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

Petition No. 112/2005

PRESENT:

P. K. Mehrotra, Chairman

D. Roybardhan, Member

R. Natarajan, Member

IN THE MATTER OF:

Determination of Annual Revenue Requirement (ARR) and Tariff for Generation for FY 2005-06 based on the tariff application made by Madhya Pradesh Power Generating Company Ltd. and Madhya Pradesh State Electricity Board.

MPPGCL (Petitioner) represented among others by –

1. Shri C. S. Dubey (Addl. Chief Engineer)

2. Shri Manjeet Singh (Deputy Director Costs)

MPSEB (Co-petitioners) not represented

ORDER

(Passed on this 25th Day of January, 2006)

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1 The Madhya Pradesh Electricity Regulatory Commission (hereinafter called "the Commission") having heard the applicant, interveners, consumers, consumer representatives of various consumer groups on 17th November, 2005 at Bhopal, having had the formal interactions with the officers of the Madhya Pradesh Power Generating Company Ltd. and Madhya Pradesh State Electricity Board, which is a trading licensee and co-petitioner during the months of September and October 2005 and having met with the members of the State Advisory Committee in December 2005 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 Annual Revenue Requirement proposals and has made alternative estimates thereof based on the efficient and reasonable operating parameters and expenditure 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.

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 June 2005 i.e. the date when MPPGCL started its independent operations after the notification of the State Government issued on 31st May 2005 and will continue to be effective till 31st March 2006 when multi year tariff will become operational. 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 recalculate its bills for energy supplied to MPSEB since 1st June 2005 and must also provide information to the Commission in support of having complied with this order.

4 Further, it is directed that the trading licensee i.e. MPSEB must 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, State 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 Electricity Act, 2003 of regulating "the purchase and procurement process of distribution licensee 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". The Trading Licensee may approach the Commission separately to have its trading margin fixed by submitting full details of its operations. Before parting with this case, the Commission would also like to draw the attention of the State Government to the situation resulting from non-allocation, among the distribution licensees of the state, their respective share of power in the central generating stations and also the state generating stations. This situation has been sought to be addressed through an agreement made between MPSEB and distribution licensees showing a differential bulk sale rate to different distribution companies. In the Commission's view this amounts to subsidising one company by overcharging the other. In our view, the trading licensee does not have the discretion in this matter. He may only take the trading margin but is not free to hike the selling price for one distribution company to give benefit to another. A better, and legally sanctified arrangement is possible by allocating the cheaper sources of generation or a larger share in such generating stations (now that the Commission has determined station wise generation cost) to that distribution licensee as has an adverse or less favorable consumer mix or has suffered from persisting high losses (AT&C losses) and low efficiency problems which cannot be tackled overnight and can only be addressed gradually over the next few years. The Commission suggests that the State Government's Energy department evolve a suitable allocation plan for the rights in the generated electricity as were available with MPSEB before restructuring and may notify the same under the powers available to the State Government in Part XIII of the Electricity Act, 2003.

Ordered as above read with attached detailed reasons and grounds,

Sd/-	**Sd/-**	**Sd/-**
(R. Natarajan)	**(D. Roybardhan)**	**(P.K.Mehrotra)**
Member (Econ.)	**Member (Engg.)**	**Chairman**

Date: January 25, 2006
Place: Bhopal

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CHAPTER 1

Background of the order

Introduction

1.1 This order relates to petition number 112 of 2005 filed by the Madhya Pradesh Power Generating Company Limited (MPPGCL) and Madhya Pradesh State Electricity Board (MPSEB) for determination of tariff for electricity to be sold to MPSEB by MPPGCL for FY06. MPPGCL is the owner of the generating plants previously owned by MPSEB. MPPGCL has started functioning independently from 1st June 2005. The Commission has examined the operational and the financial data of the generating plants of the period when they were part of MPSEB. The Commission has based this order on the past records, submission of the company and views expressed by stakeholders.

1.2 The Generating Company has filed this petition for determination of generation tariff for the period after coming into effect of GoMP notification dated 31st May 2005, which provides that MPSEB shall be sole buyer of all energy produced by MPPGCL. MPSEB, who is a co-petitioner to this application, 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. The agreement also provided that within 30 days of signing the agreement the parties to this agreement shall approach MPERC for determination of tariff and the terms and conditions of the agreement. As per the agreement, the terms of agreement shall stand modified as per the orders passed by the Commission. While deciding the application for retail tariff determination for year 2005-06, the Commission had directed the Petitioner vide its order dated 29th June 2005 to submit a fresh petition if MPPGCL required the Commission to determine the generation tariff as had been provided in the State Govt. notification mentioned above. Till this was done, the Commission had directed that rates provisionally agreed between MPPGCL and MPSEB may be treated for payment on adhoc basis. The Petitioner in the present petition has formally requested the Commission to determine the tariff in accordance with the applicable regulations.

Procedural history

1.3 The Commission had also received an application through which the unbundled companies requested the Commission's approval for a composite agreement, which they had mutually reached to provide for the rate and terms of payment to be operative amongst them till a formal determination of tariff was ordered by the Commission. The Commission has not so far taken any view on the various provisions mentioned in the inter-se agreement between MPSEB and the Generation, Transmission and Distribution Companies because the time allowed to MPSEB to continue as Trading Licensee was in the first instance only upto 9th December 2005 and extended later till 9th June 2006. The Commission considers this as a transitory arrangement and will take a view in the matter only after the position of MPSEB is known finally. Also, the notification issued by GoMP has a specific arrangement called "Cash Flow Management" which is stated to be purely temporary to overcome the difficulty of setting up banking arrangement. The Commission expects that this is only a transitory and temporary arrangement and is not meant to restrict the autonomous and responsible functioning of unbundled companies.

1.4 The Commission in its tariff order dated 29th June 2005 directed MPPGCL to file a separate tariff petition for FY06 before 31st July 2005 if any revision was required in the provisional rate of Rs. 1.51/Unit agreed between MPPGCL and MPSEB. On 27th July 2005 the petitioner appeared before the Commission in regard to petition no. 77/05 which relates to the approval for inter-se agreement and during the hearing it requested for extending the deadline for submission of the petition for fixation of generation tariff upto 25th August 2005 as the approval of the petition from the Board of Directors was awaited. The Commission granted the requisite time to the petitioner.

1.5 The petitioner submitted its petition on 23rd August 2005. This petition was unsigned, the requisite fee had not been deposited and had some other discrepancies, which the Petitioner was asked to rectify. The Petitioner was also asked to clearly establish before the Commission if there existed any legal basis for the Commission to determine the generation tariff when under the present arrangement MPPGCL is bound to sell its entire output to MPSEB, a trading licensee and not to the Distribution Licensees of the State. The authorised representative of the Petitioner signed the petition on 26th August 2005 and further clarifications on the other observed discrepancies were submitted vide letter dated 30th August 2005. The Petitioner submitted that the Commission's powers to determine generation tariff under section 86(1)(a) of the Electricity Act 2003 were wide and covered the present situation also. A reading of the relevant portion of Section 86(1)(a) of Electricity Act 2003 is as follows: -

86. Functions of State Commission- (1) The State Commission shall discharge the following functions, namely: -

(a) Determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State: Providing that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;

………….

1.6 Here, it is appropriate to look at section 62 of Electricity Act wherein it is provided as follows: -

62. Determination of Tariff- (1) The Appropriate Commission shall determine the tariff in accordance with provisions of this act for –

(a) supply of electricity by a generating company to a distribution licensee:

………..

To understand the meaning of 'supply' one must refer to the definition in section 2 (70) of the Act which is: -

"supply", in relation to electricity, means the sale of electricity to a licensee or consumer;

……………

1.7 One view placed before the Commission is that section 62 of the Act limits the function of the Commission to only the determination of tariff when the supply of electricity is made by a generating company to a distribution licensee. Another view is that section 86(1)(a) is wide enough to encompass situations where the generating company situated within the State is supplying electricity to a trading licensee also. The Commission is of the view that the relevant notification issued by GoMP makes it abundantly clear that the sale of electricity by MPPGCL is primarily and exclusively for the purpose of supply to distribution licensees within the State and hence it is the obligation of the Commission to determine the tariff to allow the operations to continue smoothly. The Commission has, therefore, decided to proceed with the matter of determining generation tariff. However, the Commission is strongly of the view that individual distribution licensees must enter into a long-term power purchase agreement with MPPGCL in order that the arrangement continues uninterrupted even when MPSEB is no longer allowed to continue its operations as a trading licensee. The interest of ordinary consumers of the State must be safeguarded in this matter.

1.8 The Petitioner has submitted that the fee paid by MPSEB for the tariff petition earlier filed by MPSEB for FY06 may be treated as the fee payable by it and this has been accepted by the Commission.

Table 2: Summary of the tariff petition

Sl. No.	Particulars	Amount (Rs. Cr.)
1.	Generation Cost (fuel cost)	1494.76
2.	Repairs and Maintenance	200.09
3.	Employee Cost	152.04
4.	Administration and General	21.25
5.	Net Prior period charges	84.96
6.	Other debits & write offs	2.86
7.	Depreciation	113.04
8.	Interest and Finance Charges	406.83
9.	Income tax	54.98
10.	Return on Equity	130.14
Less	Expenses Capitalised	123.68
	Total	2537.27
11.	Non Tariff Income*	(-) 35.46
	Net Amount Recoverable	2501.81
12.	Revenue from sale of power @Rs.1.51/unit (Estimated net generation of 14551.91 Mu)	2197.34

* The Company has estimated this income from its share of incentive as per Ahluwalia Committee Report and miscellaneous income.

1.9 The Commission in a hearing held on 7th September 2005 directed MPPGCL to bring an authorisation from the Board allowing it to adjust the fee payable by it from the fee already paid by the Board. The MPPGCL was also directed to ask MPSEB to become co-petitioner to this petition, as MPSEB is the one, which will pay for the power purchased. Further, the petitioner was directed to submit the Executive Summary for public circulation and the gist of the petition in Hindi and English for publication in the Newspapers by 15th September 2005. The Commission had other observations as well on the petition, the petitioner was required to submit its responses on these observations by aforesaid date.

1.10 The petitioner on 15th September 2005 submitted the abridged version of tariff petition, gist in English for publication in newspapers, authorisation letter from MPSEB for adjustment of fee payable by MPPGCL and other clarifications needed by the Commission. However only on 27th September 2005 MPSEB gave its consent to join the petition filed by MPPGCL as a co-petitioner, as stipulated by the Commission. Thus 27th September 2005 is to be reckoned as the date of submission of petition under section 64(1) of the Electricity Act, 2003.

Public Hearing

1.11 The Commission in its hearing on 21st September 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 Edition) and Hindustan Times (English, All Madhya Pradesh Edition) on 24th September 2005 and 25th September 2005 respectively.

1.12 The Commission held a public hearing on the tariff petition of MPPGCL at Bhopal on 17th November 2005 in the Conference Hall of Urja Bhawan.

State Advisory Committee

1.13 A presentation on the tariff proposal of MPPGCL was made before the members of the Committee on 16th December 2005. 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 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: Provisional Opening Balance Sheet of Madhya Pradesh Power Generating Company Ltd.

(Rs. In Crore)

<table>
<tr><th colspan="2">Liabilities</th><th colspan="2">Amount</th><th colspan="2">Assets</th><th colspan="2">Amount</th></tr>
<tr><td colspan="3">Equity From GoMP</td><td>1278</td><td rowspan="5">Fixed Assets</td><td>Gross Assets</td><td>4453</td><td rowspan="4"></td></tr>
<tr><td rowspan="5">Project Specific Capital Liabilities (Including payments overdue)</td><td>PFC</td><td>1120</td><td rowspan="4"></td><td rowspan="3">Less Accumulated depreciation</td><td rowspan="3">1576</td></tr>
<tr><td>LIC</td><td>488</td></tr>
<tr><td>CSS</td><td>3</td></tr>
<tr><td>REC</td><td>334</td><td>Total</td><td>2878</td><td>2878</td></tr>
<tr><td>Total</td><td>1945</td><td>1945</td><td colspan="3" rowspan="2">Capital Works in Progress</td><td rowspan="2">1040</td></tr>
<tr><td colspan="3">Loan from MPSEB</td><td>259</td></tr>
<tr><td rowspan="6">Current Liabilities</td><td>Fuel Liabilities</td><td>191</td><td rowspan="5"></td><td rowspan="6">Current Assets</td><td>Stock</td><td>244</td><td rowspan="5"></td></tr>
<tr><td>Staff Related</td><td>29</td><td>Cash and Balances</td><td>11</td></tr>
<tr><td>Towards Suppliers</td><td>143</td><td>Loan Advances</td><td>3</td></tr>
<tr><td>Intt. Accrued but not due</td><td>21</td><td>Sundry Receivable</td><td>34</td></tr>
<tr><td>Others</td><td>342</td><td>Others</td><td></td></tr>
<tr><td>Total</td><td>727</td><td>727</td><td>Total</td><td>292</td><td>292</td></tr>
<tr><td rowspan="2">Borrowings for working capital</td><td>Overdraft</td><td>0</td><td rowspan="2">0</td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td></tr>
<tr><td>Working capital demand loan + cash credit</td><td>0</td></tr>
<tr><td colspan="3">Accumulated Surplus/ (Deficit)</td><td>0</td><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="3">Reserves and Reserve Funds</td><td>0</td><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="3">Total Liabilities</td><td>4210</td><td colspan="3">Total Assets</td><td>4210</td></tr>
</table>

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 It is necessary to go through Section 131 of the Electricity Act, 2003 (Act) at this juncture which pertains to the Reorganisation of the Board. The section reads as under:

*131. **Vesting of the property of Board in State Government.-** (1) With effect from the date on which a transfer scheme, prepared by the state Government to give effect to the objects and purposes of this Act, is published or such further date as may be stipulated by the state Government (hereafter in this Part referred to as the effective date), any property, interest in property, rights and liabilities which immediately before the effective date belonged to the State Electricity Board (hereinafter referred to as the Board) shall vest in the State Government on such terms as may be agreed between the State Government and the Board.*

(2) Any property, interest in property, rights and liabilities vested in the State Government under sub-section (1) shall be re-vested by the State Government in a Government company or in a company or companies, in accordance with a transfer scheme so published along with such other property, interest in property, rights and liabilities of the State Government as may be stipulated in such scheme, on such terms and conditions as may be agreed between the State Government and such company or companies being State Transmission Utility or generating company or transmission licensee or distribution licensee, as the case may be.

Provided that the transfer value of any assets transferred hereunder shall be determined, as far as may be, based on the revenue potential of such assets at such terms and conditions as may be agreed between the State Government and the State Transmission Utility or generating company or transmission licensee or distribution licensee, as the case may be.

2.3 The State Government, in terms of Section 131 of the Act, published in the Madhya Pradesh Gazette on 30th September, 2003 the Madhya Pradesh Electricity Reforms First Transfer Scheme Rules, 2003 (Transfer Scheme Rules) regulating the transfer and vesting of functions, properties and interest, rights and liabilities of the Madhya Pradesh Electricity Board in the State Government and re-transfer and re-vesting thereof by the State Government in any other company or body corporate or authority and also for the transfer of Personnel of the Madhya Pradesh State Electricity Board to any other company or body corporate or authority and for determining the terms and conditions on which such transfer and vesting shall be made. Rules 5 and 6 of the said Transfer Scheme Rules deal with transfer of property to the State and Transfer of Undertaking by the State. The relevant rules are given hereunder:

5 (1) On and from the date of transfer to be notified by the State Government the properties and all interests, rights and liabilities of the Board as specified in Schedules 'A' to 'E' shall stand transferred to and vested in the State Government for the purposes of the Transfer Schemes under these Scheme Rules.

(2) Nothing in sub-rule (1) shall apply to rights, responsibilities, liabilities and obligations in respect of the personnel and personnel related matters including statutory dues such as salary, wages, gratuity, pension, provident fund, compensation terminal and retirement benefits and the same shall be dealt in the manner provided under Rule 7 of these Scheme Rules.

6 (1) The Undertakings forming part of Generation Undertakings as set out in Schedule-'A' shall be transferred to and vested in GENCO as and from the date of the transfer to be notified by the State Government subject to the terms and conditions specified in the Act and these Scheme Rules.

(2) -------
(3) -------
(4) -------
(5) -------

(6) The Undertakings or the Properties and Liabilities as set out in Schedule 'F' shall be retained by the Board till further orders of the State Government.
(7) ------

(8) The transfer to and vesting of the Undertakings to the
(a) transferees in terms of these Scheme Rules shall take effect immediately on the date of the transfer as may be notified by the State Government

for the purpose not withstanding that the value of such Undertaking have not been determined and shall be determined at a later date.

(b) The value of the assets to be transferred to the Transferees shall be the fair value determined in any one or more of the following basis.

(i) Revenue earning potential, or
(j) Depreciated replacement value, or
(k) Book value

(c) The opening balance sheet of the Transferees may be finalized and notified by the State Government at any time during the provisional period mentioned in Rule 10 of these Scheme Rules.

(9) The State Government may by an order to be issued for the purpose amend, vary, modify, add, delete or otherwise change the terms and conditions specified in the Schedules at any time during the provisional period mentioned in Rule 10 of these Scheme Rules.

Rule 10 of the Scheme Rules is given hereunder:

10 (1) The classification and transfer of Undertakings including personnel under these Scheme Rules, unless otherwise specified in any order made by the state Government, shall be provisional and shall be final upon the expiry of twelve months from the date of the transfer.

(2) At any time within a period of twelve months from the date of the transfer, the State Government may by order to be notified amend, vary, modify, add, reduce, delete or otherwise change terms and conditions of the transfer including items included in the transfer, and transfer such properties, interest, rights, liabilities, personnel and proceedings and forming part of an Undertaking of one transferee to that of any other transferee or the Board or to the state Government in such manner and on such terms and conditions as the State Government may consider appropriate.

