## Ref. No. MERC/MSEDCL/FAC/141

7<sup>th</sup> January, 2008

**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: Vetting of FAC for the period August to September 2007

Sir,

Upon vetting the FAC calculations for the month of August and September, 07 submitted vide letter under above reference; the Commission has accorded post facto approval for FAC levied for the months of August and September 2007.

2. The Commission has considered the increase in power purchase cost for the month of August and September, 2007 in case of approved power purchase sources as per the Tariff Order dated 18<sup>th</sup> May 2007.

3. The Commission has approved FAC amount of Rs.98.79 Crore for August 2007 and Rs 67.28 Crore for September 2007 as per details given below:-

Sr No	Particulars	Unit	August 07		September 07	
			MSEDC L	Approved	MSEDCL	Approved
1.	FAC net of excess T&D Loss	Rs. Crore	98.79	98.79	67.28	67.28
2.	FAC rate to be billed	Paise/unit	24	24	19	19
3.	FAC rate (unmetered)					
	-LT-Ag (>1318 hours per year)	Rs/hp/mon th	25.50	25.50	20.00	20.00
	-LT-Ag (<1318 hours per year)	Rs/hp/mon th	14.40	14.40	11.30	11.30

Contd --2

Page 1 of 7

I am directed to forward herewith the detailed vetting and approval of the Commission on FAC vetting for the months of August and September 2007.



- Encl: Detailed Vetting Report
- Cc: Prayas Energy Group, Amrita Clinic, Athawale Corner, Lakdipool-Karve Road Junction, Deccan Gymkhana, Karve Road, Pune 411 004.
- Cc: The President, Mumbai Grahak Panchayat, Grahak Bhavan, Sant Dynyaneshwar Marg, Behind Cooper Hospital, Vile Parle (West), Mumbai 400 056.
- Cc: The General Secretary, Thane Belapur Industries Association, Plot No.P-14, MIDC, Rabale Village, PO Ghansoli, Navi Mumbai 400 7001.
- Cc: The President, Vidarbha Industries Association, 1<sup>st</sup> floor, Udyog Bhawan, Civil Lines, Nagpur 440 001.
- Cc: Shri A.D.Mahajan, Head-Advisory SICOM Limited Nirmal, 1<sup>st</sup> floor, Nariman Point, Mumbai- 400 021

## Detailed Vetting Report MSEDCL, FAC Charges for the period August and September 07. Attachment to letter No. MERC/MSEDCL/FAC/ dated 7<sup>th</sup> January 2008

- 1. The Commission has issued detailed MYT Tariff Order dated 18<sup>th</sup> May 2007 for the period FY 2007-08 to FY 2009-10 for MSEDCL and has also stipulated the parameters and mechanism for computation of FAC. The Commission has approved FAC charges for the month of August 07 and September 07 based on the Tariff Order dated 18<sup>th</sup> May 2007 and MERC (Terms and Conditions of Tariff) Regulations 2005.
- 2. For FAC computations, the Commission has considered only those power purchase sources which have been considered as Non-costly sources of power in the MYT Order as well as new sources for which the average rate is less than Rs 4/kWh.
- 4. MSEDCL vide its letter dated 11<sup>th</sup> December, 2007 has forwarded FAC submissions as per formats for the month of August 07 and September 07 with a charge of @ 24 paise/unit and 19 paise/ unit respectively for metered sales.
- 5. Analysis of FAC proposal submitted by MSEDCL and computation of FAC charges for August 07 and September 07 is as below:
- i) Variable Cost of Generation of MSPGCL stations:

a. MSEDCL has submitted the break up of purchase price of different fuels for all stations duly certified by Chartered Accountant.

b. Variable Fuel Cost :

MSEDCL has considered the base variable fuel cost for each station as given by the Commission in the MYT order of MSPGCL dated 25<sup>th</sup> April 2007. MSEDCL has not considered power stations, which are yet to be commissioned while computing weighted average cost of generation. MSEDCL has submitted sample bills for the fuel purchased along with the FAC submissions. MSEDCL has also submitted fuel analysis report of representative monthly sample of fuels certified by an Independent Certification Agency along with FAC submissions for the months of August 07 and September 07.



Station	Energy Charge considered for FAC (Rs/kWh)
Khaparkheda	1.00
Paras	1.43
Bhusawal	1.59
Nasik	1.58
Parli	1.58
Koradi	1.05
Chandrapur	1.14
Uran	0.80
Total Average	1.21

Station-wise energy charge per unit is considered as under:

The actual fuel cost and net generation in August 07 and September 2007 for 8 existing generating stations of MSPGCL as submitted by MSEDCL is Rs.475.03 Crore, Rs 449.01 Crore and 3343 MU and 3183 MU respectively. Thus, actual average variable cost of generation works out to Rs.1.42 per kWh and Rs 1.41 per kWh for August and September 2007, respectively, as against approved average variable cost of generation of Rs.1.21/kWh. Normative variable cost of generation for August 07 and September 07 is considered at Rs.448.66 Crore and Rs 492.85 Crore. The average normative variable cost of generation works out to @Rs.1.34/kWh and Rs 1.35/kWh.

