

The Managing Director,
 Maharashtra State Electricity Distribution Company Ltd.,
 5th Floor, Prakashgad, Plot No. G-9,
 Bandra (East),
 Mumbai – 400 051.

Sub : Levy of Fuel Adjustment Charges (FAC) by MSEDCL for the month of June 2006 to be recovered in the month of September 2006.

Ref : 1) MSEDCL Letter No. SE/TRC/28364 dated 28.08.2006.
 2) MSEDCL Letter No. SE/TRC/31103 dated 13.09.2006.

Sir,

Upon vetting, the FAC calculations for the month of June 2006 submitted vide letter under above reference 1 and submission of audited billed details vide letter under reference 2, the Commission hereby approves the FAC for the month of June 2006 to be recovered in the month of September 2006. Please find below the details of approval.

2. The Commission has considered the increase in power purchase cost for the month of June 2006 only in case of approved power purchase sources as per the Tariff Order dated 10th March 2004 and in line with the Commission's vetting report dated 6th July 2006 approving FAC for the month of April 2006 of MSEDCL.

3. The Commission hereby allows FAC amount of Rs.107.70 crore to be recovered @ FAC rate of 25 paise/unit (for metered sale) for June 2006 to be billed in the month of September 2006 and is as detailed below: -

Sr No	Particulars	Unit	As per MSEDCL	Allowed by Commission
1.	FAC of June 2006 net of excess T&D Loss	Rs. Crore	240.53	107.70
2.	FAC rate to be billed in the month of September 2006	Paise/unit	56	25
3.	FAC rate (unmetered)	Rs/hp/month		
	-LT-Ag (>1300 hours per year)	Rs/hp/month	51.00	23.00
	-LT-Ag (<1300 hours per year)	Rs/hp/month	41.00	19.00

Continued...

4. Further the fuel analysis report submitted vide letter SE/TRC/30676 dated September 08, 2006 by MSEDCL has not been validated in absence of certification by an Independent Certification Agency as directed by the Commission. The Commission hereby directs you to resubmit it along with FAC submission for the next month.

With regards,

Yours faithfully,

(Ms. Malini Shankar)
Secretary, MERC

Encl : Detailed Vetting Report (40 pages)

Cc:

Prayas Energy Group,
Amrita Clinic, Athawale Corner,
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The President,
Mumbai Grahak Panchayat,
Grahak Bhavan,
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The General Secretary,
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Plot No.P-14, MIDC,
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The President,
Vidarbha Industries Association,
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Shri A.D. Mahajan,
Senior Manager,
SICOM Limited,
Nirmal, Nariman Point,
Mumbai – 400 021.

Detailed Vetting Report

MSEDCL, FAC Charges for the period June, 2006.

Attachment to letter No. MERC/MSEDCL/FAC/1874 dated 14th September 2006

1. The Commission vide its letter dated 24th February 2006 has approved FAC charges for the month of September 2005 based on the Tariff Order dated 10th March 2004 and MERC (Terms and Conditions of Tariff) Regulations 2005. In the said letter, the Commission has approved variable fuel cost to be considered for FAC calculations as against the variable cost of generation indicated in the Tariff Order.
2. Further, the Commission has issued a detailed Order in the matter of MSEDCL petition for review of regulations relating to FAC Formula dated 21st March, 2006, salient features of which are as below: -
 - i) The Commission has directed to consider the normative fixed cost as 69.6 paise / kWh based on the tariff order for FY. 2003-04 for arriving at the per unit variable cost for the sources of power purchase for which break up of fixed and variable cost is not available. The Commission has directed to deduct this normative fixed cost from the total cost per unit for the sources for which break up is not available such as Traders, bi-lateral sources, TPC and CPT, while estimating the change in fuel cost to be recovered through FAC.
 - ii) The Commission to approve the FAC to be recovered by MSEDCL in excess of existing ceiling (20 paise / unit) on recovery through FAC charge after detailed vetting of the actual FAC data on case to case basis till the Commission issues the order on ARR and Tariff of MSEDCL for FY. 2006-07.

3. The Commission had not considered the power purchase from sources like Kawas (liquid fuel), NVVN, Adani, Sardar Sarovar and Pench under power purchase cost while carrying out vetting of FAC for the month of April 2006 as informed by the Commission vide its letter dated 6th July 2006. The Commission had also not considered the power purchase cost from Kawas (Liquid), Adani, NVVN, RGPPL, Lanco, Sardar Sarovar, Pench as the cost is higher than the cost of supply in terms of the Order of the Commission dated 28th April 2006 and in terms of the MERC (Terms & Conditions of Tariff) Regulations 2005 as informed by the Commission vide its letter dated 9th August 2006.
4. MSEDCL vide its letter dated 28th August 2006 has forwarded FAC submissions for the month of June 2006 with a charge @ 56 paise/unit for metered sales. The Commission has carried out vetting for June 2006 on the basis of ...
- Tariff Order dated 10th March 2004
 - MERC (Terms and Conditions of Tariff) Regulations 2005
 - Vetting reports for the months of September 2005 to May 2006
 - Commission's Order dated 21st March 2006 in the matter of MSEDCL's petition for review of Regulations relating to FAC formula (Case 52 of 2005)
 - Commission's Order dated 28th April 2006 in the matter of MSEDCL's petition for approval of short term power purchase for the period April to June 2006 (Case 3 of 2006)
5. **Analysis of FAC proposal submitted by MSEDCL and computation of FAC charges for June 2006 is as below:**
- i) **Variable Cost of Generation:**
- a. MSEDCL has made the FAC submissions for the June, 2006 in the Standard Formats prescribed by the Commission vide its letter dated 28th August, 2005

b. MSEDCL has submitted the break up of purchase price of raw materials for all stations certified by CA.

c. Variable Fuel Cost :

MSEDCL has considered the base variable fuel cost for each station as given by the Commission in its letter dated 24th February 2006. MSEDCL has submitted sample bills for the fuel purchased along with the FAC submissions.

MSEDCL vide its letter SE/TRC/31103 dated September 13,2006 has submitted fuel analysis report of six generating stations that are not validated because it has not been certified by an Independent Certification Agency as directed by the Commission vide its letter dated 5th May 2006 and 1st June 2006. The Commission directs you to resubmit the same with next FAC submission.

The Commission directs MSEDCL to submit the fuel analysis report of representative monthly sample of fuels certified by an Independent Certification Agency along with FAC submissions for all the stations in future.

d. Auxiliary consumption:

MSEDCL has taken auxiliary consumption at each unit at normative levels for calculation of variable cost of generation and the same is allowed.

e. Heat Rate:

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

f. Transit Loss:

MSEDCL has worked out the variable cost of generation considering normative transit loss.

ii) Variable cost of power purchase –

a. MSEDCL has purchased 2110 MU's with a variable cost of Rs.434.94 crore (after deduction of fixed cost @0.696 Rs./unit in case of sources where the fixed costs are not available) at avg. rate of Rs.2.0612/unit as against estimated 1349 MU's with a variable cost of Rs.161.37 crore @ Rs.1.20 /unit. Thus, the units purchased have increased by 56% whereas the purchase cost has increased by 170% for June, 2006. The major increase in cost is due to the power purchase from Kawas Unit at very high rates.

b. MSEDCL has not submitted the Long Term Power Procurement Plan. MSEDCL has considered cost of power purchase from Korba, Vindhyachal I & II, Kawas (Gas & Liquid), Gandhar, Kakrapar, Tarapur, Eastern Region, Tata Power (Trading), Power Trading Corporation, Adani, NVVN, Tata N.P., Sardar Sarovar, Pench, RGPPL, Lanco, JSW PTCL, Non Conventional Sources and Captive Power Plants under Power Purchase Cost. The cost of power purchase from Captive Power Plants is allowed, as the avg. rate of purchase of Rs.2.75/unit is lower than the avg. cost of supply of Rs.2.83/- per unit in terms of the Regulations 25.6 of MERC (Terms & Conditions of Tariff) Regulations 2005. **However, the power purchase cost from Kawas (Liquid), Adani, NVVN, TataN.P., Sardar Sarovar, RGPPL, Lanco, Pench, JSW PTCL is higher than the cost of supply and has not been allowed in terms of the Order of the Commission dated 28th April, 2006 and in terms of the MERC (Terms & Conditions of Tariff) Regulations 2005.**

c. Considering the severe power shortage faced by MSEDCL partly due to shut down of the Unit 5 of Chandrapur station, the energy purchased by MSEDCL other than from Kawas (Liquid), Adani, NVVN, TataN.P., Sardar Sarovar, RGPPL, Lanco, Pench, JSW PTCL and cost thereof for June 2006 is allowed.

