

Ref. No. MERC/FAC/20112012/1271

Date : 11 August , 2011

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

Subject: Post Facto approval of FAC submission of MSEDCL for April 2011,
Reference: MSEDCL's FAC submission of month April 2011 received vide MSEDCL/PP/FAC/L7/21678 of 12th July 2011

Sir

Upon vetting the FAC calculations for the month of April, 2011 submitted vide letter under above reference, the Commission has accorded post facto approval for the FAC amount (net of excess T&D loss) of Rs. 300.0319 Crore for April 2011 as detailed below.

The Commission has notified on 28th January 2011 the Amendment Regulations for recovery of Fuel Adjustment Cost charges from the Consumers in a proportionate manner. Accordingly, the Commission has also approved the categorywise and slabwise tabulation for recovery of the said FAC charges by MSEDCL from its Consumers. The adjustments (positive or negative) arising out of the apportionment as above is to be carried forward by MSEDCL to the next month.

The Commission has approved the correction to the year-end adjustment to disallowed excess Distribution Loss as submitted by MSEDCL along with FAC submission for April 2011 and no further correction to this account is applicable through FAC submission.

The summary of the FAC claim for April, 2011 as approved by Commission is shown in the Table below:-

Sr No	Particulars	Unit	Approved
1	FAC incl of excess T&D Loss	Rs. Crore	300.0319
2	FAC rate	Paise/kWh	Proportionate. See Table-6 A & 6B of Annexure attached with this letter
3	FAC rate (unmetered)		
	-LT-Ag (>1318 hours per year)	Rs/hp/month	
	-LT-Ag (<1318 hours per year)	Rs/hp/month	

Yours faithfully,

Sd/
(Kuldip.N.Khawarey)
Secretary, MERC

Encl : Detailed Vetting Report for April, 2011

Cc as enclosed :

Names and Addresses of Consumer Representatives authorized as per Section 94 (3) of the Electricity Act 2003

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 7001	The President, Vidarbha Industries Association, 1 st floor, Udyog Bhawan, Civil Lines, Nagpur 440 001.
Shri N.Ponarathnam 25, Majithia Industrial Estate Waman Tukaram Patil Marg Deonar, Mumbai 400 088	Shri Rakshpal Abrol Bhartiya Udhami Avam Upbhokta Sangh Madhu Compound, 2 nd Floor 2 nd Sonawal Cross Road Goregaon (E), Mumbai 400063
Prof Dr G H Barhate Organiser, Grahak Panchayat Shrirampur Chairman, Research Centre C D Jain College of Commerce Shrirampur, Dist Ahmednagar	Shri Sandeep Ohri A-74, Tirupati Tower Thakur Complex Kandivali (E) Mumbai 400101

Post Facto approval of FAC Charges for April 2011 submitted by MSEDCL

Reference: MSEDCL's FAC submission of month April 2011 received vide MSEDCL/PP/FAC/L7/21678 of 12th July 2011

1. FAC submission by MSEDCL:

- 1.1 Upon vetting the FAC calculations for the month of April 2011, submitted vide letter under above Reference and after taking cognizance of the clarifications furnished by MSEDCL to the queries raised by the Commission, the Commission has accorded post facto approval for the FAC amount for the said month as detailed below.

The Commission issued Tariff Order for MSPGCL, dated September 12, 2010 (Case 102 of 2009), for Truing up for FY 2008-09, Annual Performance Review for FY 2009-10 and Determination of Tariff for FY 2010-11.

The Commission had appointed CPRI (A Govt. of India enterprise) to conduct tests and recommend "Achievable performance parameters". Of MSPGCL's thermal stations, whose report had guided the Commission to specify achievable performance parameters for the said year, taking into consideration the plant degradations.

The Commission issued Tariff Order for MSEDCL, dated September 12, 2010 (Case 111 of 2009), approving principles of Annual Revenue Requirement (ARR) and Tariff for FY 2010-11 and has also mentioned about the parameters and mechanism for computation of FAC.

The Commission issued a Review Order on 2nd December 2010 in the matter of Case 69 of 2010, "Application under Regulation 85 of the MERC (Conduct of Business) Regulations, 2004, by Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) seeking review of the Order dated 12th September, 2010 in Case No. 111 of 2009 in respect of MSEDCL's Annual Performance Review (APR) for FY 2009-10, true up for FY 2008-09 and ARR and Tariff Determination for FY 2010-11" whereby the Tariffs of various categories of Consumers were revised.