Thus, change in variable cost of generation is considered at Rs.43.46 Crore (3343 MU x (1.34-1.21)/10) for August 2007 and Rs 44.56 Crore (3183 MU x (1.35-1.21)/10) in September 2007.

c. Auxiliary consumption:

Auxiliary consumption at each unit is considered by MSEDCL at normative levels for calculation of variable cost of generation and the same is allowed.

d. Heat Rate:

MSEDCL has worked out the variable cost of generation considering normative heat rates of each station and the same is allowed.

e. Transit Loss:

MSEDCL has worked out the variable cost of generation considering normative transit loss and the same is allowed.



ii) Variable cost of power purchase from other sources-

The Commission has considered the increase in power purchase cost for the month of August 2007 and September 2007 in case of approved power purchase sources as per the Tariff Order dated 18<sup>th</sup> May 2007.

Power purchase from Kawas Gas is not considered under the FAC mechanism as it is costly source (Total cost more than Rs 4/unit) and the same should be covered under ASC. Power purchase from Pench (11 MU and 17MU at Rs.2.61 per unit and Rs.2.58 per unit for August and September, 07 respectively) is considered in FAC computation as the average cost is less than Rs.4.00 per unit (Non-costly power). These two sources were not considered in the MYT order.

**a.** MSEDCL has purchased net 2070 MU and 2047 MU in August and September 2007, respectively, with total variable cost of Rs.357.72 Crore and Rs.364.85 Crore respectively at average rate of Rs.1.73/unit and Rs.1.78/unit as against approved average variable cost of Rs.1.6998/unit from existing power purchase sources.

b. The cost of power purchase from Co-gen, wind and Captive Power Plants is considered as part of FAC computations.

c. UI charges:

MSEDCL has purchased 69 MU and 85 MU through UI during the months of August and September 2007 and the same has been allowed.

The Commission has approved change in Variable (Fuel) Cost of Generation and Power Purchase Cost (C) of Rs. 60.19 Crore and Rs.73.69 Crore as submitted by MSEDCL for August and September, 2007.

iii) **Interest on working capital** – MSEDCL has not considered interest on incremental working capital requirement on account of change in fuel and power purchase costs and accordingly the same is not considered in the FAC.



## iv) Adjustment factor for over recovery / under recovery (B) –

The adjustment factor for over recovery/under recovery is approved at Rs.38.60 Crore, and Rs (.6.42) Crore in August and September, 2007, respectively.

- v) **T & D Loss:** The actual intra-state transmission loss is 5.19% and 4.84% in the months of August and September 2007, respectively, as against the approved level of 4.85%. The actual distribution losses during August and September, 07 are lower than the approved norm of 31.70%. Thus, there is no excess distribution loss in August 2007 and September 2007.
- vi) **Energy Sales within License area:** The energy sales within license area is considered at 4029 MU. and 3979 MU for August and September 2007, respectively.

The Commission hereby allows FAC amount of Rs.98.79 Crore for August 2007 and Rs 67.28 Crore for September, 07 respectively as per details given below:

Sr. No.	Parameter	Unit	August 07	September, 07
(A)	(B)	(C)	(D)	
1.0	Calculation of FAC (A)			
1.1	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	6019	7369
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	3860	(642)
1.7	FAC(A) = C + I + B	Rs Lakh	9879	6728
2.0	Calculation of FAC <sub>kWh</sub>			
2.1	Sale within License Area	MU	4179	3623
2.2	Excess T&D Loss	MU		-
2.3	FAC Charge (FAC <sub>kWh</sub> ) without considering cap on monthly FAC Charge	Paise/kWh	24	19
2.4	Cap on monthly FAC Charge	Paise/kWh	27.21	27.21
2.5	FAC Charge (FAC <sub>kWh</sub> ) considering cap on monthly FAC Charge	Rs/kWh	0.21	0.19
3.0	FAC (A)			
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	9879	6728
3.2	FAC (A) disallowed corresponding to excess T&D loss		-	-
3.3	Carried forward FAC (A) for recovery during future period	Rs Lakh	Nil	Nil



FAC rate (unmetered)	Rs/hp/month	August 2007	September 2007
-LT-Ag (>1318 hours per year)	Rs/hp/month	(0.80)	25.20
-LT-Ag (<1318 hours per year)	Rs/hp/month	0.40	14.30

Approved FAC rate for unmetered consumers for August 07 and September 07 is as under:

