter No.349 dated 05.01.2017


Sir,

Upon vetting the FAC calculations for the months of July, 2016 to October, 2016 submitted vide letters under above reference, the Commission has accorded post facto approval to MSEDCL for charging to its consumers the FAC amount (net of excess T&D loss), as detailed below:

Month	FAC allowed to be recovered / (Refunded) (Rs. Crore)	Month	FAC allowed to be recovered / (Refunded) (Rs. Crore)
July, 2016	127.45	September, 2016	20.23
August, 2016	286.44	October, 2016	82.93

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 the 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 the next FAC billing process.

Yours faithfully,

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

**Encl:** Annexure: Detailed Vetting Report for the month of July, 2016 to October, 2016.

**Cc as enclosed:**

Names and Addresses of Institutional Consumer Representatives

Prayas Energy Group, Amrita Clinic, Athawale Corner, Lakdipool-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 <sup>st</sup> floor, Udyog Bhawan, Civil Lines, Nagpur 440 001
Maharashtra Chamber of Commerce, Industry & Agriculture, Oricon House, 6 <sup>th</sup> Floor, 12k. Dubash Marg, Fort, Mumbai- 400001 (Nashik Branch) Email: <a href="mailto:maccia.nsk@gmail.com">maccia.nsk@gmail.com</a>	Chamber of Marathwada Industries and Agriculture, Bajaj Bhavan, P-2, MIDC Area, Station Road, Aurangabad – 431 005





## ANNEXURE

### **Detailed Vetting Report**

**Date: 10 January, 2017**

### **Post Facto approval of FAC Charges for the months of July, 2016 to October, 2016 submitted by MSEDCL**

**Subject:** Post Facto approval of FAC submissions of MSEDCL for the month of July, 2016 to October, 2016.

**Reference:** a) MSEDCL's FAC submission for month of July, 2016 vide letter No.36363 dated 06 December, 2016.  
b) MSEDCL's FAC submission for month of August, 2016 vide letter No.350 dated 05 January, 2017.  
c) MSEDCL's FAC submission for month of September, 2016 vide letter No.348 dated 05 January, 2017.  
d) MSEDCL's FAC submission for month of October, 2016 vide letter No.349 dated 05 January, 2017.

#### **1. FAC submission by MSEDCL:**

1.1 MSEDCL has submitted FAC submissions for the month of July, 2016 to October, 2016 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by MSEDCL, the Commission has accorded post facto approval for the FAC amount for the said months as detailed below.

#### **2. Background**

2.1 MERC (Multi Year Tariff) Regulations, 2015 becomes applicable for Tariff determination of 3<sup>rd</sup> Control Period of FY 2016-17 to FY 2019-20. However, Tariff Order under this MYT Regulations, 2015 applicable for FY 2016-17 has been issued on 3 November, 2016 and made effective from 1 November, 2016. Therefore, for the period of April, 2016 to October, 2016, Tariff Order dated 26 June, 2015 was applicable.

2.2 Accordingly, MSEDCL in its submission has computed the FAC for the months of July, 2016 to October, 2016 in accordance with the MYT Order dated 26 June, 2015 in Case No. 121 of 2014 for Multi Year Tariff for the second Control Period, i.e., FY 2013-14 to FY 2015-16.

2.3 In terms of the MERC (MYT) Regulations, 2011 a Distribution Licensee is required to obtain post facto approval of the Commission on a quarterly basis for FAC charges. Accordingly, MSEDCL has submitted details of FAC chargeable from all consumers for the months of July, 2016 to October, 2016.



### 3. FAC Mechanism

- 3.1 The Commission has taken cognizance of the directives issued in all the above Orders and has accordingly approved FAC charges for the months of July, 2016 to October, 2016 in accordance with the principles stipulated therein and the MERC (Terms and Conditions of Tariff) Regulations, 2011. Any variance on account any further Reviews / Amendments will be addressed during the Tariff proceedings.
- 3.2 MSEDCL procures power from:
- MSPGCL
  - Central Generating Stations
  - JSW (Ratnagiri) Energy Ltd.
  - Adani Power Limited
  - Mundra UMPP
  - Indiabulls Power Limited
  - Bilateral Procurements (Power Exchange, Traders, etc.)
  - Renewable Energy Sources
  - Infirm Power (MSPGCL units under commissioning, other infirm sources)

### 4. Analysis of FAC proposal submitted by MSEDCL and computation of FAC charges is as below:

#### I. Variable cost of power purchase:

The Commission has considered the increase in power purchase cost for the months of July, 2016 to October, 2016 with reference to the approved power purchase sources as per the Tariff Order dated 26 June, 2015 in Case No. 121 of 2014.

