

# MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

13th Floor, Centre No. 1, World 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  
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**MERC**

Ref.: MERC/TPC/FAC/Jul07-Sept07/2007-08/ 718

April 1, 2008

**The Tata Power Company Ltd.,**

Regulations Department,

Corporate Centre, 'B' Block

34, Sant Tukaram Road,

Carnac Bunder,

Mumbai – 400 009

Kind Attention: Mr V H Wagle, Senior Manager

**Sub: Approval of TPC Fuel Adjustment Charges (FAC) for Jul'07 to Sept'07.**

Dear Sir,

With reference to your application dated 31<sup>st</sup> October, 2007, in pursuance of directions in the Tariff Order dated 30<sup>th</sup> April 2007 for FY 2007-08 and subsequent correspondence on the above subject, including revised submission through email dated 26<sup>th</sup> December, 2007, I am directed to forward herewith the decision of the Commission (refer Annexure) regarding approval of FAC for the period July to September 2007.

The Commission has accorded post facto approval to FAC amount of Rs. (481.92) Lakh, Rs. 14.73 Lakh and Rs. (225.77) Lakh for the months of July, August and September 2007 respectively, the details of which are as given below:

Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07

Regulations Dept  
Inward No. 84  
Date 7.4.08

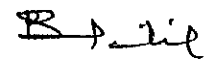
Ref.: MERC/TPC/FAC/Jul07-Sept07/2007-08/718

April 1, 2008

Particulars	Unit	July, 07		August,07		September,07	
		TPC	COMMIS SION	TPC	COMM ISSION	TPC	COMMIS SION
<b>FAC (A) = C + I + B</b>	Rs Lakh	(481.92)	(481.92)	14.73	14.73	(225.77)	(225.77)
FAC charge without considering cap on monthly FAC charge	Paise/ kWh	(22.46)	(22.46)	0.70	0.70	(10.97)	(10.97)
Cap on Monthly FAC Charge	Paise/ kWh	45.00	45.00	45.00	45.00	45.00	45.00
FAC Charge considering cap on monthly FAC Charge	Paise/ kWh	(22.46)	(22.46)	0.70	0.70	(10.97)	(10.97)
FAC Amount considering cap on monthly FAC Charge	Rs. Lakh	(481.92)	(481.92)	14.73	14.73	(225.77)	(225.77)
FAC disallowed corresponding to excess T&D loss	Rs. Lakh	-	-	-	-	-	-
<b>Carried Forward FAC for recovery during future period</b>	<b>Rs. Lakh</b>	-	-	-	-	-	-

With Regards,

Yours faithfully,



Secretary, MERC

Encl: Detailed Vetting Report

Ref.: MERC/TPC/FAC/Jul07-Sept07/2007-08/ 7 | 8

April 1, 2008

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

**Detailed Vetting of Fuel Adjustment Cost (FAC) Charges of The Tata  
Power Company Ltd. (TPC) for July, 07 to September, 07**

(Attachment to MERC letter No. /TPC/FAC/Jul07 – Sept07 2007-08 dated 1<sup>st</sup> April  
2008.)

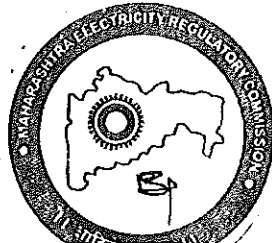
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**1 TPC's Application for approval of FAC Charge for July'07 to  
September'07**

As per the Tariff Order and the MERC (Terms and Conditions of Tariff) Regulations, 2005, TPC is required to obtain post facto approval of the Commission on a quarterly basis for the FAC charged.

The methodology for arriving at FAC is as per Tariff Order dated 30<sup>th</sup> April, 2007. The salient features for arriving at FAC are as under:

- a. Variable cost of generation is calculated based on net generation for TPC-G. The hydro generation continues to be charged based on the variable tariff @ Rs. 2.00 per kWh and Rs. 1.65 per kWh for peak and off peak period generation respectively. These charges are considered as given in the Tariff Order dated 2<sup>nd</sup> April 2007 on TPC-G MYT Petition.
- b. Normative parameters of Heat Rate, Auxiliary Consumption, Transmission and Distribution loss are considered.
- c. Normative Distribution losses are considered for calculations as metering arrangement at TPC-T & TPC-D has been established in October'07 and the determination of the actual loss is in progress and is expected to be complete by March'08.



