

Ref. No. MERC/FAC/20112012/000336

**Date** 10<sup>th</sup> May, 2011

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 submission of MSEDCL for January 2011,

**Reference:** MSEDCL's FAC submission of month January 2011 received vide MSEDCL/PP/FAC/L7/11523 of 18<sup>th</sup> April 2011

Upon vetting the FAC calculations for the month of January, 2011 submitted vide letter under above reference, the Commission has accorded post facto approval for the FAC amount for the above mentioned month as detailed below.

Post facto approval accorded for FAC amount (net of excess T&D loss) of Rs. 196.6803 Crores for the month January, 2011. Carried forward FAC at the end of the month is NIL.

The summary of the FAC claim for January, 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	196.6803
2	FAC rate	Paise/kWh	33.94
3	FAC rate (unmetered)		
	-LT-Ag (>1318 hours per year)	Rs/hp/month	36.60
	-LT-Ag (<1318 hours per year)	Rs/hp/month	20.70

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

Yours faithfully,

(K.N.Khawarey)  
Secretary, MERC

**Encl :** Detailed Vetting Report for January, 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 <sup>st</sup> 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 <sup>nd</sup> Floor 2 <sup>nd</sup> 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 January 2011 submitted by MSEDCL**

**Reference:** MSEDCL's FAC submission of month January 2011 received vide MSEDCL/PP/FAC/L7/11523 of 18<sup>th</sup> April 2011

**1. FAC submission by MSEDCL:**

- 1.1 Upon vetting the FAC calculations for the month of January 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 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 January 2011 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.

In addition to the FAC amount computed as above, the Commission has also allowed MSEDCL to recover from its consumers the first instalment of Rs 72.08 Crores, as per the directive issued by the Commission in the Order in the matter of Case 1 of 2011 of 31<sup>st</sup> March 2011

- 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. 196.6803** Crores for the month January 2011. The summary of the FAC claim for January 2011 as approved by the Commission is shown in the Table below:-

Sr No	Particulars	Unit	Approved
1	FAC incl of excess T&D Loss	Rs. Crore	196.6803
2	FAC rate	Paise/kWh	33.94
3	FAC rate (unmetered)		
	-LT-Ag (>1318 hours per year)	Rs/hp/month	36.60
	-LT-Ag (<1318 hours per year)	Rs/hp/month	20.70

As the FAC amount is to be refunded to the consumers, the carried forward FAC at the end of the month January 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 Bhusaval, Nashik, Parli and Chandrapur Thermal power plants of MSPGCL for the Month January 2011 was more than 80%. As against approved generation of 4747.95 MU (all thermal, gas, Hydro plants), the Actual gross generation was 4423.30 MU viz approx 7% 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 24% of the approved value, which appears to have been made up to some extent by excess generation of Hydro electric plants of the utility.

MSPGCL sold 36.71MU energy in January 2011, from the “Retired” vintage plants at Koradi. It is noted that half of the energy sold from the above plant 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 12<sup>th</sup> 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 January 2011 for existing generating stations of MSPGCL as approved by the Commission after detail vetting, is shown in the Table below:

**Table**

<b>Sr No</b>	<b>Detail</b>	<b>Unit</b>	
1	Actual Fuel Cost	Rs Crore	769.6819
2	Normative Actual Fuel cost	Rs Crore	767.5030
3	Net Generation	MU	3528.97
4	Approved variable cost of generation (Order)	Rs./kWh	1.755
5	Actual average variable cost of generation	Rs./kWh	2.18
6	Average Normative variable cost of generation	Rs./kWh	2.1748
7	Change in variable cost of generation = $\{(3)X[(6)-(4)]\}/10$	Rs. Crore	148.1462

**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 January 2011 is given below

<b>S.No</b>	<b>Details</b>	<b>Unit</b>	<b>January 2011</b>
1	Net Energy Purchase	MU	4070.27
2	Variable Cost of Energy purchased	Rs Crore	842.3627
3	Average Rate of energy purchased	Rs./kWh	2.07
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 has gone down . 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 183 MU through UI at avg rate of Rs. 2.87 per kWh, in January 2011. This has reduced the cost of power procured by Rs 52.4525 Crores

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

MSEDCL has claimed losses in power purchase through grid at (96) MU in January 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 January 2011 are 5151.86 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 January 2011 is equal to one third of the power consumption of the previous quarter. 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.

