

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION
5th Floor, "Metro Plaza", Bittan Market, Bhopal - 462 016



Petition No.55 of 2011

PRESENT:

Rakesh Sahni, Chairman

C.S. Sharma, Member

IN THE MATTER OF:

True-up of Generation Tariff for FY 2008-09, determined by MP Electricity Regulatory Commission vide Generation Tariff Order dated 7th March, 2006.

M.P. Power Generating Company Ltd, Rampur, Jabalpur

: PETITIONER

Vs.

1. **M.P. Power Trading Company Ltd., Rampur, Jabalpur**
2. **M.P. Poorv Kshetra Vidyut Vitaran Company Ltd., Jabalpur**
3. **MP Madhya Kshetra Vidyut Vitaran Company Ltd., Bhopal**
4. **MP Paschim Kshetra Vidyut Vitaran Company Ltd., Indore**
5. **M.P. Power Transmission Co. Ltd. Jabalpur**
6. **M.P. State Electricity Board, Rampur, Jabalpur**
7. **Rajasthan Rajya Vidyut Prasaran Nigam Ltd (RRVPL), Jaipur**
8. **Uttar Pradesh Power Corporation Ltd (UPPCL), Lucknow**
9. **MSEB (Holding Co) & Maharashtra State Transmission Co. Ltd., Mumbai**

RESPONDENTS

ORDER

(Passed on this 22nd day of March, 2012)

- 1 The Madhya Pradesh Electricity Regulatory Commission (hereinafter called “the Commission” or “MPERC”) having gone through the petition submitted by the MP Power Generating Company Limited (hereinafter called “the Petitioner” or “Company” or “Generating Company” or “MPPGCL”) and having considered the documents available on record and Orders issued by the Government of Madhya Pradesh (Energy Department) on 31st May, 2005 making the Transfer Scheme Rules effective from 1st June, 2005 vide Order No.3679/FRS/18/13/2002 dated 31.05.2005, hereby accepts the application with modifications, conditions and directions as attached herewith. The Commission has also considered the final opening balance sheet (as on 1st June, 2005) notified by the Government of Madhya Pradesh on 12th June, 2008, while passing this order.
- 2 MPPGCL filed the subject petition with the Commission for true-up of generation tariff for FY 2008-09 on 6th August, 2011. The petition was registered as P-55/2011. On preliminary scrutiny of the petition, the Commission observed several information gaps and discrepancies in the filing which were conveyed to the petitioner vide Commission’s letter dated 14th September, 2011. MPPGCL filed its response on 15th October, 2011.
- 3 On further scrutiny of the additional submissions made by the petitioner, the Commission observed that the claims made by the petitioner for additional capitalization were not adequately substantiated with the required information and documents as per the provisions of the Tariff Regulations, 2005. The petitioner in response to the Commission’s letter No.3189 dated 23rd November, 2011 filed its reply on 7th December, 2011. The petitioner vide its afore-mentioned letter submitted additional information regarding the issues related to additional capitalization and interest and finance charges.
- 4 MPPGCL vide its communication dated 3rd December, 2011 could not clarify the issue regarding writing off values against the replacement of old assets on additional capitalization. The petitioner was therefore, asked to depute their concerned senior officer(s) to explain the issues related to additional capitalization in the Asset-Depreciation Register of the company. A meeting with the officers of MPPGCL and officers of the Commission was held in the office of the Commission on 24th December, 2011 when the representatives of the petitioner had shown some basic data of Asset-Depreciation Register in respect of two thermal power stations to ensure compliance of notes under Clause 19 of MPERC (Terms & Conditions for determination of Generation Tariff) Regulations, 2005. It was assured by the petitioner during the course of meeting that the complete details, as required by the Commission regarding assets added under additional capitalization indicating write-off value of each asset added against the replacement of old asset shall be submitted to the Commission by 10th January, 2012.

- 5 The Commission vide order dated 28th December, 2011 admitted the subject true-up petition as filed by MPPGCL and directed the petitioner to publish the gist of the petition in English and Hindi newspapers for inviting comments/suggestions from stakeholders. MPPGCL submitted the final Asset-Depreciation Registers to the Commission indicating write off value of the assets replaced on additional capitalization incorporating appropriate adjustments in the total asset values and the accumulated depreciation on 25th January, 2012 and 2nd February, 2012. The true-up amount for FY 2008-09, as claimed by the petitioner in this true-up petition is given below :

Table: 1 True up filed by the petitioner (Amount in Rs. Cr.)

Particulars	Elements	As per MYT Order	As per Actual Availability/C. Index	True-up Amount
Variable Cost Elements	Coal	1491.20	1616.05	124.85
	Oil	86.58	124.92	38.35
	Other	13.71	13.64	-0.07
	Total	1591.49	1754.61	163.12
Fixed Cost Elements	O & M Expenses	336.92	331.38	-5.54
	Interest On Loan	41.43	66.00	24.57
	Interest on W/C	73.47	99.07	25.60
	Total Interest	114.90	165.07	50.17
	Depreciation	103.24	98.49	-4.75
	Other Expenses	25.71	68.55	42.84
	RoE	129.11	197.08	67.97
	Less: Non Tariff Income	-5.86	-31.29	-25.43
Grand Total		2295.51	2583.90	288.39

The station wise break-up of the true up amount is as under:

Table : 2 (Amount in Rs. Cr.)

S. No.	Station	As per MYT Order	As per Actual Availability/C. Index	True-up Amount
1	ATPS	188.12	223.51	35.39
2	STPS	1155.47	1292.90	137.43
3	SGTPS	813.86	844.65	30.80
4	Total Thermal	2157.45	2361.06	203.62
5	Gandhi Sagar	11.37	10.40	-0.97
6	Pench	12.06	14.45	2.39
7	Rajghat	8.63	13.30	4.67
8	Bargi	9.94	18.81	8.86
9	Bansagar(I,II&III)	92.21	161.04	68.84
10	Birsinghpur	3.86	4.84	0.98
11	Total Hydro	138.06	222.83	84.77
Total		2295.51	2583.90	288.39

- 6 The Commission modified the estimates of true-up of the Annual Revenue Requirement for FY 2008-09 based on the efficient and reasonable operating parameters and expenditure required therefore and accordingly modified the proposal submitted by the Madhya Pradesh Power Generating Company Limited for true- up of generation tariff for FY 2008-09 in the Multi Year Generation Tariff (MYT) Order (for the control period FY 2006-07 to FY 2008-09) issued on 07/03/2006, as per detailed Order attached to this Order.
- 7 The Commission vide this Order has determined the true-up amount of **Rs.106.77 crores** for FY 2008-09. The Commission has also allowed additional true-up amount for FY 2005-06, FY 2006-07 and FY 2007-08 over and above the amount allowed in true-up cost for FY 2007-08 in true-up order for FY 2007-08 on account of additional capitalization claimed in this petition by the petitioner in FY 2005-06 to FY 2008-09. The true-up admitted is as given below :

Table :3 Component-wise details of true-up amount allowed for FY 2008-09 Rs. Cr.

Sr. No.	Particular	Year-wise true-up amount allowed in this order on actual availability				
		FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	Total
1	Fuel Cost	0.00	0.00	0.00	33.95	33.95
2	Interest on loan	1.14	1.69	2.45	13.84	19.12
3	Depreciation	-3.65	0.43	1.79	-4.63	-6.06
4	Return on equity	0.06	0.53	1.21	47.17	48.96
5	O & M Expenses	0.00	0.00	0.00	-2.96	-2.96
6	Interest on Working Capital	0.00	0.00	0.00	17.07	17.07
7	Other fixed cost	0.00	0.00	0.00	22.09	22.09
8	Less non tariff income	0.00	0.00	0.00	-25.41	-25.41
Total :		-2.44	2.65	5.45	101.12	106.77

Table :4 Power station-wise true-up allowed for FY 2008-09 Rs. Cr.

Sr. No.	Particular	Year-wise true-up amount allowed in this order on actual availability				
		FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	Total
1	ATPS	-0.47	0.14	0.56	18.55	18.78
2	STPS	0.86	1.69	2.82	47.02	52.37
3	SGTPS	-2.84	0.08	0.30	-33.79	-36.25
4	Gandhi Sagar	0.00	0.00	0.00	-2.40	-2.40
5	Pench	0.00	0.35	1.03	0.66	2.03
6	Rajghat	0.02	0.37	0.42	3.64	4.44
7	Bargi	0.01	0.00	0.35	7.89	8.25
8	Bansagar	0.00	0.01	-0.01	58.93	58.94
9	Birsinghpur	0.00	0.00	-0.01	0.62	0.61
Total		-2.44	2.65	5.45	101.12	106.77

- 8 The Commission, in exercise of the powers vested under Section 64 of the Electricity Act, 2003, in its MYT generation tariff Order dated 07/03/2006 directed that the station-wise generation tariff determined by the said Order was deemed effective w.e.f. 1st April, 2008. The present order is for the true-up of the MYT generation tariff Order of 07/03/2006 to the extent it was applicable for FY 2008-09. The petitioner must take 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 its amendments and recalculate its bills for the energy supplied to Distribution Companies of the State/ M.P. Power Trading Company Ltd. since 1st April, 2008 to 31st March, 2009. The petitioner must also provide information to the Commission in support of having complied with this Order. The amount becoming due as a result of this true-up shall be recoverable from the three Distribution Companies of the State in the ratio of energy supplied to them in FY 2008-09 in equal monthly instalments during FY 2012-13.

Ordered accordingly.

sd/-
(C. S. Sharma)
Member (Eco.)

sd/-
(Rakesh Sahni)
Chairman

Date: 22nd March, 2012
Place: Bhopal

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CHAPTER 1

Background of the Order

Introduction

- 1.1 This order relates to petition No.55 of 2011 filed by the Madhya Pradesh Power Generating Company Limited (MPPGCL) for truing up of the generation tariff for FY 2008-09 under the Multi-Year generation (MYT) Tariff order for control period FY 2006-07 to FY 2008-09 determined by the Commission on 7th March, 2006.
- 1.2 Madhya Pradesh Power Generating Company Limited hereinafter referred to as MPPGCL, is a company incorporated under the Companies Act, 1956, having its registered office at Shakti Bhawan, Rampur, Jabalpur. Consequent to the implementation of power sector reforms in the state where-under, amongst others, the activities of generation, transmission, distribution and retail supply of electricity carried out by erstwhile MPSEB were restructured and transferred to the five successor corporate entities, wherein the function of power generation was vested with MPPGCL. The functions of retail distribution of power has been vested with the three Distribution Companies viz M. P. Poorv Kshetra Vidyut Vitaran Company Ltd., Jabalpur (hereinafter referred as Respondent No.2), M.P. Madhya Kshetra Vidyut Vitaran Company Ltd., Bhopal (hereinafter referred as Respondent No.3) and M. P. Paschim Kshetra Vidyut Vitaran Company Ltd., Indore (hereinafter referred as Respondent No.4). The responsibility of power transmission has been vested with M. P. Power Transmission Co. Ltd., Jabalpur (hereinafter referred as Respondent No.5).
- 1.3 The M.P. State Electricity Board (MPSEB), (hereinafter referred as Respondent No.6), constituted under Section- 5 of the Electricity (Supply) Act, 1948, is a body corporate. It was vested with the general duties under Section 18 of the said Act. After implementation of the Power Sector Reforms in the State, its scope of operation was limited to act as trader of power in the State and manage cash flow on provisional basis. Subsequently, GoMP vide its notification dated 3rd June, 2006 has incorporated MP Power Trading Company Limited (MP Tradeco) (hereinafter referred as Respondent 1) and transferred the responsibilities of power trading to it. Now MPSEB is primarily managing Cash Flow amongst six successor Companies in accordance with the “Cash Flow Mechanism” notified by GoMP vide notification dated 3rd June, 2006. Since all power generated by MPPGCL from the capacity allocated to it, is to be purchased by MP Tradeco and MPSEB shall be making payments on behalf of MP Tradeco to MPPGCL, both of them are affected parties and hence made respondent to the petition. The power generated by MPPGCL and sold to MP Tradeco shall be transmitted through the transmission network of MP Transco and shall be ultimately sold to the above mentioned three Discoms. Hence all the four companies are also affected parties and hence made respondent to this petition.

- 1.4 Rajasthan Rajya Vidyut Prasaran Nigam (RRVPL), Jaipur, (hereinafter referred as Respondent No.7) has 40% share in the PH-1 of STPS Sarni and 50% share in Gandhi Sagar Hydro Power Station operated by MPPGCL. At the same time MPPGCL has 50% share in the Ranapratap Sagar Hydro Power Station and Jawahar Sagar Hydro Power Station operated by the Respondent No.7. Similarly, Uttar Pradesh Power Corporation Ltd (UPPCL), Lucknow (hereinafter referred as Respondent No.8) and MSEB (Holding Co) & Maharashtra State Transmission Co. Ltd., Mumbai (hereinafter referred as Respondent No.9) have 50% share in Rajghat Hydro Power Station and 33.3% share in Pench Hydro Station operated by MPPGCL respectively.
- 1.5 The State Government vide notification dated 31st May, 2005 also provided that the petitioner will sell entire power generated to the M. P. Power Trading Co. Ltd. (MP Tradeco), Jabalpur at a rate determined by the Commission. The Power Purchase Agreement to this effect has also been signed between MPPGCL and MP Tradeco.
- 1.6 GoMP vide its notification dated 31st May, 2005 had provided "Provisional Opening Balance Sheet" to MPPGCL. In this opening balance sheet, the values of assets and liabilities provided were provisional. Subsequently, GoMP vide its notification dated 12th June, 2008 has provided the "Final Opening Balance Sheet as on 1st June, 2005".
- 1.7 It was observed that the values of asset, liabilities including various loans etc. changed considerably in the final opening balance sheet notified by GoMP vis-a-vis the provisional opening balance sheet earlier notified. The resultant impact has already been incorporated in Books of Accounts of MPPGCL for FY 2007-08. The impact of changes in values of assets and liabilities have been considered by the Commission in last true-up order for FY 2007-08 issued on 24th January, 2011.
- 1.8 MPPGCL has filed the subject true-up petition No.55/2011 on 6th August, 2011. The petitioner has filed this petition based on the MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2005 (G-26 of 2005) notified by the Commission on 5th December, 2005 and the Audited Accounts of the company for FY 2008-09.
- 1.9 The subject petition is not based on the capital cost (gross block, equity, loan, accumulated depreciation) as admitted by the Commission in its last true-up order for FY 2007-08 issued on 24th January, 2011. The petitioner has considered various capital cost components on the basis of its audited accounts for FY 2008-09, which includes additional capitalization in various power stations during past financial years w.e.f. 1st June, 2005. It was nowhere stated in the petition that the claims made by the petitioner for true-up of FY 2008-09 include additional capitalization made by the petitioner during FY 2005-06 to FY 2008-09. The petitioner was therefore, asked to file the complete year-wise break-up in the change of capital cost components filed in the petition vis-a-vis admitted by the Commission in last true-up order for FY 2007-08 along with several other information in support of their claims for additional capitalization as per the provisions under applicable Regulations to the instant petition.

- 1.10 MPPGCL in their supplementary submission filed requisite information and documents in support of their claim for additional capitalization. Based on the information/documents submitted by the petitioner, the Commission has considered the additional capitalization made by the petitioner during FY 2005-06 to FY 2008-09 in this true-up order.

Procedural History

- 1.11 The petitioner has filed the subject petition on 6th August, 2011. The Commission on further scrutiny of this petition conveyed the information gaps to the petitioner on 14th September, 2011. The petitioner filed its response on 15th October, 2011 in respect of several important tariff components like additional capitalization, equity, interest and finance charges, depreciation, fuel cost etc.
- 1.12 On examination of the afore-mentioned response filed by the petitioner, the petitioner was further asked to submit the detailed information in respect of additional capitalization and interest and finance charges vide Commission's letter No.3189 dated 23rd November, 2011. The petitioner submitted their clarification to the Commission on 3rd December, 2011. The Commission vide order dated 28th December, 2011 admitted the petition and directed the petitioner to publish the gist of the petition in English and Hindi newspapers for inviting comments/suggestions from stakeholders. The petitioner vide afore-mentioned order of the Commission was also directed to depute their concerned officer(s) to the Commission on 24th December, 2011 to explain the balance issues related to additional capitalization. The public hearing in the matter was fixed on 30th January, 2012 and the public notice on the petition was published by the petitioner on 1st January, 2012.

Public Hearing

- 1.13 The Commission got published the abstract of the application and the true-up proposal filed by MPPGCL in the following newspapers on 1st January, 2012 :
- a) Jabalpur Express (Hindi)
 - b) Swadesh, Indore (Hindi)
 - c) Nai Duniya, Bhopal (Hindi)
 - d) Bhaskar, Gwalior (Hindi)
 - e) Jagaran, Rewa (Hindi)
 - f) Hindustan Times, Bhopal (English)
- 1.14 The public hearing in the subject true-up petition was conducted on 30th January, 2012.

CHAPTER 2

Capital Cost and Additional capitalization :

2.1. MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2005 (G-26 of 2005) notified vide No.2932/MPERC/2005 on 5th December, 2005 is the Regulation based on which the tariff order for FY 2008-09 was determined by the Commission in its MYT order dated 7th March, 2006. Hence, the scrutiny of this true-up petition is also based on the same Regulations.

Capital Cost

Petitioner's submission

A. Opening Gross Block

2.2. The petitioner has submitted that the subject true-up petition is based on final opening balance sheet and audited annual statements of accounts for FY 2008-09. The petitioner has filed a comparative statement showing Gross Block of Assets of MPPGCL share as per books of Accounts for FY 2008-09 vis-a-vis Gross Block admitted by the Commission as on 31st March, 2008 in last true-up order issued based on final opening balance sheet as given below:

Table :5

Rs. Cr.

Stations		Gross Block of Assets as on 31 st March, 2008		
		As per Annual Statement of Accounts for FY 2008-09	As per True Up Order For FY 2007- 08	Diff./ Asset Addition
1	ATPS	182.63	144.11	38.52
2	STPS	630.24	605.61	24.63
3	SGTPS	2161.28	2157.19	4.09
4	Total Thermal	2974.15	2906.91	67.24
5	Gandhi Sagar	10.30	10.29	0.00
6	Pench	96.24	87.74	8.51
7	Rajghat	82.80	82.79	0.01
8	Bargi	87.03	86.99	0.04
9	Bansagar I,II&III	1243.92	1243.92	0.00
10	Birsinghpur	52.15	52.15	0.00
11	Total Hydro	1572.44	1563.88	8.56
12	HQ	0.43	0.00	0.43
Total		4546.59	4470.79	76.23

- 2.3. With reference to above, the petitioner in its additional submission dated 15th October, 2011 has submitted that the difference in the capital cost component as admitted by the Commission in last true-up order (FY 2007-08) and capital cost filed in the subject petition as per annual statement of accounts for FY 2008-09, is on account of Additional Capitalization during FY 2005-06 to FY 2007-08.
- 2.4. The petitioner on affidavit dated 15th October, 2011 has submitted that the capital works carried out were need based and were necessary for running of the power houses and are in accordance with the Proviso 19 of the MPERC (Terms and Conditions for determination of generation tariff) Regulations, 2005. The petitioner has further submitted that the need based capital works have been carried out after getting the approval from competent authorities as per the delegation of powers notified by MPPGCL. The year wise and power station wise details of additional capitalization as per books of accounts filed by the petitioner is given below:

Table :6 **Rs. Cr.**

Power Station		FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	Total
1	ATPS	6.17	13.35	19.00	0.99	39.51
2	STPS	8.26	6.73	9.64	0.95	25.58
3	SGTPS	0.59	0.03	3.48	2.44	6.54
4	Total Thermal	15.02	20.11	32.12	4.38	71.63
5	Gandhi Sagar	0.00	0.00	0.00	0.00	0.00
6	Pench	0.10	8.40	0.00	0.00	8.50
7	Rajghat	0.00	0.00	0.01	0.00	0.01
8	Bargi	0.00	0.00	0.04	0.00	0.04
9	Bansagar I,II&III	0.00	0.00	0.00	0.00	0.00
10	Birsinghpur	0.00	0.00	0.00	0.00	0.00
11	Total Hydro	0.10	8.40	0.05	0.00	8.55
	HQ	0.13	0.10	0.19	0.30	0.72
Total		15.25	28.61	32.36	4.68	80.90

- 2.5. The petitioner in its affidavit dated 15th October, 2011 has also filed the mode of funding for the works related to additional capitalization carried out during FY 2005-06 to FY 2008-09. The power station wise details of mode of funding as filed by the petitioner is given below:

Table :7

Rs. Cr.

Particulars	FY 2005-06		FY 2006-07		FY 2007-08		FY 2008-09	
	Loan	Equity	Loan	Equity	Loan	Equity	Loan	Equity
1 ATPS	6.17	0.00	13.35	0.00	19.00	0.00	0.99	0.00
2 STPS	0.38	7.88	4.13	2.60	5.12	4.52	0.41	0.54
3 SGTPS	0.00	0.59	0.00	0.03	0.00	3.48	0.00	2.44
4 Total Thermal	6.55	8.47	17.48	2.63	24.12	8.00	1.40	2.98
5 Gandhi Sagar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6 Pench	0.00	0.10	0.00	8.40	0.00	0.00	0.00	0.00
7 Rajghat	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
8 Bargi	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
9 Bansagar I,II&III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10 Birsinghpur	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11 Total Hydro	0.00	0.10	0.00	8.40	0.00	0.05	0.00	0.00
Total	6.55	8.57	17.48	11.03	24.12	8.05	1.40	2.98

Provisions of the Regulation

2.6. With regard to the capital cost, Clause 18 (2.5) of the Regulation, 2005 provides as under :

“Subject to prudence check by the commission, the actual expenditure incurred on completion of the project shall form the basis for determination of tariff. The tariff shall be determined based on the admitted capital expenditure actually incurred upto the date of commercial operation of the Generating units/station”

2.7. With regard to additional capitalization, Clause 19 of the Regulations, 2005 provides that,

“The following capital expenditure, actually incurred after the date of commercial operation and duly audited, may be considered by the Commission, subject to prudence check

- (a) due to deferred liabilities within the original scope of work,*
- (b) on works within the original scope of work, deferred for execution*
- (c) to meet award of arbitration or satisfaction of Order or decree of a court arising out of original scope of works,*
- (d) on account of change in law,*
- (e) on procurement of initial spares included in the original project costs subject to the ceiling norm laid down in regulation 18.*
- (f) any additional works/ services, which have become necessary for efficient and successful operation of a generating station or a transmission or a distribution system but not included in the original capital cost.*

Provided that original scope of work along with estimates of expenditure shall be submitted along with the application for provisional tariff.

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the generating station.

Note 1

Any expenditure admitted on account of committed liabilities within the original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 20.

Note 2

Any expenditure on replacement of old assets shall be considered after writing off the gross value of the original assets from the original cost. Before allowing the loss due to sale of the retired assets a detailed examination regarding the justification for each and every asset item retired prior to the completion of useful life shall be carried out.

Note 3

Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 20.

Note 4

Any expenditure admitted by the Commission for determination of tariff on renovation, modernization, life extension and restoration of assets damaged due to natural calamities shall be serviced on normative debt-equity ratio specified in regulation 20 after writing off the original amount of the replaced assets from the original cost.”

Commission’s Analysis

(a) Capital Cost

- 2.8. The State Government vide order dated 31st May, 2005 notified the “Provisional Opening Balance Sheets” of the Companies as on 01.06.2005. The Operation & Management Agreement between MPSEB and Companies terminated, and Companies started independent functioning w.e.f. 01.06.2005. In this notification, the assets and liabilities were transferred on provisional basis. The MYT order dated 7th March, 2006 issued by the Commission was based on this provisional opening balance sheet of the company and the capital cost components were also considered by the Commission as per the provisional opening balance sheet.
- 2.9. GoMP, vide its subsequent notification No.4068-FRS-18-2002-XIII dated 12.06.2008 provided Final Opening Balance Sheet as on 01.06.2005 along with Account Code wise / RAO-wise details.

2.10. Earlier the petitioner had filed the petition for determination of true-up of generation tariff for FY 2007-08 based on the final opening balance sheet. The Commission while passing order dated 24th January, 2011 on afore-mentioned true-up petition, considered the impact of final opening balance sheet in the generation true-up orders for the past period as well as for respective year i.e. FY 2007-08. In the same true-up order, the Commission considered the impact of final opening balance sheet w.e.f. 01.06.2005 and allowed the additional true-up cost for FY 2005-06 and FY 2006-07 in addition to the cost which were already allowed in true-up orders for FY 2005-06 and FY 2006-07.