- d. Power purchase is considered from non expensive sources of TPC-G (excluding power from Unit 4 oil and external source) and wind based generation.
- e. The cap on the FAC rate, as per the Commission's Tariff Order dated 30<sup>th</sup> April 2007 for TPC-Distribution Business, which is set at 10% of the average variable charge works out to 45 paise per kWh. The working for the cap on FAC rate for FY08 is shown in the following table:

Annual Sales for TPC-D as approved in TO for FY08	MUs	A	2933
Variable Charges as approved for FY08*	Rs. Cr.	B	1307
Average Variable charges (VC) for FY08 – TPC (D)	Rs./kWh	$C=B/A*10$	4.46
Cap on FAC Rate (10% of Avg VC)	Rs./kWh	$D=C*0.10$	0.45

\* - Variable component of tariff includes energy charge of Rs. 733 Crores and Reliability Charge of Rs. 574 Crores.

- f. The normative parameters as per the tariff order dated 30<sup>th</sup> April 2007 are as under:

Sr.No.	Parameter	Unit	Normative Rate
1.	Heat Rate		
	Unit # 4	kCal/kWh	2565
	Unit # 5	kCal/kWh	2489
	Unit # 6	kCal/kWh	2400
	Unit # 7	kCal/kWh	1971
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 (TPC-D)	%	2.93
4.	Transmission Loss	%	4.85
5.	Weighted Average variable cost of power purchase (Excl. U#4 & Expensive power)	Rs./kWh	2.76



**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 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 in support of actual fuel calorific value.

**Normative Operating Parameters:**

TPC has considered Unit-wise approved heat rate as per the Tariff Order dated 2<sup>nd</sup> April 2007 for computing actual Unit-wise, variable cost of generation on monthly basis and the same is allowed.

**Variable cost of power purchase of TPC-D:**

In addition to TPC-G, TPC-D has considered power purchase sources from the Wind Plants of TPC.

**Change in variable cost of power purchase (“C”)**

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



**Interest on working capital (“I”)**

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 (“B”)**

The adjustment factor for over / under recovery “B” has been worked out as shown in Table 6.6.

The Commission has also factored the carried forward adjustment (if applicable) 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 30<sup>th</sup> April 2007 and is considered for arriving at the requirement of TPC-D. Thus there is no excess Distribution loss.

**Calculation of FAC (“A”) and FAC per unit :-**

FAC ( $A=C+I+B$ ) has been computed at Rs. (481.92) Lakh, Rs. 14.73 Lakh and Rs. (225.77) Lakh for the months of July, August and September 2007 respectively respectively. The details are given in Table 6.7.

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 (22.46) paise/kWh, 0.70 paise/kWh, and (10.97) paise/kWh for the months of July, August and September 2007 respectively.

**FAC charge considering monthly cap: -**

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Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07



FAC<sub>kWh</sub> for July, 07 to September, 07 is lower than the cap of 45 paise / kWh on FAC charge. Thus, there is no carry forward FAC. The details are given in Table 7.1.

### Summary of FAC

The summarized details of FAC (A) & FAC per unit are given in Table 8.1. The highlights are as under –

Particulars	Unit	July, 07		August,07		September,07	
		TPC	COMMISSION	TPC	COMMISSION	TPC	COMMISSION
FAC (A) = C + I + B	Rs Lakhs	(481.92)	(481.92)	14.73	14.73	(225.77)	(225.77)
FAC charge without considering cap on monthly FAC charge	Paise/kWh	(22.46)	(22.46)	0.70	0.70	(10.97)	(10.97)
Cap on Monthly FAC Charge	Paise/kWh	45.00	45.00	45.00	45.00	45.00	45.00
FAC Charge considering cap on monthly FAC Charge	Paise/kWh	(22.46)	(22.46)	0.70	0.70	(10.97)	(10.97)
FAC considering cap on monthly FAC Charge	Rs. Lakhs	(481.92)	(481.92)	14.73	14.73	(225.77)	(225.77)
FAC disallowed corresponding to excess T&D loss	Rs. Lakhs	-	-	-	-	-	-
Carried Forward FAC for recovery during future period	Rs. Lakhs	-	-	-	-	-	-

Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07





**TPC Fuel Adjustment Charges (FAC) for July'07 to September'07.**

<b>Table No</b>	<b>Title</b>
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 Purchase
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 <sub>kWh</sub>

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Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07

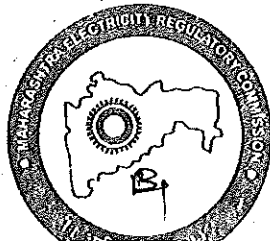


Table 31  
Title Heat Rate for Thermal Generating Station Unit

Sr. No.	Generating Station/Unit	Order	July'07				August'07				September'07		
			Heat Rate	Gross Generation	Energy Input	Heat Rate	Gross Generation	Energy Input	Heat Rate	Gross Generation	Energy Input	Heat Rate	
(A)	(B)	(C)	MU	Mvad	kcd/kWh	MU	Mvad	kcd/kWh	MU	Mvad	kcd/kWh		
(A)	(B)	(C)	(D)	(E)	(F) = (E)/(D)	(G)	(H)	(I)	(J)	(K)	(L)		
10	Unit #4	256500	7674	19374365	252477	540	1382695	259212	3680	9152101	248719		
20	Unit #5	248900	34478	88781445	257499	36579	94245666	257653	35173	88628332	254826		
30	Unit #6	240000	27549	64602757	234601	32526	75243976	231338	30903	71388397	231008		
40	Unit #7	197100	10821	22088106	204082	9549	19024851	199234	9949	19844172	199463		
Total for Thermal Generation			80622	194841672	241974	79193	188897187	239789	79706	190014508	238899		

Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07

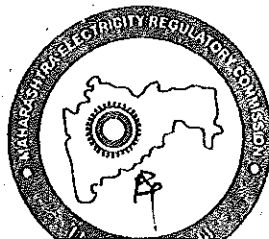


Table 3.3  
Title: Calculation of Station/Unit-wise variable cost of generation (fuel cost)