(3)On the expiry of the period of twelve months from the date of the transfer and subject to any directions given by the State Government, the transfer of Undertakings, properties, interests, rights, liabilities, personnel and proceedings made in accordance with the Scheme Rules shall become final.

2.4 As per Rule 12(1) of the said Scheme Rules, the transferees shall continue to function and undertake business activities assigned to them on behalf of and as agents of the Board till such time the State Government issues a Notification authorizing the transferees to under take such functions and activities on their own and independent of the Board.

2.5 Vide Notification No. 6269-XIII-2003 dated 1st October 2003, the State Government notified the date of commencement of the said Madhya Pradesh Electricity Reforms First Transfer Scheme Rules, 2003 as 1st October 2003. Vide Notification No. 6271-XIII-2003 dated 1st October 2003, the State Government notified 1st October 2003 as the date of transfer under sub-rule (1) of the Rule 5 and sub-rules (1) to (5) of Rule 6 of the said Scheme Rules. Thus, the properties and all interest, rights and liabilities of the Board stood transferred to and got vested in the State Government on 1st October 2003. Again on 1st October 2003, the Undertakings forming part of Generation Undertakings as specified in Schedule 'A' of the Scheme Rules stood transferred to the MPPGCL. However, 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. Thus the valuation falls within the provisions of Rule 8(b) of the Scheme Rules of 2003. As mentioned earlier, 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.

2.6 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.

CHAPTER 3

Station-wise Allocation of Fixed Assets, Equity Capital and Loan:

3.1 As indicated in Para 2.1, the opening balance sheet of MPPGCL as notified by the Government of Madhya Pradesh include the following amounts as Equity from GoMP, Project Specific Capital Liabilities (including payments overdue), Loan from MPSEB and Gross Fixed Assets:

Equity from GoMP	Rs. 1,278 crores
Project Specific Capital Liabilities	
Power Finance Corporation	Rs. 1,120 crores
Life Insurance Corporation	Rs. 488 crores
Centrally Sponsored Schemes	Rs. 3 crores
Loan from REC	Rs. 334 crores
Total	**Rs. 1,945 crores**
Loan from MPSEB	Rs. 259 crores
Gross Fixed Assets	Rs. 4,453 crores

3.2 It is necessary to allocate the above amounts station-wise so that the fixed charges (Capacity charges) pertaining to the respective stations are derived.

3.3 **Fixed Assets:**

MPPGCL had submitted that the fixed assets of the company are identifiable with the projects as the respective RAOs have the details of the assets and accordingly allocated the fixed assets to the various projects as under:

Project	Value of Fixed Assets (Rs. Crores)
ATPS, Chachai	143.97
STPS, Sarni	606.85
SGTPS, Birsinghpur	2115.06
Gandhi Sagar	10.29
R.P. Sagar	18.86
J. Sagar	16.56
Pench	87.50
Rajghat	82.75
Bargi	77.27
Bansagar I (Tons)	942.25
Bansagar II (Silpara)	119.65
Bansagar III (Devloned)	179.48

Project	Value of Fixed Assets (Rs. Crores)
Birsinghpur Hydel	52.12
Total MPPGCL	**4452.61**

The Commission agrees to the above allocation.

3.4 **Equity from GoMP:** MPPGCL in their reply to the observations of the Commission on the petition had indicated that the Capital Works in Progress of Rs. 1,040 crores (as per the opening balance sheet) consisted of Rs. 740 crores of PFC loan and Rs. 300 crores of Equity from GoMP. In terms of the above submission of MPPGCL, out of Rs. 1,278 crores of Equity Capital, Rs. 300 crores pertains to projects under construction leaving a balance of Rs. 978 crores towards completed projects. GoMP's contribution towards implementation of a project in the past had been on the basis of budgetary allocations and not in the form of equity capital. Only now, the GoMP had indicated equity capital in the opening balance sheet and in the absence of complete details of the release of equity by the GoMP, the company had proposed to allocate the amount of Rs. 978 crores to the various projects on the basis of opening gross block. As the opening gross block allocated is Rs. 4453 Crores, the equity component in the project cost would amount to less than 22%. The Commission agrees with the proposal of MPPGCL in this regard. The proposed allocation of equity capital is as under:

Power Station	Gross Block (Rs. Crores)	% of total Gross Block	Equity capital proposed (Rs. Crores)
ATPS, Chachai	144	3.23	32
STPS, Sarni	607	13.63	133
SGTPS, Birsinghpur	2115	47.50	465
Gandhi Sagar	10	0.23	2
R.P. Sagar	19	0.42	4
J. Sagar	17	0.37	4
Pench	88	1.97	19
Rajghat	83	1.86	18
Bargi	77	1.74	17
Bansagar I (Tons)	942	21.16	207
Bansagar II (Silpara)	120	2.69	26
Bansagar III (Devloned)	179	4.03	40
Bansagar Total	1241	27.88	273
Birsinghpur Hydel	52	1.17	11
Total MPPGCL	**4453**	**100.00**	**978**

3.5 Out of the above, the projects which are outside the state viz. Rana Pratap Sagar and Jawahar Sagar are not coming under the purview of Commission and hence are excluded leaving a balance of Rs. 970 Crores as equity invested in projects under the operation control of MPPGCL.

3.6 **Allocation of Loans:**

3.6.1 The Commission directed MPPGCL to identify the project specific capital liabilities (loans) with respective projects. MPPGCL had represented that in the opening balance sheet some loans are clearly earmarked to the respective project but the remaining loans have been assigned to MPPGCL on lump sum basis with no clear identification possible. MPPGCL proposed to allocate the loans to the respective projects on the basis of following assumptions:

(i) Loans which are clearly identifiable with the project should be assigned to the project only;

(ii) Loans which are not identifiable directly with the project should be assigned to the project considering their repayment ability as in the cost plus tariff scenario, repayment ability of any project is governed by the balance depreciation available.

(iii) As an outcome of these assumptions, the following position emerged:

(a) Full amount of PFC loan are identifiable with respective projects.

(b) Full amount of LIC, REC and CSS loans get allocated to SGTPS, Birsinghpur.

(c) Full amount of generic liability gets allocated to Ban Sagar.

3.6.2 Out of the Power Finance Corporation loan of Rs. 1,120 crores, as given in Para 3.4 above, MPPGCL had admitted Rs. 740 crores as pertaining to Capital Works in Progress leaving a balance of Rs. 380 crores as utilized towards projects that have already been completed. The Capital Work in Progress loan of Rs. 740 crores had been identified with projects as under:

Project	Amount (Rs. Crores)
SGTPS, Birsinghpur Extn 500 MW	542.77
Marikhera HEP (2X20 MW)	86.39
R & M scheme of Satpura TPS	4.74
R & M Chachai	1.47
ATPS Chachai 210 MW	55.05
Bansagar – IV	49.14
Total	**739.56**

Note: MPPGCL claimed Rs. 690 crores as loans utilized for CWIP. Commission had found out that they had left out funds utilized for Bansagar-IV amounting to Rs. 49.14 crores and has hence included the same.

3.6.3 The applicable interest on these loans will not be considered in the Interest and Finance charges but will be allowed to be capitalized.

3.6.4 The Commission, while agreeing with MPPGCL that loans that are clearly identifiable with the projects should be assigned to those projects, is not in a position to agree with the other two assumptions. The Commission would like to adjust the value of the loans that could not be identified with any specific project, as utilized for Working Capital borrowings. However, if MPPGCL could show the utilization of the capital liabilities for any specific project in the near future, the Commission would definitely consider the same and re-work the capacity charges.

3.6.5 In their submission, MPPGCL had identified Rs. 388 crores out of the PFC loan as against Rs. 380 crores (indicated in para 3.6.2) to the following projects:

Project	Amount of PFC loan (Rs. Crores)
ATPS, Chachai	14
STPS, Sarni	21
SGTPS, Birsinghpur	229
Rajghat	**6**
Bansagar	118
Total	**388**

3.6.6 The interest payable on the PFC loan would be allowed in the Capacity charges of the respective project.

3.6.7 Thus out of the total of Rs. 2,204 crores of loans (project specific loan of Rs. 1,945 crores and MPSEB loan of Rs. 259 crores), MPPGCL had identified Rs. 1,128 crores (Rs. 740 crores as pertaining to Capital Works in Progress and Rs. 388 crores as allocable to projects) leaving a balance of Rs. 1,076 crores as not identifiable with any project. The Commission will treat unidentified balance loan as Working capital borrowings and allow the interest on them to the various projects on the basis of normative working capital needs even though the balance sheet notified by the State Government on 31st May, 2005 does not show any requirement on this account. This will be dealt with in the Chapter on Interest and Finance Charges.

CHAPTER 4

Computation of Generation Tariff for FY 06

4.1 In line with the principles enunciated by the Central Electricity Regulatory Commission (CERC), the Commission had decided to introduce the two part tariff structure for the generating stations coming under its purview which means that the tariff will be determined as Capacity (Fixed) charges and Energy (Variable) charges separately for each generating station. The two-part determination of tariff would enable the Commission to implement the intra-state Availability Based Tariff (ABT), which has been recommended by the National Electricity Policy. The National Tariff Policy of 6th January 2006 had recommended introduction of peak and off-peak pricing for supply by generators but in the present exercise, the Commission had decided not to introduce the same. The Commission proposes to bring out a discussion paper on peak and off-peak pricing and will introduce the same in future after ascertaining the views of all stake-holders.

4.2 The Capacity (Fixed) charge component of the tariff would consist of:

a) Return on Equity
b) Interest and Finance charges on long term as well as Working Capital borrowings;
c) Depreciation;
d) Operation & Maintenance Expenses comprising of employee related expenses, administration & general (A&G) expenses and repairs and maintenance expenses;
e) Other expenses specifically allowed by the Commission such as Government levies, terminal benefit payments to employees etc.

4.3 The Capacity charges of thermal power stations are payable by the utilities buying the electricity on the basis of capacity of each generating station allotted/contracted by them in equal monthly installments subject to the generating station demonstrating its availability as per norms fixed by the Commission when the intra-state ABT is made applicable or in its absence, by the cumulative target PLF achieved. The Capacity charges are payable pro-rata if availability/cumulative PLF is less than the norm/target fixed.

4.4 The Capacity charges for the hydro stations are payable by the utilities buying the electricity on the basis of capacity of each generating station allotted/contracted by them in equal monthly installments based on the formula:

Capacity charges = Annual Fixed Charges – Primary Energy Charges*

* Where the Primary Energy Charge is the least variable cost of the thermal plant in the Western Region and the total primary energy charge shall not exceed Annual Fixed Charge.

4.5 The capacity charges as determined by the Commission in this order for Hydro Stations shall be payable in full if the capacity index as defined by MPERC in its tariff regulation for existing plants is above 90% for purely run of the river and above 85% for storage type and Run of the river plants with pondage. In case, the capacity index achieved is below the normative capacity index defined above for reasons attributable to MPPGCL, there would be a pro rata reduction in capacity charges payable and at zero capacity index no capacity charge shall be payable for that Hydro Station. The capacity index declared by the Hydro Station for computation of capacity charges for the month shall be verified by SLDC. The SLDC if it deems fit, may ask any Hydro Station to demonstrate the capacity declared by it any time as per the procedure defined by MPERC in its regulations.

4.6 In case, the capacity index is more than the normative level as indicated above, incentive shall be payable as per the formula given in MPERC's tariff regulation on terms and conditions of generation tariff, which is reproduced below for ready reference.

Incentive= 0.65* Annual fixed charge*(CI_A-CI_N)/100
Where CI_A=Capacity Index actually achieved
CI_N= Normative Capacity Index

4.7 The Generating Company shall be eligible to recover primary energy charges for each hydro station. The primary energy charge shall be payable monthly for the saleable primary energy (primary energy less auxiliary consumption) for the month at the rate of the thermal station having the least variable cost in the western region. The primary energy as per MPERC's Regulations on terms and conditions of generation tariff is the quantum of energy generated upto design energy on per year basis at the generating station. Presently, the variable cost of generation from Korba is expected to be the least thermal generation cost in the western region.

4.8 In case in any month saleable energy exceeds saleable primary energy MPPGCL for such station shall be entitled to receive additional payment for the excess generation (saleable secondary) at the rate equal to that of rate payable for saleable primary energy. The procedure for determination of secondary energy charge shall be as per MPERC (Terms and Conditions) Regulation 2005.

4.9 The Energy (Variable) Charge of the thermal generating stations comprise of fuel and related cost viz. landed cost of coal, oil, government levies etc. and the consumption will be based on the operating norms fixed by the Commission from time to time. Any variation in the cost on account of price, net calorific value based on the actual grade of supply etc. are allowed to be recovered through a Variable Cost Adjustment (VCA) formula approved by the Commission.

4.10 The details of the Power Stations operated by the MPPGCL within Madhya Pradesh is given below:

Table-1: Details of Power Stations within Madhya Pradesh operated by MPPGCL

Power Station				Commissioning Year	Capacity MW	Age as on 31.03.05
Thermal Power Stations	1	**Amarkantak Thermal Power Station (Chachai)**	PH 1 (2 units)	1965	50.0	40
			PH 2 (2 units)	1977-78	240.0	27
			Complex (4 units)		**290.0**	**29**
	2	**Satpura Thermal Power Station (Sarni)**	PH 1 (5 units)	1967-70	312.5	37
			PH 2 (2 units)	1979-80	410.0	25
			PH 3 (2 units)	1983-84	420.0	22
			Complex (9 units)		**1142.5**	**27**
	3	**Sanjay Gandhi Thermal Power Station Bir'pur**	PH 1 (2 units)	1993-94	420.0	12
			PH 2 (2 units)	1999	420.0	6
			Complex (4 units)		**840.0**	**9**
		Total Thermal Generation			**2272.5**	**21**
Hydel Power Stations	1	**Chambal HPS**	Gandhi Sagar (5 units)	1960-66	115.0	43
	2	**Pench Totladoh Hydro Station (2 units)**		1986-87	160.0	18
	3	**Bansagar Tons HPS**	Tons (3 units)	1991-92	315.0	13
			Silpara (2 units)	2002	30.0	3
			Devloned (3 units)	2001-02	60.0	3
			Complex (8 units)		**405.0**	**11**
	4	**Birsinghpur HPS (1 units)**		1991	20.0	13
	5	**Bargi HPS (2 units)**		1988	90.0	17
	6	**Rajghat HPS (3 units)**		1999	45.0	5
	Total Hydro Generation (21 units)				**835.0**	**22**
	Total Thermal and Hydel				**3107.5**	

Note: 4 units of RP Sagar, 3 units of Jawahar Sagar and 3 Units of Matatila are not located within Madhya Pradesh and in the jurisdiction of MPERC and have been excluded from the calculation.

CHAPTER 5

Computation of Variable Cost for FY 06

Thermal Generation

(a) PLF and Availability

5.1 For fixing the target for FY06, the Commission has analysed the historical performance of the thermal units of MPPGCL, maintenance schedule of the units and targets set by the Commission through its earlier orders. Historical performance of the plants of MPPGCL has been elaborated in the table below:

Table-2: Historical Performance PLF (%)

	Particulars	FY 02	FY 03	FY 04	FY 05
1	ATPS PH I	25.1%	51.9%	41.9%	39.6%
2	ATPS PH II	41.9%	57.8%	46.8%	48.8%
	ATPS Chachai	**39.0%**	**56.8%**	**45.9%**	**47.2%**
3	STPS PH I	72.7%	80.3%	77.1%	77.5%
4	STPS PH II	79.2%	75.5%	74.9%	73.1%
5	STPS PH III	67.4%	81.0%	78.8%	79.8%
	STPS Sarni	**73.1%**	**78.8%**	**76.9%**	**76.8%**
6	SGTPS PH I	45.0%	62.6%	62.7%	66.4%
7	SGTPS PH II	69.5%	79.5%	76.2%	82.3%
	SGTPS Birsinghpur	**57.3%**	**71.0%**	**69.5%**	**74.3%**
	Total Thermal	**62.9%**	**73.1%**	**70.2%**	**72.1%**

5.2 For FY05, the Commission had approved the PLF targets as proposed by MPPGCL (then MPSEB). Station-wise break-up of PLF is given in the table below. While performance of PH I and II of ATPS Chachai, PH II of STPS Sarni and PH I of SGTPS Birsinghpur fell short of the target specified, yet due to better performance of other stations, MPPGCL could achieve the overall PLF target (about 0.6% higher than the target specified).

Table-3: Performance Vs Target PLF (%)

Particulars		FY 05		
		Proposed by MPPGCL	**MPERC Approved**	**Actual**
1	ATPS PH I	45.7%	45.7%	39.6%
2	ATPS PH II	54.7%	54.7%	48.8%
	ATPS Chachai	**53.1%**	**53.1%**	**47.2%**
3	STPS PH I	74.9%	74.9%	77.5%
4	STPS PH II	75.9%	75.9%	73.1%
5	STPS PH III	74.7%	74.7%	79.8%
	STPS Sarni	**75.2%**	**75.2%**	**76.8%**
6	SGTPS PH I	70.7%	70.7%	66.4%
7	SGTPS PH II	74.7%	74.7%	82.3%
	SGTPS Birsinghpur	**72.7%**	**72.7%**	**74.3%**
	Total Thermal	**71.5%**	**71.5%**	**72.1%**

Amarkantak Thermal Power Station (ATPS, Chachai)

5.3 In FY03, the units of ATPS Chachai had performed reasonably well, however after that their performance has not been satisfactory. According to MPPGCL this has been mainly due to vintage, curtailed regular maintenance (due to paucity of funds) and technical obsolescence of these units. MPPGCL has submitted that improvement in performance would be possible only after major R&M works are carried out. The Commission had persistently asked the Board to carry out the necessary R&M works to improve the performance of these units. The poor performance of these units cannot be continuously overlooked merely because of vintage and design constraints as pleaded by the MPPGCL.

