

Ref. No. MERC/FAC/20112012/ 01

Date: 1 April, 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 September 2010, October 2010, November 2010

- Reference:**
- a) MSEDCL's FAC submission of month September 2010 received vide MSEDCL/PP/FAC/L7/689 of 7th January 2011
 - b) MSEDCL's FAC submission of month October & November 2010 received vide MSEDCL/PP/FAC/L7/5809 of 17th February 2010
 - c) Clarifications received vide E-Mail.

Upon vetting the FAC calculations for the month of September, October, and November 2010 submitted vide letter under above references (a) and (b), the Commission has accorded post facto approval for the FAC amount for the above mentioned month as detailed below.

- a) Post facto approval accorded for FAC amount (net of excess T&D loss) of Rs. 124.3782, Rs. 63.7604, and Rs. 150.2517 Crores for the month September, October, and November 2010.
- b) Carried forward FAC at the end of the months September, October, and November 2010 for adjustment in future is NIL.

The summary of the FAC claim for September, October, November 2010 as approved by the Commission is shown in the Table below:-

Sr No	Particulars	Unit	Approved		
			September 2010	October 2010	November 2010
1	FAC incl of excess T&D Loss	Rs. Crore	124.3782	63.7604	150.2517
2	FAC rate	Paise/kWh	24.64	11.50	27.03
3	FAC rate (unmetered)				
	-LT-Ag (>1318 hours per year)	Rs/hp/month	26.60	12.40	29.10
	-LT-Ag (<1318 hours per year)	Rs/hp/month	15.00	7.00	16.50

I am directed to forward herewith the detailed vetting and approval of the Commission on FAC amount for the months September, October, November 2010

Yours faithfully,
Sd/-
(P.B.Patil)
Registrar, MERC

Encl : Detailed Vetting Report for September, October, November 2010

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

ANNEXURE
Detailed Vetting Report

Date: 1 April, 2011

Post Facto approval of FAC Charges for September, October & November 2010 submitted by MSEDCL

- Reference :**
- a) MSEDCL's FAC submission of month September 2010 received vide MSEDCL/PP/FAC/L7/689 of 7th January 2011
 - b) MSEDCL's FAC submission of month October & November 2010 received vide MSEDCL/PP/FAC/L7/5809 of 17th February 2010
 - c) Clarifications received vide E-Mail

1. FAC submission by MSEDCL:

- 1.1 Upon vetting the FAC calculations for the month of September, October & November 2010, submitted vide letter under above Reference (a) and (b) 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 months as detailed below.

The Commission issued MYT 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 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 has approved FAC charges for the months of September, October & November 2010 in accordance with the principles stipulated in the APR Order dated September 12, 2010 and the MERC (Terms and Conditions of Tariff) Regulations, 2005 and as explained above, any variance on account of the above will be addressed during the true-up.

- 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. 124.3782**, **Rs. 63.7604**, **Rs. 150.2517** Crores for the months September,

October & November 2010 respectively. The summary of the FAC claim for September, October & November 2010 as approved by the Commission is shown in the Table below:-

Sr No	Particulars	Unit	Approved		
			September 2010	October 2010	November 2010
1	FAC incl of excess T&D Loss	Rs. Crore	124.3782	63.7604	150.2517
2	FAC rate	Paise/kWh	24.64	11.50	27.03
3	FAC rate (unmetered)				
	-LT-Ag (>1318 hours per year)	Rs/hp/month	26.60	12.40	29.10
	-LT-Ag (<1318 hours per year)	Rs/hp/month	15.00	7.00	16.50

The carried forward FAC at the end of the month September, October & November 2010 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 Generation at most of the Thermal power plants of MSPGCL for the Month September 2010 was extremely low. As against approved generation of 5,039.44 MU (all thermal, gas, Hydro plants), the Actual gross generation was 2768.95 MU. In the subsequent months, slight improvement has been noted and the generation of MSPGCL plants was 3664.66 MU in October 2010 and 3591.71 MU in November 2010..

MSPGCL sold 100.57 MU energy in September 2010, 173.42MU in October 2010 and 172.53 MU in November 2010 from the “Retired” vintage plants at Koradi, Bhusawal, Paras and Parali. It is noted that half of the energy sold from these plants was charged by MSEDCL to FAC and half to ZLS.

