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



Petition No. 54/2009

PRESENT:

K.K. Garg, Member

C.S. Sharma, Member

IN THE MATTER OF:

Determination of Generation Tariff for FY2009-10 to FY2011-12 based on the tariff application filed by Madhya Pradesh Power Generating Company Limited (MPPGCL) under Multi Year Tariff Principles.

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

PETITIONER

Vs.

- 1. M.P. Power Trading Company Ltd., Rampur, Jabalpur
 - RESPONDENTS
- 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. CMD, Rajasthan Rajya Vidyut Prasaran Nigam Ltd (RRVPNL), Jaipur
- 8. CMD, Uttar Pradesh Power Corporation Ltd (UPPCL), Lucknow
- 9. Managing Director, MSEB (Holding Co) & MSTCL, Mumbai

ORDER

(Passed on this Day of 3rd March, 2010)

1. The Madhya Pradesh Electricity Regulatory Commission (hereinafter called "the Commission") has issued MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2009 {RG-26 (I) of 2009} (hereinafter referred to as "the Regulations") for the new control period i.e. FY 2009-10 to FY 2011-12. These were notified in the official gazette on 8th May, 2009. Regarding applicability of tariff to the existing projects from 1st April, 2009 till approval of tariff by the Commission as per the above mentioned Regulations, clause 15.3 of the above-mentioned Regulations provides that,

"In case of the existing Projects, the Generating Company shall continue to provisionally bill the Beneficiaries based on the Tariff approved by the Commission and applicable as on 31.3.2009 for the period starting from 1.4.2009 till approval of Tariff by the Commission in accordance with these Regulations:

Provided that where the Tariff provisionally billed exceeds or falls short of the final Tariff approved by the Commission under these Regulations, the Generating Company, shall refund to or recover from the Beneficiaries, within six months from the date of determination of final Tariff under these Regulations along with simple interest at the rate equal to short-term Prime Lending Rate of State Bank of India on the 1st April of the concerned/respective Year."

- 2. The Commission, while framing the above Regulations was guided by the principles and methodology specified by the Central Electricity Regulatory Commission in its notification dated 19th January, 2009 on Terms and Conditions of Tariff Regulations, 2009 effective from 1st April, 2009.
- 3. The Commission has scrutinized the petition filed by Madhya Pradesh Power Generating Company Limited ((hereinafter called "MPPGCL" or "Generating Company") based on the principles, methodology and the norms specified in the MPERC Regulations.
- 4. MPPGCL has filed the proposal for generation tariff for the new control period from FY 2009-10 to FY 2011-12 on 30th September, 2009. The Commission, after preliminary scrutiny of the petition intimated the information gaps to the Petitioner vide letter No.2474 dated 11th November, 2009. MPPGCL filed additional submission vide letter No.07-12/CP-MPPGCL/MPERC/MYT-10-12/661 dated 23rd November, 2009 and has further filed the additional submission on 30th December, 2009 in response to the issues raised by the Commission in its letter dated 11th November, 2009. MPPGCL has further submissions vide its letter No.07-12(i)/CPfiled the supplementary MPPGCL/MPERC/MYT FY 10-12/96 dated 1st February, 2010 based on the issues raised during the course of public hearing and subsequent discussions.
- 5. The Commission accepted the petition on 30th November, 2009 for detailed scrutiny and directed the Petitioner to publish the gist of the application and tariff proposal in

newspapers and website for inviting comments/suggestions from stakeholders. The public hearing in the matter was conducted on 5th January, 2010 in the Commission's office at Bhopal.

- 6. The Commission heard the Petitioner and other stakeholders such as interveners and Distribution Licensees on 5th January 2010 at Commission's office, Bhopal in the matter of determination of generation tariff for FY 2009-10 to FY 2011-12 under MYT tariff principles. The Commission has considered the documents available on record, order issued by Government of Madhya Pradesh (Energy Department) on 31st May 2005 making the Transfer Scheme Rules effective from 1st June 2005, (order no. 3679/FRS/18/13/2002 dated 31.5.2005). All available information and documents have been taken into consideration while finalizing this order.
- 7. The Commission has scrutinized the Petition as per the "Regulations" notified on 8th May, 2009 and made modifications to the proposed Annual Fixed Charges based on provisions of the Regulations. The modifications made to the proposal of MPPGCL are attached to this order. The summary of annual fixed charges and energy charges as filed by the Petitioner are as given in the following tables:-

Table: 1 Annual Fixed charges proposed by the Petitioner for FY 2009-10 to FY 2011-12

S.		Particulars			es and other charges	As per M	IPERC Reg	FY 11 FY 12 79.93 83.52 79.93 83.52 134.94 138.94 129.57 132.65 130.88 133.64 395.39 405.23 236.13 234.27 478.44 470.23 951.52 939.58 11.62 12.05 11.46 11.77 8.30 8.43 16.80 17.22 132.17 130.58 23.64 23.20		
No			based on revisi	ion in norms sough	t by the petitioner					
			FY 10	FY 11	FY 12	FY 10	FY 11	FY 12		
	1	ATPS 2	82.00	86.74	90.76	78.87	79.93	83.52		
	2	ATPS Chachai	82.00	86.74	90.76	78.87	79.93	83.52		
	3	STPS 1	167.30	158.47	164.20	133.16	134.94	138.94		
	4	STPS 2	144.59	136.52	140.51	127.01	129.57	132.65		
nal	5	STPS 3	135.65	137.80	141.89	128.71	130.88	133.64		
Thermal	6	Sarni	447.54	432.79	446.60	388.88	395.39	405.23		
Th	7	SGTPS 1	241.24	236.21	236.88	238.96	236.95	235.08		
	8	SGTPS 2	248.24	242.05	240.51	238.14	236.13	234.27		
	9	SGTPS 3	489.66	479.70	471.20	486.90	478.44	470.23		
	10	SGTPS	979.14	957.96	948.59	963.99	951.52	939.58		
	11	Total Thermal	1508.67	1477.49	1485.95	1431.74	1426.84	1428.34		
	12	GandhiSagar	6.41	11.62	12.05	11.19	11.62	12.05		
	13	Pench	11.17	11.46	11.77	11.17	11.46	11.77		
	14	Rajghat	8.21	8.30	8.43	8.21	8.30	8.43		
del	15	Bargi	11.64	16.80	17.22	16.38	16.80	17.22		
Hydel	16	Bansagar	128.84	132.17	130.58	133.80	132.17	130.58		
	17	Madhikheda	22.10	22.64	22.20	23.09	22.64	22.20		
	18	Birsinghpur	4.01	4.09	4.13	4.07	4.09	4.13		
	19	Total Hydel	192.38	207.08	206.38	207.91	207.08	206.38		

Table: 2 Energy Charges proposed by the Petitioner for FY 2009-10 to FY 2011-12

S. No		Particulars	energy revision	GCL propo charges be in norms se tioner(Pai	ased on ought by	As per MPERC Regulation (Paise/unit)			
			FY 10	FY 11	FY 12	FY 10	FY 11	FY 12	
	1	ATPS 2	131	127	124	116	114	113	
	2	ATPS Chachai	131	127	124	116	114	113	
	3	STPS 1	174	169	169	140	138	136	
	4	STPS 2	161	151	151	136	134	132	
nal	5	STPS 3	161	148	148	136	134	131	
Thermal	6	Sarni	164	154	154	137	135	133	
Th	7	SGTPS 1	146	115	126	107	105	103	
	8	SGTPS 2	137	119	119	107	105	103	
	9	SGTPS 3	112	108	106	94	94	94	
	10	SGTPS	129	113	116	102	101	99	
	11	Total Thermal	145	131	133	118	116	114	
	12	Gandhi Sagar	36	11	11	10	11	11	
	13	Pench	34	34	35	34	34	35	
_	14	Rajghat	76	77	78	77	77	78	
Hydel	15	Bargi	39	16	17	16	16	17	
Hy	16	Bansagar	124	90	89	92	90	89	
	17	Madhikheda	1909	289	282	296	289	282	
	18	Birsinghpur	194	76	76	75	76	76	
	19	Total Hydel	101	62	61	63	62	61	

The annual fixed charges and energy charges approved by the Commission are given in the table below:-

Table: 3 Annual Fixed charges and Energy Charges approved by the Commission for FY 2009-10 to FY 2011-12

		FY200	09-10	FY20	10-11	FY2011-12	
			Energy		Energy		Energy
		Fixed	charges	Fixed	charges	Fixed	charges
		charges	(Paisa per	charges	(Paisa	charges	(Paisa per
S.No.	Power Station	(Rs. Cr.)	unit)	(Rs. Cr.)	per unit)	(Rs. Cr.)	unit)
1	ATPS Chachai	68.98	114.61	70.25	113.08	73.75	111.38
2	STPS Sarni	361.14	138.65	352.30	133.81	361.30	131.48
3	SGTPS Birsingpur (PH-1&2)	385.82	114.78	382.15	112.34	378.64	109.91
	SGTPS Birsingpur (PH-3)						
4	500MW	383.29	100.30	376.27	100.30	369.41	100.30
5	Gandhi Sagar	7.77	-	8.19	-	8.63	-
6	Pench	16.19	-	15.35	ı	15.81	-
7	Rajghat	11.00	-	10.76	-	10.53	-
8	Bargi	12.33	-	12.34	-	10.33	-
9	Bansagar (I to III)	151.42	-	146.70	ı	142.07	-
	Bansagar-IV (Jhanna)	14.60	-	14.31	-	14.02	-
10	Madhikheda	28.52	-	27.92	-	27.34	-
11	Birsingpur	6.08	-	5.86	-	5.68	-

8. The Commission has issued tariff orders in respect of some new capacity additions allowing recovery of charges on provisional basis as the petitioner had not filed full required details especially in respect of capital cost as on the date of CoD. The details of all such units along with the Date of Commercial Operation and the date of provisional Orders issued by the Commission has been provided in Table 18 of Para 3.15 of this order. It is noted that the required details have still not been filed by the petitioner thereby the Commission could not determine final tariff for all such generating units. The petitioner, is, thus allowed to recover the fixed charges only to the extent of 95% of the fixed charges determined in this Order on provisional basis subject to retrospective adjustment on determination of final tariff for the following generating units/stations:-

S. No.	Unit
1	Madhikheda HPS
	Unit No.1, Unit No.2
2	Madhikheda HPS Unit No.3
3	Bansagar IV
	Jhinna Unit No.1, Jhinna Unit No.2
4	SGTPS, Extn. Unit 500MW (PH-III)

- 9. In addition to above, the petitioner is allowed to recover the fee paid by the petitioner to MPERC for determination of generation tariff, water charges and cess on usage of water for hydro stations and E.D. and cess on auxiliary power consumption levied by the Statutory Authorities from the beneficiaries on pro-rata basis.
- 10. The recovery of annual capacity (fixed) charges shall be made by the petitioner in accordance with the Regulations 38.2 and 38.3 in case of Thermal Power Stations and Regulations 50.1 and 50.3 in case of Hydro Generating Stations. Energy charges for hydro generating stations shall be recovered in accordance with Regulations 50.4 to 50.7.
- 11. The Commission, in exercise of the powers vested in it under Section 64 of the Electricity Act, 2003, directs that the generation tariff determined by this order shall be applicable from 1st April 2009 and will continue to be operative till 31st March 2012 under multi year tariff principles. Till 31st March 2010 the Generating Company shall continue to bill the Discoms at the same tariff as was applicable during FY 2008-09. The Generating Company shall bill the difference of fixed and energy charges applicable for FY 2009-10 and FY 2008-09 in first six months of FY 2010-11 in equal monthly installments along with the fixed and energy charges for FY 2010-11. No interest on the unbilled amount of FY 2009-10 is being allowed in view of the fact that tariff determination got delayed on account of abnormally delayed submission of the proposal thereof by MPPGCL. The Petitioner must take steps to implement the Order after giving 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 must also information to the Commission in support of having complied with this order.

12. Ordered as above read with attached detailed reasons and grounds.

Sd/(C.S. Sharma)
Member (Economics)

Sd/(K. K. Garg)
Member (Engineering)

Date: 3rd March, 2010

Place: Bhopal

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CHAPTER 1

Background of the order

Introduction

- 1.1. This order relates to petition number 54 of 2009 filed by the Madhya Pradesh Power Generating Company Limited (MPPGCL) for determination of generation tariff for FY2009-10 to FY2011-12 under multi year tariff principles. MPPGCL is the owner of the generating plants previously owned by MPSEB. MPPGCL has started functioning independently from 1st June 2005.
- 1.2. The Commission had issued the generation tariff order for the earlier control period i.e. FY 2006-07 to FY 2008-09 under MYT tariff principles on 7th March, 2006. The Commission had further issued the orders for continuation of generation tariff for FY 2007-08 and FY 2008-09 under petition Nos.110/2006 and 71/2007 on 28th February, 2007 and 18th March, 2008 respectively. The Commission, in the above continuation orders had allowed the same generation tariff, as approved by the Commission under MYT order for FY 2006-07 to FY 2008-09 issued on 7th March, 2006.
- 1.3. MPPGCL had filed the true-up petition No.56/2008 on 31st July, 2008 for truing-up of generation tariff for FY 2006-07 determined by the Commission under MYT order issued on 7th March, 2006. The Commission issued the true-up order of generation tariff for FY 2006-07 on 17th June, 2009 based on the audited accounts for FY 2006-07 and the documents available on record and the orders issued by the GoMP (Energy Department) on 31st May, 2005. It is pertinent to mention that MPPGCL in its true-up petition for FY 2006-07 had not taken into account the impact of final balance sheet notified by the GoMP on 12th June, 2008 as the audited accounts for FY 2006-07 were based on the provisional balance sheet notified by the State Government.
- 1.4. The petitioner in the subject petition has mentioned that the generation cost filed in the petition is based on the books of accounts for FY 2007-08 after incorporating final opening balance sheet. It may be mentioned that the impact of changes in the final balance sheet vis-à-vis the provisional balance sheet is yet to be determined by the Commission as true-up for FY 2007-08 is yet to be finalized. In view of this, the Commission has examined this petition on the basis of the status of gross block, accumulated depreciation, equity and the loans as on 31st March, 2007 as approved by the Commission in its true-up order for FY 2006-07 issued on 17th June, 2009. The impact of the final balance sheet for FY 2005-06 (w.e.f. 1st June, 2005) notified by the State Government on 12th June, 2008 shall be considered while taking up true-up petitions of MPPGCL for the respective years along with its audited accounts.
- 1.5. The Commission notified the MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2009 in the State Gazette on 8th May, 2009. As per clause 2.1 of the above Regulations, these Regulations shall apply in all cases of

determination of Generation Tariff under Section 62 of the Electricity Act, 2003 for supply of electricity to Distribution Licensees but shall not apply where tariff has been determined through the transparent process of bidding in accordance with the guidelines issued by the Central Government as per the provisions of Section 63 of the Electricity Act, 2003.

