

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION
"Urja Bhawan", Shivaji Nagar, Bhopal - 462 016



Petition No. 149/2005

PRESENT:

P. K. Mehrotra, Chairman

D. Roy Bardhan, Member

R. Natarajan, Member

IN THE MATTER OF:

Determination of Aggregate Revenue Requirement (ARR) and Generation Tariff for FY07 to FY09 based on the tariff application made by Madhya Pradesh Power Generating Company Limited (MPPGCL) under Multi Year Tariff Principles.

MPPGCL (Petitioner) represented among others by –

- 1. Shri C. S. Dubey (Addl. Chief Engineer)**
- 2. Shri Manjeet Singh (Deputy Director Cost)**

ORDER

(Passed on this 7th Day of March, 2006)

- 1 The Madhya Pradesh Electricity Regulatory Commission (hereinafter called “the Commission”) having heard the applicant, interveners, consumers, consumer representatives of various consumer groups on 20th February, 2006 at Bhopal, having had the formal interactions with the officers of the Madhya Pradesh Power Generating Company Ltd. (hereinafter called “MPPGCL” or “Generating Company”) during the months of January and February 2006 and having met with the members of the State Advisory Committee on 27th February 2006 and having considered the documents available on record and order issued by Government of Madhya Pradesh (Energy Department) on 31st May 2005 making the Transfer Scheme Rules effective from 1st June 2005, (order no. 3679/FRS/18/13/2002 dated 31.5.2005) hereby accepts the applications with modifications, conditions and directions as herewith attached.
- 2 The Commission has made modification to the estimates of the Aggregate Revenue Requirement proposals and has made alternative estimates thereof based on benchmarks for operating parameters and O&M expenditure as per MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2005 and has accordingly made modifications to the tariff proposed by the Madhya Pradesh Power Generating Company Ltd. as per detailed order attached to this order. The Commission has determined the Station wise two part tariff for all power plants located in State of MP and under operational control of MPPGCL. The Commission while determining these charges has taken into consideration the entire installed capacity of the plants. The charges determined by the Commission for FY07 are based on the opening balance sheet notified by GoMP and are subject to any changes that may be made in the opening balance sheet by GoMP before 31st May 2006 or on availability of audited balance sheet as on 1st June 2005. While determining tariff for generation, the Commission has kept multi year principles in mind but the Generating Company shall be required to seek approval each year for continuation of this Tariff subject to any changes necessitated on account of any uncontrollable factor.
- 3 The Commission, in exercise of the powers vested in it under Section 64 of the Electricity Act, 2003, directs that the station wise generation tariff determined by this present order shall be deemed to be effective w.e.f. 1st April 2006 i.e. the date when the control period for multiyear tariff will start and will continue to be operative till 31st March 2009 subject to yearly approval of the Commission. The Petitioner must take immediate steps to implement the Order after giving seven (7) days public notice in accordance with clause 1.30 of MPERC (Details to be furnished and fee payable by licensee or generating company for determination of tariff and manner of making application) Regulations, 2004 and also provide information to the Commission in support of having complied with this order.

- 4 As per paragraph 4 of GoMP Order No. 3679/FRS/18/13/2002 Dated 31/05/2005 made to give effect to reorganisation of MPSEB, MPSEB shall continue to undertake the Electricity Bulk Purchase and Bulk Supply function and as per Clause 2 (ii) of Schedule VII “Cash Flow Mechanism” of the said order MPSEB will have first charge on the generation of Genco and purchase the entire power from the Genco. Accordingly, MPSEB shall pay for the energy received from MPPGCL at rates determined by the Commission. However, MPSEB shall be required to approach the Commission for determination of rates to be paid by the Distribution Licensees for Bulk Supply of Electricity if they are to be different from the rates determined in this order.

- 5 The Commission has not taken any view on the request of the Petitioner relating to Variable Charges and the Commission will pass separate orders on this subject.

Ordered as above read with attached detailed reasons and grounds,

-sd-

(R. Natarajan)
Member (Econ.)

-sd-

(D. Roy Bardhan)
Member (Engg.)

-sd-

(P.K.Mehrotra)
Chairman

Date: March 7, 2006
Place: Bhopal

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CHAPTER 1

Background of the order

Introduction

- 1.1 This order relates to petition number 149 of 2005 filed by the Madhya Pradesh Power Generating Company Limited (MPPGCL) for determination of tariff for electricity to be sold to MPSEB by MPPGCL for FY07 to FY09. MPPGCL is the owner of the generating plants previously owned by MPSEB. MPPGCL has started functioning independently from 1st June 2005. While passing the order for determination for Generation Tariff for FY06, the Commission has examined the operational and the financial data in detail of the generating plants for the period when they were part of MPSEB. The order passed by the Commission was based on the past records, submissions of the company and views expressed by stakeholders.

- 1.2 The Commission notified the MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2005 in the Madhya Pradesh Government Gazette on 23rd December 2005. As per clause 1.3 of the said Regulations, the Regulations shall come into force from the date of their publication in the official Gazette of the Government of Madhya Pradesh. As per clause 1.4, the Regulations shall apply in all cases of determination of generation tariff under section 62 of the Electricity Act 2003 (Act) for supply of electricity to a distribution licensee by existing State Generating Stations where the State Government, under section 123 of the Act, allocates the capacity. As stated in the Commission's order dated 25th January 2006 determining the tariff of various state generating stations, the State Government issued an order on 31st May 2005 to give effect to the reorganization of Madhya Pradesh State Electricity Board in terms of the Madhya Pradesh Electricity Reforms First Transfer Scheme Rules 2003 (Transfer Scheme Rules) notified on 30th September 2003. As per paragraph 4 of this Order, the Madhya Pradesh State Electricity Board (MPSEB) shall continue to undertake the electricity Bulk Purchase and Bulk Supply function as provided in Schedule F to the Transfer Scheme Rules, 2003. It would be necessary to revisit the Schedule F of the Transfer Scheme Rules here to understand allocation of capacity by the State Government. As per paragraph 1 of Schedule F, the bulk purchase and bulk supply functions, namely, purchase of electricity in bulk from the generating companies including GENCO and supply of electricity in bulk to the DISCOMS have been specified as functions retained by MPSEB. Even though the State Government had not specifically allocated the generating capacity of stations of GENCO to the MPSEB, the Government had notified that the purchase of electricity in bulk from the GENCO would be the responsibility of MPSEB and MPSEB would also supply electricity in bulk to the DISCOMS. As such it can be construed that entire generating capacity of the GENCO had been allocated to the MPSEB who, at present, is operating as a trading licensee in the State. As per section 86(1)(a) of the Act, the State Commission shall determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State. As per Section 86(1)(b) of the Act, the Commission shall regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State. As the GENCO will be supplying electricity in bulk to MPSEB, and MPSEB, the Trading Licensee, in turn will be supplying electricity in bulk to the DISCOMS, the Commission has determined the tariff for the generating stations of the GENCO in this order in accordance with the terms and conditions stipulated in the Regulations notified on 23rd December 2005.

- 1.3 As per clause 1.23 of the Regulations, the tariff will be determined on the basis of the principles enunciated for a period of three years commencing from 1st April 2006. As per clause 1.24, tariff in respect of a Generating Company under the Regulations shall be determined station wise and the Generating Company shall submit separate calculations in respect of each generating station.
- 1.4 Accordingly, the Commission determines the station wise tariff for the three-year period commencing from 1st April 2006 in this Order. However, the Commission would like to point out that as stated by it in its Order dated 25th January 2006, in paragraph 2.6 of Chapter 2, the State Government has got a right to amend, vary, modify or otherwise change the values or the terms and conditions or any one or more of them during the provisional period which is ending on 31st May 2006. Hence, the tariff as determined now will be provisional and will become final in case the Government of Madhya Pradesh does not enforce its right by 31st May 2006. In case, the Government of Madhya Pradesh enforces its right, then the GENCO is free to approach the Commission for a revision in the tariff determined.
- 1.5 The Commission, in its order dated 25th January 2006 had already directed the Trading Licensee i.e. MPSEB to make available to the Commission full details of its operations including the quantum and the price of electricity purchased by it from the Central Generating Stations and other traders or generators and details of the price paid for the electricity supplied to Distribution Licensees to enable the Commission to discharge its function under Section 86(1)(b) of the Act as stated earlier.
- 1.6 In its order the Commission drew the attention of the State Government to the situation resulting from non-allocation of generating capacities of the State Generating Stations and the respective share of the Central Generating Stations among the distribution licensees of the State which was sought to be addressed through an agreement made between MPSEB and the distribution licensees with differential bulk sale rate. The Commission, in its order dated 25th January 2006 had pointed out that in its view, the Trading Licensee does not have the discretion of charging a differential bulk sale rate to different distribution companies. The Commission had suggested that the Energy Department of the State Government evolve a suitable allocation plan for the rights in the generated electricity and notify the same under the powers available to the State Government in Part XIII of the Act.

- 1.7 The Commission reiterates its view that the Trading Licensee does not have the discretion of charging a differential bulk sale rate to different distribution companies. The Commission will fix the bulk sale rate for MPSEB for the portion of electricity supplied to it by GENCO based on tariff fixed in this Order and the MPSEB will charge only this rate for supply to the Distribution Licensees uniformly. Once the trading licensee, i.e. MPSEB makes available full details of its operations including the quantum and the price of electricity purchased by it from various sources including the state generating stations, the Commission would fix the bulk sale rate for the MPSEB which will be applicable to all the Distribution Licensees in the state. In case MPSEB wants a trading margin to meet its cost of operation, it is free to approach the Commission for fixing the same under section 86(1)(j) of the Act.
- 1.8 Subsequent to the GoMP notification dated 31st May 2005, MPSEB has been allowed to continue as a Trading Licensee, first till 9th December 2005 and then till 9th June 2006. The Company and MPSEB mutually entered into a provisional power purchase agreement, which provided for sale and purchase of power both from Hydel and Thermal Power stations at a pooled price of Rs. 1.51 per unit. As per the provisions in the said agreement MPPGCL filed Petition for determination of generation tariff for FY06. The Commission has already passed its order on the generation tariff for FY06 on 25/01/2006. The Commission has determined the Station wise Tariff in the order of 25/01/2006. The Petitioner has filed this Petition for determination of the generation tariff for the period from FY07 to FY09.
- 1.9 Having stated its policy, the Commission determines the tariff for the generating stations of MPPGCL in the next Chapter.

Procedural history

1.10 In the Commission’s regulations namely Madhya Pradesh Electricity Regulatory Commission (Details to be furnished and fee payable by licensee or generating company for determination of tariff and manner of making application) Regulations, 2004 and its subsequent amendments, the State Generation Company is required to file the its proposal for determination of generation tariff for the next year by 15th October every year. MPPGCL requested for extension for filing of the Petition from 15/10/2005 to 15/11/2005 which the Commission accepted. MPPGCL filed the Petition on 16/11/2005. Meanwhile, the Commission has issued its regulation namely MPERC (Terms and Conditions for determination of the Generation Tariff) Regulations 2005. Hence, the Commission directed MPPGCL to update its proposal on the basis of the norms elaborated in the aforesaid regulations by 31/12/2005. MPPGCL submitted its updated proposal on 31/12/2005. The Commission directed to hold the hearing on the filing of MPPGCL on 05/01/2006 wherein the Petitioner was directed to make a presentation on the proposal submitted before the Commission. The Commission observed that the filing of the Petitioner was incomplete as the petitioner had not filed the station wise details of cost. Hence, the Commission directed the generating Company to revise and resubmit the Petition by 23/01/2006. The Petitioner has finally filed the Petition on 23/01/2006. The Petition has been filed for determination of revenue requirement and the Generation Tariff on the basis of the multiyear principles for FY07 to FY09.

1.11 The Summary of the petition filed by MPPGCL is given below:

Table 1: Fixed Cost of Generation

S. No	Particulars	Cr Rs.			Rate in p/u		
		FY 07	FY 08	FY 09	FY 07	FY 08	FY 09
Thermal	1 ATPS	53.5	55.2	57.1	46	47	49
	2 STPS	303.2	243.8	227.7	48	38	35
	3 SGTPS	368.1	364.4	393.0	73	72	76
	4 Thermal Share	724.7	663.5	677.8	58	53	53
Hydro	5 GandhiSagar	4.1	4.2	4.3	24	24	25
	6 R.P.Sagar	5.6	5.8	6.0	30	31	33
	7 J.Sagar	3.8	3.9	4.0	27	28	29
	8 Pench	9.7	9.9	10.2	63	65	67
	9 Rajghat	6.6	6.5	6.4	146	145	144
	10 Bargi	11.3	11.5	11.6	23	23	24
	11 Bansagar	143.4	139.4	135.7	139	135	131
	12 Birsinghpur	4.1	4.2	4.1	104	106	104
	13 Hydro Share	188.6	185.4	182.4	84	82	81
14 Total Share	913.4	848.9	860.2	62	57	57	

Table 2: Variable Cost of Thermal Generation

S. No.	Particulars	Cr Rs.			Rate in p/u			
		FY 07	FY 08	FY 09	FY 07	FY 08	FY 09	
Thermal	1	ATPS	137.6	138.9	139.9	120	119	119
	2	STPS	860.2	858.6	846.8	136	134	132
	3	SGTPS	529.9	528.8	524.9	106	104	102
	4	Thermal Share	1527.7	1526.3	1511.6	122	121	119

Table 3: Taxes and Duties

S. No.	Particulars	Cr Rs.			Rate in p/u			
		FY 07	FY 08	FY 09	FY 07	FY 08	FY 09	
Thermal	1	ATPS	4.2	4.2	4.2	4	4	4
	2	STPS	18.1	18.1	18.0	3	3	3
	3	SGTPS	41.8	41.7	41.6	8	8	8
	4	Thermal Share	64.0	64.0	63.9	5	5	5
Hydro	5	GandhiSagar	2.6	2.7	2.8	15	16	16
	6	R.P.Sagar	0.3	0.3	0.4	2	2	2
	7	J.Sagar	0.3	0.3	0.3	2	2	2
	8	Pench	1.5	1.5	1.5	10	10	10
	9	Rajghat	2.0	2.0	2.1	45	46	46
	10	Bargi	2.4	2.4	2.4	5	5	5
	11	Bansagar	23.2	23.2	23.3	22	23	23
	12	Birsinghpur	0.9	0.9	0.9	22	22	22
	13	Hydro Share	33.3	33.4	33.6	15	15	15
14	Total Share	97.3	97.4	97.4	7	7	7	

Table 4: Total Cost of Generation:

S. No.	Particulars	Cr Rs.			Rate in p/u			
		FY 07	FY 08	FY 09	FY 07	FY 08	FY 09	
Thermal	1	ATPS	195.3	198.3	201.2	170	171	171
	2	STPS	1181.5	1120.4	1092.5	187	175	170
	3	SGTPS	939.7	934.9	959.6	187	184	187
	4	Thermal Share	2316.5	2253.7	2253.3	185	178	177
Hydro	5	Gandhi Sagar	6.6	6.8	7.1	39	40	41
	6	R.P.Sagar	6.0	6.2	6.4	32	33	35
	7	J.Sagar	4.1	4.2	4.3	30	30	31
	8	Pench	11.2	11.4	11.7	73	75	77
	9	Rajghat	8.6	8.5	8.5	191	191	190
	10	Bargi	13.7	13.8	14.0	28	28	29
	11	Bansagar	166.7	162.7	158.9	161	157	154
	12	Birsinghpur	5.0	5.1	5.0	127	128	126
	13	Hydro Share	221.9	218.8	216.0	98	97	96
14	Total Share	2538.4	2472.5	2469.3	172	166	165	

Public Hearing

- 1.12 The Commission decided to issue public notice for inviting comments from the stakeholders on the Petition filed by MPPGCL. The Public notice was published in Dainik Bhaskar (Hindi, All Madhya Pradesh Editions) and Hindustan Times (English, All Madhya Pradesh Edition) on 31st January 2006.
- 1.13 The Commission held a public hearing on the tariff petition of MPPGCL in its Hearing Hall at Urja Bhavan, Shivaji Nagar, Bhopal on 20th February 2006.

State Advisory Committee

- 1.14 A presentation on the tariff proposal of MPPGCL was made before the members of the Committee on 27th February 2006. The members made their observations on the petition and gave valuable suggestions, which have been kept in mind while finalising this order.

CHAPTER 2

Status of the Generating Company:

- 2.1 MPPGCL is a company incorporated under the Companies Act, 1956 in 2002 and was functioning under an O & M Agreement with MPSEB ever since. The Government of Madhya Pradesh (GoMP) notified the transfer scheme vide its notification No. 3679/FRS/18/13/2002 dated 31st May 2005 as per which the MPPGCL was assigned assets and liabilities, on a provisional basis, as per the table given below:

Table 5: Provisional Opening Balance Sheet of MPPGCL

(Rs. In Crore)

Liabilities		Amount		Assets		Amount		
Equity From GoMP		1278		Fixed Assets	Gross Assets	4453		
Project Specific Capital Liabilities (Including payments overdue)	PFC	1120	Capital Works in Progress		Less Accumulated depreciation	1576		
	LIC	488			Total	2878		
	CSS	3				2878		
	REC	334			2878			
Total		1945	1945	1040				
Loan from MPSEB		259		Current Assets	Stock	244		
Current Liabilities	Fuel Liabilities	191	Total		Cash and Balances	11		
	Staff Related	29			Total	Loan Advances	3	
	Towards Suppliers	143				Total	Sundry Receivable	34
	Intt. Accrued but not due	21			Total		Others	
	Others	342				Total	292	
	Total				727		727	292
Borrowings for working capital	Overdraft	0	0					
	Working capital demand loan + cash credit	0						
Accumulated Surplus/ (Deficit)		0						
Reserves and Reserve Funds		0						
Total Liabilities		4210		Total Assets		4210		

Notes: -

- The values of the fixed Assets are as per the book values
- The Contingent Liabilities to the extent they are associated with or related to Generation activities or to the Undertakings or Assets of MPGENCO shall vest in MPGENCO. (Estimated to be Rs. 275.86 Cr.)
- The above balance sheet is provisional till finalisation of actual balance sheet as on date of transfer date.

As per the notification, the above balance sheet is provisional for a period of 12 months. During the provisional period, the GoMP may change the values stated in the opening balance sheet.

- 2.2 MPPGCL has assumed independent functioning from 1st June 2005 consequent to the notification of its Balance Sheet by the State Government on 31st May 2005. On the Petition filed by the Generating Company for determination of generation tariff for FY06, the Commission had already passed the Tariff Order on 25/01/2006.
- 2.3 The Generation Tariff Order of the Commission for FY06 was based on the Balance Sheet notified by the GoMP. The value of the assets to be transferred to MPPGCL was notified by the State Government vide its notification dated 31st May 2005 as per which the values of the Fixed Assets are as per the book values. As per the notification, the opening balance sheet is provisional for a period of twelve months and at any time during the said period, the Government of Madhya Pradesh may change the values stated in the opening balance sheet including but not limited to value assigned to the Fixed Assets, Capital Expenditure in progress, Project Specific Liabilities, Loan from Madhya Pradesh State Electricity Board, borrowings for Working Capital etc.
- 2.4 Thus the State Government has got a right to amend, vary, modify or otherwise change the values or the terms and conditions or any one or more of them during the provisional period, which is ending on 31st May 2006.
- 2.5 In the following chapters the Commission has determined the Station wise cost of all the Generating Stations that are being operated and maintained by MPPGCL based on the opening balance sheet notified by GoMP.

