

July 2006

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 July			July - 2006				Normalive Actual Var. Cost <sup>4</sup> for July - 2006		
			MU	Var. Cost <sup>3</sup>	Var. Cost	Generation <sup>3</sup>	Var. Cost <sup>3</sup>	Var. Cost	Generation <sup>3</sup>	Reasons for Material Variation	Var. Cost <sup>3</sup>	Var. Cost	Generation <sup>3</sup>	Var. Cost <sup>3</sup>	Var. Cost
				Rs/ kWh			Rs Lakh				Rs/ kWh				
(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	Water	1,336.10	-	-	111.34	-	-	265.49		-	-	265.49	-	-
	Unit # 7	Gas	1,197.40	0.62	7,423.88	99.78	0.62	618.66	95.97		0.65	627.90	95.97	0.70	673.00
	Unit # 6	Gas	102.70	0.71	729.17	8.56	0.71	60.76	28.17		0.89	250.46	28.17	0.81	228.78
	Unit # 5	Gas	-	0.75	-	-	0.75	-	-		-	-	-	-	0.85
	Unit # 4	Gas	-	0.79	-	-	0.79	-	0.19		0.97	1.86	0.19	0.89	1.71
	Unit # 5	Coal	3,844.00	1.18	45,359.20	320.33	1.18	3,779.93	201.86		1.25	2,519.87	201.86	1.23	2,478.46
	Unit # 6	Oil	3,660.20	2.50	91,505.00	305.02	2.50	7,625.42	228.91			11,643.54	228.91	5.01	11,478.63
	Unit # 5	Oil	340.20	2.62	8,913.24	28.35	2.62	742.77	8.624		5.39	464.83	8.62	5.25	452.61
	Unit # 4	Oil	111.60	2.76	3,080.16	9.30	2.76	256.68	67.33		5.50	3,701.63	67.33	5.52	3,716.89
2.0	Generating Station/ Unit wise summary														
	Hydro	All fuels	1,336.10	-	-	111.34	-	-	265.49		-	-	265.49	-	-
	Unit # 4	All fuels	111.60	2.76	3,080.16	9.30	2.76	256.68	67.52		5.49	3,703.48	67.52	5.51	3,718.60
	Unit # 5	All fuels	4,184.20	1.30	54,272.44	348.68	1.30	4,522.70	210.48		1.42	2,984.70	210.48	1.39	2,931.08
	Unit # 6	All fuels	3,762.90	2.45	92,234.17	313.58	2.45	7,686.18	257.09		4.63	11,894.00	257.09	4.55	11,707.41
	Unit # 7	All fuels	1,197.40	0.62	7,423.88	99.78	0.62	618.66	95.97		0.65	627.90	95.97	0.70	673.00
3.0	Total for all Generating Stations /Units														
	Total Generation excl FHC	All fuels	10,592.20	1.48	157,010.65	882.68	1.48	13,084.22	896.55		2.14	19,210.08	896.55	2.12	19,030.08
	Fuel Handling Cost (FHC)				1,090.00			90.83				75.18			75.18
	Generation including FHC		10,592.20	1.49	158,100.65	882.68	1.49	13,175.05	896.55		2.15	19,285.26	896.55	2.13	19,105.27
4.0	Generation corresponding to Utilisation of Specific Generating Station/ Unit corresponding to sale mentioned at Table 1.1, Item 3 <sup>5</sup>														
	Unit # 4 / Unit # 6	Oil	-	-	-	-	-	-	-		-	-	-	-	-
5.0	Total for all Generating Stations/Units excl. generation reported at (4.0)														
			10,592.20	1.49	158,100.65	882.68	1.49	13,175.05	896.55		2.15	19,285.26	896.55	2.13	19,105.27