2.11. The Commission has also issued the following tariff orders for determination of provisional tariff in respect of new capacity additions as given below :

Table : 8 Provisional Tariff Orders issued by the Commission

S. No.	Unit	CoD	Date of Order
1	Madhikheda HPS Unit No.1 Unit No.2	28 th August, 2006 9 th Sept. 2006	18 th January, 2008
2	Madhikheda HPS Unit No.3	18 th August, 2007	5 th January, 2010
3	Bansagar IV (Jhinna) Unit No.1 Unit No.2	20 th August, 2006 30 th August, 2006	18 th January, 2008
4	SGTPS, Extn. Unit 500MW	28 th August, 2008	24 th Nov. 2009

2.12. Since the project cost and funding of the above new capacity additions shall be finalised in their final tariff orders on filing the petition by the petitioner for determination of final tariff, any change in cost on account of above-mentioned new capacity additions is not considered in this order.

2.13. The power station-wise gross block admitted by the Commission (considering the impact of final opening balance sheet) in last true-up order for FY2007-08 is as under:

Table :9

	Station	Gross Block in Rs. Cr.
1	ATPS	144.11
2	STPS	605.61
3	SGTPS	2157.19
4	Total Thermal	2906.91
5	Gandhi Sagar	10.29
6	Pench	87.74
7	Rajghat	82.79
8	Bargi	86.99
9	Bansagar I,II&III	1243.92
10	Birsinghpur	52.15
11	Total Hydro	1563.88
	Total	4470.79

(b) Additional Capitalization

- 2.14. The petitioner in the last true-up petition for FY 2007-08 filed additions in the gross block after 1st June, 2005 on account of either capitalization of new units or need base small R&M works. The Commission while processing the true-up petition for FY 2007-08 sought some additional information in support of their claim for additional capitalization under requirement of Clause 19 of the Regulation.
- 2.15. The petitioner could not furnish complete details as desired by the Commission for proper scrutiny of claim made for additional capitalization.
- 2.16. The Commission had sought clarification from the petitioner on the issue of additional capitalization time and again. The petitioner finally confirmed that submission of required information will require a further period of about 4-5 months. Hence, in view of the above observations and absence of required details for proper scrutiny of claims made for additional capitalization, the Commission had not considered additional capitalization in last true-up order for FY 2007-08.
- 2.17. The Commission while processing the subject true-up petition sought following information from the petitioner in support of its claim for additional capitalization.
- i. The year-wise schemes for addition of new unit or need based small R&M works with full details for each work.
 - ii. The nature of need based R&M works executed in each unit with its respective cost.
 - iii. The approval, if accorded by any competent authority.
 - iv. The details of cost benefit earned for each need based R&M work”.
 - v. Year wise and power station wise mode of funding and loan agreement.
 - vi. Whether the addition of asset is on account of (a) to (f) of the reasons in Clause 19 of the Regulation.
 - vii. Whether the petitioner has taken due care in writing off the gross value of the original asset from the original cost in case of any expenditure on replacement of old asset.
 - viii. Whether the effect of writing off the gross value of the original asset from the original cost on replacement of the old asset has been considered in the asset registers.
- 2.18. The petitioner vide affidavit dated 15.10.2011 filed its reply to the issues raised by the Commission as given below :

“The difference in the capital cost admitted by the Commission in last True up Order (FY07-08) and as per annual Statement of Accounts for FY08-09 is on account of Additional Capitalization during FY06 to FY08. The capital works carried out were need based and were necessary for running of the power houses and are in accordance to the proviso 19 of MPERC Generation Tariff Regulations, 2005. These works have been carried out after getting the approvals from competent authorities as per the delegation of powers notified by MPPGCL. The details of Additional Capitalization done year-wise and power station wise FY 06 to FY 09 are annexed as Annexure-2. The mode of funding for the works

carried out is also annexed as Annexure-3. The cost benefit analysis for the work carried out cannot be made because the works were need based. As regards writing off the gross value of original assets, same has been done and necessary entries have been shown as negative entries in asset cum depreciation register which has already been submitted to the Commission.”

2.19. The petitioner has filed the power station-wise details in respect of asset addition/additional capitalization during FY 2005-06 to FY 2008-09 and also submitted details regarding debt and equity corresponding to the amount of additional capitalization claimed in the subject petition. The contention of the petitioner regarding cost benefit analysis of the works carried out under capitalization is considered by the Commission in accordance with Clause 19 (2.9) (f) of MPERC (Terms & Conditions for determination of Generation Tariff) Regulations, 2005.

2.20. On further scrutiny of the aforementioned response filed by the petitioner, some more information/clarifications with regard to additional capitalization were sought from the petitioner vide Commission's letter dated 23rd November, 2011 as given below :

- i. The details of funding agency along with their terms and conditions for each loan utilized for additional capitalization works.*
- ii. Reference of the approval from competent authority for each work in Annexure-2.*
- iii. Whether the retired asset, if replaced under additional capitalization, completed its useful life or retired prior to completion of useful life.*
- iv. Regarding each need based work executed under additional capitalization, it needs to be indicated whether that work pertains to replacement of retired asset/original asset or addition of asset so that prudence check may be appropriately exercised by the Commission as per notes under Regulation 19 of Tariff Regulations, 2005.*
- v. Since the Commission has already allowed interest and finance charges up to FY 2007-08 on all assets except the assets added under additional capitalization in subject petition therefore, classified details about interest and finance charges indicating power station-wise amount of loan, interest due and scheduled repayment (referring the lending agency) in respect of assets admitted by the Commission in last true-up order for FY 2007-08 and the assets added under additional capitalization in the instant petition is required to be submitted to the Commission.*

2.21. Regarding the issue of writing off gross value of original assets from its original cost, it was stated by the petitioner that writing off has been done and necessary entries are shown as negative entries in Asset-Depreciation Register. On scrutiny of the same in Asset-Depreciation Register, it was observed that the negative entries were not linked with respective need based work since the account code and items under additional capitalization filed in Annexure-2 did not tally with the assets added and shown under additional capitalization. The meeting with the concerned officers of MPPGCL were convened in the office of the Commission on 7th December, 2011 and 24th December, 2011 to exercise prudence check on the issue of writing off gross value of original asset from its original cost.

2.22. The petitioner vide its letter dated 3rd December, 2011 filed reply to the above-mentioned queries raised by the Commission as given below :

1. *“Power Finance Corporation was the funding agency for main part of Additional Capitalization claimed under True up Petition. With the approval of the Board (erstwhile MPSEB) two loan agreements Loan No.20104020 amounting to Rs.20 crores for R&M Scheme of Satpura Thermal Power Station and Loan No.20104021 amounting to Rs.99 crores for R&M scheme of ATPS, PH-2, were executed with PFC.*
2. *The replacement of new equipments/system was found necessary due to non-functioning/obsolesce of existing system or due to non availability of spares or due to completion of their useful life and to improve efficiency of the units/plant and for successful operation of the generating station.*
3. *The need based works executed under R&M schemes are generally replacement of original assets necessitated due to defects/non-functioning of the equipments & to improve efficiency of the units/plant for successful and efficient operation of the generating plant.*
4. *It is further to mention that some of the entries pertaining to CWIP have been transferred to Asset Register by the way of capitalization as per accepted accounting principles.*
5. *In reference to explanation regarding negative entries in asset cum depreciation register A.O. (Accounts) will be present in the office of MPERC on 07.12.2011 to discuss and explain the issue with the officials of MPERC.*
6. *In reference to interest and finance charges claimed by MPPGCL in True up of FY 2008-09, it is to state that some of the loan received from Power Finance Corporation which have been transferred to the petitioner by the Government of MP through Final Opening Balance Sheet notified on 12.06.2008 in exercise of the statutory power under Section 131 of the Electricity Act 2003, has not been considered in True up Tariff Order for FY08. Though these loans were considered in the Multi Year Tariff order dated 07.03.2006. Loan No.20104020 related to R&M Scheme of STPS Sarni and 20104021 related to R&M Scheme of ATPS, Chachai, were sanctioned to erstwhile MPSEB in May, 2003 and July, 2004 respectively.”*

- 2.23. It is observed from the reply that the Power Finance Corporation was the funding agency for the loans utilized for additional capitalization works by MPPGCL. MPPGCL has submitted the MoAs between PFC and MPSEB for loan Nos.20104020 and 20104021 executed on 27th May, 2003 and 19th July, 2004 for loan amount of Rs.20 crores and Rs.99 crores respectively. It is also observed from the MoAs enclosed as **Annexure-1** of their reply that the first loan was taken for execution of R&M works at STPS while the later was taken for R&M at ATPS, Phase-2 (2x120MW). The additional capitalization works which were submitted by the petitioner are predominantly related to these two thermal power stations. It is captured in the MoAs that erstwhile MPSEB passed resolutions dated 9th May, 2003 and 23rd June, 2004 wherein it was agreed to accept the said loans on the terms and conditions of the loans. A copy of resolution is also enclosed by MPPGCL. The petitioner has also filed some relevant correspondences from erstwhile MPSEB and PFC along with terms and conditions of afore-mentioned loans at **Annexure-1 & 2** of their reply.
- 2.24. With regard to writing off the old assets against replacement under additional capitalization, the petitioner vide letter dated 20th December, 2011 was asked to depute senior concerned officer(s) to explain the issue regarding writing off against old assets under additional capitalization. Accordingly, MPPGCL deputed Jt. Director (Accounts) on 24th December, 2011 to explain this issue.
- 2.25. During the course of meeting held with the representatives of MPPGCL in the office of the Commission on 24th December, 2011, the break-up of all assets added under additional capitalization in respect of only two thermal power stations i.e. STPS, Sarni and SGTPS, Birsinghpur was shown by the representatives of MPPGCL in following three categories :
- a) Head-wise details of total assets added under additional capitalization.
 - b) All new assets added under additional capitalization marked as “new assets”.
 - c) Addition of assets under replacement against old assets marked as “replaced against old”.
- 2.26. The representatives of the petitioner submitted that the complete details regarding assets added under additional capitalization indicating write off value of each asset added as replacement of old asset shall be filed with the Commission by 10th January, 2012 to fulfil the requirements as per notes under proviso 19 of Tariff Regulations, 2005.
- 2.27. Accordingly, the petitioner vide its letter No.07-12/CS-MPPGCL/MPERC/TU09/116 dated 2nd February, 2012 submitted the revised Asset-cum-Depreciation Register incorporating the adjustments of all negative entries and indicating the write off value of all the assets added under replacement of old assets.
- 2.28. As may be seen from the preceding **Para 2.4** in the petitioner’s submission, the petitioner submitted power station-wise list of need based works under additional capitalization amounting to Rs.80.90 crores for the period 01.06.2005 to 31.3.2009. The petitioner further submitted that the works under this head were need based and were necessary for running of the power houses and are in accordance with the Proviso 19 of MPERC Generation Tariff Regulations, 2005.

2.29. Based on the above, the additional capital expenditure during the period FY 2005-06 to FY 2008-09 for the purpose of tariff as approved by the Commission in this order is as under:

Table :10

Rs. Cr.

Particular	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
Need based work as per books of accounts under Regulation 19(f) of Regulation, 2005.	15.12	28.51	32.17	4.38
Less: Writing off the old assets	-4.73	-0.011	0.00	0.00
Net additional capital expenditure allowed	10.39	28.50	32.17	4.38

2.30. As mentioned in preceding **Para 2.13**, the gross block of Rs.4470.79 crores has been admitted by the Commission as on 31st March, 2008 (closing gross block) in last true-up order passed by the Commission for FY 2007-08 on 24th January, 2011. Considering net addition during FY 2005-06 (10 months) to FY 2008-09, closing gross block as on 31st March, 2009 in respect of each thermal and hydel power stations as admitted by the Commission in this true-up order is given as below :

Table :11 Thermal Power Stations

ATPS PH I&II: Capital Cost admitted by the Commission

Rs. Cr.

Sr. No.	Particular	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Gross Block	144.11	150.27	163.62	182.62
2	Gross addition during the year	6.17	13.35	19.00	0.99
3	Write-off value	-0.011	0.00	0.00	0.00
4	Net addition during the year	6.159	13.35	19.00	0.99
5	Closing Gross Block	150.27	163.62	182.62	183.61

STPS Complex: Capital Cost admitted by the Commission

Rs. Cr.

Sr. No.	Particular	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Gross Block	605.61	609.15	615.88	625.52
2	Gross addition during the year	8.26	6.73	9.64	0.95
3	Write-off value	-4.719	0.00	0.00	0.00
4	Net addition during the year	3.541	6.73	9.64	0.95
5	Closing Gross Block	609.15	615.88	625.52	626.47

SGTPS PH I&II: Capital Cost admitted by the Commission

Rs. Cr.

Sr. No.	Particular	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Gross Block	2157.19	2157.78	2157.81	2161.29
2	Gross addition during the year	0.59	0.03	3.48	2.44
3	Write-off value	0.00	0.00	0.00	0.00
4	Net addition during the year	0.59	0.03	3.48	2.44
5	Closing Gross Block	2157.78	2157.81	2161.29	2163.73

Table :12 Hydel Power Stations

Gandhi Sagar: Capital Cost admitted by the Commission

Rs. Cr.

Sr. No.	Particular	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Gross Block	10.29	10.29	10.29	10.29
2	Gross addition during the year	0.00	0.00	0.00	0.00
3	Write-off value	0.00	0.00	0.00	0.00
4	Net addition during the year	0.00	0.00	0.00	0.00
5	Closing Gross Block	10.29	10.29	10.29	10.29

Pench: Capital Cost admitted by the Commission

Rs. Cr.

Sr. No.	Particular	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Gross Block	87.74	87.84	96.24	96.24
2	Gross addition during the year	0.10	8.40	0.00	0.00
3	Write-off value	0.00	0.00	0.00	0.00
4	Net addition during the year	0.10	8.40	0.00	0.00
5	Closing Gross Block	87.84	96.24	96.24	96.24

Rajghat: Capital Cost admitted by the Commission

Rs. Cr.

Sr. No.	Particular	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Gross Block	82.79	82.79	82.79	82.80
2	Gross addition during the year	0.00	0.00	0.01	0.00
3	Write-off value	0.00	0.00	0.00	0.00
4	Net addition during the year	0.00	0.00	0.01	0.00
5	Closing Gross Block	82.79	82.79	82.80	82.80

Bargi: Capital Cost admitted by the Commission

Rs. Cr.

Sr. No.	Particular	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Gross Block	86.99	86.99	86.99	87.03
2	Gross addition during the year	0.00	0.00	0.04	0.00
3	Write-off value	0.00	0.00	0.00	0.00
4	Net addition during the year	0.00	0.00	0.04	0.00
5	Closing Gross Block	86.99	86.99	87.03	87.03

Bansagar (I, II and III): Capital Cost admitted by the Commission

Rs. Cr.

Sr. No.	Particular	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Gross Block	1243.92	1243.92	1243.91	1243.91
2	Gross addition during the year	0.00	0.00	0.00	0.00
3	Write-off value	0.00	-0.011	0.00	0.00
4	Net addition during the year	0.00	-0.011	0.00	0.00
5	Closing Gross Block	1243.92	1243.91	1243.91	1243.91

Birsinghpur: Capital Cost admitted by the Commission

Rs. Cr.

Sr. No.	Particular	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Gross Block	52.15	52.15	52.15	52.15
2	Gross addition during the year	0.00	0.00	0.00	0.00
3	Write-off value	0.00	0.00	0.00	0.00
4	Net addition during the year	0.00	0.00	0.00	0.00
5	Closing Gross Block	52.15	52.15	52.15	52.15

2.31. The year-wise opening gross block and the closing gross block for all power stations considered in this true-up order and approved by the Commission is given below :

Table :13

Capital Cost admitted by the Commission

Rs. Cr.

Sr. No.	Particular	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Gross Block	4470.79	4481.18	4509.68	4541.85
2	Gross addition during the year For efficient and successful operation of generating station, but not included in original project cost Regulation (19)(f)	15.12	28.51	32.17	4.38
3	Write-off value	-4.73	-0.01	0.00	0.00
4	Net addition during the year	10.39	28.50	32.17	4.38
5	Closing Gross Block	4481.18	4509.68	4541.85	4546.23

(c) **Debt-Equity ratio**

2.32. Clause 20 of the Regulation, 2005 provides that,

“For the purpose of determination of tariff, debt-equity ratio as on the date of commercial operation in case of new generating station or capacity expansion shall be 70:30. The debt-equity amount arrived in accordance with this shall be used for calculation of interest on loan, return on equity, advance against depreciation and foreign exchange rate variation.

Where equity employed is in excess of 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. The interest rate applicable on the equity in excess of 30% treated as loan has been specified in regulation 22. Where actual equity employed is less than 30%, the actual equity shall be considered.”

2.33. The petitioner in its additional submission vide its letter No.860 dated 15th October, 2011 provided funding of asset addition in existing plants with break-up of year-wise loan and equity in Annexure-3 of that submission. Considering the year-wise addition of asset funding in each power station on account of additional capitalization, the additional loan and equity in each power station as filed by the petitioner for FY 2005-06 to FY 2008-09 is given as below :

Table :14 Funding of Asset Addition in Existing Plants under Commercial operation

In Rs.Crores

Particulars	FY 2005-06			FY 2006-07			FY 2007-08			FY 2008-09		
	Loan	Equity	Total	Loan	Equity	Total	Loan	Equity	Total	Loan	Equity	Total
1 ATPS	6.17	0.00	6.17	13.35	0.00	13.35	19.00	0.00	19.00	0.99	0.00	0.99
2 STPS	0.38	7.88	8.26	4.13	2.60	6.73	5.12	4.52	9.64	0.41	0.54	0.95
3 SGTPS	0.00	0.59	0.59	0.00	0.03	0.03	0.00	3.48	3.48	0.00	2.44	2.44
4 Malwa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 Total Thermal	6.55	8.47	15.02	17.48	2.63	20.11	24.12	8.00	32.12	1.40	2.98	4.38
6 Gandhi Sagar		0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00
7 R.P. Sagar		0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00
8 J Sagar		0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00
9 Pench		0.10	0.10		8.40	8.40		0.00	0.00		0.00	0.00
10 Rajghat		0.00	0.00		0.00	0.00		0.01	0.01		0.00	0.00
11 Bargi		0.00	0.00		0.00	0.00		0.04	0.04		0.00	0.00
12 Bansagar I,II&III		0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00
13 Madhikheda		0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00
14 Birsinghpur		0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00
15 Total Hydro	0.00	0.10	0.10	0.00	8.40	8.40	0.00	0.05	0.05	0.00	0.00	0.00
16 HQ		0.13	0.13		0.10	0.10		0.19	0.19		0.30	0.30
Total	6.55	8.70	15.25	17.48	11.13	28.61	24.12	8.24	32.36	1.40	3.28	4.68

2.34. The year-wise equity addition from the above table is mentioned below :

Table :15

Power Station		Equity amount in Rs. Cr.			
		FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
1	ATPS	0.00	0.00	0.00	0.00
2	STPS	7.88	2.60	4.52	0.54
3	SGTPS	0.59	0.03	3.48	2.44
4	Total Thermal	8.47	2.63	8.00	2.98
5	Gandhi Sagar	0.00	0.00	0.00	0.00
6	Pench	0.10	8.40	0.00	0.00
7	Rajghat	0.00	0.00	0.01	0.00
8	Bargi	0.00	0.00	0.04	0.00
9	Bansagar I,II&III	0.00	0.00	0.00	0.00
11	Birsinghpur	0.00	0.00	0.00	0.00
12	Total Hydro	0.10	8.40	0.05	0.00
Total		8.57	11.03	8.05	2.98

2.35. The petitioner on affidavit dated 15th October, 2011 mentioned that repayment on excess equity has not been considered because there is no actual repayment. The petitioner further submitted that the Regulation does not provide for repayment of normative loan. The equity in excess of normative equity has been worked out in succeeding chapter on Return on Equity and the interest on the excess equity has also been worked out as per provision under Clause 20 of the Tariff Regulations, 2005.

Interest and Finance charges :

Petitioner' submission

2.36. The petitioner has submitted that the opening balances of loan as on 1st April, 2008 is based on the Audited Accounts of FY 2008-09 and the lender-wise amount of interest for FY 2008-09 based on Audited Balance Sheet of MPPGCL is given as below :

Table :16 Loan-wise details of receipt, repayment and interest in FY 2008-09
Rs. Cr.

S. No.	Particulars	Opening balance	Principal Receipts	Principal Repayment due	Closing balance	Interest Amt.
1	PFC	146.88	11.46	68.28	90.06	18.83
2	REC	265.37	-	38.92	226.4	20.93
3	LIC	371.66	-	35.17	336.4	28.86
5	GoMP	9.39	-	2.94	6.45	2.47
Total		793.3	11.46	145.31	659.4	71.09

2.37. The petitioner has mentioned that the various loan liabilities transferred to MPPGCL vide GoMP notification dated 12th June, 2008 have been linked with various power stations considering adequacy of balance depreciation and repayment in accordance with the directives of the Commission.

2.38. The petitioner in its additional submission dated 15th October, 2011 filed the power station wise details of loan utilised in new assets added during FY 2005-06 to FY 2008-09 as given below :

Table :17

Particulars		Loan in new assets (Rs. Cr.)			
		FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
1	ATPS	6.17	13.35	19.00	0.99
2	STPS	0.38	4.13	5.12	0.41
3	SGTPS	0.00	0.00	0.00	0.00
4	Total Thermal	6.55	17.48	24.12	1.40
5	Total Hydro	0.00	0.00	0.00	0.00
Total		6.55	17.48	24.12	1.40

2.39. The loan in new assets as shown above is considered by the petitioner in the figures filed at **Para 2.36** above.

2.40. The power station-wise actual interest charges claimed by the petitioner vis-a-vis allowed in MYT order for FY 2008-09 are given below :

Table :18 **Rs. Cr.**

S. No.	Stations	MPPGCL Actual	MPERC Approved	Diff.
1	ATPS Chachai	5.42	0.61	4.81
2	STPS Total	4.73	0.69	4.04
3	SGTPS Total	34.74	35.47	-0.73
4	Total Thermal	44.89	36.77	8.12
5	Rajghat	0.23	0.19	0.04
6	Bansagar	25.97	4.47	21.5
7	Total Hydro	26.2	4.66	21.54
	Total	71.09	41.43	29.66

Provisions in the Regulation

2.41. Clause 22 of Regulation provides that,

“Interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the schedule of repayment, as per the terms and conditions of relevant agreements of loan, bond or debenture, ordinarily restricted to prevailing rates of PFC / REC Term Lending Rate or the rates specified by the CERC from time to time. Exception can be made for the existing or past loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable generation projects. The interest rate on the amount of equity in excess of 30% treated as loan shall be the weighted average rate of the loan schemes of the generating company.

Provided that all loans considered for this purpose shall be identified with the assets created.

Provided that interest and finance charges of renegotiated loan agreements shall not be considered should they result in higher charges.

Provided that interest and finance charges on works in progress shall be excluded and considered as part of the capital cost.

Interest charges on security deposits, if any, with a generating company shall be considered at the rate specified by the Commission from time to time.

In case any moratorium period is availed of, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

The generating company shall make every effort to swap the loan as long as it results in net benefit to the beneficiary. The cost associated with such swapping shall be borne by the beneficiary and any benefit on account of swapping of loan and interest on loan shall be passed on to the beneficiary in such ratio as may be decided by the Commission.”

Commission’s Analysis

- 2.42. The Commission in true-up order for FY 2007-08 had worked out power station-wise loan balances as on 1st June, 2005 considering the impact of final opening balance sheet. The lender-wise details of loan balances as on 1st June, 2005 worked out in the last true-up order for FY 2007-08 are given below :

Table :19
Lender-wise loan balances as on 1st June 2005 (Rs. Cr.)