The Commission issued a Review Order on April 31, 2011 (Case 1 of 2011) pertaining to its Order dated September 12, 2010 in Case No. 102 of 2009 regarding approval of APR for the year 2009-10 and for determination of tariff and approval of ARR for the year 2010-11 of MSPGCL, whereby the Commission approved recovery of Rs 432.5 Crores from MSEDCL in a phased manner (monthly installment of Rs 72.08 Crores).

The Commission has notified on 28th January 2011 the Amendment Regulations for recovery of Fuel Adjustment Cost charges from the Consumers in a proportionate basis.

The Commission has taken cognisance of the directives issued in all the above orders and has accordingly approved FAC charges for the month of April 2011 in accordance with the principles stipulated therein and the MERC (Terms and Conditions of Tariff) Regulations, 2005. Any variance on account any further Reviews / Amendments will be addressed during the true-up.

Subsequent to the approval of the aggregate FAC amount, the Commission has also approved the apportionment of the said recovery from the consumers, based on the tariff categories and consumption slabs.

- 1.2 Regarding purchase of power from the external sources, the Commission has considered power purchase sources and rates based on the APR Order dated September 12, 2010, which were effective from September 2010 onwards.

2. Details of approval:

2.1 Approval :

The Commission has accorded post facto approval for the FAC amount of (net of T & D loss), **Rs. 300.0319** Crores for the month April 2011. The summary of the FAC claim for April 2011 as approved by the Commission is shown in the Table below:-

Table -1

Sr No	Particulars	Unit	Approved
1	FAC incl of excess T&D Loss	Rs. Crore	300.0319
2	FAC rate	Paise/kWh	Proportionate. See Tables 7A & 7B of the Annexure
3	FAC rate (unmetered)		
	-LT-Ag (>1318 hours per year)	Rs/hp/month	
	-LT-Ag (<1318 hours per year)	Rs/hp/month	

After the apportionment, the under-recovered FAC amount to be carried forward to the next month, is Rs Nil.

2.2 Year end Adjustment of disallowed excess Distribution loss:

MSEDCL, in its FAC submission for March 2011, had claimed credit of Rs 28.9098 Crores for excess distribution loss disallowed by the Commission. During the vetting of the said FAC submission of March 2011, the Commission had allowed only credit of Rs **8.957** Crores, to be recovered from the consumers and advised MSEDCL to refund remaining amount. In order to resolve the issue, a meeting was held between MERC and MSEDCL on 26 July 2011 to take a close look at modality and procedures to be used for the said calculations. After detailed discussions, it was agreed that the said adjustment is only towards excess Distribution loss disallowed by the Commission and not T&D loss. Further, after due discussions it was agreed to follow the same modality and procedure as approved by the Commission for carrying out True-up exercise in the Tariff Orders. Tabulations have been made accordingly and, the refund of Rs

12.72 Crores shown by MSEDCL in FAC submission of April 2011 is approved by the Commission.

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

a) **Generation by MSPGCL stations:**

The Plant Load factor at MSPGCL Thermal power stations, except Nashik and Koradi TPS for the Month April 2011 was more than 80%.

As against approved generation of 4747.95 MU (all thermal, gas, Hydro plants, excl Parli 6 & Paras 3), the Actual gross generation was 4627.68 MU.

However, it is noted that the shortfall in generation of Thermal plants of MSPGCL (excl Parli 6 & Paras 3) was amply made up by excess generation of Hydro electric plants of the utility (686.33 MU Hydel generation in the month against approved quantity of 330.41 MUs in the month).

MSPGCL sold NIL MU energy in April 2011, from the “Retired” vintage plants at Koradi, Paras, Parli and Bhusaval..

b) **Variable Cost of Generation:**

MSEDCL has submitted the break-up of purchase price of different fuels for all stations of MSPGCL, certified by Chartered Accountant.

i) **Variable Fuel Cost:**

MSEDCL has considered the base variable fuel cost for each station as approved by the Commission in the APR Order of MSPGCL of 12th September 2010 (Case 102 of 2009) and in conformity with the directions given in the Commission's letter MERC/MON/FAC/MSEDCL/09/2637 dated November 20, 2009

The summary of fuel related costs for the month April 2011 for existing generating stations of MSPGCL as approved by the Commission after detail vetting, is shown in the Table below:

Table-2

Sr No	Detail	Unit	
1	Actual Fuel Cost	Rs Crore	803.2368
2	Normative Actual Fuel cost	Rs Crore	795.4103
3	Net Generation	MU	3586.55
4	Approved variable cost of generation	Rs./kWh	1.753767

Sr No	Detail	Unit	
	(Order)		
5	Actual average variable cost of generation	Rs./kWh	2.24
6	Average Normative variable cost of generation	Rs./kWh	2.2177
7	Change in variable cost of generation = $\{(3) \times [(6)-(4)]\} / 10$	Rs. Crore	157.0343

ii) Variable cost of power purchase

The Commission has considered the increase in power purchase cost in case of approved power purchase sources as per the APR order of MSEDCL of September 12, 2010 (Case 111 of 2009) which is applicable from September, 2010 (See Appendix).