CHAPTER 3

Thermal Power Stations of MPPGCL

Introduction

- 3.1 In this chapter net generation from Thermal Power Stations of MPPGCL viz. ATPS Chachai, STPS Sarni and SGTPS Birsingpur and the corresponding fixed & variable costs of generation have been determined for FY07, FY08 and FY09 based on the norms and principles elaborated in MPERC (Terms and Conditions of Generation Tariff) Regulations 2005 (Regulations). For STPS Sarni, the Commission has determined the cost for the entire station as the plant is located in MP and is within the jurisdiction of this Commission. The Company shall bill the beneficiary for FY07 at provisional tariff determined for these power stations by the Commission, while the rates for FY08 and FY09 are only indicative. The tariff for these years shall be computed when petitions are filed by the Company before the Commission after the audited balance sheet becomes available and the opening balance sheet notified by the GoMP becomes final.
- 3.2 The details of the plant are as given in the table below:

Table-6: Installed Capacity

Thermal Power Station / Units		Capacity (MW)	COD
Amarkantak Thermal Power Station (ATPS), Chachai			
1.	Unit # 1	30.0	1 st Feb, 65
2.	Unit # 2	20.0	8 th Feb, 65
3.	Unit # 3	120.0	11 th Sep, 77
4.	Unit # 4	120.0	31 st March, 78
	Total	290.0	
Satpura Thermal Power Station (STPS), Sarni			
1.	Unit # 1	62.5	6 th October, 67
2.	Unit # 2	62.5	21 st March, 68
3.	Unit # 3	62.5	14 th May, 68
4.	Unit # 4	62.5	10 th July, 68
5.	Unit # 5	62.5	21 st March, 70
6.	Unit # 6	200.0	27 th June, 79
7.	Unit # 7	210.0	20 th Septemeber, 80
8.	Unit # 8	210.0	25 th January, 83
9.	Unit # 9	210.0	27 th February, 84
	Total	1142.5	

Thermal Power Station / Units		Capacity (MW)	COD
Sanjay Gandhi Thermal Power Station (SGTPS), Birsingpur			
1.	Unit # 1	210.0	26 th March, 93
2.	Unit # 2	210.0	27 th March, 94
3.	Unit # 3	210.0	28 th Feb, 99
4.	Unit # 4	120.0	23 rd Nov, 99
	Total	840.0	

Availability

- 3.3 Full fixed charges shall be recoverable from beneficiaries if the availability for FY07, FY08 and FY09 is as per the table given below:

Table-7: Availability (%)

Generating Station	FY07	FY08	FY09
ATPS	51.36	51.72	52.24
STPS	77.56	77.98	78.41
SGTPS	75.50	76.00	77.00

- 3.4 Fixed charges shall be recoverable on pro rata basis if actual availability is lower than that indicated in the above table.
- 3.5 The availability at the year-end shall not be lower than the PLF achieved by the station for that year. Availability shall be computed in accordance with the relevant provisions of the Regulations. SLDC shall verify the availability figures submitted by MPPGCL for claiming fixed charges.

PLF

- 3.6 The Plant Load factor considered for computing variable cost for FY07, FY08 and FY09 is as per the regulations and is given in the table below:

Table-8: PLF (%)

Generating Station	FY07	FY08	FY09
STPS	51.36	51.72	52.24
ATPS	77.56	77.98	78.41
SGTPS	75.50	76.00	77.00

- 3.7 Gross Generation from the three thermal generating stations in FY07, FY08 and FY09 based on target PLFs is expected to be as given in the table below:

Table-9: Gross Generation (MU)

Generating Station	FY07	FY08	FY09
ATPS	1305	1317	1327
STPS	7762	7826	7848
SGTPS	5556	5608	5666

Auxiliary Consumption

- 3.8 The auxiliary consumption as a percentage of gross generation in FY07, FY08 and FY09 as per Regulations is as given in the table below:

Table-10: Auxiliary Consumption (%)

Generating Station	FY07	FY08	FY09
ATPS	11.85	11.73	11.57
STPS	8.84	8.77	8.69
SGTPS	9.62	9.39	9.22

Net Generation

- 3.9 The ex-bus (net) generation in FY07, FY08 and FY09 after accounting for the auxiliary consumption indicated in the above table is given in the table below:

Table-11: Net Generation (MU)

Generating Station	FY07	FY08	FY09
ATPS	1150	1163	1174
STPS	7076	7140	7166
SGTPS	5021	5081	5144

- 3.10 The Generating Company shall be entitled to receive incentive payments corresponding to scheduled generation in excess of ex-bus energy corresponding to target plant load factor. The applicable rate shall be as per the relevant clause of the Regulations.

Determination of Energy Charges

- 3.11 As per the Regulations the energy (variable) charges shall cover fuel costs based on the norms provided for the tariff period for calorific value of coal and consumption of secondary fuel oil.

Station Heat Rate

- 3.12 The allowable station heat rate for FY07, FY08 and FY09 as per the Regulations is as given in the table below:

Table-12: Station Heat Rate (Kcal/kwh)

Generating Station	FY07	FY08	FY09
ATPS	3573	3573	3573
STPS	2960	2926	2873
SGTPS	2825	2800	2757

Secondary fuel oil consumption (ml/kwh)

- 3.13 The allowable secondary fuel consumption for FY07, FY08 and FY09 as per the Regulations is as given in the table below:

Table-13: Secondary fuel oil consumption (ml/kwh)

Generating Station	FY07	FY08	FY09
ATPS	7.10	7.09	7.08
STPS	2.66	2.66	2.66
SGTPS	2.00	2.00	2.00

Transit Losses (%)

- 3.14 The allowable transit losses for FY07, FY08 and FY09 as per the Regulations is as given in the table below:

Table-14: Transit Losses (%)

Generating Station	FY07	FY08	FY09
ATPS	0.3	0.3	0.3
STPS	0.8	0.8	0.8
SGTPS	1.80	1.50	1.20

- 3.15 The Generating Company in addition to transit losses has sought compensation for stacking losses at the rate of 1%. The Commission had commented on the issue in its order for FY06. The same is being reproduced.

“The CERC in its norms does not provide for a separate provision of stacking losses, these losses have been considered as an intrinsic part of the transit losses. The Commission however is allowing 0.5% as stacking losses in addition to the above transit losses only for this year. MPPGCL will not be allowed to perpetually incur such stacking losses and they shall

be considered as a part of transit losses. MPPGCL is therefore again being directed to upgrade its coal handling plants immediately so that these losses are minimized and do not add to the overall fuel cost.”

- 3.16 The Commission instead of GCV of coal considers NCV for computation of coal cost. NCV accounts for the loss of heat content on account of reasons mentioned by the petitioner. The claim of the petitioner is therefore not being entertained.

Net Calorific Value

- 3.17 The Generating Company has computed the NCV of coal on the basis of weighted average of actual NCV recorded and computed quantity of coal fired in the boilers in the months of April to September 2005. The quantity of coal fired has been computed on the basis of actual station heat rate determined by the Generating Company. The Commission has re-determined the weighted average of NCV for the same period by considering actual NCV for the month, approved PLF and approved station heat rate for FY06. The weighted average for the period is given in the Table below. The same has been considered for FY07, FY08 and FY09. The Commission directs that the Generating Company in future while computing the NCV for the station shall consider only the operating norms specified by the Commission and any variation in these values shall be addressed through VCA claims. The NCV has been taken uniformly for all the three years on the basis of the current data available. The Company is expected to make available updated information while filing petitions for the relevant years.

Table-15: Net Calorific Value (Kcal/kg)

Generating Station	FY07	FY08	FY09
ATPS	4490	4490	4490
STPS	3436	3436	3436
SGTPS	3863	3863	3863

Landed Cost of Coal

- 3.18 The Company has computed the weighted average landed cost considering all sources from which the supply was received and all grades of coal that were received during the period April 2005 to October 2005. The Commission has gone into the data supplied by the Generating Company and agrees with the price proposed by MPPGCL. The same has been considered by the Commission while determining the tariff for FY07, FY08 and FY09.

A - ATPS Chachai:

- 3.19 The Generating Company for FY07, FY08 and FY09 has considered the coal cost at Rs. 1139 per MT. The details are provided in the table below:

Table-16: Coal cost computation

Coal Grade	Quantity MT	Basic Price	Royalty	Sizing Charges	Surface Tr. Charges	Beneficiation	SED	Transit Fee	MPST/ CST @ 4%	Total Rs.	Rate Rs./MT
C	1382.52	14.79	1.59	0.28	0.41	0	0	0.14	0.69	17.90	1294.62
D	390757.7	3594.97	332.41	78.16	117.24	199.41	14.6	39.08	175.03	4550.90	1164.63
E	133537.7	961.45	113.49	26.69	40.06	207.24	6.52	13.34	54.75	1423.50	1066.02
F	765.24	3.98	0.50	0.15	0.23	1.07	0	0.08	0.24	6.20	816.44
Total	526443.2	4575.19	447.99	105.28	157.94	407.72	21.12	52.64	230.71	5998.60	1139.46

B - STPS Sarni:

3.20 The Generating Company for FY07, FY08 and FY09 has considered the coal cost at Rs. 1358 per MT. The details are provided in the table below:

Table-17: Coal cost computation

Sl. No.	Details	Grade				All
		C	D	E	Other	
1	Basic Price	396807212.9	1977404556	1708297020	47316318	4129825107
2	Rotyalty	28294765.58	152799442.9	161339163	0	342433371.5
3	Sizing Charges	4175909.7	35230282.9	37962156	0	77368348.6
4	Surface Tr. Charges	10058735.05	38463683	61021421.86	0	109543839.9
5	SED	3328795.95	17976405.05	18981078	361469.2	40647748.2
6	Transit Fee	1339645.76	11666305.97	7411796.01	0	20417747.74
7	MPST / CST @ 4%	17760202.6	89341627.01	79800505.4	1907111	188809446.5
8	Freight	130515417	278409102.9	155541566.1	0	564466086
9	Siding Charges	1456792	1874023	251501	0	3582316
10	Other if any	7599040.154	12601872.73	20277979.32	1150893	41629785
11	Total Rs.	601336516.6	2615767301	2250884187	50735792	5518723796
12	Quantity (MT)	332879.595	1797640.485	1898107.29	36146.92	4064774.29
	Rate (Rs./MT)	1806.47	1455.11	1185.86	1403.60	1357.70

C - SGTPS Birsingpur:

5.1 The Generating Company for FY07, FY08 and FY09 has considered the coal cost at Rs. 1190 per MT. The details are provided in the table below

Table-18: Coal cost computation

Details	Grade						Total
	A	B	C	D	F	Other	
Basic Price	500.28	3282.766	2925.47	311.89	6012.12	1.44	13033.97
Rotyalty	55.21	405.16	307.54	28.29	831.45	0	1627.65
SED	3.35	24.53	26.7	3.31	127.93	0	185.82
Sizing Charges	0	19.45	37.85	4.65	346.03	0	407.98
STC	4.23	87.33	88.03	11.9	354.1	0	545.59
Seema Kar	0	2.04	0.61	0	0	0	2.65
Terminal Tax	0	3.86	9.69	0.85	0	0	14.4
Niryat Kar	0	0.02	0	0	2.39	0	2.41
Forest Transit Fee	1.83	0.82	1.63	0.44	0	0	4.72
Entry Tax	2.41	3.21	15.65	0	0	0	21.27
MPST @4%	22.69	153.17	136.53	14.45	306.96	0.06	33.86
Under loading charges	0	-0.53	-0.01	0	-64.99	0	-65.53
Freight	0	440.27	392.81	34.35	4114.87	0	4982.3
Siding Charges	0	81.65	79.53	12.72	379.78	0	553.68
Unloading Charges	0	16	15.51	2.6	75.48	0	109.59
Liasioning Charges	0.97	7.49	7.89	0.99	38.12	0.00	55.46
Other if any	0	0	0	0	0.00	0	0
Total (Rs. Lakh)	590.97	4527.23	4045.42	426.44	12524.24	1.50	22115.81
Quantity (MT)	33463.45	245540.3	267431.7	33261.24	1279171	118.52	1858986.2
Price (Rs./MT)							1189.67

Total Coal Cost

3.21 The Commission based on the norms approved by it and considering the NCV and the price of the coal computed by it allows following amounts for coal purchase.

Table-19: Total Coal Cost (Rs. Lakh)

Station		FY07	FY08	FY09
ATPS	Total Coal Qty (LMT)	10.21	10.31	10.38
	Total Coal Cost (Rs. Lakh)	11631	11745	11831
STPS	Total Coal Qty (LMT)	66.79	66.56	65.52
	Total Coal Cost (Rs. Lakh)	90682	90363	88957
SGTPS	Total Coal Qty (LMT)	41.07	40.97	40.63
	Total Coal Cost (Rs. Lakh)	48856	48731	48332

Oil Cost

3.22 MPPGCL has done the computation of the oil cost on the basis of price paid by the Company for Furnace Oil and LDO for the period April 05 to October 05.

A - ATPS Chachai:

3.23 The Company has considered the rate of oil at Rs. 18592 per KL for FY07, FY08 and FY09. The same has been found in order and is acceptable. The details are given in the table below:

Table-20: Details of oil cost

Month	Furnace Oil			LDO			Sec. Oil		
	Qty (KL)	Rate	Amt (Rs.)	Qty (KL)	Rate	Amt (Rs.)	Qty (KL)	Rate	Amt (Rs.)
April	1337.00	16200	21659400	209.76	23732	4978024	1546.76	17221	26637424
May	1291.00	16852	21755932	258.37	26724	6904680	1549.37	18498	28660611.88
June	1380.80	16890	23321712	117.28	25982	3047169	1498.08	17602	26368880.96
July	1200.00	18027	21632400	309.72	25983	8047455	1509.72	19659	29679854.76
August*									
September	1421.00	19394	27558874	117.03	27785	3251679	1538.03	20032	30810552.55
October	44.10	16890	744849				44.1	16890	744849
Total	6673.90	17482	116673167	1012.16	25914	26229006	7686.06	18592	142902173.5

* No oil was received in this month

B - STPS Sarni:

3.24 The Company has considered the rate of oil at Rs. 20691 per KL for FY07, FY08 and FY09. The same has been found in order and is acceptable. The details are given in the table below:

Table-21: Details of oil cost

Month	Furnace Oil			LDO			Sec. Oil		
	Qty (KL)	Rate	Amt (Rs.)	Qty (KL)	Rate	Amt (Rs.)	Qty (KL)	Rate	Amt (Rs.)
April	1552.00	14698	22811296	347.00	30292	10511324	1899.00	17547	33322620
May	0.00	0	0	0.00	0	0	0.00		0
June*			0			0	0.00		0
July	1533.80	16935	25974903	259.80	45071	11709446	1793.60	21010	37684349
August	1520.00	16513	25099760	455.60	25377	11561761	1975.60	18557	36661521
September	2420.00	19227	46529340	528.00	35227	18599856	2948.00	22093	65129196
October	1532.00	20595	31551540	383.86	35363	13574441	1915.86	23554	45125981
Total	8557.80	17758	151966839	1974.26	33408	65956828	10532.06	20691	217923667

* No oil was received in this month

C - SGTPS Birsingpur:

3.25 The Company has considered the rate of oil at Rs. 22870 per KL for FY07, FY08 and FY09. The same has been found in order and is acceptable. The details are given in the table below:

Table-22: Details of oil cost

Month	Furnace Oil			LDO			Sec. Oil		
	Qty (KL)	Rate	Amt (Rs.)	Qty (KL)	Rate	Amt (Rs.)	Qty (KL)	Rate	Amt (Rs.)
April*									
May*									
June	803.00	16694	13405282	680.00	24075	16371000	1483.00	20078	29776282
July*									
August	745.00	17821	13276645	819.00	25951	21253869	1564.00	22078	34530514
				47.00	21734	1021498	47.00	21734	1021498
Total				866.00	25722	22275367	866.00	25722	22275367
September*									
October	810.00	20768	16822080	703.00	27778	19527934	1513.00	24025	36350014
November	21.94	17620	386583	23.71	24443	579544	45.65	21164	966126.33
Total	1634.94	18725	30613944.80	2272.71	25852	58753845	3907.65	22870	89367789.33

• No oil was received in these months

3.26 The oil cost allowed at the approved norm for specific oil consumption and the rate of oil for FY07, FY08 and FY09 is as given in the table below:

Table-23: Total Oil Cost (Rs. Lakh)

Station		FY07	FY08	FY09
ATPS	Total Oil Qty (KL)	9264	9341	9396
	Total Oil Cost (Rs. Lakh)	1722	1737	1747
STPS	Total Oil Qty (KL)	20648	20817	20874
	Total Oil Cost (Rs. Lakh)	4272	4307	4319
SGTPS	Total Oil Qty (KL)	11111	11215	11332
	Total Oil Cost (Rs. Lakh)	2541	2565	2592

3.27 The oil cost at ATPS constitutes around 13% of the fuel cost while for other two stations it is less than 5% on account of lower PLF and frequent interruptions.

Other Costs

3.28 The Generating Company has estimated the entry tax payable by it at Rs. 25.62 Crore for each of the years. The same has been apportioned to various thermal stations on the basis of expected gross generation in FY06.

3.29 On close scrutiny of the coal cost as provided by the generating company it was observed that entry tax had already been considered as a part of the coal cost. MPPGCL vide its letter dated 23/02/2006 has confirmed this observation. Hence, entry tax has not been considered separately.

3.30 However, the Petitioner has requested the Commission to consider some related items for fuel handling like coal handling contract charges, commission to agents, locomotive and wagon charges and some staff cost for railway personnel. These had not been included originally in the Tariff Petition filed before the Commission. The Generating Company has now projected this cost by increasing the amount allowed by the Commission for FY06 by 6% for FY07 and subsequent years. This item of expenditure has been allocated by the Generating Company to various power stations and the Commission is allowing the same as given in the table below:

Table-24: Other Costs (Rs. Lakh)

Generating Station	FY07	FY08	FY09
ATPS	97	104	113
STPS	759	804	848
SGTPS	409	409	410

3.31 The Commission directs the Company to account for the other fuel related cost station wise so that the need to allocate this cost is done away.

Energy Cost

3.32 The energy (variable) cost to be paid on the basis of approved operating parameters, coal cost, oil cost and other costs shall be as per the table below:

Table-25: Energy (Variable) Cost (Rs. Lakh)

Generating Station	FY07			FY08			FY09		
	Net Gen. (MU)	Rs. Lakh	Rs./U	Net Gen. (MU)	Rs. Lakh	P/U	Net Gen. (MU)	Rs. Lakh	P/U
ATPS	1150	13451	1.17	1163	13586	1.17	1174	13691	1.17
STPS	7076	95713	1.35	7140	95474	1.34	7166	94124	1.31
SGTPS	5021	51806	1.03	5081	51705	1.02	5144	51334	1.00

Fixed Cost

3.33 The fixed cost is being determined in accordance with MPERC (Terms and Conditions of Generation Tariff) Regulations 2005.