d. MSEDCL has submitted the data for the power purchase certified by Chartered Accountant except the data relating to Sardar Sarovar, Pench, RGPPL, Grid Losses, Non Conventional Sources of Energy (NCSE) and Captive Power Plant. The Commission expresses its displeasure in MSEDCL not submitting the audited power purchase statements from Renewable Source. **The Commission directs MSEDCL to submit future FAC submissions along with audited power purchase statements for power purchased from Renewable Source of Power and Captive Power Plants.**

e. As directed by the Commission in its order dated 21st March, 2006, MSEDCL has deducted normative fixed cost of 69.60 paise / unit from the actual total cost per unit from the sources where break up of fixed cost and variable is not available.

f. The wind power purchase rate is taken as Rs.3.46 / unit and hydropower rate is taken as Rs.2.45/ unit as per the respective orders. The cost of power purchase from bagasse is taken as Rs.3.24/- per unit. The Commission has allowed the cost for power purchase from Non Conventional Sources of Energy (NCSE) and CPP as claimed by MSEDCL.

g. UI charges:

MSEDCL has purchased 145 MU's through UI at average rate of Rs.2.44/ unit and the same are allowed.

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

MSEDCL has claimed losses in power purchase through grid at 109 MU's as the difference between the Scheduled Energy (including UI) and Actual Drawal.

Accordingly, the Commission has considered the losses in the grid as given by MSEDCL.

Considering above, the Commission has approved change in Variable (Fuel) Cost of Generation and Power Purchase Cost of Rs. 220.27 crore as against Rs. 314.17 crore as submitted by MSEDCL.

- iii) **Interest on working capital** – MSEDCL has not considered interest on incremental working capital requirement on account of change in fuel and power purchase costs and accordingly the same is not considered in the FAC.
- iv) **Adjustment factor for over recovery / under recovery (B)** –

The Commission has observed that MSEDCL has taken into account the T&D Loss of Rs. 38.93 crore which was actually disallowed by Commission vide its letter dated 1st June, 2006 (vetting of FAC for March 06). **This should be avoided in future.** MSEDCL has billed an amount of Rs. 503.07 crore in the month of June 2006 and has worked out Rs. 73.64 crore as adjustment for FAC as over recovery.

The Commission considered allowable FAC for March 2006 as net of excess T & D loss and adjusted against the actual FAC billing in June 2006 (actual FAC billing figures as submitted by MSEDCL). The over recovery of FAC works out to Rs.112.57 crores (FAC allowed net of T&D loss for March 2006 as Rs.390.50 lacs less FAC actually billed in June 2006 as Rs.503.07 lacs).

- v) **T & D Loss:** The actual T&D loss is 25.43% for June 2006 as against the approved norm of 26.87% and hence there is no excess T&D loss in the month of June 2006.

The Commission has arrived at recoverable FAC of Rs.107.70 crore (net of T&D loss) @ 25 paise/unit for June 2006 to be billed in the month of September, 2006. The summary of FAC is given below and the details are as per the Tables 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.1a, 2.2, 2.2b, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.3a, 4.1, 6.1, 6.2, 6.5, 6.6, 6.7, 7.1, 7.3 and 8.1.

Calculation of FAC charge for the month of June 2006:

Sr. No.	Parameter	Units	June 2006	
			As per MSEDCL	As per Commission
	Calculation of FAC			
1	Normative Variable Fuel Cost of generation	Rs./unit	1.27	1.27
2	Normative Variable Fuel Cost of power purchase	Rs./unit	2.06	1.74
3	Normative Variable Fuel cost of generation and power purchase	Rs./unit	1.57	1.43
5	Change in Variable Fuel cost of generation and power purchase	Rs./unit	0.57	0.43
6	Net Generation	Mus	3425	3425
7	Net power purchase	MUs	2110	1750
8	Net Generation + Net power purchase	MUs	5535	5175
9	Change in Variable Fuel cost of generation and power purchase	Crore	314.17	220.27
10	Working capital interest (I)	Crore	0.00	0.00
11	Adjustment of (over recovery) / under recovery (B)	Crore	(73.64)	(112.57)
12	Total FAC (9+10+11)	Crore	240.53	107.70
	FAC liable sale			
13	Sale within License Area	MUs	4282	4282
14	Excess T & D losses	MUs	-	-
15	Sale within License Area and Excess T & D losses	MUs	4282	4282
	FAC Charge without considering cap	Paise/unit	56	25
16	FAC(A) allowed	Rs.crore	240.53	107.70
17	FAC(A) disallowed corresponding to excess loss	Rs.crore	-	-

Table	1.1					
Title	Energy Sales					
Sr. No.	Consumer Category	Unit	FY 03-04	Jun-06		
			Order	Order	Actual	Reasons for material variation
(A)	(B)	(C)	(D)	(E)	(F)	(G)
1.0	Energy Sales in License Area¹					
	Domestic	MU	8,781	732	719	
	Non-Domestic	MU	1,954	163	193	
	LTP-G	MU	3,640	303	133	
	PWW	MU	481	40	32	
	Agriculture-Metered	MU	894	75	453	
	Street Lighting	MU	635	53	44	
	Temporary	MU	-	-	2	
	HTP-I	MU	6,644	554	454	
	HTP-II	MU	6,217	518	1,235	
	HTP-III&IV (PWW)	MU	1,031	86	92	
	HTP-V (Railway)	MU	980	82	103	
	HTP-VI	MU	310	26	34	
	HTP-VII (Agriculture)	MU	582	49	37	
	Mula Pravara	MU	667	56	50	
	Others	MU			19	
	Inter state	MU	-	-	0	
	Subtotal	MU	32,816	2,735	3,600	
2.0	Energy Sales outside License Area excluding Energy Sales reported at (3)					
	Consumer 1	MU				
	Consumer 2	MU				
	...	MU				
	Consumer 'n'	MU				
	Subtotal	MU	-	-	-	
3.0	Energy Sales corresponding to specific utilisation of a particular Unit/Station² as per Order	MU				
4.0	Total Energy Sales (1.0 + 2.0 + 3.0)	MU	32,816	2,735	3,600	
5.0	Total Energy Sales excluding Energy Sales corresponding to specific utilisation of a particular Unit/Station as per Order (1.0 + 2.0)	MU	32,816	2,735	3,600	

Table 1.2								
Title								
Sr. No.	Consumer Category¹	FY 2003-2004 (Order)			Jun-06			
		Load	Norm²	EC_{UM}³	Order	Load	EC_{UM}³	Reasons for material variation
		HP	hrs/ HP/ Year	MU	MU	HP	MU	
(A)	(B)	(F)	(F)	(D)	(E)	(G)	(H)	(I)
1.0	Unmetered Hrs>1300	2660698	1458	2413	201		239	
1.1	Unmetered Hrs<1300	4497468	1188	4480	373		443	
	Total	7158166	2646	6893	574		682	