The details of power purchase by MSEDCL for July, 2016 to October, 2016 from all sources are given below:

Sr. No	Details	Unit	Jul 16	Aug 16	Sept 16	Oct 16
1	Net Energy Purchase	MU	7634.10	8054.92	8,332.58	8,826.34
2	Weighted Average Normative actual Rate of energy purchased	Rs./ kWh	2.41	2.48	2.32	2.30
3	Weighted Approved Rate for Energy purchase (Order)	Rs./ kWh	2.22	2.22	2.22	2.22
4	Change in Variable Cost of Energy purchased	Rs. crore	139.98	208.67	83.63	67.75





## II. Total sales in licence area:

The total sales in its licence area have been presented by MSEDCL in the following manner:-

- a. Metered sales include the total sales metered for the HT and LT consumers in its area.
- b. Unmetered sales are the assessed sales of unmetered consumers.

The details are tabulated below:

Sr. No.	Detail	Unit	Jul 16	Aug 16	Sept 16	Oct 16
1	Total Metered Energy Sales	MU	7146.54	7003.45	7002.33	6901.06
2	Total Unmetered Energy Sales	MU	790.06	790.06	716.96	716.96
3	Less: Credit for HT injections, temporary supply, interstate, wheeling etc	MU	106.06	102.17	75.43	29.95
4	<b>Total sales in license area</b>	<b>MU</b>	<b>7830.54</b>	<b>7691.35</b>	<b>7643.86</b>	<b>7588.08</b>

## III. Carrying Cost/ Holding Cost for Under Recovery/ Over Recovery

The following table shows the month wise interest rate and amount worked out as Carrying/ Holding cost for under/ over recovery for the months of July, 2016 to October, 2016.

Particulars	Jul 16	Aug 16	Sept 16	Oct 16
Applicable Interest Rate	14.05%	14.05%	14.05%	14.05%
Carrying Cost/ (Holding Cost) for under/ over recovery (Rs. Crore)	(0.29)	1.78	(1.74)	0.35

## IV. Adjustment factor:

The computation of Adjustment factor is as shown in the following table.

Sr.	Parameter	Unit	Jul 16	Aug 16	Sept 16	Oct 16
1.0	<b>Adjustment for over-recovery/under-recovery ('B')</b>					
1.1	Incremental cost allowed to be recovered in Month	Rs Crore	239.01	301.45	77.44	127.44
1.2	Incremental cost in Month j-4 actually recovered in month j-2	Rs Crore	251.26	225.46	151.69	112.46
1.3	<b>Over-recovery/under-recovery (1.2-1.1)</b>	Rs Crore	(12.25)	75.99	(74.25)	14.98



Sr.	Parameter	Unit	Jul 16	Aug 16	Sept 16	Oct 16
<b>2.0</b>						
2.1	Carry forward due to formula error	Rs Crore	-	-	-	-
2.2	FBSM impact for the month	Rs Crore	-	-	24.12	-
2.3	Refund of Incentive claim of excess distribution loss disallowed by the MERC		-	-	(11.53)	-
<b>3.0</b>	<b>Adjustment factor for over-recovery/under-recovery (1.3+2.1+2.2+2.3)</b>	<b>Rs Crore</b>	(12.25)	75.99	(61.66)	14.98

#### 5. Distribution Loss:

Particular	Distribution Loss (%)			
	Jul 16	Aug 16	Sept 16	Oct 16
Target Distribution Loss*	13.50%	13.50%	13.50%	13.50%
Cumulative Achievement at the end of month	11.20%	11.52%	12.65%	13.65%
Disallowance due to excess Loss (Rs. Crore)	-	-	-	0.15

\* Target distribution loss is considered as 13.50% as approved in MYT Order dated 26 June, 2015.