- 1.6. As per clause 6.3 of the Regulations, operating and cost parameters for the tariff period have been prescribed on normative basis after duly considering the past performance, performance of similar placed units, fuel, vintage of equipments, nature of operation and capability of achievement in view of past performance. The allowable tariffs shall be determined in accordance with these norms. Thus, the generating company is allowed to retain most of the savings as a reward for better performance. This is expected to incentivise the Generating Company for efficient performance and economical use of resources. The Beneficiaries shall also benefit from the efficient performance of the Generating Company on account of improvement in availability and Plant Load Factor of generating stations.
- 1.7. As per clause 8.2 of the Regulations, the tariff in respect of a Generating Company under the Regulations shall be determined unit-wise or for a group of units. However, when a new generating unit is added after 1st April, 2009, the Commission shall determine separate Tariff for such new unit(s).
- 1.8. The M.P. State Electricity Board (MPSEB), (hereinafter referred as Respondent 6), was 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 Jun 06 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 Jun 06. 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 the petition.
- 1.9. The State Government vide notification dated 31st May, 2005 also provided that the petitioner will sale 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. The functions of retail supply of power has been vested with the three Distribution Companies viz. the M. P. Poorv Kshetra Vidyut Vitaran Co. Ltd., Jabalpur (Respondent No.2 in the petition), M. P. Madhya Kshetra Vidyut Vitaran Co. Ltd., Bhopal

- (Respondent No.3 in the petition) and M. P. Paschim Kshetra Vidyut Vitaran Co. Ltd., Indore (Respondent No.4 in the petition). The responsibility for power transmission has been vested with M. P. Power Transmission Co. Ltd., Jabalpur (Respondent No.5 in the petition).
- 1.10. Rajasthan Rajya Vidyut Prasaran Nigam (RRVPNL), Jaipur, (hereinafter referred as Respondent No. 6) has 40% share in the PH-1 of STPS Sarni and 50% share in Gandhi Sagar Hydro Station operated by MPPGCL. At the same time MPPGCL has 50% share in the Ranapratap Sagar Hydro Station and Jawahar Sagar Hydro Station operated by the Respondent No. 6. Similarly Uttar Pradesh Power Corporation Ltd (UPPCL), Lucknow (hereinafter referred as Respondent No. 7) and MSEB (Holding Co) & Maharashtra State Transmission Co. Ltd , Mumbai (hereinafter referred as Respondent No. 8) have 50% share in Rajghat Hydro Power Station and 33.3% share in Pench Hydro Station operated by MPPGCL respectively.
- 1.11. MPPGCL has filed this petition for determination of generation tariff for FY 2009-10 to FY 2011-12 after the gazette notification of the Regulations on 8th May, 2009. The petitioner in its petition has sought revision in the benchmarks/norms specified in the Regulations i.e. {RG-26 (I) of 2009} notified on 8th May, 2009 and also filed a tariff proposal based on the revised norms proposed by the petitioner as well as the norms The Commission vide its letter No.2474 dated 11th specified in the Regulations. November, 2009 had conveyed to the petitioner that since the Regulations were finalized and notified after inviting and considering comments from various stakeholders after a process of public hearing. As the process has only been concluded in recent past, the revision of norms prescribed in the Regulations cannot be considered at this stage. Beside tariff petition cannot be used for seeking revision in norms. The Commission had also expressed its views on the aforementioned issue to the petitioner during the course of public hearing conducted on 5th January, 2010. Accordingly, the Commission has determined the tariff as per the norms specified in the Regulations.

Procedural History

1.12. MPPGCL has filed the proposal for approval of generation tariff for the new control period from FY 2009-10 to FY 2011-12 on 30th September, 2009. The Commission, after preliminary scrutiny of the petition intimated the information gaps to the Petitioner vide letter No.2474 dated 11th November, 2009. MPPGCL filed its additional submission vide letter No.07-12/CP-MPPGCL/MPERC/MYT-10-12/661 dated 23rd November, 2009 and has further filed the supplementary submission on 30th December, 2009 in response to the issues raised by the Commission in its letter dated 11th November, 2009.

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

Table: 4 Annual Fixed charges proposed by the Petitioner for FY 2009-10 to FY 2011-12

S. No		Particulars	and other	proposal for f charges based s sought by the (Rs.Cr.)	on revision	As per MPERC Regulation Rs. Cr.			
			FY 10	FY 11	FY 12	FY 10	FY 11	FY 12	
	1	ATPS 2	82.00	86.74	90.76	78.87	79.93	83.52	
	2	ATPS Chachai	82.00	86.74	90.76	78.87	79.93	83.52	
	3	STPS 1	167.30	158.47	164.20	133.16	134.94	138.94	
<u>_</u>	4	STPS 2	144.59	136.52	140.51	127.01	129.57	132.65	
l ë	5	STPS 3	135.65	137.80	141.89	128.71	130.88	133.64	
Thermal	6	Sarni	447.54	432.79	446.60	388.88	395.39	405.23	
I	7	SGTPS 1	241.24	236.21	236.88	238.96	236.95	235.08	
	8	SGTPS 2	248.24	242.05	240.51	238.14	236.13	234.27	
	9	SGTPS 3	489.66	479.70	471.20	486.90	478.44	470.23	
	10	SGTPS	979.14	957.96	948.59	963.99	951.52	939.58	
	12	GandhiSagar	6.41	11.62	12.05	11.19	11.62	12.05	
	13	Pench	11.17	11.46	11.77	11.17	11.46	11.77	
ਚ	14	Rajghat	8.21	8.30	8.43	8.21	8.30	8.43	
Hydel	15	Bargi	11.64	16.80	17.22	16.38	16.80	17.22	
Ε Ξ	16	Bansagar	128.84	132.17	130.58	133.80	132.17	130.58	
	17	Madhikheda	22.10	22.64	22.20	23.09	22.64	22.20	
	18	Birsinghpur	4.01	4.09	4.13	4.07	4.09	4.13	

Table: 5 Energy charges proposed by the Petitioner for FY 2009-10 to FY 2011-12

S.		Particulars	MPPGCL	proposal fo	or energy	As per MPERC			
N	0			based on re		Regulation			
				ght by the j	petitioner	(Paise/unit)			
			(Paise/unit)					
			FY 10	FY 11	FY 12	FY 10	FY 11	FY 12	
	1	ATPS 2	131	127	124	116	114	113	
	2	ATPS Chachai	131	127	124	116	114	113	
	3	STPS 1	174	169	169	140	138	136	
<u></u>	4	STPS 2	161	151	151	136	134	132	
Thermal	5	STPS 3	161	148	148	136	134	131	
heı	6	Sarni	164	154	154	137	135	133	
T	7	SGTPS 1	146	115	126	107	105	103	
	8	SGTPS 2	137	119	119	107	105	103	
	9	SGTPS 3	112	108	106	94	94	94	
	10	SGTPS	129	113	116	102	101	99	
	11	Gandhi Sagar	36	11	11	10	11	11	
	12	Pench	34	34	35	34	34	35	
<u> </u>	13	Rajghat	76	77	78	77	77	78	
Hydel	14	Bargi	39	16	17	16	16	17	
H	15	Bansagar	124	90	89	92	90	89	
	16	Madhikheda	1909	289	282	296	289	282	
	17	Birsinghpur	194	76	76	75	76	76	

Public Hearing

- 1.14 Public hearing on the application and tariff proposals filed by the Petitioner was conducted in the Commission's office on 5th January, 2010 when the representatives of the Petitioner and the West Discom, Indore were present.
- 1.15 The Commission, during the course of public hearing expressed that the petition shall be scrutinized based on the principles, methodology and norms specified in the MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2009 {RG-26 (I) of 2009} notified on 8th May, 2009.

CHAPTER 2

Status of Generation Capacity filed in the petition

Installed Capacity of MPPGCL

2.1 Total installed capacity of the MPPGCL, as on 31.03.2009 is 3514.7 MW (including its share in bilateral interstate projects), consisting of 2597.5 MW thermal and 917.2 MW Hydro power. The plant wise details are as under:-

Table: 6 Generation Capacity

		Power Station		Installed Capacity (MW)					
		rower Station		Tota	l	MPPGC	CL Share		
	1	Amarkantak Thermal	PH 2	2 x 120	240.0	100%	240.0		
	_	Power Station (Chachai)	Complex		240.0	100%	240.0		
su	2		PH 1	5 x 62.5	312.5	60%	187.5		
Thermal Power Stations		Satpura Thermal Power Station (Sarni)	PH 2	200 + 210	410.0	100%	410.0		
er S		Station (Saim)	PH 3	2 x 210	420.0	100%	420.0		
OW(Complex	T	1142.5	89%	1017.5		
lal P			PH 1	2 x 210	420.0	100%	1017.5 420.0 420.0 500.0 1340.0 2597.5 57.5 86.0 49.5 193.0 106.7 315.0		
erm	3	Sanjay Gandhi Thermal Power Station	PH 2	2 x 210	420.0	100%	420.0		
Ţ		Birsinghpur	PH 3	1 x 500	500.0	100%	500.0		
			Complex		1340.0	100%	1340.0		
	4	Total Thermal Generation		2722.5	95%	2597.5			
	1		Gandhi Sagar		115.0	50%	57.5		
		Chambal HPS	R.P. Sagar	4 x 43	172.0	50%	86.0		
		Chambai III S	Jawahar Sagar	3 x 33	99.0	50%	49.5		
			Complex		386.0	50%	193.0		
so	2	Pench Totladoh HPS		2 x 80	160.0	66.7%	106.7		
Hydro Power Stations			Tons	3 x 105	315.0	100%	315.0		
Sta			Silpara	2 x 15	30.0	100%	30.0		
ower	3	Bansagar Tons HPS	Devlond	3 x 20	60.0	100%	60.0		
ro Pe			Jhinna	2 x 10	20.0	100%	20.0		
Hyd			Complex		425.0	100%	425.0		
	4	Birsinghpur HPS		1 x 20	20.0	100%	20.0		
	5	Bargi HPS		2 x 45	90.0	100%	90.0		
	6	Rajghat HPS		3 x 15	45.0	50%	22.5		
	7	Madhikheda HPS	3 x 20	60.0	100%	60.0			
	8	Total Hydro Generation			1186.0		917.2		
Tota	ıl G	eneration			3908.5		3514.7		

Ongoing Capacity addition and proposed new projects

2.2 MPPGCL has submitted that the following are the three ongoing projects for addition of generation capacity:-

a) Amarkantak Thermal Power Station- Ext. Unit No. -5(1x210 MW)

The 210 MW Extension Unit No.-5 had been synchronized on 15th June 2008 on Oil Support. Subsequently Unit was synchronized with coal firing through priority path on 14th March, 2009 on partial load. Unit is taken on MCR on 6th Sept. 2009 and after continuous running for more than 72 hours unit is declared under commercial operation with effect from 9th Sept. 2009. The petitioner in Para 27 of the petition has submitted that the scope of this petition does not cover the tariff of new 210MW unit because the unit has not been capitalized. For this unit, a separate petition is being submitted by the petitioner.

b) Shri Singaji Thermal Power Project (2x600 MW)- Phase-I

The administrative approval has been accorded by GoMP in May 2001 for installation the Project near Village Purni in Distt. Khandwa. Project has to be implemented in two packages specifying the unit size as 2x 600 MW (i) Main Power Block & (ii) Complete BoP with respective civil works. The Main Power Block package have been finalized through ICB routing and accordingly EPC contract of Main Power Block have been awarded to M/s BHEL vide order dated 12.12.2008. GoI has accorded Mega Power Project Status to this Project. 3 TMC water has been allocated by NVDA & NoC has also been issued by CWC, GoI. All the clearances for the project have been obtained. M/S PFC has sanctioned loan amount to the tune of 80% (Rs. 3242 Crores) of the estimated Project Cost (Rs. 4053 Crores). The project cost estimate has been revised to Rs. 6750 Crore. Necessary approvals are awaited. M/s PFC has been requested for additional funding.

c) Satpura Thermal Power Station Extn. Unit 10 & 11(2 x 250 MW)

Units at Satpura Thermal Power Station as Extension, Unit no. 10 & 11 are planned for installation. Administrative approval has been accorded by State Govt., in Jun' 06 and by B.o.D. MPPGCL on August,06. MOEF clearance has also been received recently in Feb .2009. For execution of Main Power Block on EPC basis, LoI have been issued on 10.3.2008 to M/s. BHEL. The project cost estimate has been revised to Rs. 2637 Crore.

2.3 MPPGCL in its petition has mentioned the following new projects are proposed to be taken up for additing to its generation capacity in future:-

- a) 2x800 MW Bansagar Thermal Power Project
- <u>b)</u> 250 MW Extn. Unit No.6 Amarkantak Thermal Power Station, Chachai, Distt. Anuppur.
- <u>c)</u> New Thermal Power Units (2x500MW or 1x500MW or 2X250 MW) at Birsinghpur, Dist. Umaria.
- <u>d)</u> 2x600MW (Second Phase) Shri Singaji Thermal Power Project, Purni, Dist. Khandwa

Renovation and Modernization works proposed in the petition

2.4 MPPGCL has also submitted the details of life of units completed under each phase of its power stations as given below:-

Table: 7 Thermal Power Stations

S. No.	Unit	Unit No.	Life span (in years)	Capacity in MW
1.	ATPS, Chachai	3	31	120
2.	ATPS, Chachai	4	31	120
3.	STPS, Sarni	1	42	62.5
4.	STPS, Sarni	2	41	62.5
5.	STPS, Sarni	3	41	62.5
6.	STPS, Sarni	4	40	62.5
7.	STPS, Sarni	5	39	62.5
8.	STPS, Sarni	6	30	200
9.	STPS, Sarni	7	29	210
10.	STPS, Sarni	8	26	210
11.	STPS, Sarni	9	25	210
12.	SGTPS, Birsinghpur	1	16	210
13.	SGTPS, Birsinghpur	2	15	210
14.	SGTPS, Birsinghpur	3	10	210
15.	SGTPS, Birsinghpur	4	9	210
16.	SGTPS, Birsinghpur	5	1	500

Table: 8 Hydro Power Stations

S. No.	Unit	Unit No.	Life span (in years)	Capacity in MW
1.	Gandhi Sagar	1	48	23
2.	Gandhi Sagar	2	48	23
3.	Gandhi Sagar	3	48	23
4.	Gandhi Sagar	4	46	23
5.	Gandhi Sagar	5	42	23
6.	Pench	1	23	80
7.	Pench	2	22	80
8.	Tons	1	18	105
9.	Tons	2	17	105
10.	Tons	3	17	105
11.	Silpara	1	7	15
12.	Silpara	2	7	15
13.	Devlond	1	8	20
14.	Devlond	2	8	20
15.	Devlond	3	7	20

16.	Birsinghpur Hydro		17	20
17.	Bargi	1	21	45
18.	Bargi	2	20	45
19.	Rajghat	1	9	15
20.	Rajghat	2	10	15
21.	Rajghat	3	9	15

2.5 MPPGCL in its petition has also submitted that for optimal operation of the units, normally annual overhaul of 25 to 30 days every year and 45-60 days capital overhaul in 5 to 6 years are recommended. MPPGCL is supplying its entire power generated to the State of Madhya Pradesh, which has been passing through serious power shortage for the past decade. Considering the priority of providing power to the consumers, either number of units could not be taken on overhaul in previous years or the period of their overhaul was squeezed considerably, as is obvious from the following table:-

Table: 9 Days of Overhaul

Labic	able . 9 Days of Overhauf									
I	Partic	culars	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
1	•=	Unit #1	-	65	66	-	-	-	-	-
2	cha	Unit #2	-	31	-	-	-	-	-	-
3	Chachai	Unit #3	66	-	34	25	35	45	37	27
4		Unit #4	89	90	29	30	22	-	51	20
5		Unit #1	-	28	16	33	-	36	24	-
6		Unit #2	28	-	40	-	27	28	37	20
7		Unit #3	77	-	36	26	28	30	32	42
8	•=	Unit #4	41	21	22	-	54	27	25	22
9	Sarni	Unit #5	77	32	-	24	25	30	33	27
10	S	Unit #6	28	25	38	63	-	30	36	-
11		Unit #7	-	56	13	28	17	42	33	17
12		Unit #8	25	-	31	-	33	48	-	32
13		Unit #9	96	43	-	28	47	-	47	28
14	ur	Unit #1	77	28	-	25	25	10	45	15
15	singhpur	Unit #2	40	51	29	28	42	25	21	35
16	.sing	Unit #3	31	-	45	11	24	15	81	-
17	Bir	Unit #4	32	-	29	26	18	42	8	-

2.6 In addition to the above, the petitioner has mentioned that erstwhile MPSEB/MPPGCL has been in serious cash crunch and therefore, adequate expenditure on Repair & Maintenance could not be provided. Creeping effect of vintage and resource deficiency due to cash crunch has also added to the constraints to undertake adequate maintenance of the units.