Table 3.4						
Title Disallowance of FAC for Excess Auxiliary Consumption <sup>1</sup>						
Sr. No.	Generating Station/Unit	Fuel Basket (FB)	July - 2006			
			Excess Aux Cons <sup>2</sup>	Change in Var. Cost <sup>3</sup>	Increase in Var. Cost <sup>4</sup>	Disallowance <sup>5</sup>
(A)	(B)	(C)	MU (D)	Rs/kWh (E)	Rs/kWh (F) = max(E,0)	Rs Lakh (G) = (D) * (F)
	Hydro	Water	-	0.6384	0.6384	-
	Unit # 4	Gas	0.00	0.1040	0.1040	0.00
	Unit # 4	Oil	0.38	2.7606	2.7606	10.47
	<b>Unit # 4</b>	<b>All Fuel</b>	<b>0.38</b>			<b>10.48</b>
	Unit # 5	Gas	-	0.0999	0.0999	-
	Unit # 5	Coal	2.19	0.0478	0.0478	1.05
	Unit # 5	Oil	0.09	2.6282	2.6282	2.45
	<b>Unit # 5</b>	<b>All Fuel</b>	<b>2.28</b>			<b>3.50</b>
	Unit # 6	Gas	0.06	0.1021	0.1021	0.06
	Unit # 6	Oil	0.45	2.5144	2.5144	11.27
	<b>Unit # 6</b>	<b>All Fuel</b>	<b>0.50</b>			<b>11.32</b>
	Unit # 7	Gas	-	0.0813	0.0813	-
	<b>Unit # 7</b>	<b>All Fuel</b>	<b>-</b>			<b>-</b>
	<b>Total for all Generating Stations/Units</b>		<b>3.16</b>			<b>25.30</b>

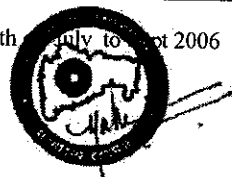


Table 4.1 Title Variable cost of power purchase <sup>1(1)</sup>															
Sr. No.	Power Purchase Source <sup>2</sup>	Order (FY)			Order for July - 2006			Actual for July - 2006							
		Net Purchase <sup>3</sup>	Var. Cost <sup>5</sup>	Var. Cost Amt <sup>4</sup>	Net Purchase <sup>3</sup>	Var. Cost <sup>5</sup>	Var. Cost Amt <sup>4</sup>	Net Purchase <sup>3</sup>	Tariff <sup>6</sup>	PP Amt <sup>7</sup>	FAC Unit <sup>8</sup>	FAC Rate <sup>9</sup>	FAC Amt <sup>10</sup>	Var. Cost Amt <sup>4</sup>	Var. Cost <sup>5</sup>
(A)	(B)	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)
(7)	MSEDCL-Peak	61.50	2.99	1,838.85	5.13	2.99	153.24	51.53	2.99	1,540.81	51.53	1.03	530.78	2,071.60	2.99
(8)	MSEDCL-Others	-	-	-	-	-	-	-	-	17.81	-	-	-	17.81	-
(9)	MSEDCL-Jindal	-	-	-	-	-	-	-	-	146.39	-	-	-	146.39	-
(10)	MSEDCL-Kawas-Liquid	-	-	-	-	-	-	-	-	228.53	-	-	-	228.53	6.05
(11)	MSEDCL-Kawas-Gas	-	-	-	-	-	-	3.78	6.05	-	-	-	-	-	-
(12)	MSEDCL-DVC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(13)	MSEDCL-Sikkim	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(14)	MSEDCL-WBSEB	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(15)	MSEDCL-Gridco	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(16)	MSEDCL-Assam	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(17)	MSEDCL-KPCL	-	-	-	-	-	-	2.51	4.09	102.75	-	-	-	102.75	4.09
(18)	TPTCL-Jindal	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(19)	TPTCL-TISCO	-	-	-	-	-	-	13.10	4.07	532.94	-	-	-	532.94	4.07
(20)	TPTCL-CESC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(21)	TPTCL-TISCO (DA)	-	-	-	-	-	-	1.79	3.94	70.63	-	-	-	70.63	3.94
(22)	GEL-Arp	-	-	-	-	-	-	2.34	4.04	94.62	-	-	-	94.62	4.04
(23)	MSEDCL-Gandhar	-	-	-	-	-	-	0.53	2.71	14.32	-	-	-	14.32	2.71
(24)	TPTCL-GUVNL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Total Power Purchase</b>	<b>61.50</b>	<b>2.99</b>	<b>1,838.85</b>	<b>5.13</b>	<b>2.99</b>	<b>153.24</b>	<b>75.58</b>	<b>3.64</b>	<b>2,748.81</b>	<b>51.53</b>	<b>103.00</b>	<b>530.78</b>	<b>3,279.59</b>	<b>4.34</b>