5.4 The Commission again directs MPPGCL to carry out necessary R&M works for improving the performance of these 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*. Considering the average performance of these units during the period FY02- FY05 and the recommendation of CEA in its report on Technical Standard on Operation Norms for Coal/Lignite Fired Thermal Power Stations issued in December 2004 to fix norms the Commission fixes the target PLF of 43% by PH I and 52.3% by PH II plants of Amarkantak (ATPS) for FY06. The prescribed target should be achievable as there is a substantial gap between the availability of plants and its PLF, which can be reduced through increased loading of the units. However for the purpose of determination of tariff for Amarkantak (ATPS) station, the Commission has considered the overall target of 50.7% for FY06.

Satpura Thermal Power Station (STPS, Sarni)

5.5 STPS PH I, which was commissioned during 1967-70, has been performing exceedingly well. The PLF of the units of PH I in FY03, FY04 and FY05 exceeded 77%. The plant has achieved 77.5% PLF as against the target of 74.9% for FY05. MPPGCL through its supplementary submission has requested to reconsider the target for this station for FY06 as 73.6% as against originally proposed target of 74.9% in the tariff petition for FY06. MPPGCL has submitted that necessary overhauling work of units (#3 & #4) has taken more time than envisaged earlier. Unit #3 took 35 days as against plan of 25 days and unit #4 took 54 days as against plan of 31 days. The target fixed by the Commission for FY05 provides nearly 92 days of possible shut down of the units in a year. The Commission expects that prolonging the maintenance period would have been a commercial decision on the part of the management that after attending to these units the improved performance is likely to compensate for any generation loss in the remaining period of the year. The benefits of improved performance are likely to accrue to the Company in future years also. This plea is therefore an afterthought with the intent of keeping a soft target and the Commission does not accept this argument. Considering the historical performance of these units and target fixed by the Commission earlier, the target for FY06 remains unchanged and shall be 74.9%. The Commission is considering 100% of generation of these units for the purpose of determination of tariff. In case, MPPGCL had admitted only their share of cost of fixed assets they may come back to the Commission with proof so that the depreciation can be taken care of. MPPGCL is free to honour its commitment with partner state but the generation tariff shall be determined by this Commission for units located in MP.

5.6 Units of PH II and PH III of STPS Sarni are of similar vintage as some of the units of NTPC, the PLF norm applicable for such units is 80%. The Commission expects these units of PH II and PH III to operate at this PLF. However in FY05 the achievement of units of PH II has been around 73.1% as against the target of 75.9%. MPPGCL has proposed to operate these units at the earlier fixed target of 75.9%, which the Commission accepts for FY06. However, the Commission intends to gradually move the benchmark figure for these PH II units to 80% in the multi year regime to be applicable from FY07. The units of PH III given their past performance are expected to operate at 80% PLF for FY06.

5.7 The Commission considering the target fixed for units of PH I, PH II and PH III expects the overall plant load factor of 77.1% for STPS Sarni Complex and this has been taken into account while determining the tariff for FY06.

Sanjay Gandhi Thermal Power Station (SGTPS, Birsinghpur)

5.8 The units of SGTPS PH I were commissioned in 1993-94. For plants of similar vintage, CERC has prescribed a norm of 80%. In previous years the PLF of these units has hovered around 66% and for FY06 MPPGCL has proposed a target of 70%. Subsequently, MPPGCL has intimated the Commission that while attending the overhauling of unit # 2 it was felt necessary to attend to IP and LP turbine also which took 12 more days than that had been originally planned. Similarly unit #1 took 5 additional days. MPPGCL requested the Commission to scale down the earlier target to 64%. The Commission does not consider this request as reasonable because it is the job of the petitioner to manage the repair and overhaul expeditiously without losing valuable time. The target PLF fixed earlier by the Commission allows for appropriate maintenance schedule. The Commission for FY06 would like to continue with the last year's target, which was proposed by the Board but in future would gradually improve this norm to 80%. The units of PH II were commissioned in 1999 and for units of similar vintage, CERC has fixed a norm of 80%. MPPGCL has pleaded that due to failure of 400kV Katni Damua feeder, it was necessary for MPPGCL to reduce the load of its units. The Commission has taken care of such eventualities while defining availability/PLF for computation of allowable fixed charges. The Commission feels that given the past performance of these units the target of 80% is very much achievable. For FY06 the target PLF of 74.8% is fixed for the Station as a whole for the purpose of determination of tariff.

5.9 Considering above facts, Station-wise targets as approved for FY06 are elaborated in the table below. It is obvious from the table below that while approving the targets for FY06, the Commission has been flexible in fixing station-wise targets taking into consideration the overhauling schedule, genuine unit specific problems and the request of MPPGCL, however, overall improvement in operating efficiency has been envisaged for all the stations.

Table-4: Approved PLF targets for FY06 (%)

Particulars		For FY 06	
		Proposed by MPPGCL	**MPERC Approved**
1.	**ATPS Chachai**	**50.4%**	**50.7%**
2.	**STPS Sarni**	**76.1%**	**77.1%**
3.	**SGTPS Birsinghpur**	**74.4%**	**74.8%**

5.10 For not achieving the norms fixed earlier by the Commission, MPPGCL had reasoned that its units are old and due to liquidity crunch adequate maintenance of these plants could not be done in past. The Commission while fixing the norms earlier had considered the vintage of the units. Further the Commission had been allowing R&M expenses in various tariff orders as requested. The Company and the integrated MPSEB incurred expenditure less than that had been allowed and neglected regular maintenance work. It cannot therefore be absolved of the responsibility for the poor performance. It needs to be reiterated that the responsibility for inefficient handling of a plant must be squarely on the management and the consumers should not be penalized for the inefficient ways of the management. The Company should not expect the Commission to lower the expected efficiency gains on this account.

5.11 The Commission, for improved performance by MPPGCL, shall allow an incentive for actual generation in excess of generation based on target PLFs as approved in the table above.

5.12 For FY06, the Commission has decided to fix separate tariffs for capacity made available and energy generated both for thermal and hydro generating units so that intra-state ABT could be made applicable as and when introduced. The capacity charge, consisting of Employee cost, R&M, A&G expenses, Interest & Finance Charges, Depreciation etc, is of fixed nature, and is payable for the generating capacity available. The Commission therefore fixes availability targets for each station equal to PLF targets indicated in paragraph 5.9 for each such station. CERC has also adopted a similar principle Availability and PLF targets for Central Generating Stations are same. If the Generating Company fully achieves the availability target for a station, full capacity charges for that station would be payable by the beneficiary. These charges shall be payable on pro rata basis if the actual availability of the station is lower than the approved level. The definition, procedure for determination and declaration of availability shall be as per MPERC (Terms and Conditions for generation tariff) Regulations 2005 and Inter-State ABT order of CERC.

Table-5: Approved Availability targets for FY06 (%)

Particulars		For FY 06	
		Proposed by MPPGCL	**MPERC Approved**
1.	**ATPS Chachai**	**50.4%**	**50.7%**
2.	**STPS Sarni**	**76.1%**	**77.1%**
3.	**SGTPS Birsinghpur**	**74.4%**	**74.8%**

5.13 In the power shortage scenario, the Commission does not envisage backing down of state thermal generating stations. However, such situations may arise in the rainy season and at some point of time during other season as well due to substantial reduction in the demand. MPPGCL in such cases shall take into consideration while calculating availability any generation back down that it is directed by SLDC to carry out. The SLDC shall verify the availability declared by a generating station for payment of capacity charges. The Generating Company would be required to demonstrate the availability of its plants as declared by it as per the procedure defined by MPERC whenever SLDC requires it to do so. The Generating Company shall be entitled to recover full fixed cost only if the targeted availability is achieved but on the pro rata basis if actual availability is lower. For ensuring strict compliance, 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.

5.14 In case there is any dispute on the computation of availability, cumulative PLF (generation lost on account of thermal backing shall be included for payment of fixed charge, however no energy charge shall be payable for generation lost) achieved by the thermal plant shall be considered for computation of fixed charges payable to the Generating Company. The availability should not be lower than the cumulative PLF computed in accordance with this definition.

(b) Auxiliary Consumption

5.15 The auxiliary consumption in percentage terms as proposed by MPPGCL (erstwhile MPSEB), approved by the Commission and as achieved in FY05 are given in the table below:

Table-6: Auxiliary Consumption (%)

Particulars		For FY 05		
		Proposed by MPPGCL	MPERC Approved	Actual
1	ATPS PH I	12.00%	11.00%	14.99%
2	ATPS PH II	10.50%	9.81%	11.93%
	ATPS Chachai	**10.72%**	**9.99%**	**12.37%**
3	STPS PH I	9.25%	9.00%	9.65%
4	STPS PH II	8.80%	8.90%	8.86%
5	STPS PH III	8.80%	8.88%	9.05%
	STPS Sarni	**8.92%**	**8.92%**	**9.15%**
6	SGTPS PH I	10.00%	9.50%	11.12%
7	SGTPS PH II	10.00%	9.00%	9.67%
	SGTPS Birsinghpur	**10.00%**	**9.24%**	**10.32%**

5.16 The Commission in its order for FY05 had gone by the benchmarks set earlier in its order for FY03. The Commission compared these norms with the auxiliary consumption of generating stations of similar age in India and found them to be reasonable. The MPPGCL in its petition for FY06 has given numerous reasons for not achieving these targets. The auxiliary consumption in the last few years is given in the table below:

Table-7: Auxiliary Consumption in past years (%)

Particulars		FY 02	FY 03	FY 04	FY 05
1	ATPS PH I	17.06%	12.38%	14.48%	14.99%
2	ATPS PH II	10.61%	10.24%	11.53%	11.93%
	ATPS Chachai	**11.33%**	**10.58%**	**11.99%**	**12.37%**
3	STPS PH I	9.17%	9.15%	9.34%	9.65%
4	STPS PH II	8.74%	8.74%	9.01%	8.86%
5	STPS PH III	8.85%	8.57%	8.98%	9.05%
	STPS Sarni	**8.89%**	**8.79%**	**9.09%**	**9.15%**
6	SGTPS PH I	11.33%	10.96%	11.43%	11.12%
7	SGTPS PH II	10.69%	10.15%	9.80%	9.67%
	SGTPS Birsinghpur	**10.94%**	**10.51%**	**10.54%**	**10.32%**

5.17 (i) The Auxiliary consumption in FY05 by ATPS and STPS witnessed an upward trend but for SGTPS the downward trend has continued. CEA in its report on Technical Standard on Operation Norms for Coal/Lignite Fired Thermal Power Stations issued in December 2004 has recommended following norms:

a. 200/210/250 MW units and 500 units with motor driven BFPs

I. 8.5% with open cycle CW system

II. 9.0% with cooling towers

A reduction of 1.5% shall be made for units having turbine driven BFPs.

b. 100-200 MW range and for units less than 100 MW

I. 11.5% with open cycle CW system

II. 12.0% with cooling towers

(ii) CEA in its report has mentioned that considering the ground realities and maintenance practices of state sector units, a time bound schedule over a period of 3 to 5 years may be specified by concerned ERC for these units to achieve the specified targets.

(iii) CERC has fixed similar norms for tariff determination purpose.

5.18 MPPGCL has proposed for an overall target of 9.63% for FY06 in its tariff petition. In the supplementary submission it has revised the proposed target to 9.85%, considering the actual performance up-to Oct 05. The Commission considering historical trends, performance of similar units in other states and the recommendation of CEA approves the following target for FY06 as elaborated in the table below:

Table-8: Approved auxiliary Consumption target for FY06 (%)

Particulars		For FY 05			For FY 06	
		Proposed by MPPGCL	**MPERC Approved**	**Actual**	**Proposed by MPPGCL**	**MPERC Approved**
1	ATPS PH I	12.00%	11.00%	14.99%	12.86%	12.85%
2	ATPS PH II	10.50%	9.81%	11.93%	11.88%	11.85%
	ATPS Chachai	**10.72%**	**9.99%**	**12.37%**	**12.02%**	**11.99%**
3	STPS PH I	9.25%	9.00%	9.65%	9.17%	9.10%
4	STPS PH II	8.80%	8.90%	8.86%	8.94%	8.88%
5	STPS PH III	8.80%	8.88%	9.05%	8.94%	8.80%
	STPS Sarni	**8.92%**	**8.92%**	**9.15%**	**9.00%**	**8.91%**
6	SGTPS PH I	10.00%	9.50%	11.12%	10.17%	10.00%
7	SGTPS PH II	10.00%	9.00%	9.67%	9.75%	9.60%
	SGTPS Bir'pur	**10.00%**	**9.24%**	**10.32%**	**9.95%**	**9.79%**

5.19 The Commission, as is evident from the table above has fixed less stringent norms considering the recommendations of CEA and MPPGCL's reasoned request. The Commission, given the past trend, would like to give some more time to these units to achieve the benchmark norm as fixed by CERC for units of similar vintage. The MPPGCL in order to achieve the norms fixed must carry out the necessary Repairs and Maintenance expenditure and Renovation and Modernisation works. Duly approved plans shall be considered while truing up expenses for FY06 in the future tariff orders. *MPPGCL must also ensure that necessary metering* devices *are installed in all plants for recording auxiliary consumption and data is displayed unit wise on its website and on a quarterly basis it should be submitted to the Commission. The concerned division in the Commission office shall ensure that this data is placed before the Commission at a formal meeting.*

(b) Net thermal Generation

5.20 The Net generation expected from various thermal generating stations of MPPGCL based on the approved PLF and auxiliary consumption norms are as given in the table below:

Table-9: Approved net generation for FY06 (MU)

Particulars		For FY 05			For FY 06	
		Proposed by MPPGCL	**MPERC Approved**	**Actual**	**Proposed by MPPGCL**	**MPERC Approved**
1	ATPS PH I	176	178	148	157	164
2	ATPS PH II	1029	1037	903	969	969
	ATPS Chachai	**1205**	**1215**	**1051**	**1126**	**1133**
3	STPS PH I	1861	1866	1917	1862	1864
4	STPS PH II	2485	2482	2393	2481	2484
5	STPS PH III	2508	2506	2669	2586	2684
	STPS Sarni	**6854**	**6854**	**6979**	**6929**	**7032**
6	SGTPS PH I	2340	2353	2171	2315	2341
7	SGTPS PH II	2475	2503	2735	2615	2621
	SGTPS Birsinghpur	**4815**	**4856**	**4906**	**4930**	**4962**
	Total Thermal	**12874**	**12925**	**12936**	**12985**	**13127**

5.21 The above estimate of total generation includes some element of power, which is sold or transmitted, to other states with whom there exist past agreements. MPPGCL must produce details of actual power sent out to these states or the money actually paid or received on account of these transactions to enable this Commission to consider this as cost or earning.

(c) Station Heat Rate

5.22 The Station Heat rate achieved by various thermal power stations of erstwhile MPSEB / MPPGCL are as given in the table below:

Table-10: Station Heat Rate in previous years (Kcal/Kwh)

Particulars		FY 02	FY 03	FY 04	FY 05
1	ATPS PH I	3715	3868	4895	5143
2	ATPS PH II	3565	3547	3807	3973
	ATPS Chachai	**3582**	**3598**	**3978**	**4142**
3	STPS PH I	3286	3480	3456	3429
4	STPS PH II	2969	2911	2996	3030
5	STPS PH III	2980	2908	2898	2908
	STPS Sarni	**3059**	**3068**	**3085**	**3093**
6	SGTPS PH I	3224	3005	2996	2993
7	SGTPS PH II	3188	3028	2867	2873
	SGTPS Bir'pur	**3202**	**3018**	**2926**	**2927**
	Total Thermal	**3148**	**3103**	**3101**	**3117**

5.23 In the previous tariff order the Commission had approved the heat rates based on historical trends and comparing with units of other well performing utilities. The performance of MPPGCL against these targets is compared in the table below. The promised improvement has not come about. According to MPPGCL its units are old and inferior quality of coal is supplied by the supplier as compared to the design parameters. Inadequate maintenance works due to paucity of funds is also the factor responsible. Consequently there have been deferments of overhauling, partial loading and frequent stoppages of units. The targeted Station Heat Rates therefore could not be achieved. In the opinion of the Commission these are operational inefficiencies attributable to inefficient management. The Commission is not in agreement with the reasons advanced by the Company as it has been approving funds as desired by the petitioner for repair and maintenance of the plants and has always goaded the Company to carry out required R&M works. The original and the revised station heat rate targets proposed by MPPGCL for FY06 are as given in the table below:

Table-11: Proposed Station Heat Rate (Kcal/Kwh)

Particulars		For FY 05			For FY 06
		Proposed by MPPGCL	MPERC Approved	Actual	Proposed by MPPGCL
1	ATPS PH I	4216	3500	5143	4500
2	ATPS PH II	3500	3500	3973	3700
	ATPS Chachai	**3606**	**3500**	**4142**	**3813**
3	STPS PH I	3296	2910	3429	3250

4	STPS PH II	2825	2910	3030	2950
5	STPS PH III	2825	2910	2908	2900
	STPS Sarni	**2953**	**2910**	**3093**	**3012**
6	SGTPS PH I	2850	2825	2993	2900
7	SGTPS PH II	2825	2825	2873	2850
	SGTPS Bir'pur	**2837**	**2825**	**2927**	**2874**
	Total Thermal	**2972**	**2934**	**3117**	**3031**

5.24 In pursuance of the requirement of the EA 2003, CEA has issued its report on "Technical Standard on Operation Norms for Coal/Lignite Fired Thermal Power Stations" in December 2004. In this report an integrated approach has been recommended for deciding operational efficiency of various smaller and state owned utilities.