MSEDCL has submitted the data for the power purchase certified by Chartered Accountant.

The details of power purchase by MSEDCL for April 2011 are given below

Table-3

S.No	Details	Unit	April 2011
1	Net Energy Purchase	MU	4047.76
2	Variable Cost of Energy purchased	Rs Crore	913.5362
3	Average Rate of energy purchased	Rs./kWh	2.26
4	Approved Rate for Energy purchase (Order)	Rs./kWh	2.31

NOTE :

- i)** It is to be noted that while cost of generation from MSPGCL's plants, has gone up, the cost of procurement of energy from outside is lower than the approved cost. The net average rate of energy has gone up due to expensive generation from MSPGCL's plants with respect to the approved rate.

c) Unscheduled Interchange (UI) Charges:

MSEDCL has procured 123MU through UI at avg rate of Rs. 1.69 per kWh, in April 2011. The net cost of UI purchase was Rs. 20.83 Crore.

d) Scheduled Energy Received in grid through Imports from various regions and losses:

MSEDCL has claimed losses in power purchase through grid at (235) MU in April 2011 as the difference between the Scheduled Energy (including UI) and Actual Drawal. The Commission has considered the losses in the grid as submitted by MSEDCL.

Metered sales in April 2011 are 5899.81 MU against Order value (monthly) of 5284 MU and Unmetered sales (estimated) is 934.01 MU. Against the Order value (average monthly estimation) of 589 MU (estimated consumption of unmetered categories).

e) **Interest on working capital** –

MSEDCL has mentioned that 10.25% is the rate of Interest for working capital. However, no IWC has been claimed in the format 6.5 submitted for claiming the IWC incurred. Hence Interest on working capital has not been considered for the said month..

As per APTEL judgment, interest on the difference of normative actual cost and approved cost of fuel in a month is eligible for payment through FAC mechanism, in case such claim is made along with supportive documentation. Else it will be addressed through the Annual True-up.

f) **Adjustment factor**

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

Table-4
Adjustment Factor – April 2011

Sr. No.	Parameter	Unit	Value
(A)	(B)	(C)	(D)
1.0	Adjustment for over-recovery/under-recovery ('B')		
1.1	Incremental cost allowed to be recovered in Month (January 2011)	Rs Cr	196.6803
1.2	Incremental cost in Month j-4 actually recovered in month j-2 (April 2011)	Rs Cr	165.33
	C/f Diff of Last Month Due to Category wise and Slab wise FAC		35.9841
1.3	Over-recovery/under-recovery (1.2-1.1)	Rs Cr	67.3327
2.0	Carried forward adjustment	Rs Cr	
2.1	over-recovery/ under-recovery attributable to application of ceiling limit in prev month	Rs Cr	0
2.2	4 th Instalment of Recovery of Rs. 432 Cr. Permitted by the Commission vide Order of case 1 of 2011	Rs Cr	72.0833
2.3	Correction for disallowance for excess distribution loss	Rs Cr	-12.72
3.0	Adjustment factor for over-recovery/under-recovery	Rs Cr	126.696

4. **Transmission and Distribution Loss:** .

Transmission Loss:

In the FAC submission, MSEDCL has reported Transmission loss in its system as 3.43%, against approved order value of 4.85%.

Distribution loss:

For the month April 2011, MSEDCL has reported 18.82 % Distribution Loss. Thereby, the Cumulative Distribution loss upto the months April 2011 is 18.82 %, against approved Distribution loss of 17.20%.

As the reported distribution loss (cumulative upto the month) is more than the stipulated limit value of Distribution loss for the FY, deductions of Rs 601.38 Lakhs , has been made from FAC charges of April 2011

5. Energy Sales for within License area:

The energy sales within licence area as submitted by MSEDCL for the months April 2011, 6799.99 MU, and the same is approved by the Commission.