- 2.7 MPPGCL in Para 4.6 of the petition has mentioned that it has not planned to undertake any major Renovation & Modernization (R&M) activity in both the units of ATPS, PH-1, Chachai and 5 units (5x62.5 MW) of STPS, Sarni Phase-1 since these units are smaller size units for which major R&M could not be considered in pursuance with the CEA guidelines issued from time-to-time as summarized below:-
 - (a) The small size units are having very low plant load factor and have low design efficiency. Due to their aging and technological obsolesce; these units are performing on further lower efficiency than their design values. These units need be retired in a phased manner.
 - (b) The units of non re heat type are to be considered for retirement.
 - (c) The larger size units older than 30-35 years should also be considered for retirement on account of their economical non viability.
 - (d) At the same time the utilities should also add their capacities so as to ensure adequate power supply.
- 2.8 MPPGCL has also mentioned that the company has decided to avail the services of M/s NTPC Ltd. to support MPPGCL for undertaking suitable R&M in the units of 200/210 MW at SGTPS, Birsinghpur and STPS, Sarni.
- 2.9 The petitioner has filed the following status of the proposed comprehensive renovation and modernization plan in respect of STPS, Sarni and SGTPS, Birsinghpur:-
 - <u>a)</u> STPS, Sarni: A detailed comprehensive Renovation and Modernization Plan have been worked out in association with M/s. NTPC Ltd. (Consultancy wing) worth Rs. 576 Crore for PH-II and PH-III. Necessary administrative approvals of BoD of MPPGCL and GoMP have also been obtained. For funding, PFC/World Bank have been approached but the response from both of them is awaited. NIT of these identified R&M works is planned to be issued in Jan.2010 and completion of works is expected in March 2013. The improvements can only be expected after completion of the planned R&M works (emphasis supplied).
 - <u>b)</u> SGTPS, Birsinghpur: CEA has included comprehensive R&M work for PH-I for implementation during 12th Plan. M/s. NTPC (Consultancy wing) on the similar lines as adopted for STPS have been approached for preparation of proposal for detailed comprehensive Renovation and Modernization Plan. As the R&M activities are under planning stage and will have their respective gestation period. As such, improvements are difficult to be expected in FY10 FY12 block period (emphasis supplied).

CHAPTER 3

Fixed Charges

Components of Fixed Charges

3.1 The clause 32.2 of the Regulation provides that,

"The annual Capacity (fixed) Charges shall consist of:

- (a) Return on Equity;
- (b) Interest and Financing Charges on Loan Capital;
- (c) Depreciation;
- (d) Lease/Hire Purchase Charges;
- (e) Operation and Maintenance Expenses;
- (f) Interest Charges on Working Capital;
- (g) Cost of Secondary Fuel Oil;
- (h) Special allowance in lieu of R&M or separate compensation allowance, wherever applicable:

Provided that in case of coal based thermal generating stations, expenses on normative secondary fuel oil consumption during the Year shall be included in the Fixed Charge."

Capital Cost, Equity and Loan details as filed by the petitioner

Petitioner's Submission

Opening Gross Block

3.2 MPPGCL has submitted the opening gross block as on 1st June, 2005 based on the final balance sheet is under:

Table: 10 Opening Gross Block as on 1st June, 2005

Amount in Cr.Rs.

			Opening (Gross Block as on 1st	Jun 2005
	Stations		As per Prov. Balance Sheet	As per Final. Balance Sheet	Difference
1	ATPS Chachai	Cr Rs	1 44.11	1 44.11	0.00
2	STPS Total	Cr Rs	6 10.33	6 05.61	- 4.72
3	SGTPS Total	Cr Rs	21 57.19	21 57.19	0.00
4	Malwa	Cr Rs	0.00	0.00	0.00
5	Total Thermal	Cr Rs	29 11.63	29 06.91	- 4.72
6	Gandhi Sagar	Cr Rs	10.29	10.29	0.00
7	R.P. Sagar	Cr Rs	18.86	18.86	0.00
8	J Sagar	Cr Rs	16.56	16.56	0.00
9	Pench	Cr Rs	87.74	87.74	0.00
10	Rajghat	Cr Rs	82.79	82.79	0.00

11	Bargi	Cr Rs	86.30	86.99	0.69
12	Bansagar	Cr Rs	12 43.99	12 43.92	- 0.07
13	Madhikheda	Cr Rs	0.01	0.00	- 0.01
14	Birsinghpur	Cr Rs	52.15	52.15	0.00
15	Total Hydro	Cr Rs	15 98.70	15 99.30	0.60
16	HQ	Cr Rs	- 57.33		57.33
Tota	al	Cr Rs	44 53.00	45 06.21	53.21

3.3 MPPGCL in para 6.3 of the petition had submitted the station-wise details of the assets as provided in final opening balance sheet and the asset register considered for preparation of regulatory information is given below:-

Table: 11 -Opening Gross Block and Accumulated Depreciation as on 1st June, 2005 *Amount in Cr.Rs.*

-	Amount in Cr.As.						
		Gross 1	Block of Ass	ets	Accumul	ated Depred	ciation
	Stations	Final Balance Sheet	Asset Register	Difference	Final Balance Sheet	Asset Register	Difference
1	ATPS Chachai	1 44	1 44	-	1 05	1 05	-
2	STPS Total	6 06	6 06	-	4 52	4 52	-
3	SGTPS Total	21 57	21 57	-	8 44	8 44	-
4	Malwa			-			-
5	Total Thermal	29 07	29 07	-	14 01	14 01	-
6	Gandhi Sagar	10	10	-	8	8	-
7	R.P. Sagar	19	19	-	16	16	-
8	J Sagar	17	17	-	9	9	-
9	Pench	88	88	1	56	56	1
10	Rajghat	83	83	-	17	17	-
11	Bargi	87	87	-	41	41	-
12	Bansagar	1244	1244	-	233	233	-
13	Madhikheda	0	0	-	-	-	-
14	Birsinghpur	52	52	-	20	20	-
15	Total Hydro	1599	1599	-	400	400	-
16	HQ	-	-	-	-	-	-
Tot	tal	4506	4506	-	1801	1801	-

3.4 MPPGCL in para 6.6 of the petition has further submitted the the opening gross block as on 31st March, 2009 as given below:-

Table: 12 Opening Gross Block As in Asset Register and Accounts of MPPGCL as on 31st March, 2009

		I.NS.		
	Stations	As per Asset Register	As per Accounts of MPPGCL	Difference
1	ATPS Chachai	1 84	1 84	-
2	STPS Total	6 31	6 31	-
3	SGTPS Total	41 21	41 21	-
4	Malwa	33	33	-
5	Total Thermal	49 68	49 68	-
6	Gandhi Sagar	10	10	-
7	R.P. Sagar	19	19	-
8	J Sagar	17	17	-
9	Pench	96	96	-
10	Rajghat	83	83	-
11	Bargi	87	87	-
12	Bansagar	13 61	13 61	-
13	Madhikheda	2 15	2 15	-
14	Birsinghpur	52	52	-
15	Total Hydro	19 40	19 40	-
16	HQ	1	1	-
Total		69 09	69 09	-

Loan Liabilities

3.5 MPPGCL has also submitted in para 6.6 of the petition that the detailed working of the additions in assets as shown above in various years starting from FY 2005-06 to FY 2008-09 is voluminous hence, is not being included in the petition. Similarly, MPPGCL in para 7.1 of the petition has filed the lender-wise details of the loans as provided by GoMP in the provisional and final opening balance sheet as given below:-

Table: 13 Loan Liability as on 1st June, 2005

Amount in Cr.Rs.

	Particulars	rticulars Provision Opening Balance Sheet		Difference
1	PFC	1120	Balance Sheet 1169	48
2	LIC	488	490	2
3	REC	334	334	0
4	MPSEB	259		-259
5	GoMP	0	6	6
6	CSS	0	3	3
7	Total	2202	2002	-200

- 3.6 The petitioner has submitted that since the provisional and final opening balance sheet were as on 1st June, 2005, due to the change in the loan liabilities, there has been effect on the interest components, which have been duly incorporated in the books of accounts of FY 2007-08. Some of the above loans provided by GoMP through provisional and final opening balance sheet are directly identifiable with the projects and some of them are unlinked loans.
- 3.7 MPPGCL has also submitted in para 7.5 of the petition that one of the major requirements for preparation of station-wise balance sheet is linking of loan on the respective project. Hence, MPPGCL has linked the various unidentified loans with the respective stations considering the adequacy of balance depreciation for repayment of linked loan liability. MPPGCL has submitted the following loan details as on 1st April, 2009:-

Table: 14 Allocation of Loan as on 1st April, 2009

As on 1st April 2009				April 200	9	Loan Allocated				
	Particulars		Acc. Dep	Net Block	Bal. Dep.	PFC	LIC	REC	GoMP	Total
1	ATPS Chachai	183.6	113.6	70.0	51.6	5.4				5.4
2	STPS Sarni	631.2	478.0	153.2	90.1	11.1			0.7	11.8
3	SGTPS 840 MW	2163.7	1103.7	1060.0	843.7	37.4	336.5			373.9
4	SGTPS 500 MW	1956.9	70.1	1886.8	1691.1	1318.6				1318.6
5	SGTPS Total	4120.7	1173.8	2946.9	2534.8	1356.0	336.5			1692.5
6	Total Therml	4935.5	1765.4	3170.1	2676.5	1372.5	336.5		0.7	1709.6
7	Gandhi Sagar	10.3	8.1	2.2	1.2					
8	R.P. Sagar	18.9	16.6	2.3	0.4					
9	J Sagar	16.6	9.9	6.7	5.0					
10	Pench	96.2	61.4	34.8	25.2					
11	Rajghat	82.8	25.0	57.8	49.5	1.1				1.1
12	Bargi	87.0	48.7	38.4	29.6					
13	Bansagar	1361.2	339.1	1022.0	885.9	73.9		226.4	2.3	302.7
14	Madhikheda	214.7	10.0	204.7	183.2	115.6			2.4	118.0
15	Birsinghpur	52.1	25.3	26.9	21.7			_		
16	Total Hydro	1939.8	544.0	1395.8	1201.8	190.7	_	226.4	4.7	421.8
Tota	al	6875.2	2309.4	4565.8	3878.3	1563.1	336.5	226.4	5.4	2131.4

Equity

3.8 MPPGCL has submitted that the State Government has increased the allocation of equity to MPPGCL by Rs.637.08 crores through its final balance sheet as on 1st June, 1005. The equity so allocated has not been provided with station-wise break-up in either of the two notifications by the State Government. MPPGCL, adopting the procedure prescribed by the Commission in the tariff order for FY2005-06 for allocating loans and equity in the existing projects under commercial operation has submitted the following:-

Table: 15 Equity in CWIP as on 1st June, 2005

Doutionland		As per Opening B	Difference	
Particulars -		Provisional	Final	Difference
Total CWIP	Cr Rs	10 40.00	11 09.75	69.75
Loan in CWIP	Cr Rs	7 39.57	7 39.57	0.00
Equity in CWIP	Cr Rs	3 00.43	3 70.18	69.75
Funding of CWIP	Debt	71.11%	66.64%	
runding of CWIF	Equity	28.89%	33.36%	

3.9 The petitioner in Para 10.3 of the petition has submitted that there have been additions in gross block on account of either capitalization of new units or need based small repair and maintenance works. Accordingly, MPPGCL has filed the details of assets capitalized after 1st June, 2005 as given below:-

Table: 16 Projects Capitalized After 1st June, 2005

Amount in Cr.Rs.

Particulars	Total Asset Capitalized	Loan	Balance Equity	Debt : Equity
SGTPS 500 MW (PH-III)	1956.94	1318.78	638.15	67:33
Bansagar IV	117.24	63.90	53.34	55:45
Madhikheda	214.67	142.36	72.31	66:34
Total	2288.85	1525.04	763.81	67:33

3.10 In reference to the above capitalized projects, the petitioner has submitted that the actual project cost and funding thereof may increase on finalization of the project cost and any difference in the project cost, change in debt-equity mix etc. may kindly be permitted to be claimed separately at the time of true-up of tariff order for FY2009-10 and onwards. MPPGCL has also filed the additions in the assets on account of need based R&M works after 1st June, 2005 to 31st March, 2009 and filed the following equity as on 1st April, 2009:-

Table: 17 Equity as on 1st April, 2009

Amount in Cr.Rs.

	Particulars	Gross Block as on 1 st April 2009	Max Permissible Equity= 30 %	Total Equity	Equity for RoE	Equity to be treated as Loan
1	ATPS Chachai	1 35.59	40.68	49.40	40.68	8.72
2	STPS Total	6 31.20	1 89.36	2 23.17	1 89.36	33.81
3	SGTPS Total	41 20.66	12 36.20	13 84.26	12 36.20	1 48.07
4	Total Thermal	48 87.45	14 66.24	16 56.83	14 66.24	1 90.59
5	Gandhi Sagar	10.30	3.09	3.53	3.09	0.44

6	R.P. Sagar	18.86	5.66	6.47	5.66	0.81
7	J Sagar	16.56	4.97	5.68	4.97	0.71
8	Pench	96.24	28.87	38.58	28.87	9.71
9	Rajghat	82.81	24.84	28.39	24.84	3.55
10	Bargi	87.03	26.11	29.86	26.11	3.75
11	Bansagar	13 61.16	4 08.35	4 79.80	4 08.35	71.45
12	Madhikheda	2 14.67	64.40	72.31	64.40	7.91
13	Birsinghpur	52.15	15.64	17.88	15.64	2.23
14	Total Hydro	1939.77	5 81.93	682.50	581.93	100.57
Tot	al	68 27.23	20 48.17	23 39.33	20 48.17	2 91.16

3.11 As evident from the above table, the petitioner has allocated the revised equity to the respective project more than the norms i.e. 30% and requested to treat the excess amount of equity as loans.

Provision of the Regulation

- 3.12 The Clause 17.1 of the Regulation relating to the capital cost provides as under:
 - a) "the Expenditure Incurred or Projected to be incurred on original scope of work, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, up to the Date of Commercial operation of the Project, as admitted by the Commission, after prudent check shall form the basis for determination of Tariff".

Capitalized initial spares subject to the ceiling norms as specified below:

- (i) Coal-based/lignite-fired thermal generating stations 2.5% of original Project Cost.
- (ii) Hydro generating stations 1.5% of original Project Cost.

Provided that where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost under first proviso to 17.2, such norms shall apply to the exclusion of the norms specified herein.

b) Additional capital expenditure determined under Regulation 20.

Subject to prudent check, the capital cost admitted by the Commission shall form the basis for determination of Tariff:

Provided that, prudent check of capital cost may be carried out based on the benchmark norms to be specified by the Central Commission from time to time:

Provided further that in cases where benchmark norms have not been specified by the Central Commission, prudent check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of Tariff:

Provided also that the Commission may issue guidelines for vetting of capital cost of hydro-electric Projects by independent agency or expert and in that event the capital cost as vetted by such agency or expert may be considered by the Commission while determining the Tariff for the hydro generating station:

Provided also that the Commission may issue guidelines for scrutiny and approval of Commissioning schedule of the hydro-electric Projects of a developer, not being a State controlled or owned company as envisaged in the Tariff policy as amended vide Government of India Resolution No 23/2/2005-R&R (Vol.IV) dated 31st March 2008:

Provided also that in case the site of a Hydro generating station is awarded to a developer (not being a State controlled or owned Company), by a State Government by following a two stage transparent process of bidding, any Expenditure Incurred or committed to be incurred by the Project developer for getting the Project site allotted shall not be included in the capital cost:

Provided also that the capital cost in case of such hydro generating station shall include:

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the Project in conformity with National R&R Policy and R&R package as approved; and
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) Project in the affected area:

Provided also that where the power purchase agreement entered into between the Generating Company and the Beneficiaries or the implementation agreement provide for ceiling of actual expenditure, the capital expenditure admitted by the Commission shall take into consideration such ceiling for determination of Tariff:

Provided also that in case of the existing Projects, the capital cost admitted by the Commission prior to 1.4.2009 and the additional capital expenditure Projected to be incurred for the respective Year of the Tariff period during 2009-12, as may be admitted by the Commission, shall form the basis for determination of Tariff."

