



MERC

CC: Ms AS, TPM, PG, TNR.

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
13th Floor, Centre No.1, Wold Trade Centre, Cuffe Parade, Colaba, Mumbai - 400 005.
Tel. : 022-2216 3964 / 2216 3965 / 2216 3969 ♦ Fax : 022-2216 3976 ♦ Website : www.mercindia.org.in
E-mail : mercindia@mercindia.org.in

Ref.: MERC/TPC/FAC/OCT06 – DEC06/2006-07 / 1755 13th August 2007

Tata Power Company Ltd.,
Regulations Department,
Corporate Centre,
34, Sant Tukaram Road,
Carnac Bunder,
Mumbai – 400 009.

Kind Attention: Mr JD Kulkarni, DGM

Sub: Approval of TPC Fuel Adjustment Charges (FAC) for October 2006 to December 2006.

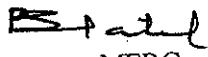
Sir,

With reference to your revised application dated 25th May 2007 in pursuance of directions in the Tariff Order dated 3rd October 2006 for F.Y. 2006-07, and subsequent correspondence on the above subject, I am directed to forward herewith the decision of the Commission (refer Annexure) for further necessary action.

The Commission has carried out the vetting of FAC amount for the months of October 2006 to December 2006, the summary of which is as under:

Particulars	Unit	Oct-06		Nov-06		Dec-06	
		TPC	COMMISSION	TPC	COMMISSION	TPC	COMMISSION
FAC (A) = C + I + B	Rs Lacs	(91.92)	(91.92)	489.31	489.31	(490.68)	(490.68)
FAC charge without considering cap on monthly FAC charge	Paise/kWh	(4.31)	(4.31)	22.74	22.74	(26.65)	(26.65)
Cap on Monthly FAC Charge	Paise/kWh	33.00	33.00	33.00	33.00	33.00	33.00
FAC Charge considering cap on monthly FAC Charge	Paise/kWh	(4.31)	(4.31)	22.74	22.74	(26.65)	(26.65)
FAC considering cap on monthly FAC Charge	Rs. Lacs	(91.92)	(91.92)	489.31	489.31	(490.68)	(490.68)
FAC disallowed corresponding to excess T&D loss	Rs. Lacs	-	-	-	-	-	-
Carried Forward FAC for recovery during future period	Rs. Lacs	-	-	-	-	-	-

Yours faithfully,


Secretary, MERC

Encl : Detailed Vetting Report

Regulations Dept
Inward No. 361
Date 16.8.07



MERC

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
13th Floor, Centre No.1, Wold Trade Centre, Cuffe Parade, Colaba, Mumbai - 400 005.
Tel. : 022-2216 3964 / 2216 3965 / 2216 3969 ♦ Fax : 022-2216 3976 ♦ Website : www.mercindia.org.in
E-mail : mercindia@mercindia.org.in

Ref.: MERC/TPC/FAC/OCT06 - DEC06/2006-07 / 1755

13th June 2007

Page 2

Cc:

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 Dnyaneshwar 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,
1st floor, Udyog Bhawan,
Civil Lines, Nagpur 440 001.

Shri A.D. Mahajan,
Senior Manager,
SICOM Limited,
Nirmal, Nariman Point,
Mumbai - 400 021.

Detailed Vetting of Fuel Adjustment Cost (FAC) charges of Tata Power Company Ltd. (TPC) for the months of October 2006 to December 2006.
Attachment to MERC letter No. /TPC/FAC/OCT06 – DEC06/2006-07 dated 13th August 2007.

1 TPC's Application for approval of FAC Charge for October 06 to December 06

As per the Tariff Order dated 3rd October 2006 and the MERC Tariff Regulations, TPC is required to obtain post facto approval of the Commission on a quarterly basis for the FAC charged. The Commission has validated the FAC for the months of October 2006 to December 2006 in accordance with the Tariff order dated 3rd October 2006.

TPC vide its letter dated 25th May 2007 had submitted the revised FAC submissions for the period October 2006 to December 2006. These submissions are in the standard formats prescribed by the Commission vide its letter dated 22nd August, 2005.