6. Summary :

The summary of the FAC amount as approved by the Commission for the month April 2011 is shown in the Tables below:-

At the above rate, total FAC amount of Rs 300.0319 Crores is to be recovered from the consumers in April 2011 at the average rate as shown n Tables 7A & 7B, and **NIL** amount to be carried forward for recovery at future date at the end of April 2011.

Table-5

Sr. No.	Parameter	Unit	Value
(A)	(B)	(C)	(D)
1.0	Calculation of FAC (A)		
	Disallowance of change in variable cost of generation corresponding to excess auxiliary consumption	Rs Lakh	-
1.2	Change in weighted average variable cost of generation and power purchase after accounting for disallowance of change in variable cost corresponding to excess auxiliary consumption	Rs Lakh	-
1.3	Apportionment of change in variable cost of generation and power purchase to License Area (C)	Rs Lakh	17935.04
1.4	Working Capital Interest (I)	Rs Lakh	-
1.5	T & D Loss Adjustment for the year		-
1.6	Adjustment for Over Recovery/Under Recovery (B)	Rs Lakh	12669.53
1.7	FAC (A) = C + I + B	Rs Lakh	30604.57
2.0	Calculation of FAC_{kWh}		
2.1	Sale within License Area	MU	6799.99
2.2	Excess T&D Loss	MU	136.30
2.3	FAC Charge (FAC _{kWh}) without considering cap on monthly FAC Charge (avg)	Paise/kWh	44.12
2.4	Cap on monthly FAC Charge (avg)	Paise/kWh	44.12
2.5	FAC Charge (FAC_{kWh}) considering cap on monthly FAC Charge	Rs/kWh	As per Tables 6A, 6B
3.0	FAC (A)		
3.1	FAC (A) considering cap on Monthly FAC Charge (avg)	Rs Lakh	30003.19
3.2	FAC (A) disallowed corresponding to excess T&D loss	Rs Lakh	601.38
3.3	Carried forward FAC (A) for recovery during future period (on account of erroneous adjustment of Distribution loss)	Rs Lakh	0

7. Recovery from Consumers :

As notified on 28th January 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 may 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 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.

“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.

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

The applicable “K” factor for each category and tariff slab is calculated on the basis of the following figures arrived at from the above tables :

- Average FAC for consumers in Licensed area: paise 44.12 /kWH,
- Average cost of supply: Rs 4.55/kWH
- The energy charges shall be as approved by the Commission vide the Order of 2nd December 2010 in the matter of Case 69 of 2010.

It is seen from the tabulation that on an average MSEDCL has recovered Rs 292.5591 Crores instead of Rs. 300.0319 Crores from consumer in Licensed area as above , and hence there is under-recovery of Rs.7.4728 Crores which is carried forward to next month.

Table-6 A

Sr. No.	Categories	Approved energy charges	FAC TO BE CHARGED IN BILLING MONTH
A	LT Category	Rs/kWH	PAISA/KWH
1	Domestic (LT-I)		
A	BPL (0-30 Units)	0.82	7.96
B	Consumption > 30 Units per month		
i	1-100 Units	2.61	25.33
ii	101-300 Units	4.61	44.75
iii	301-500 Units	6.59	63.97
iv	500-1000 Units	7.65	74.26
v	Above 1000 Units	7.91	76.78
	Sub Total Domestic		
2	Non Domestic (LT-2)		
A	0-20 KW		
i	Educational institute and Hospitals		
a	0-200 Units	4.54	44.07
b	Above 200 units	6.33	61.44
ii	Others		
a	0-200 Units	4.75	46.11
b	Above 200 units	6.81	66.10
B	>20-50 KW	6.86	66.59
	>50 KW	8.86	86.00
3	Public Water Works (LT-III)		
A	0-20 KW	1.81	17.57
B	20-40 KW	2.34	22.71
C	40-50 KW	3.19	30.96
4	Agriculture (LT-IV)		
A	Unmetered Tariff		
1	Zones with Consumption norm < 1318 Hrs/HP/Annum 980 Hrs basis		
	A) 0-5 HP	2.16	20.95Rs/HP
	B) Above 5 HP	2.16	20.95Rs/HP
2	Zones with Consumption norm > 1318 Hrs/HP/Annum 1734 Hrs basis		
	A) 0-5 HP	2.53	24.53