Commission's Analysis

- 3.13 MPPGCL in its petition has considered the impact of final opening balance sheet as on 1st June, 2005 notified by GoMP vide its notification No. No.4068-FRS-18-2002-XIII dated 12th June, 2008. The petitioner has projected the opening gross block, accumulated depreciation, status of opening loans as on 31st March, 2009 and equity as on 31st March, 2009 after incorporating the effects of the final opening balance sheet as on 1st June, 2005. It is worthwhile to mention that the Commission has recently issued the last true-up order for truing-up of the generation cost for FY 2006-07 on 17th June, 2009 on the basis of the audited accounts filed by the petitioner for that year. It is pertinent to mention here that the audited accounts for FY 2006-07 had not taken into account the changes due to final opening balance sheet as on 1st June, 2005.
- 3.14 The impact of the final opening balance sheet on the audited accounts will have to be seen on year-to-year basis w.e.f. 1st June, 2005 and the base figures shall get finalized only after truing-up of the generation tariff for FY 2007-08, the Commission shall consider the impact of the final opening balance sheet while truing-up the generation cost for respective years from FY 2007-08 onwards. Furthermore, for the new capacity additions cost of which have got reflected in the books of accounts of the company for FY 2008-09, these have been considered based on the cost admitted by the Commission in respective provisional tariff orders.
- 3.15 The Commission, has taken the figures at the closing of the financial year FY 2006-07 duly approved by the Commission vide its true-up order for FY 2006-07 in this tariff order. Accordingly, the Commission has considered the opening gross block, accumulated depreciation, equity and the status of opening loans as on 1st April, 2007 as per the true-up order for FY 2006-07 issued by the Commission on 17th June, 2008. The Commission has considered the addition to gross block, equity and loan for all such generating units for which the Commission has issued the provisional tariff order as given below:-

Table: 18 Provisional Tariff Orders issued by the Commission

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

- 3.16 As may be seen from Para 10.4 of the petition, MPPGCL has submitted that the actual project cost and the funding thereof in case of the above mentioned new projects may change on finalization of the project cost. The Commission has observed that the petitioner has not yet filed the petition for determination of final tariff in respect of above mentioned new generating units. The commission has therefore, considered the capital cost and other components in this order as provisionally admitted by the Commission.
- 3.17 The petitioner in Para 10.3 of the petition has considered the additions in the assets on account of need based renovation and modernization works also. The Commission vide letter No.243 dated 27th January, 2010 has sought several clarifications regarding the need based renovation and modernization works filed in the petition as addition to the gross block. The Commission on perusal of the reply submitted by the petitioner vide its letter No.07-12(i)/CP-MPPGCL/MPERC/MYT FY 10-12/96 dated 1st February, 2010 has observed that the petitioner has not sufficiently provided the cost benefit analysis for the works filed in the petition and stated these as "need based replacement". Moreover, it has also not been stated whether renovation and modernization works regarding replacement of the items has been accounted while computing the depreciation and the gross block filed in the petition.
- 3.18 The Commission, while observing the above facts is of the view that detailed scrutiny and analysis of all such renovation and modernization is needed. This exercise is likely to take time. The process of tariff determination has already been delayed due to late filing of the petition. It would not be in the interest of the petitioner to delay the process further. Hence, the Commission shall consider the impact of the R&M activities at the time of dealing with the true-up petition for the respective years in which R&M works has been executed.
- 3.19 Accordingly, the Commission has considered the opening gross block as on 1st April, 2007 and the equity as on 1st April, 2007 for all the generating stations as per the true-up order for FY 2006-07 issued by the Commission on 17th June, 2009. Cumulative depreciation as on 31st March, 2007 in the true-up order for FY 2006-07has been considered for the purpose of this order. Since MPPGCL has de-commissioned the two old units of 30MW+20MW at ATPS, Phase-1, Chachai on 31st March, 2009, the Commission has not considered the gross block of ATPS, Phase-1 Chachai for arriving to the opening gross block as on 1st April, 2009. The opening gross block of complete ATPS Complex was Rs.143.97 crores at the beginning of FY 2005-06 and no asset addition over this given block has either been claimed or approved by the Commission in last MYT order dated 7th March, 2006 and true-up order for FY 2006-07 dated 17th June, 2009. Considering the same approach as adopted in all other generating units and deducting the gross block of Rs.28.50 crores at the beginning of FY 2005-06 (as per asset register filed by the petitioner), the opening gross block for ATPS, Phase-II only as Rs.115.59 crores is considered as on 1st April, 2009 in this order.
- 3.20 The status of opening gross block as on 1st April, 2009 including additional capitalization during FY 2007-08 and FY 2008-09 and the cumulative depreciation as on 31st March, 2007 is given below:-

Table: 19 Capital Cost

$\mathbf{D}_{\mathbf{c}}$	C
КC	(r

		Closing Gross Block as on 31.03.2007 as admitted by the Commission (as per	Additional Capitalization by adding new units admitted by the Commission		Opening Gross Block as on 01.04.2009
Sr.		true-up order fy06- 07 and prov. Orders			admitted by the
No.	Power Station	for new units)	FY2007-08	FY2008-09	Commission
1	ATPS Chachai (PH-I)*	28.50	De-sync	hronized	-
2	ATPS Chachai (PH-II)	115.47	-	-	115.47
3	STPS Sarni Complex	606.85	-	-	606.85
4	SGTPS (PH-1&2)	2115.06	-	-	2115.06
5	SGTPS (PH-III) 500 MW	0.00	-	1729.50**	1729.50
6	Gandhi Sagar	10.29	-	-	10.29
7	Pench	87.50	-	-	87.50
8	Rajghat	82.75	-	-	82.75
9	Bargi	77.27	-	-	77.27
10	Bansagar (I to III)	1241.38	-	-	1241.38
11	Bansagar-IV (Jhinna)***	97.18	-	-	97.18
12	Madhikheda****	142.99	32.25****	-	175.24
13	Birsinghpur	52.12	-	-	52.12

^{*}As per assets register filed by MPPGCL. MPPGCL have de-capitalized ATPS (PH-1) on 31st March, 2009.

**As per provisional order dated 24th November, 2009 issued by the Commission.

*** As per Provisional order issued by the Commission vide order dated 18th January, 2008.

****As per provisional tariff order dated 18th January, 2008 for Madhikheda Unit 1 & 2

Status of Equity as on 1st April, 2009 **Table : 20**

Rs. Cr.

Sr. No.	Power Station	Gross block as on 31st March, 2007 admitted	Equity as on 31st March, 2007 admitted by the	Additional equity by adding new units		Equity as on 1st April, 2009
		by the Commission (ref. true up FY07 & prov. Orders)	Commission (ref. true up FY 07 & prov. Orders)	FY2007-08	FY2008-09	admitted by the Commission
1	ATPS PH-I	28.50*	5.95	-	-	0
1	ATPS PH-II	115.47	24.11	-	-	24.11
2	STPS Sarni	606.85	126.69	-	-	126.69
3	SGTPS (PH-1&2)	2115.06	441.56	-	-	441.56
4	SGTPS (PH-3) 500MW	0.00	0	-	428.72**	428.72
5	Gandhi Sagar	10.29	2.15	-	-	2.15
6	Pench	87.50	18.27	-	-	18.27
7	Rajghat	82.75	17.28	-	-	17.28
8	Bargi	77.27	16.13	-	-	16.13
9	Bansagar (I to III)	1241.38	259.16	-	-	259.16
10	Bansagar-IV (Jhinna)	97.18***	33.28	_	-	33.28
11	Madhikheda	142.99****	38.04	5.16****	-	43.20
12	Birsinghpur	52.12	10.88	-	-	10.88

^{****} As per provisional order dated 5th January, 2010

Return on Equity

Petitioner's Submission

3.21 MPPGCL under para 10.8 of the petition has submitted the following:-

The return on equity has been computed @ 15.5% + tax rate of 33.33%, as elaborated in the regulation "MPERC (Terms and Conditions of Generation Tariff) Regulations, 2009 (G-26 (I) of 2009)". It is pertinent to mention that MPPGCL's request for applicability of benefits under section 80 I A of the Income Tax Act, has not yet been considered by the Income Tax department. In case the request is considered, the correction in the return on equity, to the extent considered by IT department shall be submitted for correction in respective year's true up. As the matter is under consideration of Income tax department, it is humbly submitted to kindly consider to permit the tax rate of 33.33%. Effective rate of Return, considering corporate rate of income tax as 30% work out to 23.25% ($15.5\% \div (1-33.33\%)$). The return on equity, with ceiling of 30% of Gross block, works out as under:-

Table: 21 Return on Equity

	Amount in Cr.As.					
	Particulars	Equity for RoE	RoE	Amount in Cr.Rs.		
1	ATPS Chachai	40.68	23.25%	9.46		
2	STPS Total	1 89.36	23.25%	44.03		
3	SGTPS Total	12 36.20	23.25%	2 87.42		
4	Total Thermal	14 66.24	23.25%	3 40.90		
5	Gandhi Sagar	3.09	23.25%	0.72		
6	R.P. Sagar	5.66	23.25%	1.32		
7	J Sagar	4.97	23.25%	1.15		
8	Pench	28.87	23.25%	6.71		
9	Rajghat	24.84	23.25%	5.78		
10	Bargi	26.11	23.25%	6.07		
11	Bansagar	4 08.35	23.25%	94.94		
12	Madhikheda	64.40	23.25%	14.97		
13	Birsinghpur	15.64	23.25%	3.64		
14	Total Hydro	5 81.93	23.25%	1 35.30		
Tota	al	20 48.17	23.25%	4 76.20		

^{*}As per asset register filed by MPPGCL.

^{**}As per provisional order dated 24th November, 2009 issued by the Commission.

^{***}As per provisional order issued by the Commission dated 11th January, 2008

^{****}As per provisional tariff order dated 18th January, 2008 for Madhikheda Unit 1 & 2.

^{****} As per provisional order dated 5th January, 2010

3.22 The petitioner has mentioned that as the total equity as on 1st April,2009 filed by the petitioner is more than 30% of the Gross Block after taking the impact of final opening balance sheet, the equity in excess of the normative equity has been taken as normative loan by the petitioner and weighted average rate of interest has been applied on excess equity by the petitioner. The Petitioner has also submitted that the scope of this petition does not cover Ranapratap Sagar and Jawahar Sagar Hydro Power Stations. The total return on equity worked out by the petitioner for the stations operated by MPPGCL is as follows.

Table: 22 RoE claimed (Rs. Cr.)

	Particulars	RoE	Interest on Equity	Total RoE
1	ATPS Chachai	9.46	0.93	10.39
2	STPS Total	44.03	3.62	47.64
3	SGTPS Total	287.42	15.85	303.26
4	Total Thermal	340.90	20.40	361.30
5	Gandhi Sagar	0.72	0.05	0.77
6	Pench	6.71	1.04	7.75
7	Rajghat	5.78	0.38	6.16
8	Bargi	6.07	0.40	6.47
9	Bansagar	94.94	7.65	102.59
10	Madhikheda	14.97	0.85	15.82
11	Birsinghpur	3.64	0.24	3.88
12	Total Hydro	1 32.83	10.60	1 43.43
Total		473.73	31.00	504.73

Provisions of the Regulation

3.23 The Clause 22 of the Regulations provides that,

"Return on equity shall be computed in rupee terms, on the paid up equity capital determined in accordance with Regulation 21.

Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per Regulation 22.3 of this Regulation:

Provided that in case of Projects commissioned on or after I_{st} April, 2009, an additional return of 0.5% shall be allowed if such Projects are completed within the timeline specified in **Appendix-I**:

Provided further that the additional return of 0.5% shall not be admissible if the Project is not completed within the timeline specified above for reasons whatsoever.

The rate of return on equity shall be computed by grossing up the base rate with the normal tax rate for the Year 2008-09 applicable to the Generating Company:

Provided that return on equity with respect to the actual tax rate applicable to the Generating Company, in line with the provisions of the relevant Finance Acts of the respective Year during the Tariff period shall be trued up separately.

Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)Where t is the applicable tax rate in accordance with Regulation 22.3 of this Regulation.

Illustration.-

- (i) In case of Generating Company paying Minimum Alternate Tax (MAT) @ 11.33% including surcharge and cess:
 - Rate of return on equity = 15.50/(1-0.1133) = 17.481%
- (ii) In case of Generating Company paying normal corporate tax @ 33.99% including surcharge and cess:

 Rate of return on equity = 15.50/(1-0.3399) = 23.481%"

Commission's Analysis

- 3.24 The Commission has considered the opening equity as on 1st April, 2007 for all the generating stations as per the true-up order for FY 2006-07 issued by the Commission on 17th June, 2009 which is based on the provisional opening balance sheet notified by the GoMP. Since no additional capitalization has been admitted by the Commission for existing units hence, equity for these units as on 31st March, 2009 remains unchanged.
- 3.25 The Commission has issued provisional tariff orders for new units of Madhikheda, Bansagar-VI and SGTPS, Birsinghpur Unit-V. Since the petitioner has not filed the petition for determination of final tariff based on audited accounts for these new units, therefore the equity for these new units as approved by the Commission in its provisional orders has been considered in this order.
- 3.26 Since (20+30MW) units of ATPS, PH-I Chachai has been de-commissioned on 31st March,2009, the Commission has not considered the equity of ATPS, Chachai PH-I in this order.
- 3.27 The Commission has further observed that the station wise equity admitted by the Commission as on 1st April, 2009 in this order is less than the normative equity except Bansagar-iv (Jhinna), therefore the weighted average interest rate is applied on the amount which is more than normative equity in Bansagar-IV.
- 3.28 The Commission vide letter No.243 dated 27th January, 2010 asked the petitioner whether the petitioner has paid the income tax as per the normal corporate tax or MAT for the past three years. The petitioner vide its letter No.96 dated 1st February, 2010 has informed that

the basis of payment of income tax has varied year-to-year, as is obvious from the following table:-

Table: 23 Details of Income Tax paid

Year	Basis on which income tax was paid
FY06	Normal corporate tax
FY07	Normal corporate tax
FY08	On the basis of MAT
FY09	No tax was paid (loss in both the cases)

3.29 As per the provisions of the Regulations, grossing up is to be done based on tax rate for FY 2008-09 and considering that no tax was paid in FY 2008-09, the Commission has allowed RoE @ 15.5% without any grossing up. The Return on equity has been worked out as under:

Table: 24 Return on Equity

Rs. Cr.

			Total Equity				
		Gross block as	as on 1st		Return	Return on Equity approved	
		on 1st	April , 2009				
		April,2009 as	as admitted	Equity			
Sr.		admitted by the	by the	treated	FY2009-	FY2010-	FY2011-
No.	Powe Station	Commission	Commission	as loan	10	11	12
2	ATPS PH-II	115.47	24.11	-	3.74	3.74	3.74
3	STPS Sarni	606.85	126.69	-	19.64	19.64	19.64
4	SGTPS (PH-1&2)	2115.06	441.56	-	68.44	68.44	68.44
5	SGTPS (PH-3) 500MW	1729.50	428.72	-	66.45	66.45	66.45
6	Gandhi Sagar	10.29	2.15	-	0.33	0.33	0.33
7	Pench	87.50	18.27	-	2.83	2.83	2.83
8	Rajghat	82.75	17.28	-	2.68	2.68	2.68
9	Bargi	87.50	16.13	-	2.50	2.50	2.50
10	Bansagar (I to III)	1241.38	259.16	-	40.17	40.17	40.17
11	Bansagar-IV (Jhinna)	97.18	33.28	4.13	4.84*	4.84*	4.84*
12	Madhikheda	175.24	43.20	-	6.70	6.70	6.70
13	Birsinghpur	52.12	10.88	-	1.69	1.69	1.69

^{*} RoE including interest on equity in excess of 30% (@ weightage average rate of interest on loan)

Interest and finance charges on loan

Petitioner's submission

- 3.30 In the para 7.1 of the petition, petitioner has submitted that, in the provisional opening balance sheet the loan liability was Rs. 2202 Cr. As against this in the final opening balance sheet the loan liability has become Rs. 2002 Cr. The petitioner has taken the impact of final opening balance sheet in this MYT petition.
- 3.31 The petitioner in Para 7.9 to 7.11 of the petition has filed the following loan balances, weighted average rate of interest as on 1st April, 2009 and interest chargeable as claimed for all the three years i.e. FY 2009-10 to FY 2011-12.