Table	1.3					
Title	Energy Availability					
Sr. No.	Source of Generation/Power Purchase	Unit	FY 03-04	Jun-06		
			Order	Order	Actual	Reasons for material variation
(A)	(B)	(C)	(D)	(E)	(F)	(G)
1.0	Generation¹					
1.1	Capacity	MW				
	Khaparkheda	MW	840	840	840	
	Paras	MW	58	58	58	
	Bhusawal	MW	478	478	478	
	Nasik	MW	910	910	910	
	Parli	MW	690	690	690	
	Koradi	MW	1,080	1,080	1,080	
	Chandrapur	MW	2,340	2,340	2,340	
	Gas Thermal	MW	912	912	852	Unit No.1 of 60 MW is scrapped.
	Hydel Stations	MW	2,430	2,430	2,349	
	Subtotal	MW	9,738	9,738	9,597	
1.2	Availability					
	Khaparkheda	%	92%	92%	97%	
	Paras	%	94%	94%	100%	
	Bhusawal	%	89%	89%	85%	
	Nasik	%	95%	95%	82%	
	Parli	%	97%	97%	97%	
	Koradi	%	87%	87%	83%	
	Chandrapur	%	93%	93%	63%	
	Gas Thermal	%	55%	55%	100%	
	Hydel Stations	%				
	Subtotal	%				
1.3	PLF					
	Khaparkheda	%	81%	81%	95%	
	Paras	%	75%	75%	95%	
	Bhusawal	%	74%	74%	75%	
	Nasik	%	65%	65%	74%	
	Parli	%	65%	65%	92%	
	Koradi	%	69%	69%	72%	
	Chandrapur	%	83%	83%	58%	
	Gas Thermal	%	51%	51%	62%	
	Hydel Stations	%				
	Subtotal	%				

Table	1.3					
Title	Energy Availability					
Sr. No.	Source of Generation/Power Purchase	Unit	FY 03-04	Jun-06		
			Order	Order	Actual	Reasons for material variation
(A)	(B)	(C)	(D)	(E)	(F)	(G)
1.4	Gross Generation	MU				
	Khaparkheda	MU	5,979	498	578	
	Paras	MU	382	32	40	
	Bhusawal	MU	3,113	259	259	
	Nasik	MU	5,143	429	488	
	Parli	MU	3,918	327	457	
	Koradi	MU	6,542	545	557	
	Chandrapur	MU	16,984	1,415	976	
	Gas Thermal	MU	4,058	338	382	
	Hydel Stations	MU	4,104	342	208	
	Subtotal	MU	50,223	4,185	3,945	
1.5	Auxiliary Consumption	MU				
	Khaparkheda	MU	508	42	51	
	Paras	MU	37	3	4	
	Bhusawal	MU	311	26	26	
	Nasik	MU	463	39	43	
	Parli	MU	380	32	43	
	Koradi	MU	641	53	56	
	Chandrapur	MU	1,291	108	81	
	Gas Thermal	MU	97	8	8	
	Hydel Stations	MU	25	2	2	
	Subtotal	MU	3,753	313	314	
1.6	Net Generation (1.4-1.5)	MU				
	Khaparkheda	MU	5,471	456	526	
	Paras	MU	345	29	36	
	Bhusawal	MU	2,802	234	233	
	Nasik	MU	4,680	390	445	
	Parli	MU	3,538	295	415	
	Koradi	MU	5,901	492	501	
	Chandrapur	MU	15,693	1,308	895	
	Gas Thermal	MU	3,961	330	374	
	Hydel Stations	MU	4,079	340	206	
	Subtotal	MU	46,470	3,873	3,631	

Table 1.3						
Title Energy Availability						
Sr. No.	Source of Generation/Power Purchase	Unit	FY 03-04	Jun-06		
			Order	Order	Actual	Reasons for material variation
(A)	(B)	(C)	(D)	(E)	(F)	(G)
2.0	Net Power Purchase²	MU				
	Korba	MU	4,501	375	356	
	Vindhyanchal - I	MU	2,727	227	272	
	Vindhyanchal - II	MU	2,081	173	254	
	Kawas - Gas	MU	457	38	120	
	Kawas - Liquid	MU	-	-	0	
	Gandhar	MU	818	68	127	
	Kakrapar	MU	1,772	148	77	
	Tarapur 1-4	MU	1,187	99	170	
	Eastern Region	MU	108	9	75	
	Tata Power (Trading)	MU	104	9	14	
	Power Trading Corp	MU	2,127	177	108	
	Adani	MU			44	
	NVVN	MU			4	
	RETL	MU			-	
	Tata N.P.	MU		-	0	
	Dodson	MU			-	
	Sardar Sarovar	MU			53	
	Pench	MU			5	
	RGPPL	MU			251	
	Lanco	MU			0	
	JSW PTCL				2	
	Received in grid through Imports from various regions & Loss	MU			(109)	
	Unscheduled Interchange (UI)	MU			145	
	Power Purchase from wind generating units	MU		-	128	
	Power Purchase from other renewable sources of generation (Hydro)	MU	300	25	-	
	Power Purchase from Bagasse	MU		-	1	
	Power Purchase from captive	MU		-	9	
	Subtotal	MU	16,182	1,349	2,110	
3.0	Energy Available	MU				
3.1	Gross Generation + Net Power Purchase (1.4+2.0)	MU	66,405	5,534	6,055	
3.2	Net Generation + Net Power Purchase (1.6+2.0)	MU	62,652	5,221	5,742	
3.3	Net Energy Available at transmission voltage	MU	62,652	5,221	5,742	
3.4	Net Energy Available at distribution voltage	MU			5,420	

Table	1.4					
Title	T&D Loss					
Sr. No.	Parameter	Unit	FY 03-04	Jun-06	Actual	Reasons for material variation
(A)	(B)	(C)	(D)	(E)	(F)	(H)
1.0	Transmission and Stepdown Loss¹					
1.1	Net Energy Input at transmission voltages (Net Generation + Net Purchase)	MU			5742	
1.2	Energy Sales at transmission voltages	MU			0	
1.3	Energy fed to Distribution System	MU			5420	
1.4	Transmission and Stepdown Loss (1.1 - 1.2 - 1.3)	MU			321	
1.5	Transmission and Stepdown Loss as % of Net Energy Input (1.4 / 1.1)	%			5.60%	
2.0	Distribution Loss¹					
2.1	Net Energy Input (input from Transmission System + net energy input at distribution voltages)	MU	-	-	5420	
2.2	Energy Sales (Metered) at distribution voltages	MU			3600	
2.3	Estimated Consumption for Unmetered Categories	MU			682	
2.4	Distribution Loss (2.1 - 2.2 - 2.3)	MU			1138	
2.5	Distribution Loss as % of net energy input (2.4 / 2.1)	%			21.00%	
3.0	Transmission and Distribution (T&D) Loss					
3.1	Net Energy Input (i.e. Net Generation + Net Power Purchase)	MU			5,742	
3.2	Energy Sales (Metered + Unmetered) (1.2+2.2+2.3)	MU			4,282	
3.3	T&D Loss (3.1 - 3.2)	MU			1,460	
3.4	T&D Loss as % of Net Energy Input (3.3 / 3.1)	%	26.87%	26.87%	25.43%	
4.0	Excess T&D Loss = T&D Loss (3.3) - T&Dapp x Net Energy Input (3.1)	MU			-	

Table	1.5		
Title	Excess Auxiliary Consumption		
Sr. No.	Parameter	Unit	Jun-06
(A)	(B)	(C)	(D)
1.0	Actual Auxiliary Consumption (Table 1.3, Sr. No. 1.5)		
	Khaparkheda	MU	51.33
	Paras	MU	4.02
	Bhusawal	MU	26.03
	Nasik	MU	43.03
	Parli	MU	42.53
	Koradi	MU	55.77
	Chandrapur	MU	80.96
	Gas Thermal	MU	7.97
	Hydel Stations	MU	2.17
	Subtotal	MU	313.80
2.0	Actual Auxiliary Consumption %		
	Khaparkheda	%	8.89%
	Paras	%	10.16%
	Bhusawal	%	10.04%
	Nasik	%	8.82%
	Parli	%	9.30%
	Koradi	%	10.01%
	Chandrapur	%	8.29%
	Gas Thermal	%	2.08%
	Hydel Stations	%	1.04%
	Actual Auxiliary Consumption for all Generating Stations	%	7.95%