O&M

3.34 The norms for O&M Expenses as per Regulations as given in the table below:

Table-26: O&M Norms for all Stations (Rs. Lakh/MW)

Generating Station	FY07	FY08	FY09
O&M expenses	11.57	12.27	13.00

3.35 In accordance with these norms the allowable O&M expenses for FY07, FY08 and FY09 is given in the table below:

Table-27: O&M Norms (Rs. Lakh)

Generating Station		FY07	FY08	FY09
ATPS	Installed Capacity (MW)	290	290	290
	O&M Expenses	3355	3558	3770
STPS	Installed Capacity (MW)	1142.5	1142.5	1142.5
	O&M Expenses	13219	14018	14853
SGTPS	Installed Capacity (MW)	840	840	840
	O&M Expenses	9719	10307	10920

3.36 These norms exclude taxes payable to Government or local authorities, fee payable to MPERC and pension and terminal benefits payable to its employees. The Cess has been computed at the rate of 10 paise per unit of auxiliary consumption at norms fixed by the Commission. Total Rent, Rates and Taxes for thermal stations have been projected to be Rs. 80 lakh. This amount has been allocated to various stations on the basis of proportion of net generation to total net generation from all power stations considered by the Company. Fee payable to MPERC has been computed on the basis of applicable fee of Rs. 5000 per MW. The Generating Company has projected these charges as given in the tables below:

A - ATPS Chachai:

Table-28: Other Charges (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	143	155	155
2	Rent, Rates and Taxes	7	7	7
3	Water Charges	0	0	0
4	MPERC Fee (Rs. 5000 per MW)	15	15	15
	Total	177	176	175

B - STPS Sarni:

Table-29: Other Charges (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	686	686	682
2	Rent, Rates and Taxes	41	41	40
3	Water Charges	0	0	0
4	MPERC Fee (Rs. 5000 per MW)	57	57	57
	Total	784	784	780

C- SGTPS Birsingpur:

Table-30: Other Charges (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	534	527	523
2	Rent, Rates and Taxes	32	32	32
3	Water Charges	0	0	0
4	MPERC Fee (Rs. 5000 per MW)	42	42	42
	Total	608	601	597

3.37 The Commission allows these expenses on the basis of the applicable rates and norms. The Company shall be entitled to claim Cess computed on the basis of approved auxiliary consumption norms while other expenses shall be claimed at actuals every month. The amount allowed by the Commission for FY07, FY08 and FY09 is given in the tables below:

A - ATPS Chachai:

Table-31: Other Charges approved (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	155	155	154
2	Rent, Rates and Taxes	7	7	7
3	Water Charges	0	0	0
4	MPERC Fee (Rs. 5000 per MW)	14.50	14.50	14.50
	Total	176	176	175

B - STPS Sarni:

Table-32: Other Charges approved (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	686	686	682
2	Rent, Rates and Taxes	41	41	40
3	Water Charges	0	0	0
4	MPERC Fee (Rs. 5000 per MW)	57	57	57
	Total	784	784	779

C- SGTPS Birsingpur:

Table-33: Other Charges approved (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	535	527	522
2	Rent, Rates and Taxes	32	32	32
3	Water Charges	0	0	0
4	MPERC Fee (Rs. 5000 per MW)	42	42	42
	Total	608	601	596

- 3.38 The provisions envisaged in the transfer scheme for funding unfunded liabilities towards pension and other terminal benefits are yet to be implemented. Presently MPPTCL is paying terminal benefits on behalf of the five companies formed out of reorganisation of MPSEB. The Commission was informed that even after 1 June 2005, the terminal benefits and the pension of the people retired from the services of the company are being paid by MPPTCL. Accordingly, the Commission shall consider the provision for the terminal benefits in the tariff order of MPPTCL. When MPPGCL starts bearing the terminal liability towards its retiring employees, the Commission shall consider the actual expense incurred while truing up in subsequent orders.
- 3.39 In addition to the above, the Generating Company has also claimed additional expenses for Earned leave encashment payable to employees at the time of retirement. The Commission while fixing O&M norms has taken into consideration the liability for Earned leave encashment payable to employees, as part of employee cost and therefore no claim for this expense is admissible separately.

Depreciation

- 3.40 The opening gross block values considered by MPPGCL for computation of depreciation for thermal power stations are same as the value notified by GoMP in the transfer scheme. The Company has not projected any asset addition to the gross block of these stations in FY07, FY08 and FY09.

A - ATPS Chachai:

3.41 MPPGCL in its tariff petition has submitted that the Opening Gross block of ATPS at the beginning of FY06 as Rs. 143.97 Crore which is the value considered by the Commission in its order dated 25th Jan 2006 for FY 06. The accounting code wise break up of the opening gross block and accumulated depreciation is given in the table below :

Table-34: Opening Gross Block and Accumulated Depreciation (Rs. Lakh)

Code	Particulars	Gross Block	Acc. Dep. FY05	Acc. Dep. FY06	Acc. Dep. as a % of GB FY06
10.1	Land and Land Rights	35	5.91	6.28	17.86%
10.2	Buildings and Civil works	2203	1310.23	1342.09	60.91%
10.3	Hydraulic Works	331	153.41	157.32	47.46%
10.4	Other Civil Works	1495	578.75	605.40	40.49%
10.5	Plant & Machinery	9958	8175.87	8202.39	82.37%
10.6	Lines & Cable networks	298	233.39	234.62	78.78%
10.7	Vehicles	24	21.91	21.91	90.0%
10.8	Furniture & Fittings	6	4.77	4.83	81.09%
10.9	Office Equipment	46	37.43	37.84	83.26%
	Total	14397	10521.65	10612.68	73.71%

3.42 The depreciation amount claimed by the Generating Company for FY07, FY08 and FY09 at depreciation rates notified by the Commission is as given in the table below:

Table-35: Depreciation (Rs. Lakh)

Code	Particulars	FY07	FY08	FY09
10.1	Land and Land Rights	0.37	0.37	0.37
10.2	Buildings and Civil works	31.86	31.86	31.86
10.3	Hydraulic Works	3.55	3.54	3.53
10.4	Other Civil Works	26.65	26.65	26.65
10.5	Plant & Machinery	76.40	78.72	76.45
10.6	Lines & Cable networks	1.23	1.23	1.23
10.7	Vehicles	0	0	0
10.8	Furniture & Fittings	0.06	0.06	0.06
10.9	Office Equipment	0.41	0.34	0.32
	Total	140.54	142.77	140.47

- 3.43 The Commission has gone into the computation done by the Generating Company. The Commission finds that the amount claimed for FY06 for ATPS for Rs. 91 lakh is much lower than the amount claimed for FY07, FY08 and FY09. Similarly claim in FY08 is higher than the claim for FY07. The depreciation claim in later year for same figures of opening gross block and with same depreciation rate should be either same or lower as some of the assets get depreciated to 90% of the historical cost.
- 3.44 On closer scrutiny of ATPS account it was revealed that the increase in depreciation amount is due to increase in depreciation for plant and machinery (accounting code 10.5). The Company has debited 10.507 (Ash handling plant) by Rs. 16.21 Crore in FY94. This had reduced the depreciation claim at the rate of 7.84%. ***The Generating Company is directed that in future it must provide explanations for such adjustments.***

B - STPS Sarni:

- 3.45 MPPGCL in its tariff petition has submitted that the Opening Gross block of ATPS at the beginning of FY06 is Rs. 606.85 Crore which is the value considered by the Commission in its order dated 25th Jan 2006 for FY 06. The accounting code wise break up of the opening gross block and accumulated depreciation is given in the table below:

Table-36: Opening Gross Block and Accumulated Depreciation (Rs. Lakh)

Code	Particulars	Gross Block	Acc. Dep. FY05	Acc. Dep. FY06	Acc. Dep. as a % of GB FY06
10.1	Land and Land Rights	72	4.12	4.29	5.94%
10.2	Buildings and Civil works	6695	3476.5	3605.23	53.85%
10.3	Hydraulic Works	1567	1121.67	1137.35	72.59%
10.4	Other Civil Works	1883	535.84	569.67	30.25%
10.5	Plant & Machinery	48977	38936.59	39323.34	80.29%
10.6	Lines & Cable networks	1318	1101.91	1124.68	85.33%
10.7	Vehicles	95	85.54	85.54	90.0%
10.8	Furniture & Fittings	13	10.93	11.07	85.23%
10.9	Office Equipment	65	48.38	49.83	76.84%
	Total	60685	45321.48	45911.01	75.66%

- 3.46 The depreciation amount claimed by the Generating Company for FY07, FY08 and FY09 at depreciation rates notified by the Commission is as given in the table below:

Table-37: Depreciation (Rs. Lakh)

Code	Particulars	FY07	FY08	FY09
10.1	Land and Land Rights	0.17	0.17	0.17
10.2	Buildings and Civil works	127.09	127.01	126.79
10.3	Hydraulic Works	15.68	15.68	15.68
10.4	Other Civil Works	33.83	33.83	33.83
10.5	Plant & Machinery	351.12	349.40	328.76
10.6	Lines & Cable networks	22.28	20.51	9.44
10.7	Vehicles	0	0	0
10.8	Furniture & Fittings	0.14	0.11	0.10
10.9	Office Equipment	1.45	1.16	1.08
	Total	551.76	547.87	515.86

C- SGTPS Birsingpur:

3.47 MPPGCL in its tariff petition has submitted that the Opening Gross block of SGTPS at the beginning of FY06 is Rs. 2115.06 Crore which is the value considered by the Commission in its order dated 25th Jan 2006 for FY 06. The accounting code wise break up of the opening gross block and accumulated depreciation is given in the table below:

Table-38: Opening Gross Block and Accumulated Depreciation (Rs. Lakh)

Code	Particulars	Gross Block	Acc. Dep. FY05	Acc. Dep. FY06	Acc. Dep. as a % of GB FY06
10.1	Land and Land Rights	1403	204	225	16.05%
10.2	Buildings and Civil works	26109	10846	11610	44.47%
10.3	Hydraulic Works	2452	1029	1091	44.48%
10.4	Other Civil Works	7929	2138	2281	28.76%
10.5	Plant & Machinery	162050	63611	69682	43.00%
10.6	Lines & Cable networks	11402	3848	4125	36.18%
10.7	Vehicles	115	103	103	90.0%
10.8	Furniture & Fittings	22	15	16	70.38%
10.9	Office Equipment	24	17	18	76.55%
	Total	211506	81812	89151	42.15%

3.48 The depreciation amount claimed by the Generating Company for FY07, FY08 and FY09 at depreciation rates notified by the Commission is as given in the table below:

Table-39: Depreciation (Rs. Lakh)

Code	Particulars	FY07	FY08	FY09
10.1	Land and Land Rights	21.07	21.07	21.07
10.2	Buildings and Civil works	687.79	684.23	642.70
10.3	Hydraulic Works	38.80	37.74	37.74
10.4	Other Civil Works	142.72	142.72	142.72
10.5	Plant & Machinery	5706.96	5689.03	5308.41
10.6	Lines & Cable networks	275.78	274.30	273.31
10.7	Vehicles	0	0	0
10.8	Furniture & Fittings	0.46	0.43	0.43
10.9	Office Equipment	1.00	0.48	0.33
	Total	6874.60	6850.01	6426.71

- 3.49 The Generating Company as directed by the Commission in its order dated 25th January 2006 for MPPGCL is required to reconcile its accumulated depreciation figure for FY05 with the figure notified by the GoMP. The same has not yet been done. In the absence of audited balance sheet, the figures of accumulated depreciation submitted by MPPGCL cannot be accepted. However as the depreciation for FY07, FY08 and FY09 is being calculated on the opening gross block, which tallies with the figure notified by the GoMP, the figures of accumulated depreciation submitted by MPPGCL are being ignored. The depreciation amount for FY07, FY08 and FY09 is being computed at rates specified by the Commission in MPERC (Terms and Conditions of generation tariff) Regulations 2005.
- 3.50 The Commission in its order dated 25th January 2006 had expressed its anguish on the non-preparation of fixed asset registers and the lackadaisical approach of the Company in preparing them. The direction given in the previous order to complete fixed asset registers and codify all its assets by October 2006 must be complied by the due date.
- 3.51 The Generating Company has claimed depreciation at rates specified by the Commission and therefore the amount that has been claimed for FY07, FY08 and FY09 is being allowed.

Table-40: Depreciation (Rs. Lakh)

Details	FY07	FY08	FY09
ATPS	141	143	140
STPS	552	548	516
SGTPS	6875	6850	6427

Interest and Finance Charges

- 3.52 In addition to the loans of the Opening Balance Sheet identified with various power stations, the company has also claimed interest on the amount supposedly recoverable by the company as the difference between the provisional rate of 151 paise per unit and the rate per unit filed before the Commission for FY 06.
- 3.53 The entire regulatory asset has been sought to be amortised during the tariff period FY07 to FY09. The regulatory asset has been computed on the basis of actual amount of energy supplied by the Company during the period June 2005 to December 2005 and the difference in the billing rate of Rs. 1.51 per unit as per the inter-se agreement and Rs. 1.83 per unit as per the tariff filing for FY06 before the Commission. The regulatory asset so computed has been apportioned to various stations on the basis of net generation.
- 3.54 As the things turned out, the tariff determined by the Commission for FY 06 is lower than the provisional rate of 151 paise and thus no regulatory assets needs to be created. In fact, the Commission has directed MPPGCL to revise its bills on the basis of the two-part tariff determined by the Commission and withdraw the earlier bills. The Commission is neither allowing the amortization of the regulatory asset nor the interest on the regulatory asset claimed by MPPGCL.

A - ATPS Chachai:

- 3.55 The Generating Company has claimed interest liability for outstanding PFC loans of Rs 11.52 Crore in FY07, Rs. 9.53 Crore in FY08 and Rs. 7.52 Crore in FY09 and also interest on regulatory assets and an amount for amortization of regulatory assets. The amount claimed for FY07, FY08 and FY09 is shown in the table below:

Table-41: Interest Liability (Rs. Lakh)

Details	FY07	FY08	FY09
PFC	96.72	78.94	61.03
Amortization of regulatory asset	431.31	400.48	369.69
Total	528.03	479.42	430.72

- 3.56 The loans from PFC are project specific and can be identified with ATPS. As per the details provided by the Generating Company PFC loans have been availed for the following purpose.

Table-42: Details of PFC Loans (Rs. Lakh)

Loan No	Scheme Name	Net Balance*	Wtd. Avg. Int. Rate %
20104010	R&M 8th plan of Amarkantak TPS	54.18	10.26%
20104012	R&M scheme of Amarkantak TPS	110.98	9.03%
20104018	R&M scheme of Amarkantak TPS PH-II (2x120 MW)	1,240.64	8.93%

* As per notified balance sheet

3.57 The interest claimed on these loans is given in the following table:

Table-43: Interest (Rs. Lakh)

Loan No	Scheme Name	FY07	FY08	FY09
20104010	R&M 8th plan of Amarkantak TPS	0	0	0
20104012	R&M scheme of Amarkantak TPS	6.85	4.65	241
20104018	R&M scheme of Amarkantak TPS PH-II (2x120 MW)	89.87	74.30	58.62
	Total	96.72	78.95	61.03

3.58 Interest liability on PFC since it is project specific is being allowed as per above table. The Commission vide its order dated 25th January 2006 has determined two part tariff payable for all the stations located in MP and under the operational control of MPPGCL. The interest allowed for ATPS for FY07, FY08 and FY09 is as given in the table below:

Table-44: Interest Liability (Rs. Lakh)

	FY07	FY08	FY09
PFC	97	79	61
Total	97	79	61

B - STPS Sarni:

3.59 The Generating Company has claimed interest liability for PFC loans, interest on regulatory assets and an amount for amortization of regulatory assets. The amount claimed for FY07, FY08 and FY09 is shown in the table below:

Table-45: Interest Liability (Rs. Lakh)

Details	FY07	FY08	FY09
PFC	137	103	69
Amortization of regulatory asset	2374	2200	2020
Total	2510	2303	2089

- 3.60 The loans from PFC are project specific and can be identified with STPS. As per the details provided by the Generating Company PFC loans have been availed for the following purpose.

Table-46: Details of PFC Loans (Rs. Lakh)

Loan No	Scheme Name	Net Balance*	Wtd. Avg. Int. Rate %
20104008	R&M 8th plan of Satpura TPS	42.13	10.26%
20104014	R&M scheme of Satpura TPS	1417.63	9.00%
20104020	R&M scheme of Satpura TPS	474.19	8.82%
20104021	R&M scheme of Satpura TPS	146.92	9.50

- As per notified Balance Sheet

- 3.61 The interest claimed on these loans is given in the following table:

Table-47: Interest (Rs. Lakh)

Loan No	Scheme Name	FY07	FY08	FY09
20104008	R&M 8th plan of Satpura TPS	0	0	0
20104014	R&M scheme of Satpura TPS	87.05	58.95	30.54
20104020	R&M scheme of Satpura TPS	36.06	31.88	27.70
20104021	R&M scheme of Satpura TPS	13.43	12.04	10.64
	Total	136.5	102.87	68.88

- 3.62 MPPGCL through its supplementary submission has also identified CSS loan of Rs.34 Lakh with STPS project. The details in this regard have been provided. The Commission finds the details provided acceptable. The interest amount of Rs. 2 Lakh has been allowed for this loan for FY07 only after which there is no interest liability payable on this loan.

- 3.63 Since Interest liability on PFC and CSS Loans is project specific it is being allowed as per above table. The Commission vide its order dated 25th January 2006 has determined two part tariff payable for all the stations located in MP and under the operational control of MPPGCL. The interest allowed for STPS for FY07, FY08 and FY09 is as given in the table below:

Table-48: Interest Liability (Rs. Lakh)

	FY07	FY08	FY09
PFC	137	103	69
CSS	2	0	0
Total	139	103	69

C- SGTPS Birsingpur:

3.64 The Generating Company has claimed interest liability for PFC Loans, LIC Loans, REC Loans, CSS loans, interest on regulatory assets and an amount for amortization of regulatory assets. The amount claimed for FY07, FY08 and FY09 is shown in the table below:

Table-49: Interest Liability (Rs. Lakh)

Details	FY07	FY08	FY09
PFC	1432	1001	591
LIC	3032	3032	2956
REC	2631	2364	2084
CSS	2	0	0
Total Interest	7097	6397	5632
Amortization of regulatory asset	1883	1750	1620
Total	8980	8147	7252

3.65 Loans from PFC are project specific and can be identified with SGTPS. As per the details provided by the Generating Company PFC loans have been availed for the following purposes.