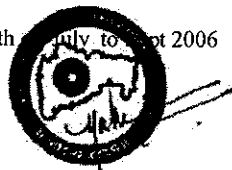


Table 6.1 Title Composite variable cost of generation and power purchase													
Sr. No.	Parameter	Order (FY)			Order for July - 2006			Actual for July - 2006			Normative Actual <sup>4</sup> for July - 2006		
		Energy	Var. Cost <sup>2</sup>	Var. Cost Amt <sup>3</sup>	Energy	Var. Cost <sup>2</sup>	Var. Cost Amt <sup>3</sup>	Energy	Var. Cost <sup>2</sup>	Var. Cost Amt <sup>3</sup>	Energy	Var. Cost <sup>2</sup>	Var. Cost Amt <sup>3</sup>
		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 <sup>1</sup> (Table No. 3.3, Sr. No. 5.0)	10,592.20	1.49	158,100.65	882.68	1.49	13,175.05	896.55	2.15	19,285.26	896.55	2.1310	19,105.27
2.0	Disallowance of FAC for Excess Auxiliary Consumption (Table No. 3.4)												25.30
3.0	Net Power Purchase (Table No. 4.1)	61.50	2.99	1,838.85	5.13	2.99	153.24	75.58	4.34	3,279.59	75.58	4.3390	3,279.59
4.0	Own Generation + Net Power Purchase (1.0-2.0+3.0)	10,653.70	1.5013	159,939.50	887.81	1.5013	13,328.29	972.13	2.32	22,564.85	972.13	2.3001	22,359.56



Table 6.2			
Title Change in variable cost of generation and power purchase (C) - Format 1			
For July - 2006			
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 July - 2006 (Table No.6.1 Sr. No.4.0, Col. No. (H))	Rs/kWh	1.5013
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	2.3001
3.0	Change in variable cost of generation and power purchase (2.0-1.0)	Rs/kWh	0.798797
4.0	Generation <sup>1</sup> + Net Power Purchase (Table No.6.1 Sr. No.4.0, Col. No. (L))	MU	972.13
5.0	Change in variable cost of generation and power purchase (3.0 x 4.0)	Rs Lakh	7,765.36

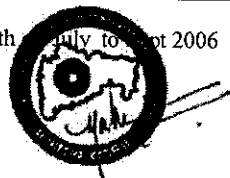


Table 6.4					
Title: Apportionment of change in variable cost of generation and power purchase (C) to License Area					
For July - 2006					
Sr. No.	Parameter	Unit	Sale within License Area	Sale outside License Area	Total
(A)	(B)	(C)	(D)	(E)	(F) = (D) + (E)
1	Energy Sales (Table 1.1, Sr. No. 5.0)	MU	916.96	1.30	918.26
2	<b>Apportionment of Generation and Power purchase</b>				
2.1	Apportionment of hydel generation <sup>1</sup>	MU	264.79	-	264.79
2.2	Apportionment of net thermal generation and power purchase <sup>2&amp;3</sup> (Table 3.3, Sr. No. 5.0)	MU	675.33	1.33	676.66
2.3	Apportionment of generation and power purchase (2.2 + 2.3)	MU	940.12	1.33	941.46
3	<b>Apportionment of change in variable cost of generation and power purchase (Table 6.2, Sr. No. 5.0) in proportion of 2.2 above</b>	Rs Crore	7,750.06	15.30	7,765.36