Table	1.5		
Title	Excess Auxiliary Consumption		
Sr. No.	Parameter	Unit	Jun-06
(A)	(B)	(C)	(D)
3.0	Normative Auxiliary Consumption¹		
	Khaparkheda	MU	49.09
	Paras	MU	3.84
	Bhusawal	MU	25.91
	Nasik	MU	43.88
	Parli	MU	44.36
	Koradi	MU	54.60
	Chandrapur	MU	74.20
	Gas Thermal	MU	9.17
	Hydel Stations	MU	1.25
	Normative Auxiliary Consumption for all Generation Stations	MU	306.31
4.0	Excess Auxiliary Consumption²		
	Khaparkheda	MU	2.24
	Paras	MU	0.18
	Bhusawal	MU	0.11
	Nasik	MU	(0.86)
	Parli	MU	(1.83)
	Koradi	MU	1.16
	Chandrapur	MU	6.77
	Gas Thermal	MU	(1.21)
	Hydel Stations	MU	0.92
	Subtotal	MU	7.49

Table	2.1				
Title	Fuel Calorific Value				
Sr. No.	Station/Unit	Parameter	Unit	FY	Jun-06
				Order	Actual
(A)	(B)	(C)	(D)	(E)	(F)
1.0		Calorific value of constituents of Fuel Basket specified at (2.0)			
		Coal - Raw Coal	kcal/Kg		-
		Coal - Washed Coal	kcal/Kg		-
		Coal - Imported Coal	kcal/Kg		-
		Coal - Blended Coal	kcal/Kg		3,622
		Oil - LDO	kcal/Kl		10,611
		Oil - HSD	kcal/Kl		-
		Oil - FO	kcal/Kl		10,448
		Oil - LSHS	kcal/Kl		10,485
		Gas	Kcal/SM ³		8,706
2.0		Calorific value of Fuel Basket specified in the Tariff Order			
		Fuel Basket 1	kcal/qty		N.A.
		Fuel Basket 2	kcal/qty		N.A.
		...	kcal/qty		
		Fuel Basket 'n'	kcal/qty		N.A.

Table	2.1a												
Title	Fuel Calorific Value												
Sr. No.	Station	Parameter	Unit	FY	Month & Year	For the month of June 2006							
(A)	(B)	(C)	(D)	Order	Actual	(E)	(F)						
1.0	MAHA GENCO STNs	Calorific value of constituents of Fuel Basket specified at (2.0)				K'Kheda	Paras	Bhusawal	Nasik	Parli	Koradi	Cha'pur	Total Average
		Coal - Raw Coal	kcal/kg				3990	3877			3892	3058	
		Coal - Washed Coal	kcal/kg								4617	4250	
		Coal - Imported Coal	kcal/kg					6651	6680				
		Coal - Blended Coal	kcal/kg			3750	3990	3703	3985	3560	3831	3313	3622
		Oil - LDO	kcal/ltr			10555	10300	10970	10860	10450	10682	10572	10611
		Oil - HSD	kcal/ltr										0
		Oil - FO	kcal/ltr			10235	10150	10470	10690	10350	10460	10132	10448
		Oil - LSHS	kcal/ltr								10484		10485
		Gas (Uran Station)	Kcal/SM^3										8706

Table 2.2																						
Title Fuel Inventory																						
For the month June 2006																						
Sr. No.	Station	Fuel ¹	Unit of Qty	Opening Level			Purchase 2 during May 2006			Available at Plant Boundary ² during May 2006				Consumption during June 2006						Closing Inventory		
				Qty	Value	Rate	Qty	Value	Rate	Transit Loss	Qty at Plant Boundary	Issued to	Qty	Qty	Value	Price	Price	Qty	Value	Rate		
				MT	Rs Lakh	Rs/Qty	MT	Rs Lakh	Rs/Qty	QTY.MT	VALUE (Rs.Lakhs)	MT	QTY. MT	VALUE (Rs.Lakhs)	MT	Mkcal	Rs Lakh	Rs/Qty	Rs/ Mkcal	MT	Rs Lakh	Rs/MT
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(K1)	(L) = (H)-(K)	L1	L2	(M)	(N)	(O)	(P)	(Q)	(R)=(E)+(L)-(M)	(S)=(F)+(I)-(O)	(T)
	MAHAGENCO - Coal Based Stations	Coal - Raw Coal	MT	1304456	16972	1301	2101037	29972	1427	20817	332	2080220	0	0	1930573	0	27643	1432	0	1454103	18969	1305
		Coal - Washed Coal	MT	0	0	0	412749	6622	1604	0	0	412749	0	0	412749	0	6622	1604	0	0	0	0
		Coal - Imported Coal	MT	105805	4175	3946	132931	4513	0	0	132931	0	0	126224	146007	4558	3611	0	0	112512	4130	3670
		Subtotal		1410261	21147	1499	2646716	41107	1553	20817	332	2625900	0	0	2469546	8971494	38823	1572	433	1566615	23099	1474
		Oil - LDO	KL	12075	3441	28494	1601	484	30213	0	0	1601	0	0	1238	11204	363	29300	3237	12438	3562	28635
		Oil - HSD	KL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Oil - FO	KL	17663	3477	19687	4784	1146	23963	0	0	4784	0	0	3544	34549	722	20376	2090	18902	3901	20639
		Oil - LSHS	KL	2167	488	22537	0	0	0	0	0	0	0	0	529	4994	119	22538	2388	1638	369	22537
		Subtotal		31906	7406	23214	6384	1630	25530	0	0	6384	0	0	5311	50747	1204	22671	2373	32978	7832	23749
		Other charges as per 2.2b		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total - Coal	0		28553			42737		20817	332		0	0	9022241	40359		451		30931		
	Gas Based Station	Fuel¹	Unit of Qty	Qty	Value	Rate	Qty	Value	Rate	Transit Loss	Qty at Plant Boundary	Issued to	Qty	Qty	Value	Price	Price	Qty	Value	Rate		
				MM ^{^3}	Rs Lakh	Rs/SM ^{^3}	MM ^{^3}	Rs Lakh	Rs/SM ^{^3}	MM ^{^3}	Rs Lakh	MM ^{^3}	Mkcal	Rs Lakh	MM ^{^3}	Mkcal	Rs Lakh	Rs/SM ^{^3}	Rs/Mkcal	MM ^{^3}	Rs Lakh	Rs/SM ^{^3}
	Uran Gas Station	Total - Gas	MMCM D	0	0	0	85.64	3007.03	3.51	0	0	0	0	0	86	745570	3007.03	3.51	403	0	0	0
	MAHAGENCO - TOTAL	TOTAL - Coal & Gas			28553			45744							9767812	43367				30931		

Table	2.2.b Supplementary sheet													
Title	Purchase price break u													
	For the month of June 2006													
Sr. No.	Station	Fuel ¹	Purchase price of Fuel as Indicated in Supplier's Invoice											
			Quantity Purchase	Base Price	Transportation	Insurance	Local Transportation	Taxes	Duties SED	Royalty Charges	Others STC	Others	Others	Total Value
				Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh
1	K'kheda	Coal - Raw Coal	323068.72	2371.77	1117.46	0.00	0.00	111.02	32.31	236.67	134.86	0.00	0.00	4004.09
		Coal - Washed Coal	3640.00	22.29	17.19	0.00	0.00	1.03	0.45	2.96	0.00	0.00	5.69	49.61
		Coal - Imported Coal	77228.95	1320.62	341.35	3.86	551.41	96.54	83.79	0.00	0.00	110.44	2.70	2510.71
		Total Coal	403937.67	3714.68	1476.00	3.86	551.41	208.59	116.55	239.63	134.86	110.44	8.39	6564.41
		Oil - LDO												0.00
		Oil - HSD												0.00
		Oil - FO	1511.69	307.09	15.68			40.35						363.12
		Oil - LSHS												
		Total Oil	1511.69	307.09	15.68	0.00	0.00	40.35	0.00	0.00	0.00	0.00	0.00	363.12