Sr. No.	Loan Agency	As per final opening balance sheet
1	PFC	332.62
2	LIC	371.66
3	REC	334.20
4	CSS	0.40
5	GoMP	3.40
Total		1042.28

- 2.43. The Commission had considered total loan amount as on 1st June, 2005 of Rs.1042.28 crores for existing power stations after considering the impact of final opening balance sheet. In the above-mentioned true-up order, the Commission had also mentioned the linkage of above opening balances of loan with the existing power stations as given below :

Table :20

Power Station wise and lender-wise details as on 1st June, 2005 Rs. Cr.						
Power Station	PFC	LIC	REC	GoMP	CSS	Total
ATPS	11.74	-	-	-	-	11.74
STPS	11.69	-	-	3.40	0.40	15.49
SGTPS	208.71	371.66	-	-	-	580.37
Bansagar	95.49	-	334.20	-	-	429.69
Rajghat	4.99	-	-	-	-	4.99
Total	332.62	371.66	334.20	3.40	0.40	1042.28

- 2.44. While going through the subject petition, the Commission vide letter dated 14th September, 2011 asked the petitioner to file the break-up of interest on loan separately for existing assets as well as assets added during FY 2005-06 to FY 2008-09 as additional

capitalization as per Regulation, 2005. The petitioner was also asked to submit following details regarding loan for existing power stations and CWIP separately.

- a. Lender-wise and power house wise loan details for each scheme clearly indicating opening balance and closing balance of principal amount for the year.
- b. Lender-wise and power house wise details of scheduled and actual repayments made during the year for each scheme and loan amount receipt during the year.
- c. Lender-wise and power house wise details of scheduled interest amount due and actual interest amount paid during the year.
- d. Interest on interest due amount and penal interest details and the treatment given to these in accounts.
- e. Capitalized detail in heads of expenditure upto the date of commercial operation and as on date.

2.45. The petitioner on affidavit dated 15th October, 2011 submitted above-mentioned details along with opening loan balances of loan for existing power station and loan amount utilized for additional capitalization. The details of the loan utilized in need based additional capitalization as submitted by the petitioner is given below :

Table :21

Rs. Cr.

Particulars	FY 2005-06		FY 2006-07		FY 2007-08		FY 2008-09	
	Loan	Total addition	Loan	Total addition	Loan	Total addition	Loan	Total addition
1 ATPS	6.17	6.17	13.35	13.35	19.00	19.00	0.99	0.99
2 STPS	0.38	8.26	4.13	6.73	5.12	9.64	0.41	0.95
3 SGTSPS	0.00	0.59	0.00	0.03	0.00	3.48	0.00	2.44
4 Total Thermal	6.55	15.02	17.48	20.11	24.12	32.12	1.40	4.38
5 Gandhi Sagar		0.00		0.00		0.00		0.00
6 Pench		0.10		8.40		0.00		0.00
7 Rajghat		0.00		0.00		0.01		0.00
8 Bargi		0.00		0.00		0.04		0.00
9 Bansagar I,II&III		0.00		0.00		0.00		0.00
10 Birsinghpur		0.00		0.00		0.00		0.00
11 Total Hydro	0.00	0.10	0.00	8.40	0.00	0.05	0.00	0.00
Total	6.55	15.25	17.48	28.61	24.12	32.36	1.40	4.68

2.46. On further scrutiny of the response filed by the petitioner, the Commission sought some more details in respect of funding agency along with their terms and conditions for each loan utilized for additional capitalization works. The petitioner in its response dated 3rd December, 2011 filed the loan details as given below :

“Power Finance Corporation was the funding agency for main part of Additional Capitalization claimed under True up Petition. With the approval of the Board (erstwhile MPSEB) two loan agreements were executed with PFC as per details given below:-

- a) Loan No. 20104020 amounting to Rs.20 Crores for R&M Scheme of Satpura Thermal Power Station. A copy of the Resolution passed by the MPSEB on 9.5.2003, along with Memorandum of Agreement dated 27.05.2003 in this context is annexed as Annexure-1.
- b) Loan No.20104021 amounting to Rs.99 crores for R&M scheme of ATPS, PH-2 (2x120 MW). Copy of Memorandum of Association dated 19.07.2004 is annexed as Annexure 2.”

2.47. In view of the above, the Commission observed that the loan was funded from PFC and utilized for additional capitalization works by MPPGCL. The petitioner has filed the copies of MoAs between PFC and MPSEB for loan Nos.20104020 and 20104021 executed on 27th May, 2003 and 19th July, 2004 for loan amount of Rs.20 crores and Rs.99 crores respectively. It is seen from the MoAs that the first loan was taken for execution of R&M works at STPS while the later was taken for R&M at ATPS, Phase-2 (2x120MW). The additional capitalization works which were submitted by the petitioner are predominantly related to these two thermal power stations. It is captured in the MoAs that erstwhile MPSEB passed resolutions dated 9th May, 2003 and 23rd June, 2004 wherein it was agreed to accept the said loans on the terms and conditions of the loans. The petitioner has also filed some relevant correspondences from erstwhile MPSEB and PFC along with terms and conditions of afore-mentioned loans.

PFC Loans

2.48. The Commission in the last true-up order dated 24th January, 2011 had worked out the schedule repayment and opening balances for each PFC loan scheme as on 1st June, 2005, after considering the impact of final opening balance sheet are as given below:

Table :22

Sr. No.	Loan No.	Power Station	Amount of instalment Rs. Cr.	Total No. of instalments	No. of instalment due before June, 2005	Balance loan (as per Sch. Repayment) as on 1 st June, 2005 Rs. Cr.
1	20101008	SGTPS 1&2	1.5	20	15	7.42
2	20101009	SGTPS 1&2	2.25	20	13	15.64
3	20101010	SGTPS 3&4	18.66	20	10	185.65
4	20102006	Rajghat	0.28	40	21	4.99
5	20104008	R&M STPS	0.23	20	19	0.00
6	20104010	R&M ATPS	0.24	20	19	0.00
7	20104012	R&M ATPS	0.11	20	11	0.89
8	20104014	R&M STPS	1.31	20	10	11.69
9	20104018	R&M ATPS-II	0.42	40	13	10.84
10	20102004	Bansagar Tons	2.3	40	22	38.70
11	20102005	Bansagar II&III	2.28	40	14	56.79
Total						332.62

- 2.49. Since there was no further drawal in above-mentioned PFC schemes during FY 2005-06 to FY 2007-08 therefore, the Commission determined the loan balances in above schemes by considering the scheduled repayment as per terms and conditions of each scheme as given below:

Table :23
PFC scheme-wise loan balances considering change due to final Opening balance sheet
Rs. Cr.

Power Station	Loan No.	Balance loan as on 1 st June, 2005 Rs. Cr.	Balance loan as on 1 st April, 2006 Rs. Cr.	Balance loan as on 1 st April, 2007 Rs. Cr.	Balance loan as on 1 st April, 2008 Rs. Cr.
SGTPS 1&2	20101008	7.42	4.42	1.42	0.00
SGTPS 1&2	20101009	15.64	11.14	6.64	2.14
SGTPS 3&4	20101010	185.65	148.33	111.01	73.69
Rajghat	20102006	4.99	3.88	2.76	1.64
R&M STPS	20104008	0.00	0.00	0.00	0.00
R&M ATPS	20104010	0.00	0.00	0.00	0.00
R&M ATPS	20104012	0.89	0.67	0.44	0.22
R&M STPS	20104014	11.69	9.08	6.47	3.85
R&M ATPS-II	20104018	10.84	9.17	7.49	5.82
Bansagar Tons	20102004	38.70	29.50	20.30	11.10
Bansagar II&III	20102005	56.79	47.66	38.52	29.39
Total		332.62	263.84	195.06	127.85

- 2.50. It is mentioned that while determining the interest on PFC loan, the Commission has considered only those power stations which were covered in MYT order issued on 7th March, 2006. The Commission has not considered loan of any new generating unit for which the provisional tariff orders were issued by the Commission subsequently.
- 2.51. The interest on above-mentioned PFC loan schemes allowed by the Commission in last true-up order for FY 2007-08 are reproduced below :

Table:24 Interest amount on PFC loan (Rs. Cr.)

Year	Opening Balance	Sch. Repayment	Closing Balance	Average loan amount	Applicable interest rate	Interest amount
	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)	(%)	(Rs. Cr.)
FY 2005-06 (10-months)	332.62	68.78	263.84	298.23	6.78	16.85
FY 2006-07	263.84	68.78	195.06	229.45	7.41	17.00
FY 2007-08	195.06	67.20	127.85	161.46	8.50	13.72
Total						47.58

Table:25 Power Station-wise interest allowed on PFC loan (Rs. Cr.)

Power Station	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	Total interest
ATPS	0.61	0.66	0.59	1.86
STPS	0.59	0.58	0.44	1.60
SGTPS	10.53	10.48	8.28	29.29
Bansagar	4.88	5.04	4.22	14.14
Rajghat	0.25	0.25	0.19	0.68
Total	16.85	17.00	13.72	47.58

- 2.52. In the last true-up order, the Commission had also allowed the interest on EMI worked out after restructuring and rescheduling the PFC loan. The power station-wise details of interest on PFC loan including interest on EMI as allowed by the Commission is given below:

Table:26 Interest allowed on PFC loan including interest on principal of EMI (Rs. Cr.)

Power Station	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	Total interest
ATPS	0.63	0.68	0.60	1.91
STPS	0.66	0.71	0.49	1.86
SGTPS	10.87	11.08	8.53	30.48
Bansagar	4.91	5.10	4.24	14.25
Rajghat	0.32	0.38	0.24	0.94
Total	17.39	17.94	14.11	49.44

- 2.53. Since there is no further drawal in aforementioned PFC schemes at **Para 2.49** for additional capitalization therefore, the interest amount on PFC loan from FY 2005-06 to FY 2007-08 for above schemes remains same as allowed in true-up order for FY 2007-08. The interest on above PFC loan (for FY 2008-09) is determined by the Commission considering the scheduled repayment as considered in last true-up order and weighted average rate of interest as filed by the petitioner for FY 2008-09 as follows:

Table:27 Interest amount on PFC loan for FY 2008-09 (Rs. Cr.)

Opening Balance as on 1 st April, 2008	Annual Scheduled Repayment	Closing Balance as on 31 st March, 2009	Average loan for FY 2008-09	Applicable Interest rate as filed	Interest amount
Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs. Cr.	%	Rs. Cr.
127.85	63.41	64.44	96.15	10.97	10.55

Table:28 Power Station-wise interest allowed on PFC loan for FY 2008-09 (Rs. Cr.)

Sr. No.	Power Station	FY 2008-09
1	ATPS	0.56
2	STPS	0.28
3	SGTPS	6.15
4	Bansagar	3.44
5	Rajghat	0.12
Total		10.55

R&R Korba PFC loan

- 2.54. The petitioner filed the interest amount on R&R Korba loan transferred by GoMP, in earlier true-up petitions for FY 2006-07 and FY 2007-08. The petitioner linked this loan with STPS, Sarni. The Commission disallowed the interest on this loan in true up order for FY 2006-07 with the reason that the principal amount was not recorded in the audited accounts for FY 2006-07. The Commission also disallowed the interest on R&R Korba loan in true-up order for FY 2007-08 with the reasons recorded in **Para 2.52 to 2.55** of the last true-up order.
- 2.55. While processing the subject petition, the Commission sought following clarifications from the petitioner in support of their claim for R&R Korba loan :
- Whether the interest filed in the petition included the interest on R&R Korba loan.*
 - Whether the full principal amount of R&R Korba loan recognized in the audited accounts for FY2008-09.*
 - Whether the petitioner has any schedule of repayment for this loan.*
 - Whether any actual repayment has been made against R&R Korba loan.*
- 2.56. The petitioner vide letter dated 15th October, 2011 filed the clarification on the issues raised by the Commission as given below :
- The interest filed in the petition included the interest on R&R Korba loan.*

- b. The R&R Korba loan transferred to MPPGCL vide Final Opening Balance Sheet notification dated 12.06.2008 has been recognized in the audited accounts for FY2008-09. However, its final reconciliation with PFC could be done on October 2010 during which Additional liability of Rs. 5.25 Crs. has been transferred to MPPGCL.
- c. The repayment schedule and loan agreement of R&R Korba loan is annexed as Annexure-12.
- d. The actual repayment made against R&R Korba loan is detailed in Annexure 10.

2.57. On further scrutiny of the details filed by the petitioner, the Commission observed that the principal amount of R&R Korba loan has now been taken in the audited accounts of FY 2008-09 and final reconciliation with the PFC has also been done. The petitioner also submitted the terms and conditions and repayment schedule for R& R Korba loan. The Commission has observed that there are two loan schemes ((Loan No. 20104016 & 20104017) sanctioned in October, 1999. The R&R Korba loan was transferred to MPPGCL through final opening balance sheet dated 12th June, 2008. The opening balances of Korba loan worked out as per repayment schedule filed by the petitioner in Annexure-12 with its letter dated 15th October, 2011 as given below :

Table :29

Power Station	Loan No.	Balance loan as on 1 st June, 2005 Rs. Cr.	Balance loan as on 1 st April, 2006 Rs. Cr.	Balance loan as on 1 st April, 2007 Rs. Cr.	Balance loan as on 1st April, 2008 Rs. Cr.
STPS	20104016	11.04	9.72	7.95	6.18
STPS	20104017	6.15	5.41	4.43	3.45
Total		17.19	15.13	12.38	9.63

2.58. Considering above, the interest on R&R Korba loan for FY 2005-06 to FY 2008-09 is determined by taking the weighted average rate of interest as filed by the petitioner as follows :

Table :30

PFC R&R Korba Loan Total: Linked with STPS, Sarni (Rs. Cr.)

Financial Year	As admitted by the Commission				Applicable Interest rate as filed (%)	Interest amount
	Opening Balance	Annual Sch. Repayment	Closing Balance	Average loan		
FY 2005-06 (10-Months)	17.19	2.06	15.13	16.16	6.78	0.91
FY 2006-07	15.13	2.75	12.38	13.75	7.41	1.02
FY 2007-08	12.38	2.75	9.63	11.01	8.50	0.94
FY 2008-09	9.63	2.75	6.88	8.26	10.97	0.91
Total						3.78

PFC Loan for need based R&M

2.59. The petitioner has submitted that two loans (No. 20104020 & 20104021) has been taken from PFC for need based R&M work in STPS and ATPS. The petitioner has filed the document of terms and conditions for both the loans. On further scrutiny of the loan documents, it is observed that the dates of repayment start for loan No.20104020 is 15th October, 2005 and for loan No.20104021 is 15th October, 2006 as given below :

Table :31

PFC Loan utilized in additional capitalization:				
Loan No.	Repayment Commencement	Periodicity of repayment	No. of Instalments	Power Station
20104020	15-Oct.-05	Quarterly	40	STPS
20104021	15-Oct.-06	Quarterly	40	ATPS

2.60. The petitioner vide letter dated 10th January, 2012 has submitted the PFC statement for these two loans which indicates the date of repayment for loan No.20104020 as 15th October, 2005 as per loan agreement but for loan No.20104021, the date of starting of repayment is shown as 15th July, 2010. The petitioner vide its letter dated 3rd December, 2011 filed the scheme-wise loan details which shows that no repayment made by the petitioner during FY 2008-09 against loan No.20104021 and only interest amount is paid by the petitioner in respect of this PFC loan.

2.61. The details captured from PFC statement in respect of these two loans utilized for need based R&M work is given as below :

Table :32

Rs. Cr.

Particular	Loan No.20104020 for STPS, Sarni			
	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
Opening balance	4.33	4.47	7.84	6.97
Disbursement	0.38	4.13	0.10	0.41
Repayment	0.24	0.76	0.97	1.01
Closing balance	4.47	7.84	6.97	6.37

Particular	Loan No. 20104021 for ATPS, Chachai			
	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
Opening balance	1.47	3.84	35.55	44.39
Disbursement	2.37	31.71	8.84	11.05
Repayment	0.00	0.00	0.00	0.00
Closing balance	3.84	35.55	44.39	55.44

- 2.62. In view of the above, the Commission finds no basis to work out the interest of loan No.20104021 utilized for need based R&M work of ATPS, Chachai. The interest on this loan may be considered only after commencement of the repayment.
- 2.63. The interest on loan No.20104020 utilized for need based R&M work of STPS, Sarni is worked out by considering the year-wise actual disbursement and scheduled repayment as per PFC statement and weighted average rate of interest submitted by the petitioner as follows :

Table :33 **Rs. Cr.**

Particular	Loan No.20104020 for STPS, Sarni			
	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
Opening balance	4.33	4.47	7.84	6.97
Disbursement during the year	0.38	4.13	0.10	0.41
Repayment	0.24	0.76	0.97	1.01
Closing balance	4.47	7.84	6.97	6.37
Average loan	4.40	6.16	7.41	6.67
Wt. average PFC interest rate (%)	6.78	7.41	8.50	10.97
Interest amount	0.25	0.46	0.63	0.73

- 2.64. Year-wise and power station-wise interest allowed on total PFC loan considering the impact of additional capitalization and R&R Korba loan is given below :

Table :34 **Rs. Cr.**

Interest on PFC Loan

Power Station	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
ATPS	0.61	0.66	0.59	0.56
STPS	1.75	2.06	2.01	1.92
SGTPS	10.53	10.48	8.28	6.15
Bansagar	4.88	5.04	4.22	3.44
Rajghat	0.25	0.25	0.19	0.12
Total	18.02	18.49	15.29	12.19

- 2.65. Hence, the Commission has allowed the amount of **Rs.12.19 crores** for FY 2008-09 against the interest on PFC Loan. The Commission has also revised the interest on PFC loan for FY 2005-06 to FY 2007-08 as above by considering the impact of additional capitalization and R&R Korba loan.

REC Loan

- 2.66. The Commission in the last true-up order for FY 2007-08 work out the opening balance of REC loan as on 1st June, 2005 based on the final opening balance sheet as Rs.334.20

crores. Full amount of REC loan linked with the Bansagar hydro power station. While calculating the interest on REC loan, the Commission has considered the scheduled repayment as per terms and conditions of the loan and opening loan balances as per final opening balance sheet notified by the GoMP on 12th June, 2008. Accordingly, the interest amount on REC loan from FY 2005-06 to FY 2007-08 considering the impact of the final opening balance sheet determined by the Commission in the true-up order for FY 2007-08 is reproduced below:

Table:35 Interest amount on REC loan (Rs. Cr.)

Year	Opening Balance	Sch. Repayment	Closing Balance	Average loan amount	Applicable interest rate (%)	Interest amount
FY 2005-06 (10-months)	334.20	30.37	303.83	319.02	8.50	22.60
FY 2006-07	303.83	30.36	273.47	288.65	8.50	24.54
FY 2007-08	273.47	30.36	243.11	258.29	8.50	21.95
Total						69.09

- 2.67. Since there is no further drawal of REC loan for additional capitalization therefore, the interest amount on REC loan from FY 2005-06 to FY 2007-08 remains the same as allowed in true-up order for FY 2007-08. Interest on REC loan for FY 2008-09 is determined by the Commission considering the scheduled repayment as considered in last true-up order and weighted average rate of interest as filed by the petitioner for FY 2008-09 as follows:

Table:36 Interest amount on REC loan for FY2008-09 (Rs. Cr.)

Opening Balance as on 1 st April, 2008	Annual Scheduled Repayment	Closing Balance as on 31 st March, 2009	Average loan for FY08-09	Applicable Interest rate as filed	Interest amount
Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs. Cr.	%	Rs. Cr.
243.11	30.36	212.75	227.93	8.50	19.37

- 2.68. Hence, the Commission has allowed an amount of **Rs.19.37 crores** for FY 2008-09 against the interest on REC Loan.

LIC Loan

- 2.69. The Commission in the last true-up order for FY 2007-08 worked out the opening balance of LIC loan as on 1st June, 2005 based on the final opening balance sheet as Rs.371.66 crores. Full amount of LIC loan linked with SGTPS, Birsinghpur. While calculating the interest on LIC loan, the Commission had considered the scheduled repayment as per terms and conditions of the loan. Since the LIC loan was restructured for 10 years at lower interest rate therefore, the Commission had taken the repayment without considering any moratorium. Accordingly, the interest amount on LIC loan from FY 2005-06 to FY 2007-08 considering the impact of the final opening balance sheet determined by the Commission in the true-up order for FY 2007-08 is reproduced below:

Table:37 Interest amount on LIC loan (Rs. Cr.)

Year	Opening Balance	Sch. Repayment	Closing Balance	Average loan amount	Applicable interest rate	Interest amount
FY 2005-06 (10-months)	371.66	37.10	334.56	353.11	9.00	26.48
FY 2006-07	334.56	37.10	297.46	316.01	9.00	28.44
FY 2007-08	297.46	37.10	260.36	278.91	9.00	25.10
Total						80.03

2.70. Since there is no further drawal of LIC loan for additional capitalization therefore, the interest amount on LIC loan from FY 2005-06 to FY 2007-08 remain the same as allowed in true-up order for FY 2007-08. Interest on LIC loan for FY 2008-09 is determined by the Commission considering the scheduled repayment as considered in last true-up order and weighted average rate of interest as filed by the petitioner for FY 2008-09 as given below :

Table:38 Interest amount on LIC loan for FY 2008-09 (Rs. Cr.)

Opening Balance as on 1 st April, 2008	Annual Scheduled Repayment	Closing Balance as on 31 st March, 2009	Average loan for FY08-09	Applicable Interest rate as filed	Interest amount
Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs. Cr.	%	Rs. Cr.
260.36	37.10	223.26	241.81	9.20	22.25

2.71. Hence, the Commission has allowed the amount of **Rs.22.25 crores** for FY 2008-09 against the interest on LIC Loan.

GoMP Loan

2.72. The petitioner has filed the interest on GoMP loan as Rs.2.47 Cr. FY 2008-09, transferred to MPPGCL through final opening balance sheet notified on 12th June, 2008. The petitioner had linked the GoMP loan with the STPS, Sarni and taken in its annual audited accounts of FY 2007-08. The Commission has observed that the GoMP loan was not the part of provisional opening balance sheet notified by the Govt. of Madhya Pradesh as on 31st May, 2005. This GoMP loan is recognized in the final opening balance sheet notified by GoMp on 12th June, 2008. The petitioner has taken the amount of GoMP loan in its audited accounts for FY 2007-08.

2.73. The Commission while issuing the true-up order for FY 2007-08 had disallowed the interest on GoMP loan with the contention that neither the principal amount nor interest actually paid by the Company as per their audited accounts for FY 2007-08.

2.74. The details of the GoMP loan as per audited accounts of FY 2007-08 and FY 2008-09 is given below:

Table :39 **Amount in Rs. Cr.**

Sr. No.	Particular	As per FY 2007-08 BS	As per FY 2008-09 BS
1	Opening balance	3.40	9.39
2	Principal over Due	0.00	8.38
3	Interest over Due	0.00	3.32
4	Amount received during the year	11.41	0.00
5	Principal due at the beginning of the year	2.96	2.94
6	Total Payment due during the year	5.42	5.42
7	Principal re-payment made during the year	0.00	0.00
8	Outstanding at the end of the year	9.39	11.33
9	Interest due during the year	3.32	2.47
10	Interest actually paid during the year	0.00	0.01

2.75. From the above details of the audited accounts, it may be seen that the principal amount has not been paid by the Company during FY 2007-08 and FY 2008-09. The petitioner has paid only Rs.1.00 lac during FY 2008-09 against interest charges. It is further observed that the amount of Rs.3.40 crores is transferred through final opening balance sheet and same has been linked by the petitioner with STPS, Sarni. The amount received during the year FY 2007-08 is Rs.11.41 crores that has further been linked with Sarni, Bansagar-IV and Madhikheda power stations.

2.76. Clause 2.15 of the Tariff Regulation, 2005 provides that,

“Interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the schedule of repayment, as per the terms and conditions of relevant agreements of loan, bond or debenture, ordinarily restricted to prevailing rates of PFC / REC Term Lending Rate or the rates specified by the CERC from time to time.....”.

2.77. In view of the afore-mentioned provision, the interest charges on loan is to be determined by considering the scheduled repayments of loan. The Commission vide letter dated 14th September, 2011 asked the petitioner to submit the following details in support of GoMP loan :

- a. Terms and conditions of the loan with supporting documents.
- b. Power stations from which GoMP loan linked by the petitioner.
- c. Opening and closing balance of the loan.
- d. Repayment schedule of the loan as per Terms & Conditions of loan.
- e. Details of actual repayment made during the year and also in past years as per audited accounts.
- f. Details of schedule interest amount due and interest actually paid during the year.