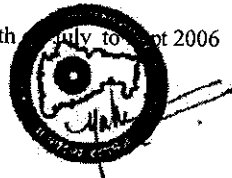


Table 6.6 Title Adjustment for Over-Recovery/Under-Recovery (B)			
Sr. No. (A)	Parameter (B)	Unit (C)	Value (D)
			Jul-06
1.0	Adjustment for over-recovery/under-recovery ('B')		
1.1	Incremental cost allowed to be recovered in Month j-4	Rs Lakh	2,090.74
1.2	Incremental cost in Month j-4 actually recovered in month j-2	Rs Lakh	2,060.98
1.3	over-recovery/under-recovery (1.2-1.1)	Rs Lakh	29.76
2.0	Carried forward adjustment for over-recovery/under-recovery attributable to application of ceiling limit	Rs Lakh	14,857.83
2.01	Add: Under recovery for Q1 due to considering avg VC rate on monthly basis earlier rather than avg VC rate as per Tariff Order (Rs 1.50/kWh)* (Annexure - 4)		2,068.77
2.02	Add: Under recovery for April 06 & May 06 due to correction as FAC amount recoverable in April 06 & May 06 was already considered in FAC vetting by Commission vide Order MERC/TPC/FAC/APR04-MAR 06/1293 dated 19th June 2006 against Feb 06 & March 06. (Details as per Annexure - 5) @		3,731.08
3.0	Adjustment factor for over-recovery/under-recovery (1.5+2.0+2.01)	Rs Lakh	20,687.44
<p>*This has been revised to make the computations in line with the practices followed by other utilities for FAC computation. Monthwise under recovery is Rs 664.38 Lacs, Rs 878.15 Lacs &amp; Rs 526.24 lacs for April 06, May 06 &amp; Jun 06 respectively. For Q2, the calculations are based on the methodology.</p> <p>@ Under recovery of 3731.08 Lacs for April 06 &amp; May 06 is calculated as Rs 1871 Lacs + Rs 1860 Lacs considered in Feb 06 &amp; March 06</p>			

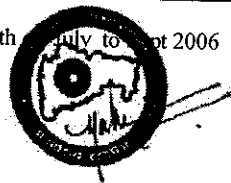


Table 8.1 Title: Summary of FAC (A) and FAC <sub>kWh</sub>			
Sr. No.	Parameter	Unit	
(A)	(B)	(C)	
			Jul-06
<b>1.0</b>	<b>Calculation of FAC (A)</b>		
1.1	Disallowance of change in variable cost of generation corresponding to <u>excess auxiliary consumption</u>	Rs Lakh	25.30
1.2	Change in weighted average variable cost of <u>generation and power purchase</u> after accounting for disallowance of change in variable cost corresponding to excess auxiliary consumption	Rs Lakh	7,740.06
1.3	Apportionment of change in variable cost of generation and power purchase to License Area (C)	Rs Lakh	7,724.81
1.4	Working Capital Interest (I)	Rs Lakh	-
1.5	Adjustment for Over Recovery/Under Recovery (B)	Rs Lakh	20,687.44
<b>1.6</b>	<b>FAC (A) = C + I + B</b>	Rs Lakh	<b>28,412.25</b>
<b>2.0</b>	<b>Calculation of FAC<sub>kWh</sub></b>		
2.1	Sale within License Area	MU	916.96
2.2	Excess T&D Loss	MU	0.60
2.3	FAC Charge (FAC <sub>kWh</sub> ) without considering cap on monthly FAC Charge	Paise/kWh	309.65
2.4	Cap on monthly FAC Charge	Paise/kWh	21.00
<b>2.5</b>	<b>FAC Charge (FAC<sub>kWh</sub>) considering cap on monthly FAC Charge</b>	Paise/kWh	<b>21.00</b>
<b>3.0</b>	<b>FAC (A)</b>		
3.1	FAC (A) considering cap on Monthly FAC Charge (Est)	Rs Lakh	1,925.62
3.2	FAC (A) disallowed corresponding to excess T&D loss (Est)	Rs Lakh	1.26
3.3	Carried forward FAC (A) for recovery during future period (Est)	Rs Lakh	26,485.37