The change in methodology for arriving at FAC due to tariff order dated 3rd October 2006 is highlighted are as under –

- a. REL & BEST are now consumers of TPC-G & hence TPC-D's sales exclude energy sold to REL & BEST. The energy sale pertains to TPC-D's direct customers only.
- b. Variable cost of generation is calculated based on Net Generation instead of Gross Generation for TPC-G. As a result of this, there is no separate disallowance of FAC on account of excess auxiliary consumption. From Oct 06, Hydro generation has been charged based on the variable tariff @ Rs 2.00/kWh and Rs 1.65/kWh for peak and off-peak period generation respectively as against NIL variable charges earlier.
- c. Normative parameters of Heat Rate, Auxiliary Consumption, Transmission and Distribution loss are considered.
- d. Normative Distribution losses are considered for calculations as metering arrangement at TPC-T & TPC-D is being established and is expected to be commissioned by September 2007.
- e. Instead of T&D loss, only distribution loss is considered and excess distribution loss, if any, is disallowed.
- f. Power purchase is considered including power purchase from TPC-G.
- g. Instead of computing Variable cost of generation and Power purchase cost, it is now only Power purchase cost.



- h. The cap on the FAC rate, as per Commission's tariff order date 3rd October 2006 for TPC-Distribution Business, which is set at 10% of the average energy charge works out to be 33 paisa/kWh. The working for the cap on FAC rate for FY07 is shown in the following table –

Annual Sales as approved in TO for FY07	Mus	A	2,365.00
Energy charges as approved for H2 FY07	Rs Cr	B	387.01
Avg Energy Charges (EC) for FY07 - TPC(D)	Rs/kWh	$C=B/A*10*2$	3.27
Cap on FAC Rate (10% of Avg EC)	Rs/kWh	$D=C*0.10$	0.33

- i. The normative parameters as per tariff order dated 3rd October 06 are as under –

Sr No	Parameter	Unit	Normative Rate
1	Heat Rate –		
	Unit # 4	kCal/kWh	2560
	Unit # 5	kCal/kWh	2450
	Unit # 6	kCal/kWh	2400
	Unit # 7	kCal/kWh	2000
2	Auxiliary consumption –		
	Hydro	%	0.50
	Unit # 4	%	8.00
	Unit # 5	%	5.50
	Unit # 6	%	3.50
	Unit # 7	%	2.75
3	Distribution Loss (TOC-D)	%	2.93
4	Transmission Loss	%	4.85
5	Wtd Avg variable cost of power purchase	Rs/kWh	2.94
6	Power purchase rate from TPC-G	Rs/kWh	2.72
7	Power purchase rate from other sources	Rs/kWh	4.41



Variable cost of generation for TPC-G -

While assessing the actual variable cost of generation, the Commission has assessed unit wise variable cost of generation and weighted average variable cost of generation considering the following:-

- Change in generation mix
- Change in fuel price
- Normative operating parameters (i.e. heat rate and auxiliary consumption) as set out in the Tariff Order.

Change in generation mix:

The Commission has carried out a broad assessment of adherence to the principles of merit order dispatch by comparing fuel wise, unit wise monthly gross generation with the levels considered in the Tariff Order and seeking justification for any material variation.

Change in Fuel Price :

Actual variable cost of power generation of each unit is certified by Cost Accountant. TPC also has submitted Fuel Analysis Report of representative monthly samples of fuels certified by an Independent Certification Agencies viz M/s Geo-Chem Laboratories Pvt Ltd, Mumbai and M/s SGS India Pvt Ltd, Mumbai in support of actual fuel calorific value.

Normative Operating Parameters:

TPC has considered Unit-wise approved heat rate as per the Tariff Order dated 3rd October 2006 for computing actual Unit-wise, variable cost of generation on monthly basis and the same is allowed. TPC-G has billed its fuel cost recoverable from TPC-D, which is Rs 6292.77 lakhs (221.58 MUs) for October 06, Rs 5254.79 lakhs (193.93 MUs) for November 06 and Rs 5220.77 lakhs (191.82 MUs) for December 2006. The details are given in table no 4.1.

Variable cost of power purchase of TPC-D:

TPC-D has considered power purchase sources in addition to TPC-G. Other sources are from MSEDCL, TISCO (through TPTCL), NTPC – Kayamkulam (through MSEDCL), Arunachal Pradesh (through GEL). to meet the growing demand of license area. The details of the power purchase quantity and rate are detailed in Table 4.1.