2.78. The petitioner vide its letter dated 15th October, 2011 submitted the following;

- a. Terms & conditions of the loan with supporting document are annexed as Annexure 7.
- b. The details of GoMP loan linking the power stations are annexed as Annexure 10.
- c. Opening and Closing balance of the GoMP loan is indicated in Annexure 10.
- d. Repayment schedule of the GoMP loan is indicated in Annexure 7.
- e. Actual repayment made during the year FY 2008-09 and during the past years as per audited accounts is indicated in Annexure 8.
- f. Details of schedule interest amount due and interest actually paid during the year is annexed as Annexure 8.

2.79. While going through the afore-mentioned provision of the Regulation and petitioner's submission, the Commission has now determined the interest on GoMP loan considering schedule repayments at par with all other loans and interest rate as filed in the petition as given below :

Table :40

Particular	GoMP Loan: Rs. Cr.	
	FY 2007-08	FY 2008-09
Opening balance	3.40	3.06
Sch. Repayment	0.34	0.34
Closing Balance	3.06	2.72
Average Loan	3.23	2.89
Interest Rate (%)	12.39	12.39
Interest amount	0.40	0.36

2.80. Based on above, the total interest amount on all loans allowed in this true-up order is given below :

Table :41

Total interest including interest on excess equity allowed in this true-up order Rs. Cr.

Sr. No.	Power Station	Interest and finance charges allowed in this true up order including interest on principle of EMI				
		FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09	Total
1	ATPS Chachai	0.64	0.68	0.60	0.56	2.48
2	STPS	1.83	2.19	2.46	2.28	8.76
3	SGTPS	40.82	42.22	35.75	30.25	149.04
4	Gandhi Sagar	0.00	0.00	0.00	0.00	0.00
5	Pench	0.00	0.22	0.43	0.47	1.13
6	Rajghat	0.43	0.47	0.31	0.16	1.38
7	Bargi	0.00	0.00	0.00	0.00	0.00
8	Bansagar	30.58	32.36	28.56	25.16	116.66
9	Birsinghpur	0.00	0.00	0.00	0.00	0.00
Total		74.31	78.14	68.11	58.88	279.44

2.81. Year-wise interest and finance charges including interest on excess equity for FY 2005-06 to FY 2007-08 already allowed in last true-up order for FY 2007-08 and for FY 2008-09 in MYT order dated 7th March, 2006 is reproduced below :

Table :42

Year-wise Interest and finance charges (including interest on excess equity)

Sr. No.	Power Station	Interest and finance charges already allowed in true up/tariff order (Rs. Cr.)			
		FY 2005-06	FY	FY	FY
		(10-months)	2006-07	2007-08	2008-09
1	ATPS Chachai	0.64	0.68	0.60	0.61
2	STPS Total	0.70	0.71	0.49	0.69
3	SGTPS Total	40.81	42.19	35.61	35.47
4	Pench	0.00	0.00	0.00	0.00
5	Rajghat	0.43	0.47	0.31	0.19
6	Bansagar	30.58	32.34	28.57	4.47
Total		73.15	76.39	65.58	41.43

2.82. Based on the above two tables, the true-up amount for interest and finance charges to be allowed in this order is given below :

Table :43

Year-wise balance Interest and finance charges allowed in this true-up order (including interest on excess equity)

Sr. No.	Power Station	Interest and finance charges true-up amount allowed in this order (Rs. Cr.)			
		FY 2005-06	FY	FY	FY
		(10-months)	2006-07	2007-08	2008-09
1	ATPS Chachai	0.00	0.00	0.00	-0.05
2	STPS Total	1.13	1.48	1.97	1.59
3	SGTPS Total	0.01	0.03	0.14	-5.22
4	Pench	0.00	0.22	0.43	0.47
5	Rajghat	0.00	0.00	0.00	-0.03
6	Bansagar	0.00	0.02	-0.01	20.69
Total		1.15	1.75	2.53	17.45

Return on Equity :

Petitioner's Submission

2.83. The petitioner has submitted that the equity provided by GoMP in its notification dated 12.06.2008 has been allocated by MPPGCL in the ratio of their station-wise gross block of assets and accordingly the permissible equity for RoE and excess equity as on 01.04.2008 elaborated in the petition is filed as per table below :

Table :44

Rs. Cr.

	Particulars	Opening 01.04.08	Actual Equity in Running Projects 01.04.08	Permissible Equity 30%	Equity Admissible for Return	Excess Equity treated as Loan
1	ATPS	182.63	49.4	54.79	49.4	0.00
2	STPS	630.24	222.63	189.07	189.07	33.56
3	SGTPS	2161.29	743.67	648.39	648.39	95.28
4	Total Thermal	2974.16	1015.7	892.25	886.86	128.84
5	Gandhi Sagar	10.29	3.53	3.09	3.09	0.44
6	R.P. Sagar	18.86	6.47	5.66	5.66	0.81
7	J Sagar	16.56	5.68	4.97	4.97	0.71
8	Pench	96.24	38.58	28.87	28.87	9.71
9	Rajghat	82.80	28.39	24.84	24.84	3.55
10	Bargi	87.03	29.86	26.11	26.11	3.75
11	Bansagar(I,II&III)	1243.92	426.46	373.18	373.18	53.28
12	Birsinghpur	52.15	17.88	15.64	15.64	2.24
13	Total Hydro	1607.85	556.85	482.35	482.35	74.5
14	HQ	0.42	0.42	0.13	0.13	0.29
	Total	4582.43	1572.97	1374.73	1369.34	203.63

2.84. The petitioner in Table 4.6.3 of the petition has claimed 10.50% weighted average rate of interest on loans of MPPGCL as on 01.04.2008 for the purpose of claiming return on equity.

2.85. The petitioner submitted that the Commission has permitted Return on Equity in the MYT Order to Rs.129.11 Crores and against the same the actual Return on Equity for FY09 amounts to Rs.211.64 Crores. The equity allocated to HQ is nominal and as such has been linked to nearest power station i.e. Bargi HPS for simplicity. Considering the same, the true-up on account of Return on Equity for the existing stations is claimed as Rs.82.53 Crores.

Provisions of the Regulation

2.86. Clause 21 of the Regulations provides that,

“Return on equity shall be computed on the paid up equity capital determined in accordance with regulation 20 and shall be computed at 14% (post tax) per annum unless the Commission allows a lower level for reasons to be recorded.

Provided that return on equity invested in work in progress shall be allowed from the date of commercial operation.

The premium raised by the generating company while issuing share capital and investment of internal resources created out of free reserves, if any, shall also be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting capital expenditure and forms part of the approved financial package. For the purposes of computation of return, the portion of free reserves utilized for meeting the capital expenditure shall be considered from the date the asset created is productively deployed in the generating business.

Equity invested in foreign currency shall be allowed a return up to the prescribed limit in the same currency and the computation on this account for the ensuing year shall be made in Indian Rupees based on the exchange rate prevailing on first day of March of the current year.”

Commission's Analysis

2.87. The Commission in the last true-up order for FY 2007-08 had determined power station-wise equity amount as on 1st June, 2005 as per procedure prescribed in the order. In **Para 2.103** of the true-up order for FY 2007-08, the equity reallocated to various projects on the basis of opening gross block as per final opening balance sheet is given as below :

Table :45 Allocation of Equity as on 1st June, 2005 (Amount in Cr. Rs.)

	Power Station	Opening Gross Block as per final opening balance Sheet (excluding inter state projects)	% of total Gross Block	Equity as per final opening balance sheet	Normative equity for ROE (30% of the GB)	Excess equity treated as normative loan
1	ATPS	144.11	3.20	49.41	43.23	6.18
2	STPS	605.61	13.44	207.64	181.68	25.95
3	SGTPS	2157.19	47.87	739.60	647.16	92.44
5	Total Thermal	2906.91	64.51	996.65	872.07	124.57
6	Gandhi Sagar	10.29	0.23	3.53	3.09	0.44
7	Pench	87.74	1.95	30.08	26.32	3.76
8	Rajghat	82.79	1.84	28.38	24.84	3.55
9	Bargi	86.99	1.93	29.82	26.10	3.73
10	Bansagar	1243.92	27.60	426.48	373.18	53.31
11	Birsinghpur	52.15	1.16	17.88	15.65	2.23
12	Total Hydro	1563.88	34.70	536.18	469.16	67.02
	Total	4470.79	99.21	1532.83	1341.24	191.59

2.88. From the above table, the Commission observed that the total equity allocated to MPPGCL including inter-state power stations through final opening balance sheet for running power stations was in excess of normative by **Rs.191.59 crores**. The Commission considered the same allocation of power station-wise equity based on the percentage of its opening gross block.

- 2.89. In last true-up order for FY 2007-08, the Commission allowed the following return on equity for FY 2005-06 to FY 2007-08 based on the final opening balance sheet :

Table :46 **Rs. Cr.**

Sr. No.	Power Station	Return on Equity allowed @14%		
		FY 2005-06 (10-Months)	FY 2006-07	FY 2007-08
1	ATPS	5.04	6.05	6.05
2	STPS	21.20	25.44	25.44
3	SGTPS	75.50	90.60	90.60
4	Total Thermal	101.74	122.09	122.09
5	Gandhi Sagar	0.36	0.43	0.43
6	Pench	3.07	3.69	3.69
7	Rajghat	2.90	3.48	3.48
8	Bargi	3.04	3.65	3.65
9	Bansagar	43.54	52.24	52.24
10	Birsinghpur	1.83	2.19	2.19
11	Total Hydro	54.74	65.68	65.68
Total		156.48	187.77	187.77

- 2.90. The equity incurred in new assets /need based additional capital expenditure has also been considered by the Commission and approved in terms of sub-clause (f) of clause (2.9) of Regulation 19 of Regulations, 2005. The power station wise amount of equity invested in need based R&M/ additional capitalization has been mentioned in preceding paragraphs of this order.
- 2.91. Since the capital cost of various power stations in this true-up order would be revised on account of additional capitalization considered in this order therefore, the Commission has reworked the average equity for FY 2005-06 to FY 2008-09 considering additional capitalization.
- 2.92. The Commission has allowed the return on equity only up to normative equity amount (30% of the Gross Block) and balance amount of equity is considered as loan on which weighted average rate of interest is applied. The petitioner in table 4.6.3 of its petition has filed the applicable weighted average rate of interest on equity in excess of normative equity based on the actual loan portfolio.
- 2.93. The power station-wise details of revised return on equity allowed by the Commission for FY 2005-06, FY 2006-07, FY 2007-08 and FY 2008-09 based on the final opening balance sheet is given as below :

Table :47
ATPS PH I&II: **Rs. Cr.**

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Normative equity	43.23	43.23	43.23	43.23
2	Equity addition due to additional capitalization	0.00	0.00	0.00	0.00
3	Closing equity	43.23	43.23	43.23	43.23
4	Equity- average	43.23	43.23	43.23	43.23
5	Return on equity @ 14%	5.04	6.05	6.05	6.05
6	RoE allowed in last true-up/tariff order	5.04	6.05	6.05	4.20
7	True-up amount	0.00	0.00	0.00	1.85

STPS Complex: **Rs. Cr.**

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Normative equity	181.68	182.75	184.76	187.66
2	Equity addition due to additional capitalization	1.06	2.02	2.89	0.16
3	Closing equity	182.75	184.76	187.66	187.82
4	Equity- average	182.21	183.75	186.21	187.74
5	Return on equity @ 14%	21.26	25.73	26.07	26.28
6	RoE allowed in last true-up/tariff order	21.20	25.44	25.44	17.74
7	True-up amount	0.06	0.29	0.63	8.54

SGTPS PH I&II: **Rs. Cr.**

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Normative equity	647.16	647.33	647.34	648.39
2	Equity addition due to additional capitalization	0.18	0.01	1.04	0.73
3	Closing equity	647.33	647.34	648.39	649.12
4	Equity- average	647.25	647.34	647.87	648.75
5	Return on equity @ 14%	75.51	90.63	90.70	90.83
6	RoE allowed in last true-up/tariff order	75.50	90.60	90.60	61.82
7	True-up amount	0.01	0.03	0.10	29.01

Gandhi Sagar:

Rs. Cr.

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Normative equity	3.09	3.09	3.09	3.09
2	Equity addition due to additional capitalization	0.00	0.00	0.00	0.00
3	Closing equity	3.09	3.09	3.09	3.09
4	Equity- average	3.09	3.09	3.09	3.09
5	Return on equity @ 14%	0.36	0.43	0.43	0.43
6	RoE allowed in last true-up/tariff order	0.36	0.43	0.43	0.30
7	True-up amount	0.00	0.00	0.00	0.13

Pench:

Rs. Cr.

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Normative equity	26.32	26.35	28.87	28.87
2	Equity addition due to additional capitalization	0.03	2.52	0.00	0.00
3	Closing equity	26.35	28.87	28.87	28.87
4	Equity- average	26.34	27.61	28.87	28.87
5	Return on equity @ 14%	3.07	3.87	4.04	4.04
6	RoE allowed in last true-up/tariff order	3.07	3.69	3.69	2.56
7	True-up amount	0.00	0.18	0.35	1.48

Rajghat:

Rs. Cr.

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Normative equity	24.84	24.84	24.84	24.84
2	Equity addition due to additional capitalization	0.00	0.00	0.003	0.00
3	Closing equity	24.84	24.84	24.84	24.84
4	Equity- average	24.84	24.84	24.84	24.84
5	Return on equity @ 14%	2.90	3.48	3.48	3.48
6	RoE allowed in last true-up/tariff order	2.90	3.48	3.48	2.42
7	True-up amount	0.00	0.00	0.00	1.06

Bargi:

Rs. Cr.

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Normative equity	26.10	26.10	26.10	26.11
2	Equity addition due to additional capitalization	0.00	0.00	0.01	0.00
3	Closing equity	26.10	26.10	26.11	26.11
4	Equity- average	26.10	26.10	26.10	26.11
5	Return on equity @ 14%	3.04	3.65	3.65	3.66
6	RoE allowed in last true-up/tariff order	3.04	3.65	3.65	2.26
7	True-up amount	0.00	0.00	0.00	1.40

Bansagar I, II&III:

Rs. Cr.

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Normative equity	373.18	373.18	373.18	373.18
2	Equity addition due to additional capitalization	0.00	0.00	0.00	0.00
3	Closing equity	373.18	373.18	373.18	373.18
4	Equity- average	373.18	373.18	373.18	373.18
5	Return on equity @ 14%	43.54	52.24	52.24	52.24
6	RoE allowed in last true-up/tariff order	43.54	52.24	52.24	36.28
7	True-up amount	0.00	0.00	0.00	15.96

Birsinghpur hydel:

Rs. Cr.

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Normative equity	15.65	15.65	15.65	15.65
2	Equity addition due to additional capitalization	0.00	0.00	0.00	0.00
3	Closing equity	15.65	15.65	15.65	15.65
4	Equity- average	15.65	15.65	15.65	15.65
5	Return on equity @ 14%	1.83	2.19	2.19	2.19
6	RoE allowed in last true-up/tariff order	1.83	2.19	2.19	1.52
7	True-up amount	0.00	0.00	0.00	0.67

MPPGCL's Total		Rs. Cr.			
Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening Normative equity	1341.24	1342.51	1347.05	1351.01
2	Equity addition due to additional capitalization	1.27	4.55	3.95	0.89
3	Closing equity	1342.51	1347.05	1351.01	1351.90
4	Equity- average	1341.87	1344.78	1349.03	1351.45
5	Return on equity @ 14%	156.55	188.27	188.86	189.20
6	RoE allowed in last true-up/tariff order	156.48	187.77	187.77	129.10
7	True-up amount	0.07	0.50	1.09	60.10

2.94. Considering the impact of additional capitalization, the Commission has determined the true-up amount of return on equity of **Rs.60.10 crores** for FY 2008-09. The Commission has also allowed further true-up of return on equity for FY 2005-06, FY 2006-07 and FY 2007-08 as **Rs.0.07 crore**, **Rs.0.50 crore** and **Rs.1.09 crores** respectively over and above the amount already allowed for respective years in earlier true-up Order.

Table :48

Normative Return on equity

Rs. Cr.

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Already allowed in earlier true/tariff order	156.48	187.77	187.77	129.10
2	Allowed in this tariff order	156.55	188.27	188.86	189.20
3	True-up amount allowed	0.07	0.50	1.09	60.10

Interest on the excess equity treated as loan

2.95. In accordance with the provisions under Regulation, 2005, the excess equity shall be treated as loan hence, the interest on excess equity as mentioned in preceding paragraph of this order is worked out as below :

Table :49 Additional details of normative loan (Equity excess to normative equity) Rs. Cr.

Power Station	CoD of last unit	Amount of excess equity as on CoD	Period of loan in years	No. of instalment	Amount of instalment	No. of instalments due before June, 2005	Opening balance of excess equity as on 01.06. 2005
ATPS	31-Mar-78	6.18	10	20	0.31	20	0.00
STPS	27-Feb-84	25.95	10	20	1.30	20	0.00
SGTPS	23-Nov-99	92.44	10	20	4.62	10	46.22
Total thermal		124.57			6.23	50	46.22
Gandhi Sagar	03-Nov-66	0.44	10		0.00		0.00
Pench	09-Mar-86	3.76	10	40	0.30	00	0.00
Rajghat	03-Nov-99	3.55	10	40	0.09	21	1.69
Bargi	29-Nov-88	3.73	10		0.00		0.00
Bansagar	02-Sep-02	53.31	10	40	1.33	11	40.98
Birsinghpur	01-Nov-91	2.23	10		0.00		0.00
Total Hydel		67.02			1.42	32	42.66
		191.59			7.65	82	88.88

2.96. It is pertinent to mention here that since the amount on equity in excess of the norms is treated as loan therefore, repayment of this loan has also been considered in accordance with the repayment schedule of other loan(s) for the respective power stations. No moratorium period has been considered while working out repayment of loan in excess of equity in respect of each power station and the repayment has been considered from the date of commercial operation of the last unit of the respective power house. Accordingly, the interest payable to the excess equity amount has been worked out applying year-wise weighted average rate of interest.

**Table:50 Power Station-wise interest on Excess Equity treated as loan
STPS Complex:**

Rs. Cr.

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening excess equity	0.00	0.00	0.00	0.00
2	Excess equity addition due to additional capitalization	2.48	0.58	1.63	0.38
3	Repayment considered	2.48	2.67	2.67	0.665
4	Closing excess equity	0.00	0.00	0.00	0.00
5	Excess equity- average	0.00	0.00	0.00	0.00
6	Applicable rate of interest (%)	8.15	8.23	8.56	10.50
7	Interest amount	0.00	0.00	0.00	0.00
8	Interest on excess equity allowed in earlier true-up/tariff order	0.00	0.00	0.00	0.00
9	True-up amount	0.00	0.00	0.00	0.00

SGTPS PH I&II:

Rs. Cr.

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening excess equity	46.22	37.39	28.17	21.37
2	Excess equity addition due to additional capitalization	0.41	0.02	2.44	1.71
3	Repayment considered	9.24	9.24	9.24	9.24
4	Closing excess equity	37.39	28.17	21.37	13.84
5	Excess equity- average	41.81	32.78	24.77	17.60
6	Applicable rate of interest (%)	8.15	8.23	8.56	10.50
7	Interest amount	2.84	2.70	2.12	1.85
8	Interest on excess equity allowed in last true-up/tariff order	2.83	2.66	1.98	0.00
9	True-up amount	0.01	0.04	0.14	1.85

Pench:

Rs. Cr.

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening excess equity	0.00	0.07	5.36	4.77
2	Excess equity addition due to additional capitalization	0.07	5.88	0.00	0.00
3	Repayment considered	0.00	0.59	0.59	0.59
4	Closing excess equity	0.07	5.36	4.77	4.19
5	Excess equity- average	0.04	2.72	5.07	4.48
6	Applicable rate of interest (%)	8.15	8.23	8.56	10.50
7	Interest amount	0.002	0.22	0.43	0.47
8	Interest on excess equity allowed in last true-up/tariff order	0.00	0.00	0.00	0.00
9	True-up amount	0.002	0.22	0.43	0.47

Rajghat:

Rs. Cr.

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening excess equity	1.69	1.33	0.97	0.62
2	Excess equity addition due to additional capitalization	0.00	0.00	0.01	0.00
3	Repayment considered	0.36	0.36	0.36	0.36
4	Closing excess equity	1.33	0.97	0.62	0.26
5	Excess equity- average	1.51	1.15	0.79	0.44
6	Applicable rate of interest (%)	8.15	8.23	8.56	10.50
7	Interest amount	0.10	0.09	0.07	0.05
8	Interest on excess equity allowed in last true-up/tariff order	0.10	0.09	0.07	0.00
9	True-up amount	0.00	0.00	0.00	0.05

Bargi:		Rs. Cr.			
Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening excess equity	0.00	0.00	0.00	0.03
2	Excess equity addition due to additional capitalization	0.00	0.00	0.03	0.00
3	Repayment considered	0.00	0.00	0.00	0.00
4	Closing excess equity	0.00	0.00	0.03	0.03
5	Excess equity- average	0.00	0.00	0.01	0.03
6	Applicable rate of interest (%)	8.15	8.23	8.56	10.50
7	Interest amount	0.00	0.00	0.00	0.003
8	Interest on excess equity allowed in last true-up/tariff order	0.00	0.00	0.00	0.00
9	True-up amount	0.00	0.00	0.001	0.003

Bansagar I, II&III:		Rs. Cr.			
Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening excess equity	40.98	35.66	30.34	25.02
2	Excess equity addition due to additional capitalization	0.00	0.00	0.00	0.00
3	Repayment considered	5.32	5.32	5.32	5.32
4	Closing excess equity	35.66	30.34	25.02	19.70
5	Excess equity- average	38.32	33.00	27.68	22.36
6	Applicable rate of interest (%)	8.15	8.23	8.56	10.50
7	Interest amount	2.60	2.72	2.37	2.35
8	Interest on excess equity allowed in last true-up/tariff order	2.60	2.71	2.37	0.00
9	True-up amount	0.00	0.01	0.00	2.35

MPPGCL's Total					Rs. Cr.
Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Opening excess equity	88.89	74.45	64.85	51.81
2	Excess equity addition due to additional capitalization	2.58	6.48	4.10	2.09
3	Repayment considered	17.02	16.09	17.14	15.89
4	Closing excess equity	74.45	64.85	51.81	38.01
5	Excess equity- average	81.67	69.65	58.33	44.91
6	Applicable rate of interest (%)	8.15	8.23	8.56	10.50
7	Interest amount	5.55	5.73	4.99	4.72
8	Interest on excess equity allowed in earlier true-up/tariff order	5.53	5.47	4.41	0.00
9	True-up amount	0.02	0.26	0.58	4.72

- 2.97. The Commission has allowed interest of **Rs.5.55 crores** on excess equity for FY 2005-06 (10-months), **Rs.5.73 crores** for FY 2006-07, **Rs.4.99 crores** for FY 2007-08 and **Rs.4.72 crores** for FY 2008-09 in this order.

Table :51 Interest charges on Excess equity					Rs. Cr.
Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Already allowed in earlier true/tariff order	5.53	5.47	4.41	0.00
2	Allowed in this tariff order	5.55	5.73	4.99	4.72
3	True-up amount allowed	0.02	0.26	0.58	4.72

Depreciation :

Petitioner's submission

The petitioner has broadly submitted the following :

- 2.98. The values of Gross block of Assets in respect of MPPGCL's share as per the Annual Statement of Accounts for FY 2008-09 and accumulated depreciation as on 1st April, 2008 are tabulated below:

Table :52 **Rs. Cr.**
Opening Gross Block & Accumulated Depreciation as on 01-04-2008

Sr. No.	Asset Description	Opening GB	Opening Acc. Depreciation
1	ATPS I	48.02	17.2
2	ATPS II	134.6	93.68
3	ATPS Chachai	182.63	110.89
4	STPS I	36.5	31.82
5	STPS II & III	593.74	437.49
6	STPS Total	630.24	469.31
7	SGTPS 840 MW	2161.28	1046.51
8	SGTPS 500 MW	0	0
9	SGTPS Total	2161.28	1046.51
10	Malwa	32.66	0
11	Total Thermal	3006.81	1626.71
12	Gandhi Sagar	10.3	7.99
13	R.P. Sagar	18.86	16.52
14	J Sagar	16.56	9.65
15	Pench	96.24	60.03
16	Rajghat	82.8	22.8
17	Bargi	87.03	46.56
18	Bansagar(I,II,III & IV)	1360.63	310.43
19	Madhikheda	212.74	5.24
20	Birsinghpur	52.15	24.07
21	Total Hydro	1937.3	503.3
22	HQ	0.43	0.04
Total		4944.54	2130.05

2.99. The petitioner has further submitted that there has been asset capitalization and asset addition on account of minor capital works in the existing plants. The depreciation on the Gross Block shown above has been computed based on the following:

- ❖ The rates for depreciation are considered as approved by the Commission in Appendix-II of Regulation G-26 of 2005.
- ❖ The salvage value of assets is considered as 10% i.e. none of the assets are depreciated more than 90% of the gross value.
- ❖ In case the asset is capitalized during mid of the year, the depreciation is charged on pro rata on day basis

2.100. The depreciation on assets of HQ is nominal as such has been linked to the nearest power station i.e Bargi HPS for simplicity considering above, the depreciation amount admissible for FY 2008-09 true up is worked out to Rs.6.17 crores. MPPGCL requested the Commission to permit the same.

