

Detailed Vetting Report MSEDCL- *Post Facto* approval of FAC Charges for June 2009 submitted by MSEDCL

Reference :

MSEDCL's letter No. MSEDCL/CAS/FAC/L7/45 of July 13,2009 for submission of June-09

1. FAC submission by MSEDCL:

- 1.1 Upon vetting the FAC calculations for the months of June-09, submitted vide letter under above Reference the Commission has accorded post facto approval for the FAC amount for the month June-09 as detailed below.

The Commission issued APR Order dated June 20, 2008 approving principles of Annual Revenue Requirement (ARR) and Tariff for FY 2008-09 for MSEDCL and has also mentioned about the parameters and mechanism for computation of FAC, which have been summarized in the Appendix to this letter. The Commission has approved FAC charges for the month of June-09 in accordance with the principles stipulated in the APR Order dated June 20, 2008 and the MER(Terms and Conditions of Tariff) Regulations, 2005

- 1.2 The Commission has considered power purchase sources based on the APR Order dated June 20, 2008.

- 1.3 MSEDCL has forwarded FAC submissions as per formats with a charge for June-09 @ 31 paise / unit for metered sales

- 1.4 The Commission has considered the increase in power purchase cost in case of approved power purchase sources as per the APR Order dated June 20, 2008 (Case No. 72 of 2007)

2. Details of approval:

The Commission has accorded post facto approval for the FAC amount of (net of T & D loss), Rs. Crore #REF! for month June-09. The summary of the FAC claim for June-09 as submitted by MSEDCL and as approved by the Commission is shown in the Table below:-

Jun-09

Sr No	Particulars	Unit	MSEDCL	Approved by Commission
1	FAC net of excess T&D Loss	Rs. Crore	161.57	#REF!
2	FAC rate	Paise/kWh	31	#REF!
3	FAC rate (unmetered)			
	-LT-Ag (> 300 hours per year)	Rs/hp/month	33.30	#REF!
	-LT-Ag (< 300 hours per year)	Rs/hp/month	18.80	#REF!

Further, the carried forward under-recovered FAC for the month June-09 as approved by the Commission works out to Rs.Crore #REF!

The Commission's Order in the matter of the Review petition of MSEDCL regarding (Case No 102 of 2008), stipulates that the Commission would approve the FAC to be recovered by MSEDCL in excess of existing ceiling (30.90 Paise/kWh) through FAC charge after detailed vetting of the actual FAC data on case to case basis for the period from November 2008 to February 2009. Accordingly, the approved value of unrecovered FAC at the end of June-09 allowed to be carried forward for recovery at future date, amounted to Rs. Crore #REF!

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

a) 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 dated May 31, 2008 (Case 71 of 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.

Station-wise based variable charge per unit considered for FAC based on the approved cost by the Commission is as under:

Station	Net Gen (MU)	Energy Charge as per Order Rs/kWh	Other cost considered Rs. Cr	Component of Other Charges Rs/kWh	Energy Charge as considered for FAC Rs/kWh
Khaparkheda	5483	1.28	13.77	0.03	1.25
Paras	348	1.55	2.53	0.07	1.48
Bhusawal	3004	1.91	18.50	0.06	1.85
Nasik	5612	2.06	48.22	0.09	1.97
Parli	4273	1.96	40.99	0.10	1.86
Koradi	6574	1.23	29.52	0.04	1.19
Chandrapur	15120	1.19	13.57	0.02	1.17
Uran	3844	0.76	0.72	0.00	0.76
Paras II	1592	1.28	--	--	1.28
Parli II	1592	1.47	--	--	1.47

ii) **Secondary fuel consumption :**

The Commission's clarifications on the issues of secondary fuel oil consumptions for FAC computations are as under:

- In case secondary fuel oil consumption is more than 2 ml/kWh, the same should be limited to the approved level 2 ml/kWh
- In case usage of actual secondary fuel oil consumption is less than normative value of 2 ml/kWh (or no consumption), the same should be recomputed considering the normative levels.