Break up not given

For the month of June 2006

Sr. No.	Station	Fuel ¹	Purchase price of Fuel as Indicated in Supplier's Invoice											
			Quantity Purchase	Base Price	Transportation	Insurance	Local Transportation	Taxes	Duties SED	Royalty Charges	Others STC	Others	Others	Total Value
				Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh
1	Paras	Coal - Raw Coal	31367.70	351.32	50.16			15.62	3.14	26.66	9.41			456.31
		Coal - Washed Coal												
		Coal - Imported Coal												
		Total Coal	31367.70	351.32	50.16	0.00	0.00	15.62	3.14	26.66	9.41	0.00	0.00	456.31
		Oil - LDO	0	0				0				0		0.00
		Oil - HSD												0.00
		Oil - FO	215	35.22	0			5.12	5.75					46.09
		Oil - LSHS												
		Total Oil	215.00	35.22	0.00	0.00	0.00	5.12	5.75	0.00	0.00	0.00	0.00	46.09

Purchase price of Fuel as Indicated in Supplier's Invoice																
Sr. No.	Station	Fuel ¹	Quantity Purchase	Base Price	Transportation	Insurance	Local Transportation	Taxes	Duties SED	Royalty Charges	Others STC	Others	Others	Total Value		
				Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh		
1	Bhusawal	Coal - Raw Coal	183033.86	1948.52	713.85			87.25	17.93	155.58	59.24	0.00	0.00	2982.37		
		Coal - Washed Coal													0.00	
		Coal - Imported Coal	6878.25	145.82	90.10	0.34		11.17	11.18	0.00	0.69	29.44	1.72		290.46	
		Total Coal	189912.11	2094.34	803.95	0.34	0.00	98.42	29.11	155.58	59.93	29.44	1.72		3272.83	
		Oil - LDO													0.00	
		Oil - HSD													0.00	
		Oil - FO													0.00	
		Oil - LSHS														0.00
		Total Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

For the month of June 2006

Purchase price of Fuel as Indicated in Supplier's Invoice																
Sr. No.	Station	Fuel ¹	Quantity Purchase	Base Price	Transportation	Insurance	Local Transportation	Taxes	Duties SED	Royalty Charges	Others STC	Others	Others	Total Value		
				Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh		
1	Nasik	Coal - Raw Coal	327049.70	3456.69	2113.54			154.62	32.70	277.99	98.11			6133.65		
		Coal - Washed Coal													0.00	
		Coal - Imported Coal	10493.15	213.53	93.39	0.52	25.29	15.93	15.71			46.10	3.67		414.14	
		Total Coal	337542.85	3670.22	2206.93	0.52	25.29	170.55	48.41	277.99	98.11	46.10	3.67		6547.79	
		Oil - LDO													0.00	
		Oil - HSD													0.00	
		Oil - FO													0.00	
		Oil - LSHS														0.00
		Total Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

For the month of June 2006														
Sr. No.	Station	Fuel ¹	Purchase price of Fuel as Indicated in Supplier's Invoice											
		Quantity Purchase	Base Price	Transportation	Insurance	Local Transportation	Taxes	Duties SED	Royalty Charges	Others STC	Others	Others	Others	Total Value
			Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh
1	Parli	Coal - Raw Coal	279419.44	2786.96	1524.04	0.00	0.00	127.92	27.94	250.22	132.90	0.00	0.00	4849.98
		Coal - Washed Coal												
		Coal - Imported Coal	38330.23	655.45	218.48	1.92	0.00	49.92	44.08	0.00	205.93	120.74	1.34	1297.86
		Total Coal	317749.67	3442.41	1742.52	1.92	0.00	177.84	72.02	250.22	338.83	120.74	1.34	6147.84
		Oil - LDO						0.00						0.00
		Oil - HSD												
		Oil - FO	1549.11	323.10	0.00			40.39	0.00					363.49
		Oil - LSHS												
		Total Oil	1549.11	323.10	0.00	0.00	0.00	40.39	0.00	0.00	0.00	0.00	0.00	363.49

For the month of June 2006														
Sr. No.	Station	Fuel ¹	Purchase price of Fuel as Indicated in Supplier's Invoice											
		Quantity Purchase	Base Price	Transportation	Insurance	Local Transportation	Taxes	Duties SED	Royalty Charges	Others STC	Others	Others	Others	Total Value
			Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh
1	Koradi	Coal - Raw Coal	371233.52	2406.39	1749.03	0.00	137.51	117.67	37.12	297.33	47.86	15.00	0.00	4807.91
		Coal - Washed Coal	82523.65	484.83	363.27	0.00	30.95	25.42	10.31	67.05	42.29	128.94	0.00	1153.06
		Coal - Imported Coal												
		Total Coal	453757.17	2891.22	2112.30	0.00	168.46	143.09	47.43	364.38	90.15	143.94	0.00	5960.97
		Oil - LDO	1600.65	423.39	15.43			53.76	0.00	0.00	0.00		-8.98	483.60
		Oil - HSD		0.00	0.00				0.00	0.00	0.00			0.00
		Oil - FO	0.00	0.00	0.00			0.00	0.00	0.00	0.00		0.00	0.00
		Oil - LSHS	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Total Oil	1600.65	423.39	15.43	0.00	0.00	53.76	0.00	0.00	0.00	0.00	-8.98	483.60

Table	2.2.b Supplementary sheet													
Title	Purchase price break up													
	For the month of June 2006													
Sr. No.	Station	Fuel ¹	Purchase price of Fuel as Indicated in Supplier's Invoice											
		Quantity Purchase	Base Price	Transportation	Insurance	Local Transportation	Taxes	Duties SED	Royalty Charges	Others STC	Others	Others	Others	Total Value
			Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh
1	C'pur	Coal - Raw Coal	585863.67	5511.33	244.67	0.00	0.00	249.75	58.59	497.98	175.76	0.00		6738.08
		Coal - Washed Coal	326585.45	3995.20	268.06	0.00	0.00	176.14	32.66	277.60	97.98	571.62		5419.26
		Coal - Imported Coal												
		Total Coal	912449.12	9506.53	512.73	0.00	0.00	425.89	91.25	775.58	273.74	571.62	0.00	12157.34
		Oil - LDO												0.00
		Oil - HSD		0.00	0.00			0.00	0.00	0.00	0.00			0.00
		Oil - FO	1507.79	315.99	16.07			41.51	0.00	0.00	0.00			373.57
		Oil - LSHS												
		Total Oil	1507.79	315.99	16.07	0.00	0.00	41.51	0.00	0.00	0.00	0.00	0.00	373.57

Table	2.2.b Supplementary sheet													
Title	Purchase price break up													
	For the month of June 2006													
Sr. No.	Station	Fuel ¹	Purchase price of Fuel as Indicated in Supplier's Invoice											
		Quantity Purchase	Base Price	Transportation	Insurance	Local Transportation	Taxes	Duties SED	Royalty Charges	Others STC	Others	Others	Others	Total Value
			Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh
1	TOTAL - COAL STNS	Coal - Raw Coal	2,101,036.61	18,832.98	7,512.75	-	137.51	863.85	209.73	1,742.43	658.14	15.00	-	29,972.39
		Coal - Washed Coal	412,749.10	4,502.32	648.52	-	30.95	202.59	43.42	347.61	140.27	700.56	5.69	6,621.93
		Coal - Imported Coal	132,930.58	2,335.42	743.32	6.64	576.70	173.56	154.76	-	206.62	306.72	9.43	4,513.17
		Total Coal	2646716.29	25,670.72	8,904.59	6.64	745.16	1,240.00	407.91	2,090.04	1,005.03	1,022.28	15.12	41,107.49
		Oil - LDO	1,600.65	423.39	15.43	-	-	53.76	-	-	-	-	(8.98)	483.60
		Oil - HSD	-	-	-	-	-	-	-	-	-	-	-	-
		Oil - FO	4,783.59	981.40	31.75	-	-	127.37	5.75	-	-	-	-	1,146.27
		Oil - LSHS	-	-	-	-	-	-	-	-	-	-	-	-
		Total Oil	6384.24	1,404.79	47.18	-	-	181.13	5.75	-	-	-	(8.98)	1,629.87