Table-50: Details of PFC Loans (Rs. Lakh)

Loan No	Scheme Name	Net Balance*	Wtd. Avg. Int. Rate %
20101008	SGTPS Unit I & II	871.19	9.22
20101009	SGTPS Stage I	1756.79	9.10
20101010	SGTPS Unit III & IV	20227.95	9.10

• As per notified balance sheet

3.66 The interest claimed on these loans is given in the following table:

Table-51: Interest (Rs. Lakh)

Loan No	Scheme Name	FY07	FY08	FY09
20101008	SGTPS Unit I & II	35.56	9.85	0
20101009	SGTPS Stage I	95.36	49.90	13.56
20101010	SGTPS Unit III & IV	1300.83	941.04	577.33
	Total	1431.75	1000.79	590.89

- 3.67 MPPGCL through its supplementary submission has also identified LIC loans with SGTPS project. The details in this regard have been provided. The Commission had found that out of Rs 488 Crore allocated in the Opening Balance Sheet and Rs 419 Crore as filed by the generating company, Rs 371.66 Crore has been found to be pertaining to SGTPS. The interest amount of Rs. 3032 Lakh, Rs. 3032 Lakh and Rs.2956 Lakh have been allowed for this loan for FY07, FY08 and FY09 respectively.
- 3.68 MPPGCL apart from the above loans, which are identified to projects, has allocated loans from other sources that are not identified with projects on repayment ability of the project. The repayment ability of the project has been determined on the basis of balance amount of depreciation available for it. MPPGCL has consequently allocated all balance loans from LIC and REC loan to SGTPS. Another chunk of loans amounting to Rs 259 Crore has been shown in the Opening balance sheet as coming from MPSEB. It has not been explained whether MPSEB is in the business of extending loans and is undertaking financing business. As per information available, MPSEB was itself deeply indebted during the years before the issue of restructuring order and hence it is not easily believable that MPSEB was in a position to extend loans to other entities. What can be surmised is that there were some debt liabilities of MPSEB which have been allocated to the companies which have come into existence as a result of restructuring. MPPGCL, in their filings Dated 23 February 2006 have included as an Annexure, the working of interest and finance charges by MPSEB and in this document, MPSEB has identified Rs 2,176 Crore as raised from bonds, debentures, financial institutions and GoMP. The Opening Balance Sheet notified, indicates the liability of Rs 2,155 Crore of MPSEB and the amount due from successor entities is also the same. The break up of Rs 2,176 Crore is as under :

Table-52: Sources of MPSEB Loans

Sl. No.	Source of Fund	Amount in Rs. Crore
1	Bonds	552.40
2	Debentures	799.38
3	SIDBI	11.63
4	IDBI	7.73
5	NVDA	18.26
6	SPA	6.56
7	MPRSVGS	0.16
8	LIC (HFL)	1.50
9	HDFC	1.17
10	PFC (Working Capital Loan)	75.00
11	Loan from GoMP	702.18
	Total	2175.97

3.69 This has been distributed to the successor companies as under

Table-53: Company wise allocation of MPSEB Loans (Rs. Crore)

Sr. No.	Successor entity	Amount
1	Genco	310.92
2	Transco	826.59
3	East Discom	240.25
4	West Discom	308.88
5	Central Discom	488.34
	Total	2175.97

3.70 The Commission has taken note of the position in respect of loans to be repaid to PFC, REC and LIC, etc which have been allocated as a liability to the successor entities of MPSEB. As the loans of MPSEB cannot be easily identified with individual successor companies, the restructuring notification has continued to retain the repayment liability with MPSEB, even as individual successor companies will be responsible for their share of liability as allocated to them through the opening balance sheet. It may be mentioned here that the liability passed on to MPPGCL is of the order of Rs 259 Crore and MPPGCL has identified it with Bansagar project. Energy Deptt, GoMP, vide their letter no. 300/13/2006 dated 18 January 2006 addressed to the CMDs of all successor companies has conveyed the decision of GoMP, that the MPSEB loans should be paid over a period of 10 years with interest @ 12% per annum based on weighted average rate of interest payable by MPSEB to its lenders for the subject liability.

3.71 Since Interest liability on PFC loans and some of the LIC loans is project specific it is being allowed as per the above table. The Commission in its order dated 25th January 2006 for FY06 has mentioned that the Commission would consider all loans, which could not be identified with any specific project as utilized for working capital borrowings. The Commission can consider interest liability on these loans only if MPPGCL can identify the assets that have been created out of these loans and provide proof to substantiate its claim. The interest payable on such loans has been computed in paragraph on interest on working capital.

3.72 The interest allowed for SGTPS for FY07, FY08 and FY09 is as given in the table below:

Table-54: Interest Liability (Rs. Lakh)

	FY07	FY08	FY09
PFC	1432	1001	591
LIC	3032	3032	2956
Total	4464	4033	3547

3.73 The Generating Company has claimed advance against depreciation for meeting repayment liability. The advance against depreciation is available to meet the repayment liability of long term loans availed for funding the capital cost of the plant. There is no provision for providing advance against depreciation for loans contracted for meeting working capital requirements. The Commission has considered loans from LIC and REC as working capital loans for reasons stated earlier. Hence on excluding the repayment liability for these loans as claimed by the Generating Company, the depreciation amount allowed by the Commission is sufficient to meet the repayment liability of PFC and LIC Loans. The Claim for advance against depreciation is therefore not being admitted.

Interest on working Capital

3.74 MPPGCL has claimed the interest on working capital in accordance with the norms prescribed in revised MPERC (Terms and Conditions of Generation Tariff). Accordingly the Generating Company is entitled to claim working capital on the following basis:

- 45 days of coal stock for pithead stations and 60 days for non-pithead stations
- 60 days of secondary fuel stock
- Operation and Maintenance expenses for one month
- Maintenance spares @ 1% of historical cost
- Receivables equivalent to two months of fixed and variable charges

3.75 MPPGCL has considered the interest rate of 12.75% for computing the interest liability for working capital borrowings.

3.76 The Commission has recomputed the working capital requirement considering the approved cost and the interest rate equal to the short term lending rate of State Bank of India plus 1%. Interest rate that is being considered is therefore, 11.25% (10.25%+1%). The interest rate that actually prevails on 1st April 2006 shall be considered while truing up.

A - ATPS Chachai:

3.77 The Generating Company has accordingly claimed interest on working capital as given in the table below:

Table-55: Interest on working capital (Rs. Lakh)

Details	FY07	FY08	FY09
Working Capital Requirement	5413	5497	5574
Interest on working capital (@ 12.75%)	690	701	711

3.78 The Computation as per the norms and revised interest rate is provided in the table below:

Table-56: Working Capital Requirement (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1.	45 days of coal stock	1434	1448	1459
2.	60 days of secondary oil stock	283	285	287
3.	O&M (1 month)	280	297	314
4.	Maintenance spares (1% of HC)	144	144	144
5.	Receivables (2 months)	3030	3085	3135
	Total	5170	5259	5339
	Interest on wc (@11.25%)	582	592	601

B - STPS Sarni:

3.79 The Generating Company has claimed interest on working capital as given in the table below:

Table-57: Interest on working capital (Rs. Lakh)

Details	FY07	FY08	FY09
Working Capital Requirement	31855	30876	30327
Interest on working capital (@ 12.75%)	4061	3937	3867

3.80 The Computation as per the norms and revised interest rate is provided in the table below:

Table-58: Working Capital Requirement (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1.	45 days of coal stock	11180	11141	10967
2.	60 days of secondary oil stock	702	708	710
3.	O&M (1 month)	1102	1168	1238
4.	Maintenance spares (1% of HC)	607	607	607
5.	Receivables (2 months)	20715	19721	19258
	Total	34306	33345	32779
	Interest on wc (@11.25%)	3859	3751	3688

C- SGTPS Birsingpur:

3.81 The Generating Company has claimed interest on working capital as given in the table below:

Table-59: Interest on working capital (Rs. Lakh)

Details	FY07	FY08	FY09
Working Capital Requirement	25088	25044	25459
Interest on working capital (@ 12.75%)	3199	3193	3246

3.82 The Computation as per the norms and revised interest rate is provided in the table below.

Table-60: Working Capital Requirement (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1.	45 days of coal stock	6023	6008	5959
2.	60 days of secondary oil stock	418	422	426
3.	O&M (1 month)	810	859	910
4.	Maintenance spares (1% of HC)	2115	2115	2115
5.	Receivables (2 months)	13675	13679	13564
	Total	23041	23083	22974
	Interest on wc (@11.25%)	2592	2597	2585

3.83 Asset created out of balance LIC Loan of Rs. 116.34 Crore, REC loan of Rs. 303.64 Crore and MPSEB Loan of Rs. 258.87 Crore could not be identified. The amount indicated against each of the sources is the projected opening balance for FY07. The Generating Company has allocated all loans except MPSEB Loan to SGTPS based on the principle on repayment capability of the project measured in terms of the balance amount of depreciation available. MPSEB Loan has been allocated to Bansagar. It would be pertinent to mention here that the opening balance of LIC Loan and CSS loan are not as per the notified balance sheet. As per the notified balance sheet opening balance of LIC Loan for FY07 should have been Rs. 488 Crore as no payment is due in FY06. The Generating Company is directed to reconcile these values. As per the stated stand of the Commission all loans that are not identifiable with assets created have been treated as working capital loans. For the purpose of computation of interest on working capital, opening balance of loans for FY07 has been computed as per the repayment schedule provided by the Company and balance as per the notified balance sheet of 1st June 2005. The opening balance considered for working capital funding and the interest thereon for FY07, FY08 and FY09 is as given in the table below:

Table-61: Interest on working capital (Rs. Lakh)

Details	FY07	FY08	FY09
LIC	11634	11634	11634
REC	30364	27327	24291
Generic	25887	23298	20709
Total	67885	62259	56634
Interest at (11.25%)	7637	7004	6371

- 3.84 The Commission allocates the allowed interest on REC, LIC, and MPSEB Loan to all power stations considered in this order in proportion of the working capital requirement of the individual station to the total working capital requirement of the power stations considered in this order. The allocated working capital interest is higher for FY07 but for FY08 and FY09 it is lower than the interest on the working capital required on normative basis. The Commission allows interest on working capital for FY07 on the allocated basis and for FY08 and FY09 it is allowed to the extent of normative working capital requirement. The interest on working capital allowed for these stations for FY07, FY08 and FY09 is given in the table below. The interest allowed on working capital loans has been proportionately allocated to all power stations so that fixed cost of SGTPS and Bansagar does not get unduly inflated.

Table-62: Working Capital Interest allowed (Rs. Lakh)

Details	FY07	FY08	FY09
ATPS	592	592	601
STPS	3930	3751	3688
SGTPS	2640	2597	2585

Other Expenses

- 3.85 The Generating Company has claimed expenses for making provisions for bad debts and expenses incurred by MPSEB for providing common services like co-ordination amongst five companies and load despatch centre, various court cases between erstwhile MPEB/MPSEB and CSEB, various issues related with CERC etc. The Generating Company has also claimed pension expenses and payments for Earned leave encashment. The Generating Company has allocated total expenses likely to be incurred under this head to various stations on the basis of net generation.

A - ATPS Chachai:

3.86 The Generating Company has wrongly projected this expense for ATPS at Rs. 14.02 Crore, 14.60 Crore and 15.51 Crore for FY07, FY08 and FY09 at table 15.3.14.1 at page 93 of the petition. The incorrect estimation is due to incorrect projection of expected generation from ATPS at 6329 MU, 6389 MU and 6414 MU for FY07, FY08 and FY09. The expected expenses corrected for net generation as per the norms is given in the table below:

Table-63: Other expenses (Rs. Lakh)

Details	FY07	FY08	FY09
Pension Expenses			
Earned Leave encashment			
Provision for Bad debt			
MPSEB's Common Facility Cost			
Total	255	266	284

B - STPS Sarni:

3.87 The expenses claimed for STPS for FY07, FY08 and FY09 is as given in the table below:

Table-64: Other expenses (Rs. Lakh)

Details	FY07	FY08	FY09
Pension Expenses			
Earned Leave encashment			
Provision for Bad debt			
MPSEB's Common Facility Cost			
Total	1402	1460	1551

C- SGTPS Birsingpur:

3.88 The expenses claimed for SGTPS for FY07, FY08 and FY09 is as given in the table below:

Table-65: Other expenses (Rs. Lakh)

Details	FY07	FY08	FY09
Pension Expenses			
Earned Leave encashment			
Provision for Bad debt			
MPSEB's Common Facility Cost			
Total	1112	1161	1244

- 3.89 The expenses claimed by MPPGCL are not in accordance with the applicable regulations and hence cannot be accepted. The expenses claimed by MPSEB have no basis because MPSEB, which is a trader, cannot claim expenses for activities, which MPPGCL as an independent organisation is itself supposed to carry out. An expense claimed on behalf of SLDC by MPSEB has no basis, as SLDC is not under its operational control. The Commission for FY06 has allowed expenses incurred in operating SLDC as a part of transmission charges to be paid by long-term users. For FY07 and onwards the SLDC charges may be allowed either as a part of the transmission charges or a separate order in this regard may be issued. MPSEB, which is a trader, can approach the Commission for fixation of trading margin for its trading business. The Commission shall fix trading margin when MPSEB approaches it. MPSEB cannot unilaterally fix its trading margin. MPPGCL is directed not to entertain any such claim of MPSEB without the prior approval of the Commission. The Commission has already dealt with issues pertaining to pension liability and Earned leave encashment in earlier paragraphs.
- 3.90 The other expenses claimed by the Generating Company are not being allowed for all the three years.

Return on Equity and Tax on return on equity

- 3.91 The Generating Company has allocated equity of Rs. 929.57 Crore employed in completed projects to various power stations on the basis of opening gross block of the year.
- 3.92 The Commission in its order dated 25th January 2006 had gone into the computation of equity employed in the completed projects and had agreed with the contention of the Generating Company that out of total equity of Rs. 1278 Crore only Rs. 929.57 Crore had been employed in the completed project. Since the last order no changes have taken place in the opening gross block of fixed assets, the Commission for the purpose of computation of return considers Rs. 929.57 Crore as equity employed in commissioned assets as done in the previous order. The allocation of the equity on the basis of opening gross block of different power stations is also acceptable. The return allowed at 14% for FY07, FY08 and FY09. The Power Station wise details are given below:

A - ATPS Chachai:

Table-66: Return on Equity (Rs. Lakh)

Details	FY07	FY08	FY09
Equity allocated to ATPS	3006	3006	3006
Return on equity (at 14%)	420.8	420.8	420.8

B - STPS Sarni:

Table-67: Return on Equity (Rs. Lakh)

Details	FY07	FY08	FY09
Equity allocated to STPS	12669	12669	12669
Return on equity (at 14%)	1774	1774	1774

C- SGTPS Birsingpur:

Table-68: Return on Equity (Rs. Lakh)

Details	FY07	FY08	FY09
Equity allocated to SGTPS	44156	44156	44156
Return on equity (at 14%)	6181.84	6181.84	6181.84

- 3.93 The Generating Company has computed the tax liability at 35% + 2.5% surcharge and 2% education Cess. The Generating Company for return on equity computed in the above paragraph has claimed tax at Rs. 243 Lakh, Rs. 1024 Lakh and Rs. 3568 Lakh respectively for ATPS, STPS and SGTPS for FY07, FY08 and FY09.
- 3.94 The Commission has recomputed the tax liability based on the rates applicable for the assessment year FY07. The applicable rates are 30% plus 10% surcharge and 2% education Cess. The Generating Station wise tax liability at the applicable rates is Rs. 214 Lakh, Rs. 900 Lakh and Rs. 3136.9 Lakh respectively for ATPS, STPS and SGTPS for each of FY07, FY08 and FY09. However the tax liability is dependent on the other expenses and will be known when the accounts are finalised. Hence the Generating Company shall bill the beneficiary the tax liability to be incurred by it subject to the maximum of Rs. 214 Lakh, Rs. 900 Lakh and Rs. 3136.9 Lakh respectively for ATPS, STPS and SGTPS. The amount billed is a pass through item and shall be payable by beneficiary monthly subject to truing up at the end of the financial year.

Prior Period expenses for STPS Sarni:

3.95 Prior period charges relate to out of court settlement with WCL with regards to price rise affected by the Coal Company in February 2001 for coal supplies to Sarni. The Board contested the price rise affected by WCL in February 2001 in the High Court. The Board as per the interim order of the High Court had been making payment to WCL at August 1998 rates (the price revision done earlier to Feb 01 revision) and 50% of the enhanced rate in Feb 01. The Board and WCL reached an out of court settlement according to which the Board will settle the entire amount payable to WCL in 30 equal monthly instalments starting from January 2005. The total amount payable to WCL under this settlement is Rs. 212.5 Crore. The amount is being allowed as the cost of generation previously had been computed on the basis of the price for coal actually paid as per the interim direction of the High Court. The amount claimed is for the adjustment of the past liability. The Commission allows Rs. 84.96 Crore for FY07 and Rs. 21.24 Crore for FY08. No amount is being allowed for FY09 as this liability will extinguish in FY08.

Non-Tariff Income

3.96 The Generating Company has computed the non tariff income on the basis of the past trend except for incentive due to securitisation of CPU dues (Montek Singh Ahluwalia Committee), which is not expected to accrue from FY07 and onwards. The estimated amount has been allocated to various stations on the basis of expected net generation from them. The Commission finds the estimation of the Generating Company reasonable and allows the same.

Table-69: Non-Tariff Income (Rs. Lakh)

Details	FY07	FY08	FY09
ATPS	44.31	45.52	46.85
STPS	244	250	256
SGTPS	193	199	205

Fixed and Variable Charges

A - ATPS Chachai:

3.97 The summary of allowable fixed and variable charges is given in the table below:

Table-70: Fixed and Energy Cost (Rs. Lakh)

Sl. No.	Details	FY07		FY08		FY09	
		Total	Per U	Total	Per U	Total	Per U
I	Fixed Cost						
1.	O&M	3355		3558		3770	
2.	Cess on aux.	155		155		154	
3.	Rents and Rates	7		7		7	
4.	MPERC fee	15		15		15	
5.	Depreciation	141		143		140	
6.	Interest & Finance	97		79		61	
7.	Interest on WC	592		592		601	
8.	ROE	421		421		421	
Less	Non-Tariff Income	44		46		47	
	Total	4738		4923		5121	
II	Energy Cost (Paise)		117		117		117

B - STPS Sarni:

3.98 The summary of allowable fixed and variable charges is given in the table below:

Table-71: Fixed and Energy Cost (Rs. Lakh)

Sl. No.	Details	FY07		FY08		FY09	
		Total	Per U	Total	Per U	Total	Per U
I	Fixed Cost						
1.	O&M	13219		14018		14853	
2.	Cess on aux.	686		686		682	
3.	Rents and Rates	41		41		40	
4.	MPERC fee	57		57		57	
5.	Prior period Expenses	8496		2124		0	
5.	Depreciation	552		548		516	
6.	Interest & Finance	139		103		69	
7.	Interest on WC	3930		3751		3688	
8.	ROE	1774		1774		1774	
Less	Non-Tariff Income	244		250		256	
	Total	20154		20729		21422	
II	Energy Cost (Paise)		135		134		131

C- SGTPS Birsingpur:

3.99 The summary of allowable fixed and variable charges is given in the table below:

Table-72: Fixed and Energy Cost (Rs. Lakh)

Sl. No.	Details	FY07		FY08		FY09	
		Total	Per U	Total	Per U	Total	Per U
I	Fixed Cost						
1.	O&M	9719		10307		10920	
2.	Cess on aux.	534		527		522	
3.	Rents and Rates	32		32		32	
4.	MPERC fee	42		42		42	
5.	Depreciation	6875		6850		6427	
6.	Interest & Finance	4464		4033		3547	
7.	Interest on WC	2640		2597		2585	
8.	ROE	6182		6182		6182	
Less	Non-Tariff Income	193		199		205	
	Total	30294		30370		30052	
II	Energy Cost (Paise)		103		102		100

3.100 The fixed charges determined by the Commission shall be payable in twelve equal monthly instalments by the beneficiary subject to the cumulative monthly availability or cumulative monthly PLF achieved. In case of lower availability or cumulative PLF for the month there would be a prorate reduction in fixed charges. If the cumulative PLF is more than the norm than incentive shall be payable for the energy generated in excess of the norm. These conditions as per MPERC (Terms and Conditions of Generation tariff) Regulations 2005 and it may be referred to for any clarification in this regard.