5.25 CEA in this report has mentioned that the operation efficiency or heat rate and other performance parameters of a thermal power station depend on a number of factors which can be broadly classified as follows: -

1. Technology & Equipment design dependent
2. Site specific problems
3. Ambient conditions
4. Fuel quality
5. Plant operation variations.
6. Age of the plant

5.26 Considering various aspects of operational constraints, CEA has recommended following approach for determining the heat rate of old thermal power stations:

1. The design heat rates are achievable only under ideal conditions and so the principle of working out norms based on design heat rates does not lead to realistic norms heat rate.
2. The following norms of heat rate are recommended for old smaller size units of various sizes from 30 MW to <200 MW: -
   a) Old units (existing)
   Normative Heat Rate = 10% above the design heat rate of the units.
   b) New Units
   The normative heat rate shall be 5% above the design heat rates.
   Notes
   1) The normative heat rate shall be applicable for a station PLF of 80%.
3. It is proposed that average existing heat rate may be allowed as normative heat rate for these units for some time and certain time frame of 3-5 years may be allowed to attain the recommended normative performance level of 110% of guaranteed heat rate. Targets for specific improvement each year may be fixed by the respective regulatory commission.
4. Normative heat rates to be increased by 1% for units more than 25 years old.

5. The above heat rates are for an average station PLF of 80% and accordingly for each 1% reduction in operating PLF, an additional heat rate of 2.5 kcal/kWh shall be allowed.

5.27 MPPGCL has submitted data in respect of deviation of coal quality w.r.t the design parameters and has also computed the targeted Station Heat Rates based on CEA's approach to be achieved over a period of 3 to 5 years. Considering past performance and the recommendation of CEA the Commission approves the following norms for FY06:

Table-12: Approved Station Heat Rate target for FY06 (Kcal/Kwh)

Particulars		Norms (CERC)	Approved (MPERC)
1	ATPS PH I	NA	4500
2	ATPS PH II	NA	3500
	ATPS Chachai		**3646**
3	STPS PH I	NA	3250
4	STPS PH II	2500	2910
5	STPS PH III	2500	2900
	STPS Sarni		**2996**
6	SGTPS PH I	2500	2850
7	SGTPS PH II	2500	2850
	SGTPS Bir'pur		**2850**

5.28 The Commission in its order for FY05 had relaxed the SHR norms fixed in its earlier order for FY03 after comparing it with generating stations of similar vintage. The Commission based on the past trend, the recommendation of CEA and CERC's existing norms, fixes the station heat rate for various phases of various thermal stations for FY06 as given in table above. The SHRs of units of PH II & PH III of STPS and PH I & PH II of SGTPS shall gradually move towards norms as recommended by CERC.

5.29 The reasons provided by the MPPGCL for not achieving adequate improvement in SHR are operational and are surmountable. The Commission has been allowing for adequate Repair & Maintenance and Renovation & Modernisation expenses in the tariffs as projected by the Board / MPPGCL. Due to the inability of the Board/MPPGCL to invest on account of their inefficient collection efforts, the paying consumers of the state cannot be made to suffer. The MPPGCL is advised to carry out the necessary Repair & Maintenance and Renovation & Modernisation works. *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.*

(d) Specific Oil Consumption

5.30 Specific Oil Consumption in various units of Thermal Power stations assigned to MPPGCL are given in the table below: -

Table-13: Specific Oil Consumption in previous years (ml/Kwh)

	Particulars	FY 02	FY 03	FY 04	FY 05
1	ATPS PH I	30.45	12.10	27.70	14.49
2	ATPS PH II	12.03	5.61	7.71	6.57
	ATPS Chachai	**14.07**	**6.63**	**10.85**	**7.72**
3	STPS PH I	5.49	3.66	5.81	5.84
4	STPS PH II	2.11	1.79	1.82	1.21
5	STPS PH III	2.43	1.47	1.51	1.42
	STPS Sarni	**3.14**	**2.19**	**2.80**	**2.57**
6	SGTPS PH I	7.23	3.82	1.76	1.47
7	SGTPS PH II	3.25	2.11	1.57	0.82
	SGTPS Bir'pur	**4.81**	**2.87**	**1.65**	**1.11**

5.31 Even though the overall specific oil consumption of MPPGCL has shown a declining trend the performance of ATPS Chachai PH-1 and PH2 and STPS PH-1 has not been satisfactory. MPPGCL has attributed vintage of these units, lack of repair & maintenance expenditure and technological constraints as the reasons for higher Specific Oil Consumption. It may be seen that in FY03 these stations performed reasonably well, however in the subsequent years, their performance has not been up-to the mark.

5.32 The table below elaborates the proposal of MPPGCL for FY05, approval by the Commission and actual achievement during FY 05. It may be seen that all the units of 200/210 MW have performed better than MPPGCL's proposal and that approved by the Commission. However, units of smaller size i.e. below 120 MW could not achieve the specified targets.

Table-14: Specific Oil Consumption in FY05 (ml/Kwh)

Particulars		For FY 05		
		Proposed By MPPGCL	MPERC Approved	Actual
1	ATPS PH I	15.00	8.50	14.49
2	ATPS PH II	7.00	2.60	6.57
	ATPS Chachai	**8.19**	**3.47**	**7.72**
3	STPS PH I	4.27	3.50	5.84
4	STPS PH II	1.80	1.40	1.21
5	STPS PH III	1.60	1.40	1.42
	STPS Sarni	**2.40**	**1.97**	**2.57**
6	SGTPS PH I	2.00	2.45	1.47
7	SGTPS PH II	2.20	2.45	0.82
	SGTPS Bir'pur	**2.10**	**2.45**	**1.11**
	Total Thermal	**2.84**	**2.29**	**2.44**

5.33 CEA in its report on technical standards on operation norms for coal/lignite fired thermal Power Stations, issued in December 2004 has reported that Secondary Fuel Oil Consumption of units 100 to 200 MW is about 7.47 ml/Kwh. Further it has suggested allowing these units a period of 3 to 5 years to reduce the Specific Oil consumption to a reasonable level, through a provision adequate renovation and modernization programmes. The Commission for units of 100 MW and lower size has prescribed a reduction trajectory based on the recommendation of CEA in its MYT framework applicable for the period FY 07 to FY 09 to MPPGCL.

5.34 Considering the historical trends, proposal of MPPGCL, recommendation of CEA, technological limitations and target of 2 ml/kwh set by CERC for similar units, the Commission for FY06 fixes the following targets:

Table-15: Specific Oil Consumption target for FY06 (ml/Kwh)

	Particulars	For FY 06	
		Proposed by MPPGCL	MPERC approved
1	ATPS PH1	14.30	13.50
2	ATPS PH2	7.43	6.00
	ATPS Chachai	**8.39**	**7.08**
3	STPS PH 1	5.21	4.50
4	STPS PH 2	1.66	2.00
5	STPS PH 3	1.65	2.00
	STPS Sarni	**2.61**	**2.66**
6	SGTPS PH 1	2.04	2.00
7	SGTPS PH 2	1.69	2.00
	SGTPS Bir'pur	**1.86**	**2.00**

5.35 It would be pertinent to mention here that some of the units of MPPGCL are performing better than the targets specified by CERC and deserve appreciation for the same. The targets for such units have been provided at the norms prescribed by CERC.

(e) Transit Losses and stacking losses

5.36 The Commission in its order for FY05 dated 10^{th} December 2004 had expressed grave concern over high transit and stacking losses. The Commission had also directed that these losses should be progressively reduced to normative levels fixed by CERC. The Commission in order to reduce these losses had directed MPPGCL in the past to install in motion weighbridges and weight-o-meters and accurately measure these losses. MPPGCL complied with these directives and has also appointed Liaison agents to ensure delivery of coal with low transit losses. The estimated and projected transit losses submitted by the Board for FY05 and FY06 and that approved (inclusive of stacking losses) by the Commission for FY05 are given in the table below:

Table-16*: *Transit and stacking losses (%)

Stations	FY05 (Proposed)	FY05 (Approved)	FY05 (Actual)	FY06 (Projected)
ATPS Chachai	4.0	1.25	0.32	0.32
STPS Sarni	4.0	2.20	0.78	0.78
SGTPS Birsinghpur	4.0	3.00	3.15	3.15

5.37 ATPS Chachai sources its coal requirement from local mines and therefore it can be considered as a pithead station. Sarni Power Station receives around 40% of its coal requirements from local mines and rest from distant mines. SGTPS receives around 30% of the coal required from local mines while the rest comes from distant mines. CERC for tariff determination purposes has prescribed norms for transit losses both for pithead and non-pithead stations for the computation of quantity of coal required. The normative transit and stacking losses as a percentage of quantity of coal dispatched by the Coal supply Company as prescribed by CERC are

Pit Head Generating Stations	: 0.3%
Non-Pit Head Generating Stations	: 0.8%

5.38 The allowable losses for three power stations i.e. ATPS, STPS and SGTPS if worked out on the basis of CERC's norms and the percentage of coal requirement sourced from local and distant mines would be:

ATPS	: 0.3%
STPS	: 0.6%
SGTPS	: 0.65%

5.39 The MPPGCL in its petition for FY05 had said that CERC norms should not be made applicable to them, as they do not have the facilities such as merry-go-round system, covered sheds etc. Further MPPGCL in its supplementary submission has requested that in addition to transit losses claimed by them, 1% of quantity of coal purchased be permitted towards stacking losses. According to MPPGCL these losses are inevitable due to inadequate number of covered sheds and lack of other stacking facilities.

5.40 The Commission in its order dated 10th December 2004 had considered the request and had not applied norms prescribed by CERC but had stated very categorically that these norms would gradually converge to norms established by CERC. In this order the Commission had asked MPPGCL to submit an investment plan to reduce the transit and stacking losses to the level fixed by CERC, however no such plan has been submitted before it. Hence the Commission finds no merit in the request made by MPPGCL.

5.41 The Commission, given the actual losses in FY05, the allowable losses as determined in paragraph 5.38 and restriction of losses to 2% as per agreement with the liasioning agent for Birsinghpur, fixes the following transit loss target for FY06:

ATPS	: 0.3%
STPS	: 0.6%
SGTPS	: 1.5%

5.42 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. It may be mentioned here that even 0.5% stacking loss translates to Rs. 6.71 Crores each year. Transit and stacking losses permissible for FY06 shall be as under:

ATPS : 0.3% + 0.5% = 0.8%
STPS : 0.6%+ 0.5% = 1.1%
SGTPS : 1.5% + 0.5% = 2.0%

(f) Net Calorific Value

5.43 MPPGCL for computation of quantity of coal consumed in FY06 has considered Net CV of coal fired as considered by the Commission in its approved VCA formulae by its order dated 29th November, 2002. The Commission in its order for FY05 had estimated these numbers on the basis of the information then made available by MPPGCL. The MPPGCL in its filing for FY06 has provided the actual NCV values of coal fired for the period April 2004 to March 2005 for all its three power stations. The Commission has computed a weighted average mean for this period and has assumed that this would be also the value of NCV of coal fired in FY06 also. MPPGCL vide its letter dated 2nd January 2006 revised NCV values filed in its petition. The submitted values are claimed to be based on the actual figures available upto October 2005. The Commission has not gone into the veracity of the calculations submitted as it would inordinately delay the present order. MPPGCL may file a petition according to a VCA (Variable Cost Adjustment) formula if there is any deviation from the value considered by the Commission in its cost computation and the actual value of the coal received. In this petition the Commission has considered the data as submitted originally at the time of presentation of petition.

Table-17: NCV of Coal **(Kcal/Kg)**

Stations	FY05 (Weighted Aver.)	FY06 (Projected)	FY06 (Approved)
ATPS Chachai	4649	4512	4649
STPS Sarni	3491	3554	3554
SGTPS Birsinghpur	3948	3791	3948

(g) Total Coal Costs

5.44 The MPPGCL for FY06 has considered the landed costs of coal for ATPS Chachai paid in the month of March 2005 and for STPS & SGTPS landed cost paid in the month of December 2004 for computation of cost of coal purchased. The landed cost consists of basic price, royalty, sizing charges, surface transport charge, beneficiation charge, stowing, ED and forest tax. The landed cost is weighted average of the landed cost of various grade of coal from various mines. The Commission has scrutinised these costs from the bills raised by Coal Companies and has found that there has been fluctuations in the rate of coal received. MPPGCL has considered the latest rate paid by them at the time of filing this petition. The Commission in order to even out the effect of price variations observed in various months adopts the weighted average cost for FY05. Accordingly for FY06, for ATPS Chachai the weighted average cost of coal received in FY05 has been considered whereas for STPS Sarni and SGTPS Birisinghpur the weighted average cost paid during the period April 04 to December 04 for which the data is available has been considered. MPPGCL vide its letter dated 2nd January 2006 revised the landed cost of coal filed in its petition. The submitted values are claimed to be based on the actual figures available upto October 2005. The Commission has not gone into the veracity of the calculations submitted as it would inordinately delay the present order. Rates considered for the computation of coal cost for FY06 for respective power stations are as given in the table below:

Table-18: Landed Cost of Coal for FY06 (Rs. /MT)

Stations	Rs/MT	Rs/MT (Approved)
ATPS Chachai	1151.59 (March, 2005)	1119.67
STPS Sarni	1287.00 (December 2004)	1232.77
SGTPS Birsinghpur	1196.00 (December, 2004)	1107.28

5.45 The Commission based on the actual NCV of the coal fired and Rs. /MT has computed Kcal/Rs for each power station. MPPGCL for each rupee spent purchased 4820.61 Kcals of heat content for ATPS. Similar figures for STPS and SGTPS were 3235.1 Kcals and 3710.88 Kcals respectively. From this analysis it is evident that MPPGCL is getting better heat quality of coal at same price at ATPS when compared with the quality received at other stations. 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.*

5.46 *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.*

5.47 The total quantity of coal and its costs that is expected to be consumed in FY06 considering all generation from Sarni Phase I available to MPSEB at approved operating parameters, transit & stacking losses, NCV of coal fired and coal cost per MT are as given in the table below:

Table-19: Landed Cost of Coal (Rs. Cr.)

	Particulars	Qty (LMT)	Rate (Rs/MT)	Amount (Rs. Cr.)
1	ATPS Chachai	9.98	1119.67	111.78
2	STPS Sarni	65.22	1232.77	804.00
3	SGTPS Birsinghpur	40.22	1107.28	445.31

5.48 MPPGCL may file a petition according to a VCA (Variable Cost Adjustment) formula if there is any deviation from the price considered by the Commission in its coal cost computation and the actual price of the coal received.

(h) Oil Cost

5.49 MPGCL for computation of total oil cost for FY06 has considered the weighted average price of secondary oil (Rs. /KL) paid in FY05. The Commission for the purpose of computation of oil cost for FY06 has also considered the same price and entire generation from Sarni Phase I available for MPSEB. *The Generating Company shall in future filings shall provide complete details of the basis on which oil prices for ensuing year have been assumed. The Generating Company shall provide details for past 12 months for which data is available with it.* MPPGCL vide its letter dated 2nd January 2006 revised the landed cost of oil filed in its petition. The submitted values are claimed to be based on the actual figures available upto October 2005. The Commission has not gone into the veracity of the calculations submitted as it would inordinately delay the present order. MPPGCL may file a petition according to a VCA (Variable Cost Adjustment) formula if there is any deviation from the price considered by the Commission in its oil cost computation and the actual price of the oil received.

Table-20: Oil Cost (Rs. Cr.)

	Particulars	Qty (kL)	Rate (Rs/kL)	Amount (Rs. Cr.)
1	ATPS Chachai	9140	14412	13.17
2	STPS Sarni	20566	15953	32.81
3	SGTPS Birsinghpur	11001	16138	17.75

(i) Other Costs

5.50 The proposed other fuel related cost and entry tax is in line with the trend observed in the past. The projected costs have been reworked considering all generation from Sarni. These costs have been allocated to three thermal stations in proportion to these costs in past years. The allowable cost for FY06 is as given in the table below:

Table-21: Other Costs **(Rs. Cr.)**

Stations	ATPS Chachai	STPS Sarni	SGTPS Birsinghpur	Total
Fuel related cost	0.48	5.94	5.52	11.94
Entry Tax	2.64	19.01	10.53	32.18
Total	**3.12**	**24.95**	**16.05**	**44.12**

(j) Incentives

5.51 The generating company shall be entitled to receive an incentive payment of 25 paise per unit of energy delivered at ex-bus bar in excess of the delivery based on target PLF. This arrangement is for current year only and the basis of incentive may be decided again for the multi year period. The incentive shall be payable monthly to be adjusted over the financial year.

(k) Energy Cost

5.52 The Energy (Variable) cost to be paid on the basis of the approved operating parameters, coal costs, oil costs and other costs shall be as per the table below: While computing the energy cost full generation from Sarni PH I has been considered.

Table-22: Station wise Energy (variable) cost

Power Stations		Net Gen	Variable	
		MU	Rs. Lakh	p/u
1	ATPS	1133	12808	113
2	STPS	7032	86175	123
3	SGTPS	4962	47911	97
	Thermal	**13127**	**146893**	**112**

(l) Hydro Generation

5.53 MPPGCL has submitted the historical performance of generation at its hydro power generating stations as under: -

Table-23: Gross Generation in past years (MU)

Particulars	FY02	FY03	FY04	FY05
Gandhi Sagar	114	39	143	343
R.P.Sagar	259	10	240	377
J.Sagar	199	17	193	280
Pench	137	339	464	228
Rajghat	105	68	142	88
Bargi	522	453	586	488
Bansagar-I (Tons)	1254	870	1122	889
Bansagar-II (Silpara)		50	86	68
Bansagar-III (Devlond)	41	47	108	77
Birsinghpur	36	25	63	39
Total	**2667**	**1917**	**3146**	**2876**
MPPGCL Share	**2283**	**1769**	**2663**	**2287**
Total from plants located in MP	**2209**	**1891**	**2713**	**2218**

5.54 Hydro power stations Rana Pratap Sagar and Jawahar Sagar are under operational control of power generating utility of Rajasthan and thus MPERC has no jurisdiction even though Madhya Pradesh has 50% share in the installed capacity. On the other hand, 50% share in installed capacity of Gandhi Sagar belongs to Rajasthan, 1/3rd share in the generation capacity of Pench belongs to Maharashtra and 50% share in the installed capacity in Rajghat belongs to UP. These plants are under operational control of MPPGCL and are located in MP. This Commission alone has jurisdiction to determine tariff for generation units located in MP irrespective of the fact that some part of the power generated is to be shared with others. Rana Pratap Sagar and Jawahar Sagar have been excluded from our consideration for the purpose of determination of tariff as these are outside the jurisdiction of MPERC.