Table	2.2.b Supplementary sheet													
Title	Purchase price break up													
	For the month of June 2006													
Sr. No.	Station	Fuel ¹	Purchase price of Fuel as Indicated in Supplier's Invoice											Total Value
			Base Price	Service charges	Insurance	Additional service charges	Taxes	Duties	Royalty Charges	Rebate	Others	Others		
			Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh
1	URAN GAS STATION	Gas	2987.06	5.81	0.00	42.70	334.86	0.00	27.40	390.05	5.82	0.12		3,014
		Total Coal	2,987	6	-	43	335	-	27	390	6	0		3,014

Summary of Purchase for URAN GAS station for the month of Apr 2006												
Fuel supplied	Name of Supplier	As per Invoice				As per Payment Advise			As booked in Accounts			
		Price	Qty	Rate	Value	Qty	Rate	Value	Qty	Rate	Value	
Gas	M/s.Gail (contract dated 10.02.98)	3,200	85.64	3200.00	3013.71	85.64	3200.00	3007.03	85.64	3200.00	3,007	
Total			86		3,014	86		3,007	86		3,007	

Table 2.3								
Title	Fuel Cost							
Sr. No.	Station	Fuel Basket	Unit of Qty	Order for FY		Jun-06		
				Consumption¹	Fuel price¹	Consumption¹	Fuel price¹	Reasons for material variation
				Unit	Rs/Unit	Unit	Rs/Unit	
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
	MAHAGENCO	Coal - Raw Coal	MT			1930573	1432	
		Coal - Washed Coal	MT			412749	1604	
		Coal - Imported Coal	MT			126224	3611	
		Coal - Blended Coal	MT			2469546	1572	
		Oil - LDO	KL			1238	29300	
		Oil - HSD	KL			0	0	
		Oil - FO	KL			3544	20376	
		Oil - LSHS	KL			529	22538	
		Gas	MM^3			86	3007	
		Total						

Table	2.4				
Title	Fuel Consumption by Various Generating Station/ Unit				
Sr. No.	Generating Station/Unit	Unit for Qty	Fuel Basket (FB) ¹	Jun-06	
				Consumption	Consumption
				Qty	Mkcal
(A)	(B)	(C)	(D)	(E)	(F)
	Fuel consumption by Generating Station/Unit				
	Khaperkheda		Coal	396364	1486366
	Khaperkheda		Oil	446	4103
	Total		All fuels²	396810	1490469
	Paras		Coal	31682	126411
	Paras		Oil	20	183
	Total		All fuels²	31702	126594
	Bhusawal		Coal	183498	679493
	Bhusawal		Oil	1037	10107
	Total		All fuels²	184535	689600
	Parli		Coal	341133	1214433
	Parli		Oil	650	6199
	Total		All fuels²	341783	1220632
	Nasik		Coal	323146	1287738
	Nasik		Oil	856	8488
	Total		All fuels²	324002	1296226
	Koradi		Coal	429056	1643714
	Koradi		Oil	1532	14541
	Total		All fuels²	430588	1658255

Table	2.4				
Title	Fuel Consumption by Various Generating Station/ Unit				
Sr. No.	Generating Station/Unit	Unit for Qty	Fuel Basket (FB) ¹	Jun-06	
				Consumption	Consumption
				Qty	Mkcal
(A)	(B)	(C)	(D)	(E)	(F)
	<u>Fuel consumption by</u>				
	<u>Generating Station/Unit</u>				
	Chandrapur		Coal	764666	2533338
	Chandrapur		Oil	771	7135
	Total		All fuels²	765437	2540474
	Uran		Gas	86	745570
	Total		All fuels²	86	745570
	<u>Fuel-wise subtotal of</u>				
	<u>consumption</u>				
	Total fuel consumption		Coal	2469546	8971494
	Total fuel consumption		Oil	5311	50755
	Total fuel consumption		Gas	86	745570
	Total		All fuels²	2474943	9767820

Table	2.5											
Title	Transit Loss on Fuel											
Sr. No.	Generating Station¹	Fuel¹	Order FY	Jun-06								
			Transit Loss	Despatch²	Receipt³	Transit Loss	Actual Transit Loss	Normative Transit Loss actual	Adjtd Transit Loss Qty	Transit Loss after including Adjtd Loss	Transit Loss after including Adjtd Loss	Reasons for material variation
			%	Qty	Qty	%	Rs.Lacs	Rs.Lacs	MT	%	Rs.Lacs	
(A)	(B)		(C)	(D)	(E)	(F) = ((D)-(E))/(D)					(G)	
	Khaparkhed a		1.45%	403938	401847	0.52%	20.95	58.69	0	0.52%	20.95	
	Paras		2.58%	31368	30750	1.97%	8.98	11.77	0	1.97%	8.98	
	Bhusawal		0.98%	189912	185843	2.14%	65.25	29.84	0	2.14%	65.25	
	Nasik		0.96%	337543	332212	1.58%	97.47	59.25	0	1.58%	97.47	
	Parli		2.40%	317750	312423	1.68%	93.45	133.78	0	1.68%	93.45	
	Koradi		1.47%	453757	451978	0.39%	28.35	106.28	0	0.39%	28.35	
	Chandrapur		1.72%	912449	910847	0.18%	17.72	173.56	0	0.18%	17.72	
	Total Thermal			2646716	2625900		332.17	573.18	0.00		332.17	

Table	3.1					
Title	Heat Rate for Thermal Generating Station/Unit					
Sr. No.	Generating Station/Unit¹	Order FY	Jun-06			
		Heat Rate	Gross Generation	Energy Input	Heat Rate	Reasons for material variation
		kcal/ kWh	MU	Mkcal	kcal/ kWh	
(A)	(B)	(C)	(D)	(E)	(F) = (E)/(D)	(G)
	Khaparkheda	2725	578	1490469	2,581	
	Paras	3200	40	126594	3,197	
	Bhusawal	2735	259	689600	2,661	
	Nasik	2663	488	1296226	2,658	*
	Parli	2649	457	1220632	2,669	*
	Koradi	2996	557	1658255	2,976	
	Chandrapur	2502	976	2540474	2,602	
	Gas Thermal	1966	382	745570	1,950	
	Total for Thermal Generation		3,737	9767820	2,614	

Table	3.2					
Title	Secondary Oil Consumption for Thermal Generating Station/Unit					
Sr. No.	Generating Station/Unit¹	Order (FY)	Jun-06			
		Secondary Oil Consumption	Gross Generation	Secondary Oil Consumption	Secondary Oil Consumption	Reasons for material variation
		ml/kWh	MU	kl	ml/kWh	
(A)	(B)	© *	(D)	(E)	(F) = (E)/(D)	(G)
	Khaparkheda		578	446	0.77	
	Paras		40	20	0.49	
	Bhusawal		259	1037	4.00	
	Nasik		488	856	1.76	
	Parli		457	650	1.42	
	Koradi		557	1532	2.75	
	Chandrapur		976	771	0.79	
	Gas Thermal		-	-		-Not Applicable
	Total for Thermal Generation		3,355	5,311	1.58	

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 Month & Year					Jun-06				Normative Actual Var. Cost ⁴ for June 2006		
				Var. Cost ³	Var. Cost	Genera ³	Var. Cost ³	Var. Cost	Genera ³	Reasons for Material Variation	Var. Cost ³	Var. Cost	Genera ³	Var. Cost ³	Var. Cost
			MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	MU		Rs/ kWh	Rs Lakh	MU	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														
2.0	Generating Station/Unit wise summary														
	Khaparkheda		5471	0.9162	50125.3	456	0.9162	4,177	526		1.12	5,880	526	1.18	6,222
	Paras		345	1.2063	4161.74	29	1.2063	347	36		1.38	493	36	1.39	494
	Bhusawal		2802	1.0721	30040.2	234	1.0721	2,503	233		1.70	3,952	233	1.73	4,023
	Nasik		4680	1.3188	61719.8	390	1.3188	5,143	445		1.53	6,804	445	1.53	6,790
	Parli		3538	1.2278	43439.6	295	1.2278	3,620	415		1.60	6,634	415	1.60	6,653
	Koradi		5901	1.1695	69012.2	492	1.1695	5,751	501		1.21	6,059	501	1.23	6,164
	Chandrapur		15693	0.7023	110212	1,308	0.7023	9,184	895		1.18	10,538	895	1.14	10,205
	Gas Thermal		3961	0.6742	26705.1	330	0.6742	2,225	374		0.80	3,007	374	0.81	3,041
	Total	All fuels	42391	0.9328	395416	3,533	0.9328	32,951	3,425		1.27	43,367	3,425	1.27	43,592