Change in variable cost of power purchase

Change in variable cost of power purchase (Rs lakhs) has been arrived at by multiplying power purchase (MUs) with the change in weighted average cost (Rs/kWh) of power



purchase. The change in variable cost of power purchase works out to (Rs 91.92 lakhs), Rs 489.31 lakhs and (Rs 398.76 lakhs) for October 06, November 06 and December 06 respectively.

Interest on working capital –

TPC has not considered any interest on working capital due to change in prices of fuel and accordingly, the Commission has also not considered the same.

Adjustment factor for over recovery / under recovery –

While computing adjustment factor for over / under recovery “B”, TPC has taken into account the incremental cost allowed to be recovered in the month of August 2006, September 2006 and October 2006 to be actually recovered in the month of October 2006, November 2006 & December 2006 respectively. The detailed working of adjustment factor for over / under recovery is shown in Table 6.6. There is no over recovery / under recovery in October 06 as trueing-up was done upto September 06 in Tariff Order of TPC-G dated April 2, 2007 (Case No. 72 of 2006).

The Commission has also factored the carried forward adjustment for over / under recovery attributable to application of ceiling limit in the computation of component “B”.

Excess Distribution Loss –

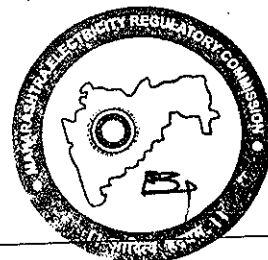
TPC-D's distribution loss of 2.93% is approved as per the tariff order date 3rd October 06 and is considered for arriving at the requirement of TPC-D. Thus there is no excess Distribution loss. As mentioned earlier, metering arrangement at TPC-T & TPC-D is being established and is expected to be commissioned by September 2007, thereafter actual distribution losses will be considered. TPC has considered allowable Distribution Loss at the normative rate of 2.93% as stipulated in the Tariff Order. There is no disallowance of FAC due to excess distribution loss for October 06 to December 06.

Calculation of FAC per unit :-

FAC per unit has been computed by considering FAC (A) for the License area, Energy sales submitted by TPC for the License area and Excess Distribution Loss. The Commission approves the FAC rate of (4.31 paise/kWh), 22.74 paise/kWh, and (26.65 paise/kWh) for the months of October, November and December 2006 respectively.

FAC charge considering monthly cap :-

FAC_{kWh} for October to December 2006 is lower than the monthly ceiling of 33 paise / kWh on FAC charge. Thus there is no carry forward FAC due to cap on monthly FAC rate.



Summary of FAC

Particulars	Unit	Oct-06		Nov-06		Dec-06	
		TPC	COMMISSION	TPC	COMMISSION	TPC	COMMISSION
FAC (A) = C + I + B	Rs Lacs	(91.92)	(91.92)	489.31	489.31	(490.68)	(490.68)
FAC charge without considering cap on monthly FAC charge	Paise/kWh	(4.31)	(4.31)	22.74	22.74	(26.65)	(26.65)
Cap on Monthly FAC Charge	Paise/kWh	33.00	33.00	33.00	33.00	33.00	33.00
FAC Charge considering cap on monthly FAC Charge	Paise/kWh	(4.31)	(4.31)	22.74	22.74	(26.65)	(26.65)
FAC considering cap on monthly FAC Charge	Rs. Lacs	(91.92)	(91.92)	489.31	489.31	(490.68)	(490.68)
FAC disallowed corresponding to excess T&D loss	Rs. Lacs	-	-	-	-	-	-
Carried Forward FAC for recovery during future period	Rs. Lacs	-	-	-	-	-	-



Table No	Title
3.1	Heat rate for Thermal generating Units
3.3	Calculation of Station/Unit wise Variable cost of Generation
4.1	Variable cost of Power Purchases
6.2	Change in Variable Cost of Power Purchases (Table 6.1 is not applicable as change in variable cost is only for power purchase as against composite cost of generation and power purchase, accordingly table 6.2 table has the references from table 4.1)
6.5	Working Capital Interest
6.6	Adjustment for Over/Under recovery
6.7	Total FAC
7.1	Calculation of per unit FAC charge
7.3	Recovery of FAC charge
8.1	Summary of FAC and FAC _{kWh}



Table 3.3
Title Calculation of Station/Unit-wise variable cost of generation (fuel cost)