5.55 MPPGCL in the tariff petition has projected generation for FY06 from its hydel stations based on historical trends. The anticipated hydel generation for FY06 has been accorded approval by CEA also. MPPGCL in supplementary submission has revised its projection for FY06 considering actual rains and available water level. The Commission as indicated earlier is not considering the revised submission and approves the target set for FY06 as approved by CEA. The Commission would like to highlight the fact that the anticipated generation on account of lower availability of water is lower than the design energy of these plants.

Table-24: Anticipated gross generation in FY06 (MU)

Particulars		Anticipated Gross Generation in FY06		
		Petition	**Design Energy**	**Difference**
1	Gandhi Sagar	280	420.48	-140.48
2	Pench	350	315.36	34.64
3	Rajghat	100	87.60	12.40
4	Bargi	500	508.08	-8.08
5	Bansagar-I (Tons)	900	900.00	0
6	Bansagar-II (Silpara)	85	113.00	-28.00
7	Bansagar-III (Devlond)	100	143.00	-43.00
8	Birsinghpur	50	52.00	-2.00
	Total	**2365**	**2539.52**	**-174.52**

5.56 The auxiliary consumption of the hydro generating station has a fixed component, because even if the water is not available for generation, some of the auxiliaries are required to be operated. As the projected auxiliary consumption of 0.18% is lower than the norm of 0.5% approved by CERC, therefore the same is being approved for FY06. Net generation expected from Hydro generating stations during FY06 considering full generation available from Gandhi Sagar, Pench and Rajghat available to MPSEB for sale is as detailed in the table below: -

Table-25: Approved gross and net generation in FY06 (MU)

Particulars		Generation for FY 06 (MU)		
		Gross	**Aux**	**Net**
1	Gandhi Sagar	280	0.26%	279
2	Pench	350	0.19%	349
3	Rajghat	100	0.44%	100
4	Bargi	500	0.13%	499
5	Bansagar-I (Tons)	900	0.11%	899
6	Bansagar-II (Silpara)	85	0.32%	85
7	Bansagar-III (Devlond)	100	0.12%	100
8	Birsinghpur	50	0.86%	50
	Total	**2365**	**0.18%**	**2361**

CHAPTER 6

Computation of Annual Fixed Charges

(a) Repairs and Maintenance Expenses

6.1 MPPGCL for FY05 and FY06 has projected R&M expenses using actual expenses incurred in FY04. MPPGCL has estimated the net R&M expenditure in FY05 to increase by 51 % over FY04 level and further by 34.5% for FY 06 over FY05 level. MPGCL has provided no justification for this proposed substantial increase apart from mentioning that due to cash crunch in past it has been inadequately spending on repairs and maintenance but now it wishes to take up those R&M activities on priority basis which shall reduce the down time and improve the operating performance of its generating units.

6.2 The Commission acknowledges the need for adequate spending on R&M activities for efficient performance of Generation, Transmission and Distribution function of the erstwhile Board. Accordingly, the Commission in the past has been liberal in approving amounts for repair and maintenance expenditure as proposed by the utility. However, MPPGCL/erstwhile MPSEB did not spend the amounts approved by the Commission citing inadequate cash liquidity as a major reason. The Commission is of the opinion that under spending on repair and maintenance adversely affects the consumers. The utility claims increased amount of Repair and maintenance expenditure through tariffs without commensurate improvement in its performance. The practice followed by generating entity of initially inflating its requirement for R&M and subsequently incurring much less expenditure doubly hurts the consumer as he pays for improvements, which do not actually happen. The Commission views this seriously and will not allow this to continue.

6.3 MPPGCL was asked to revise the expenditure estimated for FY05 on the basis of latest Trial Balance figures of FY05. As per the submission made by MPPGCL the net expenditure under this head is likely to be Rs. 116.59 Crores. The Commission in its tariff order dated 10th December 2004 had allowed Rs. 140.31 Crores. The Generating Company has once again failed to utilize the approved amount.

Table-26: Net R&M Expenditure **(Rs. Cr.)**

Details	FY05 (Approved)	FY05 (Estimated)		FY06 (Projected)
		Petition	Revised	
Generation	140.31	148.73	116.59	200.49

6.4 The Commission desires that MPPGCL should spend adequate amount on R&M activities as higher availability of plants would benefit consumers of the state but given the past trend of actual expenditure it would not be prudent to allow Rs 200 Crores as proposed by the petitioner for R&M activities. As already mentioned by the Commission it would be injustice to the consumer that they pay a price but do not get commensurate quality of supply. The Commission for FY06 approves R&M cost at amount actually spent in FY05 corrected for inflation of 6% i.e. Rs. 123.59 Crores. MPPGCL in its submission dated 18th January 2005 have stated that the operational expenses submitted by MPPGCL like fuel cost, employee cost, A&G expenses and Repair & Maintenance expenses considered by it in the tariff petition pertains to its share only. The Company has submitted that if full share in bilateral plants located in Madhya Pradesh is considered then estimate of Rs. 200 Crores originally submitted by it stands revised to Rs. 210.58 Crores for including share in Sarni PH I, Gandhi Sagar, Pench and Rajghat but exluding Jawahara Sagar and Rana Pratap Sagar. The Commission allows a proportionate increase for share in bilateral stations located in Madhya Pradesh. Hence, Rs. 131.91 Crore is being allowed for FY06. The Commission may permit higher expenditure on repair and maintenance if the same is actually spent, while truing up the expenditure at a later stage. The Commission believes that this would incentivise the Company to spend more under this head, which is desirable as it would result in higher availability resulting in higher generation.

6.5 The table below elaborates the station wise requirement of repair and maintenance expenditure as requested by MPPGCL and as approved by the Commission. The approved amount has been allocated to various stations on the basis of estimation done by MPPGCL and considering full generation from Sarni Phase I, Gandhi Sagar, Pench and Rajghat.

Table-27: Net R&M Expenses **Rs. Lakh**

Sl. No.	Particulars	Projected	Approved
1	ATPS	3366	2108
2	STPS	8077	5669
3	SGTPS	8108	5079
	Total Thermal	**19550**	**12856**
4	Gandhi Sagar	67	84
5	Pench	92	87
6	Rajghat	17	22
7	Bargi	26	16
8	Bansagar-I (Tons)	164	102
9	Bansagar-II (Silpara)	15	10
10	Bansagar-III (Devlond)	18	11
11	Birsinghpur	5	3
12	RPS Sagar	23	
13	Jawahar Sagar	23	

	Total Hydel	**450**	**335**
	Total Thermal & Hydel	**20000**	**13191**

6.6 The Generating Company for 10 months of existence shall be entitled to receive Rs. 109.9 Crores only. The Generating Company shall recover net R&M expenses for each power station in proportion of its share in the approved charges shown in the table above.

(b) Administration and General Expenses

6.7 MPPGCL in the tariff petition has proposed a net expenditure of Rs. 15.28 Crores towards Administrative and General Expenses for FY06. The expenses incurred in FY04 and that estimated for FY05 and FY06 are given in the table below:

Table-28: Proposed Net A&G Expenses **Rs. Crores**

Sl. No.	Particulars	FY 04	FY 05	FY 06
1	Rent, Rates And Taxes	0.29	0.31	0.32
2	Insurance	3.03	3.18	3.18
3	Telephone, Postage, Telegram & Telex Charges	0.26	0.37	0.40
4	Consultancy Charges, Technical Fees etc	0.52	0.55	2.71
5	Conveyance And Travel	0.48	0.60	0.74
6	Other Administration Expenses	2.82	3.01	5.32
7	License Fee to MPERC	0.00	0.39	1.16
8	Fee and Other Subscriptions, Books etc	1.46	1.53	1.62
9	Printing And Stationery	0.42	0.46	0.99
10	Advertisement Expenses, Exhibitions etc.	0.04	0.14	0.25
11	Electricity Charges To Offices	1.46	1.53	1.62
12	Water Charges	0.01	0.01	0.01
13	Legal Charges	0.48	0.60	0.74
14	Material Related Expenses	0.94	1.51	2.19
	Gross A&G Expenses	**12.20**	**14.20**	**21.25**
Less	Capitalised	-3.43	-3.99	-5.97
	Net A&G Expenses	**8.77**	**10.21**	**15.28**

6.8 MPPGCL has proposed an increase of about 50% over anticipated expenditure in FY05. The expenditure in FY05 is expected to be 16.4% more than FY04 level on an annualized basis. The Commission for FY05 had allowed Rs. 9.48 Crores for expenditure under this head. MPGCL on of the basis of Trial Balance has estimated that expenses likely to be incurred under this head in FY05 are Rs. 11.77 Crore, higher than the figure it had estimated at the time of filing the petition. MPPGCL in its petition had stated after the formation of company it is now required to comply with the requirement of the Companies Act, which requires it to undertake number of audits and incur other statutory expenditure. In addition, MPPGCL has also provided for Rs 2.00 Cr for consultancy to be undertaken by a third-party for renovation and modernization of its plants. The company will also be required to pay a fee of about Rs 2.00 Cr for enhancement of its authorized capital from Rs. 1 Crore to Rs. 2500 Crores. The projection also takes care of increase in the fee payable to MPERC and higher expenses towards stationery and advertisement charges etc.

6.9 The Commission is of the view that the consultancy charges payable for advice on renovation and modernization of the plants should be a part of capital expenses if the advice offered by the consultant is accepted. The Commission will consider this expense when it is incurred considering the fact whether advice offered was acceptable to MPPGCL or not. Presently this expense is not being considered as a part of revenue expense. The expense incurred towards registration of enhanced authorized capital is a one time expense and is being allowed. The fee payable to MPERC is a pass through item and is being permitted as projected. The Commission, however, is not in agreement with MPPGCL that substantial increase in expenses will occur due to the formation of the Company. The Commission considers these expenses as controllable and expects the Company to exercise prudence while incurring these expenses. The Commission allows MPPGCL a 6% rise over the expenditure (excluding allocated portion of fee) approved by it for FY05 and in addition other expenditures referred above are also being allowed.

6.10 The Commission arrived at the figure of Rs. 13.05 Crore (9.89 +2+1.16) as net A&G expenses for FY06 but the approved cost has been reworked to Rs. 13.62 crores considering entire generation from Sarni PH I, Gandhi Sagar, Pench and Rajghat as given in the table below:

Table-29: Net A&G Expenses **Rs. Lakhs**

Sl. No.	Particulars	Projected	Approved
1	ATPS	154	133
2	STPS	438	426
3	SGTPS	717	622
	Total Thermal	**1309**	**1181**
4	Gandhi Sagar	2	3
5	Pench	4	6

6	Rajghat	9	15
7	Bargi	20	18
8	Bansagar-I (Tons)	127	110
9	Bansagar-II (Silpara)	12	10
10	Bansagar-III (Devlond)	14	12
11	Birsinghpur	7	6
12	RPS Sagar	8	
13	Jawahar Sagar	15	
	Total Hydel	**219**	**181**
	Total Thermal & Hydel	**1528**	**1362**

6.11 The Generating Company for 10 months of its operations shall be entitled to recover Rs. 10.88 Crores. The net A&G expenses shall be recovered for each power station in proportion of their share in the approved amount of Rs. 13.62 Crores as shown in the table above.

(c) Employee Expenses

6.12 MPPGCL in its petition for FY06 has submitted that the actual net expenditure during FY04 was Rs. 125.94 Crores, which includes provisions of Rs. 21.25 Crores for wage revision arrears and Rs. 13.2 Crores for pension respectively. This expenditure in FY05 is anticipated to be Rs. 129.81 Crores, which includes provisions for salary revisions and pension of Rs. 13.62 Crores and Rs. 19.81 Crores respectively. The net employee expense therefore is expected to increase by 3.1% only. The Generating Company on the basis of Trial Balance of FY05 has revised the earlier figure of employee cost to Rs. 129.41 Crores. The amount approved by the Commission for FY05 was Rs. 108.02 Crores. The Company for FY06 has projected the net cost at Rs. 141.76 Crore i.e. an increase of 9.21 % over the anticipated cost in FY05. The Company while projecting the cost has requested the Commission to consider a wage revision of 15%, DA at 71% of basic salary, induction of 180 officers, increased provision for pension and terminal liabilities, additional provision for subsidized electricity for its employees and increased capitalization rate.

6.13 MPPGCL in its subsequent submission has requested the Commission to provide additional employee expenses for nearly 500 additional employees, which have been allocated to it subsequent to the filing of the petition. At the time of tariff petition filing MPPGCL had anticipated 6505 employees to be working with it during FY06 but now subsequent to reallocation of employees it expects this number to be 7000. The Company has also submitted that Officer / Employee ratio is higher when compared to other companies formed out of re-organization of MPSEB, thus its per employee expenditure is expected to be higher. The Company has requested for an additional provision of Rs. 11.61 Crore in employee expenditure already filed by it to account for these differences. The revised net employee expenditure projected for FY06 is Rs. 153.37 Crore.

6.14 The Commission in order to verify this claim asked the Generating Company to provide individual salary details of all the employees. MPPGCL submitted employee wise salary details of employees for the month of October 2005. The table below gives station wise breakup of employees at its salary roll:

Table-30: Employee Details

Particulars		Installed Capacity (MW)	Total No. of Employees	Employees/ MW
1	ATPS Chachai	290	1074	3.70
2	STPS Sarni	1143	2949	2.58
3	SGTPS Birsinghpur	840	1282	1.53
	Total Thermal	**2273**	**5305**	**2.33**
4	Gandhi Sagar	115	127	1.10
5	Pench	160	90	0.56
6	Rajghat	45	78	1.73
7	Bargi	90	51	0.57
8	Bansagar	405	586	1.45
9	Birsinghpur	20	0*	0.00
	Total Hydel	**835**	**932**	**1.11**
10	Head Quarter		694	
	Total MPPGCL	**3108**	**6931**	**2.23**

* Included in SGTPS. Ratio would be 1.49 if hydel capacity is added.

6.15 For MPPGCL number of employees per MW is about 2.2, which is much higher than the reported figure of less than 1 per MW for NTPC. This is indicative of excessive manpower with MPPGCL and the potential that exists for reducing employee cost. As evident from the above table there is a lopsided distribution of employees across the power stations. A large number of employees have been stationed at Head office at Jabalpur. The Company should operate on the basis of norms for manpower required for given generation capacity. The Commission would like to see that the generating company ensures in future that benchmarking is done per MW employee ratio in comparison with other efficient generating companies. Manpower planning study should be undertaken and the possibility of retiring surplus staff or redeployment after retraining should be seriously considered so as to correct skewed employee ratio. The Company may look to introduce automation in the plants, which are having excessive manpower. The Company should not expect the Commission to consider the employee cost as given and hence to be passed on to the consumers as uncontrollable cost item. The Commission has been commenting upon the excessive and skewed deployment of manpower in the past tariff orders and has been egging on the Company to work out a strategy to rectify the problem. It seems the advice has not been heeded. The Company shall have to bear the adverse implications of this attitude maintained by MPSEB so far.

6.16 The break-up of its employee expenses for FY04, estimation for FY05 and projection for FY06, as submitted by MPPGCL is given in the table below:

Table-31: Employee Cost details (Rs. Crores)

Sl. No.	Particulars	FY 04	FY 05	FY 06
1	Salaries	44.24	44.90	45.88
2	D.A.	29.28	33.42	37.50
3	Other Allowances and Relief	2.12	2.16	2.20
4	Addl. Pay and C. Off Encashment	11.37	10.35	10.58
5	Provision for Wage Revision	21.25	13.62	14.42
6	Other Staff Cost	9.69	12.32	16.64
7	Terminal Benefits	13.20	19.81	24.76
8	Bonus / Ex-gratia payments	0.06	0.06	0.06
	Gross Employee Cost	**131.22**	**136.64**	**152.04**
Less	Capitalization	-5.29	-6.83	-10.28
	Net Employee Cost	**125.94**	**129.81**	**141.76**

6.17 As already mentioned above, MPPGCL while projecting expenses for FY06 has considered DA @ 71% and has included a provision for wage revision @ 15%. These provisions have been made in anticipation of revision in wages and DA at rates declared by Government of India. The Commission would not like to prejudice the outcome of the negotiations between employee and management in this regard. The Commission has no hesitation in stating that the Company must take its own decision regarding actual amount of interim relief and DA to its employees.