#### 6. Energy Sales within Licence area:

The net energy sales within licence area as submitted by MSEDCL in the FAC submission, after deducting the HT credits etc as explained above, and as approved by the Commission are as below:

Month	Energy Sales (MU)
July, 2016	7830.54
August, 2016	7691.35
September, 2016	7643.86
October, 2016	7588.08

#### 7. Summary:

The summary of the FAC amount as approved by the Commission is shown in the Table below:-





Sr. No.	Summary of FAC (A) and FAC <sub>kWh</sub> July, August, September and October 2016					
	Parameter	Unit	Jul 16	Aug 16	Sept 16	Oct 16
<b>1.0</b>	<b>Calculation of FAC (A)</b>					
1.1	Apportionment of change in variable cost of generation and power purchase to License Area (F)	Rs Lakh	13,998.32	20,866.97	8,363.20	6,774.71
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs Lakh	(28.69)	177.95	(173.86)	35.08
1.3	Adjustment for over recovery/under recovery (B)	Rs Lakh	(1,224.99)	7,599.25	(6,166.07)	1,498.15
<b>1.5</b>	<b>FAC (A) = F + C + B</b>	Rs Lakh	<b>12,744.64</b>	<b>28,644.18</b>	<b>2,023.27</b>	<b>8,307.94</b>
<b>2.0</b>	<b>Calculation of FAC<sub>kWh</sub></b>					
2.1	Sale within License Area	MU	7,830.54	7,691.35	7,643.86	7,588.08
2.2	Excess T&D Loss	MU	-	-	-	13.74
2.3	FAC Charge (FAC <sub>kWh</sub> ) without considering cap on monthly FAC Charge	Paise/kWh	16.28	37.24	2.65	10.93
2.4	Cap on monthly FAC Charge	Paise/kWh	20% cap on category wise energy charge is considered			
<b>2.5</b>	<b>FAC Charge (FAC<sub>kWh</sub>) considering cap on monthly FAC Charge</b>	<b>Rs/kWh</b>	<b>0.1628</b>	<b>0.3724</b>	<b>0.0265</b>	<b>0.1093</b>
<b>3.0</b>	<b>FAC (A)</b>					
3.1	FAC (A) without considering cap on Monthly FAC Charge	Rs Lakh	12,744.64	28,644.18	2,023.27	8,292.93
3.2	FAC (A) disallowed corresponding to excess T&D loss	Rs Lakh	-	-	-	15.02
3.3	FAC (A) without considering cap and as per 8.3 category-wise and slab-wise-(1)	Rs Lakh	12,744.64	28,644.18	2,023.27	8,292.93
3.4	C/f from Previous month-(2).	Rs Lakh	-	-	-	-
3.5	Under/over recovery from 6.6 statement Sl. No. 1. (3)	Rs Lakh	-	-	-	-
<b>3.6</b>	<b>Total FAC to be recovered from consumers 4=(1+2+3)</b>	<b>Rs Lakh</b>	<b>12,744.64</b>	<b>28,644.18</b>	<b>2,023.27</b>	<b>8,292.93</b>
3.7	Carried forward FAC (A) for recovery during future period	Rs Lakh	-	-	-	-

## 8. Recovery from Consumers:

8.1 As notified on 28th October 2011, vide Maharashtra Electricity Regulatory Commission (Terms and Conditions of Tariff) (Amendment) Regulations, 2011, the Commission has amended the Regulations applicable to recovery of FAC as follows:

*“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, or such other ceiling as be stipulated by the Commission from time to time.

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 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.

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

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

Where:

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

$$K = (\text{Energy Charge}) / (\text{ACOS})$$

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.

Based on the above amendment, MSEDCL has calculated the “FAC apportioned to each Tariff Category and as per applicable slab”,

- 8.2 The Commission approves the FAC computed for the months of July, 2016 to October, 2016 as given in the Tables above subject to Truing up MSEDCL for FY 2016-17.
- 8.3 As the Tariff Order applicable for FY 2016-17 has been issued on 3 November, 2016, and revised Tariff has been made affective from 1 November, 2016, recovery of FAC in the month of November, 2016 has been equated to zero. MSEDCL needs to get prior approval of FAC for the month of November 2016 based on revised Tariff.





- 8.4 Accordingly, the Commission accorded its approval for levy of FAC for the month of July 2016 to the consumers in the billing month of October, 2016. MSEDCL is not able to levy FAC for the month of August, 2016 to October, 2016 to its consumers due to above directives in Tariff Order dated 3 November, 2016.
- 8.5 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 the 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 the next FAC billing process.