3.101 The energy charges shall be payable at rates determined by the Commission for energy actually supplied in the month.

CHAPTER 4

Hydel Power Stations of MPPGCL

Introduction

- 4.1 In this chapter, net generation expected from hydro power stations of MPPGCL and the annual fixed charges of each of the plant have been determined for FY07, FY08 and FY09. These are based on the norms and principles elaborated in MPERC (Terms and Conditions of Generation Tariff) Regulations 2005. The Company shall bill the beneficiary for FY07 at provisional tariff determined for this power station by the Commission, while the rates for FY08 and FY09 are only indicative. The actual rates for these years shall be computed when the tariff petitions for these years are filed by the Company before the Commission either after the audited balance sheet becomes available or the opening balance sheet notified by the GoMP becomes final.
- 4.2 The details of the plants are as given in the table below:

Table-73: Installed Capacity

Hydro Power Station / Units		Capacity (MW)	COD
Gandhi Sagar			
1.	Unit # 1	23	Nov, 60
2.	Unit # 2	23	Nov, 60
3.	Unit # 3	23	Nov, 60
4.	Unit # 4	23	Aug, 63
5.	Unit # 5	23	Nov, 66
	Total	115	
Pench			
1.	Unit # 1	80	March, 86
2.	Unit # 2	80	March, 86
	Total	160	
Rajghat			
1.	Unit # 1	15	15 th Oct, 99
2.	Unit # 2	15	29 th Sept, 99
3.	Unit # 3	15	3 rd Nov, 99
	Total	45	
Bargi			
1.	Unit # 1	45	June 88
2.	Unit # 2	45	Nov 88
	Total	90	

Hydro Power Station / Units		Capacity (MW)	COD
Bansagar-1 (Tons)			
1	Unit # 1	105	27 th Aug, 91
2	Unit # 2	105	3 rd Sept, 92
3	Unit # 3	105	30 th Aug, 92
	Total	315	
Bansagar-2 (Silpara)			
1	Unit # 1	15	28 th Aug, 02
2	Unit # 2	15	1 st Sep, 02
	Total		
Bansagar -3 (Devlond)			
1	Unit # 1	20	18 th July, 01
2	Unit # 2	20	26 th Aug, 01
3	Unit # 3	20	2 nd Sep, 02
	Total	60	
	Total (Complex)	405	
Birsingpur			
	Unit # 1	20	1991
	Total	20	

Normative Capacity Index

- 4.3 Full capacity charges shall be recoverable from the beneficiary if the normative capacity index for FY07, FY08 and FY09 is as per the table given below:

Table-74: Normative Capacity Index (%)

Generating Station	FY07	FY08	FY09
Gandhisagar	85	85	85
Pench	85	85	85
Rajghat	85	85	85
Bargi	85	85	85
Bansagar*	85	85	85
Birsinghpur	85	85	85

- For Bansagar II Silpara CI index shall be 90%. The total CI for the complex shall be the weighted average mean of the applicable CI and installed capacity

- 4.4 Capacity charges shall be recoverable on pro rata basis if actual capacity index is lower than that indicated in the above table. Incentive shall be payable for the station if the actual capacity index exceeds normative capacity index indicated in the above table. The incentive shall be payable as per the relevant clause of the MPERC (Terms and Conditions of Tariff) Regulations 2005.

- 4.5 CI shall be computed in accordance with the relevant provisions of the MPERC (Terms and Conditions of Tariff) Regulations 2005. SLDC shall verify the availability figures submitted by MPPGCL for claiming fixed charges.

Gross Generation

- 4.6 The average of generation during the period FY94 to FY05, design energy and the projection done by the Generating Company is given in the table below:

Table-75: Gross Generation (MU)

Generating Station	Design Energy	Average*	Projected
Gandhisagar	420.80	323	345
Pench	315.36	397	230
Rajghat	87.6	81.28	90
Bargi	508.08	519	490
Bansagar -I	900	960.28	890
Bansagar -II	113	68.02	70
Bansagar -III	143	77.51	75
Bansagar	1156	1105.80	1035
Birsinghpur	52	44.28	45

- For the period FY94 to FY05

- 4.7 The projections of MPPGCL are based on the gross generation achieved during FY05. The projected gross Generation for FY07, FY08 and FY09 is expected to be same. The gross generation is being projected for the purpose of ascertaining energy that is likely to become available to distribution licensees during these years. Entire generation from these power plants is being considered. For Bansagar the generation from complex rather than from individual plant is being considered. The recovery of charges depends upon only on the capacity index achieved by the plant. The Commission considering the fact that average energy generation in the past has been lower than the design energy the projection of MPPGCL is realistic and is acceptable.

Table-76: Gross Generation (MU)

Generating Station	FY07	FY08	FY09
Gandhisagar	345	345	345
Pench	315.36	315.36	315.36
Rajghat	90	90	90
Bargi	508.08	508.08	508.08
Bansagar	1105	1105	1105
Birsinghpur	45	45	45

Auxiliary Consumption

- 4.8 The auxiliary consumption as a percentage of gross generation in FY07, FY08 and FY09 shall be as per MPERC (Terms and Conditions for determination of generation tariff) Regulations 2005 and is expected to be as given in the table below:

Table-77: Auxiliary Consumption (%)

Generating Station	FY07	FY08	FY09
Gandhisagar	0.7*	0.7	0.7
* 0.2% of energy generated for surface hydroelectric power stations with rotating exciters and 0.5% of transformation losses from generation voltage to transmission voltage			
Pench	0.9*	0.9	0.9
* 0.4% of energy generated for underground hydroelectric power stations with rotating exciters system and 0.5% of transformation losses from generation voltage to transmission voltage.			
Rajghat	1*	1	1
* 0.5% of energy generated for surface hydroelectric power stations with static excitation system and 0.5% of transformation losses from generation voltage to transmission voltage.			
Bargi	1*	1	1
* 0.5% of energy generated for surface hydroelectric power stations with static excitation system and 0.5% of transformation losses from generation voltage to transmission voltage			
Bansagar	1*	1	1
* 0.5% of energy generated for surface hydroelectric power stations with static excitation system and 0.5% of transformation losses from generation voltage to transmission voltage.			
Birsinghpur	1*	1	1
* 0.5% of energy generated for surface hydroelectric power stations with static excitation system and 0.5% of transformation losses from generation voltage to transmission voltage.			

Net Generation

- 4.9 The ex-bus (net) generation in FY07, FY08 and FY09 at target norms indicated in the above table is expected to be as given in the table below:

Table-78: Net Generation (MU)

Generating Station	FY07	FY08	FY09
Gandhisagar	342.60	342.60	342.60
Pench	312.52	312.52	312.52
Rajghat	89.1	89.1	89.1
Bargi	503	503	503
Bansagar	1094	1094	1094
Birsinghpur	44.6	44.6	44.6

- 4.10 Rate of primary energy for this station shall be equal to the lowest variable charges of the central sector thermal power station in the western region.
- 4.11 The Generating Company shall be entitled to receive incentive payments for saleable secondary energy generation as per the relevant clause of the MPERC (Terms and Conditions for determination of generation tariff) Regulations 2005.

Annual Fixed Charges

- 4.12 The annual fixed charges payable for Gandhi Sagar power station are being determined in accordance with MPERC (Terms and Conditions of Generation Tariff) Regulations 2005. These charges shall be payable monthly by the beneficiary.

O&M

- 4.13 The norms for O&M Expenses as per MPERC (Terms and Conditions of Generation Tariff) Regulations 2005 are as given in the table below:

Table-79: O&M Norms (Rs. Lakh/MW)

	FY07	FY08	FY09
O&M	4.42	4.69	4.97

- 4.14 In accordance with these norms the allowable O&M expenses for FY07, FY08 and FY09 is given in the table below:

Table-80: O&M Norms (Rs. Lakh)

Details		FY07	FY08	FY09
Gandhisagar	Installed Capacity (MW)	115	115	115
	O&M Expenses	508	539	572
Pench	Installed Capacity (MW)	160	160	160
	O&M Expenses	707	750	795
Rajghat	Installed Capacity (MW)	45	45	45
	O&M Expenses	199	211	224
Bargi	Installed Capacity (MW)	90	90	90
	O&M Expenses	398	422	447
Bansagar	Installed Capacity (MW)	405	405	405
	O&M Expenses	1790	1899	2013
Birsinghpur	Installed Capacity (MW)	20	20	20
	O&M Expenses	88	94	99

- 4.15 These norms exclude taxes payable to Government or local authorities, fee payable to MPERC and pension and terminal benefits payable to its employees. The Cess has been computed at the rate of 10 paise per unit of auxiliary consumption at norms fixed by the Commission. Total Rent, Rates and Taxes for hydro stations have been projected to be Rs. 35 lakh for FY07 and FY07 and thereafter an annual 10% increase has been proposed for FY08 and FY09 respectively. This amount has been allocated to various stations on the basis of proportion of net generation to total net generation from all power stations considered by the Company. Water charges have been levied by the State Government according to a formula which allows for yearly increase and works out to 13.5 paise, 14 paise and 14.5 paise per unit of gross generation for FY07, F08 and FY09 for Gandhisagar and Rajghat. For Bansagar and Bargi this levy is 2 paise per unit of gross generation for all the three years. Fee payable to MPERC has been computed on the basis of applicable fee of Rs. 1000 per MW. The Generating Company has projected these charges as given in the tables below:

A – Gandhi Sagar

Table-81: Other Charges (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	4	4	4
2	Rent, Rates and Taxes	3	3	3
3	Water Charges	466	484	500
4	MPERC Fee (Rs. 1000 per MW)	1	1	1
	Total	474	492	508

B – Pench

Table-82: Other Charges (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	0	0	0
2	Rent, Rates and Taxes	2	3	3
3	Water Charges	0	0	0
4	MPERC Fee (Rs. 1000 per MW)	2	2	2
	Total	4	5	5

C- Rajghat

Table-83: Other Charges (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	0.35	0.35	0.35
2	Rent, Rates and Taxes	1	1	1
3	Water Charges	61	63	65
4	MPERC Fee (Rs. 1000 per MW)	0.45	0.45	0.45
	Total	62	65	67

D – Bargi

Table-84: Other Charges (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	1	1	1
2	Rent, Rates and Taxes	8	8	9
3	Water Charges	98	98	98
4	MPERC Fee (Rs. 1000 per MW)	1	1	1
	Total	107	108	109

E – Bansagar

Table-85: Other Charges (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	2	2	2
2	Rent, Rates and Taxes	16	18	20
3	Water Charges	207	207	207
4	MPERC Fee (Rs. 1000 per MW)	4	4	4
	Total	229	231	233

F – Birsinghpur

Table-86: Other Charges (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1.	Cess on Aux (@10 p/u)	0.4	0.4	0.4
2.	Rent, Rates and Taxes	0.6	0.7	0.7
3.	Water Charges	0	0	0
4.	MPERC Fee (Rs. 1000 per MW)	0.2	0.2	0.2
	Total	1.2	1.2	1.3

4.16 The Commission allows these expenses on the basis of the applicable rates and norms. Water Charges have been considered for entire generation from these power plants. The Company shall be entitled to claim Cess computed on the basis of approved auxiliary consumption norms while other expenses shall be claimed at actuals every month. The amount allowed by the Commission for FY07, FY08 and FY09 is given in the tables below:

A – Gandhi Sagar

Table-87: Other Charges approved (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	2	2	2
2	Rent, Rates and Taxes	3	3	3
3	Water Charges	466	483	500
4	MPERC Fee (Rs. 1000 per MW)	1	1	1
	Total	472	490	507

B – Pench

Table-88: Other Charges approved (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	3	3	3
2	Rent, Rates and Taxes	2	3	3
3	Water Charges	0	0	0
4	MPERC Fee (Rs. 1000 per MW)	2	2	2
	Total	7	8	8

C – Rajghat

Table-89: Other Charges approved (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	0.90	0.90	0.90
2	Rent, Rates and Taxes	1	1	1
3	Water Charges	122	126	131
4	MPERC Fee (Rs. 1000 per MW)	0.45	0.45	0.45
	Total	124	128	133

D – Bargi

Table-90: Other Charges approved (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	5	5	5
2	Rent, Rates and Taxes	8	8	8
3	Water Charges	102	102	102
4	MPERC Fee (Rs. 1000 per MW)	0.9	0.9	0.9
	Total	116	116	116

E – Bansagar

Table-91: Other Charges approved (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1	Cess on Aux (@10 p/u)	11	11	11
2	Rent, Rates and Taxes	16	18	20
3	Water Charges	221	221	221
4	MPERC Fee (Rs. 1000 per MW)	4	4	4
	Total	252	254	256

F – Birsinghpur

Table-92: Other Charges approved (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1.	Cess on Aux (@10 p/u)	0.40	0.40	0.40
2.	Rent, Rates and Taxes	0.6	0.7	0.7
3.	Water Charges	0	0	0
4.	MPERC Fee (Rs. 1000 per MW)	0.2	0.2	0.2
	Total	1.2	1.3	1.3

- 4.17 The provisions envisaged in the transfer scheme for funding unfunded liabilities towards pension and other terminal benefits are yet to be implemented. Presently MPPTCL is paying terminal benefits on behalf of the five companies formed out of reorganisation of MPSEB. The Commission was informed that even after 1 June 2005, the terminal benefits and the pension of the people retired from the services of the company are being paid by MPPTCL. Accordingly, the Commission shall consider the provision for the terminal benefits in the tariff order of MPPTCL. When MPPGCL starts bearing the terminal liability towards its retiring employees, the Commission shall consider the actual expense incurred while truing up in subsequent orders.
- 4.18 In addition to the above, the Generating Company has also claimed additional expenses for Earned leave encashment payable to employees at the time of retirement. The Commission while fixing O&M norms has taken into consideration the liability for Earned leave encashment payable to employees, as part of employee cost and therefore no claim for this expense is admissible separately.

Depreciation

A – Gandhi Sagar

- 4.19 MPPGCL in its tariff petition has submitted that the Opening Gross block of Gandhi Sagar at the beginning of FY06 is Rs. 10.29 Crore, which is the value considered by the Commission in its order dated 25th Jan 2006 for FY 06. The opening gross block value considered by MPPGCL for computation of depreciation is same as the value notified by GoMP in the transfer scheme. The Company has not projected any asset addition to the gross block in FY07, FY08 and FY09. The accounting code wise break up of the opening gross block and accumulated depreciation is given in the table below:

Table-93: Opening Gross Block and Accumulated Depreciation (Rs. Lakh)

Code	Particulars	Gross Block	Acc. Dep. FY05	Acc. Dep. FY06	Acc. Dep. as a % of GB FY06
10.1	Land and Land Rights	0.30	0	0	0%
10.2	Buildings and Civil works	24.94	22.29	22.30	89.41%
10.3	Hydraulic Works	371.29	202.85	209.28	56.37%
10.4	Other Civil Works	15.41	13.16	13.25	85.98%
10.5	Plant & Machinery	522.19	451.88	453.23	86.79%
10.6	Lines & Cable networks	84.68	76.03	76.04	89.81%
10.7	Vehicles	9.02	8.12	8.12	90.0%
10.8	Furniture & Fittings	0.46	0.41	0.41	90.0%
10.9	Office Equipment	1.02	0.92	0.92	90.0%
	Total	1029.29	775.65	783.54	76.12%

- 4.20 The depreciation amount claimed by the Generating Company for FY07, FY08 and FY09 at depreciation rates notified by the Commission is as given in the table below and the same is being allowed.

Table-94: Depreciation (Rs. Lakh)

Code	Particulars	FY07	FY08	FY09
10.1	Land and Land Rights	0.0	0.0	0.0
10.2	Buildings and Civil works	0.01	0.01	0.01
10.3	Hydraulic Works	6.43	6.43	6.43
10.4	Other Civil Works	0.08	0.07	0.06
10.5	Plant & Machinery	1.35	1.35	1.35
10.6	Lines & Cable networks	0.01	0.01	0.01
10.7	Vehicles	0	0	0
10.8	Furniture & Fittings	0	0	0
10.9	Office Equipment	0	0	0
	Total	7.88	7.87	7.85

B- Pench

- 4.21 MPPGCL in its tariff petition has submitted that the Opening Gross block of Pench at the beginning of FY06 is Rs. 87.5 Crore, which is the value considered by the Commission in its order dated 25th Jan 2006 for FY 06. The opening gross block value considered by MPPGCL for computation of depreciation is same as the value notified by GoMP in the transfer scheme. The Company has not projected any asset addition to the gross block in FY07, FY08 and FY09. The accounting code wise break up of the opening gross block and accumulated depreciation is given in the table below:

Table-95: Opening Gross Block and Accumulated Depreciation (Rs. Lakh)

Code	Particulars	Gross Block	Acc. Dep. FY05	Acc. Dep. FY06	Acc. Dep. as a % of GB FY06
10.1	Land and Land Rights	0	0	0	0%
10.2	Buildings and Civil works	315	136	142	45.03%
10.3	Hydraulic Works	6488	4224	4293	66.17%
10.4	Other Civil Works	0	0	0	0.0%
10.5	Plant & Machinery	1873	1206	1245	66.48%
10.6	Lines & Cable networks	66	38	39	58.59%
10.7	Vehicles	6	5	5	90.0%
10.8	Furniture & Fittings	1	1	1	90.0%
10.9	Office Equipment	0.0	0	0	90.0%
	Total	8750	5610	5725	65.44%

- 4.22 The depreciation amount claimed by the Generating Company for FY07, FY08 and FY09 at depreciation rates notified by the Commission is as given in the table below and the same is being allowed.