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 Month & Year			Jun-06				Normative Actual Var. Cost ⁴ for June 2006		
				Var. Cost ³	Var. Cost	Generation ³	Var. Cost ³	Var. Cost	Generation ³	Reasons for Material Variation	Var. Cost ³	Var. Cost	Generation ³	Var. Cost ³	Var. Cost
			MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	MU		Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)
3.0	Total for all Generating Stations/Units														
	Total Generation excl FHC	All fuels													
	Fuel Handling Cost (FHC)														
	Generation including FHC														
4.0	Generation corresponding to Utilisation of Specific Generating Station/Unit corresponding to sale mentioned at Table 1.1, Item 3⁵														
	Generating Station/Unit 'n'	FB ..													
5.0	Total for all Generating Stations/Units excl. generation reported at (4.0)		42391	0.93	395416	3533	0.93	32951	3425	0	1.27	43367	3425	1.27	43592

Sheet 3.3a									
Calculation of Normative Variable Cost of Generating Stations									
A. Thermal Stations	K'kheda	Paras	Bhusawal	Nasik	Parli	Koradi	C'pur	Total for Coal	Uran (Gas)
Actual Gross Generation (MU)	578	40	259	488	457	557	976	3,355	382
Approved Auxiliary Consumption%	8.50%	9.70%	10.00%	9.00%	9.70%	9.80%	7.60%		2.40%
Net Generation (MU)	528	36	233	444	413	503	902	3,059	373
Actual Generation Cost (Rs lakhs)	5,880	493	3,952	6,804	6,634	6,059	10,538	40,359	3,007
Less: Transit Loss after Adjustment	21	9	65	97	93	28	18	332	-
Add: Normative Transit Loss (Rs.Lakhs)	59	12	30	59	134	106	174	573	-
Actual Adjusted Gen Cost (Rs.Lakhs)	5,917	496	3,917	6,766	6,674	6,137	10,694	40,600	3,007
Actual Quantity delivered (MT)	403,938	31,368	189,912	337,543	317,750	453,757	912,449	2,646,716	
Avg coal purchase price (Rs/MT)	1,625	1,455	1,723	1,940	1,935	1,314	1,332		
Actual Transit Loss (MT)	2,091	618	4,069	5,331	5,327	1,779	1,602	20,817	
Actual Heat Input (MKcal)	1,490,469	126,594	689,600	1,296,226	1,220,632	1,658,255	2,540,474	9,022,249	745,570
Actual Fuel Cost (Rs/MkCal)	397	391	568	522	547	370	421	450	403
Base Variable Cost (Rs/kWh)	0.9162	1.2063	1.0721	1.3188	1.2278	1.1695	0.7023		0.6742
Actual Heat Rate (kCal/kWh)	2,581	3,197	2,661	2,658	2,669	2,976	2,602	2,689	1,950
Norm - Heat Rate (kCal/kWh)	2,725	3,200	2,735	2,663	2,649	2,996	2,502	2,675	1,966
Variable cost after adjustment for Heat rate & Auxiliary Consumption	1.1823	1.3871	1.7260	1.5274	1.6039	1.2293	1.1398	1.2038	0.8124
Norm - Transit Loss (%)	1.45%	2.58%	0.98%	0.96%	2.40%	1.47%	1.72%		1.72%
Actual Transit loss (%) Quantity	0.52%	1.97%	2.14%	1.58%	1.68%	0.39%	0.18%		0.00%
Normative Variable Cost (Rs/kWh)	1.1823	1.3871	1.7260	1.5274	1.6039	1.2293	1.1398	1.2038	0.8124

Table 4.1															
Title															
Variable cost of power purchase^{1&11}															
Sr. No. Power Purchase Source²															
Order (FY)															
Order for Month & Year															
Jun-06															
	Net Purchase³	Var. Cost⁵	Var. Cost Amt⁴	Net Purchase³	Var. Cost⁵	Var. Cost Amt⁴	Net Purchase³	Tariff⁶	PP Amt⁷	FAC Unit⁸	FAC Rate⁹	FAC Amt¹⁰	Var. Cost Amt⁴	Var. Cost⁵	
	MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	Rs Lakh	Rs/ kWh	
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)=(I)*(J)	(L)	(M)	(N)=(L)*(M)	(O)=(K)+(N)	(P)
Korba	4501	0.53	23,630	375	0.53	1,969	356	0.48	1,726	356	0.09	326	2052	0.58	
Vindhyanchal -I	2727	0.74	20,049	227	0.74	1,671	272	0.83	2,246	272	0.16	435	2681	0.99	
Vindhyanchal -II	2081	0.79	16,467	173	0.79	1,372	254	0.79	2,008	254	0.15	388	2396	0.94	
Kawas - Gas	457	2.45	11,190	38	2.45	933	120	1.03	1,230	120	2.36	2,829	4060	3.39	
Kawas - Liquid	0	-	-	-	-	-	-	3.72	-	-	3.89	-	0	#DIV/0!	
Gandhar	818	1.15	9,374	68	1.15	781	127	1.01	1,294	127	0.44	561	1855	1.45	
Kakrapar	1772	2.99	53,002	148	2.99	4,417	77	2.12	1,636	77	(0.06)	(48)	1588	2.06	
Tarapur 1-4	1187	0.94	11,212	99	0.94	934	170	1.76	2,991	170	0.03	53	3043	1.79	
Eastern Region	108	1.06	1,148	9	1.06	96	75	0.81	613	75	0.18	133	746	0.99	
Tata Power (Trading)	104	1.80	1,876	9	1.80	156	14	4.89	698	14	-	-	698	4.89	
Power Trading Corp	2127	1.49	31,796	177	1.49	2,650	108	2.92	3,161	108	-	-	3161	2.92	
Adani	0	-	-	-	-	-	-	4.08	-	-	-	-	0	#DIV/0!	
NVVN	0	-	-	-	-	-	-	3.43	-	-	-	-	0	#DIV/0!	
RETL	0	-	-	-	-	-	-	-	-	-	-	-	0	#DIV/0!	

Table 4.1															
Title Variable cost of power purchase^{1&11}															
Sr. No.	Power Purchase Source²	Order (FY)			Order for Month & Year			Jun-06							
		Net Purchase³	Var. Cost⁵	Var. Cost Amt⁴	Net Purchase³	Var. Cost⁵	Var. Cost Amt⁴	Net Purchase³	Tariff⁶	PP Amt⁷	FAC Unit⁸	FAC Rate⁹	FAC Amt¹⁰	Var. Cost Amt⁴	Var. Cost⁵
		MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	Rs Lakh	Rs/ kWh
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)= (I)*(J)	(L)	(M)	(N)= (L)*(M)	(O)= (K)+(N)	(P)
	Tata N.P.	0	-	-	-	-	-	-	1.81	-	-	-	-	0	#DIV/0!
	Dodson	0	-	-	-	-	-	-	-	-	-	-	-	0	#DIV/0!
	Sardar Sarovar	0	-	-	-	-	-	-	3.48	-	-	-	-	0	#DIV/0!
	Pench	0	-	-	-	-	-	-	1.75	-	-	-	-	0	#DIV/0!
	RGPPL	0	-	-	-	-	-	-	3.55	-	-	-	-	0	#DIV/0!
	Lanco	0	-	-	-	-	-	-	3.44	-	-	-	-	0	#DIV/0!
	JSW PTCL	0	-	-	-	-	-	-	3.44	-	-	-	-	0	#DIV/0!
	Losses	0	-	-	-	-	-	(109)	-	-	(109)	-	-	0	-
	Unscheduled Interchange (UI)	0	-	4,400	-	-	367	145	2.44	3,547	145	-	-	3547	2.44
	Non Conventional Sources (Wind)	0	-	-	-	-	-	128	3.46	4,431	128	-	-	4431	3.46
	Non Conventional Sources (Hydro)	300	3.17	9,500	25	3.17	792	-	2.45	-	-	-	-	0	#DIV/0!
	Power Purchase from Bagasse	0	-	-	-	-	-	1	3.24	41	1	-	-	41	3.24
	Power Purchase from captive generating units	0	-	-	-	-	-	9	2.05	185	9	-	-	185	2.05
	Total Power Purchase	16182	1.20	193,646	1349	1.20	16137	1750	1.47	25807	1750	0.27	4677	30483	1.7418