Sr. No.	Generating Station/Unit <sup>1,2</sup>	Fuel Basket (FB) <sup>1,2</sup>	Order (FY)			Order for the month			July 07				
			Net Generation <sup>3</sup>		Var. Cost <sup>3</sup>	Net Generation <sup>3</sup>		Var. Cost <sup>3</sup>	Actual			Norm	
			MU	Rs/kWh		MU	Rs/kWh		Rs Lakh	Var. Cost <sup>3</sup>	Rs Lakh		Rs/kWh
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
<b>1.0 Generating Station/Unit wise, Fuel Basket-wise details</b>													
	Hydro-Peak	Water	747.00	2.00	14,940.00	62.25	2.00	1,215.00	94.64	2.00	1,892.88	20.000	
	Hydro-CIT Peak	Water	746.00	1.65	12,309.00	62.17	1.65	1,025.75	193.68	1.65	3,195.72	1.6500	
	Unit # 7	Gas	1,399.40	0.70	9,854.57	116.62	0.70	821.21	105.62	0.73	771.49	0.7081	
	Unit # 6	Gas	36.88	0.86	318.68	3.07	0.86	26.56	3.09	0.85	26.14	0.8689	
	Unit # 5	Gas	-	0.92	-	-	0.92	-	-	0.95	-	0.9202	
	Unit # 4	Gas	-	0.97	-	-	0.97	-	-	0.96	-	0.9740	
	Unit # 5	Coal	3,337.00	1.48	49,377.59	278.08	1.48	4,114.80	316.57	1.59	5,031.20	1.5370	
	Unit # 6	Oil	3,647.99	4.71	171,827.62	304.00	4.71	14,318.97	263.69	5.46	14,396.15	5.6071	
	Unit # 5	Oil	435.40	4.99	21,719.06	36.28	4.99	1,809.92	9.42	6.14	578.59	5.9381	
	Unit # 4	Oil	861.80	5.28	45,505.63	71.82	5.28	3,792.14	70.52	6.19	4,368.00	6.2857	
	<b>Total</b>		<b>11,211.47</b>	<b>2.91</b>	<b>325,852.15</b>	<b>934.29</b>	<b>2.91</b>	<b>27,154.35</b>	<b>1,057.23</b>	<b>2.86</b>	<b>30,260.16</b>	<b>2.89</b>	
	TPC-G Non Expensive Power (Total-U#4)		10,349.67	2.71	280,316.53	862.47	2.71	23,362.21	966.72	2.62	25,892.17	2.64	
	TPC-G Non Expensive Power for IPCD (Total-U#4) *20.27%		2,097.88	2.71	56,826.24	174.82	2.71	4,735.52	200.01	2.62	5,248.34	2.64	
<b>2.0 Generating Station/ Unit wise summary</b>													
	Hydro	All fuels	1,493.00	1.83	27,249.00	124.42	1.83	2,270.75	288.32	1.76	5,088.60	1.76	
	Unit # 4	All fuels	861.80	5.28	45,505.63	71.82	5.28	3,792.14	70.52	6.19	4,368.00	6.29	
	Unit # 5	All fuels	3,772.40	1.88	71,096.65	314.37	1.88	5,924.72	326.00	1.72	5,609.79	1.66	
	Unit # 6	All fuels	3,684.87	4.67	172,146.31	307.07	4.67	14,345.53	266.78	5.41	14,422.29	5.55	
	Unit # 7	All fuels	1,599.40	0.70	9,854.57	116.62	0.70	821.21	105.62	0.73	771.49	0.71	
<b>3.0 Total for all Generating Stations/Units</b>													
	Total Generation excl FHC All fuels		11,211.47	2.905	325,852.15	934.29	2.91	27,154.35	1,057.23	2.86	30,260.16	2.8855	
<b>4.0 Generation corresponding to Utilization of Specific Generating Station/ Unit corresponding to sale mentioned at Table 1.1, Item 3<sup>5</sup></b>													
	Contracted Power Sale outside IA												
<b>5.0 Total for all Generating Stations/Units excl generation reported at (4.0)</b>													
			11,211.47	2.91	325,852.15	934.29	2.91	27,154.35	1,057.23	2.86	30,260.16	2.8855	

Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07

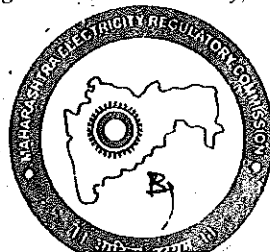


Table 3.3  
Title: Calculation of Station/Unit-wise variable cost of generation (fuel cost)

