

Ref. No. MERC/FAC/20112012/574

Date June 8, 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 February 2011,

Reference: MSEDCL's FAC submission of month February 2011 received vide MSEDCL/PP/FAC/L7/15208 of 13th May 2011

Upon vetting the FAC calculations for the month of February, 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. 220.9045 for the above mentioned month as detailed below. Carried forward FAC at the end of the month is NIL.

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 summary of the FAC claim for February, 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	220.9045
2	FAC rate	Paise/kWh	Proportionate. See Table-6 A&B of Annexure
3	FAC rate (unmetered)		
	-LT-Ag (>1318 hours per year)	Rs/hp/month	40.50
	-LT-Ag (<1318 hours per year)	Rs/hp/month	22.90

I am directed to forward herewith the detailed vetting and approval of the Commission on FAC amount for the month February, 2011

Yours faithfully,

(K.N.Khawarey)
Secretary, MERC

Encl : Detailed Vetting Report for February, 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 February 2011 submitted by MSEDCL

Reference: MSEDCL's FAC submission of month February 2011 received vide MSEDCL/PP/FAC/L7/15208 of 13th May 2011

1. FAC submission by MSEDCL:

- 1.1 Upon vetting the FAC calculations for the month of February 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 dated September 12, 2010 (Case 111 of 2009), approving principles of Annual Revenue Requirement (ARR) and Tariff for FY 2010-11 for MSEDCL 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 Tariff Order 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 for MSPGCL

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 a Review Order on March 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 instalment 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 months of February 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 Total FAC charges to be recovered, the Commission has also approved the tariff categorywise and consumption slabwise tabulation for recovery of the said FAC charges by MSEDCL from its Consumers.

- 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:

The Commission has accorded post facto approval for the FAC amount of (net of T & D loss), **Rs. 220.9045** Crores for the month February 2011. The summary of the FAC claim for February 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	220.9045
2	FAC rate	Paise/kWh	Proportionate. See Annexure
3	FAC rate (unmetered)		
	-LT-Ag (>1318 hours per year)	Rs/hp/month	40.50
	-LT-Ag (<1318 hours per year)	Rs/hp/month	22.90

As the FAC amount is to be refunded to the consumers, the carried forward FAC at the end of the month February 2011 works out to **NIL**.

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 Khaparkheda, Nashik, and Chandrapur Thermal power plants and new units Pari unit 7 and Paras Unit 4 of MSPGCL for the Month February 2011 was more than 80%. As against approved generation of 4747.95 MU (all thermal, gas, Hydro plants), the Actual gross generation was 4207.83MU viz approx 11% lesser than approved generation, (excl. Generation of Parli Unit 6 and Paras Unit 3 plants).

However, it is noted that the shortfall in generation of Thermal plants of MSPGCL was less by approx 17% of the approved value, which appears to have been made up to some extent by excess generation of Hydro electric plants of the utility (587.99 MU Hydel generation in the month against approved quantity of 330.41 MUs in the month).

MSPGCL sold NIL MU energy in February 2011, from the “Retired” vintage plants at Koradi, Paras, Parli and Bhusaval. (either recoverable under FAC or under ZLS schemes).

b) Variable Cost of Generation:

MSEDCL has submitted the break-up of purchase price of different fuels for all stations 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 February 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	710.7357
2	Normative Actual Fuel cost	Rs Crore	706.4911
3	Net Generation	MU	3300.90
4	Approved variable cost of generation (Order)	Rs./kWh	1.75357
5	Actual average variable cost of generation	Rs./kWh	2.15
6	Average Normative variable cost of generation	Rs./kWh	2.1403
7	Change in variable cost of generation = $\{(3)X[(6)-(4)]\}/10$	Rs. Crore	127.5138

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 February 2011 is given below

Table-3

S.No	Details	Unit	February 2011
1	Net Energy Purchase	MU	3778.74
2	Variable Cost of Energy purchased	Rs Crore	835.9225
3	Average Rate of energy purchased	Rs./kWh	2.21
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 sold 25 MU through UI at avg rate of Rs. 3.99 per kWh, in February 2011. This has reduced the cost of power procured by Rs 9.9402 Crores

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

MSEDCL has claimed losses in power purchase through grid at (99) MU in February 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 February 2011 are 5222.74 MU against Order value (monthly) of 5284 MU and Unmetered sales (estimated) is 668.89 MU. Against the Order value (average monthly estimation) of 589 MU (estimated consumption of unmetered categories). It is clear from the scrutiny of the submitted values of the previous months that the value of estimated power consumption submitted for February 2011 is equal to the estimated power consumption of the previous month. On this basis, the Commission has approved the submitted value, however, the Commission notes that the large differences between the monthly unmetered consumption values needs improvement by changing to monthly readings rather than quarterly readings.

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 – February 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 (November 2010)	Rs Cr	150.2517
1.2	Incremental cost in Month j-4 actually recovered in month j-2 (February 2011)	Rs Cr	120.42
1.3	Over-recovery/under-recovery (1.2-1.1)	Rs Cr	29.8310
2.0	Carried forward adjustment	Rs Cr	
2.1	over-recovery/ under-recovery attributable to application of ceiling limit	Rs Cr	0
2.2	1 st Instalment of Recovery of Rs. 432 Cr. Permitted by the Commission vide Order of case 1 of 2011	Rs Cr	72.0833
3.0	Adjustment factor for over-recovery/under-recovery	Rs Cr	101.9143

4. Transmission and Distribution Loss:

Transmission Loss:

In the FAC submission, MSEDCL has reported Transmission loss in its system as 3.5%, against approved order value of 4.85%.