**Table-6 A – Fuel Adjustment Charges for the Month of July, 2016 to be levied in October, 2016**

Sr. No.	Categories	FAC levied in Month of October, 2016 (Paisa/kWh)
	LT Category	October 16
<b>1</b>	<b>Domestic (LT-I)</b>	
A	BPL (0-30 Units)	4.15
B	Consumption > 30 Units per month	
i	1-100 Units	12.64
ii	101-300 Units	22.62
iii	301-500 Units	30.65
iv	500-1000 Units	34.65
v	Above 1000 Units	37.92
<b>2</b>	<b>Non Domestic (LT-2)</b>	
A	0-20 KW	
a	0-200 Units	23.03
b	Above 200 units	32.08
B	>20-50 KW	36.28
C	>50 KW	43.99
<b>3</b>	<b>Public Water Works (LT-III)</b>	
A	0-20 KW	8.87
B	20-40 KW	12.14
C	40-50 KW	15.68
<b>4</b>	<b>Agriculture (LT-IV)</b>	
A	Unmetered Tariff	
1	Zones with Consumption norm < 1318 Hrs/HP/Annum	
	A) 0-5 HP (Rs/HP/month)	6.28
	B) Above 5 HP (Rs/HP/month)	6.28
2	Zones with Consumption norm > 1318 Hrs/HP/Annum	
	A) 0-5 HP (Rs/HP/month)	11.11
	B) Above 5 HP (Rs/HP/month)	11.11
B	Metered Tariff (Pumpsets)	8.20
C	Metered Tariff (Others)	12.17
<b>5</b>	<b>LT Industries (LT-V)</b>	
A	<b>Powerloom</b>	
i	0-20 KW	16.11
ii	Above 20 KW	21.11
B	<b>General</b>	
i	0-20 KW	17.02





Sr. No.	Categories	FAC levied in Month of October, 2016 (Paisa/kWh)
	LT Category	October 16
ii	Above 20 KW	24.49
<b>6</b>	<b>Street Light (LT-VI)</b>	
A	Grampanchayat A, B & C Class Municipal Council	14.27
B	Municipal corporation Area	17.46
<b>7</b>	<b>Temporary Connection (LT-VII)</b>	
A	Temporary Connection (Religious)	13.17
B	Temporary Connection (Other Purposes)	45.71
<b>8</b>	<b>Advertising and Hording (LT-VIII)</b>	62.47
<b>9</b>	<b>Crematorium &amp; Burial (LT-IX)</b>	12.03
<b>10</b>	<b>Public Services ( LT X)</b>	
A	<b>Government</b>	
a	0-20 KW	
i	0-200 Units	16.32
ii	Above 200 units	19.73
b	>20-50 KW	23.73
c	>50 KW	25.31
B	<b>Others</b>	
a	0-20 KW	
i	0-200 Units	17.43
ii	Above 200 units	23.76
b	>20-50 KW	26.13
c	>50 KW	26.71



**Table-6 B – Fuel Adjustment Charges for the Month of July, 2016 to be levied in October, 2016**

Sr. No.	Categories	FAC levied in Month of October, 2016 (Paisa/kWh)
	HT Category	October 16
<b>1</b>	<b>HT-I – Industries</b>	
A	HT-I - Cont (Express Feeders)	24.02
B	HT-I – Non-Cont (Non Express Feeders)	22.45
C	HT-I - Seasonal Category	30.56
<b>2</b>	<b>HT-II Commercial</b>	
a	Express Feeder	37.80
b	Non-Express Feeder	34.85
<b>3</b>	<b>HT-III Railways</b>	24.70
<b>4</b>	<b>HT-IV Public Water Works (PWW)</b>	
A	Express Feeders	18.07
B	Non-Express Feeders	19.15
<b>5</b>	<b>HT-V Agricultural</b>	10.39
<b>6</b>	<b>HT-VI Bulk Supply</b>	
A	Residential Complex	20.14
<b>7</b>	<b>Temporary Supply</b>	
B	Other	44.24
<b>8</b>	<b>Public services( HT IX)</b>	
<b>A Government</b>		
a	Express Feeders	23.09
b	Non-Express Feeders	22.51
<b>B Others</b>		
a	Express Feeders	28.02
b	Non-Express Feeders	27.79
<b>9</b>	<b>HT Port</b>	33.04