Table: 25 Interest Charges

Amount in Rs. Cr.

Par	ticulars		Loan Bala	nces As on		Rate of	Inter	est Charge	eable
		1-Apr-09	1-Apr-10	1-Apr-11	1-Apr-12	Interest	FY 10	FY 11	FY 12
1	ATPS Chachai	5.37	3.43	1.50		10.49%	0.46	0.26	0.08
2	STPS Sarni	11.76	2.73			11.53%	0.84	0.16	
3	SGTPS 840 MW	373.91	278.64	185.62	95.39	9.30%	30.34	21.59	13.07
4	SGTPS 500 MW	1,318.61	1,217.53	1,116.45	1,015.36	11.58%	146.84	135.14	123.43
5	SGTPS Total	1,692.52	1,496.17	1,302.07	1,110.75	11.08%	177.19	156.73	136.50
6	Total Thermal	1,709.65	1,502.33	1,303.57	1,110.75	11.08%	178.48	157.14	136.58
7	Rajghat	1.14				10.11%	0.06		
8	Bansagar	302.66	234.12	165.57	97.03	8.69%	23.31	17.36	11.40
9	Madhikheda	118.00	106.79	95.59	84.38	10.46%	11.76	10.59	9.41
10	Total Hydro	421.80	340.91	261.16	181.41	9.19%	35.13	27.94	20.82
Tota	al	2,131.45	1,843.24	1,564.73	1,292.16	10.70%	213.61	185.08	157.39

Provision of the Regulation

3.32 The Clause 23 of the Regulation provides that,

"The loans arrived at in the manner indicated in Regulation 21 shall be considered as gross normative loan for calculation of interest on loan.

The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

The repayment for the Year of the Tariff period 2009-12 shall be deemed to be equal to the depreciation allowed for that Year.

Notwithstanding any moratorium period availed by the Generating Company, the repayment of loan shall be considered from the first Year of commercial operation of the Project and shall be equal to the annual depreciation allowed.

The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Project:

Provided that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered.

Provided further that if the generating station does not have actual loan, then the weighted average rate of interest of the Generating Company as a whole shall be considered.

The interest on loan shall be calculated on the normative average loan of the Year by applying the weighted average rate of interest

The Generating Company shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such refinancing shall be borne by the Beneficiaries and the net savings shall be shared between the Beneficiaries and the Generating Company, in the ratio of 2:1.

The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing......"

Commission's analysis

- 3.33 Regulation 21.5 which states that the debt-equity ratio for the generating stations declared under commercial operation prior to 1st April, 2009 shall be considered the same as allowed by the Commission for determination of tariff for the period ending 31st March, 2009. The Commission thus, considered the opening balance loan as on 1st April, 2007 as per the closing balance of loan as on 31st March, 2007 based on provisional opening balance sheet and approved by the Commission in its true-up order for FY 2006-07 on 17th June, 2009. However, the Commission has also considered the addition in loan balances for the generating projects, which have been provided with the provisional tariff by the Commission as stated under table 18 in this order.
- 3.34 Further, the Commission has considered the repayment of loan provisionally allowed by the Commission for the respective year in case of new projects. The Commission has also considered the repayment of loans during FY 2007-08 and FY 2008-09 as filed/approved by the Commission in the last MYT order dated 7th March, 2006 and schedule of payment submitted by the petitioner for FY 2005-06 to FY 2008-09. Accordingly, the normative loan outstanding as on 1st April, 2009 has been worked out as shown below:-

Table: 26 Details of loan

Rs. Cr.

		Loan as on 31.03.2007 as allocated by the petitioner admitted by	Additional loan by		Repayment as filed in last MYT petition and as per prov.		Balance loan as on
		the Commission (ref.		new units	Orders for		31.03.2009
		true-up order for FY06-					admitted by
Sr.		07 and prov. Orders for	FY2007-	FY2008-	FY2007-	FY2008	the
No.	Power station	new units)	08	09	08	-09	Commission
2	ATPS Chachai (PH-II)	44.52			12.38	11.77	20.37
3	STPS Sarni Complex	57.55			8.29	8.92	40.34
4	SGTPS (PH-1&2)	681.29			62.48	86.43	532.38
	SGTPS (PH-III) 500						
5	MW	0.00		1300.78	0.00	62.26	1238.52
6	Gandhi Sagar	0.00			0.00	0.00	0.00
7	Pench	8.02			0.67	0.85	6.50
8	Rajghat	20.71			2.46	2.81	15.44
9	Bargi	11.87			0.99	1.26	9.62
10	Bansagar (I to III)	336.22			43.12	48.11	244.99
11	Bansagar-IV (Jhinna)	60.71			6.39	6.39	47.93
12	Madhikheda	99.70	26.43		11.85	13.21	101.07
13	Birsinghpur	8.13			0.67	0.87	6.59

3.35 The repayment for each year of the tariff period i.e. FY 2009-10 to FY 2011-12 has been considered to be equal to the depreciation allowed in that year for arriving at the closing loan for that year. The rate of interest applied is the weighted average rate of interest considered in the true-up order for FY 2006-07 for existing stations and that allowed in provisional tariff order for capacities subsequently added. Based on the scheme-wise details of the linked and unlinked loans provided by the MPPGCL during true-up exercise for FY2006-07, the rate of interest approved by the Commission on the actual interest amount is reproduced below:

Status as per true-up FY2006-07

Rs. Crore

Scheme-wise Loans	Opening Balance as on 01.04.2006	Closing Balance as on 31.03.2007	Average Loan for FY2006-07	Interest approved in true-up order dt. 17.06.2009	Rate of interest
PFC Linked	316.29	268.88	292.59	25.19	8.61
LIC Linked	318.79	318.79	318.79	27.23	8.54
LIC Unlinked	100	100	100	8.59	8.59
REC	304	273	288.5	26.23	9.09
MPSEB	233	207	220	27.97	12.71

3.36 Accordingly the weighted average rate of interest has been worked out and applied in this order. The actual weighted average interest rates shall be trued-up in respective true-up orders based on audited accounts of those years.

3.37 The interest on loan by applying the weighted average rate of interest has been computed as follows:

Table: 27 Station-wise Interest on Loan ATPS PH-II:

Rs. Cr.

Particular	FY10	FY11	FY12
Opening balance of loan	20.37	19.16	17.95
Depreciation for the year	1.21	1.21	1.21
Closing balance of loan	19.16	17.95	16.73
Average loan	19.77	18.55	17.34
Wt. Average rate of interest	8.61	8.61	8.61
Interest amount	1.70	1.60	1.49

STPS, Sarni:

Rs. Cr.

Particular	FY10	FY11	FY12
Opening balance of loan	40.35	31.67	23.17
Depreciation for the year	8.68	8.50	8.31
Closing balance of loan	31.67	23.17	14.86
Average loan	36.01	27.42	19.01
Wt. Average rate of interest	9.53	9.53	9.53
Interest amount	3.43	2.61	1.81

SGTPS, Birsinghpur (4X210 MW):

Rs. Cr.

Particular	FY10	FY11	FY12
Opening balance of loan	532.38	439.26	348.34
Depreciation for the year	93.13	90.92	88.20
Closing balance of loan	439.26	348.34	260.14
Average loan	485.82	393.80	304.24
Wt. Average rate of interest	9.31	9.31	9.31
Interest amount	45.23	36.66	28.33

SGTPS, Birsinghpur (1X500 MW):

Rs. Cr.

Particular	FY10	FY11	FY12
Opening balance of loan	1238.52	1149.18	1059.85
Depreciation for the year	89.34	89.34	89.34
Closing balance of loan	1149.18	1059.85	970.51
Average loan	1193.85	1104.52	1015.18
Wt. Average rate of interest	11.52	11.52	11.52
Interest amount	137.53	127.24	116.95

Gandhi Sagar:

T)	\sim		
K C	r		
17.7.	\		

Particular	FY10	FY11	FY12
Opening balance of loan	0.00	0.00	0.00
Depreciation for the year	0.23	0.23	0.22
Closing balance of loan	0.00	0.00	0.00
Average loan	0.00	0.00	0.00
Wt. Average rate of interest	0.00	0.00	0.00
Interest amount	0.00	0.00	0.00

Pench:

Rs. Cr.

			Test CI.
Particular	FY10	FY11	FY12
Opening balance of loan	6.50	3.79	2.28
Depreciation for the year	2.71	1.51	1.51
Closing balance of loan	3.79	2.28	0.77
Average loan	5.14	3.04	1.53
Wt. Average rate of interest	10.06	10.06	10.06
Interest amount	0.52	0.31	0.15

Rajghat

Rs. Cr.

Particular	FY10	FY11	FY12
Opening balance of loan	15.44	11.42	7.40
Depreciation for the year	4.02	4.02	4.02
Closing balance of loan	11.42	7.40	3.38
Average loan	13.43	9.41	5.39
Wt. Average rate of interest	9.79	9.79	9.79
Interest amount	1.31	0.92	0.53

Bargi Rs. Cr.

Particular	FY10	FY11	FY12	
Opening balance of loan	9.62	6.36	3.10	
Depreciation for the year	3.26	3.26	1.18	
Closing balance of loan	6.36	3.10	1.92	
Average loan	7.99	4.73	2.51	
Wt. Average rate of interest	10.06	10.06	10.06	
Interest amount	0.80	0.48	0.25	

Bansagar (I to III)

Rs. Cr.

Particular	FY10	FY11	FY12
Opening balance of loan	244.98	182.42	119.85
Depreciation for the year	62.57	62.57	62.57
Closing balance of loan	182.42	119.85	57.29
Average loan	213.70	151.13	88.57
Wt. Average rate of interest	9.71	9.71	9.71
Interest amount	20.76	14.68	8.60

Bansagar-IV (Jhinna)

Rs. Cr.

Particular	FY10	FY11	FY12
Opening balance of loan	47.93	43.03	38.13
Depreciation for the year	4.90	4.90	4.90
Closing balance of loan	43.03	38.13	33.24
Average loan	45.48	40.58	35.69
Wt. Average rate of interest	7.35	7.35	7.35
Interest amount	3.34	2.98	2.62

Madhikheda Rs. Cr.

Particular	FY10	FY11	FY12
Opening balance of loan	101.07	91.94	82.81
Depreciation for the year	9.13	9.13	9.13
Closing balance of loan	91.94	82.81	73.68
Average loan	96.50	87.37	78.24
Wt. Average rate of interest	8.74	8.74	8.74
Interest amount	8.43	7.63	6.84

Birsinghpur hydel

Rs. Cr.

Particular	FY10	FY11	FY12	
Opening balance of loan	6.59	4.08	1.62	
Depreciation for the year	2.51	2.47	2.47	
Closing balance of loan	4.08	1.62	-0.85	
Average loan	5.34	2.85	0.38	
Wt. Average rate of interest	10.06	10.06	10.06	
Interest amount	0.54	0.29	0.04	

Depreciation

Petitioner's submission

3.38 The petitioner has filed the opening gross block and accumulated depreciation considering the effect of final opening balance sheet (as on 1st June, 2005) notified by the State Government on 12th June, 2008. Based on the opening gross block and accumulated depreciation, the petitioner has claimed the depreciation for FY 2009-10 to FY 2011-12 as given below:-

Table: 28 Station wise break up Depreciation for FY 10 to FY 12

Amount in Cr.Rs.

S. No.	Asset Description	Opening Block for FY 10 Depreciation for		ı for	Accur	osing nulated eciation		
		Asset GB	Acc. Dep.	FY 10	FY 11	FY 12	Cr Rs.	% of GB
1	ATPS Chachai	184	114	1.94	1.94	1.93	119	65.0%
2	STPS Total	631	478	9.03	8.84	8.65	505	79.9%
3	SGTPS Total	4121	1174	196.36	194.10	191.32	1756	42.6%
4	Malwa	33	0	0.00	0.00	0.00	0	0.0%
5	Total Thermal	49 68	17 65	207.32	204.87	201.91	23 80	47.9%
6	Gandhi Sagar	10	8	0.22	0.22	0.21	9	84.7%
7	R.P. Sagar	19	17	0.07	0.06	0.05	17	88.7%
8	J Sagar	17	10	0.62	0.61	0.61	12	70.8%
9	Pench	96	61	2.97	2.96	2.96	70	73.1%
10	Rajghat	83	25	4.03	4.03	4.03	37	44.8%
11	Bargi	87	49	3.67	3.67	3.65	60	68.6%
12	Bansagar	1361	339	68.55	68.55	68.55	545	40.0%
13	Madhikheda	215	10	11.20	11.20	11.20	44	20.3%
14	Birsinghpur	52	25	2.50	2.46	2.46	33	62.7%
15	Total Hydro	19 40	5 44	93.82	93.75	93.72	8 25	42.5%
16	HQ	0.7	0.1	0.08	0.08	0.08	0.3	43.1%
Tota	1	69 09	23 09	301.22	298.70	295.71	32 05	46.4%

- 3.39 The petitioner has also submitted that the depreciation of upcoming new units of ATPS, Chachai (210 MW) has not been included in its claim since the petition of this unit shall be submitted separately by the petitioner. The petitioner has further submitted that the depreciation for Ranapratap Sagar and Jawahar Sagar are excluded in the tariff petition since these stations are operated by Rajasthan authorities.
- 3.40 The petitioner has claimed the following station-wise depreciation of the plants operated by MPPGCL for FY 2009-10 to FY 2011-12:

Table: 29 Station wise break up Depreciation of the Plant Operated by MPPGCL For FY 10 to FY 12

Amount in.Rs. Cr FY 10 FY 11 FY 12 **Particulars** ATPS Chachai 1.9 1.9 1.9 2 8.7 STPS Sarni 9.0 8.8 3 SGTPS Birsinghpur 194.1 191.3 196.4 4 **Total Thermal** 207.3 204.9 201.9 Gandhi Sagar 5 0.2 0.2 0.2 6 Pench 3.0 3.0 3.0 7 Rajghat 4.0 4.0 4.0 8 Bargi 3.7 3.7 3.6 9 Bansagar 68.5 68.5 68.5 11.2 10 Madhikheda 11.2 11.2 11 Birsinghpur 2.5 2.5 2.5 12 **Total Hydro** 93.1 93.1 93.1 13 0.1 0.1 HQ 0.1298.0 295.0 300.5 Total

Provision of the Regulation

3.41 The clause 24 of the Regulation 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 capital cost of the assets as admitted by the Commission
- (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) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

Provided that in case of Hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site.

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under Long-term power purchase agreement at regulated Tariff.

- (d) Land other than land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (e) Depreciation shall be calculated annually based on 'Straight Line Method' and at rates specified in **Appendix-II** to these Regulations for the assets of the generating station:

Provided that, the remaining depreciable value as on 31st March of the Year closing after a period of 12 Years from the Date of Commercial operation shall be spread over the balance Useful life of the assets.