Sr. No.	Generating Station/Unit ^{1,2}	Fuel Basket (FB) ^{1,2}	Order (FY)			Order for the month			Oct-06							
			Net Generation ³			Net Generation ³			Actual			Normative				
			Var. Cost ³	Var. Cost ³	Var. Cost ³	Var. Cost ³	Var. Cost ³	Var. Cost ³	Var. Cost ³	Var. Cost ³	Var. Cost ³	Var. Cost ³	Var. Cost ³			
			MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	Rs/ kWh	Rs Lakh			
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	
1.0 Generating Station/Unit wise, Fuel Basket-wise details																
	Hydro-Peak	Water	746.50	2.00	14,930.00	62.21	2.00	1,244.17	84.26	2.00	1,685.24	2.0000	1,685.24			
	Hydro-Off Peak	Water	746.50	1.65	12,317.25	62.21	1.65	1,026.44	60.95	1.65	1,005.63	1.6500	1,005.63			
	Unit # 7	Gas	1,379.00	0.74	10,204.60	114.92	0.74	850.38	119.56	0.70	840.03	0.7144	854.19			
	Unit # 6	Gas	23.00	0.90	207.00	1.92	0.90	17.25	3.11	0.82	25.47	0.8640	26.88			
	Unit # 5	Gas	-	-	-	-	-	-	-	0.90	-	0.9006	-			
	Unit # 4	Gas	-	-	-	-	-	-	-	0.94	-	0.9666	-			
	Unit # 5	Coal	3,729.00	1.47	54,816.30	310.75	1.47	4,568.03	336.76	1.40	4,704.05	1.4025	4,723.03			
	Unit # 6	Oil	2,894.00	5.38	155,697.20	241.17	5.38	12,974.77	310.83	4.69	14,569.61	4.9480	15,379.58			
	Unit # 5	Oil	159.00	5.69	9,047.10	13.25	5.69	753.93	1.46	5.14	74.77	5.1579	75.07			
	Unit # 4	Oil	168.00	6.02	10,113.60	14.00	6.02	842.80	83.87	5.36	4,496.69	5.5360	4,643.03			
2.0 Generating Station/ Unit wise summary																
	Hydro	All fuels	1,493.00	1.83	27,247.25	124.42	1.83	2,270.60	145.21	1.85	2,690.87	1.8531	2,690.87			
	Unit # 4	All fuels	168.00	6.02	10,113.60	14.00	6.02	842.80	83.87	5.36	4,496.69	5.5360	4,643.03			
	Unit # 5	All fuels	3,888.00	1.64	63,863.40	324.00	1.64	5,321.95	338.22	1.41	4,778.82	1.4187	4,798.11			
	Unit # 6	All fuels	2,917.00	5.34	155,904.20	243.08	5.34	12,992.02	313.94	4.65	14,595.07	4.9075	15,406.46			
	Unit # 7	All fuels	1,379.00	0.74	10,204.60	114.92	0.74	850.38	119.56	0.70	840.03	0.7144	854.19			
3.0 Total for all Generating Stations /Units																
	Total Generation excl FHC	All fuels	9,845.00	2.72	267,333.05	820.42	2.72	22,277.75	1,000.80	2.74	27,401.49	2.8370	28,392.66			
4.0 Generation corresponding to Utilisation of Specific Generating Station/ Unit corresponding to sale mentioned at Table 1.1, Item 3⁵																
	Contracted Power Sale outside LA															
5.0 Total for all Generating Stations/Units excl. generation reported at (4.0)																
			9,845.00	2.72	267,333.05	820.42	2.72	22,277.75	1,000.80	2.74	27,401.49	2.8370	28,392.66			



Table 3.3
Title Calculation of Station/Unit-wise variable cost of generation (fuel cost)