Sr. No.	Generating Station/Unit <sup>1,2</sup>	Fuel Basket (FB) <sup>1,2</sup>	Order (FY)			Order for the month			August'07					
			Net Generation <sup>3</sup>	Var. Cost <sup>3</sup>	Var. Cost	Net Generation <sup>3</sup>	Var. Cost <sup>3</sup>	Var. Cost	Net Generation <sup>3</sup>	Actual		Non		
			MU	Rs/kWh	Rs Lakh	MU	Rs/kWh	Rs Lakh	MU	Rs/kWh	Rs Lakh	Rs/kWh		
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	
<b>1.0 Generating Station/Unit wise, Fuel Basket-wise details</b>														
	Hydro-Peak	Water	747.00	2.00	14,940.00	62.25	2.00	1,245.00	56.79	200	1,135.86	200		
	Hydro-Off Peak	Water	746.00	1.65	12,309.00	62.17	1.65	1,025.75	57.53	1.65	949.32	1.65		
	Unit # 7	Gas	1,399.40	0.70	9,854.57	116.62	0.70	821.21	93.25	0.71	659.96	0.70		
	Unit # 6	Gas	36.88	0.86	318.68	3.07	0.86	26.56	25.31	0.83	209.55	0.86		
	Unit # 5	Gas	-	0.92	-	-	0.92	-	-	0.94	-	0.91		
	Unit # 4	Gas	-	0.97	-	-	0.97	-	-	0.96	-	0.97		
	Unit # 5	Coal	3,337.00	1.48	49,377.59	278.08	1.48	4,114.80	344.26	1.55	5,330.94	1.51		
	Unit # 6	Oil	3,647.99	4.71	171,827.62	304.00	4.71	14,318.97	289.96	5.46	15,845.45	5.69		
	Unit # 5	Oil	435.40	4.99	21,719.06	36.28	4.99	1,809.92	4.15	6.19	256.88	6.03		
	Unit # 4	Oil	861.80	5.28	45,505.63	71.82	5.28	3,792.14	4.99	6.35	316.59	6.38		
	Total		11,211.47	2.91	325,852.15	934.29	2.91	27,154.35	876.24	2.82	24,724.54	2.88		
	TPC-G Non Expensive Power (Total-UB4)		10,349.67	2.71	280,316.53	862.47	2.71	23,362.21	871.26	2.8015	24,407.94	2.86		
	TPC-G Non Expensive Power for TPC-D (Total-UB4)*20.27%		2,097.88	2.71	56,826.24	174.82	2.71	4,735.52	176.60	2.8015	4,947.49	2.8616		
<b>2.0 Generating Station/ Unit wise summary</b>														
	Hydro	All fuels	1,493.00	1.83	27,249.00	124.42	1.83	2,270.75	114.33	1.82	2,085.18	1.82		
	Unit # 4	All fuels	861.80	5.28	45,505.63	71.82	5.28	3,792.14	4.99	6.35	316.59	6.38		
	Unit # 5	All fuels	3,772.40	1.88	71,076.65	314.37	1.88	5,924.72	348.41	1.61	5,607.81	1.57		
	Unit # 6	All fuels	3,684.87	4.67	172,146.31	307.07	4.67	14,345.53	315.27	5.09	16,054.99	5.31		
	Unit # 7	All fuels	1,399.40	0.70	9,854.57	116.62	0.70	821.21	93.25	0.71	659.96	0.70		
<b>3.0 Total for all Generating Stations /Units</b>														
	Total Generation excl HFC All fuels		11,211.47	2.906	325,852.15	934.29	2.91	27,154.35	876.24	2.82	24,724.54	2.88		
<b>4.0 Generation corresponding to Utilisation of Specific Generating Station/ Unit corresponding to sale mentioned of Table 1.1, Item 3<sup>5</sup></b>														
	Contracted Power Sale outside LA													
<b>5.0 Total for all Generating Stations/Units excl. generation reported of (4.0)</b>														
			11,211.47	2.91	325,852.15	934.29	2.91	27,154.35	876.24	2.82	24,724.54	2.88		

Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07

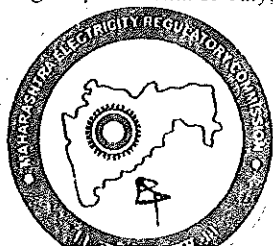


Table 3.3  
Title: Calculation of Station/Unit-wise variable cost of generation (fuel cost)