- (f) In case of the existing Projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation including Advance Against Depreciation as admitted by the Commission upto 31.3.2009 from the gross depreciable value of the assets. The rate of Depreciation shall be continued to be charged at the rate specified in **Appendix-II** till cumulative depreciation reaches 70%. Thereafter the remaining depreciable value shall be spread over the remaining life of the asset such that the maximum depreciation does not exceed 90%.
- (g) Depreciation shall be chargeable from the first Year of commercial operation. In case of commercial operation of the asset for part of the Year, depreciation shall be charged on pro rata basis. "

Commission's analysis

- 3.42 The Commission, while determining the depreciation in this order has considered the opening gross block and accumulated depreciation as on 1st April, 2007 as per the true-up tariff order issued by the Commission for FY 2006-07 on 17th June, 2009.
- 3.43 Further, the Commission has also considered the accumulated depreciation approved by the Commission in its provisional tariff order for new generating units.
- 3.44 Accordingly, the Commission has computed the gross block and accumulated depreciation as on 31st March, 2009 considering depreciation approved by the Commission in its last MYT order issued on 7th March, 2006 for FY 2006-07 to FY 2008-09 and the depreciation allowed by the Commission through its provisional order for the new generating projects.
- 3.45 The Commission has observed that the accumulated depreciation in Pench and Bargi Hydro Power Stations has reached upto 70% of gross block in FY 2010-11 and FY20011-

12 respectively. As per the provision of the Regulation, the balance depreciation for these two stations is required to be spread over the balance useful life of the project from the year. Hence, the depreciation in case of these two projects has been worked out as per the Regulation.

In the other projects, the accumulated depreciation reaches upto 70% of gross block and they have also completed their useful life. The Commission allowed to charge the depreciation at the rate specified in the Regulations upto the accumulated depreciation reaches 90% of the gross block. The Commission, after arriving to the opening gross block and the accumulated depreciation as on 1st April, 2009 has computed the depreciation for FY 2009-10 to FY 2011-12 on the basis of weighted average rate of depreciation as filed by the petitioner. The depreciation allowed in this order is given below:-

Table: 30 Depreciation

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120	r

Sr. No.	Power Station	Gross Block as on 1st April,2009 admitted by the Commission	Accumulat ed Depreciatio n as on 1st April, 2007	Depreciation including AAD allowed in MYT order dt 07.03.2006 for existing units and allowed in provisional orders for new units		including AAD allowed in MYT order dt 07.03.2006 for existing units and allowed in provisional orders		Accumulated Depreciation as on 1st April,2009 admitted by the Commission	Acc. Dep. % of the gross block as on 1st April, 2009	Depre	ciation an allowed	ount FY12
				2007-08	2008-09			F 1 10	FIII	F 1 12		
1	ATPS (PH-2)	115.47	92.63	0.67	0.65	93.95	81.37	1.21	1.21	1.21		
2	STPS Complex	606.85	464.63	5.48	5.16	475.27	78.32	8.68	8.50	8.31		
3	SGTPS (PH- I&II)	2115.06	960.26	68.50	64.27	1093.02	51.68	93.13	90.92	88.20		
4	SGTPS (PH- III) 500MW	1729.50	0.00	0.00	36.84	36.84	2.13	89.34	89.34	89.34		
5	Gandhi Sagar	10.29	7.91	0.08	0.08	8.07	78.42	0.23	0.23	0.22		
6	Pench	87.50	58.39	1.14	1.13	60.66	69.33	2.71	1.51	1.51		
7	Rajghat	82.75	20.44	2.19	2.19	24.82	29.99	4.02	4.02	4.02		
8	Bargi	77.27	43.81	1.93	1.93	47.67	61.69	3.26	3.26	1.18		
9	Bansagar (I to III)	1241.38	279.34	25.87	25.87	331.08	26.67	62.57	62.57	62.5		
10	Bansagar-IV	97.18	3.20	6.39	6.39	15.98	16.44	4.90	4.90	4.90		
11	Madhikheda	175.24	5.24	11.85	12.93	30.01	17.13	9.13	9.13	9.13		
12	Birsinghpur	52.12	22.65	1.33	1.21	25.19	48.33	2.51	2.47	2.47		

Operation & Maintenance Expenses:

Petitioner's submission

The petitioner in its petition has submitted the following:-

- 3.46 O&M Charges consists of expenses on Employees, Repair and Maintenance of plants and machinery and Administrative & General expenses. As elaborated by Commission, these expenses are projected based on past trends of expenditure by providing inflation factors.
- 3.47 It is pertinent to mention that inadequacy of O&M norms affects on the availability of material/facility and the morale of the employees. Particularly in the present circumstances, where the Company has been carved out from erstwhile MPSEB and is in the initial phase of teething troubles / cash crunch, adequacy of O&M charges is crucial. Generation function of erstwhile MPSEB was also facing difficulty in arranging the funds for repair & maintenance of its machines. Due to inadequate expenditure on maintenance of machines, the performance of the machines has deteriorated in past. Projecting the trend based on inadequate expenses incurred in past will continue to put the company in vicious cycle of inadequate resources. Considering this fact while proposing the requirement of O&M charges, MPPGCL has provided suitable pad to over come from this vicious cycle of cash crunch. The proposed O&M charges and approved O&M charges are tabulated in the table below:-

Table: 31 O&M Charges

Amount in 1	L Rs /	MW/	<u>Year</u>
A MDEI	D.C.D.	1 4	

Thermal Station		As per MPERC Regulation				
1 net mai	Thermal Station		FY 11	FY 12		
ATPS	PH-II	17.84	18.94	20.10		
	PH-I	21.42	22.74	24.13		
STPS	PH-II	14.28	15.16	16.09		
	PH-III	14.28	15.16	16.09		
	PH-I	14.28	15.16	16.09		
SGTPS	PH-II	14.28	15.16	16.09		
	PH-III	10.70	11.36	12.05		
Hydro Stations		5.96	6.37	6.68		

3.48 The Commission in its Regulation RG-26(I) of 2009 Section 26(1)(7), has mentioned that where the Commission is of the opinion that an increase in O&M charges is justified, it may consider the same. It is pertinent to mention that while approving the benchmarks for norms the Accounts for FY09 were provisional. At the same time major decision of wage revision and D.A. thereon were also under decision. Further, the expenses provided in the balance sheet are towards the share of MPPGCL only and not for the 100% capacity installed. As MPPGCL does not have the exact calculation based on which Commission has considered to decide rate of O&M charges, considering the protection available under Sec. 26(1)(7) of Regulation RG-26(I) of 2009, it is submitting the petition based on the norms approved by the Commission. MPPGCL humbly prays before Commission to kindly consider the actual O&M charges at the time of respective True up.

- 3.49 In the Truing up of these expenses for FY06, the Commission has permitted O&M charges as per actual. Also, in the base data utilized for projection of O&M expenses for the previous block period (FY 07- FY 09), to best of knowledge of MPPGCL, the Commission had included the incentive payable to the employees. It is pertinent to mention that CERC has excluded incentive payable to employees and has made the companies to pay same from the incentive earned by them because the actual performance of the companies like NTPC is better than the norms specified by CERC. The very purpose of incentive is to motivate the employees for better and better performance. The inevitable part of expecting performance from employees is to provide them the suitable targets and resources. In the current circumstances, MPPGCL itself is not in the agreement with the targets specified by Commission. Therefore it may be difficult for the company to expect its employees to achieve performance to the level of targets set by the Commission. This inter-alia means practically no incentive shall be payable to employees, who are already passing through a phase of lower morale. Thus it is humbly requested that the element of incentive, if not included in the O&M charges, employees be considered as reimbursable on actual considering the merit of incentive policy. It is pertinent to point out that the expenditure incurred on incentive ultimately results in lowering the cost of production due to improved performance in long run.
- 3.50 MPPGCL is submitting this petition with a request to the Commission to consider O&M charges as per actual at the time of true up under the protection extended under Section 26(1)(7) of Regulation RG-26(I) of 2009. The O&M Charges, as proposed by MPPGCL and as approved by are tabulated below:-

Table: 32 <u>O&M Charges</u>

			<u>Amou</u>	int in Cr Rs.		
	S. No	Particulars	As per MPERC Regulation			
			FY 10	FY 11	FY 12	
	1	ATPS 2	42.82	45.46	48.24	
	2	ATPS Chachai	42.82	45.46	48.24	
	3	STPS 1	66.94	71.06	75.41	
	4	STPS 2	58.55	62.16	65.97	
nal	5	STPS 3	59.98	63.67	67.58	
Thermal	6	Sarni	185.46	196.89	208.95	
ľĥ	7	SGTPS 1	59.98	63.67	67.58	
	8	SGTPS 2	59.98	63.67	67.58	
	9	SGTPS 3	53.50	56.80	60.25	
	10	SGTPS	173.45	184.14	195.41	
	11	Total Thermal	401.73	426.49	452.60	
	12	GandhiSagar	6.85	7.26	7.68	
	13	Pench	9.54	10.10	10.69	
	14	Rajghat	2.68	2.84	3.01	
del	15	Bargi	5.36	5.68	6.01	
Hydel	16	Bansagar	25.33	26.82	28.39	
	17	Madhikheda	3.58	3.79	4.01	
	18	Birsinghpur	1.19	1.26	1.34	
		Total Hydel	54.53	57.74	61.12	

COMPENSATION ALLOWANCE

- 3.51 The Commission in Sec. 54.2 of the Regulation RG-26(I) of 2009 has also permitted "Compensation Allowances" to the Thermal Generating stations depending upon their age to meet the requirement of capital nature of minor assets. The philosophy adopted by the Commission is definitely to support the performance of the generating stations and MPPGCL has worked out the compensation allowance for its capacity under the following assumptions:-
 - 3.51.1 <u>STPS Sarni</u>: All the units are above 25 years and therefore compensation allowance @ 0.65 lakhs/MW/Year basis has been considered.
 - 3.51.2 <u>SGTPS Birsinghpur</u>: The units No.1 & 2 are older than 15 years therefore the compensation allowance @ 0.35 lakhs/MW/Year has been considered. The age of the Unit No.3 will be in the age group of 11 to 15 years therefore compensation has been considered @ 0.15 Lakhs/MW/Year. The Unit No. 4 will fall in this age group in FY 11, so the amount has been considered for FY11 and FY 12 only.
 - 3.51.3 <u>ATPS, Chachai</u>: The units are older than 25 years therefore the compensation allowance for the plants have been considered based on the norms permitted by the Commission under Sec. 34(2) of Regulation RG-26(I) of 2009 @ 0.65 lakhs/MW/Year.
 - 3.51.4 The total amount of compensation works out as elaborated in the table below:-

Table: 33 Compensation Allowance

Amount in Cr Rs.

	Intown of Its.							
S	S. Particulars MPPGCL Proposal		As per N	MPERC Reg	gulation			
N	0		FY 10	FY 11	FY 12	FY 10	FY 11	FY 12
	1	ATPS 2	1.56	1.56	1.56	1.56	1.56	1.56
	2	ATPS Chachai	1.56	1.56	1.56	1.56	1.56	1.56
	3	STPS 1	2.03	2.03	2.03	2.03	2.03	2.03
	4	STPS 2	2.67	2.67	2.67	2.67	2.67	2.67
nal	5	STPS 3	2.73	2.73	2.73	2.73	2.73	2.73
Thermal	6	Sarni	7.43	7.43	7.43	7.43	7.43	7.43
Th	7	SGTPS 1	1.47	1.47	1.47	1.47	1.47	1.47
	8	SGTPS 2	0.63	0.63	0.63	0.63	0.63	0.63
	9	SGTPS 3	0.00	0.00	0.00	0.00	0.00	0.00
	10	SGTPS	2.10	2.10	2.10	2.10	2.10	2.10

Special Allowance

3.52 The Commission in Regulation RG-26(I) of 2009 Section 18 for Renovation & Modernization as provided that the Generating Company, in case of thermal generating stations, may it its discretion can avail a special allowance either for a unit or a group of units as compensation for meeting the requirement of expenses including R&M works

beyond the useful life of the generating stations. In such case the revision of capital cost shall not be considered and the option once opted shall be final. Units of STPS, Sarni PH-1 are planned for their closure, soon after the commencement of 2x250 MW Units of STPS, Sarni. MPPGCL opts to avail this special allowance for these five units. Accordingly the same have been included in the fixed charges of the Station.

Table: 34 Special Allowance

Amount in Cr Rs.

Particulars	MPPGCL Proposal			As per 1	MPERC Reg	gulation
	FY 10 FY 11 FY 12		FY 10	FY 11	FY 12	
STPS PH-1	15.63	16.52	17.46	15.63	16.52	17.46

3.53 The petitioner has requested to consider the O&M expenses, Compensation Allowance and Special Allowances as elaborated above.

Provision of the Regulation

3.54 The Clause 34.1 & 34.2 of the Regulations regarding Thermal Power Stations provides that,

"The Operation and Maintenance expenses admissible to existing thermal power stations comprise of employee cost, Repair & Maintenance (R&M) cost and Administrative and General (A&G) cost. These norms exclude Pension, Terminal Benefits and Incentive to be paid to employees, taxes payable to the Government, MPSEB expenses and fees payable to MPERC. The Generating Company shall claim the taxes payable to the Government and fees to be paid to MPERC separately as actuals. The claim of pension and Terminal Benefits shall be dealt as per Regulation 26.

O&M Norms for Thermal Generating Units

Rs. In lakh/MW						
Units (MW)	FY 2009-10	FY 2010-11	FY 2011-12			
62.5	21.42	22.74	24.13			
120	17.84	18.94	20.10			
200/210/250	14.28	15.16	16.09			
500	10.7	11.36	12.05			

Provided that the above norms shall be multiplied by the following factors for additional Units in respective Unit sizes for the Units whose COD occurs on or after 1.4.2009 in the same station:

200/210/250 MW	Additional 5th & 6th Units Additional 7th & more Units	0.9 0.85
300/330/350 MW	Additional 4th & 5th Units Additional 6th & more Units	0.9 0.85
500 MW and above	Additional 3rd & 4th Units Additional 5th & above Units	0.9 0.85

In case of coal-based or lignite-fired thermal generating station, a separate compensation allowance Unit-wise shall be admissible to meet expenses on new assets of capital nature including in the nature of minor assets, in the following manner from the Year following the Year of completion of 10, 15, or 20 Years of Useful life:

Years of operation	Compensation Allowance (Rs lakh/MW/Year)
0-10	Nil
11-15	0.15
16-20	0.35
21-25	0.65

3.55 Further, Clause 47.1 & 47.2 of the Regulations regarding Hydel Power Stations provides that,

"The Operation and Maintenance Expenses admissible to existing Hydro power stations comprise of employee cost, Repair & Maintenance (R&M) cost and Administrative and General (A&G) cost. These norms exclude pension, terminal benefits and incentives to be paid to employees, taxes payable to the Government, MPSEB expenses and fees payable to MPERC. The Generating Company shall claim the taxes payable to the Government and fees to be paid to MPERC separately as actuals. The claim of Pension and Terminal Benefits shall be dealt as per Regulation 26.

O&M Norms for Hydel Power Stations

Year	O&M Expenses in
	Rs. in lakh/MW
FY 9-10	5.96
FY 10-11	6.31
FY 11-12	6.68

Commission's analysis

- 3.56 The Commission considering the MW capacity of the units (excluding 210MW ATPS-PH-3, Chachai) existing as on 31st March, 2009 and has computed the O&M expenses as per the above mentioned norms prescribed in the Regulation. The Commission has also considered the compensation allowance and special allowance filed by the petitioner in respect of the thermal units entitled to be allowed for the same. The Commission has considered the following while approving the O&M expenses, compensation allowance and special allowances:-
 - (i) For Thermal and Hydel Power Stations, Commission has fixed norms for annual O&M expenses for generating units based on the MW capacity of the unit, same norms has been applied for calculation of annual O&M expense.

- (ii) Special allowance of Rs. 5 Lakhs/MW/year with escalation @5.72% every year from FY2009-10 on wards on the units in which R&M is not taken by the generator.
- (iii) In case of thermal generating units, a separate compensation allowance unit wise shall be admissible to meet expenses on new assets in the manner following the year of completion of 10,15 or 20 years of useful life Rs. 0.15, 0.35 and 0.65 Lakhs per MW per year respectively.
- (iv) The Commission has issued an order dt. 29/12/09 for the petition No. P-46/2009 in matter of relaxation in operational parameters bench marked for FY2009-10 on account of shortage of water at STPS, Sarni. In respect of additional O&M expenses the Commission has allowed additional expenses of Rs. 14.85 Lakhs for E&M work and Rs. 773 Lakhs for civil works or actual expenditure which ever is less for the year FY2009-10 over and above the normative O&M expenses specified in the regulation. The same expenses has also been considered while determining the O&M expenses of STPS, Sarni for FY2009-10. If the additional O&M expenses allowed in the MYT order is more than the actual expenses, the same may be adjusted in the True-up for the subsequent year.
- 3.57 Accordingly, the Commission has approved the O&M expenses for FY 2009-10 to FY 2011-12 as given below:-

Table: 35 O&M charges Rs. Cr.