**Adjustment Factor – January 2011**

<b>Sr. No.</b>	<b>Parameter</b>	<b>Unit</b>	<b>Value</b>
(A)	(B)	(C)	(D)
<b>1.0</b>	<b>Adjustment for over-recovery/under-recovery ('B')</b>		
1.1	Incremental cost allowed to be recovered in Month <b>(October 2011)</b>	Rs Lakh	6376.00
1.2	Incremental cost in Month j-4 actually recovered in month j-2 <b>(January 2011)</b>	Rs Lakh	2311
1.3	Over-recovery/under-recovery (1.2-1.1)	Rs Lakh	4065.25
<b>2.0</b>	<b>Carried forward adjustment</b>		
2.1	over-recovery/ under-recovery attributable to application of ceiling limit	Rs Lakh	0
2.2	1 <sup>st</sup> Instalment of Recovery of Rs. 432 Cr. Permitted by the Commission vide Order of case 1 of 2011	Rs Lakh	7208.33
<b>3.0</b>	<b>Adjustment factor for over-recovery/under-recovery</b>	Rs Lakh	11273.58

**g) Transmission and Distribution Loss:**

**Transmission Loss:**

In the FAC submission, MSEDCL has reported Transmission loss in its system as 5.36%, against approved order value of 4.85%.

**Distribution loss:**

For the month January 2011, MSEDCL has reported 27.66 % Distribution Loss. Thereby, the Cumulative Distribution loss upto the months January 2011 is 18.43 %, 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 335.27 Lakhs, has been made from FAC charges of January 2011

**i) Energy Sales for within License area:**

The energy sales within licence area as submitted by MSEDCL for the months January 2011, 5795.38 MU, and the same is approved by the Commission.

**4. Summary :**

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

At the above rate, total FAC amount of Rs 196.6803 Crores is to be recovered from the consumers in January 2011 at the rate of 33.94 Paise/kWh, and **NIL** amount to be carried forward for recovery at future date at the end of January 2011.

<b>Sr. No.</b>	<b>Parameter</b>	<b>Unit</b>	<b>Value</b>
(A)	(B)	(C)	(D)
<b>1.0</b>	<b>Calculation of FAC (A)</b>		
	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	8729.71
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	11273.58
<b>1.7</b>	<b>FAC (A) = C + I + B</b>	Rs Lakh	20003.30
<b>2.0</b>	<b>Calculation of FAC<sub>kWh</sub></b>		
2.1	Sale within License Area	MU	5795.38
2.2	Excess T&D Loss	MU	98.79
2.3	FAC Charge (FAC <sub>kWh</sub> ) without considering cap on monthly FAC Charge	Paise/kWh	33.94
2.4	Cap on monthly FAC Charge	Paise/kWh	37.75
<b>2.5</b>	<b>FAC Charge (FAC<sub>kWh</sub>) considering cap on monthly FAC Charge</b>	Rs/kWh	0.3394
<b>3.0</b>	<b>FAC (A)</b>		
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	19668.03
3.2	FAC (A) disallowed corresponding to excess T&D loss	Rs Lakh	335.27
3.3	Carried forward FAC (A) for recovery during future period	Rs Lakh	0.00



## 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)
<b>MSPGCL</b>	<b>50490</b>	
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
<b>NTPC</b>	<b>19040</b>	<b>1.25</b>
Kakrapar APP	368	2.15
Tarapur APP 1&2	1206	0.94
Tarapur APP 3&4	1934	2.73
<b>NPCIL</b>	<b>3507</b>	<b>2.05</b>
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
<b>TOTAL PP</b>	<b>23423</b>	
NCE Sources	4114	
CPPs	392	