2.101. The petitioner in its additional submission on affidavit dated 15th October, 2011 had submitted following statement showing depreciation separately for the existing assets and assets added during FY 2005-06 to FY 2008-09 :

Table :53

Depreciation on Existing Assets and Asset Additions

In Rs. Crores

Stations		Depreciation							
		On Existing Assets				On Asset Addition			
		FY 2005-06	FY 2006- 07	FY 2007- 08	FY 2008-09	FY 2005-06	FY 2006- 07	FY 2007- 08	FY 2008-09
1	ATPS PH-I	0.75	1.11	1.59	1.58	0.10	0.25	0.00	0.00
2	ATPS PH-II	0.44	0.52	0.52	1.13	0.00	0.00	0.58	0.02
3	ATPS Total	1.19	1.63	2.10	2.71	0.10	0.25	0.58	0.02
4	STPS PH-I	0.42	0.52	0.42	0.21	0.01	-0.05	0.00	0.00
5	STPS PH II&III	4.37	5.33	5.59	5.90	0.09	0.15	0.33	0.01
6	STPS Total	4.79	5.84	6.00	6.11	0.09	0.10	0.33	0.02
7	SGTPS PH- I&II	62.40	70.27	69.84	64.66	0.01	0.00	0.05	0.11
8	Total Thermal	68.38	77.74	77.95	73.48	0.21	0.35	0.96	0.14
9	Gandhi Sagar	0.07	0.08	0.08	0.08	0.00	0.00	0.00	0.00
10	Pench	0.97	1.16	1.41	1.40	0.00	0.13	0.00	0.00
11	Rajghat	1.83	2.19	2.19	2.19	0.00	0.00	0.00	0.00
12	Bargi	1.78	2.14	2.13	2.11	0.00	0.00	0.00	0.00
13	Bansagar I,II&III	21.59	25.93	28.59	28.76	0.00	1.34	0.09	0.01
14	Birsinghpur	1.11	1.33	1.32	1.19	0.00	0.00	0.00	0.00
15	Total Hydro	27.35	32.83	35.72	35.73	0.00	1.47	0.09	0.01
16	HQ	0.00	0.01	0.01	0.03	0.00	0.00	0.01	0.02
Total		95.73	110.59	113.68	109.24	0.22	1.82	1.05	0.17

2.102. The petitioner further submitted that in compliance to the directives of Commission, the ATPS PH-I (Units 1 &2) have been decommissioned w.e.f. 01.04.2009. The balance depreciation upto 90% of Gross block of this power house is required to be recovered, because ATPS PH-I was not considered in MYT order for FY 2009-10 to FY 2011-12. The petitioner has therefore, requested to permit the recovery of balance depreciation amounting to **Rs.24.43** Crores in addition to the depreciation claimed in this true-up. The break-up of balance depreciation for ATPS PH-I as claimed by the petitioner is given below:

Table :54

S. No.	A/c Code	Asset Description	Rs. Cr.				
			Opening Acc. Dep	Dep. for FY 2008-09	Closing Acc. Dep	Dep. upto 90% of GB	Balance Dep. claimed
1	10.1	Land and land rights	0	0	0	0.36	0.35
2	10.2	Building containing Gen. plant	0	0	0	0	0
3	10.3	Hydraulic works	0.29	0.04	0.33	1.95	1.62
4	10.4	Other civil works	1.49	0.08	1.56	3.81	2.25
5	10.5	Plant and Machinery	15.18	1.45	16.63	36.74	20.11
6	10.6	Lines, Cable networks etc.	0.01	0	0.01	0.02	0.01
7	10.7	Vehicles	0	0	0	0	0
8	10.8	Furniture and fixtures	0.01	0	0.01	0.02	0.01
9	10.9	Office Equipments	0.23	0.01	0.23	0.32	0.08
10	10.99	Unclassified fixed assets	0	0	0	0	0
Total			17.2	1.58	18.79	43.22	24.43

Provisions of the Regulation

2.103. Clause 23 of the regulation of 2005 for generation tariff provides that

“For the purpose of tariff, depreciation shall be computed in the following manner:

(a) The value base for the purpose of depreciation shall be the historical cost of the assets, i.e. actual expenses limited to approved /accepted capital cost:

Provided that the consumer contribution or capital subsidy/ grant etc shall be treated as per the accounting rules notified and in force from time to time.

(b) The approved/accepted cost shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency actually availed.

(c) Depreciation rates for the purpose of determination of allowable depreciation shall be as per CERC notification. The existing rates are given in Annexure-I of this regulation.

Provided that the total depreciation during the life of the asset shall not exceed 90% of the original cost.

Advance against depreciation (AAD) shall be permitted for any new projects in addition to allowable depreciation, in the manner given hereunder:

AAD = Loan repayment amount as per regulation 22 subject to a ceiling of 1/10th of loan amount as per regulation 20 minus depreciation as per schedule

Provided that Advance Against Depreciation for any new project shall be permitted only if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year,

Provided further that Advance Against Depreciation in a year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation up to that year.

On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.

Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro-rata basis.

Depreciation against assets relating to environmental protection shall be allowed on case to case basis at the time of fixation of tariff.”

Commission’s Analysis

- 2.104. While going through subject petition and subsequent additional submissions made by the petitioner, it is observed that the power station wise values of opening gross block and accumulated depreciation as on 1st April, 2008 has been filed as per the Audited Accounts for FY 2008-09. MPPGCL has also claimed the depreciation amount from FY 2005-06 to FY 2008-09 considering the impact of additional capitalization. The power station-wise detail of additional capitalization has been discussed in the chapter on Capital cost.
- 2.105. The Commission had issued the true-up order for FY 2007-08 on 24th January, 2011 taking the impact of final opening balance sheet. In **Para 2.129** of the afore-mentioned true-up order, the following gross block and accumulated depreciation as on 31st March, 2008 was considered by the Commission based on the final opening balance sheet :

Table :55
Accumulated depreciation already admitted as on 31st March, 2008

Sr. No.	Power Station	Rs. Cr.	
		Gross Block	Accumulated depreciation
1	ATPS	144.11	109.05
2	STPS	605.61	468.21
3	SGTPS	2157.19	1046.37
5	Total Thermal	2906.91	1623.63
6	Gandhi Sagar	10.29	7.99
7	R.P. Sagar	18.86	-
8	Jawahar Sagar	16.56	-
9	Pench	87.74	59.63
10	Rajghat	82.79	22.07
11	Bargi	86.99	46.22
12	Bansagar	1243.92	306.35
13	Birsinghpur	52.15	24.07
14	Total Hydro	1599.3	466.34
Total		4506.21	2089.97

- 2.106. The Commission in the afore-mentioned true-up order had also allowed the additional depreciation for FY 2005-06 and FY 2006-07 considering changes in gross block due to final opening balance sheet, in addition to the depreciation already allowed in past true-up orders of the respective years. As stated in earlier paragraphs, the Commission in the subject petition is considering the additional capitalization from FY 2005-06 to FY 2008-09 (detailed reasons mentioned in chapter on Capital cost). Accordingly, the revised capital cost/gross block is reworked by the Commission in this order for the earlier year from FY 2005-06 to FY 2008-09.
- 2.107. Since the Commission had directed MPPGCL to provide the revised asset register considering the addition of new assets and write off value of the assets. Accordingly, MPPGCL has prepared asset-cum-depreciation registers for each power station separately and its computation of depreciation based on the rate prescribed by the Commission. MPPGCL has updated the asset registers after incorporating the changes as provided addition of assets in FY 2005-06 (10 months) to FY 2008-09 and corresponding write-off values if any.
- 2.108. The MPPGCL has filed that the depreciation on the gross block has been computed based on the following :
- ❖ The rates for depreciation are considered as approved by the Commission in Appendix-II of Regulation G-26 of 2005.
 - ❖ The salvage value of assets is considered as 10% i.e. none of the assets are depreciated more

than 90% of the gross value.

- ❖ In case the asset is capitalized during mid of the year, the depreciation is charged on pro rata on day basis

2.109. In the MYT order for FY 2006-07 to FY 2008-09, the Commission had determined the depreciation on share basis for the power stations operated by MPPGCL. The same procedure has been adopted in this true-up order also for determination of depreciation. The Commission has not considered the RP Sagar and J. Sagar since they are not under operational control of MPPGCL.

2.110. Since the Commission has considered additional capitalization in this order, the Commission has reworked the Gross Block accordingly for FY 2005-06, FY 2006-07, FY 2007-08 and FY 2008-09 in **Para 2.30** in this order. The power station-wise revised depreciation for FY 2005-06, FY 2006-07, FY 2007-08 and true-up of depreciation for FY 2008-09 is worked out as follows:

- ❖ Depreciation for FY 2005-06 is worked out for 10 months as calculated in the assets registers filed by the MPPGCL.
- ❖ Depreciation for FY 2006-07, FY 2007-08 and FY 2008-09 has been worked out by applying the weighted average rate of depreciation on average Gross Block as per the assets register considering the additional capitalization.

2.111. Details of power station wise depreciation determined by the Commission is given as below:

Table:56 Power station-wise depreciation

ATPS, Chachai:					Rs. Cr.	
Sr. No.	Particular	FY2005-06 (10-Months)	FY 2006-07	FY 2007-08	FY 2008-09	
1	Average Gross Block	147.19	156.94	173.12	183.11	
2	Opening accumulated depreciation	105.03	105.73	107.30	109.36	
3	Wt. average annual rate of depreciation (%)	0.47	1.00	1.19	1.50	
4	Depreciation during the year	0.70	1.57	2.06	2.75	
5	Closing accumulated depreciation	105.73	107.30	109.36	112.11	
6	Depreciation already allowed	1.19	1.43	1.40	1.40	
7	Balance depreciation allowed to be recovered	-0.49	0.14	0.66	1.35	

STPS Sarni (Rs. Cr.)

Sr. No.	Particular	FY2005-06 (10 Months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Average Gross Block	607.38	612.52	620.70	626.00
2	Opening accumulated depreciation	452.15	456.61	462.22	468.06
3	Wt. average annual rate of depreciation (%)	0.73	0.92	0.94	1.00
4	Depreciation during the year	4.46	5.61	5.84	6.26
5	Closing accumulated depreciation	456.61	462.22	468.06	474.32
6	Depreciation already allowed	4.79	5.64	5.61	5.16
7	Balance depreciation allowed to be recovered	-0.33	-0.03	0.23	1.10

SGTPS Birsinghpur

Rs. Cr.

Sr. No.	Particular	FY2005-06 (10 Months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Average Gross Block	2157.49	2157.80	2159.55	2162.51
2	Opening accumulated depreciation	843.95	903.29	973.54	1043.42
3	Wt. average annual rate of depreciation (%)	2.75	3.26	3.24	3.00
4	Depreciation during the year	59.34	70.25	69.88	64.79
5	Closing accumulated depreciation	903.29	973.54	1043.42	1108.21
6	Depreciation already allowed	62.40	70.23	69.80	64.27
7	Balance depreciation allowed to be recovered	-3.06	0.02	0.08	0.52

Gandhi Sagar

Rs. Cr.

Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Average Gross Block	10.29	10.29	10.29	10.29
2	Opening accumulated depreciation	7.77	7.84	7.91	7.99
3	Wt. average annual rate of dep. (%)	0.64	0.76	0.76	0.75
4	Depreciation during the year	0.07	0.08	0.08	0.08
5	Closing accumulated depreciation	7.84	7.91	7.99	8.07
6	Depreciation already allowed	0.07	0.08	0.08	0.08
7	Balance depreciation allowed to be recovered	0.00	0.00	0.00	0.00

Pench		Rs. Cr.			
Sr. No.	Particular	FY 2005-06 (10 Months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Average Gross Block	87.79	92.04	96.24	96.24
2	Opening accumulated depreciation	56.35	57.32	58.43	59.85
3	Wt. average annual rate of depreciation (%)	1.11	1.21	1.47	1.46
4	Depreciation during the year	0.97	1.11	1.41	1.40
5	Closing accumulated depreciation	57.32	58.43	59.85	61.25
6	Depreciation already allowed	0.97	1.15	1.16	1.13
7	Balance depreciation allowed to be recovered	0.00	-0.04	0.25	0.27

Rajghat		Rs. Cr.			
Sr. No.	Particular	FY 2005-06 (10 Months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Average Gross Block	82.79	82.79	82.80	82.80
2	Opening accumulated depreciation	16.59	18.42	20.61	22.80
3	Wt. average annual rate of depreciation (%)	2.21	2.65	2.65	2.65
4	Depreciation during the year	1.83	2.19	2.19	2.19
5	Closing accumulated depreciation	18.42	20.61	22.80	25.00
6	Depreciation already allowed	1.83	1.83	1.83	2.19
7	Balance depreciation allowed to be recovered	0.00	-0.040	0.25	0.27

Bargi		Rs. Cr.			
Sr. No.	Particular	FY 2005-06 (10 Months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Average Gross Block	86.99	86.99	87.01	87.03
2	Opening accumulated depreciation	40.51	42.29	44.43	46.56
3	Wt. average annual rate of depreciation (%)	2.05	2.4607805	2.44	2.42504394
4	Depreciation during the year	1.78	2.14	2.13	2.11
5	Closing accumulated depreciation	42.29	44.43	46.56	48.67
6	Depreciation already allowed	1.78	2.14	1.78	1.93
7	Balance depreciation allowed to be recovered	0.00	0.00	0.35	0.18

Bansagar				Rs. Cr.	
Sr. No.	Particular	FY 2005-06 (10 Months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Average Gross Block	1243.92	1243.92	1243.92	1243.92
2	Opening accumulated depreciation	232.90	254.49	280.42	306.34
3	Wt. average annual rate of depreciation (%)	1.74	2.08	2.08	2.08
4	Depreciation during the year	21.59	25.92	25.92	25.92
5	Closing accumulated depreciation	254.49	280.42	306.34	332.26
6	Depreciation already allowed	21.59	25.93	25.93	25.87
7	Balance depreciation allowed to be recovered	0.00	-0.01	-0.01	0.05

Birsinghpur				Rs. Cr.	
Sr. No.	Particular	FY 2005-06 (10 Months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Average Gross Block	52.15	52.15	52.15	52.15
2	Opening accumulated depreciation	20.31	21.42	22.75	24.06
3	Wt. average annual rate of depreciation (%)	2.13	2.56	2.50	2.29
4	Depreciation during the year	1.11	1.33	1.31	1.20
5	Closing accumulated depreciation	21.42	22.75	24.06	25.25
6	Depreciation already allowed	1.11	1.33	1.32	1.21
7	Balance depreciation allowed to be recovered	0.00	0.00	-0.01	-0.01

2.112. Considering the impact of additional capitalization, the Commission has determined true-up amount of depreciation of **Rs.-3.89 crores**, **Rs.0.43 crore**, **Rs.1.91 crores** and **Rs.3.47 crores** for FY 2005-06 (10 months), FY 2006-07, FY 2007-08 and FY 2008-09 respectively over and above the amount already allowed by the Commission in earlier true-up amounts of respective years as given below:

Table :57

Depreciation		Rs. Cr.			
Sr. No.	Particular	FY 2005-06 (10-months)	FY 2006-07	FY 2007-08	FY 2008-09
1	Already allowed in earlier true-up/tariff order	95.73	109.78	108.91	103.24
2	Allowed in this tariff order	91.84	110.21	110.82	106.71
	True-up amount allowed in this order	-3.89	0.43	1.91	3.47

2.113. The petitioner in prayer of the petition has requested to permit recovery of balance depreciation of ATPS, Phase-1 retired on 1st April, 2009 and allow actual fuel cost in the power station. Since the unit was in use and generated electricity throughout the subject true-up period i.e. FY 2008-09, the Commission has therefore, considered depreciation of this unit – ATPS, Phase-1 as per the provisions under Tariff Regulation, 2005 in this true-up order. The issue of balance depreciation up to 90% of gross block of this power house may be dealt appropriately as per the provisions of Regulations and accounting principles in terms of its actual salvage value in true-up petition for FY 2009-10.

Operation and Maintenance Expenses :

Petitioner's submission

- 2.114. The petitioner has submitted that the O&M norms as given in regulations are inadequate and it is not possible for MPPGCL to limit its legitimate expenses within the specified limits. The petitioner has also mentioned that the Commission was kind enough to understand MPPGCL's legitimate expenses and allowed actual O&M expenses in Generation True up order in FY 2007-08.
- 2.115. The petitioner in Para 4.1 of the petition has submitted power station wise comparison of O&M expenditure approved by the Commission in MYT order for FY 2008-09 based on regulation and actual expenditure as given below :

Table :58

**O&M expenses allowed for FY 2008-09 in MYT Order Vs Actual in FY 2008-09
(Rs Cr.)**

S. No.	Power Station	As per MYT Order	As per Actuals	Diff.
1	ATPS	37.7	60.03	22.33
2	STPS	148.53	181.33	32.8
3	SGTPS	109.2	74.01	-35.19
4	Total Thermal	295.43	315.37	19.95
5	Gandhi Sagar	5.72	7.35	1.63
6	Pench	7.95	6.76	-1.19
7	Rajghat	2.24	4.34	2.11
8	Bargi	4.47	5.29	0.81
9	Bansagar	20.13	22.82	2.69
10	Birsinghpur	0.99	0.89	-0.11
11	Total Hydro	41.5	47.44	5.94
	Total	336.92	362.82	25.89

- 2.116. The petitioner further submitted that the actual O&M expenditure mentioned in the above table are exclusive of taxes payable to Government or local authorities, fee payable to MPERC, Common expenses, which MPPGCL has claimed separately as Other Charges. Terminal Benefits have also been excluded from O&M expenses claimed.

Provisions of the Regulation

- 2.117. *As per Clause 38 and 54 of MPERC (Terms and Conditions for determination of Generation tariff) Regulation, 2005 applicable for the control period FY 2006-07 to FY 2008-09, operation and maintenance expenses admissible to existing thermal and hydro power stations of MPPGCL for FY 2008-09 are given below :*

Table :59

<i>Particular</i>	<i>Rs. Lacs /MW/year</i>
<i>O&M expenses for thermal power stations</i>	<i>13.00</i>
<i>O&M expenses for hydro power stations</i>	<i>4.97</i>

The norms for O&M expenses exclude taxes payable to government or local authorities, fee payable to MPERC and pension and terminal benefits payable to its employees, which the generating company shall claim separately.

Commission's Analysis

- 2.118. The O&M expenses include employee cost, repair and maintenance (R&M) and Administrative and General (A&G) expenses. These employee, R&M and A&G expenses are determined based on power station-wise expenses for 100% capacity operated by MPPGCL. However, the expenses of Ranapratap Sagar and Jawahar Sagar have not been considered since these stations are operated by Rajasthan authorities.
- 2.119. The petitioner in the subject true-up petition for FY 2008-09 has submitted that the O&M norms in MPERC regulations are inadequate hence; it was not possible for the petitioner to limit its legitimate expenses within the specified limit. The petitioner has also submitted that the company has inherited a legacy from erstwhile MPSEB, wherein due to cash crunch in MPSEB, number of issues related with employees like wage revision, payment of DA on current rates as per GoI etc. were kept in abeyance. It is stated by the petitioner that the actual cash outgoes on account of afore-mentioned reasons and also the wage revision and payment of DA at revised rates (revised twice in FY 2006-07 and thrice in FY 2007-08 and twice in FY 2008-09) have not been reflected in historical trends therefore, could not be included in based expenses for projecting the trends.
- 2.120. The terms and conditions for determination of generating tariff applicable for the tariff period FY 2006-07 to FY 2008-09 provides for payment of O&M expenses on normative basis. Similar provisions exist in regulation for transmission tariff also. However, the Commission, while issuing the order dated 19th March, 2008 on true-up for transmission tariff for FY 2006-07 had approved the actual O&M expenses. Accordingly, the Commission had allowed O&M expenses based on actual in the petition for true-up of transmission tariff and generation tariff for FY 2007-08 also. The same logic holds good for O&M expenses of MPPGCL in this order also.
- 2.121. The Commission had also allowed the actual O&M expenses in generating true-up order for FY 2006-07 and FY 2007-08. The Commission in Para 3.11 of the order for true-up of FY 2006-07 had mentioned that *“the Commission is of the view that the norms prescribed by the Commission for O&M expenditure while framing the regulations on terms and conditions of tariff of generation and transmission companies might have been understated for the generation and transmission companies and over-stated for the Distribution Companies. This could be due to the fact that the regulations on terms and conditions of tariff were framed just after unbundling of power utilises from erstwhile MPSEB and the actual break-up of total O&M expenses for generation, transmission and distribution segments was not available. Therefore, the base figures for computation of norms for*

O&M expenditure were taken from the common base of erstwhile MPSEB and apportioned among generation/transmission/distribution segments on the basis of the information made available at that time. The Commission has decided to follow a consistent approach of allowing actual expenditure after exercising the prudent check”.

2.122. Accordingly, the Commission has taken a consistent approach to this issue across all the years in the control period of applicable Regulation and has decided to allow the actual O&M expenses based on prudent check.

A. Repair and Maintenance Expenses

2.123. The petitioner in Schedule 4 of the petition has claimed total R&M expenses of Rs.140.75 crores, which also include Rs.0.03 crore as prior period expenses towards R&M expenses and Rs.1.20 crores towards entry tax. The Commission vide its letter dated 14th September, 2011 asked the petitioner to submit the power station-wise details of R&M expenses on share basis and also on 100% operating capacity basis.

2.124. The petitioner vide its letter dated 15th October, 2011 submitted the power station-wise details of R&M expenses in format as desired by the commission. The R&M expenses on share basis (indicated in Schedule 17 of the audited accounts) including prior period expenses (indicated in schedule 23 of the audited accounts) are Rs.142.19 crores.

2.125. The Commission has estimated the R&M expenses of stations operated by the petitioner on 100% capacity basis. The Commission has not considered the R&M charges on capital works in progress as indicated in Schedule 17 of the audited accounts. The R&M expenses filed by the petitioner also includes the entry tax while the petitioner has filed the entry tax separately in other fixed expenses. Since the entry tax in the audited accounts is the part of R&M expenses therefore, the Commission has allowed entry tax in the R&M expenses on actual basis.

2.126. With regard to the prior period expenses under head of R&M expenses, the petitioner on 14th September, 2011 was asked to submit the details with reasoning. The petitioner vide its letter dated 15th October, 2011 has submitted the power station wise details of prior period expenses covered in Schedule 23 of the audited accounts.

2.127. The Commission thus, allows **Rs.140.73 crores** for R&M expenditure inclusive entry tax and prior period expenses for FY 2008-09 in this true-up order. The power station-wise break-up of R&M expenses allowed is given below :

Table :60 R&M expenses allowed by the Commission Rs. Cr.

Power Station	R&M expenses inclusive entry tax as per Audited Accounts (Sch. 17)		Prior period to R&M as per audited accounts (Sch. 23)	Total R&M Expenses allowed
	On share basis	On 100% Oper. capacity basis		
ATPS Complex	23.29	23.29	0.00	23.29
STPS PH-I	16.11	26.85	0.00	26.85
STPS PH-II&III	52.65	52.65	0.00	52.65
STPS Complex	68.76	79.50	0.00	79.50
SGTPS PH-I&II	33.60	33.60	0.04	33.64
Total Thermal	125.64	136.38	0.04	136.42
Gandhi Sagar	0.10	0.21	0.00	0.21
Pench	0.87	1.30	0.00	1.30
Birsinghpur	0.05	0.05	0.00	0.05
Bansagar I,II&III	1.96	1.96	0.00	1.96
Bargi	0.61	0.61	0.00	0.61
Rajghat	0.09	0.18	0.00	0.18
Total Hydro	3.69	4.31	0.00	4.31
Total	129.33	140.69	0.04	140.73

2.128. The Commission has determined the actual R&M expenses of **Rs.140.73 crores** for FY 2008-09 including prior period to R&M expenses in this true up order.