Sr. No.	Generating Station/Unit ^{1&2}	Fuel Basket (FB) ^{1&2}	Order (FY)			Order for the month			Nov-06						
			Net Generation ³	Var. Cost ³	Var. Cost	Net Generation ³	Var. Cost ³	Var. Cost	Net Generation ³	Actual		Normative			
										Var. Cost ³	Var. Cost	Var. Cost ³	Var. Cost	Var. Cost ³	Var. Cost
			MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	Rs/ kWh	Rs Lakh		
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)
1.0	Generating Station/Unit wise, Fuel Basket-wise details														
	Hydro-Peak	Water	746.50	2.00	14,930.00	62.21	2.00	1,244.17	59.64	2.00	1,192.81	2.00	1,192.81	1.65	638.59
	Hydro-Off Peak	Water	746.50	1.65	12,317.25	62.21	1.65	1,026.44	38.70	1.65	638.59	1.65	638.59	0.71	820.22
	Unit # 7	Gas	1,379.00	0.74	10,204.60	114.92	0.74	850.38	114.80	0.70	801.93	0.71	820.22	0.86	25.84
	Unit # 6	Gas	23.00	0.90	207.00	1.92	0.90	17.25	2.99	0.83	24.84	0.86	25.84	-	-
	Unit # 5	Gas	-	-	-	-	-	-	-	0.89	-	0.90	-	-	
	Unit # 4	Gas	-	-	-	-	-	-	-	0.94	-	0.97	-	-	
	Unit # 5	Coal	3,729.00	1.47	54,816.30	310.75	1.47	4,568.03	328.53	1.39	4,577.49	1.42	4,648.85	4.81	13,062.30
	Unit # 6	Oil	2,894.00	5.38	155,697.20	241.17	5.38	12,974.77	271.50	4.62	12,555.88	4.81	13,062.30	5.02	111.83
	Unit # 5	Oil	159.00	6.69	9,047.10	13.25	6.69	753.93	2.23	4.94	110.12	5.02	111.83	5.38	4,163.66
	Unit # 4	Oil	168.00	6.02	10,113.60	14.00	6.02	842.80	77.35	5.23	4,045.88	5.38	4,163.66	-	-
2.0	Generating Station/ Unit wise summary														
	Hydro	All fuels	1,493.00	1.83	27,247.25	124.42	1.83	2,270.60	98.34	1.86	1,831.40	1.86	1,831.40	5.38	4,163.66
	Unit # 4	All fuels	168.00	6.02	10,113.60	14.00	6.02	842.80	77.35	5.23	4,045.88	5.38	4,163.66	1.44	4,760.68
	Unit # 5	All fuels	3,888.00	1.64	63,863.40	324.00	1.64	5,321.95	330.76	1.42	4,687.61	1.44	4,760.68	4.77	13,068.14
	Unit # 6	All fuels	2,917.00	5.34	155,904.20	243.08	5.34	12,992.02	274.49	4.58	12,580.72	4.77	13,068.14	0.71	820.22
	Unit # 7	All fuels	1,379.00	0.74	10,204.60	114.92	0.74	850.38	114.80	0.70	801.93	0.71	820.22	-	-
3.0	Total for all Generating Stations /Units														
	Total Generation excl FHC	All fuels	9,845.00	2.72	267,333.05	820.42	2.72	22,277.75	895.74	2.67	23,947.53	2.75	24,664.11	-	-
4.0	Generation corresponding to Utilisation of Specific Generating Station/ Unit corresponding to sale mentioned at Table 1.1, Item 3⁵														
	Contracted Power Sale outside LA								19.83	4.69	929.33	4.69	929.33	-	-
5.0	Total for all Generating Stations/Units excl. generation reported at (4.0)														
			9,845.00	2.72	267,333.05	820.42	2.72	22,277.75	875.90	2.63	23,018.21	2.71	23,734.78	-	-



Table 3.3
Title Calculation of Station/Unit-wise variable cost of generation (fuel cost)