Table-96: Depreciation (Rs. Lakh)

Code	Particulars	FY07	FY08	FY09
10.1	Land and Land Rights	0	0	0
10.2	Buildings and Civil works	6	6	6
10.3	Hydraulic Works	68	68	67
10.4	Other Civil Works	0	0	0
10.5	Plant & Machinery	39	39	39
10.6	Lines & Cable networks	1	1	1
10.7	Vehicles	0	0	0
10.8	Furniture & Fittings	0	0	0
10.9	Office Equipment	0	0	0
	Total	114	114	113

C – Rajghat:

- 4.23 MPPGCL in its tariff petition has submitted that the Opening Gross block of Rajghat at the beginning of FY06 is Rs. 82.75 Crore, which is the value considered by the Commission in its order dated 25th Jan 2006 for FY 06. The opening gross block value considered by MPPGCL for computation of depreciation is same as the value notified by GoMP in the transfer scheme. The Company has not projected any asset addition to the gross block in FY07, FY08 and FY09. The accounting code wise break up of the opening gross block and accumulated depreciation is given in the table below:

Table-97: Opening Gross Block and Accumulated Depreciation (Rs. Lakh)

Code	Particulars	Gross Block	Acc. Dep. FY05	Acc. Dep. FY06	Acc. Dep. as a % of GB FY06
10.1	Land and Land Rights	7	0	0	0%
10.2	Buildings and Civil works	1537	251.74	290.97	18.93%
10.3	Hydraulic Works	1602	248.03	288.51	18.01%
10.4	Other Civil Works	2	0.25	0.28	16.9%
10.5	Plant & Machinery	4927	1056.47	1191.97	24.19%
10.6	Lines & Cable networks	184	34.63	38.67	20.98%
10.7	Vehicles	15	13.18	13.18	90.0%
10.8	Furniture & Fittings	1	0.69	0.74	81.95%
10.9	Office Equipment	0.36	0.26	0.28	76.58%
	Total	8275	1605.26	1824.60	22.05%

- 4.24 The depreciation amount claimed by the Generating Company for FY07, FY08 and FY09 at depreciation rates notified by the Commission is as given in the table below and the same is being allowed.

Table-98: Depreciation (Rs. Lakh)

Code	Particulars	FY07	FY08	FY09
10.1	Land and Land Rights	0	0	0
10.2	Buildings and Civil works	39.2	39.2	39.2
10.3	Hydraulic Works	40.5	40.5	40.5
10.4	Other Civil Works	0.03	0.03	0.03
10.5	Plant & Machinery	135.5	135.5	135.5
10.6	Lines & Cable networks	4	4	4
10.7	Vehicles	0	0	0
10.8	Furniture & Fittings	0.1	0	0
10.9	Office Equipment	0	0	0
	Total	219	219	219

D – Bargi

- 4.25 MPPGCL in its tariff petition has submitted that the Opening Gross block of Bargi at the beginning of FY06 is Rs. 77.27 Crore, which is the value considered by the Commission in its order dated 25th Jan 2006 for FY 06. The opening gross block value considered by MPPGCL for computation of depreciation is same as the value notified by GoMP in the transfer scheme. The Company has not projected any asset addition to the gross block in FY07, FY08 and FY09. The accounting code wise break up of the opening gross block and accumulated depreciation is given in the table below:

Table-99: Opening Gross Block and Accumulated Depreciation (Rs. Lakh)

Code	Particulars	Gross Block	Acc. Dep. FY05	Acc. Dep. FY06	Acc. Dep. as a % of GB FY06
10.1	Land and Land Rights	6	0	0	0%
10.2	Buildings and Civil works	4474	2272	2383	53.27%
10.3	Hydraulic Works	2	0.58	0.61	32.14%
10.4	Other Civil Works	1	0.21	0.22	37.99%
10.5	Plant & Machinery	3244	1719	1802	55.56%
10.6	Lines & Cable networks	1	0.61	0.61	90.0%
10.7	Vehicles	0	0	0	0.0%
10.8	Furniture & Fittings	1	0.59	0.59	90.0%
10.9	Office Equipment	0	0	0.0	0.0%
	Total	7727	3993	4187	54.19%

- 4.26 The depreciation amount claimed by the Generating Company for FY07, FY08 and FY09 at depreciation rates notified by the Commission is as given in the table below and the same is being allowed.

Table-100: Depreciation (Rs. Lakh)

Code	Particulars	FY07	FY08	FY09
10.1	Land and Land Rights	0.0	0.0	0.0
10.2	Buildings and Civil works	111	111	111
10.3	Hydraulic Works	0.04	0.04	0.04
10.4	Other Civil Works	0.01	0.01	0.01
10.5	Plant & Machinery	83	82	81
10.6	Lines & Cable networks	0.0	0.0	0.0
10.7	Vehicles	0.0	0.0	0.0
10.8	Furniture & Fittings	0.0	0.0	0.0
10.9	Office Equipment	0.0	0.0	0.0
	Total	194	193	193

E- Bansagar

- 4.27 MPPGCL in its tariff petition has submitted that the Opening Gross block of Bansagar Complex at the beginning of FY06 is Rs. 1241.38 Crore, which is the value considered by the Commission in its order dated 25th Jan 2006 for FY 06. The opening gross block value considered by MPPGCL for computation of depreciation is same as the value notified by GoMP in the transfer scheme. The Company has not projected any asset addition to the gross block in FY07, FY08 and FY09. The accounting code wise break up of the opening gross block and accumulated depreciation is given in the table below:

Table-101: Opening Gross Block and Accumulated Depreciation (Rs. Lakh)

Code	Particulars	Gross Block	Acc. Dep. FY05	Acc. Dep. FY06	Acc. Dep. as a % of GB FY06
10.1	Land and Land Rights	4052	0	0	0%
10.2	Buildings and Civil works	1406	405	430	30.59%
10.3	Hydraulic Works	84762	16090	17816	21.02%
10.4	Other Civil Works	311	101	107	34.3%
10.5	Plant & Machinery	33583	6144	6974	20.77%
10.6	Lines & Cable networks	2	1	1	57.49%
10.7	Vehicles	9	8	8	90.0%
10.8	Furniture & Fittings	9	8	8	88.07%
10.9	Office Equipment	4	4	4	89.96%
	Total	124138	22760	25347	20.42%

- 4.28 The depreciation amount claimed by the Generating Company for FY07, FY08 and FY09 at depreciation rates notified by the Commission is as given in the table below and the same is being allowed.

Table-102: Depreciation (Rs. Lakh)

Code	Particulars	FY07	FY08	FY09
10.1	Land and Land Rights	0.0	0.0	0.0
10.2	Buildings and Civil works	25	25	25
10.3	Hydraulic Works	1725	1725	1725
10.4	Other Civil Works	6	6	6
10.5	Plant & Machinery	830	830	830
10.6	Lines & Cable networks	0	0	0
10.7	Vehicles	0	0	0
10.8	Furniture & Fittings	0	0	0
10.9	Office Equipment	0	0	0
	Total	2587	2587	2587

F – Birsingpur

- 4.29 MPPGCL in its tariff petition has submitted that the Opening Gross block of Birsinghpur at the beginning of FY06 is Rs. 52.12 Crore, which is the value considered by the Commission in its order dated 25th Jan 2006 for FY 06. The opening gross block value considered by MPPGCL for computation of depreciation is same as the value notified by GoMP in the transfer scheme. The Company has not projected any asset addition to the gross block in FY07, FY08 and FY09. The accounting code wise break up of the opening gross block and accumulated depreciation is given in the table below:

Table-103: Opening Gross Block and Accumulated Depreciation (Rs. Lakh)

Code	Particulars	Gross Block	Acc. Dep. FY05	Acc. Dep. FY06	Acc. Dep. as a % of GB FY06
10.1	Land and Land Rights	0	0	0	0%
10.2	Buildings and Civil works	44	19	20	46.13%
10.3	Hydraulic Works	2601	933	999	38.43%
10.4	Other Civil Works	0	0	0	0.0%
10.5	Plant & Machinery	2561	1040	1106	43.18%
10.6	Lines & Cable networks	0	0	0	0.0%
10.7	Vehicles	0	0	0	0.0%
10.8	Furniture & Fittings	7	6	6	90.0%
10.9	Office Equipment	0.0	0.22	0.22	90.0%
	Total	5212	1998	2132	40.89%

4.30 The depreciation amount claimed by the Generating Company for FY07, FY08 and FY09 at depreciation rates notified by the Commission is as given in the table below:

Table-104: Depreciation (Rs. Lakh)

Code	Particulars	FY07	FY08	FY09
10.1	Land and Land Rights	0	0	0
10.2	Buildings and Civil works	1.1	1.1	1.1
10.3	Hydraulic Works	66	66	54
10.4	Other Civil Works	0	0	0
10.5	Plant & Machinery	66	66	66
10.6	Lines & Cable networks	0	0	0
10.7	Vehicles	0	0	0
10.8	Furniture & Fittings	0	0	0
10.9	Office Equipment	0	0	0
	Total	133	133	121

- 4.31 The Generating Company as directed by the Commission in its order dated 25th January 2006 for MPPGCL is required to reconcile its accumulated depreciation figure for FY05 with the figure notified by the GoMP. The same has not yet been done. In the absence of audited balance sheet, the figures of accumulated depreciation submitted by MPPGCL cannot be accepted. However as the depreciation for FY07, FY08 and FY09 is being calculated on the opening gross block, which tallies with the figure notified by the GoMP, the figures of accumulated depreciation submitted by MPPGCL are being ignored. The depreciation amount for FY07, FY08 and FY09 is being computed at rates specified by the Commission in MPERC (Terms and Conditions of generation tariff) Regulations 2005.
- 4.32 The Commission in its order dated 25th January 2006 had expressed its anguish on the non-preparation of fixed asset registers and the lackadaisical approach of the Company in preparing them. The direction given in the previous order to complete fixed asset registers and codify all its assets by October 2006 must be complied by the due date.
- 4.33 The Generating Company has claimed depreciation at rates specified by the Commission and therefore the amount that has been claimed for FY07, FY08 and FY09 is being allowed.

Table-105: Depreciation (Rs. Lakh)

Generating Station	FY07	FY08	FY09
Gandhi Sagar	8	8	8
Pench	114	114	113
Rajghat	219	219	219
Bargi	194	193	193
Bansagar	2587	2587	2587
Birsinghpur	133	133	121

Interest and Finance Charges

- 4.34 In addition to the loans of the Opening Balance Sheet identified with various power stations, the company has also claimed interest on the amount supposedly recoverable by the company as the difference between the provisional rate of 151 paise per unit and the rate per unit filed before the Commission for FY 06.

- 4.35 The entire regulatory asset has been sought to be amortised during the tariff period FY07 to FY09. The regulatory asset has been computed on the basis of actual amount of energy supplied by the Company during the period June 2005 to December 2005 and the difference in the billing rate of Rs. 1.51 per unit as per the inter-se agreement and Rs. 1.83 per unit as per the tariff filing for FY06 before the Commission. The regulatory asset so computed has been apportioned to various stations on the basis of net generation.
- 4.36 The Generating Company has claimed interest on regulatory assets and an amount for amortization of regulatory assets only for Gandhisagar, Pench, Bargi and Birsinghpur. The amount claimed for FY07, FY08 and FY09 is shown in the table below:

Table-106: Interest Liability (Rs. Lakh)

Details	FY07	FY08	FY09
Gandhisagar	64	64	64
Pench	57	53	48
Bargi	184	169	154
Birsinghpur	15	14	12

- 4.37 As the things turned out, the tariff determined by the Commission for FY 06 is lower than the provisional rate of 151 paise and thus no regulatory assets needs to be created. In fact, the Commission has directed MPPGCL to revise its bills on the basis of the two-part tariff determined by the Commission and withdraw the earlier bills. The Commission is neither allowing the amortization of the regulatory asset nor the interest on the regulatory asset claimed by MPPGCL.
- 4.38 For Gandhisagar, Pench, Bargi and Birsinghpur the Company had claimed only interest on regulatory asset and amortisation. As stated the Commission disallows the claim.

Rajghat:

- 4.39 The Generating Company has claimed interest on regulatory assets and an amount for amortization of regulatory assets. The amount claimed for FY07, FY08 and FY09 is shown in the table below:

Table-107: Interest Liability (Rs. Lakh)

Details	FY07	FY08	FY09
PFC	41	30	19
Amortization of regulatory asset	17	15	14
Total	58	45	33

- 4.40 Loans from PFC are project specific and can be identified with Rajghat hydro station. As per the details provided by the Generating Company PFC loans have been availed for the following purpose.

Table-108: Details of PFC Loans (Rs. Lakh)

Loan No	Scheme Name	Net Balance•	Wtd. Avg. Int. Rate %
20102006	Rajghat Hydro Electric Project (3x15 MW)	615.62	9.00%
	Total	615.62	9.00%

- As per notified balance sheet

- 4.41 The interest claimed on these loans is being allowed and is given in the following table:

Table-109: Interest (Rs. Lakh)

Loan No	Scheme Name	FY07	FY08	FY09
20102006	Rajghat Hydro Electric Project (3x15 MW)	40.84	29.89	18.82
	Total	40.84	29.89	18.82

Bansagar

- 4.42 The Generating Company has claimed interest on PFC Loans which has been exclusively identified with Bansagar project and for regulatory assets and for amortization of regulatory assets (which has been already discussed above). The amount claimed for FY07, FY08 and FY09 is shown in the table below:

Table-110: Interest Liability (Rs. Lakh)

Details	FY07	FY08	FY09
PFC	3765	3272	2777
Amortization of regulatory asset	387	356	325
Total	4153	3628	3102

- 4.43 Loans from PFC are project specific and can be identified with Bansagar hydro station. As per the details provided by the Generating Company PFC loans have been availed for the following purpose.

Table-111: Details of PFC Loans (Rs. Lakh)

Loan No	Scheme Name	Net Balance•	Wtd. Avg. Int. Rate %
20102004	Common Water Carrier & Head Regulator for Bansagar Tons HEP	5,047.65	9.01%
20102005	PH-II(2X15MW) & PH-III (3X20MW) Bansagar Tons HEP	6,708.51	9.00%
	Total	11756.16	9.00%

- As per notified balance sheet

- 4.44 The interest claimed on PFC loans as per the details provided in the petition and reproduced in table 14 is at variance with the work sheet provided by the petition. As per the details given in the worksheet the interest on PFC loans is given in the following table:

Table-112: Interest (Rs. Lakh)

Loan No	Scheme Name	FY07	FY08	FY09
20102004	Common Water Carrier & Head Regulator for Bansagar Tons HEP	329.12	234.40	138.58
20102005	PH-II(2X15MW) & PH-III(3X20MW) Bansagar Tons HEP	485.28	397.26	308.61
	Total	814.4	631.66	447.19

- 4.45 MPPGCL apart from the Loans from PFC, which are identifiable, has allocated loans from other sources that are not identifiable with projects on repayment ability of the project. The repayment ability of the project has been determined on the basis of balance amount of depreciation available for it. MPPGCL has consequently allocated all loans from LIC, REC and CSS loan to SGTPS, while full amount of MPSEB loan has been allocated to Bansagar. The Generating Company has stated this at page 65 of its petition. In view of the stated allocation principle of the Generating Company and the information provided in the worksheet the corrected source wise interest cost is being given in the table below:

Table-113: Interest Liability (Rs. Lakh)

Details	FY07	FY08	FY09
PFC	814	632	447
MPSEB Loans	2951	2640	2330
Amortization of regulatory asset	387	356	325
Total	4153	3628	3102

- 4.46 The Generating Company has allocated the interest cost to various stages of the complex on the opening gross block of these stages. The opening Gross block of these stages has been determined on the basis of installed capacity of these stages. Thus it can be construed that interest cost allocation has been done on the basis of installed capacity. The Commission as has been already stated before the annual fixed charges are being determined for the complex and not for its various stages.

4.47 Interest liability on PFC since it is project specific is being allowed. The Commission does not agree with the basis of assumption for identifying non-project specific loans to specific projects. The Commission in its order dated 25th January 2006 for FY06 has also mentioned this. The Commission would consider all loans, which could not be identified with any specific project as utilized for working capital borrowings. The Commission can consider interest liability on these loans only if MPPGCL can identify the assets that have been created out of these loans and provides proof to substantiate its claim. The interest payable on such loans has been computed in paragraph on interest on working capital.

Table-114: Interest Liability (Rs. Lakh)

Details	FY07	FY08	FY09
PFC	814	632	447
Total	814	632	447

4.48 The Generating Company has claimed advance against depreciation for meeting repayment liability. The advance against depreciation is available to meet the repayment liability of long term loans availed for funding the capital cost of the plant. There is no provision for providing advance against depreciation for loans contracted for meeting working capital requirements. The Commission has considered loans from LIC and REC as working capital loans for reasons stated in paragraph 3.71 of this order. Hence on excluding the repayment liability for these loans as claimed by the Generating Company, the depreciation amount allowed by the Commission is sufficient to meet the repayment liability of PFC Loans. The Claim for advance against depreciation is therefore not being admitted.

Interest on working Capital

4.49 MPPGCL has claimed the interest on working capital in accordance with the norms prescribed in revised MPERC (Terms and Conditions of Generation Tariff). Accordingly the Generating Company is entitled to claim working capital on the following basis:

- Operation and Maintenance expenses for one month
- Maintenance spares @ 1% of historical cost
- Receivables equivalent to two months of fixed and variable charges

4.50 MPPGCL has considered the interest rate of 12.75% for computing the interest liability for working capital borrowings.