B. Administrative and General Expenses

2.129. The petitioner in this true-up petition has claimed Rs.8.31 crores towards A&G expenses on 100% operating capacity basis. The Commission vide letter dated 14th September, 2011 asked the petitioner to submit the power station-wise details of A&G expenses on share basis and also on 100% operating capacity basis. The petitioner vide its letter dated 15th October, 2011 had submitted the power station-wise details of A&G expenses in format as desired by the commission. The A&G expenses on share basis indicated in Schedule 19 of the audited accounts is Rs.21.55 crores includes rent, rates and taxes, MPSEB common expenses but the power station-wise details submitted by the petitioner excluding the rent and taxes, MPSEB common expenses and MPERC fees for the A&G expenses and claimed these expenses separately in the head of other charges.

2.130. The petitioner has also claimed the prior period expenses of Rs.2.76 crores on 100% operating capacity basis as per Schedule 23 of the audited account. The same has been considered by the Commission in this order.

2.131. The Commission has computed the A&G expenses of all stations operated by the petitioner on 100% capacity basis. The Commission has not considered the A&G expenses for power stations situated outside the state. The Commission has also not considered the A&G expenses on capital works in progress.

2.132. The Commission has allowed the A&G expenses of **Rs.8.31 crores** including **Rs.2.77 crores** of prior period expenses The power station-wise A&G expenses as allowed by the Commission in this true-up order as follows :

Table:61 A&G expenses allowed by the Commission Rs. Cr.

Power House	A&G expenses excluding rate rent & taxes as per Audited Accounts (Sch. 17)		A&G Expenses excluding MPSEB Expenses	Prior period to A&G as per audited accounts (Sch. 23)	Total A&G Expenses allowed
	On share basis	On 100% Oper. capacity basis			
ATPS Complex	2.95	2.95	1.73	0.01	1.74
STPS PH-I	-6.12	-4.67	-6.95	0.83	-6.12
STPS PH-II&III	8.06	8.06	4.63	1.82	6.45
STPS Complex	1.94	3.39	-2.32	2.66	0.33
SGTPS PH I&II	6.90	6.90	3.38	0.09	3.46
Total Thermal	11.79	13.24	2.78	2.76	5.54
Gandhi Sagar	0.78	1.68	0.71	0.01	0.72
Pench	0.88	1.34	0.34	0.00	0.34
Birsinghpur	0.16	0.16	0.08	0.00	0.08
Bansagar I,II&III	2.83	2.83	1.09	0.00	1.09
Bargi	0.59	0.59	0.21	0.00	0.21
Rajghat	0.32	0.71	0.33	0.00	0.33
Total Hydro	5.55	7.31	2.76	0.01	2.77
Total	17.34	20.55	5.54	2.77	8.31

2.133. The Commission has determined the actual A&G expenses of **Rs.8.31 crores** for FY 2008-09 including prior period to A&G expenses in this true up order.

C. Employee Cost

2.134. The petitioner has claimed the employee expenses of Rs.213.74 crores. The Commission has scrutinized the details of employee expenses with respect to audited accounts of FY 2008-09. It has been observed that the total employee cost indicated on share basis in audited accounts is Rs.241.75 crores including bonus/incentive, terminal benefit.

2.135. The Commission vide its letter dated 14th September, 2011 asked the petitioner to clarify the power station-wise break-up of employee expenses in the formats enclosed with the letter. The petitioner vide its letter dated 15th October, 2011 submitted the power station-wise details of employee expenses in prescribed formats.

2.136. The Commission has excluded the incentive from the employees expenses indicated in the audited accounts since the incentive is not an uncontrollable expense to be allowed over and above the normative O&M expenditure. The incentive if any, is to be paid from the incentive earned by the company by out performing the target. The Commission has also

excluded the terminal benefits towards employee of the company because these are being allowed in the ARR of Transmission Company. The power station-wise employee expenses and prior period items towards employee expenses allowed by the Commission is as follows :

Table :62 **Rs. Cr.**

Power House	Employee expenses excluding incentive and terminal benefits as per Audited Accounts (Sch. 17)		Prior period items to employee cost as per audited accounts (Sch. 23)	Total employee Expenses allowed
	On share basis	On 100% Oper. capacity basis		
ATPS Complex	33.45	33.45	0.01	33.46
STPS PH-I	15.65	26.08	0.37	26.45
STPS PH-II&III	72.71	72.71	0.25	72.96
STPS Complex	88.35	98.79	0.62	99.41
SGTPS PH I&II	35.33	35.33	0.86	36.19
Total Thermal	157.13	167.56	1.50	169.06
Gandhi Sagar	3.02	6.05	0.01	6.06
Pench	3.31	4.94	0.00	4.94
Birsinghpur	0.71	0.71	0.00	0.71
Bansagar I,II&III	19.20	19.20	0.09	19.29
Bargi	3.69	3.69	0.63	4.33
Rajghat	1.83	3.66	0.00	3.66
Total Hydro	31.77	38.25	0.74	38.99
Total	188.90	205.81	2.24	208.05

2.137. The Commission has determined the actual employee expenses of **Rs.208.05 crores** including prior period items to employee expenses in this true up order.

D. Cost of chemicals for thermal power stations

2.138. The cost of chemical spent in thermal generating stations is composite part of O&M cost. The Commission allows this cost under the O&M costs claimed by the petitioner.

2.139. The petitioner in its additional submission has submitted the power station wise break-up of cost of chemicals on share basis as per audited accounts as well as 100% operating capacity basis. The power station-wise cost of chemicals as per audited accounts on share basis and on 100% operating capacity basis is allowed as follows :

Table :63 **Rs. Cr.**

Power House	Cost of Chemicals allowed in this true-up order	
	On share basis as per audited accounts	On 100% capacity basis
ATPS Complex	0.80	0.80
STPS PH-I	0.27	0.45
STPS PH-II&III	1.31	1.31
STPS Complex	1.58	1.75
SGTPS PH-I&II	0.60	0.60
Total Thermal	2.97	3.15

2.140. Hence, the Commission has determined the cost of chemicals of **Rs.3.15 crores** for thermal power stations for FY 2008-09 in this order.

E. Consumables and Stores

2.141. The cost of consumables and stores spent in generating stations is integral part of O&M cost. The Commission allows this cost under the O&M expenses claimed by the petitioner.

2.142. The petitioner in its additional submission dated 15th October, 2011 submitted the power station wise break-up of cost of consumable and stores on share basis as per audited accounts as well as 100% operating capacity basis. The power station-wise cost of chemicals as per audited accounts on share basis and also on 100% operating capacity basis is as follows :

Table :64 **Rs. Cr.**

Power House	Cost of Consumable & Stores allowed	
	On share basis as per audited accounts	On 100% capacity basis
ATPS Complex	0.22	0.22
STPS PH-I	0.61	1.02
STPS PH-II&III	1.60	1.60
STPS Complex	2.22	2.63
SGTPS PH-I&II	0.95	0.95
Total Thermal	3.39	3.80
Gandhi Sagar	0.00	0.00
Pench	0.00	0.00
Birsinghpur	0.02	0.02
Bansagar I,II&III	0.00	0.00
Bargi	0.00	0.00
Rajghat	0.02	0.05
Total Hydro	0.04	0.07
Total	3.43	3.86

2.143. The Commission has determined the cost of consumables and stores for Thermal and Hydel power stations of **Rs.3.86 crores** in this order.

F. Water charges for thermal

2.144. The cost of water incurred for thermal generating stations is also composite part of O&M expenses. The Commission allows the cost of water for thermal power stations under O&M expenses.

2.145. The cost of water pertains to thermal power stations as per audited accounts on share basis and on 100% operating capacity basis is as follows :

Power House	Rs. Cr.	
	Cost of Water for thermal allowed On share basis as per audited accounts	On 100% capacity basis
ATPS Complex	0.20	0.20
STPS PH-I	0.36	0.60
STPS PH-II&III	0.47	0.47
STPS Complex	0.83	1.07
SGTPS PH-I&II	0.34	0.34
Total Thermal	1.37	1.61

2.146. The Commission has determined the cost of water for thermal power stations as **Rs.1.61 crores** in this order.

2.147. The power station-wise total actual O&M expenses allowed by the Commission in this true-up order is as follows :

Table:66

Total O&M expenses allowed by the Commission for FY 2008-09

Rs. Cr.

Power station	R&M expenses	A&G expenses	Employee expenses	Cost of Chemicals	Cost of Consumables	Cost of water for thermal	Total O&M Cost
ATPS Complex	23.29	1.74	33.46	0.80	0.22	0.20	59.71
STPS PH-I	26.85	-6.12	26.45	0.45	1.02	0.61	49.26
STPS PH-II&III	52.65	6.45	72.96	1.31	1.60	0.47	135.44
STPS Complex	79.50	0.33	99.41	1.75	2.63	1.08	184.70
SGTPS Complex	33.64	3.46	36.19	0.60	0.95	0.34	75.18
Total Thermal	136.42	5.54	169.06	3.15	3.80	1.61	319.58
Gandhi Sagar	0.21	0.72	6.06	-	0.00	-	6.99
Pench	1.30	0.34	4.94	-	0.00	-	6.58
Birsinghpur	0.05	0.08	0.71	-	0.02	-	0.86
Bansagar	1.96	1.09	19.29	-	0.00	-	22.34
Bargi	0.61	0.21	4.33	-	0.00	-	5.15
Rajghat	0.18	0.33	3.66	-	0.05	-	4.22
Total Hydro	4.31	2.77	38.99	-	0.07	-	46.14
Total	140.73	8.31	208.05	3.15	3.86	1.61	365.71

2.148. The Commission has allowed true-up amount of **Rs.28.79 crores** for O & M expenses for FY 2008-09 in this true up order as given below :

Table :67

Operation and Maintenance expenses:

Rs. Cr.

Sr. No.	Particular	FY 2008-09
1	Already allowed in earlier true-up/tariff order	336.92
2	Allowed in this tariff order	365.71
3	True-up amount allowed in this order	28.79

2.149. The power station-wise comparison of actual O&M expenses allowed in this order with the normative O&M expenses as allowed in MYT order for FY 2008-09 is as follows:

Table:68

Comparison of Normative O&M expenses allowed in MYT order Vs-Actual O&M expenses allowed by the Commission in this order: Rs. Cr.

Power station	O&M expenses allowed in MYT order on normative basis	O&M expenses allowed on actual basis in this order	Difference
ATPS Complex	37.7	59.71	22.01
STPS Complex	148.53	184.7	36.17
SGTPS	109.2	75.18	-34.02
Total Thermal	295.43	319.58	24.15
Gandhi Sagar	5.72	6.99	1.27
Pench	7.95	6.58	-1.37
Birsinghpur	2.24	0.86	-1.38
Bansagar	4.47	22.34	17.87
Bargi	20.13	5.15	-14.98
Rajghat	0.99	4.22	3.23
Total Hydro	41.5	46.14	4.64
Total	336.92	365.71	28.79

Other Expenses :

Petitioner's submission

2.150. The petitioner has submitted that the other expenses comprises of Common Expenses, Cess on auxiliary consumption, Rent, Rates & Taxes, MPERC Fees, Entry Tax on R&M and Water Charges. Water Charges and Cess which are payable to Government have been paid based on rates specified by GoMP. The details of the other expenses filed by the petitioner are as given below :

Table :69
Other Expenses filed by the petitioner **Rs. Cr.**

Power Station	Common Expenses	Water charges	Rent , Rate and Taxes	Cess on Aux.	MPERC Fee	Entry Tax on R&M	Total other fixed charges
	A	B	C	D	E	F	
ATPS	1.22	0.20	0.03	1.46	0.15	0.30	3.36
STPS	5.71	1.08	0.27	6.95	0.57	0.59	15.17
SGTPS	4.77	0.45	0.02	6.32	0.42	0.29	12.27
Total Thermal	11.70	1.73	0.32	14.73	1.14	1.18	30.80
Gandhi Sagar	0.97	1.64	0.01	0.01	0.011	0.00	2.64
Pench	1.01	0.00	0.00	0.00	0.016	0.00	1.03
Birsinghpur	0.08	0.08	0.00	0.00	0.002	0.00	0.16
Bansagar	1.79	22.78	0.01	0.06	0.040	0.01	24.69
Bargi	0.38	6.48	0.00	0.00	0.009	0.00	6.87
Rajghat	0.38	1.98	0.00	0.00	0.005	0.00	2.37
Total Hydro	4.61	32.96	0.02	0.07	0.083	0.01	37.76
Total	16.31	34.69	0.34	14.80	1.22	1.19	68.56

Commission's analysis

A. MPSEB's Common Expenses

2.151. The petitioner has claimed the MPSEB's common expenses of Rs.16.31 crores for FY 2008-09. The petitioner in its petition submitted that Common expenses are expenditure incurred in management of cash flow etc. and have been paid to MPSEB in accordance to GoMP notification dated 03.06.2006.

2.152. The Commission in its true-up tariff order for FY 2006-07 in Clause 3.20(g) has mentioned that,

"The common expenses by MPSEB amounting to Rs.13.81 crores are not allowed. The Commission had not been allowing these expenses to the distribution companies also since erstwhile MPSEB had already been disintegrated into successor companies and one of them has been entrusted with the responsibility of a trading company i.e. M. P. Power Trading Co. Ltd."

2.153. Since the Commission has also not allowed these expenses in true-up order for FY 2007-08 therefore, the Commission has taken a consistent view and approach in this true-up order also and disallowed this amount against common MPSEB expenses.

B. Water charges for Hydel Power Stations

- 2.154. The petitioner in this true-up petition claimed water charges of **Rs.34.69 crores** for FY 2008-09 as per schedule 10 of the petition. Schedule 16 of the audited accounts indicates total water charges of Rs.34.38 crores for MPPGCL's share ownership.
- 2.155. A clarification was sought from the petitioner in this regard vide letter dated 14th September, 2011. The petitioner in its reply dated 15th October, 2011 submitted the break-up of power station-wise water charges on share basis and also on 100% operating capacity basis. Since the Commission has allowed the water charges of thermal power stations in the head of O&M expenses therefore, the water charges only for hydel power stations is considered in the head of other charges by the Commission.
- 2.156. The comparison of water charges allowed in this true-up order vis-a-vis cost of water allowed in the MYT order for the year FY 2008-09 is given in the table :

Table :70 **Rs. Cr.**

Power House	Allowed in MYT order	Cost of Water for hydel allowed in this true-up order	
		On share basis as per audited accounts	On 100% capacity basis
Gandhi Sagar	5.00	0.82	1.64
Pench	0.00	0.00	0.00
Birsinghpur	0.00	0.08	0.08
Bansagar I,II&III	2.21	22.08	22.08
Bargi	1.02	6.48	6.48
Rajghat	1.13	0.99	1.98
Total Hydro	9.36	30.45	32.26

- 2.157. Since the water charges of thermal power stations is an integral part of entire O&M expenses hence, for the purpose of true-up, the Commission has included and allowed the water charges of thermal generating station in the O&M expenses of thermal stations.
- 2.158. The expenditure on account of water charges of hydel stations paid by MPPGCL to the Government of MP is based on actual. The Commission allows the true-up amount of **Rs.22.90 crores** for water charges of hydel power stations in this order.

Table :71

Water charges for hydel power station: **Rs. Cr.**

Sr. No.	Particular	FY 2008-09
1	Already allowed in MYT order for FY 2008-09	9.36
2	Allowed in this tariff order	32.26
3	True-up amount allowed in this order	22.90

C. Rent, Rate and Taxes

- 2.159. The petitioner has claimed the expenses against the rent, rate and taxes under other cost. It has been observed that the expense on rent, rate and taxes mentioned in Schedule 19 of the audited accounts is Rs.0.32 crores which is for the shared portion whereas these expenses filed in the petition on 100% operating capacity basis. The clarification in this regard was sought from the petitioner in this regard.
- 2.160. The petitioner in its reply dated 15th October, 2011 submitted the break-up of power station-wise rent, rate and taxes on share basis and also on 100% operating capacity basis. On scrutiny of the power station-wise details of rent, rate and taxes on share basis and on 100% operating capacity basis as filed by the petitioner in its additional submission, the Commission has allowed the rent, rate and taxes as given below :

Table :72

Rent, Rate and taxes as allowed in MYT order vis-à-vis in this true-up order as per audited account for FY 2008-09: Rs. Cr.

Power House	Allowed in MYT order	Rent, Rates and taxes allowed in this true-up order	
		On share basis as per audited accounts	On 100% capacity basis
ATPS Complex	0.07	0.03	0.03
STPS PH-I	0.40	0.04	0.07
STPS PH-II&III		0.19	0.19
STPS Complex		0.24	0.27
SGTPS PH-I&II	0.32	0.02	0.02
Total Thermal	0.79	0.29	0.30
Gandhi Sagar	0.03	0.00	0.01
Pench	0.03	0.00	0.00
Birsinghpur	0.01	0.00	0.00
Bansagar I,II&III	0.20	0.01	0.01
Bargi	0.08	0.00	0.00
Rajghat	0.01	0.00	0.00
Total Hydro	0.36	0.02	0.03
Total	1.15	0.33	0.35

- 2.161. Since these expenses are included in A&G expenses of audited accounts therefore the rent, rate and taxes have been excluded from A&G expenses. Accordingly, the Commission allows true-up amount of **-(Rs.0.80) crore** for rent, rate and taxes in this order as given below :

Table :72A Rent, Rate and Taxes: Rs. Cr.

Sr. No.	Particular	FY 2008-09
1	Already allowed in earlier MYT order	1.15
2	Allowed in this tariff order	0.35
3	True-up amount allowed in this order	-0.80

D. Cess on Auxiliary Consumption

2.162. The power station-wise amount of cess on auxiliary consumption for FY 2007-08 allowed by the Commission in MYT order and actual Cess amount allowed by the Commission in this true-up order based on the actual aux. consumption filed in the petition is as given below :

Table :73

Power House	Cess amount allowed in MYT order (Rs. Cr.)	Cess on Auxiliary Consumption	
		Actual Aux. consumption in MU's as filed	Cess amount in (Rs. Cr.) @ 10 paisa/kWh based on actual aux. Consumption allowed
ATPS Complex	1.54	137	1.37
STPS PH-I	6.82	208	2.08
STPS PH-II&III		478	4.78
STPS Complex		686	6.86
SGTPS PH-I&II	5.22	546	5.46
Total Thermal	13.58	1369	13.69
Gandhi Sagar	0.02	3	0.03
Pench	0.03	2	0.02
Birsinghpur	0.00	0.5	0.005
Bansagar I,II&III	0.11	13	0.13
Bargi	0.05	10	0.10
Rajghat	0.01	3	0.03
Total Hydro	0.22	33.50	0.31
Total	13.80	1402.50	14.00

2.163. The Commission has allowed the actual Cess on auxiliary consumption of **Rs.14.00 crores** in this order.

Table :74

Cess on auxiliary consumption:		Rs. Cr.
Sr. No.	Particular	FY 2008-09
1	Already allowed in MYT order	13.80
2	Allowed in this true-up tariff order	14.00
3	True-up amount allowed in this order	0.20

E. MPERC Fees

2.164. The petitioner has claimed the MPERC fee of Rs.5000 per MW for thermal and Rs.1000 per MW for hydro power stations as per the regulation notified by the Commission. The Commission has therefore, allowed the fees filed by the petitioner for determination of tariff as per the Regulation.

F. Entry Tax on R&M

- 2.165. The petitioner has filed the Rs.1.19 crores as entry tax on R&M separately in the petition. Since as per Schedule 17 of the audited accounts, the entry tax is the integral part of R&M expenses and included in total R&M expenses therefore, the Commission has allowed entry tax on R&M on actual basis in the operation and maintenance expenses.
- 2.166. The summary of power station-wise total other fixed cost allowed by the Commission is given below:

Table :75

Total other expenses allowed by the Commission in this true-up order Rs. Cr.

Power Station	Water charges for Hydel	Rent , Rate and Taxes	Cess on Aux.	MPERC Fee	Total other fixed charges
ATPS	-	0.03	1.37	0.15	1.55
STPS PH-I	-	0.07	2.08	0.57	
STPS PH-II&III	-	0.19	4.78		
STPS	-	0.27	6.86		7.70
SGTPS	-	0.02	5.46	0.42	5.90
Total Thermal	-	0.30	13.69	1.14	15.13
Gandhi Sagar	1.64	0.01	0.03	0.011	1.69
Pench	0.00	0.00	0.02	0.016	0.04
Birsinghpur	0.08	0.00	0.005	0.002	0.09
Bansagar	22.08	0.01	0.13	0.040	22.26
Bargi	6.48	0.00	0.10	0.009	6.59
Rajghat	1.98	0.00	0.03	0.005	2.02
Total Hydro	32.26	0.03	0.31	0.083	32.68
Total	32.26	0.35	14.00	1.22	47.83

- 2.167. The Commission has determined total other fixed cost of **Rs.47.83 crores** for FY 2008-09 in this order. However, the true-up amount allowed by the Commission for other fixed costs is given below:

Table :76

Rs. Cr.

Particular	Water charges for Hydel	Rent , Rate and Taxes	Cess on Aux.	MPERC Fee	Total other fixed charges
Already allowed in MYT order	9.54	1.15	13.8	1.22	25.71
Allowed in this true-up order	32.26	0.35	14.03	1.23	47.85
True-up amount allowed in this order	22.72	-0.80	0.23	0.01	22.14

Non Tariff income

2.168. The non-tariff income is the income generated by the MPPGCL from all other sources except sale of power e.g. interest on fixed deposits and investments, trading business like sale of scrap delayed payment surcharge etc.

2.169. The petitioner has submitted the station-wise approved non-tariff income in MYT order vis-a-vis actual non tariff income for FY 2008-09 as given below:

S. No.	Power Station	As per MYT Order	As per Actuals	Diff.
1	ATPS	0.47	3.33	2.86
2	STPS	2.56	15.29	12.73
3	SGTPS	2.05	9.29	7.24
4	Total Thermal	5.08	27.91	22.83
5	Gandhi Sagar	0.07	0.51	0.44
6	Pench	0.06	0.34	0.28
7	Rajghat	0.02	0.17	0.15
8	Bargi	0.20	0.30	0.10
9	Bansagar	0.41	2.02	1.61
10	Birsinghpur	0.02	0.03	0.01
11	Total Hydro	0.78	3.37	2.59
	Total	5.86	31.29	-25.43

2.170. The Commission has considered the non-tariff income of **Rs.31.29 crores** in FY 2008-09 and true up of **Rs.-(25.43) crores** for non-tariff income in this true up order which shall be deducted from cost of generation.

Sr. No.	Particular	FY 2008-09
1	Already considered in earlier MYT tariff order	5.86
2	Considered in this true-up tariff order	31.29
3	True-up amount considered in this order	(-25.43)

Interest on Working Capital :

Petitioner's submission

2.171. The petitioner in Para 4.5 of the petition has submitted the following :

“The Working capital has been calculated in accordance to Clause 3.9 of Principal Tariff Regulation 2005 and its first amendments. Accordingly cost of 45/60 days coal stock, 60 days stock of secondary oil, 30 days O&M expenditure, 1% of opening gross block as maintenance spares and 2 months receivables has been considered for calculating interest on Working Capital.

The interest rate considered by Hon'ble Commission at the time of MYT order was 11.25% whereas applicable interest rate (PLR + 1 %) as per Clause 2.30 of Tariff Regulation 2005 is 13.5%. True-up amount on interest on working capital has been worked out as Rs.35.15 Crores as indicated below.

Table :79 Comparison of Interest on Working Capital (Rs. Cr.)

S.No.	Station	As per MYT Order	As per Actuals	Diff.
1	ATPS	6.01	8.96	2.95
2	STPS	36.88	55.43	18.55
3	SGTPS	25.85	36.13	10.28
4	Total Thermal	68.74	100.52	31.78
5	Gandhi Sagar	0.28	0.36	0.08
6	Pench	0.4	0.54	0.14
7	Rajghat	0.28	0.49	0.21
8	Bargi	0.32	0.68	0.36
9	Bansagar	3.31	5.84	2.53
10	Birsinghpur	0.14	0.19	0.05
11	Total Hydro	4.73	8.1	3.37
	Total	73.47	108.62	35.15

2.172. The MPPGCL has requested the Commission to allow true up of **Rs.35.15 crores** for FY 2008-09 only against the interest on working capital as per norms.