Sr. No.	Generating Station/Unit ^{1,2}	Fuel Basket (FB) ^{1,3}	Order (FY)			Order for the month			Dec-06					
			Net Generation ³	Var. Cost ⁴	Var. Cost	Net Generation ³	Var. Cost ⁴	Var. Cost	Actual		Normative			
									Var. Cost ⁴	Var. Cost	Var. Cost ⁴	Var. Cost		
			MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	Rs/ kWh	Rs Lakh	
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(L)	(M)	(N)	(O)	
1.0	Generating Station/Unit wise, Fuel Basket-wise details													
	Hydro-Peak	Water	746.50	2.00	14,930.00	62.21	2.00	1,244.17	63.34	2.00	1,266.82	2.00	1,266.82	
	Hydro-Off Peak	Water	746.50	1.65	12,317.25	62.21	1.65	1,026.44	41.33	1.65	681.99	1.65	681.99	
	Unit # 7	Gas	1,379.00	0.74	10,204.60	114.92	0.74	850.38	115.40	0.71	815.87	0.71	824.74	
	Unit # 6	Gas	23.00	0.90	207.00	1.92	0.90	17.25	7.05	0.83	58.81	0.86	60.97	
	Unit # 5	Gas	-	-	-	-	-	-	-	0.92	-	0.90	-	
	Unit # 4	Gas	-	-	-	-	-	-	-	0.93	-	0.97	-	
	Unit # 5	Coal	3,729.00	1.47	54,816.30	310.75	1.47	4,568.03	328.62	1.55	5,077.45	1.51	4,955.15	
	Unit # 6	Oil	2,894.00	5.38	155,697.20	241.17	5.38	12,974.77	279.16	4.62	12,903.42	4.79	13,376.16	
	Unit # 5	Oil	159.00	5.69	9,047.10	13.25	5.69	753.93	2.00	5.12	102.30	4.99	99.83	
	Unit # 4	Oil	168.00	6.02	10,113.60	14.00	6.02	842.80	81.07	5.17	4,189.35	5.36	4,346.29	
2.0	Generating Station/ Unit wise summary													
	Hydro	All fuels	1,493.00	1.83	27,247.25	124.42	1.83	2,270.60	104.67	1.86	1,948.81	1.86	1,948.81	
	Unit # 4	All fuels	168.00	6.02	10,113.60	14.00	6.02	842.80	81.07	5.17	4,189.35	5.36	4,346.29	
	Unit # 5	All fuels	3,888.00	1.64	63,863.40	324.00	1.64	5,321.95	330.62	1.57	5,179.75	1.53	5,054.98	
	Unit # 6	All fuels	2,917.00	5.34	155,904.20	243.08	5.34	12,992.02	286.21	4.53	12,962.24	4.69	13,437.13	
	Unit # 7	All fuels	1,379.00	0.74	10,204.60	114.92	0.74	850.38	115.40	0.71	815.87	0.71	824.74	
3.0	Total for all Generating Stations /Units													
	Total Generation excl FHC	All fuels	9,845.00	2.72	267,333.05	820.42	2.72	22,277.75	917.98	2.73	25,096.02	2.79	25,611.95	
4.0	Generation corresponding to Utilisation of Specific Generating Station/ Unit corresponding to sale mentioned at Table 1.1, Item 3⁵													
	Contracted Power Sale outside LA								51.58	3.89	2,005.48	3.89	2,005.48	
5.0	Total for all Generating Stations/Units excl. generation reported at (4.0)													
			9,845.00	2.72	267,333.05	820.42	2.72	22,277.75	866.40	2.67	23,090.54	2.72	23,606.47	



Table 4.1
Title: Variable cost of power purchase^{1,2,3}

Sr. No.	Power Purchase Source ²	Order (FY)						Actual						Cumulative Actual upto Order					
		Net Purchase ³		Var. Cost Amt ⁴		Net Purchase ³		FAC Rate ⁵		FAC Amt ⁶		Adjustment		Var. Cost Amt ⁴		Net Purchase ³		Var. Cost Amt ⁴	
		MU	Rs/ kWh	MU	Rs/ kWh	MU	Rs/ kWh	Rs Lakh	Rs Lakh	MU	Rs/ kWh	MU	Rs Lakh	MU	Rs/ kWh	MU	Rs Lakh	MU	Rs/ kWh
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)= (I)*(J)	(L)	(M)	(N)= (L)*(M)	(O)= (K)+(N)	(P)	(Q)	(R)	(S)=(R)/(Q)	
I. October'06																			
(1)	TPC G	2,179.68	2.72	5,928.73	2.72	221.58	2.72	6,026.88	221.58	0.12	265.89		6,292.77	2.84					
(2)	Others	304.50	4.41	1,342.85	8.21	4.41	362.26	-	-	-	-	-	362.26	4.41					
(3)	Renewable Sources	76.81	3.30	253.47	-	-	-	-	-	-	-	-	-	-					
(4)	Total	2,560.99	2.94	7,525.05	2.94	229.79	6,389.14	221.58					6,655.03	2.90					
II. November'06																			
(1)	TPC G	2,180.00	2.72	5,929.60	193.93	2.72	5,274.77	193.93	(6.01)	(19.97)			5,254.79	2.71					
(2)	Others	305.00	4.41	1,345.05	39.08	5.44	2,126.31				(36.39)		2,089.92	5.35					
(3)	Renewable Sources	77.00	3.30	254.10	-	-	-						-	-					
(4)	Total	2,562.00	2.94	7,528.75	233.00	7,401.08	193.93				(36.39)		7,344.71	3.15					
The cost of Power purchases from other sources is high due to the power purchase from NTPC, Kayamkulam at Kerala.																			
III. December'06																			
(1)	TPC G	2,180.00	2.72	5,929.60	191.82	2.72	5,217.51	191.82	0.00	3.26			5,220.77	2.72					
(2)	Others	305.00	4.41	1,345.05	7.56	3.22	243.22						243.22	3.22					
(3)	Renewable Sources	77.00	3.30	254.10	-	-	-						-	-					
(4)	Total	2,562.00	2.94	7,528.75	199.38	5,460.74					3.26		5,464.00	2.74					