6.18 The Commission for FY06 determines the allowable net employee cost for FY06 by allowing an inflationary increase of 6% over net actual payout of Rs. 97.28 Crores in FY05 as per the trial balance figure. However no provision for terminal benefits and WR/DA arrears is being included. Presently MPPTCL is paying the terminal benefits on behalf of all Companies formed out of the restructuring exercise. The provision for the terminal benefits shall be considered in the tariff order of MPPTCL. If MPPGCL bears the terminal benefit liability towards it retiring employees in FY06 the Commission shall consider the actual expense incurred while truing up in subsequent orders. The provision for WR/DA arrears etc is not being considered, as increase in cost that is being allowed shall take care of this eventuality. Increase in employee cost due to increase in number of employees is not being considered as proposed by the Generating Company. The Commission desires that the Generating Company should reduce its employee expenses as its adverse per MW employee ratio provides ample scope for cost cutting measures. The Company should strive to reach a respectable figure comparable to Generating Companies like NTPC. The Commission for FY06 estimates net employee expenses to be Rs 103.22 Crores as shown here under :-

Table-32: Estimated Employee Cost for FY06 (Rs. Crores)

Sl. No.	Particulars	Petition	Estimated
1	Salaries	45.88	
2	D.A.	37.50	
3	Other Allowances and Relief	2.20	
4	Addl. Pay and C. Off Enchashment	10.58	
5	Other Staff cost	16.64	
6	Bonus/Exgratia payments	0.06	
7	Provision for wage revision	14.42	
8	Terminal Benefits	24.76	
	Gross Employee Cost	152.04	
Less	Capitalisation	-10.28	
	Net Employee Cost	**141.76**	**103.22**

6.19 The station wise breakup of this expense is as per the submission of the Generating Company. The Commission is agreeable to include the entire cost incurred on operations and maintenance of shared stations and will take the entire generation at these stations for the purpose of arriving at the cost of generation. It is up to the generating company to share the cost and the product with other stakeholders in line with the agreements in vogue. This is being done so that the tariff determination function is discharged by the Commission of the State where the generating station is located. Entire generation from Sarni PH I, Gandhi Sagar, Pench and Rajghat has been considered while computing the cost of generation and is as given in the table below:

Table-33: Station wise approved Net Employee Cost for FY06 (Rs. Crores)

Sl. No.	Particulars	Projected	Approved
1	**ATPS**	**29.40**	**22.03**
2	**STPS**	**55.17**	**46.32**
3	**SGTPS**	**32.90**	**24.66**
	Total Thermal	**117.48**	**93.01**
4	Gandhi Sagar	1.45	2.17
5	Pench	1.69	1.90
6	Rajghat	0.94	1.41
7	Bargi	1.80	1.35
8	Bansagar-I (Tons)	11.53	8.64
9	Bansagar-II (Silpara)	1.09	0.82
10	Bansagar-III (Devlond)	1.28	0.96
11	Birsinghpur	0.50	0.37
12	RPS Sagar	2.22	
13	Jawahar Sagar	1.78	
	Total Hydel	**24.28**	**17.62**
	Total Thermal & Hydel	**141.76**	**110.63**

6.20 It is causing concern to the Commission that employee cost per unit of net generation in ATPS is 19.4 paise per unit which is almost three times of the cost in STPS and four times of the cost in SGTPS. The Company is required to take appropriate steps to bring down this cost to reasonable limits.

(d) Depreciation

6.21 MPPGCL in its tariff petition has submitted that the value of gross block of fixed assets stood at Rs. 4452.61 Crores at the beginning of FY 05, which is nearly the same (Rs. 4453 Crores) as that had been notified by GoMP in the transfer scheme. The station wise breakup of the value of the fixed assets of the generating company for which depreciation has been claimed is summarized in the table below. MPPGCL has not reported any asset addition during FY05 & FY06 but has requested for a subsequent adjustment at the time of truing up. The Company has not submitted any capital expenditure proposal before the Commission for approval. The Commission is not considering any asset addition for determination of depreciation for FY06 which will be based on the opening allocation of Rs. 4453 crores. The Commission shall permit the capital expenditure for inclusion in capital base only after prudence check and shall consider only for units located within Madhya Pradesh.

Table-34: Station wise Opening Gross & Net Block for FY 06 (Rs. Cr.)

Sl. No.	Particulars	Gross Value	Accum. Dep.	Net Value	Net value as a % of GV
1	ATPS Chachai	143.97	105.22	38.75	26.9%
2	STPS Sarni	606.85	453.21	153.63	25.3%
3	SGTPS Birsinghpur	2115.06	818.12	1296.93	61.3%
	Thermal	**2865.87**	**1376.56**	**1489.32**	**52.0%**
4	Gandhi Sagar	10.29	7.76	2.54	24.7%
5	R.P. Sagar*	18.86	16.40	2.46	13.0%
6	J. Sagar*	16.56	8.94	7.60	45.9%
7	Pench	87.50	56.10	31.4	35.9%
8	Rajghat	82.75	16.05	66.70	80.6%
9	Bargi	77.27	39.93	37.34	48.3%
10	Bansagar	1241.38	227.60	1013.78	81.7%
11	Birsinghpur	52.12	19.98	32.14	61.7%
	Total Hydel	**1586.73**	**392.77**	**1193.97**	**75.3%**
	Total MPPGCL	**4452.61**	**1769.32**	**2683.28**	**60.3%**

* These plants are located outside MP and are not being considered.

6.22 Earlier depreciation rates as notified by the Ministry of Power were applicable but now MPERC has specified depreciation rates in line with those specified by CERC. These rates are lower than the rates notified earlier by MOP. Considering rates applicable for the respective year and the capital costs of respective plants MPPGCL has computed the depreciation chargeable for FY04, FY05 and FY06 as given in the table below: -

Table-35 : Depreciation projected for FY06 (Rs. Cr.)

Sl. No.	Particulars		FY 04	FY 05	FY 06
1	**Gross Block**	Opening GB	4290.87	4452.61	4452.61
2		Addition during Year	161.73	0.00	0.00
3		Closing GB	4452.61	4452.61	4452.61
4	**Provision for Depreciation**	Opening Provision	1349.38	1558.13	1769.32
5		Addition during Year	208.75	211.19	113.04
6		Closing Provision	1558.13	1769.32	1882.36
7	**Depreciation Charges as % of Opn GB**		**4.87%**	**4.74%**	**2.54%**

6.23 As per the opening balance sheet notified by the GoMP, the gross fixed assets have been shown as Rs. 4453 crores and accumulated depreciation as Rs. 1576 crores. MPPGCL, in their petition had indicated the accumulated depreciation as Rs. 1558.13 Crores in FY04 and Rs. 1,769.32 crores in FY 05. In the absence of audited balance sheet, the Commission is not in a position to accept the submission of the MPPGCL on the figures of accumulated depreciation. However, as the depreciation for the current year namely FY06 will be calculated on the opening gross block only, the Commission had decided to ignore the figures of accumulated depreciation submitted by the MPPGCL and proceed with determination of claim for depreciation for FY 06 on the basis of rates specified by CERC and also notified by the Commission in the MPERC (Terms and Conditions of Generation Tariff) Regulations, 2005.

6.24 The Commission in order to verify the depreciation claim had been directing the Board/MPPGCL to prepare and maintain fixed asset registers and follow appropriate accounting policies in this regard. The Commission in its order dated 30th November 2002 had directed the Board to maintain fixed assets register properly and the same was required to be completed within six months of this order and a quarterly progress report in this regard was required to be filed. The Board submitted difficulties being faced in maintaining item wise fixed asset register instead of account head wise. The Board submitted a preliminary report of their consultant (DFID) according to which at least two years shall be required to maintain records in asset register as per the requirement of the Commission. The Commission wants to make it clear that it expects the generating company to make use of the information maintained by MPSEB as per the provisions of Electricity (Supply) Accounting Rules 1985 and to present to the Commission in soft format to allow a sample verification of assets. If these directions are not followed it shall not be possible to admit the claim fully in future.

6.25 The Commission in its order dated 10th December 2004 had repeated the same direction. The Commission had again directed the Board to maintain fixed asset accounts properly and to provide the completed statements within six months of the order by fixing responsibility on the concerned officers. These records should distinctly show age and physical location of the assets and the depreciation charged on the assets should not be more than 90% of the cost of acquisition. The Commission had engaged an independent CA firm for verification of the claims pertaining to depreciation. In its report, the CA firm had commented that the books and accounts are not properly arranged by the Board and the consultant was not provided proper supporting document.

6.26 The Generating Company vide its letter dated 18th January 2006 had contended that maintaining asset register was not mandatory as per the accounting rules prevailing prior to formation of MPPGCL and preparing asset register at this stage as prescribed by the Commission requires special skill which is not available with MPPGCL at present. The Company is seeking support of consultancy in this regard. It is has been further submitted that this gigantic task will require considerable time once the consultancy support commences. The Generating Company has requested to provide depreciation on the basis of asset block notified by GoMP.

6.27 The Commission as evident from above has been following up since FY03 with the Board/Companies for the preparation of fixed asset registers. The Board/ Companies had been promising to do the needful. Some of the Distribution Companies and the Transmission Company have made progress in this regard. The Generating Company has however lagged behind others. For the Generating Company it is much easier to comply with this direction as the assets are located together and physical verification is much easier. Clearly, the MPSEB has chosen to disregard the directions of the Commission. The preparation of fixed asset registers is essentially required to verify the physical status of asset whether in use or not, the historical cost, the depreciation charged etc. In its absence the depreciation claim cannot be ascertained. Further, the Board in response to the directive of the Commission in the past never protested that it was not mandatory for it to maintain asset register, which its successor Company is now claiming. The Board had always acknowledged the importance of asset registers and had promised to prepare them.

6.28 MPPGCL in their petition had broken up the Gross Block into various categories of assets. They had also indicated the amount depreciation claim and the effective rates of depreciation on these categories as under:

Table 36: Depreciation as claimed by the Licensee for FY 06 (Rs. Crores)

Particulars	Opening Gross Block	Depreciation for FY 06	Depreciation as %age of Gross Block
Land and Land rights	55.76	0.22	0.39
Buildings and Civil Works	429.57	11.09	2.56
Hydraulic Works	1017.24	20.11	1.98
Other Civil Works	116.44	2.09	1.80
Plant & Machinery	2689.51	76.63	2.84
Lines & Cable Net works	139.23	3.06	2.20
Vehicles	2.83	0	0
Furniture & Fittings	0.60	0.01	1.30
Office Equipment	1.42	0.03	2.04
Total	**4452.61**	**113.04**	**2.54**

6.29 The Commission had gone into the computation of depreciation amount claimed by the company. However, if the company has for any reason not counted the depreciation entitlement for that portion of shared projects which were funded by partner states, MPPGCL may provide the details and the Commission will allow the eligible depreciation. The Commission finds it reasonable except that depreciation on two projects viz. Rana Pratap Sagar and Jawahar Sagar Hydroelectric projects that are operated by Rajasthan had also been included in the depreciation claim. As the Commission does not have jurisdiction over these two projects, the claim is not being admitted and the Station wise break up of depreciation for stations located in MP as approved by the Commission is given in the table below:-

Table-37: Station wise approved Depreciation for FY06 (Rs. Lakhs)

Sl. No.	Particulars	Opn. Gross Block	Depreciation	Dep %
1	**ATPS**	**14397**	**91**	**0.6%**
2	**STPS**	**60685**	**590**	**1.0%**
3	**SGTPS**	**211506**	**7339**	**3.5%**
	Total Thermal	**286587**	**8019**	**2.8%**
4	GandhiSagar	1029	8	0.8%
5	Pench	8750	116	1.3%
6	Rajghat	8275	219	2.7%
7	Bargi	7727	194	2.5%
8	Bansagar-I (Tons)	94225	1963	2.1%
9	Bansagar-II (Silpara)	11965	249	2.1%
10	Bansagar-III (Devlond)	17948	374	2.1%

11	Birsinghpur	5212	133	2.6%
	Total Hydel	**155131**	**3257**	**2.1%**
	Total Th+Hydel	**441719**	**11276**	**2.6%**

6.30 The Generating Company for 10 months of its operations shall be entitled to recover Rs. 93.97 Crores. This depreciation cost shall be recovered for each power station in proportion of their share in the approved amount of Rs. 112.76 Crores as shown in the table above.

(e) Interest and Finance Charges

6.31 MPPGCL in its filing has claimed that consequent to reorganization of MPSEB and the notification of GoMP dated 31st May 2005 it has been allocated a loan liability of Rs 2204.00 Crores as details below.

Table-38: Loan Liability allocated to MPPGCL (Rs. Cr.)

	Particulars		**Amount**
1	**PFC**	**Project Specific**	1120.00
2	**REC**	**Project Specific**	334.00
3	**LIC**	**Project Specific**	488.00
4	**Centrally Sponsored Schemes**		3.00
5	**MPSEB**		259.00
6	**Total**		**2204.00**

6.32 While a total loan liability of Rs. 7403.95 Crores had been reported in the petition filed by the integrated board at the end of FY 2003-04, the amount has been reduced to Rs.5428 Crores as on 1st June 2005 as seen in the provisional balance sheet notified by the State Govt. The Commission has taken note of this difference and understands that this has been possible as a result of restructuring of the loan portfolio.

6.33 The Generating Company for FY06 has claimed Rs. 406.83 crores as interest which includes Rs. 85.28 crores towards interest on working capital borrowings. They have deducted from this amount, a sum of Rs. 107.34 crores as interest capitalised leaving a balance of Rs. 299.50 crores as interest and finance charges in their petition. The Company had also claimed a further amount of Rs. 85.28 crores as interest on Working Capital borrowings taking the total claim on interest to Rs. 299.50 crores. The Company has allocated the interest liability to various stations on the basis of opening gross block of the stations as well as the working capital needs of the respective stations. The Source wise interest liability as claimed by the Generating Company is given in the table below:

Table-39: Interest Liability for FY06 (Rs. Cr.)

Particulars		Amount
1	PFC	147.90
2	REC	28.13
3	LIC	112.96
4	CSS	0.19
5	MPSEB	32.38
	Total	**321.56**
Less	**Interest Capitalised**	**107.34**
	Total	**214.22**
	Interest on Working Capital borrwings	**85.28**
	Total interest claimed in the petition	**299.50**

6.34 The Generating Company has recomputed the interest liability based on the expected loans drawal from the funding agencies. The change in the computation has been mainly on account of change in the drawal schedule of loans from PFC. In the recomputed interest cost, only the liability on account of PFC loan has been identified project wise while interest on other loans have been allocated to the projects in the ratio of their opening gross block without similar details. The recomputed interest liability is shown source wise in the table below:

Table-40: Details of interest liability for FY06

Sources		Petition	Revised
Total Interest Charges	**PFC**	147.90	99.16
	REC	28.13	28.14
	LIC	112.96	112.96
	CSS	0.19	0.45
	Generic	32.38	32.38
	Total	**321.56**	**273.08**

Less Interest Capitalised		107.34	62.59
Net Revenue Interest		**214.22**	**210.49**

6.35 All the loans, except the loan from MPSEB, have been indicated to be project specific loans in the notified Balance Sheet. The Company has claimed that it has with it the applicable terms and conditions of all the loans allocated to it except MPSEB loan. However, the company has not given as much details for other loans as it has done for PFC loans. The interest cost computation for all such loans has been done on the basis of details said to be in possession of the company. The details of the loan from MPSEB allocated to MPPGCL consequent upon reorganisation are not available with them and it has been stated that the specific terms and conditions associated with the loan shall be determined only after its final allocation. The average interest rate of these loans (allocated between five successor companies) is about 12% where as the rate for some of the loans is as high as 17%. For computing the interest cost, the company has taken a rate of 12.5% and has requested for the adjustment of final figure at the time of truing up in subsequent petition. The Commission wishes to caution the company that many vital details being kept pending for the truing up stage is not a healthy practice because once the claim is admitted initially in the ARR, the licensee/regulated entity forgets about it.

6.36 The Commission has gone into the computation of allowable interest cost for FY06. The Commission for this purpose has not taken into consideration loans drawn for ongoing projects such as SGTPS Birsinghpur V, ATPS Chachai V, Marhikhera, and for in progress Renovation and Modernisation works in ATPS Chachai and STPS Sarni as benefit from such works is yet to materialise. Further, the Commission will allow interest liability on projects under implementation on their Commissioning and will allow interest during construction (IDC) as a part of the capital cost at the appropriate stage.

6.37 The Commission asked the Generating Company to provide the details of the assets created out of these loans. The Generating Company provided details of the schemes being funded from Loans from PFC. The Company could not provide the required details for other loans. The Company vide its letter dated 13th January 2006 has attempted the allocation of these loans except for PFC loan to various stations on the basis of repayment ability for the tariff applicable for FY07. The repayment ability has been judged on the basis of balance depreciation available. PFC loans have been allocated to stations for which they have been drawn. However, the Company has not been able to identify the assets created out of other loans.

6.38 As per the details provided by the Generating Company the PFC loans of Rs. 1120.5 Crores have been drawn for the following purpose.

Table-41: Details of the PFC Loan (Rs. Lakhs)

Fx	Sub-Fx	Loan No	Scheme Name	Net Balance	Wtd. Avg. Interest rate %
1G	HG	20102004	Common Water Carrier & Head Regulator for Bansagar Tons HEP	5,047.65	9.01%
1G	HG	20102005	PH-II(2X15MW) & PH-III(3X20MW) Bansagar Tons HEP	6,708.51	9.00%
1G	HG	20102006	Rajghat Hydro Electric Project (3x15 MW)	615.62	9.00%
1G	HG	20102007	Marhikheda HEP (2x20 MW)	8,638.76	9.95%
1G	HG	20102008	Tons HEP PH-IV (2x10 MW)	4,914.22	9.39%
1G	R&M	20104008	R&M 8th plan of Satpura TPS	42.13	10.26%
1G	R&M	20104010	R&M 8th plan of Amarkantak TPS	54.18	10.26%
1G	R&M	20104012	R&M scheme of Amarkamtak TPS	110.98	9.03%
1G	R&M	20104014	R&M scheme of Satpura TPS	1,417.63	9.00%
1G	R&M	20104018	R&R scheme of Amarkantak TPS PH-II (2x120 MW)	1,240.64	8.93%
1G	R&M	20104020	R&M scheme of Satpura TPS	474.19	8.82%
1G	R&M	20104021		146.92	9.50%
1G	TG	20101008	SGTPS unit 1 & 2	871.19	9.22%
1G	TG	20101009	SGTPS stage I	1,756.79	9.10%
1G	TG	20101010	SGTPS unit 3 & 4	20,227.95	9.10%
1G	TG	20101011	SGTPS Birsinghpur Extn. 500 MW	54,277.48	9.13%
1G	TG	20101012		5,505.00	8.25%
1G Total				**112,049.83**	**9.14%**

6.39 The Generating Company has also indicated that it proposes to draw Rs. 945.09 Crores of loan for ongoing projects of SGTPS (500 MW) and ATPS (210 MW). This figure was revised to Rs. 705.49 Crores. The Generating Company has further submitted that there has not been payment default in the past for PFC loans and the interest liability is for principal not due. The Commission after excluding interest on on going projects allows an interest liability of Rs. 32.03 Crores on PFC loans contracted for schemes for completed projects. The project wise details of the allowed interest is as given in the table below:

Table-42 : Details of the PFC Loan (Rs. Lakhs)

Fx	Sub-Fx	Loan No	Scheme Name	Net Balance	Wtd. Avg. Int. Rate %	FY06
1G	HG	20102004	Common Water Carrier & Head Regulator for Bansagar Tons HEP	5,047.65	9.01%	422.87
1G	HG	20102005	PH-II (2X15MW) & PH-III (3X20MW) Bansagar Tons HEP	6,708.51	9.00%	572.72
1G	HG	20102006	Rajghat Hydro Electric Project (3x15 MW)	615.62	9.00%	51.68
1G	R&M	20104008	R&M 8th plan of Satpura TPS	42.13	10.26%	3.30
1G	R&M	20104010	R&M 8th plan of Amarkantak TPS	54.18	10.26%	4.25
1G	R&M	20104012	R&M scheme of Amarkamtak TPS	110.98	9.03%	9.03
1G	R&M	20104014	R&M scheme of Satpura TPS	1,417.63	9.00%	114.86
1G	R&M	20104018	R&R scheme of Amarkantak TPS PH-II (2x120 MW)	1,240.64	8.93%	105.34
1G	R&M	20104020	R&M scheme of Satpura TPS	474.19	8.82%	40.24
1G	R&M	20104021		146.92	9.50%	13.96
1G	TG	20101008	SGTPS unit 1 & 2	871.19	9.22%	67.19
1G	TG	20101009	SGTPS stage I	1,756.79	9.10%	140.16
1G	TG	20101010	SGTPS unit 3 & 4	20,227.95	9.10%	1,657.14
1G Total				**38714.38**	**9.14%**	**3202.74**

6.40 The Commission has consistently followed the principle that only prudent cost is allowed to be recovered through tariffs. It is therefore imperative for the Company to establish the purpose for which these loans have been contracted. The Company neither in the petition nor in response to the query of the Commission has been able to establish the purpose of the loans except for PFC loans. Further, the Company does not have the terms and conditions of the loan passed on to it by MPSEB.