Accordingly, the Commission has computed the cost of secondary fuel oil consumption, Such that, the normative fuel consumption allowed for FAC vetting for the month June-09 is upto a limit value of 2 ml/kWh in combination of Fuel Oil, LDO and LSHS

The summary of fuel related costs for the month of June-09 for existing generating stations of MSPGCL as approved by the Commission after detail vetting, is shown in the Table below:

Sr No	Detail	Unit	For June-09
1	Actual Fuel Cost	Rs Crore	692.6
2	Normative Actual Fuel cost	Rs Crore	594.9
3	Net Generation	MU	3438.9
4	Approved variable cost of generation	Rs./kWh	1.37
5	Actual average variable cost of generation	Rs./kWh	2.01
6	Average Normative variable cost of generation	Rs./kWh	1.73
7	Change in variable cost of generation = {(3)X[(6)-(4)]}/10	Rs. Crore	124.1

iii) **Auxiliary consumption:**

Auxiliary consumption for all generating stations has been considered by MSEDCL at normative levels for calculation of variable cost of generation and the same is allowed.

iv) **Heat Rate:**

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

v) **Transit Loss:**

MSEDCL has worked out the variable cost of generation considering normative transit loss as approved in the APR Order dated June 20, 2008 for FY 2008-09, and the same is allowed.

b) 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 dated June 20, 2008 for FY 2008-09. However, the Commission observed that MSEDCL has not considered certain sources, which the Commission has approved in the APR Order, whenever no power was purchased from these. This has been rectified

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

The details of power purchase by MSEDCL for the month : June-09 is given below

S.No	Details	Unit	Jun-09
-1	Net Energy Purchase	MU	2,932
-2	Variable Cost of Energy purchased	Rs Crore	770.12
-3	Average Rate of energy purchased	Rs./kWh	2.63
-4	Approved Rate for Energy purchase	Rs./kWh	#REF!

c) Unscheduled Interchange (UI) Charges:

In month June-09 MSEDCL has purchased 22.31 MU through UI at average rate of Rs. (8.11) per kWh
This is allowed

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

MSEDCL has claimed losses in power purchase through grid at (248.38) MU in June-09
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.

For the month of June-09 the Commission has approved change in Variable (Fuel) Cost of Generation and Power Purchase Cost (C), of Rs #REF! Crore as submitted by MSEDCL.

d) Interest on working capital –

In the FAC submissions for the month, MSEDCL, has not made any claim for interest on working capital under Section 82.5 of MERC (Terms and Conditions of Tariff) Regulations, 2005. It is to be noted that any claim towards Interest on working capital, made as per Regulation 82.5 and substantiated with due documentation will be eligible for consideration under FAC submission.

e) Adjustment factor for over recovery / under recovery (B) –

The truing up as above is based on the performance parameters as specified in the relevant APR orders of the Commission.

In case any change in the specified parameter is approved by the Commission at a later date, based on the CPRI studies pertaining to “Determination of Achievable performance parameters of the MSPGCL Thermal power stations”, these values will be trued up accordingly at that time.

The summary of the adjustment factor for over recovery/under recovery for the month of June-09 as submitted by MSEDCL and as approved by the Commission is shown in the Tables below:

For the month of June-09

Sr. No.	Parameter	Unit	MSEDCL	Commission
(A)	(B)	(C)	(D)	
1				
1.1	Incremental cost allowed to be recovered in Month (March 2009)	Rs Lakh	14657.00	14657.44
1.2	Incremental cost in Month j-4 actually recovered in month j-2 June-09	Rs Lakh	21827	21827.15
1.3	Over-recovery/under-recovery (1.2-1.1)	Rs Lakh	-7170	(7169.71)
2	Carried forward adjustment for over-recovery/under-recovery	Rs Lakh	43399	31300.00

	attributable to application of ceiling limit			
3	Adjustment factor for over-recovery/under-recovery (1.3+2.0)	Rs Lakh	36229	24130.29