Table 6.2
Title Change in Variable Cost of Power Purchase(C)

For Order

Sr. No.	Parameter	Unit	October'06	November'06	December'06
(A)	(B)	(C)			(D)
1.0	Weighted Average variable power purchase considered by the Commission (Table No.4.1 Sr. No.4.0, Col. No. (D))	Rs/kWh	2.94	2.94	2.94
2.0	Weighted Average Normative Actual variable cost of power purchase for Month & Year (Table No.4.1 Sr. No.4.0, Col. No. (P))	Rs/kWh	2.90	3.15	2.74
3.0	Change in variable cost power purchase (2.0-1.0)	Rs/kWh	(0.04)	0.21	(0.20)
4.0	Net Power Purchase (Table No.4.1 Sr. No.4.0, Col. No. (I))	MU	229.79	233.00	199.38
5.0	Change in variable cost of power purchase (3.0 x 4.0)	Rs Lakh	(91.92)	489.31	(398.76)



Table 6.5
Title Working capital Interest (I)
For Order

Sr. No.	Parameter	Unit	Value
(A)	(B)	(C)	(D)
1.0	Working capital requirement attributable to recovery of FAC component	Rs Lakh	
2.0	Interest on Working Capital	%	
3.0	Interest on Working Capital ¹	Rs Lakh	

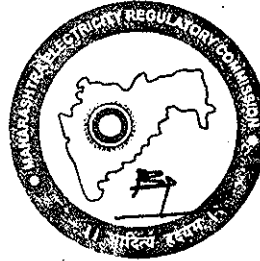


Table 6.6
Title Adjustment for Over-Recovery/Under-Recovery (B)
For Order

Sr. No.	Parameter	Unit	October'06	November'06	December'06
(A)	(B)	(C)	(D)	(E)	(F)
1.0	Adjustment for over-recovery/under-recovery ('B')				
1.1	Incremental cost allowed to be recovered in Month j-4 (October - 2006)	Rs Lakh	-	-	(91.92)
1.2	Incremental cost in Month j-4 actually recovered in month j-2 (Order)	Rs Lakh	-	-	-
1.3	over-recovery/under-recovery (1.2-1.1)	Rs Lakh	-	-	(91.92)
2.0	Carried forward adjustment for over-recovery/under-recovery attributable to application of ceiling limit	Rs Lakh	-	-	-
3.0	Adjustment factor for over-recovery/under-recovery (1.3+2.0)	Rs Lakh	-	-	(91.92)



Table 6.7
Title Total FAC(A)

For Order

Sr. No.	Parameter	Unit	October'06	November'06	December'06
(A)	(B)	(C)	(D)	(E)	(F)
1.0	Change in cost (C) (Table 6.2, Sr. No.5.0 for FAC Mechanism)	Rs Lakh	(91.92)	489.31	(398.76)
2.0	Interest on Working Capital (I) (Table 6.5, Sr. No. 3.0)	Rs Lakh	-	-	-
3.0	Adjustment factor for over-recovery/under-recovery (B) (Table 6.6, Sr. No. 3.0)	Rs Lakh	-	-	(91.92)
4.0	FAC (A) = C + I + B (1.0 + 2.0 + 3.0)	Rs Lakh	(91.92)	489.31	(490.68)