Sr. No.	Categories	Approved energy charges	FAC TO BE CHARGED IN BILLING MONTH
	B) Above 5 HP	2.53	24.53
B	Metered Tariff (Including Poultry Farms)	1.62	15.72
5	LT Industries (LT-V)		
A	0-20 KW	4.12	39.99
B	Above 20 KW	5.70	55.33
	TOD Consumption		
	2200 Hrs-0600 Hrs		
	0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		
	0900 Hrs-1200 Hrs		
	1800 Hrs-2200 Hrs		
6	Street Light (LT-VI)		
A	Grampanchayat A, B & C Class Municipal Council	3.27	31.74
B	Municipal corporation Area	3.90	37.86
7	Temporary Connection (LT-VII)		
A	Temporary Connection (Religious)	2.66	25.82
B	Temporary Connection (Other Purposes)	12.13	117.74
8	Advertising and Hording (LT-VIII)	16.88	163.85
9	Crematorium & Burial (LT-IX)	2.66	25.82

Table 6- B

Sr. No.	Categories	Approved energy charges	FAC TO BE CHARGED IN BILLING MONTH
		Rs/kWH	
	HT-I - Industries		
A	HT-I - Cont (Express Feeders)	5.56	53.97
B	HT-I - NonCont (Non Express Feeders)	5.06	49.12
C	HT-I - Seasonal Category	6.23	60.47
2	HT-II Commercial		
a	Express Feeder		
i)	Educaton Institute and Hospitals	8.07	78.33
ii)	Other	8.39	81.44
b	B) Non-Express Feeder		
i)	Educaton Institute and Hospitals	7.54	73.19
ii)	Other	7.86	76.29
3	HT-III Railways	6.12	59.41
4	HT-IV Public Water Works (PWW)		
A	Express Feeders	3.96	38.44
B	Non-Express Feeders	3.80	36.89
5	HT-V Agricultural	2.27	22.03
6	HT-VI Bulk Supply		
A	Residential Complex	3.93	38.15
B	Commertial Complex	6.65	64.55
9	Temporary Supply	10.12	98.23
	TOTAL HT Category	Rs Lakhs	14519.73
	TOTAL LT Category	Rs Lakhs	14736.18
	GRAND TOTAL	Rs Lakhs	29255.91
	Actual FAC to Be levied	Rs Lakhs	30003.19
	Under-recovery to be carried fwd to next month	Rs Lakhs	747.28

APPENDIX

Assumptions/Norms as per APR order for MSPGCL dated September 12, 2009 (Case 102 of 2009),

1. CAP on monthly FAC charge.

CAP on monthly FAC charge for FY 2010-11 works out to 37.75 paise per unit.

2 Summary of New Norms:

2.1 Purchases from MSPGCL:

Station	Net Gen (MUs)	Energy Charge as per Order (Rs/kWh)	Approved Heat Rate applicable for FY 2010-11 kCal/kWH	Approved Auxiliary Consumption for FY 2010-11 %
Khaparkheda	5,458.81	1.77	2559.9	9.74
Paras	337.45	1.82	3186.5	12.45
Bhusawal	2,946.27	2.1	2733.9	10.55
Nasik	5,394.24	2.22	2721.9	10.95
Parli	4,172.35	1.91	2744.6	11.15
Koradi	6015.64	1.61	2964.8	10.70
Chandrapur	14,898.24	1.56	2617	9.15
Paras -3	1,594		2500	9.0
Parli -6	1,594		2500	9.0
Uran	5745.20	1.68	1980	2.40

2.2 Purchases

Particulars	Approved MU Annual	Approved Variable Cost (Rs./kWh)
MSPGCL	50490	
Korba STP	5096	0.69
Vindhayanchal STP I	3395	1.02
Vindhayanchal STP II	2652	1.24
Vindhayanchal STP III	2211	1.45
KAWAS APM	1345	1.30
GANDHAR APM	1314	2.52
Farakka STPP-EP	129	2.23
Kahalgaon TPS-EP	61	2.50
Kahalgaon TPS-II	511	2.13
TSTPS-EP	84	1.01
Sipat Stage - II	2242	1.65
NTPC	19040	1.25
Kakrapar APP	368	2.15
Tarapur APP 1&2	1206	0.94
Tarapur APP 3&4	1934	2.73
NPCIL	3507	2.05
Saradar Sarovar Project	635	2.05
PENCH	240	2.05
U.I. CHARGES	0	3.00
DODSON-I	21	2.99
DODSON-II	43	
RGPPL	11000	2.88
TOTAL PP	23423	
NCE Sources	4114	
CPPs	392	