Sr. No.	Generating Station/Unit <sup>1,2</sup>	Fuel Basket (FB) <sup>1,2</sup>	Order (FY)			Order for the month			September'07			
			Net Generation <sup>3</sup>		Var. Cost <sup>3</sup>	Net Generation <sup>3</sup>		Var. Cost <sup>3</sup>	Actual		No	
			MU	Rs/KWh	Rs Lakh	MU	Rs/KWh	Rs Lakh	MU	Rs/KWh	Rs Lakh	Rs/KWh
			(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
1.0	Generating Station/Unit wise, Fuel Basket-wise details											
	Hydro-Peak	Water	747.00	2.00	14,940.00	6225	2.00	1,245.00	5225	2.00	1,045.10	2.00
	Hydro-Off Peak	Water	746.00	1.65	12,309.00	6217	1.65	1,025.75	4559	1.65	752.19	1.65
	Unit # 7	Gas	1,399.40	0.70	9,854.57	11662	0.70	821.21	9728	0.71	687.88	0.70
	Unit # 6	Gas	36.88	0.86	318.68	307	0.86	26.56	2600	0.83	214.98	0.86
	Unit # 5	Gas	-	0.92	-	-	0.92	-	-	0.93	-	0.91
	Unit # 4	Gas	-	0.97	-	-	0.97	-	-	0.93	-	0.97
	Unit # 5	Coal	3,337.00	1.48	49,377.59	27808	1.48	4,114.80	33271	1.60	5,325.49	1.57
	Unit # 6	Oil	3,647.99	4.71	171,827.62	30400	4.71	14,318.97	27332	5.51	15,061.73	5.75
	Unit # 5	Oil	435.40	4.99	21,719.06	3528	4.99	1,809.92	139	6.20	86.00	6.09
	Unit # 4	Oil	861.80	5.28	45,505.63	7182	5.28	3,792.14	3408	6.20	2,114.64	6.44
	Total		11,211.47	2.91	325,852.15	93429	2.91	27,154.35	86263	2.93	25,288.01	3.00
	TPC-G Non Expensive Power (Total-U#4)		10,349.67	2.71	280,346.53	86247	2.71	23,362.21	83855	2.80	23,173.37	2.86
	TPC-G Non Expensive Power for TPCD (Total-U#4)*20.27%		2,097.88	2.71	56,826.24	17482	2.71	4,735.52	1,6795	2.7969	4,697.24	2.8633
2.0	Generating Station/ Unit wise summary											
	Hydro	All fuels	1,493.00	1.83	27,249.00	12442	1.83	2,270.75	9784	1.84	1,797.28	1.84
	Unit # 4	All fuels	861.80	5.28	45,505.63	7182	5.28	3,792.14	3408	6.20	2,114.64	6.44
	Unit # 5	All fuels	3,772.40	1.88	71,096.65	31437	1.88	5,924.72	33410	1.62	5,411.49	1.59
	Unit # 6	All fuels	3,684.87	4.67	172,146.31	30707	4.67	14,345.53	29933	5.10	15,276.71	5.32
	Unit # 7	All fuels	1,399.40	0.70	9,854.57	11662	0.70	821.21	9728	0.71	687.88	0.70
3.0	Total for all Generating Stations/Units											
	Total Generation excl FHC All fuels		11,211.47	2.906	325,852.15	93429	2.91	27,154.35	86263	2.93	25,288.01	3.00
4.0	Generation corresponding to Utilization of Specific Generating Station/ Unit corresponding to sale mentioned at Table 1.1, Item 3 <sup>5</sup>											
	Contracted Power Sale outside LA											
5.0	Total for all Generating Stations/Units excl. generation reported at (4.0)											
			11,211.47	2.91	325,852.15	93429	2.91	27,154.35	86263	2.93	25,288.01	3.00

Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07

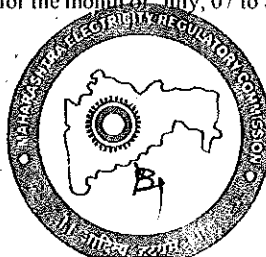


Table 4.1  
Title: Variable cost of power purchase<sup>1411</sup>

Sr. No.	Power Purchase Source <sup>2</sup>	Order (FY08)			Order for Month			Net Purchase <sup>3</sup>	Tariff <sup>4</sup>	PP Amt <sup>7</sup>	FAC Unit <sup>5</sup>
		Net Purchase <sup>3</sup>	Var. Cost <sup>2</sup>	Var. Cost Amt <sup>4</sup>	Net Purchase <sup>3</sup>	Var. Cost <sup>5</sup>	Var. Cost Amt <sup>4</sup>				
		MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh				
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)= (I)*(J)	(L)
<b>I. July</b>											
(1)	TPC-G	2097.88	2.71	56.826	174.82	2.71	4,735.52	200.01	2.6425	5285.17	
(2)	Others										
(3)	Renewable Sources	127.20	3.54	4,500	10.60	3.54	375.00	21.34	3.5364	754.73	
(2)	<b>Total</b>	<b>2225.08</b>	<b>2.7561</b>	<b>61,326.24</b>	<b>185.42</b>	<b>2.76</b>	<b>5,110.52</b>	<b>221.35</b>	<b>2.7287</b>	<b>6,039.90</b>	
<b>II. August</b>											
(1)	TPC-G	2097.88	2.71	56.826	174.82	2.71	4,735.52	176.60	2.8616	5,053.63	
(2)	Others										
(3)	Renewable Sources	127.20	3.54	4,500	10.60	3.54	375.00	20.77	3.5335	734.01	
(2)	<b>Total</b>	<b>2225.08</b>	<b>2.7561</b>	<b>61,326.24</b>	<b>185.42</b>	<b>2.76</b>	<b>5,110.52</b>	<b>197.38</b>	<b>2.9323</b>	<b>5,787.65</b>	
<b>III. September</b>											
(1)	TPC-G	2097.88	2.71	56.826.24	174.82	2.71	4,735.52	167.95	2.8633	4,808.87	
(2)	Others										
(3)	Renewable Sources	127.20	3.54	4,500.00	10.60	3.54	375.00	9.47	3.5301	334.37	
(2)	<b>Total</b>	<b>2225.08</b>	<b>2.75614</b>	<b>61,326</b>	<b>174.82</b>	<b>2.71</b>	<b>4,735.52</b>	<b>177.42</b>	<b>2.8989</b>	<b>5,143.26</b>	

Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07

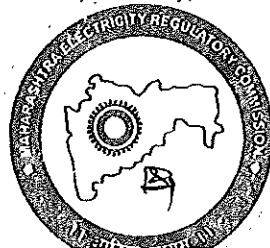


Table 42  
Title Change In Variable Cost of Power Purchase(C)

For September'07

Sr. No.	Parameter	Unit	July'07	August'07	September'07
(A)	(B)	(C)	(D)	(E)	(F)
1.0	Weighted Average variable power purchase considered by the Commission (Table No.41 Sr. No.40, Col. No. (D))	Rs/kWh	27561	27561	27561
2.0	Weighted Average Normative Actual variable cost of power purchase for Month & Year (Table No.41 Sr. No.40, Col. No. (P))	Rs/kWh	27287	29323	28989
3.0	Change in variable cost power purchase (2.0-1.0)	Rs/kWh	(0.0275)	0.1762	0.1428
4.0	Net Power Purchase (Table No.4.1 Sr. No.40, Col. No. (I))	MU	221.35	197.38	177.42
5.0	Change in variable cost of power purchase (3.0x 4.0)	Rs Lakh	(60.79)	347.70	253.29

Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07

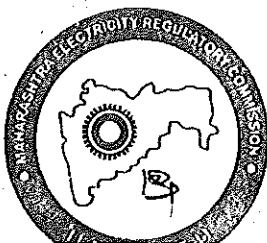
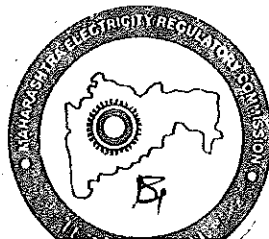


Table 6.5  
Title Working capital Interest (I)

For September'07

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 <sup>1</sup>	Rs Lakh	

Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07





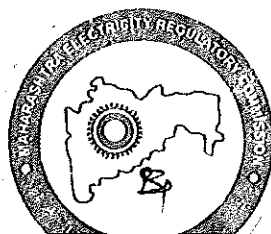
6.6

Adjustment for Over-Recovery/Under-Recovery (B)

September'07

Parameter	Unit	July'07	August'07	September'07
(B)	(C)	(D)	(E)	(F)
<b>Adjustment for over-recovery/under-recovery ('B')</b>				
Incremental Cost Allowed to be Recovered in the month j-4	Rs Lakh	565.92	29.08	(481.92)
Incremental cost in Month j-4 actually recovered in month j-2 (September'07)	Rs Lakh	987.05	362.05	(2.86)
over-recovery/under-recovery (1.2-1.1)	Rs Lakh	(421.13)	(332.97)	(479.06)
Carried forward adjustment for over-recovery/under-recovery attributable to application of ceiling limit	Rs Lakh	-	-	
<b>Adjustment factor for over-recovery/under-recovery (1.3+2.0)</b>	<b>Rs Lakh</b>	<b>(421.13)</b>	<b>(332.97)</b>	<b>(479.06)</b>

Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07

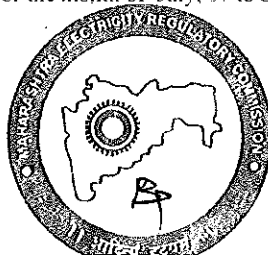


**Table 6.7**  
**Title Total FAC(A)**

For September'07

Sr. No.	Parameter	Unit	July07	August'07	September'07
(A)	(B)	(C)	(D)	(E)	(F)
1.0	Change in cost (C) (Table 6.2, Sr. No.5.0 for FAC Mechanism )	Rs Lakh	(60.79)	347.70	253.29
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	(421.13)	(332.97)	(479.06)
4.0	FAC (A) = C+I+ B(1.0+2.0+3.0)	Rs Lakh	(481.92)	14.73	(225.77)

Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07



**Table 7.1**  
**Title Calculation of per unit FAC Charge**

For September'07

Sr. No.	Parameter	Unit	July'07	August'07	September'07
(A)	(B)	(C)	(D)	(E)	(F)
1.0	Energy Sales within License Area (Table 1.1, Sr. No.1.0)	MU	214.52	211.77	205.86
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	(481.92)	14.73	(225.77)
5.0	FAC Charge (FAC <sub>kWh</sub> ) without considering cap on monthly Charge (4.0/(1.0+2.0+3.0))	Paise/kWh	(22.46)	0.70	(10.97)
6.0	Cap on monthly FAC Charge				
6.1	Cap at 10% of the variable component of tariff <sup>2</sup>	Paise/kWh	45.00	45.00	45.00
6.2	Cap as lower of 6.1 and 6.2	Paise/kWh	(22.46)	0.70	(10.97)
7.0	FAC Charge (FAC <sub>kWh</sub> ) considering cap on monthly FAC Charge (lower of 5.0 and 6.3) <sup>1</sup>	Paise/kWh	(22.46)	0.70	(10.97)

Detailed vetting & approval of FAC charges for the months of July, 07 to Sept.07



**Table 7.3**  
**Title Recovery of FAC Charge**

**For September07**

Sr. No.	Parameter	Unit	July'07	August'07	September'07
(A)	(B)	(C)	(D)	(E)	(F)
1.0	FAC (A) Considering cap on Monthly FAC Charge (Table 7.1, Sr. No. 6.2 x (Table 7.1, Sr. No. 1.0 + Table 7.1, Sr. No. 2.0))	Rs Lakh	(481.92)	14.73	(225.77)
2.0	FAC (A) disallowed corresponding to excess I&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	-	-	-

Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07



8.1  
Summary of FAC (A) and FAC<sub>kWh</sub>

June'07

Parameter	Unit	July'07	August'07	September'07
(B)	(C)	(G)	(H)	(I)
<b>Calculation of FAC (A)</b>				
Change in weighted average variable cost <u>power purchase</u>	Rs Lakh	(60.79)	347.70	253.29
Working Capital Interest (I)	Rs Lakh			
Adjustment for Over Recovery/Under Recovery (B)	Rs Lakh	(421.13)	(332.97)	(479.06)
<b>FAC (A) = C + I + B</b>	Rs Lakh	<b>(481.92)</b>	<b>14.73</b>	<b>(225.77)</b>
<b>Calculation of FAC<sub>kWh</sub></b>				
Sale within License Area	MU	214.52	211.77	205.86
Excess T&D Loss	MU			
FAC Charge (FAC <sub>kWh</sub> ) without considering cap on monthly FAC Charge	Paise/kWh	(22.46)	0.70	(10.97)
Cap on monthly FAC Charge	Paise/kWh	45.00	45.00	45.00
<b>FAC Charge (FAC<sub>kWh</sub>) considering cap on monthly FAC Charge</b>	<b>Paise/kWh</b>	<b>(22.46)</b>	<b>0.70</b>	<b>(10.97)</b>
<b>FAC (A)</b>				
FAC (A) considering cap on Monthly FAC Charge (Est)	Rs Lakh	(481.92)	14.73	(225.77)
FAC (A) disallowed corresponding to excess T&D loss (Est)	Rs Lakh	-	-	-
Carried forward FAC (A) for recovery during future period (Est)	Rs Lakh	-	-	-

Detailed vetting & approval of FAC charges for the month of July, 07 to Sept.07