Power Station	FY2009-10	FY2010-11	FY2011-12
ATPS, Chachai	42.82	45.46	48.24
STPS, Sarni	193.34	196.89	208.95
SGTPS (PH-1&2)	119.95	127.34	135.16
SGTPS (PH-3) 500MW	53.50	56.80	60.25
Gandhi Sagar	6.85	7.26	7.68
Pench	9.54	10.10	10.69
Rajghat	2.68	2.84	3.01
Bargi	5.36	5.68	6.01
Bansagar (I to III)	24.14	25.56	27.05
Bansagar-IV (Jhinna)	1.19	1.26	1.34
Madhikheda	3.58	3.79	4.01
Birsinghpur	1.19	1.26	1.34

- 3.58 The Commission in its 2009 regulation has also permitted "Compensation Allowances" to the Thermal Generating Stations depending upon their age to meet the requirement of capital nature of minor assets.
- 3.59 The petitioner has filed the station wise Compensation allowance based on the life of the units of the thermal power stations. The Commission has allowed the compensation allowance as followed:

Table: 36 Compensation Allowance for Thermal Power Stations

Rs. Cr.

Power Station	FY2009-10	FY2010-11	FY2011-12
ATPS, Chachai	1.56	1.56	1.56
STPS, Sarni	7.43	7.43	7.43
SGTPS,Birsinghpur (PH-1&2)	2.10	2.10	2.10
SGTPS,Birsinghpur (PH-3) 500MW	0	0	0

- 3.60 The Commission in the 2009 regulation has provided that the Generating Company, in case of thermal generating stations, may at its discretion avail a special allowance either for a unit or a group of units as compensation for meeting the requirement of expenses including the R&M works beyond the useful life of the generating stations. In such case the revision of capital cost shall not be considered and the option once exercised shall be final.
- 3.61 The petitioner has submitted that the units of STPS, Sarni PH-I are planned for their closure, soon after the commission of 2X250 MW Units of STPS, Sarni. The MPPGCL opts to avail this special allowance for these five units. The Commission has allowed the special allowance as filed by the petitioner given below:

Table: 37 Special Allowance for Thermal Power Stations

Rs. Cr.

Power Station	FY2009-10	FY2010-11	FY2011-12
STPS, Sarni	15.63	16.52	17.46

Terminal Benefits

Petitioner's Submission

3.62 The petitioner has submitted the following:

"Regarding Pension and the terminal benefits, Commission in Regulation RG-26(I) of 2009 Section 26.6 has mentioned that the existing arrangement of meeting these expenses shall continue in FY 10 i.e. to be met by MP Transco and for FY 11 and FY 12, separate arrangement, based on new mechanism and respective actuarial analysis shall be considered. MPPGCL agrees to the arrangement for FY 10. Appropriate proposal for FY 10 and FY 11 shall be submitted along with tariff of respective year in due course of time."

Commission's Analysis

3.63 Since the petitioner has not claimed terminal benefits in the petition, the Commission has considered the same in accordance with the Regulation.

Renovation and Modernisation

3.64 As mentioned under Para 2.9 of this order, the petitioner has not filed any claim for proposed renovation and modernization works hence, no claim is considered in this order.

Interest on Working Capital:

Petitioner's submission

3.65 The petitioner has filed the following interest on working capital considering the prevailing rate of PLR as 12.25% (as on 1st April, 2009) adopting norms prescribed under the Regulations:-

Table: 38 Interest on Working Capital

Amount in Cr.Rs.

S	S.	Particulars	MP	PGCL Prop	osal	As per I	MPERC Reg	gulation
N	0		FY 10	FY 11	FY 12	FY 10	FY 11	FY 12
	1	ATPS 2	6.32	8.11	8.86	7.65	7.82	8.18
	2	ATPS Chachai	6.32	8.11	8.86	7.65	7.82	8.18
	3	STPS 1	17.94	18.91	19.21	16.69	16.78	16.96
	4	STPS 2	19.60	20.92	21.18	19.27	19.36	19.50
nal	5	STPS 3	20.42	21.15	21.42	20.08	19.97	19.91
Thermal	6	Sarni	57.96	60.99	61.81	56.04	56.10	56.38
Th	7	SGTPS 1	17.93	18.51	18.69	18.96	18.83	18.74
	8	SGTPS 2	20.72	20.27	20.41	18.96	18.83	18.74
	9	SGTPS 3	25.38	27.49	27.20	25.47	25.41	25.40
	10	SGTPS	64.04	66.27	66.30	63.39	63.07	62.88
	12	Gandhi Sagar	0.41	0.53	0.56	0.51	0.53	0.56
	13	Pench	0.71	0.74	0.77	0.71	0.74	0.77
la e	14	Rajghat	0.38	0.39	0.40	0.38	0.39	0.40
Hydel	15	Bargi	0.56	0.67	0.70	0.65	0.67	0.70
	16	Bansagar	5.66	5.72	5.69	5.76	5.72	5.69
	17	Madhikheda	1.00	1.00	0.99	1.02	1.00	0.99
	18	Birsinghpur	0.20	0.20	0.20	0.20	0.20	0.20

Provision of the Regulation

3.66 Clause 35 of the Regulations regarding working capital for coal based generating stations provides that,

"The Working Capital for Coal based generating stations shall cover:

(i) Cost of coal for 45 Days for pit-head generating stations and two months for non-pit-head generating stations, corresponding to the normative availability;

(ii) Cost of secondary fuel oil for two months corresponding to the normative availability:

Provided that in case of use of more than one secondary fuel oil, cost of fuel oil stock shall be provided for the main secondary fuel oil.

- (iii) Maintenance spares @ 20% of the normative O&M expenses;
- (iv) Receivables equivalent to two months of capacity charges and energy charges for sale of electricity calculated on the Normative Annual Plant Availability Factor; and
- (v) Operation and Maintenance expenses for one month.

The cost of fuel shall be based on the landed cost incurred (taking into account normative transit and handling losses) by the Generating Company and Gross Calorific Value of the fuel as per actual for the preceding three months and no fuel price escalation shall be provided during the Tariff period."

3.67 Clause 48 of the Regulations regarding working capital for hydel power stations provides that,

"The Working Capital shall cover:

- (i) Maintenance spares @ 15% of normative O&M expenses;
- (ii) Receivables equivalent to two months of fixed cost; and
- (iii) Operation and Maintenance Expenses for one month."

Commission's analysis

- 3.68 The Commission has computed the working capital for thermal and hydel power stations as per the norms provided in Regulations for the following elements:-
 - (a) <u>Coal Cost:</u> The 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 on the basis of operational norms specified in the Regulations and weighted average price and GCV of coal as given below. The weighted average price of coal taken is that of preceeding three months:

Table: 39 Station-wise Cost of Coal ATPS, Chachai

Particulars	Unit	FY10	FY11	FY12
Wt.avg. GCV of Coal	kCal/kg	4652	4652	4652
Heat contributed by Coal	kCal/kWh	3370	3325	3275
Specific Coal consumption	kg/kWh	0.7259	0.7162	0.7054
Annual requirement of Coal	LMT	8.39	8.58	8.90
Coal stock (45 days in pit head station)	Metric Tons	103480	105811	109705
Wt. Avg. price of Coal	Rs./MT	1421	1421	1421
Cost of Coal stock mentioned above	Rs.Cr	14.70	15.04	15.59

STPS, Sarni

Particulars	Unit	FY10	FY11	FY12
Wt.avg. GCV of Coal	kCal/kg	3609	3609	3609
Heat contributed by Coal	kCal/kWh	2878	2787	2738
Specific Coal consumption	kg/kWh	0.8037	0.7784	0.7648
Annual requirement of Coal	LMT	60.95	61.83	61.23
Coal stock (60 days in non pit head station)	Metric Tons	1001919	1016368	1006569
Wt. Avg. price of Coal	Rs./MT	1577	1577	1577
Cost of Coal stock mentioned above	Rs.Cr	158.00	160.28	158.74

SGTPS, Birsinghpur (Phase 1 & 2)

Particulars	Unit	FY10	FY11	FY12
Wt.avg. GCV of Coal	kCal/kg	3966	3966	3966
Heat contributed by Coal	kCal/kWh	2690	2640	2590
Specific Coal consumption	kg/kWh	0.6837	0.6710	0.6583
Annual requirement of Coal	LMT	40.25	39.50	38.75
Coal stock (60 days in non pit head station)	Metric Tons	661637	649339	637041
Wt. Avg. price of Coal	Rs./MT	1536	1536	1536
Cost of Coal stock mentioned above	Rs.Cr	101.63	99.74	97.85

SGTPS, Birsinghpur (Phase 3)

Particulars	Unit	FY10	FY11	FY12
Wt.avg. GCV of Coal	kCal/kg	3966	3966	3966
Heat contributed by Coal	kCal/kWh	2415	2415	2415
Specific Coal consumption	kg/kWh	0.6138	0.6138	0.6138
Annual requirement of Coal	LMT	22.85	22.85	22.85
Coal stock (60 days in non pit head station)	Metric Tons	375668	375668	375668
Wt. Avg. price of Coal	Rs./MT	1536	1536	1536
Cost of Coal stock mentioned above	Rs.Cr	57.70	57.70	57.70

(b) Secondary fuel oil: The petitioner has claimed the cost of secondary fuel oil (HFO+LDO/HSD) and coal for working capital for thermal power stations based on the weighted average price of oil and coal procured during financial year FY2008-09. The Commission vide its letter dated 11/11/2009 asked the petitioner to submit the weighted average price of oil (HFO+LDO/HSD) and coal for three preceding months. The petitioner in its additional submissions on affidavit has submitted the weighted average price of oil and coal for three preceding months and same has been considered for determination working capital.

HSD/LDO is used only during cold boiler start ups and flame stability during low load conditions are taken care of by HFO which is the main secondary fuel oil. Since HFO is the main secondary fuel oil, it should only be considered for the computation of working capital requirement

As per the 2009 Regulation, in case of use of more than one secondary fuel oil, cost of fuel oil stock shall be provided for the main secondary fuel oil. Accordingly, the fuel oil component in working capital works out as follows for the tariff period FY2009-10 to FY2011-12.

Table: 40 Station-wise Cost of Secondary Fuel Oil

ATPS	Chachai
AII D,	Chachai

Particulars	Unit	FY10	FY11	FY12
W. COV. CO.	1.0.1%	10.000	10.000	10.000
Wt.avg. GCV of Oil	kCal/ltr.	10,000	10,000	10,000
Sp. Oil consumption	kg/kWh	3.00	2.50	2.50
Heat contributed by oil	kCal/kWh	30	25	25
Annual requirement of oil	KL	3469	2996	3154
Oil stock for two months	KL	578.16	499.32	525.60
Wt. Avg. price of Oil	Rs./KL	25041	25041	25041
Cost of Oil stock mentioned above	Rs.Cr	1.45	1.25	1.32

STPS, Sarni

Particulars	Unit	FY10	FY11	FY12
Wt.avg. GCV of Oil	kCal/ltr.	10,000	10,000	10,000
Sp. Oil consumption	kg/kWh	2.45	1.84	1.70
Heat contributed by oil	kCal/kWh	24.5	18.4	17
Annual requirement of oil	KL	18579	14616	13611
Oil stock for two months	KL	3096.51	2436.03	2268.55
Wt. Avg. price of Oil	Rs./KL	31393	31393	31393
Cost of Oil stock mentioned above	Rs.Cr	9.72	7.65	7.12

SGTPS, Birsinghpur (Phase I & II)

Particulars	Unit	FY10	FY11	FY12
Wt.avg. GCV of Oil	kCal/ltr.	10,000	10,000	10,000
Sp. Oil consumption	kg/kWh	1.00	1.00	1.00
Heat contributed by oil	kCal/kWh	10	10	10
Annual requirement of oil	KL	5887	5887	5887
Oil stock for two months	KL	981.12	981.12	981.12
Wt. Avg. price of Oil	Rs./KL	27129	27129	27129
Cost of Oil stock mentioned above	Rs.Cr	2.66	2.66	2.66

SGTPS, Birsinghpur (Phase-III) 500 MW

Particulars	Unit	FY10	FY11	FY12
Wt.avg. GCV of Oil	kCal/ltr.	10,000	10,000	10,000
Sp. Oil consumption	kg/kWh	1.00	1.00	1.00
Heat contributed by oil	kCal/kWh	10	10	10
Annual requirement of oil	KL	3723	3723	3723
Oil stock for two months	KL	620.50	620.50	620.50
Wt. Avg. price of Oil	Rs./KL	27129	27129	27129
Cost of Oil stock mentioned above	Rs.Cr.	1.68	1.68	1.68

(c) O&M expenses:

O&M expenses of one month out of the O&M expenses approved in this order have been considered for working capital of thermal and hydro power stations.

(d) Maintenance Spares:

The petitioner has calculated the value of maintenance spares for the purpose of working capital for thermal and hydel power stations as 20% and 15% of the normative O&M expenses respectively based on the norms for working capital prescribed in the Regulations. The Commission has also considered the same for working capital purpose.

(e) Receivable:

As per the Regulations, receivables for thermal power stations shall be equivalent to two months of capacity and energy charges for sale of electricity calculated on the normative annual plant availability factor. The receivables for hydel power stations shall be equivalent to two months of fixed charges.

Accordingly, the receivables have been worked out considering the operational parameters and weighted average price of fuel.

The petitioner has filed the prevailing rate of PLR (as on 1st April 2009) i.e. 12.25%. Considered the same rate of interest on working capital during the period FY2009-10 to FY 2011-12, the Commission has worked out the interest on working capital. The necessary details in support of calculation of interest on working capital are appended below:

Calculation of interest on working capital for thermal power stations:

Table: 41 Station-wise interest on working capital for Thermal Power Stations (in Rs. Cr.)

ATPS, Chachai PH-II

Particulars	FY10	FY11	FY12
Cost of 45 days Coal stock for pit			
head power stations	14.70	15.04	15.59
Cost of 60 days oil stock	1.45	1.25	1.32
O&M expenses-one month	3.57	3.79	4.02
Spares-20% of normative O&M			
expenses	8.56	9.09	9.65
Receivables-2 months	31.38	32.04	33.37
Total working capital	59.66	61.20	63.94
Rate of interest	12.25%	12.25%	12.25%
Total interest on working capital	7.31	7.50	7.83

STPS, Sarni Complex

Particulars	FY10	FY11	FY12
Cost of 60 days Coal stock for non			
pit-head power stations	158.00	160.28	158.74
Cost of 60 days oil stock	9.72	7.65	7.12
O&M expenses-one month	16.11	16.41	17.41
Spares-20% of normative O&M			
expenses	38.67	39.38	41.79
Receivables-2 months	220.39	221.22	221.16
Total working capital	442.89	444.94	446.22
Rate of interest	12.25%	12.25%	12.25%
Total interest on working capital	54.25	54.50	54.66

SGTPS, Birsinghpur (PH-I&II)

Particulars	FY10	FY11	FY12
Cost of 60 days Coal stock for non pit-			
head power stations	101.63	99.74	97.85
Cost of 60 days oil stock	2.66	2.66	2.66
O&M expenses-one month	10.00	10.61	11.26
Spares-20% of normative O&M			
expenses	23.99	25.47	27.03
Receivables-2 months	167.34	164.82	162.31
Total working capital	305.62	303.30	301.12
Rate of interest	12.25%	12.25%	12.25%
Total interest on working capital	37.44	37.15	36.89

SGTPS, Birsinghpur (PH-III) 500MW

Particulars	FY10	FY11	FY12
Cost of 60 days Coal stock for non pit-head			
power stations	57.70	57.70	57.70
Cost of 60 days Oil stock	1.68	1.68	1.68
O&M expenses-one month	4.46	4.73	5.02
Spares-20% of normative O&M expenses	10.70	11.36	12.05
Receivables-2 months	122.39	121.22	120.07
Total working capital	196.93	196.70	196.53
Rate of interest	12.25%	12.25%	12.25%
Total interest on working capital	24.12	24.10	24.07

Calculation of interest on working capital for Hydro power stations:

Table: 42 Station-wise Interest on working capital for Hydro Power Stations (in Rs. Cr.)