Provision of the Regulation

2.173. Clause 2.30 of MPERC (Terms and Conditions for determination of Generation Tariff) Regulation, 2005 (G-26 of 2005) states that,

“Rate of interest on working capital to be computed as provided subsequently in these regulations shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on April 1 of the relevant year plus

1%. The interest on working capital shall be payable on normative basis notwithstanding that the generating company has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures”.

2.174. Clause 3.9 and 3.34 of the afore-mentioned Regulation and its subsequent amendment states that,

- (a) *“The Working capital for Coal based generating stations shall cover:*
- (i) Cost of coal for 45 days for pit-head generating stations and two month for non-pit-head generating stations, corresponding to the target availability;*
 - (ii) Cost of secondary fuel oil for two months corresponding to the target availability;*
 - (iii) Operation and Maintenance expenses for one month;*
 - (iv) Maintenance spares @ 1% of the historical cost escalated @ 4% per annum from the date of commercial operation; and*
 - (v) Receivables equivalent to two months of fixed and variable charges for sale of electricity calculated on the target availability.*
- (b) *The Working Capital for hydel power stations shall cover:*
- (i) Operation and Maintenance expenses for one month;*
 - (ii) Maintenance spares @ 1% of the historical cost escalated @ 4% per annum from the date of commercial operation; and*
 - (iii) Receivables equivalent to two months of fixed charges for sale of electricity, calculated on normative capacity index.”*

Commission’s analysis

2.175. The Commission has made scrutiny of the working capital and worked out the working capital for thermal and hydel power stations as per the norms provided in Regulations for the following elements:

- a) **Coal Cost:** The petitioner has filed the cost of coal for working capital for thermal power stations based on the per MT price of coal calculated by the petitioner from its coal accounting records, cost of coal for thermal power stations has been worked out for 45 days for pit-head generating stations and two months for non pit-head generating stations. The Commission has calculated the per MT price of coal on the basis of audited accounts for FY2008-09. The amount of coal has been determined by considering the operational norms specified in the Regulations and weighted average price and GCV of coal.
- b) **Secondary fuel oil:** The petitioner has claimed the cost of secondary fuel oil (HFO+LDO/HSD) for working capital for thermal power stations based on the rates of secondary oil taken from the books of accounts maintained by the petitioner through store accounting system. Accordingly, the fuel oil component in working capital is worked out in this order.

- c) **O&M expenses:** As per provision under Regulations, the expenses for one month of the actual O&M expenses as approved by the Commission has been considered for calculation of working capital.
- d) **Maintenance Spares:** The Commission has considered the value of maintenance spares for working capital purpose as per the Regulation.
- e) **Receivable:** Two months receivables have been worked out as per Regulation considering the operational parameters and actual price of fuel.

2.176. The actual prevailing rate of PLR as on 1st April, 2008 i.e. 12.25%. Considering the same rate of interest on working capital plus 1% during the period FY 2008-09, the Commission has worked out the interest on working capital. The necessary details in support of calculation of interest on working capital are given below :

Table:80
Interest on Working Capital for FY 2008-09 for Thermal Power Stations

S. No.	Particulars	Unit	ATPS	STPS	SGTPS
1	Coal Cost	Rs.Cr.	117.81	894.75	484.90
2	45/ 60 Days Qty	Rs.Cr.	14.52	147.08	79.71
3	Oil Cost	Rs.Cr.	25.97	63.36	35.97
4	Two Month Oil Cost	Rs.Cr.	4.33	10.56	6.00
5	Total O&M charges	Rs.Cr.	59.71	184.70	75.18
6	O&M Charges for one Month	Rs.Cr.	4.98	15.39	6.27
7	Opening Gross Block	Rs.Cr.	182.62	625.52	2161.29
8	Maint. spares @1% of historical cost	Rs.Cr.	1.83	6.26	21.61
11	Receivable for FY2008-09	Rs.Cr.	219.50	1222.29	812.68
	Receivable for FY2005-06	Rs.Cr.	-0.47	0.86	-2.84
	Receivable for FY2006-07	Rs.Cr.	0.14	1.69	0.08
	Receivable for FY2007-08	Rs.Cr.	0.56	2.69	0.30
12	Total receivables	Rs.Cr.	219.73	1,227.44	810.21
13	Receivables for two Months	Rs.Cr.	36.62	204.61	135.04
14	Working Capital	Rs.Cr.	62.28	383.90	248.62
15	Interest rate @ short term PLR + 1%	%	13.25	13.25	13.25
	Interest amount on working capital	Rs.Cr.	8.25	50.87	32.94

Table:81

Interest on Working Capital for FY 2008-09 for Hydel Power Stations Rs. Cr.

S. No.	Particulars	G. Sagar	Pench	Bargi	Rajghat	Bansagar	Birsinghpur
1	Total O&M charges	6.99	6.58	5.15	4.22	22.34	0.86
2	O&M Charges for one Month	0.58	0.55	0.43	0.35	1.86	0.07
3	Opening Gross Block	10.29	96.24	87.03	82.80	1243.92	52.15
4	Maint. spares @1% of historical cost	0.10	0.96	0.87	0.83	12.44	0.52
5	Receivable for FY 2008-09	8.97	12.71	17.83	12.32	151.14	4.48
	Receivable for FY 2005-06	0.00	0.00	0.01	0.02	0.00	0.00
	Receivable for FY 2006-07	0.00	0.35	0.00	0.37	0.01	0.00
	Receivable for FY 2007-08	0.00	1.03	0.35	0.42	-0.01	-0.01
6	Total receivables	8.97	14.08	18.19	13.12	151.15	4.46
7	Receivables for two Months	1.49	2.35	3.03	2.19	25.19	0.74
8	Working Capital	2.18	3.86	4.33	3.37	39.49	1.34
9	Interest rate @ short term PLR + 1%	13.25	13.25	13.25	13.25	13.25	13.25
	Interest amount on working capital	0.29	0.51	0.57	0.45	5.23	0.18

2.177. The Commission has allowed total true-up of **Rs.25.84 crores** against interest on working capital in this order as given below:

Table :82 Interest on Working Capital Rs. Cr.

Sr. No.	Particular	FY 2008-09
1	Already allowed in earlier true-up/tariff order	73.47
2	Allowed in this tariff order	99.29
3	True-up amount allowed in this order	25.84

CHAPTER 3

Recovery of fixed (capacity) charges

- 3.1. With regard to recovery of fixed (capacity) charges of thermal power stations, Clause 41 of MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2005' (G-26 of 2005), states that,

“Full capacity charges shall be recoverable at target availability specified in regulation 36. Recovery of capacity charges below the level of target availability will be on pro rata basis. At zero availability, no capacity charges shall be payable”.

- 3.2. For recovery of fixed (capacity) charges of hydel power stations, Clause 58 of the same Regulation states as follows,

“ Full capacity charges shall be recoverable at normative capacity index specified in regulation 52 above. Recovery of capacity (fixed) charges below the level of target availability shall be on pro rata basis. At zero availability, no capacity charges shall be payable”.

- 3.3. The availability factor for thermal power stations and Capacity Index for Hydel Power Stations fixed by the Commission in the Regulation and actually achieved by the company for FY 2008-09 (as informed by MPPGCL and certified by SLDC) is given below:

Table :83

S. No.	Thermal Power Stations/ Units	% Availability	
		Normative	Actual
1	ATPS	52.24%	43.58%
2	STPS	78.41%	72.67%
3	SGTPS	77.00%	68.46%

Table :84

S. No.	Hydro Power Station / Units	% Capacity Index	
		Normative	Actual
1	Gandhi Sagar	85.00%	95.23%
2	Pench	85.00%	94.64%
3	Rajghat	85.00%	95.10%
4	Bargi	85.00%	93.79%
5	Bansagar	85.37%	87.92%
6	Birsinghpur	85.00%	98.36%

- 3.4. Normative Vs. Actual Availability of Thermal Power Stations and Capacity Index of Hydel Power Stations for FY 2005-06, FY 2006-07 and for FY 2007-08 as follows:

Table :85

Sr. No.	Power Station	FY 2005-06		FY 2006-07		FY 2007-08	
		Norms	Actual	Norms	Actual	Norms	Actual
1	ATPS	50.70%	48.04%	51.36%	50.16%	51.72%	43.27%
2	STPS	77.10%	80.89%	77.56%	74.04%	77.98%	75.43%
3	SGTPS	74.80%	69.92%	75.50%	74.13%	76.00%	69.13%
4	Gandhi Sagar	85.00%	89.09%	85.00%	93.71%	85.00%	94.80%
5	Pench	85.00%	71.37%	85.00%	89.16%	85.00%	90.35%
6	Rajghat	85.00%	98.54%	85.00%	91.75%	85.00%	96.08%
7	Bargi	85.00%	93.29%	85.00%	94.22%	85.00%	87.82%
8	Bansagar	85.00%	70.66%	85.37%	89.01%	85.37%	88.55%
9	Birsinghpur	85.00%	96.16%	85.00%	99.66%	85.00%	99.95%

- 3.5. The actual recovery of fixed cost shall be pro-rated with respect to actual availability factor of the respective thermal power stations and actual capacity index of hydro power stations. The power station-wise fixed cost allowed by the Commission in this true-up order for FY 2008-09 is given below:

Table:86

Power station-wise annual fixed charges approved by the Commission for FY 2008-09

ATPS, Chachai					Rs. Cr.
Sr. No.	Particular	Approved in MYT order for FY 2008-09	Approved in this true up order for FY 2008-09		True-up amount allowed
			Approved cost	Recoverable cost	
1	Interest on loan	0.61	0.56	0.47	-0.14
2	Depreciation	1.40	2.75	2.30	0.90
3	Return on equity	4.21	6.05	5.05	0.84
4	O & M Expenses	37.70	59.71	49.81	12.11
5	Interest on Working Capital	6.01	8.25	6.88	0.87
6	Other fixed cost	1.76	1.55	1.55	-0.21
7	Less non tariff income	-0.47	-3.33	-3.33	-2.86
Total		51.22	75.55	62.73	11.51

STPS, Sarni

Rs. Cr.

Sr. No.	Particular	Approved in MYT order for FY 2008-09	Approved in this true up order for FY 2008-09		True-up amount allowed
			Approved cost	Recoverable cost	
1	Interest on loan	0.69	2.28	2.11	1.42
2	Depreciation	5.16	6.26	5.80	0.64
3	Return on equity	17.74	26.36	24.43	6.69
4	O & M Expenses	148.53	184.7	171.18	22.65
5	Interest on Working Capital	36.88	50.87	47.14	10.26
6	Other fixed cost	7.79	7.70	7.7	-0.09
7	Less non tariff income	-2.56	-15.29	-15.29	-12.73
Total		214.23	262.88	243.08	28.85

SGTPS, Birsinghpur

Rs. Cr.

Sr. No.	Particular	Approved in MYT order for FY 2008-09	Approved in this true up order for FY 2008-09		True-up amount allowed
			Approved cost	Recoverable cost	
1	Interest on loan	35.47	30.25	26.89	-8.58
2	Depreciation	64.27	64.79	57.61	-6.66
3	Return on equity	61.82	90.83	80.75	18.93
4	O & M Expenses	109.2	75.18	66.84	-42.36
5	Interest on Working Capital	25.85	32.94	29.29	3.44
6	Other fixed cost	5.96	5.90	5.90	-0.06
7	Less non tariff income	-2.05	-9.29	-9.29	-7.24
Total		300.52	290.60	258.00	-42.52

Gandhi Sagar

Rs. Cr.

Sr. No.	Particular	Approved in MYT order for FY 2008-09	Approved in this true up order for FY 2008-09		True-up amount allowed
			Approved cost	Recoverable cost	
1	Interest on loan	0.00	0.00	0.00	0.00
2	Depreciation	0.08	0.08	0.08	0.00
3	Return on equity	0.30	0.43	0.43	0.13
4	O & M Expenses	5.72	6.99	6.99	1.27
5	Interest on Working Capital	0.28	0.29	0.29	0.01
6	Other fixed cost	5.06	1.69	1.69	-3.37
7	Less non tariff income	-0.07	-0.51	-0.51	-0.44
Total		11.37	8.97	8.97	-2.40

Pench

Rs. Cr.

Sr. No.	Particular	Approved in MYT order for FY 2008-09	Approved in this true up order for FY 2008-09		True-up amount allowed
			Approved cost	Recoverable cost	
1	Interest on loan	0.00	0.47	0.47	0.47
2	Depreciation	1.13	1.40	1.40	0.27
3	Return on equity	2.56	4.04	4.04	1.48
4	O & M Expenses	7.95	6.58	6.58	-1.37
5	Interest on Working Capital	0.4	0.51	0.51	0.11
6	Other fixed cost	0.08	0.04	0.04	-0.04
7	Less non tariff income	-0.07	-0.34	-0.34	-0.27
Total		12.05	12.71	12.71	0.66

Rajghat					Rs. Cr.
Sr. No.	Particular	Approved in MYT order for FY 2008-09	Approved in this true up order for FY 2008-09		True-up amount allowed
			Approved cost	Recoverable cost	
1	Interest on loan	0.19	0.16	0.16	-0.03
2	Depreciation	2.19	2.19	2.19	0.00
3	Return on equity	2.42	3.48	3.48	1.06
4	O & M Expenses	2.24	4.22	4.22	1.98
5	Interest on Working Capital	0.28	0.45	0.45	0.17
6	Other fixed cost	1.37	1.99	1.985	0.61
7	Less non tariff income	-0.02	-0.17	-0.17	-0.15
Total		8.67	12.32	12.32	3.64

Bargi					Rs. Cr.
Sr. No.	Particular	Approved in MYT order for FY 2008-09	Approved in this true up order for FY 2008-09		True-up amount allowed
			Approved cost	Recoverable cost	
1	Interest on loan	0	0.00	0.00	0.00
2	Depreciation	1.93	2.11	2.11	0.18
3	Return on equity	2.26	3.66	3.66	1.40
4	O & M Expenses	4.47	5.15	5.15	0.68
5	Interest on Working Capital	0.32	0.57	0.57	0.25
6	Other fixed cost	1.16	6.64	6.64	5.48
7	Less non tariff income	-0.2	-0.30	-0.30	-0.10
Total		9.94	17.83	17.83	7.89

Bansagar					Rs. Cr.
Sr. No.	Particular	Approved in MYT order for FY 2008-09	Approved in this true up order for FY 2008-09		True-up amount allowed
			Approved cost	Recoverable cost	
1	Interest on loan	4.47	25.16	25.16	20.69
2	Depreciation	25.87	25.92	25.92	0.05
3	Return on equity	36.28	52.24	52.24	15.96
4	O & M Expenses	20.13	22.34	22.34	2.21
5	Interest on Working Capital	3.31	5.23	5.23	1.92
6	Other fixed cost	2.56	22.26	22.26	19.70
7	Less non tariff income	-0.41	-2.02	-2.02	-1.61
Total		92.21	151.14	151.14	58.93

Birsinghpur					Rs. Cr.
Sr. No.	Particular	Approved in MYT order for FY 2008-09	Approved in this true up order for FY 2008-09		True-up amount allowed
			Approved cost	Recoverable cost	
1	Interest on loan	0.00	0.00	0.00	0.00
2	Depreciation	1.21	1.20	1.20	-0.01
3	Return on equity	1.52	2.19	2.19	0.67
4	O & M Expenses	0.99	0.86	0.86	-0.13
5	Interest on Working Capital	0.14	0.18	0.18	0.04
6	Other fixed cost	0.016	0.087	0.087	0.07
7	Less non tariff income	-0.02	-0.03	-0.03	-0.01
Total		3.86	4.48	4.48	0.62

Total MPPGCL's fixed cost for FY 2008-09					Rs. Cr.
Sr. No.	Particular	Approved in MYT order for FY 2008-09	Approved in this true up order for FY 2008-09		True-up amount allowed
			Approved cost	Recoverable cost	
1	Interest on loan	41.43	58.88	55.27	13.84
2	Depreciation	103.24	106.71	98.61	-4.63
3	Return on equity	129.11	189.29	176.28	47.17
4	O & M Expenses	336.93	365.73	333.97	-2.96
5	Interest on Working Capital	73.47	99.29	90.54	17.07
6	Other fixed cost	25.76	47.85	47.85	22.09
7	Less non tariff income	-5.87	-31.28	-31.28	-25.41
Total		704.07	836.47	771.24	67.17

3.6. It may be mentioned here that further true-up for FY 2005-06 and FY 2007-08 on certain components i.e interest and finance charges, depreciation and return on equity due to impact of additional capitalization. Accordingly, the aforementioned component wise true-up of fixed cost at actual availability for each power station is given below:

Table :87

ATPS Chachai:

Rs. Cr.

Cost Component	Year	Cost at actual availability		
		As per true-up order FY 2007-08	Allowed in this order	True-up amount
Interest on Loan	FY 2005-06	0.61	0.61	0.00
	FY 2006-07	0.66	0.66	0.00
	FY 2007-08	0.50	0.50	0.00
Depreciation	FY 2005-06	1.13	0.66	-0.47
	FY 2006-07	1.40	1.53	0.13
	FY 2007-08	1.17	1.72	0.55
RoE	FY 2005-06	4.78	4.78	0.00
	FY 2006-07	5.91	5.91	0.00
	FY 2007-08	5.06	5.06	0.00

STPS, Sarni :

Rs. Cr.

Cost Component	Year	Cost at actual availability		
		As per true-up order FY 2007-08	Allowed in this order	True-up amount
Interest on Loan	FY 2005-06	0.70	1.83	1.13
	FY 2006-07	0.68	2.09	1.41
	FY 2007-08	0.48	2.38	1.90
Depreciation	FY 2005-06	4.79	4.46	-0.33
	FY 2006-07	5.40	5.36	-0.04
	FY 2007-08	5.43	5.65	0.22
RoE	FY 2005-06	21.20	21.26	0.06
	FY 2006-07	24.28	24.60	0.32
	FY 2007-08	24.60	25.30	0.70

SGTPS Birsinghpur:

Rs. Cr.

Cost Component	Year	Cost at actual availability		
		As per true-up order FY 2007-08	Allowed in this order	True-up amount
Interest on Loan	FY 2005-06	38.15	38.16	0.01
	FY 2006-07	41.42	41.45	0.03
	FY 2007-08	32.39	32.52	0.13
Depreciation	FY 2005-06	58.32	55.46	-2.86
	FY 2006-07	68.95	68.98	0.03
	FY 2007-08	63.49	63.56	0.07
RoE	FY 2005-06	70.58	70.59	0.01
	FY 2006-07	88.96	88.98	0.02
	FY 2007-08	82.41	82.50	0.09

Gandhi Sagar:

Rs. Cr.

Cost Component	Year	Cost at actual availability		
		As per true-up order FY 2007-08	Allowed in this order	True-up amount
Interest on Loan	FY 2005-06	0.00	0.00	0.00
	FY 2006-07	0.00	0.00	0.00
	FY 2007-08	0.00	0.00	0.00
Depreciation	FY 2005-06	0.07	0.07	0.00
	FY 2006-07	0.08	0.08	0.00
	FY 2007-08	0.08	0.08	0.00
RoE	FY 2005-06	0.36	0.36	0.00
	FY 2006-07	0.43	0.43	0.00
	FY 2007-08	0.43	0.43	0.00

Pench:

Rs. Cr.

Cost Component	Year	Cost at actual availability		
		As per true-up order FY 2007-08	Allowed in this order	True-up amount
Interest on Loan	FY 2005-06	0.00	0.00	0.00
	FY 2006-07	0.00	0.22	0.22
	FY 2007-08	0.00	0.43	0.43
Depreciation	FY 2005-06	0.82	0.82	0.00
	FY 2006-07	1.16	1.11	-0.05
	FY 2007-08	1.16	1.41	0.25
RoE	FY 2005-06	2.58	2.58	0.00
	FY 2006-07	3.69	3.87	0.18
	FY 2007-08	3.7	4.04	0.34

Rajghat: **Rs. Cr.**

Cost Component	Year	Cost at actual availability		
		As per true-up order FY 2007-08	Allowed in this order	True-up amount
Interest on Loan	FY 2005-06	0.43	0.43	0.00
	FY 2006-07	0.47	0.47	0.00
	FY 2007-08	0.31	0.31	0.00
Depreciation	FY 2005-06	1.81	1.83	0.02
	FY 2006-07	1.83	2.19	0.36
	FY 2007-08	1.83	2.19	0.36
RoE	FY 2005-06	2.90	2.90	0.00
	FY 2006-07	3.48	3.48	0.00
	FY 2007-08	3.42	3.48	0.06

Bargi: **Rs. Cr.**

Cost Component	Year	Cost at actual availability		
		As per true-up order FY 2007-08	Allowed in this order	True-up amount
Interest on Loan	FY 2005-06	0.00	0.00	0.00
	FY 2006-07	0.00	0.00	0.00
	FY 2007-08	0.00	0.00	0.00
Depreciation	FY 2005-06	1.78	1.78	0.00
	FY 2006-07	2.14	2.14	0.00
	FY 2007-08	1.78	2.13	0.35
RoE	FY 2005-06	3.04	3.04	0.00
	FY 2006-07	3.65	3.65	0.00
	FY 2007-08	3.65	3.65	0.00

Bansagar:

Rs. Cr.

Cost Component	Year	Cost at actual availability		
		As per true-up order FY 2007-08	Allowed in this order	True-up amount
Interest on Loan	FY 2005-06	25.42	25.42	0.00
	FY 2006-07	32.34	32.36	0.02
	FY 2007-08	28.57	28.56	-0.01
Depreciation	FY 2005-06	17.95	17.95	0.00
	FY 2006-07	25.93	25.92	-0.01
	FY 2007-08	25.93	25.92	-0.01
RoE	FY 2005-06	36.19	36.19	0.00
	FY 2006-07	52.24	52.24	0.00
	FY 2007-08	52.24	52.24	0.00

Birsinghpur hydel:

Rs. Cr.

Cost Component	Year	Cost at actual availability		
		As per true-up order FY 2007-08	Allowed in this order	True-up amount
Interest on Loan	FY 2005-06	0.00	0.00	0.00
	FY 2006-07	0.00	0.00	0.00
	FY 2007-08	0.00	0.00	0.00
Depreciation	FY 2005-06	1.11	1.11	0.00
	FY 2006-07	1.33	1.33	0.00
	FY 2007-08	1.32	1.31	-0.01
RoE	FY 2005-06	1.83	1.83	0.00
	FY 2006-07	2.19	2.19	0.00
	FY 2007-08	2.19	2.19	0.00

Cost components for past period:					Rs. Cr.
Cost Component	Year	Cost at actual availability			Total
		As per true-up order FY 2007-08	Allowed in this order	True-up amount	
Interest on Loan	FY 2005-06	65.31	66.45	1.14	5.28
	FY 2006-07	75.57	77.26	1.69	
	FY 2007-08	62.25	64.70	2.45	
Depreciation	FY 2005-06	87.78	84.13	-3.65	-1.43
	FY 2006-07	108.22	108.65	0.43	
	FY 2007-08	102.19	103.98	1.79	
RoE	FY 2005-06	143.46	143.52	0.06	1.79
	FY 2006-07	184.83	185.36	0.53	
	FY 2007-08	177.70	178.91	1.21	
Total		1007.31	1012.96	5.65	5.65

CHAPTER 4

Energy Charges (Variable Charges)

Petitioner's submission

- 4.1. The petitioner has filed the actual performance of its Thermal and Hydel power stations in FY 2008-09 on various parameters like Gross Generation, Plant Load Factor (PLF), Station Heat Rate (SHR), Specific Oil Consumption, Auxiliary Consumption and Capacity Index etc. The petitioner has also mentioned the actual performance of the company in FY 2008-09 vis-a-vis the norms prescribed in the MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2005 notified by the Commission. The petitioner has filed the **actual performance** during FY 2008-09 as given below :

Table :88 Thermal Power Stations

Sr. No.	Particular	Unit	ATPS Chachai	STPS Sarni	SGTPS Birsinghpur
1	Plant load factor	%	43.56	72.43	68.37
2	Gross Station Heat Rate	kcal/kwh	3647	3178	3020
3	Sec. fuel oil consumption	ml/kwh	5.23	3.28	0.95
4	Aux energy consumption	%	12.38	8.98	10.86
5	Gross generation	MUs	1107	7249	5031
6	Transit and handling loss	%	0.24	1.87	3.07

- 4.2. In respect of hydel power station, the petitioner has mentioned actual gross generation from hydro power stations vis-a-vis the gross generation approved by the Commission in FY 2008-09 in MYT order as given below :

Table :89

Gross Generation from Hydro Power Stations in MU

Hydel Power Stations	MPERC Approved	Actuals
Gandhi Sagar HPS	345	109
Pench HPS	315	179
Rajghat HPS	90	132
RABS Bargi HPS	509	432
Bansagar Complex	1105	1472
Birsinghpur HPS	45	42
Hydel Total	2409	2366

- 4.3. The petitioner has requested the Commission to consider actual performance of the operational parameters and allow the cost of coal and oil accordingly.