6.41 The specific terms and conditions of Generic loan have not been disclosed even though the new company has been a part of the integrated MPSEB. Further the petition states that these loans are generic in nature and the Company and the MPSEB is unable to identify the assets for which this loan has been applied. It is apparent that the MPSEB as well as MPPGCL are not revealing the truth and are reluctant to admit that these loans have been contracted by MPSEB in order to meet their revenue requirement. It has also not been clearly admitted that the assets of MPSEB which continues to exist and operate shall devolve on the unbundled entities after MPSEB's operations cease.

6.42 In the absence of details of the purpose for which these loans have been contracted, the Commission cannot accept that these loans are anything but towards working capital purposes. MPSEB and MPPGCL are required to show proof of these loans having been utilised for creation of assets. The interest on the allowable working capital has been computed at the appropriate place.

Table-43: Station wise break up of interest liability for FY06 (Rs. Lakhs)

Sl. No.	Particulars	Total
1	ATPS	119
2	STPS	172
3	SGTPS	1864
	Total Thermal	**2156**
4	GandhiSagar	
5	Pench	
6	Rajghat	52
7	Bargi	
8	Bansagar-I (Tons)	774
9	Bansagar-II (Silpara)	74
10	Bansagar-III (Devlond)	147
11	Birsinghpur	
	Total Hydel	**1047**
	Total Th+Hydel	**3203**

6.43 The Generating Company for 10 months of its operations shall be entitled to recover Rs. 26.69 Crores. The net interest cost shall be recovered for each power station in proportion of their share in the approved amount of Rs. 32.03 Crores as shown in the table above.

6.44 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.

(f) Interest on working capital

6.45 In the tariff petition, MPPGCL has computed the interest on working capital on the following basis:

1. 45 days coal stock
2. 60 days fuel oil stock
3. One months operation and maintenance expenditure
4. Maintenance spares @1% of historical cost
5. The interest rate of 12.75%

6.46 The proposal of MPPGCL is based upon the norms prescribed by CERC, which has permitted 45 days coal stock for pithead and 60 days coal stock for non-pithead stations for computation of working capital. MPPGCL has pleaded that its power stations are mix of the two cases and therefore it should be allowed coal stock for 45 days. The Commission directed the Company to provide details of the coal stock in number of days it is maintaining in its coal yard. As per the details provided in MIS for FY06 it was observed that on an average the Company maintains a coal stock of around 20 to 30 days in its power stations. The Commission therefore considers the coal stock as requested of MPPGCL as reasonable.

6.47 Other cost elements of the working capital as requested by MPPGCL are as per prevailing norms.

6.48 The interest rate i.e. 12.75% used for computation of interest on working capital is equivalent to the rate charged by SBI for its CC limit, which is primarily for funding working capital requirement.

6.49 Considering the above, amount approved for various elements of working capital and also entire generation from Sarni PH I, Gandhi Sagar, Pench and Rajghat as available to MPSEB for sale, the interest liability allowed for working capital requirement is as given in the table below. MPPGCL had requested for Rs 85.28 Crores towards interest on working capital based on a Working Capital requirement of Rs. 668.89 crores as shown below:-

Table-44: Working Capital requirement and interest claimed (Rs. Cr.)

Sl. No.	Particulars	Working Capital	Interest
1	ATPS	65.07	8.30
2	STPS	296.28	37.78

3	SGTPS	256.43	32.70
	Thermal	**617.79**	**78.77**
4	GandhiSagar	1.42	0.18
5	Pench	3.13	0.40
6	Rajghat	2.46	0.31
7	Bargi	4.88	0.62
8	Bansagar Complex	35.08	4.47
9	Birsinghpur	1.49	0.19
10	Jawahar Sagar	1.19	0.15
11	RP Sagar	1.45	0.19
	Total Hydel	**51.10**	**6.52**
	Total Thermal & Hydel	**668.89**	**85.28**

6.50 The above claim of Rs. 669 crores is over and above the loan liability of the company as shown in the balance sheet notified by the State Government on notional basis. This matter has been analysed in Para 3.6.7 of this order where it has been considered by the Commission that out of the total loan liability of Rs. 2204 crores, Rs. 1076 crores which is not identifiable with any project shall be treated as working capital borrowings. For this reason the Commission is taking a lenient view by allowing the entire liability of Rs. 1076 crores which is much in excess of the normative needs and thus a separate claim of Rs. 669 crores towards working capital borrowings is not being admitted. This notional value of Rs. 1076 crores will be allocated to the various projects in the same ratio as their share in Rs. 668.69 crores and is shown below:-

Table 45: Working capital borrowing and interest allocation (Rs. Crores)

Particulars	Working capital as submitted	Working capital as approved	Interest on working capital
ATPS	65.07	104.68	13.35
STPS	296.28	476.61	60.77
SGTPS	256.43	412.51	52.59
Thermal	**617.79**	993.80	126.71
GandhiSagar	1.42	2.28	0.29
Pench	3.13	5.04	0.64
Rajghat	2.46	3.96	0.50
Bargi	4.88	7.85	1.00
Bansagar Complex	35.08	56.43	7.20
Birsinghpur	1.49	2.40	0.31
Jawahar Sagar	1.19	1.91	0.24
RP Sagar	1.45	2.33	0.30
Total Hydel	**51.10**	**82.20**	**10.48**
Total Thermal & Hydel	**668.89**	**1076.00**	**137.19**

6.51 Interest on Working Capital borrowings of Rs. 1076 crores at 12.75% will amount to Rs. 137.19 crores. Excluding the working capital interest of Jawahar Sagar and R.P. Sagar the interest would be 136.65 crores for the generating stations located within the state. Together with the interest on project specific loans amounting to Rs. 32.03 crores as shown in Para 6.42, the total interest allowed by the Commission amounts to Rs. 168.68 crores as against the claim of Rs. 299.50 crores by the MPPGCL.

6.52 The Commission emphasises that this is a one time dispensation (of allowing working capital borrowings much above the normative requirement) and directs MPPGCL to bring down the working capital borrowings within the allowable limits by FY09 when the first control period ends. The Commission has taken the above liberal view relating to the loan liabilities assigned to MPPGCL with a view to early settlement of numerous requests for repayment of capital and interest on debentures and bonds floated by MPSEB in the past. The Commission has received representations from several organizations including educational institutions and banks saying that they invested, in good faith, the money meant for paying the retirement benefits to their employees. It is the moral obligation of MPSEB and its successor entities to expeditiously settle such claims on account of debentures and bonds which were guaranteed by the State Government. The Commission has been informed that an offer for settlement has already been circulated amongst the investors and a good number have availed of the offer made under the signatures of the senior officials of the State Government. The Commission will keenly watch the progress made in the matter and will expect that everything possible is done to salvage the reputation of MPSEB as well as the State Government.

(g) Other Costs

6.53 The Generating Company has projected various debits and claims for write-off at Rs. 2.86 Crores and another Rs. 84.96 Crores for payment to WCL for coal purchased in the past for STPS as a part of out of court settlement.

6.54 The proposed write-offs include a provision for bad debts at 1% of its receivables. The Commission disallows this amount, as the Company has not formulated any policy for writing off bad debts. The other write-offs proposed by the Company would be considered only at the time of truing up when the audited balance sheet is produced before the Commission.

6.55 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 payments 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 for the period 1st October 2001 to 30th October 2005 after adjusting the recoveries due for poor quality from WCL in 30 equal monthly instalments starting from January 2005. The total amount to be payable to WCL under this settlement is Rs. 212.5 Crores. 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 Honourable High Court. The amount claimed is for the adjustment of the past liability. As against the claim of Rs. 84.96 crores for entire FY 06, the Commission allows a pro rata amount of Rs. 70.8 crores for 10 months.

6.56 The Generating Company as a part of the variable cost has also projected the cost it is likely to incur for water, lubrication, consumables, station supplies and ED /CESS for various power stations. The Commission finds these costs to be appropriate as these are in line with cost incurred under these heads in previous years. However ED/CESS are to be paid to the State Government by the Company on its actual auxiliary consumption. The amount paid on this account shall be a pass through item in tariff and the Company shall be entitled to recover this amount at actuals form MPSEB. The Commission reclassifies these cost (excluding ED/CESS) as a part of fixed costs as considered by CERC. The projected and approved cost for FY06 is as given in the table below:

Table-46: Other Costs **Rs. Lakhs**

Station	**Water Cost**	**Lubricants**	**Station Supplies**	**ED/Cess**
ATPS Chachai	5.00	220.00	1.89	(To be paid at actuals for 10 months)
STPS Sarni	20.00	330.00	10.03	
SGTPS Birs.	10.00	88.00	8.08	
Thermal	**35.00**	**638.00**	**20.00**	
Gandhi Sagar	168.75	0.55	0.0	
Pench	0.00	0.09	0.0	
Bir'pur Hydel	0.00	1.58	0.0	
Bansagar-I (Tons)	166.00	9.00	0.0	
Bansagar-II (Silpara)	16.00	1.00	0.00	
Bansagar-III (Devlond)	18.00	1.00	0.00	
Bargi	675.00	5.50	0.0	
Rajghat	67.50	3.30	0.0	
Hydel	1111	22.02	0.0	
Thermal & Hydel	**1146**	**660**	**20.0**	

6.57 The Generating Company for 10 months of its operations shall be entitled to recover Rs. 15.22 Crores for these elements of costs. The other cost shall be recovered for each power station in proportion of their share in the approved amount of Rs. 18.26 Crores as shown in the table above.

(h) Return on Equity & Tax

6.58 MPPGCL has submitted that GoMP vide its notification dated 31st May 2005 has provided for an equity base of Rs. 1278 Crores. Out of this Rs. 977.64 Crores is towards equity on project already commissioned and remaining Rs. 300.69 Crores is towards projects under construction. The Computation of this determination is provided in the table below:

Table 47: Equity employed in completed projects

Particulars		Cr.Rs
1	CWIP in Completed Projects	1.07
2	CWIP on New Works	562.55
3	**CWIP (1+2)**	**563.62**
4	Advances to Suppliers	476.63
5	**Total CWIP (3+4)**	**1040.25**
6	Total Loans on Projects (PFC only)*	739.56
7	Total equity at Beginning of FY 06	1278.33
8	Equity employed in CWIP	300.69
9	Equity employed in the completed projects	977.64

Includes loan taken for Birsinghpur (500 MW), APTS (210 MW), Marhikhera, Tons Stage IV, RM works of Sarni and Chachai.

6.59 Based on the book value of capital assets of Rs. 4452.61 crores, the equity of Rs. 978 crores (after adjusting Rs. 300.69 crores utilised in the capital works in progress) would amount to 22% of cost of the completed projects. This equity is being distributed to various projects on the basis of opening gross block. For the projects located in Madhya Pradesh the equity employed is Rs. 969.82 crores. The Commission allows return at the rate of 14% on this amount.

6.60 In the absence of details of equity employed in each project in the notified balance sheet, the proposal of MPPGCL to allocate total equity in proportion of the opening gross block of the assets is acceptable. The total return is also being allocated in the same proportion.

6.61 The above allowable return does not include return on equity invested in Rana Pratap Sagar and Jawahar Sagar. Since the Commission has not considered these two stations for the purpose of tariff determination, return on equity employed in these stations has also not been considered.

6.62 MPPGCL has computed tax liability on the allowable return of Rs. 135.77 Crores at 35%, surcharge thereon @ 2.5% and educational CESS at 2%.

6.63 While computing tax liability MPPGCL has committed a mistake by not grossing the post tax return on equity. On correcting this error the tax liability shall than be Rs. 78.36 Cr. Since MPPGCL shall recover its expenses for 10 months only the expected income tax liability for this period shall be Rs. 65.30 Crore only. However, the tax liability of generating company is based on other expenses also and will be known only when the accounts are finalized. Hence, the Generating Company shall bill MPSEB for the actual tax liability incurred by it subject to the maximum of Rs 65.30 Crore. The amount billed by the Generating Company shall be a pass through item in tariff and shall be payable by MPSEB at actuals subject to the maximum of Rs. 65.30 Crore. The Station wise break up of the RoE is elaborated in the table below: -

Table-48: Station wise break up of return on equity (Rs. Lakhs)

Sl. No.	Particulars	Op GB	Equity	RoE
1	ATPS	14397	3161	443
2	STPS	60685	13324	1865
3	SGTPS	211506	46439	6502
	Total Thermal	**286587**	**62925**	**8809**
4	Gandhi Sagar	1029	226	32
5	Pench	8750	1921	269
6	Rajghat	8275	1817	254
7	Bargi	7727	1697	238
8	Bansagar-I (Tons)	94225	20689	2896
9	Bansagar-II (Silpara)	11965	2627	368
10	Bansagar-III (Devlond)	17948	3941	552
11	Birsinghpur	5212	1144	160
	Total Hydel	**155131**	**34062**	**4769**
	Total Thermal & Hydel	**441719**	**96986**	**13578**

6.64 Since the Company has begun independent operation only in the month of June 2005 therefore return on equity is admissible for only 10 months only, hence only Rs. 113.15 Crores is admissible as return on equity. The ROE shall be recovered for each power station in proportion of their share in the approved amount of Rs. 135.78 Crores as shown in the table above.

(i) Non-Tariff Income

6.65 MPPGCL has considered non-tariff income amounting to Rs. 35.46 Crores on account of the incentive to be received by MPSEB for agreement entered in pursuance of the Montek Singh Ahluwalia Committee's Report. The amount is being considered as income to MPPGCL. The income that accrues on this account shall be passed on to MPPGCL and shall be adjusted against the fixed cost payable by MPSEB for thermal stations. However if the income that accrues on this account is not passed on to MPPGCL, the fixed cost of thermal stations shall be accordingly increased.

CHAPTER 7

Approved Fixed and Variable Costs

(a) Variable costs

7.1 A detailed statement showing station wise sub items of expenditure of variable cost of Thermal stations may be seen in the table below.

Table 49: Variable costs of Thermal power plants

S. No	Particulars	Gen. Net MU	Coal Cost L Rs	Fuel Related	Entry Tax L Rs	Oil Cost L Rs	Variable Cost L Rs	Variable Cost p/u
1	ATPS	1133	11178	48	264	1317	12808	113
2	STPS	7032	80400	594	1901	3281	86175	123
3	SGTPS	4962	44531	552	1053	1775	47911	97

(b) Fixed costs

7.2 A detailed statement showing station wise sub items of expenditure of fixed cost of thermal stations may be seen in the table below:

Table 50: Fixed costs of Thermal power plants

Stations	Empl Cost L Rs	A&G	R&M	Depr L Rs	Pr Pd. Ch L Rs	Int. L Rs	Intt. On Wor. Cap. L Rs	Others	RoE L Rs	Less NT	Fixed Cost L Rs	Fixed Cost p/u
ATPS	2203	133	2108	91	427	119	1335	227	443	312	6774	59.8
STPS	4632	426	5669	590	1799	172	6077	360	1865	1989	19601	27.9
SGTPS	2466	622	5079	7339	6270	1864	5259	106	6502	1244	34261	69.0

7.3 The per MW/month cost of ATPS Chachai, STPS Sarni and SGTPS Birsinghpur is Rs. 1.95 lakhs, Rs. 1.43 lakhs and Rs. 3.40 lakhs respectively.