- 4.51 The Generating Company has accordingly claimed interest on working capital as given in the table below:

Table-115: Interest on working capital (Rs. Lakh)

Details		FY07	FY08	FY09
Gandhisagar	Working Capital Requirement	142	146	152
	Interest on working capital (@ 12.75%)	18	19	19
Pench	Working Capital Requirement	313	319	326
	Interest on working capital (@ 12.75%)	40	41	42
Rajghat	Working Capital Requirement	234	234	234
	Interest on working capital (@ 12.75%)	30	30	30
Bargi	Working Capital Requirement	339	343	348
	Interest on working capital (@ 12.75%)	43	44	44
Bansagar	Working Capital Requirement	4166	4109	4056
	Interest on working capital (@ 12.75%)	531	524	517
Birsingpur	Working Capital Requirement	143	145	144
	Interest on working capital (@ 12.75%)	18	18	18

- 4.52 The Commission has recomputed the working capital requirement considering the approved cost and the interest rate equal to the short term lending rate of State Bank of India plus 1%. Interest rate that is being considered is therefore, 11.25% (10.25%+1%). The interest rate that actually prevails on 1st April 2006 shall be considered while truing up. The Computation is provided in the table below:

A – Gandhisagar

Table-116: Working Capital Requirement (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1.	O&M (1 month)	42	45	48
2.	Maintenance spares (1% of HC)	10	10	10
3.	Receivables (2 months)	173	181	190
	Total	225	236	248
	Interest on wc (@11.25%)	25	27	28

B – Pench

Table-117: Working Capital Requirement (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1.	O&M (1 month)	59	63	66
2.	Maintenance spares (1% of HC)	88	88	88
3.	Receivables (2 months)	186	193	201
	Total	332	343	355
	Interest on wc (@11.25%)	37	39	40

C - Rajghat

Table-118: Working Capital Requirement (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1.	O&M (1 month)	17	18	19
2.	Maintenance spares (1% of HC)	83	83	83
3.	Receivables (2 months)	142	143	144
	Total	241	243	246
	Interest on wc (@11.25%)	27	27	28

D – Bargi

Table-119: Working Capital Requirement (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1.	O&M (1 month)	33	35	37
2.	Maintenance spares (1% of HC)	77	77	77
3.	Receivables (2 months)	157	161	166
	Total	268	274	280
	Interest on wc (@12.75%)	30	31	32

E – Bansagar

Table-120: Working Capital Requirement (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1.	O&M (1 month)	149	158	168
2.	Maintenance spares (1% of HC)	1241	1241	1241
3.	Receivables (2 months)	1561	1549	1537
	Total	2951	2948	2946
	Interest on wc (@11.25%)	332	332	331

F – Birsingpur

Table-121: Working Capital Requirement (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
1.	O&M (1 month)	7	8	8
2.	Maintenance spares (1% of HC)	52	52	52
3.	Receivables (2 months)	64	65	64
	Total	124	125	125
	Interest on wc (@11.25%)	14	14	14

4.53 Asset created out of balance LIC Loan of Rs. 116.34 Crores, REC loan of Rs. 303.64 Crore and MPSEB Loan of Rs. 258.87 Crore could not be identified. The amount indicated against each of the sources is the projected opening balance for FY07. The Generating Company has allocated all loans except MPSEB Loan to SGTPS based on the principle on repayment capability of the project measured in terms of the balance amount of depreciation available. The MPSEB Loan has been allocated to Bansagar. It would be pertinent to mention here that the opening balance of LIC Loan and CSS loan are not as per the notified balance sheet. As per the notified balance sheet opening balance of LIC Loan for FY07 should have been Rs. 488 Crore as no payment is due in FY06. Similarly the opening balance for CSS for FY07 should have been Rs. 1.55 Crore if the amount due for principal repayment of Rs. 1.45 Crore in FY06 is considered. The Generating Company is directed to reconcile these values. As per the stated stand of the Commission all loans that are not identifiable with assets created have been treated as working capital loans. For the purpose of computation of interest on working capital, opening balance of loans for FY07 has been computed as per the repayment schedule provided by the Company and balance as per the notified balance sheet of 1st June 2005. The opening balance considered for working capital funding and the interest thereon for FY07, FY08 and FY09 is as given in the table below:

Table-122: Interest on working capital (Rs. Lakh)

Details	FY07	FY08	FY09
LIC	11634	11634	11634
REC	30364	27327	24291
Generic	25887	23298	20709
Total	67885	62259	56634
Interest at (11.25%)	7637	7004	6371

4.54 The Commission allocates the allowed interest on REC, LIC, and MPSEB Loan to all power stations considered in this order in proportion of the working capital requirement of the individual station to the total working capital requirement of the power stations considered in this order. The allocated working capital interest is higher for FY07 but for FY08 and FY09 it is lower than the interest on the working capital required on normative basis. The Commission allows interest on working capital for FY07 on the allocated basis and for FY08 and FY09 it is allowed to the extent of normative working capital requirement. The interest on working capital allowed for these stations for FY07, FY08 and FY09 is given in the table below. The interest allowed on working capital loans has been proportionately allocated to all power stations so that fixed cost of SGTPS and Bansagar does not get unduly inflated.

Table-123: Working Capital Interest allowed (Rs. Lakh)

Details	FY07	FY08	FY09
Gandhi Sagar	26	27	28
Pench	38	39	40
Rajghat	28	27	28
Bargi	31	31	32
Bansagar	336	332	331
Birsinghpur	14	14	14

Other Expenses

4.55 The Generating Company has claimed expenses for making provisions for bad debts and expenses incurred by MPSEB for providing common services like co-ordination amongst five companies and load despatch centre, various court cases between erstwhile MPEB/MPSEB and CSEB, various issues related with CERC etc. The Generating Company has also claimed pension expenses and payments for Earned leave encashment. The Generating Company has allocated total expenses likely to be incurred under this head to various stations on the basis of net generation. The expenses claimed for STPS for FY07, FY08 and FY09 is as given in the table below:

Table-124: Other expenses (Rs. Lakh)

Details	FY07	FY08	FY09
Gandhi Sagar	38	39	41
Pench	34	35	37
Rajghat	10	10	11
Bargi	108	112	118
Bansagar	229	236	250
Birsinghpur	9	9	10

- 4.56 The expenses claimed by MPPGCL are not in accordance with the applicable regulation and hence cannot be accepted. The expenses claimed by MPSEB have no basis because MPSEB, which is a trader, cannot claim expenses for activities, which MPPGCL as an independent organisation is itself supposed to carry out. An expense claimed on behalf of SLDC by MPSEB has no basis, as SLDC is not under its operational control. The Commission for FY06 has allowed expenses incurred in operating SLDC as a part of transmission charges to be paid by long-term users. For FY07 and onwards the SLDC charges may be allowed either as a part of the transmission charges or a separate order in this regard may be issued. MPSEB, which is a trader, can approach the Commission for fixation of trading margin for its trading business. The Commission shall fix trading margin when MPSEB approaches it. MPSEB cannot unilaterally fix its trading margin. MPPGCL is directed not to entertain any such claim of MPSEB without the prior approval of the Commission. The Commission has already dealt with issues pertaining to pension liability and Earned leave encashment in earlier paragraphs.

Return on Equity

- 4.57 The Generating Company has allocated equity of Rs. 929.57 Crore employed in completed projects to various power stations on the basis of opening gross block of the year.
- 4.58 The Commission in its order dated 25th January 2006 had gone into the computation of equity employed in the completed projects and had agreed with the contention of the Generating Company that out of total equity of Rs. 1278 Crore only Rs. 929.57 Crore had been employed in the completed project. Since the last order no changes have taken place in the opening gross block of fixed assets, the Commission for the purpose of computation of return considers Rs. 929.57 Crore as equity employed in commissioned assets as done in the previous order. The allocation of the equity on the basis of opening gross block of power station is also acceptable. The return allowed at 14% for FY07, FY08 and FY09 is as given in the table below:

Table-125: Return on Equity (Rs. Lakh)

Details		FY07	FY08	FY09
Gandhi Sagar	Allocated Equity	215	215	215
	Return on equity	30	30	30
Pench	Allocated Equity	1827	1827	1827
	Return on equity	256	256	256
Rajghat	Allocated Equity	1728	1728	1728
	Return on equity	242	242	242
Bargi	Allocated Equity	1613	1613	1613
	Return on equity	226	226	226
Bansagar	Allocated Equity	25916	25916	25916
	Return on equity	3628	3628	3628
Birsinghpur	Allocated Equity	1088	1088	1088
	Return on equity	152	152	152

(The equity invested in ex-State projects i.e. Rana Pratap Sagar and Jawahar Sagar has been excluded.)

Tax on return on equity

- 4.59 The Generating Company has computed the tax liability at 35% + 2.5% surcharge and 2% education Cess. The Generating Company for return on equity computed in the above paragraph has claimed tax as given in the following table:

Table-126: Tax on Return on equity as given by MPPGCL (Rs. Lakh)

Details	FY07	FY08	FY09
Gandhi Sagar	17	17	17
Pench	148	148	148
Rajghat	140	140	140
Bargi	130	130	130
Bansagar	2094	2094	2094
Birsinghpur	88	88	88

- 4.60 The Commission has recomputed the tax liability based on the rates applicable for the assessment year FY07. The applicable rates are 30% plus 10% surcharge and 2% education Cess. The tax liability at the applicable rates is as given in the table below. However, the tax liability is dependent on the other expenses and will be known when the accounts are finalised. Hence the Generating Company shall bill the beneficiary for twelve equal instalments of tax liability to be incurred by it subject to the maximum of the amount given in the table below for the respective power house. The amount billed is a pass through item and shall be payable by beneficiary monthly subject to review at the end of the financial year.

Table-127: Tax on Return on equity (Rs. Lakh)

Details	FY07	FY08	FY09
Gandhi Sagar	15	15	15
Pench	130	130	130
Rajghat	123	123	123
Bargi	115	115	115
Bansagar	1841	1841	1841
Birsinghpur	77	77	77

Non-Tariff Income

4.61 The Generating Company has computed the non-tariff income on the basis of the past trend except for incentive due to securitisation of CPU dues (Montek Singh Ahluwalia Committee), which is not expected to accrue from FY07 and onwards. The estimated amount has been allocated to various stations on the basis of expected net generation from them. The Commission finds the estimation of the Generating Company reasonable and allows the same. The amount allowed for FY07, FY08 and FY09 is given below:

Table-128: Non-Tariff Income (Rs. Lakh)

Details	FY07	FY08	FY09
Gandhi Sagar	7	7	7
Pench	6	6	6
Rajghat	2	2	2
Bargi	19	19	20
Bansagar	40	40	41
Birsinghpur	2	2	2

Annual Fixed Charges

4.62 The Station wise summary of allowable annual fixed charges is given in the table below:

A – Gandhisagar –

Table-129: Fixed and Energy Cost (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
Annual Fixed Charges				
1.	O&M	508	539	572
2.	Cess on aux.	2	2	2
3.	Rents and Rates	3	3	3
4.	Water Charges	466	483	500
4.	MPERC fee	1	1	1
5.	Prior period Expenses	0	0	0
5.	Depreciation	8	8	8
6.	Interest & Finance	0	0	0
7.	Interest on WC	26	27	28
8.	ROE	30	30	30
Less	Non-Tariff Income	7	7	7
	Total	1037	1086	1137

B – Pench

Table-130: Fixed and Energy Cost (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
Annual Fixed Charges				
1.	O&M	707	750	795
2.	Cess on aux.	3	3	3
3.	Rents and Rates	2	3	3
4.	Water Charges	0	0	0
4.	MPERC fee	2	2	2
5.	Prior period Expenses	0	0	0
5.	Depreciation	114	114	113
6.	Interest & Finance	0	0	0
7.	Interest on WC	38	39	40
8.	ROE	256	256	256
Less	Non-Tariff Income	6	6	6
	Total	1116	1160	1205

C – Rajghat

Table-131: Fixed and Energy Cost (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
Annual Fixed Charges				
1.	O&M	199	211	224
2.	Cess on aux.	0.90	0.90	0.90
3.	Rents and Rates	1	1	1
4.	Water Charges	122	126	131
4.	MPERC fee	0.45	0.45	0.45
5.	Prior period Expenses	0	0	0
5.	Depreciation	219	219	219
6.	Interest & Finance	41	30	19
7.	Interest on WC	28	27	28
8.	ROE	242	242	242
Less	Non-Tariff Income	2	2	2
	Total	850	856	862

D – Bargi

Table-132: Fixed and Energy Cost (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
Annual Fixed Cha.				
1.	O&M	398	422	447
2.	Cess on aux.	5	5	5
3.	Rents and Rates	8	8	8
4.	Water Charges	102	102	102
4.	MPERC fee	1	1	1
5.	Prior period Expenses	0	0	0
5.	Depreciation	194	193	193
6.	Interest & Finance	0	0	0
7.	Interest on WC	31	31	32
8.	ROE	226	226	226
Less	Non-Tariff Income	19	19	20
	Total	945	968	993

E – Bansagar

Table-133: Fixed and Energy Cost (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
Annual Fixed Charges				
1.	O&M	1790	1899	2013
2.	Cess on aux.	11	11	11
3.	Rents and Rates	16	18	20
4.	Water Charges	221	221	221
4.	MPERC fee	4	4	4
5.	Prior period Expenses	0	0	0
5.	Depreciation	2587	2587	2587
6.	Interest & Finance	814	632	447
7.	Interest on WC	338	332	331
8.	ROE	3628	3628	3628
Less	Non-Tariff Income	40	40	41
	Total	9370	9292	9222

F – Birsinghpur

Table-134: Fixed and Energy Cost (Rs. Lakh)

Sl. No.	Details	FY07	FY08	FY09
Annual Fixed Charges				
1.	O&M	88	94	99
2.	Cess on aux.	0.4	0.4	0.4
3.	Rents and Rates	1	1	1
4.	Water Charges	0	0	0
4.	MPERC fee	0.2	0.2	0.2
5.	Prior period Expenses	0	0	0
5.	Depreciation	133	133	121
6.	Interest & Finance	0	0	0
7.	Interest on WC	14	14	14
8.	ROE	152	152	152
Less	Non-Tariff Income	2	2	2
	Total	387	393	386

4.63 The annual fixed charges determined by the Commission shall be payable by the beneficiary. The payment shall be regulated as per relevant provisions of the Regulations.

- 4.64 MPPGCL shall be entitled to recover capacity charge and primary energy charge in accordance with MPERC (Terms and Conditions of Generation tariff) Regulations 2005.

$$\begin{aligned} \text{Capacity Charge} &= (\text{Annual fixed charge}-\text{Primary Energy Charge}) \\ \text{Primary Energy Charge} &= \text{Saleable Primary Energy} \times \text{Primary Energy Rate} \end{aligned}$$

- 4.65 The Saleable Primary Energy means the quantum of primary energy available for sale (ex-bus). For computation of ex-bus energy auxiliary consumption shall not be more than the norms fixed by the Commission.

Station Wise Fixed Cost and Energy Cost

Sl. No.	Generating Station	FY07		FY08		FY09	
		Fixed (Rs. Lakh)	Energy (Paise / Unit)	Fixed (Rs. Lakh)	Energy (Paise / Unit)	Fixed (Rs. Lakh)	Energy (Paise / Unit)
Thermal							
1	ATPS	4738	117	4923	117	5121	117
2	STPS	20154	135	20729	134	21422	131
3	SGTPS	30294	103	30370	102	30052	100
Hydel							
1	Gandhi Sagar	1037	--	1086	--	1137	--
2	Pench	1116	--	1160	--	1205	--
3	Rajghat	850	--	856	--	862	--
4	Bargi	945	--	968	--	993	--
5	Bansagar Complex	9370	--	9292	--	9222	--
6	Birsinghpur	387	--	393	--	386	--

CHAPTER 5

SECTION – A

Status of Compliance of directives given by Commission.

5.1 In the Generation Tariff Order for FY06 the Commission had taken a comprehensive review over the status of the compliance of the directives given by the Commission to the Board with regard to the generation function in the past orders. The Commission found that the Board / Generating Company had not responded to all the directives. The present status of compliance of those directives is described in further paragraphs.

Directive: Performance reporting by generating units every six months.

5.1.1 The Commission in its Tariff Orders of 30th November 2002 directed the Board to file the compliance on a number of issues related to generation function. The Board failed to submit the compliance report to the Commission. The Commission, vide its Tariff Order of December 10, 2004 directed the Board to file a detailed report every six months by 30th April and 31st October every year giving details of action taken the following points:

- Implementation of scheduled annual overhauling / maintenance programme as per norms stipulated by the manufactures.
- Efforts towards refurbishment / renovation / modernization work of various units to improve there working life and performance.
- Availability of adequate funds to meet the regular maintenance needs of the generating units
- Training and refresher courses to the concerned employees from time to time on the operation and maintenance of various units.
- Matter to be taken up with Coal India Ltd. and Government of India towards supply of adequate quantity and of desired quality of coal.
- Time bound programme for Energy audit of power station.
- Incentive Scheme for achieving highest possible generation and punitive measures in the event the actual performance is lower than the desired minimum.

5.1.2 **MPPGCL Compliance Reported:** MPPGCL had claimed in its Petition for FY06 and again in the petition for FY07 to FY09 that the Company has been providing the desired information in the MIS formats specified regularly showing performance of generating units. MPPGCL has also claimed that it is making the information available quarterly.

5.1.3 **Commission's Observation:** In the Generation Tariff Order for FY06, the Commission had stated that the Company has been filing regularly the MIS reports but had not submitted any report for period ending 31st October 2005. MPPGCL had not complied with the requirement of submission of this half yearly report on the performance. The Commission directed MPPGCL not to confuse the issue with the submission of the monthly MIS reports but should file the detailed half yearly report regularly. The Generating Company has not filed the report to the Commission. The Commission has once again directed that the Company should file the desired report for the period ending 31st October 2005 with in 15 days of the issue of this order.

Directive: Maintenance of Asset registers.

5.1.4 The Commission directed the Board in the Tariff Order of 10/12/2004 that the asset register be maintained properly by 30th June 2005. The Board and the Generating Company could not able to submit the asset registers but at the time of scrutinizing the data for passing the Tariff Order for 2005-06, the Board / MPPGCL had shown the records of assets as maintained by the Board. The Commission had directed Board / MPPGCL to prepare a time bound action plan for finalizing its asset records.

5.1.5 **MPPGCL Compliance Reported:** MPPGCL has reported that the conversion of base data into Asset Registers in the desired format requires expertise. MPPGCL has further informed that the expert support for preparation of Asset Register has been requested in Phase II support of DFID which would commence in last quarter of FY06. The reports generated by DFID consultants would be submitted to the Commission thereafter.

5.1.6 **Commission's Observation:** The Commission has directed that MPPGCL should file the account code and sub codes wise details with the Commission.

Directive: Data based management and management information system

5.1.7 The Commission in its earlier Tariff Order has emphasised the need for comprehensive and reliable database and strong data based management and management information system for efficient working of the Company and also effective regulation by the Commission. The Commission had developed some formats for capturing the information on the generation function and directed to submit the information on different formats to the Commission.

5.1.8 **MPPGCL Compliance Reported:** It has been informed by MPPGCL that the task of data based management and management information system requires massive computerization of MPPGCL and a detailed computer literacy programme. MPPGCL is seeking the support under phase-II of DFID support.

5.1.9 **Commission's Observation:** The Commission in its Generation Tariff Order for FY06 has already directed the Generating Company to prepare a time bound programme / action plan and apprise the Commission on the implementation of the action plan. The Commission has also directed MPPGCL to complete the task by 30/09/2006.

Directive: Creation of Station wise Efficiency Cells.

5.1.10 In the Tariff order of 10th December 2004, the Commission directed the Board that in order to have sustained efforts for improvement in the operating parameters of the generating stations of the Board, the Board should set up an efficiency cell in each of the generating stations.

5.1.11 **MPPGCL Compliance Reported:** MPPGCL has informed that Maintenance Planning Cell headed by Superintending Engineers are functioning at all the 3 thermal Power Stations. These Cells have also been assigned the work relating to performance monitoring of operating parameters. Further, there is an Operation Services Group monitoring the reports submitted by field offices at MPPGCL head quarter. A review meeting is held every month and remedial measures are taken accordingly. This has resulted in improvement in operating parameters.

5.1.12 **Commission's Observation:** In the Generation Tariff Order for FY06 the Commission has directed the MPPGCL to submit a comprehensive report on the activities of efficiency cells comprising the various types of wastage identified in the power stations, the waste minimising strategies and implementation of the recommendations, etc. MPPGCL has also been directed to indicate the efficiency gains achieved through the implementation of recommendations of these efficiency cells. MPPGCL has not submitted any details in this regard to the Commission. The Commission directs the Generating Company to submit the desired information by 30/06/2006 positively.

Directive: Bi-Annual submission of VCA Petition.

5.1.13 The Commission in its Tariff order of 10th December 2004 had indicated that the increase in the coal prices is beyond Board's control. The Commission therefore, directed the Board to file petition as per the approved Variable Cost Adjustment formula to the Commission twice in the year without waiting for submission of the Tariff Petition.

5.1.14 **MPPGCL Compliance Reported:** MPPGCL has submitted that the present VCA formula had been approved for integrated utility and in view of the unbundling of the Board into five successor companies, necessary changes in the formula are required to be incorporated. MPPGCL in the present Petition has included the proposal to incorporate necessary changes in the VCA formula. The Company shall submit the VCA bi-annually as shall be approved by the Commission.