Distribution loss:

For the month February 2011, MSEDCL has reported 23.36 % Distribution Loss. Thereby, the Cumulative Distribution loss upto the months February 2011 is 18.92 %, 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 4.9606 Crore, has been made from FAC charges of February 2011

5. Energy Sales for within License area:

The energy sales within licence area as submitted by MSEDCL for the months February 2011, 5874.29 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 February 2011 is shown in the Tables below:-

At the above rate, total FAC amount of Rs 220.9045 Crores is to be recovered from the consumers in February 2011 at the average rate of 37.61 Paise/kWh, and **NIL** amount to be carried forward for recovery at future date at the end of February 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	12395.08
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	10191.43
1.7	FAC (A) = C + I + B	Rs Lakh	22586.51
2.0	Calculation of FAC_{kWh}		
2.1	Sale within License Area	MU	5874.29
2.2	Excess T&D Loss	MU	131.91
2.3	FAC Charge (FAC _{kWh}) without considering cap on monthly FAC Charge	Paise/kWh	37.61
2.4	Cap on monthly FAC Charge	Paise/kWh	37.75
2.5	FAC Charge (FAC_{kWh}) considering cap on monthly FAC Charge	Rs/kWh	0.3761
3.0	FAC (A)		
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	22090.45
3.2	FAC (A) disallowed corresponding to excess T&D loss	Rs Lakh	496.06
3.3	Carried forward FAC (A) for recovery during future period	Rs Lakh	0.00

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	6.78
B	Consumption > 30 Units per month		
i	1-100 Units	2.61	21.59
ii	101-300 Units	4.61	38.14
iii	301-500 Units	6.59	54.52
iv	500-1000 Units	7.65	63.29
v	Above 1000 Units	7.91	65.44
	Sub Total Domestic		
2	Non Domestic (LT-2)		
A	0-20 KW		
i	Educational institute and Hospitals		
a	0-200 Units	4.54	37.56
b	Above 200 units	6.33	52.37
ii	Others		
a	0-200 Units	4.75	39.30
b	Above 200 units	6.81	56.34
B	>20-50 KW	6.86	56.75
	>50 KW	8.86	73.30
3	Public Water Works (LT-III)		
A	0-20 KW	1.81	14.97
B	20-40 KW	2.34	19.36
C	40-50 KW	3.19	26.39
4	Agriculture (LT-IV)		
A	Unmetered Tariff		
1	Zones with Consumption norm < 1318 Hrs/HP/Annum		
	A) 0-5 HP	2.16	17.85
	B) Above 5 HP	2.16	17.85
2	Zones with Consumption norm > 1318 Hrs/HP/Annum		
	A) 0-5 HP	2.53	20.91
	B) Above 5 HP	2.53	20.91

Sr. No.	Categories	Approved energy charges	FAC TO BE CHARGED IN BILLING MONTH
A	Unmetered Tariff		
1	Zones with Consumption <1318 Hrs/HP/Annum		
2	Zones with Consumption >1318 Hrs/HP/Annum		
B	Metered Tariff (Including Poultry Farms)	1.62	13.40
5	LT Industries (LT-V)		
A	0-20 KW	4.12	34.08
B	Above 20 KW	5.70	47.16
	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	27.05
B	Municipal corporation Area	3.90	32.26
7	Temporary Connection (LT-VII)		
A	Temporary Connection (Religious)	2.66	22.01
B	Temporary Connection (Other Purposes)	12.13	100.35
8	Advertising and Hording (LT-VIII)	16.88	139.65
9	Crematorium & Burial (LT-IX)	2.66	22.01

Table 6- B

Sr. No.	Categories	Approved energy charges	FAC TO BE CHARGED IN BILLING MONTH
		Rs/kWH	PAISA/KWH
	HT-I - Industries		
A	HT-I - Cont (Express Feeders)	5.56	46.00
B	HT-I - NonCont (Non Express Feeders)	5.06	41.86
C	HT-I - Seasonal Category	6.23	51.54
2	HT-II Commercial		
a	Express Feeder		
i)	Educaton Institute and Hospitals	8.07	
ii)	Other	8.39	69.41
b	B) Non-Express Feeder		
i)	Educaton Institute and Hospitals	7.54	
ii)	Other	7.86	
3	HT-III Railways	6.12	50.63
4	HT-IV Public Water Works (PWW)		
A	Express Feeders	3.96	32.76
B	Non-Express Feeders	3.80	31.44
5	HT-V Agricultural	2.27	18.78
6	HT-VI Bulk Supply		
A	Residential Complex	3.93	32.51
B	Commercial Complex	6.65	
8	Mula Pravara Electric Co-op Society (MPECS)	2.76	22.83
9	Temporary Supply	10.12	83.72
	TOTAL HT Category	Rs Lakhs	12396.73
	TOTAL LT Category	Rs Lakhs	10854.68
	GRAND TOTAL	Rs Lakhs	23251.41
	Actual FAC to Be levied	Rs Lakhs	22090.45
	Over-recovery to be carried fwd to next month	Rs Lakhs	1160.96

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	