NOTE : The difference in the Row 2.0 of the above Tables is on account of the value considered by the Commission based attributable to carried forward amounts being different

f) **Distribution Loss:**

Excess Dissonance carried forward under-recovered FAC as approved by the Commission

MSEDCL has incurred 22.73% cumulative Distribution loss upto the month. As this is more than the approved 22.2%, deduction of Rs. Crore 1.08 has been made from the computed FAC amounts of the month

g. **Energy Sales for** June-09 within licensed area is 5203 MU and the same is approved by the Commission

4. **Summary** The energy sales within licence area as submitted by MSEDCL for the month The summary of the FAC amount as approved by the Commission for

June-09 is shown in the Tables below:-

Month : June 2009

Sr. No	Parameter	Unit	MSEDCL	Approved
1				
1.1	Disallowance of change in variable cost of generation corresponding to excess auxiliary consumption	Rs Lakh	-	-
1.2	Calculation of FAC (A)	Rs Lakh	-	-
	Change in weighted average variable cost of generation and power purchase after accounting for disallowance of change in variable cost corr to excess aux. consumption			
1.3	Apportionment of change in variable cost of generation and power purchase to License Area (C)	Rs Lakh	35313	#REF!
1.4	Working Capital Interest (I)	Rs Lakh	0	0
1.5	T & D Loss Adjustment for the year		0	0
1.6	Adjustment for Over Recovery/Under Recovery (B)	Rs Lakh	36229	24130
1.7	FAC (A) = C + I + B	Rs Lakh	71542	#REF!
2	Calculation of FAC/kWh			
2.1	Sale within License Area	MU	5203	5203
2.2	Excess T&D Loss	MU	0	34.98
2.3	FAC Charge (FAC/kWh) without considering cap on monthly FAC Charge	Paise/KWh	137.49	#REF!
2.4	Cap on monthly FAC charge	Paise/KWh	30.9	31
2.5	FAC Charge (FAC/kWh) considering cap on monthly FAC Charge	Rs/KWh	0.31	#REF!
3	FAC(A)			
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	16079	#REF!
3.2	FAC(A) disallowed corresponding to excess T&D Loss	Rs Lakh	0	108.08
3.3	Carried forward FAC (A) for recovery during future period	Rs Lakh	55464	#REF!

APPENDIX

MSEDCL – Assumptions/Norms as per ARR order for FY 2008-09 for MSPGCL dated May 31, 2008 and for MSEDCL June 20, 2008 respectively.

1. CAP on monthly FAC charge.

CAP on monthly FAC charge for FY 2008-09 works out to 30.90 paise per unit (10% of energy charge).

2 Summary of New Norms:

Station	Net Gen (MUs)	Energy Charge as per Order (Rs/kWh)	Energy Charge as considered for FAC \$ (Rs/kWh)	Heat rate (kcal/kwh)	Auxiliary Consumption
Khaparkheda	5483	1.28	1.25	2561	8.50%
Paras	348	1.55	1.48	3105	9.70%
Bhusawal	3004	1.91	1.85	2654	9.75%
Nasik	5612	2.06	1.97	2653	9.00%
Parli	4273	1.96	1.86	2657	9.00%
Koradi	6574	1.23	1.19	2792	9.80%
Chandrapur	15120	1.19	1.17	2551	7.80%
Uran	3844	0.76	0.76	1980	2.40%
Paras II	1592	1.28	1.28	2500	9%
Parli II	1592	1.47	1.47	2500	9%

1 Energy charge for FAC is revised as per MSPGCL with Tariff Order dated 31st May, 2008 include other charges like lubricants, chemicals, water, etc. which are excluded.

2 **T and D loss-** Approved Intra State Transmission Loss is 4.85% and Distribution Loss as per APR Order is

3 22.20%

4 Transit Loss: 0.80% for all stations