7.4 A detailed statement showing station wise sub items of expenditure of fixed cost of Hydel stations may be seen in the table below:

Table 51: Fixed costs of Hydel power plants

Stations	Empl	A&G	R&M	Dep.	Intt.	Intt. On WC	Other	RoE	Fixed Cost
	L Rs			L Rs	L Rs	L Rs		L Rs	L Rs
GandhiSagar	217.01	3.28	83.64	7.90	0.00	29.00	169.30	31.64	541.77
Pench	189.58	5.64	86.86	115.67	0.00	64.00	0.09	268.96	730.80
Rajghat	141.13	15.03	21.88	219.34	51.68	50.00	70.80	254.37	824.23
Bargi	135.00	17.68	16.09	194.13	0.00	100.00	680.50	237.52	1380.92
Bansagar-I (Tons)	863.83	110.39	102.47	1963.34	774.34	552.88	175.02	2896.40	7438.68
Bansagar-II (Silpara)	81.58	10.43	9.68	249.31	73.75	67.11	16.53	367.80	876.18
Bansagar-III (Devlond)	95.98	12.27	11.39	373.97	147.49	100.01	19.45	551.70	1312.24
Birsinghpur	37.22	6.19	3.22	133.25	0.00	31.00	1.58	160.22	372.68

7.5 A detailed statement showing station wise consolidated fixed cost and variable cost of all power stations may be seen in the table below:

Table-52: Consolidated station wise fixed and variable cost

Sl. No		Particulars	Net Gen	Cost in Lakh Rs				
				Fixed	Variable		Total	
			MU	Lakh Rs	Lakh Rs	p/u	Lakh Rs	p/u
Thermal	1	ATPS	1133	6774	12808	113	19581	173
	2	STPS	7032	19601	86175	123	105776	150
	3	SGTPS	4962	34261	47911	97	82172	166
	4	**Thermal**	**13127**	**60635**	**146893**	**112**	**207529**	**158**
Hydel	5	Gandhi Sagar	279	542			542	19
	6	Pench	349	731			731	21
	7	Rajghat	100	824			824	83
	8	Bargi	499	1381			1381	28
	9	Bansagar-I (Tons)	899	7439			7439	83
	10	Bansagar-II (Silpara)	85	876			876	103
	11	Bansagar-III (Devlond)	100	1312			1312	131
	12	Birsinghpur	50	373			373	75
		Hydel	**2361**	**13478**			**13478**	**57**
		Thermal & Hydel	**15488**	**74113**	**146893**	**95**	**221006**	**143**
		Payable to MPPGCL (10 months)	**12907**	**61716**	**122411**	**95**	**184172**	**143**

7.6 The fixed and variable charges for both thermal and hydro stations shall be paid monthly subject to cumulative adjustment in each month of FY06. The final adjustment shall be done at the end of the financial year. The Fixed charges to MPPGCL shall be payable for 10 months only. The total amount payable to MPPGCL for FY06 shall be 10/12th of the fixed charges indicated in the table against each station (Rs. 591.72 Crores) while energy charges shall be paid at rates determined by the Commission for each station for actual amount of energy generated. In addition CESS and actual tax paid by MPPGCL shall also be payable to MPSEB as per paragraphs 6.56 and 6.63 respectively.

7.7 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.

(c) Capital Expenditure for FY06

7.8 The Generating Company has not submitted any proposal for capital expenditure for the consideration of the Commission. The Commission would not approve any asset addition in the capital base unless and until it is specifically approved by the Commission. 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.

(d) General

7.9 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.

7.10 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.

7.11 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.

7.12 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.

7.13 The generation company shall explore the possibility of setting up of Coal Washeries 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 washeries and beneficiation has resulted in improved performance.

CHAPTER 8

SECTION – A

Status of Compliance of directives given by Commission.

8.1 The Commission in its Tariff order of June 29, 2005 had observed that the MP State Electricity Board had not comprehensively responded to the observations and directives given by the Commission in its earlier tariff orders of 26th September 2001, 30th November 2002 and 10th December 2004. The Commission reiterates these directives to MP Power Generating Company Limited (MPPGCL or Company) in the Commission's Tariff Order of 29/06/2005 on improvements in operational and financial performance of the Company. The present status of compliance of the directives given in the Commission's tariff Order of 29 June 2005 is described in further paragraphs.

Directive: Performance reporting by generating units every six months.

8.2 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.

8.3 **MPPGCL Compliance Reported:** MPPGCL has claimed that it is 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.

8.4 **Commission's Observation:** MPPGCL has no doubt submitted the MIS reports in the formats Gen1 to Gen6 on the performance of its generating stations for the quarter ending June and September 2005.

8.5 A detailed and point wise compliance report on these directives was submitted by the Board for the period ending on 30th April 2005. However no report for period ending 31st October 2005 has been given by MPPGCL to the Commission. MPPGCL has not complied with the requirement of submission of this half yearly report on the performance but has confused this with MIS reports, which are to be submitted on monthly basis at the end of quarters ending on June, September, December and April every year. The Commission directs that MPPGCL should file the detailed half yearly report regularly and not confuse the required detailed descriptive report on identified points with MIS formats which are statistical in nature.

Directive: Maintenance of Asset registers.

8.6 While passing the Tariff Order of 30th November 2002, the Commission observed that the amount against depreciation was not properly charged and the requisite asset registers were not properly maintained. Hence, the Commission directed the Board to come up with a time bound programme for proper and up to date maintenance of asset registers. The Commission at the time of passing the Tariff Order for 2004-05 i.e 10th December 2004, again noted that the Board could not able to produce the asset registers before the Commission. The Commission directed that the asset register be maintained properly by 30th June 2005. While 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 has directed Board / MPPGCL to prepare a time bound action plan for finalizing its asset records.

8.7 **MPPGCL Compliance Reported:** MPPGCL has reported that the status of asset accounts had been shown to the Commission in detail and a number of field officials along with the "Asset cum Depreciation Registers" maintained in their offices were presented before the Commission and the Commission had appreciated the work being done by them. It has been claimed by MPPGCL that maintenance of "Asset Register" was not mandatory as per Accounting Rules, however, maintenance of "Asset cum Depreciation Register" was necessary. Therefore the site officials are maintaining "Asset cum Depreciation Registers". MPPGCL has submitted that as directed by the Commission the base data related to Asset Registers would be compiled by the end of September 2005 in specified formats and was to be made available to the Commission for further necessary prudence check. MPPGCL has further submitted that conversion of base data into Asset Registers in the desired format requires expertise. Expert support for preparation of Asset Register has been requested in Phase II support of DFID. MPPGCL has expected the commencement of Phase II DFID support from October 05. The reports generated by DFID consultants would be submitted to the Commission thereafter.

8.8 **Commission's Observation:** MPPGCL has indicated that the "Asset cum Depreciation Registers" are being maintained at the Power Houses. What the Company and its predecessor Board are required to do is to confirm that asset accounts according to Electricity (Supply) Accounting Rules 1985 are being maintained and that account code and sub codes wise details are available for verification. These details should be filed with the Commission in electronic version.

Directive: Data based management and management information system

8.9 In the Tariff Order of 30th November 2002 the Commission had stated that in the absence of a comprehensive and reliable database, effective regulation by the Commission for achievement of the objective of the efficient working of the utility could not be achieved. Hence, The Commission had developed some formats for capturing the information on the generation function and directed the Board to submit the information on different formats to the Commission.

8.10 **MPPGCL Compliance Reported:** MPPGCL has informed that the task of data based management and management information system requires massive computerization of MPPGCL and a detailed computer literacy programme. MPPGCL has assured the Commission to undertake this activity during phase II of DFID support. MPPGCL has assured the Commission that as soon as the DEID support is commenced, a detailed strategy/plan shall be submitted to the Commission.

8.11 **Commission's Observation:** The Commission has directed on a number of occasions that there should be a strong database management and management information system in place. The Commission has noted that MPPGCL is going to establish the MIS with the help of DFID. The Commission directs the Company should prepare a time bound programme / action plan and apprise the Commission on the implementation of the action plan. The Commission further directs MPPGCL to complete the task by 30/09/2006.

Directive: Creation of Station wise Efficiency Cells.

8.12 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.

8.13 **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.

8.14 **Commission's Observation:** The details of the activities of efficiency cells have not been furnished to the Commission. The Commission directs 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. to the Commission. MPPGCL should also indicate the efficiency gains achieved through the implementation of recommendations of these efficiency cells.

Directive: Bi-Annual submission of VCA Petition.

8.15 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.

8.16 **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 has indicated that the Company will submit the proposal to incorporate necessary changes along with its next tariff petition.

8.17 **Commission's Observations:** The Commission accepts the request of MPPGCL and directs that the Company should submit the revised proposal for VCA formula before 31/01/2006.

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

8.18 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.

8.19 **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.

8.20 **Commission's Observations:** The MPPGCL has claimed the adoption of uniform method of measuring the coal losses at all its thermal power stations. But the results and the comparison of the losses before and after the installation of weigh bridges and weight-o-meter have not been reported to the Commission. It is directed that a detailed report should be submitted to the Commission with in one month from the date of this order. The Commission in this regard has also given other directions in Chapter 3 for compliance.

Directive: Status of generating stations in partnership with neighboring states.

8.21 The Commission in its Tariff Order 10th December 2004 had directed the Board to revisit and finalise the agreement with the neighboring states with regard to the partnership /shared projects.

8.22 **MPPGCL Compliance Reported:** The MPPGCL has indicated that it is operating some capacity installed in the State of MP which belongs to other states like Rajasthan, Maharashtra and UP etc. In case of plants of Rajasthan, MPPGCL is authorized to charge O&M charges from Rajasthan and is responsible to provide the power of their share. Similarly, capacity installed in Rajasthan pertaining to MP share of generation will be available after paying O&M charges. Over and under drawl are governed through the disciplinary mechanism. MPPGCL has further informed that it has considered its own share of generation and has included the cost related to it only. Regarding levy of O&M charges it has expressed the amount of O&M charges leviable separately. The matter regarding review/renewal of the existing arrangement is a policy matter and within purview of Government of MP.

8.23 **Commission's Observation :** The Commission has observed that the generating stations that are being operated and maintained by MPPGCL and are situated with in the geographical boundary of State of Madhya Pradesh are under the jurisdiction of the MPERC hence this Commission shall determine the cost of power generation at such generating stations considering the full capacity of the station and the full expenses.

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

8.24 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.

8.25 **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. As informed by Additional Secretary, Energy Department, GOMP Bhopal vide letter No. 4164/13/2005 dated 21.6.05, the gates were targeted to be installed by September 2005. Copy of letter of GOMP has also made available for perusal of the Commission.

8.26 **Commission's Observation:** The latest status has not been informed to the Commission. It is apparent that the concerned department of State Govt. is not adhering to the schedule.

Directive: Man Power planning.

8.27 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.

8.28 **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.

8.29 **Commission's Observation:** The Commission has observed that MPPGCL has not come out with full facts. The Commission feels that the redeployment of the work force is certainly a better option. The Commission once again directs MPPGCL to conduct a work study so as to redesign their man power for better results. The Commission shall consider O&M expenses on a normative basis for FY 2007 and onwards.

Directive: Project wise details of the Loans.

8.30 In the Tariff Order of 10th December 2004 the Commission had directed the Board to submit all the loans categorised into project related and working capital related.

8.31 **MPPGCL Compliance Reported**: MPPGCL has submitted the details of the loan liability parked with the Company as given in the balance sheet given by the State Govt.

8.32 **Commission's Observations:** The Commission has observed that along with the project specific loans for generation function, MPPGCL has submitted the information on generic loans also.

Directive: Non-inclusion of cost of reservoirs that are being maintained by State Govt. in the books of accounts of MPSEB and subsequently of MPPGCL.

8.33 The Commission in its Tariff Order of 10th December 2004 had directed the Board to check and confirm that the cost of reservoirs that are being maintained by State Govt. has not been included in the books of accounts of the Board.

8.34 **MPPGCL Compliance Reported:** MPPGCL has confirmed that the assets maintained by the State Govt. have not been included into their account and no depreciation has been charged on these assets.

8.35 **Commission's Observation:** The asset registers of MPPGCL should be presented before the Commission.

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Chapter 8: Section B

Objections and Comments on MPPGCL's tariff proposal

8.36 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 24th September, 2005, the following stake holders submitted their comments/objections:-

1. M.P. Electricity Consumers Society, Indore
2. M/s. Grasim Industries Limited, Nagda

8.37 A public hearing was arranged at Bhopal on 17th November, 2005 at Urja Bhawan hall, 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:-

M.P. Electricity Consumers Society, Indore

1. Objection/Comments

8.38 "*The M.P. Electricity Consumers Society*, Indore *submits that the generating company and all the licensees have failed to file the petition as directed before 31st July 2005 and therefore the petition needs to be rejected."*

MPPGCL's Response:

8.39 Attention has been invited to para 6 and 7 of the Tariff Petition, wherein MPPGCL has itself elaborated the position on this issue. MPPGCL appeared before Hon'ble Commission on 27th July for approval of inter-se agreement and term & condition of Tariff and sought permission for extension of time which was accorded by the Commission. Accordingly MPPGCL has submitted its petition on 26th Aug.2005, which is within extended time.

Commission's View:

8.40 The Commission finds that MPPGCL has filed the petition well within the time limit thus there is no basis for rejecting the petition.

2. Objection/Comments

8.41 "*The M.P. Electricity Consumers Society, Indore submits that the petitions cannot be decided in isolation to decide on consumer's retail tariff. The petition of Generation Company thus has to wait."*

MPPGCL's Response:-

8.42 MPPGCL does not agree with the view that petition of MPPGCL cannot be decided in isolation of other petitions by Transco and Discoms. MPPGCL has provided adequate details to conduct prudence check.

8.43 Generation Tariff is the basic input for tariff of Discoms and thus tariff of Discoms cannot be decided without finalizing the Generation tariff.

Commission's View:

8.44 The Commission agrees with the petitioner and finds no merit in the objection.

3. Objection/Comments

8.45 *All the petitions and the revised retail tariffs cannot be decided unless information as required in para 42 of the order dated 29.06.2005 is provided by the distribution licensees. The para 42 reads as under: -*

"The revenue implications of the modifications have not been worked out and the distribution licensees are directed to work out the same at the earliest and submit to the Commission."

MPPGCL's Response

8.46 Distribution licensees are getting power from various sources including MPPGCL hence the generation tariff of MPPGCL is not directly linked with the revenues of these licensees. In the tariff petition of MPPGCL in the P & L account (Form S-1) the implication of the tariff rates for Generation cost as given in MPERC order dated 29th June 05 has been elaborated. It has been mentioned that as against permitted return on equity of about Rs. 130 crore, MPPGCL will incur a loss of about Rs. 210 crore, if current provisional tariff of Rs. 1.51 is continued.

Commission's View:

8.47 MPPGCL's petition is not related to retail tariff. Hence the objection is without any ground.

4. Objection/Comments

8.48 *The M.P. Electricity Consumers Society, Indore society submits that Hon'ble Commission have already submitted draft regulations named MPERC (Terms & Conditions for determination of Generation Tariff) Regulations 2005 in August 2005. The comments on the regulations have been received and the regulations will be finalized in next few months. The society submits that any future discussions on generation tariff have to be based on the finalized regulations.*

MPPGCL's Response

8.49 In the above context, it is to mention that above mentioned Terms and Conditions are to be decided for block period of FY 07 to FY 09, whereas current petition is for FY 06. In the views of MPPGCL, for finalization of FY 07 to FY 09 Cost/tariff view on FY 06 cost/Tariff is important.

8.50 MPPGCL humbly requests before Hon'ble Commission to kindly do not consider the above views of the respectable consumers.

Commission's View:

8.51 The final terms and Conditions for determination of the generation tariff were finalized and issued on 5th December, 2005 for the first control period from FY 07 to FY 09. Thus these terms and conditions are not applicable for determination of tariff for FY 06. However the Commission has taken a consistent approach in order to align the current tariff with that for the control period.

5. Objection/Comments

8.52 *The society submits that a consistent stand has been taken by the Society that the tariff petitions involve complicated techno commercial issues and therefore validation and scrutiny by experts is required before these are placed before Public. We therefore submit that the society needs to be made available a report of the experts before a public hearing is held.*

MPPGCL's Response

8.53 The respectable consumer has made a request to Hon'ble Commission and is beyond the purview of MPPGCL.

Commission's View:

8.54 The Commission would be happy to share any and studies independently carried out by the Commission or by the consultants appointed by the Commission but are unable to accept the objector's suggestion that in order to explain the complexity of tariff determination exercise to the objector the Commission may provide a consultant. It is for the society to locate such persons who understand the issues relating to the working of the electricity industry.

6. Objection/Comments

8.55 *In view of what is stated above the petition of MPPGCL may be directed to be merged with petition for Tariff on to be filed by 15th Nov. 2005.*

MPPGCL's Response

8.56 In view of the clarifications provided in foregoing para, it is submitted before Hon'ble Commission to determine the tariff for FY 06, before a view on tariff for block period FY 07 to FY 09 is taken.

Commission's View:

8.57 The Commission does not share the view that MPPGCL's petition for generation tariff for FY 06 should be kept pending.

8.58 **<u>Grasim Industries Limited:</u>**

M/s Grasim Industries in the objection/comments had pointed out the following:-

(a) Special tariff for power intensive industries (above 70% load factor) being abolished
(b) The new category for above 60% load factor does not benefit industries having high load factor such as between 70% and 80%.

The consumer further made a suggestion that power intensive industries who are not presently consumers of the state electricity utility could become consumers again if some incentives are offered like –

(a) Assured supply of quality power
(b) Compensation in case of power outages and interrupted supply.
(c) Acceptance of bank guarantee instead of security deposit for one month's contracted demand
(d) Provision of power lines to point of consumption by the State utility.

MPPGCL Reply:

8.59 MPPGCL submits that observations made are primarily on the consumer tariff to be charged by Distribution Company. Erstwhile MPSEB has been bifurcated into five successor companies' w.e.f. 1st June 2005 and MPPGCL is one of these five companies. MPPGCL has been vested with the responsibility of power generation which will be directly sold to either the three Distribution companies or to the MPSEB as Trader. The retail power supply shall be undertaken by the three Discoms. You are requested to point out your valuable views at the time of public hearing on the retail tariff submitted by the Distribution Companies. For the present your observations are beyond the purview of MPPGCL.

Commission's View:

8.60 The Commission is of the view that this objection pertains to the retail tariff and not to the Generation tariff and hence need not delay the present exercise.

Conclusion:

8.61 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 2006 (FY06) and records its appreciation for the co-operation and support provided by the petitioner/co-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.