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 September, October & November 2010 for existing generating stations of MSPGCL as approved by the Commission after detail vetting, is shown in the Table below:

Table

Sr No	Detail	Unit	Month		
			Sept 10	Oct 10	Nov 10
1	Actual Fuel Cost	Rs Crore	522.3807	635.6916	648.6635
2	Normative Actual Fuel cost	Rs Crore	365.2806	558.300	618.6999
3	Net Generation	MU	2055.77	2946.16	3135.95
4	Approved variable cost of generation (Order)	Rs./kWh	1.76	1.76	1.76
5	Actual average variable cost of generation	Rs./kWh	2.54	2.16	2.07
6	Average Normative variable cost of generation	Rs./kWh	1.7768	1.8950	1.9729
7	Change in variable cost of generation = $\{(3) \times [(6)-(4)]\} / 10$	Rs. Crore	3.4537	39.773	66.7644

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 September, October & November 2010 is given below

S.No	Details	Unit	September 2010	October 2010	November 2010
1	Net Energy Purchase	MU	4152.53	3954.33	3434.25
2	Variable Cost of Energy purchased	Rs Crore	842.7188	783.6326	734.2613
3	Average Rate of energy purchased	Rs./kWh	2.03	1.98	2.14
4	Approved Rate for Energy purchase (Order)	Rs./kWh	2.31	2.31	2.31

NOTE :

- i) It is to be noted that with progressive increase of generation from MSPGCL's plants, the procurement of energy from outside has gone down . However, net average rate of energy has gone up due to expensive generation from MSPGCL's plants with respect to the approved rate.
- ii) The Actual variable cost of power generation by MSPGCL in September 2010 was Rs 2.54/kWh. However, due to inefficiency in operation, the Commission has allowed the Rate of Rs 1.7768/kWh for that month. The gap between Actual cost and Normative Actual cost in subsequent months is lesser.

c) **Unscheduled Interchange (UI) Charges:**

MSEDCL has purchased 88MU through UI at avg rate of Rs. 1.59 per kWh, 38 MU at avg rate of Rs. 3.01 per kWh and 110 MU at avg rate of Rs 1.35/ kWh In September, October & November 2010. This is allowed

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

MSEDCL has claimed losses in power purchase through grid at (1.69) MU, (53.45) MU, (71.07) MU in September, October & November 2010 respectively, 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.

Order value (monthly) of metered sales is 5284 MU and Unmetered sales is 589 MU. Against the same, the actual values are as follows:

Sept 2010 : Metered sales are 4833.14 MU, Unmetered sales are 256.76 MU

Oct 2010 : Metered sales are 5047.76 MU, Unmetered sales are 542 MU

Nov 2010 : Metered sales are 5044.76 MU and Unmetered sales 542 MU

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 months September, October, November 2010 resp.

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. Clarification regarding the following figures appearing in the same was asked from MSPGCL, which has been furnished through E-Mail message from GM PP MSEDCL. :

- a) For the month of September 2010, MSEDCL has claimed Rs 354.3728 Cr towards adjustment for ZLS of July 2010
- b) For the month of November 2010, MSEDCL has claimed Rs 633.85 Crores towards adjustment for ZLS of October 2010.

Regarding the matter stated above, MSEDCL has explained that, MSEDCL has been procuring expensive power for the ZLS schemes in various zones / circles and also towards meeting demands in other License area. The charging towards ZLS is initially done on “estimation” basis and the adjustment as above is effected after final accounts are ready, as above, so as to fully recover the variable cost of energy supplied. This is approved.

Additionally, MSEDCL has claimed the 10th, 11th and 12th instalment of Rs 63.56 Crores, per month, in the months September 2010, October 2010 and November 2010 resp. towards arrears as permitted by the Commission's Order of Case 16 of 2008

Total adjustment factor with the inclusions as above, is Rs 16,256.80 Lakhs, 10,600.51 Lakhs, 11,382.83 Lakhs. For September, October & November 2010, respectively. This is approved.