Table 6.1													
Title Composite variable cost of generation and power purchase													
Sr. No.	Parameter	Order (FY)			Order for Month & Year			Jun-06			Normative Actual⁴ for Month & Year		
		Energy	Var. Cost²	Var. Cost Amt³	Energy	Var. Cost²	Var. Cost Amt³	Energy	Var. Cost²	Var. Cost Amt³	Energy	Var. Cost²	Var. Cost Amt³
		MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh	MU	Rs/ kWh	Rs Lakh
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
1.0	Own Generation ¹ (Table No. 3.3, Sr. No. 5.0)	42,391	0.93	395,416	3,533	0.93	32,951.32	3,425	1.27	43,367	3,425	1.27	43,592
2.0	Disallowance of FAC for Excess Auxiliary Consumption (Table No. 3.4)												
3.0	Net Power Purchase (Table No. 4.1)	16,182	1.20	193,646	1,349	1.20	16,137	1,750	1.74	30,483	1,750	1.74	30,483
4.0	Own Generation + Net Power Purchase (1.0-2.0+3.0)	58,573	1.01	589,062	4,881	1.01	49,088	5,175	1.43	73,850	5,175	1.43	74,075

Table 6.2			
Title	Change in variable cost of generation and power purchase (C) - Format 1		
Sr. No.	Parameter	Unit	Value
(A)	(B)	(C)	(D)
1.0	Weighted Average variable cost of generation and power purchase considered by the Commission for Month & Year (Table No.6.1 Sr. No.4.0, Col. No. (G))	Rs/kWh	1.01
2.0	Weighted Average Normative Actual variable cost of generation and power purchase for Month & Year (Table No.6.1 Sr. No.4.0, Col. No. (M))	Rs/kWh	1.43
3.0	Change in variable cost of generation and power purchase (2.0-1.0)	Rs/kWh	0.43
4.0	Generation ¹ + Net Power Purchase (Table No.6.1 Sr. No.4.0, Col. No. (L))	MU	5,175
5.0	Change in variable cost of generation and power purchase (3.0 x 4.0)	Rs Lakh	22,027

Table 6.5			
Title	Working capital Interest (I)		
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)		
Sr. No.	Parameter	Unit	Value
(A)	(B)	(C)	(D)
1.0	Adjustment for over-recovery/under-recovery ('B')		
1.1	Incremental cost allowed to be recovered in Month j-4 (March 2006) *	Rs Lakh	39,050
1.2	Incremental cost in Month j-4 (March 2006) actually recovered in month j-2 (June 2006)	Rs Lakh	50,307
1.3	(Over-recovery)/under-recovery (1.1-1.2)	Rs Lakh	(11,257)
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	(11,257)

Note * Commission approved FAC for March 2006 - Rs.244.26 Crores, Under Recovery - Rs.138.51 Crs and Interest - Rs.7.73 Crs. Total Fac Approved = Rs.390.50 Crs

Table	6.7		
Title	Total Fuel Cost and Power Purchase Adjustment		
Sr. No.	Parameter	Unit	Value
(A)	(B)	(C)	(D)
1.0	Change in cost (C) (Table 6.2, Sr. No.5.0 for FAC Mechanism or Table 6.3, Sr. No. 4.0 for FOCA Mechanism)	Rs Lakh	22,027
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	(11,257)
4.0	FAC (A) = C + I + B (1.0 + 2.0 + 3.0)	Rs Lakh	10,770
5.0	Any unpredictable and uncontrollable expenses incurred (Z) ¹	Rs Lakh	
6.0	FOCA (A) = C + I + B + Z (4.0 + 5.0)	Rs Lakh	

Table	7.1		
Title	Calculation of per unit FAC/FOCA Charge		
Sr. No.	Parameter	Unit	Value
(A)	(B)	(C)	(D)
1.0	Energy Sales within License Area (Table 1.1, Sr. No.5.0)	MU	3,600
2.0	Estimated Consumption within License Area (Table 1.2, Sr. No. 4.0)	MU	682
3.0	Excess T&D Loss (Table 1.4, Sr. No. 4.0)	MU	-
4.0	Total FAC (Table 6.7, Sr. No. 4.0) or Total FOCA (Table 6.7, Sr. No. 6.0)	Rs Lakh	10,770
5.0	FAC Charge (FAC _{kWh}) or FOCA Charge (FOCA _{kWh}) without considering cap on monthly Charge (4.0/(1.0+2.0+3.0))	Paise/kWh	25.15
6.0	Cap on monthly FAC/FOCA Charge	Rs/kWh	
6.1	Cap at 10% of the variable component of tariff ²	Paise/kWh	
6.2	Cap at increase in CPI for a similar period	Paise/kWh	
6.3	Cap as lower of 6.1 and 6.2	Paise/kWh	-
7.0	FAC Charge (FAC _{kWh}) or FOCA Charge (FOCA _{kWh}) considering cap on monthly FAC Charge/FOCA Charge (lower of 5.0 and 6.3) ¹	Rs/kWh	0.25

Note: FAC rate (unmetered sale) Rs/hp/month

- LT-Ag (>1300 hours per year) 23.00
- LT-Ag (<1300 hours per year) 19.00

Notes:

1 Round off FAC/FOCA Charge to 1 decimal

2 Variable component of tariff = Total estimated revenue from energy charges in the Tariff Order / Total energy sales projected in Tariff Order

Table	7.3		
Title	Recovery of FAC/FOCA Charge		
Sr. No.	Parameter	Unit	Value
(A)	(B)	(C)	(D)
1.0	FAC (A)/ FOCA (A) considering cap on Monthly FAC/FOCA Charge (Table 7.1, Sr. No. 6.0 x (Table 7.1, Sr. No. 1.0 + Table 7.1, Sr. No. 2.0))	Rs Lakh	10769.99
2.0	FAC(A)/ FOCA (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	0.00
3.0	Carried forward FAC (A)/ FOCA (A) for recovery during future period (Table 7.1, Sr. No. 4.0 - 1.0 - 2.0)	Rs Lakh	0.00

Table	8.1		
Title	Summary of FAC (A) and FAC_{kWh}		
Sr. No.	Parameter	Unit	Value
(A)	(B)	(C)	(D)
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	22,027
1.4	Working Capital Interest (I)	Rs Lakh	-
1.5	Adjustment for Over Recovery/Under Recovery (B)	Rs Lakh	(11,257)
1.6	FAC (A) = C + I + B	Rs Lakh	10,770
2.0	Calculation of FAC_{kWh}		
2.1	Sale within License Area	MU	4,282
2.2	Excess T&D Loss	MU	-
2.3	FAC Charge (FAC _{kWh}) without considering cap on monthly FAC Charge	Paise/kWh	25
2.4	Cap on monthly FAC Charge	Rs/kWh	-
2.5	FAC Charge (FAC_{kWh}) considering cap on monthly FAC Charge	Rs/kWh	0.25
3.0	FAC (A)		
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	10,770
3.2	FAC (A) disallowed corresponding to excess T&D loss	Rs Lakh	-
3.3	Carried forward FAC (A) for recovery during future period	Rs Lakh	0