Provisions of the Regulation

4.4. Clause 42 of the Regulations provides that,

“The energy (variable) charges shall cover fuel costs and shall be computed as follows:

Energy (variable) Charges shall cover fuel costs and shall be worked out on the basis of ex-bus energy scheduled to be sent out from the generating station as per the following formula:

Energy Charges (Rs) = Rate of Energy Charges in Rs/kWh X Scheduled Energy (ex-bus) for the month in kWh corresponding to scheduled generation. Rate of Energy Charges (REC) shall be the sum of the cost of normative quantities of primary and secondary fuel for delivering ex-bus one kWh of electricity in Rs/kWh and shall be computed as under:

$$REC = \frac{100\{P_p \times (Q_p)_n + P_s \times (Q_s)_n\}}{(100-(AUX_n))} \quad (Rs/kWh)$$

Where, P_p = Price of primary fuel namely coal or lignite or gas or liquid fuel in Rs/Kg or Rs/cum or Rs./litre, as the case may be.
 $(Q_p)_n$ = Quantity of primary fuel required for generation of one kWh of electricity at generator terminals in Kg or litre or cum, as the case may be, and shall be computed on the basis of normative Gross Station Heat Rate (less heat contributed by secondary fuel oil for coal/lignite based generating stations) **and gross calorific value of coal/lignite or gas or liquid fuel as fired.**
 P_s = Price of Secondary fuel oil in Rs./ml,
 $(Q_s)_n$ = Normative Quantity of Secondary fuel oil in ml/kWh as per clause 36, as the case may be, and
 AUX_n = Normative Auxiliary Energy Consumption as % of gross generation as per clause 36, as the case may be.”

Commission’s Analysis

4.5. The Commission provided the following operational norms in respect of all three Thermal Power Stations of MPPGCL for FY 2008-09 in the MPERC (Terms and Conditions for determination of Generation Tariff) Regulation, 2005 (G-26 of 2005) :

Table :90

Sr. No.	Particular	Unit	ATPS Chachai	STPS Sarni	SGTPS Birsinghpur
1	Plant load factor for incentive	%	52.24	78.41	77.00
2	Gross Station Heat Rate	kcal/kwh	3573	2873	2757
3	Sec. fuel oil consumption	ml/kwh	7.08	2.66	2.00
4	Aux energy consumption	%	11.57	8.69	9.22

4.6. The norms for transit and handling loss is provided in the Regulation as given below:

Table :91

Particular	Unit	ATPS Chachai	STPS Sarni	SGTPS Birsinghpur
Transit and handling loss	%	0.3	0.8	1.20

4.7. It may be observed that,

- a) The % Plant Load Factor in all three Thermal Power Stations actually achieved by the generating Company is lower than the normative PLF, therefore the generating Company is not entitled for any incentive
- b) Gross Station heat rate (based on GCV) in all three Thermal Power Stations is higher than the normative Station heat rate therefore the Commission has considered the normative Station heat rate for FY 2008-09, in this true up order.
- c) Specific secondary oil consumption in ATPS, Chachai and SGTPS, Birsinghpur is lower than the normative secondary oil consumption whereas in STPS, Sarni it is slightly on higher side. The Commission has observed that the oil consumption for STPS Sarni is still higher than the target. However, the Commission appreciate the over all reduction in oil consumption and decides to consider normative oil consumption as allowed in MYT Order for FY 2008-09 in this true-up tariff order to incentives the generating Company.
- d) Auxiliary energy consumption in case of all thermal power stations are marginally higher than that approved by the Commission in MYT order. However, the Commission desired for further reduction in auxiliary consumption and decides to consider normative auxiliary consumption as allowed in MYT Order for FY 2008-09 in this tariff order while calculating the energy charge rate for all three Thermal Power Stations.

Gross Generation

4.8. Since the generating company has not actually achieved the normative % PLF in all three Thermal Power Stations, therefore the actual Gross Generation for FY 2008-09 is lower than the gross generation considered in MYT Order for FY 2008-09 based on normative % PLF. The Gross Generation from the three Thermal Power Stations for FY 2008-09 as per MYT Order based on target PLF's and actually achieved and filed by the petitioner in the petition is given below :

Table :92 Approved Vs Actual Gross Generation (MU)

Power Stations	Gross Generation in MUs as per MYT Order	Gross Generation in MUs actually achieved	Difference
ATPS Chachai	1327	1107	-220
STPS Sarni	7848	7249	-599
SGTPS Birsinghpur	5666	5031	-635
Total	14841	13387	-1454

4.9. The Commission vide its letter dated 14th September, 2011 sought the SLDC's statement for certifying station-wise actual availability and ex-bus generation for FY 2008-09. In response, the petitioner vide its letter dated 15th October, 2011 submitted SLDC monthly revised energy account indicating power station-wise ex-bus generation. It has been observed that the net generation as filed by the petitioner in its true-up petition in respect of SGTPS, Birsinghpur is slightly at variance from the net generation indicated in SLDC's revised state energy account.

4.10. In view of the above, the Commission has considered the net generation as per the SLDC's revised state energy account. Accordingly, the power station-wise actual net generation considered by the Commission in this order is given below :

Table :93 Approved Vs Actual Net Generation (MU)

Name of TPS	MPERC Approved	Actuals	Difference
ATPS Chachai	1174	970	-204
STPS Sarni	7166	6563	-603
SGTPS Birsinghpur	5144	4509	-635
Total	13484	12042	-1442

Transit and Stacking Loss

4.11. Clause 3.13(iii) of the Regulation, (G-26 of 2005) states that,

“The landed cost of fuel shall include price of fuel corresponding to the grade/quality/calorific value of fuel inclusive of royalty, taxes and duties as applicable, transportation cost by rail/road/gas pipe line or any other means, and, for the purpose of computation of energy charges, shall be arrived at after considering normative transit and handling losses as percentage of the quantity of fuel dispatched by the fuel supply company during the year.....”

4.12. The normative transit and handling loss as per regulation and actually achieved by the company for FY 2008-09 is as given below :

Table :94 Normative-vs-Actual transit and handling loss Rs. Cr.

Name of TPS	MPERC Approved	Actuals	Difference
ATPS Chachai	0.30	0.24	-0.06
STPS Sarni	0.80	1.87	1.07
SGTPS Birsinghpur	1.20	3.07	1.87

4.13. The Commission has observed that in ATPS, Chachai the transit loss is lower than the normative loss approved by the Commission in the Regulation but in STPS and SGTPS the transit loss is still on higher side. The Commission in the MYT order allowed 0.5% as stacking loss in addition to the normative transit loss only for FY 2006-07 and directed the MPPGCL to upgrade its coal handling plants immediately so that these losses are minimized and do not add to the overall fuel cost but no sincere efforts have been made by the company in this direction. In view of the above, the Commission has decided to consider normative transit and stacking loss in this true up order also for calculating the cost of coal.

Gross Calorific Value

4.14. Clause 3.16 of the MYT Order dated 7th March, 2006 stated that “the Commission instead of GCV of coal considers NCV for computation of coal cost. NCV accounts for the loss of heat content on account of reasons mentioned by the petitioner. The claim of the petitioner is therefore, not being entertained.”

4.15. The Commission vide its letter dated 14th September, 2011, asked the petitioner to submit Power-Station wise monthly laboratory reports along with the month wise and year wise weighted average GCV of coal for all the Stations. The petitioner vide its affidavit dated 15th October, 2011 submitted the power station wise monthly coal analysis report indicating the Gross Calorific Value of coal.

4.16. Clause 3.13 of the Regulation MPERC (Terms & Conditions for determination of Generation Tariff) G-26 of 2005 notified by the Commission for control period FY 2006-07 to FY 2008-09 clearly stated that the Quantity of primary fuel required for generation of one kwh of electricity at generator terminal in kg shall be computed on the basis of Gross Station heat rate and Gross Calorific Value of primary fuel as fired.

4.17. The Commission in its true-up order FY 2006-07 and FY 2007-08 considered Gross Calorific Value in line of the regulation. Therefore the Commission has followed the same status and taken GCV for determination of energy charges as mentioned in the Regulation.

4.18. The month wise laboratory report submitted by MPPGCL for all three Thermal Power Stations mentions the day-wise analysis of coal which indicates only Gross Calorific Value of fuel determined in laboratory and based on that Laboratory report the yearly weighted average GCV has been calculated by the generating company and same value has also been filed by the petitioner for FY 2008-09 in their submission.

4.19. The actual Gross Calorific Value as filed in the petition and verified from the laboratory report submitted by the petitioner has been considered in this order as given below :

Table :95 Actual Gross Calorific value Kcal/kg.

Power Stations	Actual GCV for FY 2008-09
ATPS Chachai	4505
STPS Sarni	3606
SGTPS Birsinghpur	3955

Coal Cost

4.20. In the MYT Generation Tariff Order for FY 2006-07 to FY 2008-09, the Commission had computed the weighted average landed cost considering all sources from which the supply was received and all grades of coal received by the three generating stations.

**Table :96
Per metric rate of coal considered in MYT order**

Power Stations	Rs/MT (MYT Tariff Order)
ATPS Chachai	1139
STPS Sarni	1358
SGTPS Birsinghpur	1190

4.21. MPPGCL in the True-up petition has taken the Quantity of Coal from accounting records for the three Thermal Power Stations. These quantities match with the figures given in the Annual Statement of accounts for FY 2008-09 for 100% capacity of the Plant. The coal details of MPPGCL on 100% basis as filed in the petition are as given below:

Stock Status of Coal for FY 2008-09

4.22. The MPPGCL has submitted that in this petition, coal cost has been taken from the base calculations used for preparation of coal accounting records for the three Thermal Stations. The powerhouse-wise coal consumption and Audited cost considering all sources from which supply was received and all grades of coal received by the Generating Stations based on the Coal Accounting records is submitted by the petitioner as given below: The summary of the Stock status as filed by the petitioner and duly matched with the details given in note 42 of the audited accounts is given below :

Table :97 Stock Status of Coal for FY 2008-09 as filed by the petitioner (MT)

Particulars		ATPS	STPS	SGTPS	Total
Opening		86411	90631	194921	371964
Receipt	Gross	948338	6882883	6285269	14116490
	Less Transit Loss	359	48030	76702	125091
	Net Receipt	947979	6834853	6208567	13991399
Less Stone Shales		3495	31973	33086	68553
Shortage on Physical Verification		1955	80449	116004	198408
Consumption		925045	6653854	6034912	13613811
Closing Stock		103896	159208	219486	482590
Cost of Consumption (Cr.Rs.)		128.25	1066.06	872.52	2066.84
Rate of Coal (Rs/MT)		1386.46	1602.17	1445.78	1518.19

4.23. The petitioner has submitted that the change in the rates as approved in MYT order and actual is due to various factors like the change in the base price of coal notified by CIL, Transportation charges, surface transportation charges, change in tax structure etc. There was increase of about 13% - 14% in the rates of coal notified by CIL on 13.12.07. The details of the present rates vs. earlier rates are tabulated below :

Table :98 Rate revision in Coal by CIL

Grade	Amount in Rs./MT					
	Prices as on 16.06.2004		Prices as on 13.12.2007		Difference	
	SECL	WCL	SECL	WCL	SECL	WCL
C	1264	1357	1429	1538	13%	13%
D	1076	1264	1223	1441	14%	14%
E	868	1056	982	1201	13%	14%
F	639	837	726	956	14%	14%
G	473	660	541	748	14%	13%

4.24. The Commission vide its letter dated 14th September, 2011 asked the Petitioner to submit the power station wise details of Coal on share vis-à-vis 100% operating capacity basis. Since the quantity of oil consumed is not reflecting anywhere in the audited accounts and the cost of oil consumed is only reflected in Schedule 16 of the balance sheet therefore, the petitioner was also asked to submit month wise details of oil consumption with respect to each power station. The petitioner under affidavit dated 15th October, 2011 submitted the requisite details of coal and oil.

4.25. The Commission has determined the Per MT Coal cost from the Audited cost and quantity as mentioned in the Annual Audited accounts for FY 2008-09 as given below :

Table :99 Determination of per MT coal cost based on audited accounts

Power Station	Coal Cost in Rs. Cr.		Coal Consumed in MT On 100% Capacity basis	Rate Rs./MT
	On share basis as per audited account	On 100% Capacity basis		
	(A)	(B)	(C)	(D)
ATPS PH-I&II	128.25	128.25	930853	1377.77
STPS PH-I	185.03	308.38		
STPS PH II&III	757.68	757.68		
STPS Complex	942.71	1,066.06	6814306	1564.45
SGTPS PH-I&II	872.52	872.52	6260704	1393.65
Total Coal Cost	1,943.48	2,066.83	14,005,863	

4.26. The Commission has considered the total coal cost as mentioned in annual audited accounts and its power station-wise break-up submitted by the petitioner in its petition and additional submission. Out of data submitted by the petitioner, transit loss is not being considered for computing coal cost as it is being accounted for while computing per unit coal quantity consumed. The shortage on physical verification has not been considered as its linkage to cost as per annual account is not established. As regards shortage on accounts of stone shales, no supporting evidence is available to establish how much of such shortage was accepted by Coal Company and given effect to in to the coal cost captured in annual account. The petitioner is allowed to seek adjustment in determined coal cost on account of stone shale shortage on production of aforesaid details when true-up for subsequent years is taken up.

Other fuel related cost

4.27. The petitioner has claimed the other fuel related cost as given below :

Table :100**Other fuel cost claimed by the petitioner in Rs. Cr.**

Particular	ATPS	STPS	SGTPS
Coal Handling	0.00	0.00	0.01
Entry Tax	0.18	1.30	1.20
Total	0,18	1.30	1.21

4.28. However, the Commission in its MYT order dated 7th March, 2006 allowed the other fuel related cost separately therefore the power station-wise other fuel related charges which includes coal handling charges and entry tax , has been worked out on share basis vis-à-vis 100% operating capacity basis as per annual audited accounts by the Commission as follows :

Table :101

Per MT coal handling charges and Entry tax based on audited accounts

Power Station	Coal handling charges (Rs. Cr.)		Entry tax (Rs. Cr.)		Rs. Per MT	
	Share bases	100% bases	Share bases	100% bases	Handling	Entry
ATPS PH-I&II	0.00	0.00	0.18	0.18	0.00	1.95
STPS PH-I	0.00	0.00	0.00	0.00		
STPS PH-II&III	0.00	0.00	1.30	1.30	0.00	
STPS Complex	0.00	0.00	1.30	1.30	0.00	1.95
SGTPS PH-I&II	0.00	0.01	1.20	1.20	0.00	1.99
Total	0.00	0.01	2.68	2.68	0.00	1.97

4.29. In the above table the amount as per audited accounts on share basis has been further inflated up to 100% capacity basis in case of STPS, Sarni. The Commission based on the quantum of coal allowed as per normative parameters, worked out the other fuel related costs in same proportion. The other fuel cost allowed by the Commission is given as below:

Table :102 Other cost allowed by the Commission

Power Station	Coal qty. in MT allowed (ex-bus)	Other coal cost allowed in Rs. Cr.		Paise Per unit
		Handling	Entry	
ATPS PH-I&II	855309	0.00	0.17	0.17
STPS Complex	5719296	0.00	1.12	0.17
SGTPS Complex	3460538	0.00	0.69	0.15
Total	10035144	0.00	1.97	0.16

4.30. The other variable cost claimed in the petition also covers an additional cost component as “Stock shortage in physical verification”. Since, the Commission has already allowed normative transit loss hence, not considered such claim of stock shortage in this order.

Determination of rate of oil FY 2008-09

4.31. The petitioner has submitted that the secondary oil comprises of Furnace oil and LDO / HSD. While working out the secondary oil rate, weighted average of Furnace oil and LDO/HSD has been taken from available Audited records. The details of weighted average rate of secondary oil as actual and as approved in MYT order are given below:

Table :103 (in Rs. KL)

Name of TPS	As per MPERC Order	As per Actuals	Difference
ATPS Chachai	18592	33448	1485
STPS Sarni	20691	33140	1244
SGTPS Birsinghpur	22870	36208	1333

4.32. The petitioner has also mentioned that calorific value of secondary oil is practically constant, about 10000 Kcal/Litre and therefore contribution of each ml of specific secondary oil consumption in heat rate is considered as 10 Kcal/Unit.

4.33. The Commission vide letter dated 14th September, 2011 asked the petitioner that cost of coal and oil in Schedule 16 of the audited accounts of FY 2008-09 is only on share basis whereas in the subject petition these costs filed on 100% operating capacity. The quantity of oil consumed and received during the year is not indicated in audited accounts. The petitioner is required to provide the power station-wise break-up of cost and quantity of oil as indicated in Schedule 16 of the audited accounts and also break-up on 100% capacity basis. Based on the afore-mentioned details filed by the petitioner, the Commission has workout the per KL rate of oil as given below:

Table :104

Sec. Oil Cost and Quantity consumed (As per audited accounts)

Sr. No.	Power Station	Cost of oil on share basis as per audited accounts (Rs. Cr.)		Cost of Oil on 100% operating capacity basis (Rs. Cr.)		Qty. of oil on share basis as per audited accounts (KL)		Qty. of Oil on 100% operating capacity basis (KL)	
		Furnace Oil	HSD/LDO	Furnace Oil	HSD/LDO	Furnace Oil	HSD/LDO	Furnace Oil	HSD/LDO
1	ATPS PH-I&II	12.46	6.88	12.46	6.88	3928	1856	3928	1856
2	STPS PH-I	25.20	0.00	42.00	0.00	8125	0.00	13542	0.00
3	STPS PH-II&III	29.96	6.73	29.96	6.73	8389	1811	8389	1811
4	STPS Complex	55.16	6.73	71.96	6.73	16514	1811	21931	1811
5	SGTPS	24.62	13.35	24.62	13.35	7003	3482	7003	3482
	Total	92.24	26.96	109.04	26.96	27445	7149	32862	7149

Table :105
Calculation of per KL rate of Oil (On 100% cap. basis):-

Sr. No.	Particular	Unit	ATPS	STPS	SGTPS
1	Cost of furnace oil consumed	Rs.Cr.	12.46	71.96	24.62
2	Qty. of furnace oil consumed	KL	3928	21931	7003
3	Rate of furnace oil	Rs./KL	31721	32813	35156
4	Cost of LDO/HSD consumed	Rs.Cr.	6.88	6.73	13.35
5	Qty. of LDO/HSD consumed	KL	1856	1811.00	3482
6	Rate of LDO/HSD	Rs./KL	37069	37162	38340
7	Total cost of Sec. fuel oil	Rs.Cr.	19.34	78.69	37.97
8	Total qty. of sec. fuel oil	KL	5784	23742	10485
9	Wt. average rate of sec. fuel oil	Rs./KL	33437	33144	36214

4.34. By considering the rate of coal and oil (based on the audited accounts) determined by the Commission and gross calorific value as submitted by the petitioner based on laboratory analysis, the Commission has determined the energy charges for all three thermal power stations is as given below :

Table :106 Energy charges worked out for FY 2008-09

Sr. No.	Description	Unit	Power Stations		
			ATPS	STPS	SGTPS
1	Capacity	MW	290.0	1142.5	840.0
2	Gross Station Heat Rate	kCal/kWh	3573	2873	2757
3	Sp. Fuel Oil Consumption	ml/kWh	7.08	2.66	2.00
4	Aux. Energy Consumption	%	11.57	8.69	9.22
5	Transit Loss	%	0.30	0.80	1.20
6	Weighted average GCV of Oil	kCal/ltr.	10,000	10,000	10,000
7	Weighted average GCV of Coal	kCal/kg	4505	3606	3955
8	Weighted Average price of Oil	Rs./KL	33448	33140	36208
9	Weighted Average price of Coal	Rs./MT	1378	1564	1394
10	Rate of Energy Charges from Sec. fuel oil.	Paise/kWh	24	9	7
11	Rate of Energy Charge from Sec. fuel oil at ex-bus.	Paise/kWh	27	10	8
12	Heat Contributed from HFO	kCal/kWh	71	27	20
13	Heat Contributed from Coal	kCal/kWh	3502	2846	2737
14	Specific Coal Consumption	kg/kWh	0.7774	0.7894	0.6920
15	Sp. Coal Consumption including Transit Loss	kg/kWh	0.7797	0.7957	0.7004
16	Rate of Energy Charge from Coal	Paise/kWh	107	124	98
17	Rate of Energy Charge from Coal at ex bus	Paise/kWh	121	136	108
18	Per unit Other fuel related charges	Paise/kWh	0.17	0.17	0.15
19	Rate of Energy Charge ex-bus kWh Sent	Paise/kWh	148	146	116

4.35. Details of the quantity of coal & oil and corresponding cost for the coal & oil allowed by the Commission is given as below:

Table :107 Total Fuel cost worked out

S. No.	Particular	Unit	ATPS	STPS	SGTPS
1	Actual Net generation	MUs	969.71	6562.95	4509.43
2	Quantity of coal allowed	MT	855057	5719256	3479385
3	Cost of coal allowed	Rs. Cr.	117.81	894.75	484.90
4	Quantity of oil allowed	KL	7764	19119	9935
5	Cost of oil allowed	Rs. Cr.	25.97	63.36	35.97
6	Other fuel related charges allowed	Rs. Cr.	0.18	1.30	1.20
7	Total fuel cost allowed	Rs. Cr.	143.956	959.408	522.075
8	Rate of Energy Charge allowed in MYT	Paise/kWh	117.00	131.00	100.00
9	Total cost as per MYT	Rs. Cr.	136.91	941.24	513.34
10	Difference Amount	Rs. Cr.	7.05	18.17	8.73

Table :108

Power station- wise per unit energy charges allowed for FY 2008-09 in this order

Power Station	Unit	Rate allowed in MYT order	Rate allowed in this order	Diff.
ATPS	Paise/unit	117	148	31
STPS	Paise/unit	131	146	15
SGTPS	Paise/unit	100	116	16

Table :109 Fuel cost for FY 2008-09 allowed in this order

Power Station	Allowed in MYT order for FY 2007-08			Allowed in this true up order			Difference			Total fuel cost
	Coal	Oil	Others	Coal	Oil	Others	Coal	Oil	Others	
ATPS	118.31	17.47	1.13	117.81	25.97	0.18	-0.50	8.50	-0.95	7.05
STPS	889.57	43.19	8.48	894.75	63.36	1.30	5.18	20.17	-7.18	18.17
SGTPS	483.32	25.92	4.10	484.90	35.97	1.20	1.58	10.05	-2.90	8.73
Total	1491.1	86.58	13.71	1497.46	125.30	2.68	6.26	38.72	-11.03	33.95

4.36. The petitioner in prayer of the petition has also requested the Commission to consider the uncontrollable factor in respect of shortage of coal in thermal power stations and allow relief of Rs.47.60 crores on fixed cost considering deemed generation. However, the petitioner has not claimed this amount in the element-wise break-up of true-up claim made in the petition for FY 2008-09. During the course of public hearing held in the subject matter, the petitioner was asked to mention provisions of the Regulation under which the

afore-mentioned claim is made by the petitioner. In response, the petitioner vide their submission dated 6th February, 2012 filed only the correspondence made between the petitioner, Coal India Ltd. and the higher authorities in GoMP but the legal provision to allow such relief on account of shortage of coal could not be submitted by the petitioner. Since the afore-mentioned claim by the petitioner is beyond the scope of the Regulation hence, not considered in this true-up order.

4.37. The Commission has allowed **Rs.33.95 crores** as fuel cost in this true up order.