Adjustment Factor

Sr. No.	Parameter	Unit	Value	Value	Value
(A)	(B)	(C)	(D)	(D)	(D)
			Months.		
			September 2010	October 2010	November 2010
1.0	Adjustment for over-recovery/under-recovery ('B')				
1.1	Incremental cost allowed to be recovered in Month (June 2010, July 2010, Aug 2010 resp)	Rs Lakh	21,125.44	21,160.50	21335.23
			June 2010	July 2010	August 2010
1.2	Incremental cost in Month j-4 actually recovered in month j-2 (September 10, October 10, November 10)	Rs Lakh	26,444	16,916	16943
1.3	Over-recovery/under-recovery (1.2-1.1)	Rs Lakh	(5,318.13)	4,244.10	4,392.57
2.0	Carried forward adjustment for over-recovery/under-recovery attributable to application of ceiling limit	Rs Lakh	14864.13	0	0
	Carried fwd from appvd. FAC submission for month		(Aug 2010)	(Sept 2010)	(Oct 2010)
2.1	9 th instalment of arrears permitted by the Commission's Order of Case 16 of 2008	Rs Lakh	6356.417	6356.417	6356.417
2.2	ZLS Adjustments	Rs Lakh	354.3728	0	633.85
3.0	Adjustment factor for over-recovery/under-recovery (1.3+2.0+2.1+2.2)	Rs Lakh	16,256.80	10,600.51	11,382.83

g) Transmission and Distribution Loss:

Transmission Loss:

As per IBSM statements, the transmission loss for the entire Intra state transmission system of Maharashtra for the months September, October, and November 2010 is 4.14%, 4.32% and 4.40% respectively. In the FAC submission, MSEDCL has reported Transmission loss in its system as 3.41%, 4.84%, 3.63% respectively. On closer scrutiny, it was noted that the net ex bus energy values at G to T interface, as considered by MSEDCL for these calculations, do not tally with those furnished in the IBSM formats issued by MSLDC, which results in difference as shown above. MSEDCL has been asked to look into the problem.

Distribution loss:

For the month September, October & November 2010, MSEDCL has reported 20.26 %, 21.12%, 17.39% Distribution Loss. Thereby, the Cumulative Distribution loss upto the months September, October & November 2010 is 18.67%, 19.17% and 17.28% respectively against approved Distribution loss of 17.20%.

As the reported distribution loss (cumulative upto the month) is more than the stipulated limit value, deductions of Rs 230.40 Lakhs, 160.79 Lakhs and Rs 14.41 Lakhs has been made from FAC charges of September, October & November 2010 respectively.

i) Energy Sales for within License area:

The energy sales within licence area as submitted by MSEDCL for the months September-10, October-10, November-10 is 5048.23 MU, 5042.46 MU, 5559.13 MU respectively, and the same is approved by the Commission.

4. Summary :

The summary of the FAC amount as approved by the Commission for the months September, October, November 2010 is shown in the Tables below:-

At the above rate, total FAC amount of Rs 124.3782 Crores is to be charged to the consumers in September 2010 at the rate of 24.64 Paise/kWh, Rs 63.7604 Crores is to be charged to the consumers in October 2010 at the rate of 11.50 Paise/kWh Rs 150.2517 Crores is to be charged to the consumers in November 2010 at the rate of 27.03 Paise/kWh and **NIL** amount to be carried forward for recovery at future date at the end of November 2010.

Summary

Sr. No.	Parameter	Unit	Value	Value	Value
(A)	(B)	(C)	(D)	(D)	(D)
			Sept'10	Oct'10	Nov'10
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	(3,588.58)	(4,063.72)	3,656.75
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	16,256.80	10,600.51	11,382.83
1.7	FAC (A) = C + I + B	Rs Lakh	12,668.22	6,536.80	15,039.58
2.0	Calculation of FAC_{kWh}				
2.1	Sale within License Area	MU	5,048.23	5,542.46	5,559.13
2.2	Excess T&D Loss	MU	93.52	139.77	5.33
2.3	FAC Charge (FAC _{kWh}) without considering cap on monthly FAC Charge	Paise/kWh	24.64	11.50	27.03
2.4	Cap on monthly FAC Charge	Paise/kWh	37.75	37.75	37.75
2.5	FAC Charge (FAC_{kWh}) considering cap on monthly FAC Charge	Rs/kWh	0.2464	0.1150	0.2703
3.0	FAC (A)				
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	12,437.82	6,376.00	15,025.17
3.2	FAC (A) disallowed corresponding to excess T&D loss	Rs Lakh	230.40	160.79	14.41
3.3	Carried forward FAC (A) for recovery during future period	Rs Lakh	0.00	0.00	0.00

APPENDIX

Assumptions/Norms as per MYT order for MSPGCL dated May 31, 2008 and for APR Order dated September 12, 2009 (Case 102 of 2009),

1. CAP on monthly FAC charge.

CAP on monthly FAC charge for FY 2009-10 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	