Table 7.1
Title Calculation of per unit FAC Charge
For Order

Sr. No.	Parameter	Unit	October'06	November'06	December'06
(A)	(B)	(C)			(D)
1.0	Energy Sales within License Area (Table 1.1, Sr. No.1.0)	MU	212.24	215.21	184.15
2.0	Estimated Consumption within License Area (Table 1.2, Sr. No. 4.0)	MU			
3.0	Excess T&D Loss (Table 1.4, Sr. No. 2.0)	MU			
4.0	Total FAC (Table 6.7, Sr. No. 4.0)	Rs Lakh	(91.92)	489.31	(490.68)
5.0	FAC Charge (FAC _{kWh}) without considering cap on monthly Charge (4.0/(1.0+2.0+3.0))	Paise/kWh	(4.33)	22.74	(26.65)
6.0	Cap on monthly FAC Charge				
6.1	Cap at 10% of the variable component of tariff ²	Paise/kWh	33.00	33.00	33.00
6.2	Cap at increase in CPI for a similar period	Paise/kWh	NA	NA	NA
6.3	Cap as lower of 6.1 and 6.2	Paise/kWh	(4.33)	22.74	(26.65)
7.0	FAC Charge (FAC _{kWh}) considering cap on monthly FAC Charge (lower of 5.0 and 6.3) ¹	Paise/kWh	(4.33)	22.74	(26.65)

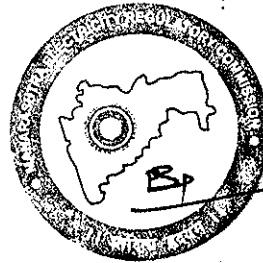


Table 7.3
Title Recovery of FAC Charge
For Order

Sr. No.	Parameter	Unit	October'06	November'06	December'06
(A)	(B)	(C)			(D)
1.0	FAC (A) Considering cap on Monthly FAC Charge (Table 7.1, Sr. No. 6.3 x (Table 7.1, Sr. No. 1.0 + Table 7.1, Sr. No. 2.0))	Rs Lakh	(91.92)	489.31	(490.68)
2.0	FAC(A) disallowed corresponding to excess T&D loss (Table 7.1, Sr. No. 7.0 x Table 7.1, Sr. No. 3.0)	Rs Lakh	-	-	-
3.0	Carried forward FAC (A) for recovery during future period (Table 7.1, Sr. No. 4.0 - 1.0 - 2.0)	Rs Lakh	-	-	-



Table 8.1
Title Summary of FAC (A) and FAC_{kwh}

For Order

Sr. No.	Parameter	Unit	October'06	November'06	December'06
(A)	(B)	(C)	(D)	(E)	(F)
1.0	Calculation of FAC (A)				
1.1	Disallowance of change in variable cost of generation corresponding to <u>excess auxiliary consumption</u>	Rs Lakh			
1.2	Change in weighted average variable cost <u>power purchase</u> after accounting for disallowance of change in variable cost corresponding to excess auxiliary consumption	Rs Lakh	(91.92)	489.31	(398.76)
1.3	Apportionment of change in variable cost of power purchase to License Area @	Rs Lakh	(91.92)	489.31	(398.76)
1.4	Working Capital Interest (I)	Rs Lakh	-	-	-
1.5	Adjustment for Over Recovery/Under Recovery (B)	Rs Lakh	-	-	(91.92)
1.6	FAC (A) = C + I + B	Rs Lakh	(91.92)	489.31	(490.68)
2.0	Calculation of FAC_{kwh}				
2.1	Sale within License Area	MU	212.24	215.21	184.15
2.2	Excess T&D Loss	MU	0.00	0.00	0.00
2.3	FAC Charge (FAC _{kwh}) without considering cap on monthly FAC Charge	Paise/kWh	(4.33)	22.74	(26.65)
2.4	Cap on monthly FAC Charge	Paise/kWh	33.00	33.00	33.00
2.5	FAC Charge (FAC_{kwh}) considering cap on monthly FAC Charge	Paise/kWh	(4.33)	22.74	(26.65)
3.0	FAC (A)				
3.1	FAC (A) considering cap on Monthly FAC Charge (Est)	Rs Lakh	(91.92)	489.31	(490.68)
3.2	FAC (A) disallowed corresponding to excess T&D loss (Est)	Rs Lakh	-	-	-
3.3	Carried forward FAC (A) for recovery during future period (Est)	Rs Lakh	-	-	-