5.1.15 Commission's Observations: The Commission shall order separately for the VCA formula.

Directive: Uniform method for determination of coal loss at all Thermal Power Stations.

5.1.16 In order to follow a uniform method for measuring coal losses at all stations on consistent basis the Commission had directed that the Board should submit an investment plan to reduce the transit and stacking losses based on which the future transit loss could be fixed by the Commission and brought down to the normative levels of transit loss approved by CERC for Central Generating stations.

5.1.17 MPPGCL Compliance Reported: MPPGCL informed that as per directives of the Commission, Weightometers have been installed and commissioned at all the 3 thermal power stations. The in-motion Weigh Bridges have also been installed. Presently the coal measurement is being done on the basis of readings recorded by weightometers. In this way MPPGCL has claimed to have adopted the uniform method at all the three thermal power stations for measuring coal losses.

5.1.18 Commission's Observations: In the Generation tariff Order for FY06 the Commission has directed the Company to report the results and the comparison of the losses before and after the installation of weigh bridges and weight-o-meter to the Commission within one month of the issuance of the order of FY06. The same has not been reported till date. MPPGCL shall file the information to the Commission by 30/04/2006 positively.

Directive: Status of installation Work of Gates of Bansagar Hydel Project.

5.1.19 In the Tariff Order of 10th December 2004, the Commission had directed the Board to provide a statement showing the progress, the problems being faced in the project by the Board and the assistance that it requires from the State Govt/MPERC for speedy installation of gates and other supporting set-up.

5.1.20 MPPGCL Compliance Reported: MPPGCL has informed that the matter was taken up with Energy Department of GOMP for requesting Water Resources Department of GOMP for expediting the work of installation of gates. It is informed by MPPGCL that the gates are targeted to be installed by May2006.

5.1.21 **Commission's Observation:** MPPGCL by taking the cognisance of GoMP letter of 21/06/2005 had earlier informed the Commission that the gates would be installed by September 2005. Now MPPGCL has informed that the gates would be installed by June 2006. It is apparent that the concerned department of State Govt. is not adhering to the schedule.

Directive: Man Power planning.

5.1.22 The Commission in its Tariff Order of 10th December 2004 had directed the Board to undertake a work study and redesign the workforce according to manpower output norms.

5.1.23 **MPPGCL Compliance Reported:** MPPGCL has submitted that it has also been appreciated in the CRISIL/ICRA report that the power stations of MPPGCL are very old with the average life of more than 20 years for more than 60% of the total installed capacity. Further, these plants are of old design having manual controls and due to this the manpower level is slightly higher. MPPGCL has further informed that there is no recruitment from last several years and considering the yearly retirements on attaining the age of superannuation, the strength is getting reduced every year. Also with the commissioning of one unit of 500 MW at SGTPS, Birsinghpur, 210 MW at ATPS, Chachai, 3x20 MW at Marhikheda Hydel Power Station and also 2 x 10 MW Bansagar IV units, the manpower level will further go down, as the Company has envisaged that only limited manpower will be recruited for these new units. MPPGCL has further claimed that all efforts will be made for further improvement in man power performance of its power stations.

5.1.24 **Commission's Observation:** The Commission in its Generation Tariff Order for FY06 has already directed MPPGCL to conduct a work study so as to redesign their man power for better results. In this order the Commission has considered the O&M expenses on a normative basis as defined in the Commission regulations on terms and conditions of generation tariff.

5.2 In the Generation Tariff Order for FY06 the Commission had given certain directions to the MPPGCL. The Generating Company has not submitted any report on the compliance of those directives. The Commission understands that due to paucity of time after the issue of the Generation Tariff Order for FY06 the Generating Company could not able to file the report. In the following paragraphs the directives given in the Generation Tariff Order for FY06 have been reproduced. Some of the directives given in FY06 are also included in the present order at appropriate places. The Commission directs the generating Company to comply with all the directives given in the Generation Tariff order for FY06 and also in the present Generation Tariff Order for FY07 to FY09.

5.2.1 The Commission again directs MPPGCL to carry out necessary R&M works for improving the performance of its generating units. MPPGCL may consider phasing out these units if it feels that these units have over lived their economic life and investment in R&M may not yield the desired results. The Company is required to submit its proposal in this regard to the Commission with a detailed cost benefit analysis within three months of this order.

(Paragraph 5.4 of Generation Tariff Order for FY06)

5.2.2 The Commission directs that the Generating Company and SLDC shall report the monthly availability of all the stations to the Commission and all beneficiaries (Distribution Licensees). Full details of station wise actual availability shall also be displayed for public information on the web site of the Generating Company, SLDC and the Commission. Compliance of these directions shall be reviewed at the time of yearly review of tariff and in case of non-compliance a deduction in ARR shall be considered.

(Paragraph 5.13 of Generation Tariff Order for FY06)

5.2.3 The Commission further directs the MPPGCL to carry out energy audit in its thermal plants regularly and based on this audit determine SHR phase wise for all stations. MPPGCL shall provide reasons for the observed differences in values determined on the basis of this audit and actual coal consumption. The Company is also required to determine SHR separately for all stations after discounting the energy generated and coal assumed to be fed in the boilers during the period when its weight-o-meters are non functional. The Company shall submit above reports quarterly and shall place the data on its website. The Commission shall arrange to review the position through a consultant and by taking up the scrutiny suo moto through a petition.

(Paragraph 5.29 of Generation Tariff Order for FY06)

5.2.4 MPPGCL is therefore again being directed to upgrade its coal handling plants immediately so that these losses are minimized and do not add to the overall fuel cost. It may be mentioned here that even 0.5% stacking loss translates to Rs. 6.71 Crore each year.

(Paragraph 5.42 of Generation Tariff Order for FY06)

5.2.5 The Company is advised to explore the possibility of sourcing coal or getting more linkage from Coal Company (SECL) for its more efficient plants at Sarni and Birsinghpur, this is likely to bring down the variable cost of generation. The Generating Company shall report to the Commission the steps taken to comply with this direction within three months of the issuance of this order.

(Paragraph 5.45 of Generation Tariff Order for FY06)

5.2.6 The Generating Company is also directed to file from the next filing full details of the assumptions made for determining price and calorific value of the coal for each of its power stations. The Company for this purpose shall provide full details of the last 12 months of actual data available with it for CV at the loading point, unloading point at its premises and at the time of firing it in the boiler. This detail shall be provided for all grades of coal received by it. Details shall be also provided for UHV of the coal received and the corresponding price paid. The Generating Company shall indicate if there are any deviations in the prices paid from the declared prices by the Coal Companies for the corresponding UHV, the fuel supply agreement and the linkages granted to it.

(Paragraph 5.46 of Generation Tariff Order for FY06)

5.2.7 The Generating Company is directed to establish the full details of date of contracting the loan and the purpose for which these have been contracted together with terms and conditions and intimate the same to the Commission. Henceforth, the Commission will insist on closely monitoring the borrowings of the regulated entities and necessary reporting mechanism for this purpose shall be notified separately by the Commission.

(Paragraph 6.44 of Generation Tariff Order for FY06)

5.2.8 It is directed that the Generating Company and MPSEB/Distribution Licensees may accordingly sign a PPA very soon and file it with the Commission before the end of current tariff validity period. The terms and conditions of the agreement must incorporate various terms and conditions of the tariff made applicable by the Commission through this tariff order.

(Paragraph 7.7 of Generation Tariff Order for FY06)

5.2.9 The Commission directs that the Capital expenditure plan along with the financing plan for the tariff period commencing from FY07 may be submitted before the Commission for its approval. The Commission in the event of the Company not complying with this direction shall disallow additional depreciation and interest on loan borrowed for funding the capital expenditure.

(Paragraph 7.8 of Generation Tariff Order for FY06)

5.2.10 The Company is advised to treat each power station as a strategic business unit and should prepare a separate Balance Sheet and profit and loss account for all its SBUs. The Commission also directs MPPGCL to pay attention to strengthening its accounting functions by coding its accounting policies and inducting trained accounting professionals. The accounting function needs to be fully computerised so that the requirements of the Companies Act of publishing half yearly accounting reports and finalising the financial statements within six months of the close of the financial year can be met.

(Paragraph 7.9 of Generation Tariff Order for FY06)

5.2.11 The Generating Company has till date not provided the Commission with the Fixed Asset Registers. The Company is directed to prepare its fixed asset registers and codify all its assets by October 2006. If the Generating Company fails to comply with this direction no depreciation shall be provided for FY08 when the ARR proposal shall be scrutinised in November – December 2006.

(Paragraph 7.10 of Generation Tariff Order for FY06)

5.2.12 The Commission directs the Company that in future all tariff petitions must have station wise cost identification and segregation based on their individual Balance Sheet and Profit & Loss account. Each petition must have subsections devoted to each of its stations. The Company must provide detailed reasons for these projections and segregations especially for cost item like interest liability. In the absence of these details the Commission shall draw adverse inference and the costs may be accordingly reduced.

(Paragraph 7.11 of Generation Tariff Order for FY06)

5.2.13 The Company is advised to fill up the post of Directors as required under its Memorandum and Articles of Association and also advised to appoint fulltime Director (Operations) and Director (Finance) to have better operational control, transparency and professional governance of the Company. The Commission feels concerned that a company handling business in excess of Rs. 2000 crores per annum does not have the benefit and support of the full time services of professional managers in the field of finance and plant management. The company should also explore the possibility of utilizing opportunity of third party audit of technical processes and efficiency.

(Paragraph 7.12 of Generation Tariff Order for FY06)

5.2.14 The generation company shall explore the possibility of setting up of Coal Washerries System for their Thermal power stations. The cost benefit analysis in this regard shall be submitted to the Commission before October 2006 failing which the Commission shall consider revising the SHR and other performance parameters to bring these to the prevailing level of similar stations where washerries and beneficiation has resulted in improved performance.

(Paragraph 7.13 of Generation Tariff Order for FY06)

Chapter 5: Section B

Objections and Comments on MPPGCL's tariff proposal

5.3 The Commission had given wide publicity to the proposal received from MPPGCL and invited stakeholders to offer comments/objections. In response to the Commission's public notice of 31st January 2006, the following stake holders submitted their comments/objections:-

1. M.P. Electricity Consumers Society, Indore

5.4 A public hearing was arranged on 20th February 2006 in the Hearing hall in the Office of the Commission at Urja Bhawan Shivaji Nagar, Bhopal. Before the hearing comments/objections had been forwarded to MPPGCL for reply, the gist of the objections, MPPGCL's response and Commissions view is given below:-

5.5 **M.P. Electricity Consumers Society, Indore**

5.5.1 **Objection/Comments:** The Petitioner has not provided separate information for Amarkantak Thermal Power Station 1 of 50 MW and for STPS Sarni of 5x62.5 MW sets established more than 30 years back.

5.5.2 **MPPGCL's Response:** In pursuance with the regulatory requirement, the Petitioner has submitted by MPPGCL based on MPERC (Terms and Conditions for Determination of Generation Tariff) regulations, 2005 wherein the Commission has clearly specified norms for each power station on complex basis. Accordingly the data have been made available on complex basis. MPPGCL has further provided the break up of necessary information on power house basis, in forms provided with the petition.

5.5.3 **Commission's View:** The Commission has agreed with the Petitioner.

5.5.4 **Objection/Comments:** The Respondent has requested the Petitioner to comment on the following paragraphs 5.2.22 and 5.2.23 of the 'National Electricity Policy' dated 10.02.2005 reproduced below:-

“5.2.22 For projects performing below acceptable standards, R&M should be undertaken as per will defined plans featuring necessary cost benefit analysis. If economic operation does not appear feasible through R&M, then there be no alternative to closure of such plants as last resort”.

“5.2.23 In case of plants with poor O&M record and persisting operational problems, alternative strategies including change of management may need to be considered so as to improve the efficiency to acceptable levels of these power stations.”.

The Respondent has stated that there is no place for inefficient power stations. Either the management in such power house be changed or alternatively these be scrapped.

- 5.5.5 MPPGCL's Comments: MPPGCL has taken up the matter with NTPC, the premier power generating Company in the country, for advising necessary renovation and modernizations in MPPGCL old plants. The Petitioner has informed that while fixing up the bench marks the Commission has incorporated increasing trends of efficiency, reflecting that possible improvements on account of renovation and modernization have duly been incorporated in the bench marks. Thus due to any further delay on account of renovation and modernization of the Generating Stations, it is only MPPGCL who is getting affected adversely and the consumers are affected in no manner. Regarding taking decision for closure of inefficient plants the Petitioner has referred to the CEA's report (Technical Standards on operation norms for Coal/lignite fired thermal power Stations" December 2004. Para 10 on page 5 which is as below:-

“Most of the very old units have very low fixed cost component. Thus the average cost of generation from these units is very low, despite their higher variable charges on account of low operation efficiencies. Thus, the Regulatory Commissions may consider dispatch of these units based on the total cost of generation or work out some other special provisions to keep these units in operation. Considering the variable charges alone for merit order dispatch of the units as being proposed would prevent large number of such units from being dispatched despite their lower overall generation costs.”

- 5.5.6 By referring to above paragraph the Petitioner has stated that even if the plants are performing at lower level of efficiency, CEA has recommended to continue their generation till their total cost become unviable. The State of MP is passing through severe crisis of power and to arrange reasonable level of power supply in the State, much costlier power than the cost of least efficient plant of MPPGCL is being purchased. MPPGCL is putting extra efforts and bearing the blame of operating inefficient plant only for the favour of consumer and economy of the State.
- 5.5.7 Commission's View: The Commission does not support the idea of continuing with the plants of poor efficiency. In view of the contention of the Petitioner that the cheaper power is available even if the plant is not functioning efficiently, the Commission will direct the distribution licensees to apply merit order while scheduling of the power purchase from various generating stations.

5.5.8 Objection / Comment: In the M.P. generating system there are 8 sets of 200/210 MW, 4 at STPS Sarni and 4 at STPS Birsinghpur. These sets should normally follow the CERC operating norms. The petitions should indicate how much present performance is below CERC norms and may indicate a transition path showing the period during which the CERC norms will be achieved. This information is essential to know how much the people of the State are burdened for inefficiency of MPPGCL

5.5.9 MPPGCL’s Comments: The report of recommends that due to paucity of funds and other limitations, the units of State utilities could not be run efficiently in the past. The matter has been taken in a right perspective to bring such units to a reasonable level of efficiency. While it has been advised to consider their present level of performance as starting point, the responsibility of setting up achievable targets (to be achieved in a span of 2 to 5 years) has been vested with respective ERC. The Commission through its regulations namely MPERC (Terms and Conditions of Generation Tariff) Regulations, 2005 under para 1.13 has stated that

“The MYT principles prescribed in this regulation seek to promote competition, adoption of commercial principles, efficient working of the Generating Company and are based on the CERC principles. The operating and cost parameters for the tariff period have been prescribed after duly considering the past performance, performance of similarly placed units and benchmark parameters fixed by other Commissions. These operating and cost parameters over the tariff period move closer to efficient levels and the allowable tariffs are determined in accordance with these norms.”

5.5.10 Commission’s View: The Petitioner has rightly pointed out. The Commission has already specified the roadmap to reach the CERC norms through its regulations on terms and conditions of generation tariff.

5.5.11 Objection / Comments: For coal based plants fuel i.e. cost is the key for improving efficiency. The Maharashtra Power Stations are adopting washed coal and imported coal, which is blended with available coal and are able to increase out put by 10-15%. Besides washing of coal there are equipments like Rotary breaker, Thickener, barrel washers to reduce ash content in the coal. A complete long term plan to improve quality of coal and increase efficiency has to be provided in the proposals

- 5.5.12 **MPPGCL's Comments:** The use of imported coal has been tested by number of utilities located in coastal areas and have been found beneficial. It is prudent to mention that use of imported coal (having high calorific value) ease up the operation of the plant however the viability for the plants located away from coastal area is also a consideration. Due to double transportation involved (Marine and Land) the effective cost of such fuel becomes higher than the locally available fuel for power stations like those of MPPGCL. Regarding use of washed coal, the benefits are also appreciable. However, the washed coal is economically viable when washery can be installed at loading point of fuel so that the cost of transporting ash is minimized. It is further to point out that the linkage decided by the Government of India for the plants of MPPGCL are from multiple collieries and the viability of washeries in such cases may be a constrain. Yet MPPGCL is exploring the possibility of such installations.
- 5.5.13 **Commission's View:** The Commission has already directed MPPGCL in the Generation Tariff Order for FY06 to explore the possibility of installation of coal washeries and use of washed coal in its thermal power stations. MPPGCL is once again directed to submit the report on this issue to the Commission with in three months from the date of this order.
- 5.5.14 **Objection / Comments:** STPS Sarni/Birsinghpur have achieved good put of 77% to 78% but improvement beyond this requires technological up-gradation in (a) instrumentation & control (b) Coal and Ash system (c) Condenser and vacuum etc. It is necessary that the MPPGCL lists out all such activities and the benefits be reflected in increased efficiency.
- 5.5.15 **MPPGCL's Comments:** MPPGCL has assured that it has already taken up matter with NTPC and necessary technological improvements will be incorporated in the plants very soon.
- 5.5.16 **Commission's View:** The Commission directs that MPPGCL should report the development with regard to the response of NTPC and action taken thereon by 30/09/2006.
- 5.5.17 **Objections / Comments:** In respect of VCA charges proposed by the MPPGCL the two parameters viz. (a) the operating performance efficiencies and (b) Base rate for VCA have to be fixed by the Commission. The base rate will be the tariff for 07.
- 5.5.18 **MPPGCL's Comments:** MPPGCL agrees with the views of respectable respondent that for VCA charges the base rate of fuel will be decided by the Commission.

5.5.19 Commission's View: The Commission has not taken any view on the request of the Petitioner relating to Variable Charges and the Commission will pass separate orders on this subject.

5.5.20 Objection / Comment: The tariff notification in the newspaper does not indicate the performance, financial parameters etc. for power stations under construction. The following stations were indicated as getting completed in the earlier petition of MPPGCL FY 06 (a) Jhinna (Bansagar JV) 2x10 = 20 MW (b) Marhikheda 3x20 M (c) SGTPS Birsinghpur V 500 MW (d) ATPS Chachai 210 MW.

5.5.21 MPPGCL's Comments: MPPGCL in para 2.5 of its tariff petition (Page 16) has categorically pointed out that the new capacities being installed by MPPGCL are beyond the purview of this petition. MPPGCL will submit separate tariff petition for these stations in due course of time, according to the directives specified by the Commission vide various regulations.

5.5.22 Commission's View: The Commission agrees with the views of Petitioner. When the project is complete, MPPGCL shall be required to file tariff proposal for that particular power station to the Commission for determination of its cost.

5.6 Conclusion:

With the observations, directions and decisions contained in preceding paragraphs of this order, the Commission concludes the Tariff determination exercise for generating company i.e. MPPGCL for the year ending 31st March 2007 (FY07) to 31st March 2009 (FY09). The Commission wishes to point out that this is the first time ever since formation of the Commission, tariff has been determined for the ensuing year before the commencement of the financial year and records its appreciation for the co-operation and support provided by the petitioner and all those who have made it possible for the Commission to complete the exercise within the time period prescribed under the Electricity Act, 2003.