Gandhi Sagar

Particulars	FY10	FY11	FY12
O&M expenses-one month	0.57	0.60	0.64
Spares-15% of normative O&M expenses	1.03	1.09	1.15
Receivables-2 months	1.29	1.37	1.44
Total working capital	2.89	3.06	3.23
Rate of interest	12.25%	12.25%	12.25%
Total interest on working capital	0.35	0.37	0.40

Pench

Particulars	FY10	FY11	FY12
O&M expenses-one month	0.79	0.84	0.89
Spares-15% of normative O&M expenses	1.43	1.51	1.60
Receivables-2 months	2.70	2.56	2.63
Total working capital	4.92	4.91	5.13
Rate of interest	12.25%	12.25%	12.25%
Total interest on working capital	0.60	0.60	0.63

Rajghat

Particulars	FY10	FY11	FY12
O&M expenses-one month	0.22	0.24	0.25
Spares-15% of normative O&M expenses	0.40	0.43	0.45
Receivables-2 months	1.83	1.79	1.76
Total working capital	2.46	2.46	2.46
Rate of interest	12.25%	12.25%	12.25%
Total interest on working capital	0.30	0.30	0.30

Bargi

Particulars	FY10	FY11	FY12
O&M expenses-one month	0.45	0.47	0.50
Spares-15% of normative O&M expenses	0.80	0.85	0.90
Receivables-2 months	2.06	2.05	1.72
Total working capital	3.31	3.38	3.12
Rate of interest	12.25%	12.25%	12.25%
Total interest on working capital	0.41	0.41	0.38

Bansagar (Ito III)

Dunisugui (100 111)				
Particulars	FY10	FY11	FY12	
O&M expenses-one month	2.01	2.13	2.25	
Spares-15% of normative O&M expenses	3.62	3.83	4.06	
Receivables-2 months	25.24	24.45	23.68	
Total working capital	30.87	30.41	29.99	
Rate of interest	12.25%	12.25%	12.25%	
Total interest on working capital	3.78	3.73	3.67	

Bansagar-IV (Jhinna)

Particulars	FY10	FY11	FY12
O&M expenses-one month	0.10	0.11	0.11
Spares-15% of normative O&M expenses	0.18	0.19	0.20
Receivables-2 months	2.46	2.41	2.36
Total working capital	2.73	2.70	2.67
Rate of interest	12.25%	12.25%	12.25%
Total interest on working capital	0.33	0.33	0.32

Madhikheda

Particulars	FY10	FY11	FY12
O&M expenses-one month	0.30	0.32	0.33
Spares-15% of normative O&M			
expenses	0.54	0.57	0.60
Receivables-2 months	4.75	4.65	4.56
Total working capital	5.59	5.54	5.49
Rate of interest	12.25%	12.25%	12.25%
Total interest on working capital	0.68	0.68	0.67

Birsinghpur Hydel

Particulars	FY10	FY11	FY12
O&M expenses-one month	0.10	0.11	0.11
Spares-15% of normative O&M			
expenses	0.18	0.19	0.20
Receivables-2 months	1.01	0.98	0.95
Total working capital	1.29	1.27	1.26
Rate of interest	12.25%	12.25%	12.25%
Total interest on working capital	0.16	0.16	0.15

Expenses on Secondary fuel oil Consumption:

Provision of the Regulation

3.69 The clause 36 of the Regulation provides that,

"Expenses on Secondary fuel oil in Rupees shall be computed corresponding to normative Specific Fuel Oil Consumption (SFC) specified in Regulation 33, in accordance with the following formula:

= SFC x LPSFi x NAPAF x 24 x NDY x IC x 10

Where,

SFC - Normative Specific Fuel Oil Consumption in ml/kWh

LPSFi - Weighted Average Landed Price of Secondary Fuel in Rs./ml considered initially

initially

NAPAF- Normative Annual Plant Availability Factor in percentage

NDY - Number of Days in a Year IC - Installed Capacity in MW

Initially, the landed cost incurred by the Generating Company on secondary fuel oil shall be taken based on actuals of the weighted average price of the three preceding months and in the absence of landed costs for the three preceding months, latest procurement price for the generating station, before the start of the Year.

The secondary fuel oil expenses shall be subject to fuel price adjustment at the end of the each Year of Tariff period as per following formula:

SFC x NAPAF x 24 x NDY x IC x 10 x (LPSFy – LPSFi) Where.

LPSFy = *The weighted average landed price of secondary fuel oil for the Year in Rs. /ml.*

Commission's analysis

3.70 The petitioner has adopted the specific oil consumption as per the norms notified by the Commission in the Regulations,2009 for determination of oil cost for thermal power stations, as given below:-

Thermal Power Station	Norms for Sec. oil consumption (ml/kWh)		
	FY2009-10 FY2010-11 FY2011-1		
ATPS, Chachai	3.00	2.5	2.5
STPS, Sarni	2.05	1.84	1.70
SGTPS, Birsinghpur (PH-I&II)	1.0	1.0	1.0
SGTPS, Birsinghpur (PH-III)	1.0	1.0	1.0

Table: 43 Norms for Sec. oil consumption

- 3.71 The Commission vide its order dated 29th December, 2009 issued revised norms for STPS, Sarni for FY2009-10 against the petition filed by the petitioner for relaxation in operational parameters bench marked for FY2010 on account of shortage of water at STPS, Sarni. The Commission has allowed Specific oil consumption for STPS, Sarni for FY2009-10 2.45 ml/kWh. The specific oil consumption for FY2010-11 and FY2011-12 shall remain same as notified in the Regulations.
- 3.72 The petitioner has claimed the cost of secondary fuel oil (HFO+LDO/HSD) based on the operational parameters as specified in the regulation and weighted average price of Oil procured during FY2008-09.
- 3.73 The Commission vide its letter dated 11/11/2009 asked the petitioner to submit the weighted average price of oil (HFO+LDO/HSD) for three preceding months. The petitioner vide letter dated 30/12/2009 in its additional submissions on affidavit has submitted the weighted average price of oil for three preceding months and same has been considered.

The station-wise cost of secondary fuel oil is determined as given in the tables below based on actual landed costs of the secondary fuel oil on the weighted average price in the three preceeding months. Further clause 36.2 of the Regulations takes care of the cost of secondary fuel oil subject to fuel price adjustment at end of the each year of tariff period as per the formula mentioned under clause 36.2 of the Regulations:-

Table: 44 Station-wise Cost of Oil

ATPS, Chachai

Rs. Cr.

Description	Unit	FY2009-10	FY2010-11	FY2011-12
Capacity	MW	240.0	240.0	240.0
NAPAF	%	55.00	57.00	60.00
Gross Generation	MU's	1156.32	1198.368	1261.44
Sp. Oil Consumption	ml/kWh	3.00	2.50	2.50
Quantity of Oil required	KL	3469	2996	3154
Wt. Average price of Oil	Rs./kl	30691	30691	30691
Total Oil Cost	Cr.	10.65	9.19	9.68

STPS, Sarni

Rs. Cr

Description	Unit	FY2009-10	FY2010-11	FY2011-12
Capacity	MW	1142.5	1142.5	1142.5
NAPAF	%	75.77	79.37	80.00
Gross Generation	MU's	7583	7944	8007
Sp. Oil Consumption	ml/kWh	2.45	1.84	1.70
Quantity of Oil required	KL	18579	14616	13611
Wt. Average price of Oil	Rs./kl	31618	31618	31618
Total Oil Cost	Cr.	58.74	46.21	43.04

SGTPS, Birsinghpur (PH-I&II)

Rs. Cr

				1401 01
Description	Unit	FY2009-10	FY2010-11	FY2011-12
Capacity	MW	840.0	840.0	840.0
NAPAF	%	80	80	80
Gross Generation	MU's	5887	5887	5887
Sp. Oil Consumption	ml/kWh	1.00	1.00	1.00
Quantity of Oil required	KL	5887	5887	5887
Wt. Average price of Oil	Rs./kl	33170	33170	33170
Total Oil Cost	Cr.	19.53	19.53	19.53

SGTPS, Birsinghpur (PH-III)

Rs. Cr

Description	Unit	FY2009-10	FY2010-11	FY2011-12
Capacity	MW	500.0	500.0	500.0
NAPAF	%	85	85	85
Gross Generation	MU's	3723	3723	3723
Sp. Oil Consumption	ml/kWh	1.00	1.00	1.00
Quantity of Oil required	KL	3723	3723	3723
Wt. Average price of Oil	Rs./kl	33170	33170	33170
Total Oil Cost	Cr.	12.35	12.35	12.35

Normative Annual Plant Availability Factor

3.74 Normative Annual Plant Availability Factor (NAPAF) for thermal and hydro power stations as per the Regulations has been considered for recovery of full fixed charges and computation of fuel element in working capital.

Summary of Annual Fixed Charges approved in this order

3.75 The Power Station wise Annual Fixed Charges for each year of the tariff period allowed in this order are summarized up in the tables below:

Table: 45 Station-wise Fixed Charges (Rs. Cr.) approved in this Order

ATPS, Chachai PH-II:

Rs. Cr.

Sr.No.	Particulars	Allowed by the Commission		
		FY10	FY11	FY12
1	Depreciation	1.21	1.21	1.21
2	Return on Equity	3.74	3.74	3.74
3	Interest on Loan	1.70	1.60	1.49
4	O&M expenses	42.82	45.46	48.24
5	Oil Cost	10.65	9.19	9.68
6	Interest on working capital	7.31	7.50	7.83
7	Compensation allowance	1.56	1.56	1.56
8	Special Allowance	0.00	0.00	0.00
9	Total Fixed charges	68.98	70.25	73.75

STPS, Sarni:

Rs. Cr.

Sr.No.	Particulars	Allowed by the Commission		
		FY10	FY11	FY12
1	Depreciation	8.68	8.50	8.31
2	Return on Equity	19.64	19.64	19.64
3	Interest on Loan	3.43	2.61	1.81
4	O&M expenses	193.34	196.89	208.95
5	Oil Cost	58.74	46.21	43.04
6	Interest on working capital	54.25	54.50	54.66
7	Compensation allowance	7.43	7.43	7.43
8	Special Allowance	15.63	16.52	17.46
9	Total Fixed charges	361.14	352.30	361.30

SGTPS, Birsinghpur (PH-I & II)

Rs. Cr.

Sr.No.	Particulars	Allowed by the Commission		
		FY10	FY11	FY12
1	Depreciation	93.13	90.92	88.20
2	Return on Equity	68.44	68.44	68.44
3	Interest on Loan	45.23	36.66	28.33
4	O&M expenses	119.95	127.34	135.16
5	Oil Cost	19.53	19.53	19.53
6	Interest on working capital	37.44	37.15	36.89
7	Compensation allowance	2.10	2.10	2.10
8	Special Allowance	0.00	0.00	0.00
9	Total Fixed Cost	385.82	382.15	378.64

SGTPS, Birsinghpur (PH-III):

Rs. Cr.

Sr.No.	Particulars	Allowed by the Commission		
		FY10	FY11	FY12
1	Depreciation	89.34	89.34	89.34
2	Return on Equity	66.45	66.45	66.45
3	Interest on Loan	137.53	127.24	116.95
4	O&M expenses	53.50	56.80	60.25
5	Oil Cost	12.35	12.35	12.35
6	Interest on working capital	24.12	24.10	24.07
7	Compensation allowance	0.00	0.00	0.00
8	Special Allowance	0.00	0.00	0.00
9	Total Fixed Cost	383.29	376.27	369.41

Gandhi Sagar:

Rs. Cr.

Sr.No.	Particulars	Allowed by the Commission		
		FY10	FY11	FY12
1	Depreciation	0.23	0.23	0.22
2	Return on Equity	0.33	0.33	0.33
3	Interest on Loan	0.00	0.00	0.00
4	O&M expenses	6.85	7.26	7.68
5	Interest on working capital	0.35	0.37	0.40
6	Total Fixed Cost	7.77	8.19	8.63

Pench Rs. Cr.

S.No.	Particulars	Allowed by the Commission		
		FY10	FY11	FY12
1	Depreciation	2.71	1.51	1.51
2	Return on Equity	2.83	2.83	2.83
3	Interest on Loan	0.52	0.31	0.15
4	O&M expenses	9.54	10.10	10.69
5	Interest on working capital	0.60	0.60	0.63
6	Total Fixed Cost	16.19	15.35	15.81

Rajghat:

Rs. Cr.

Sr.No.	Particulars	Allowed by the Commission		
		FY10	FY11	FY12
1	Depreciation	4.02	4.02	4.02
2	Return on Equity	2.68	2.68	2.68
3	Interest on Loan	1.31	0.92	0.53
4	O&M expenses	2.68	2.84	3.01
5	Interest on working capital	0.30	0.30	0.30
6	Total Fixed Cost	11.00	10.76	10.53

Bargi:

Rs. Cr.

Sr.No.	Particulars	Allowed by the Commission		
		FY10	FY11	FY12
1	Depreciation	3.26	3.26	1.18
2	Return on Equity	2.50	2.50	2.50
3	Intrest on Loan	0.80	0.48	0.25
4	O&M expenses	5.36	5.68	6.01
5	Interest on working capital	0.41	0.41	0.38
6	Total Fixed Cost	12.33	12.34	10.33

Bansagar (I to III):

Rs. Cr.

Sr.No.	Particulars	Allowed by the Commission		
		FY10	FY11	FY12
1	Depreciation	62.57	62.57	62.57
2	Return on Equity	40.17	40.17	40.17
3	Interest on Loan	20.76	14.68	8.60
4	O&M expenses	24.14	25.56	27.05
5	Interest on working capital	3.78	3.73	3.67
6	Total Fixed Cost	151.42	146.70	142.07

Bansagar-IV (Jhinna): Rs. Cr.

Sr.No.	Particulars	Allowed by the Commission		
		FY10	FY11	FY12
1	Depreciation	4.90	4.90	4.90
2	Return on Equity	4.84	4.84	4.84
3	Interest on Loan	3.34	2.98	2.62
4	O&M expenses	1.19	1.26	1.34
5	Interest on working capital	0.33	0.33	0.32
6	Total Fixed Cost	14.60	14.31	14.02

Madhikheda:

Rs. Cr.

Sr.No.	Particulars	Allowed by the Commission		
		FY10	FY11	FY12
1	Depreciation	9.13	9.13	9.13
2	Return on Equity	6.70	6.70	6.70
3	Interest on Loan	8.43	7.63	6.84
4	O&M expenses	3.58	3.79	4.01
5	Interest on working capital	0.68	0.68	0.67
6	Total Fixed Cost	28.52	27.92	27.34

Birsinghpur Hydro:

Rs. Cr.

Sr.No.	Particulars	Allowed by the Commission		
		FY10	FY11	FY12
1	Depreciation	2.51	2.47	2.47
2	Return on Equity	1.69	1.69	1.69
3	Interest on Loan	0.54	0.29	0.04
4	O&M expenses	1.19	1.26	1.34
5	Interest on working capital	0.16	0.16	0.15
6	Total Fixed Cost	6.08	5.86	5.68

3.76 The total fixed cost allowed by the Commission for the control period FY 2009-10 to FY 2011-12 is given below:-

Table: 46 Station-wise total fixed charges: Rs. Cr.

		Allowed by the Commission			
Sr. No.	Particulars	FY10	FY11	FY12	
1	ATPS Chachai PH-2	68.98	70.25	73.75	
2	STPS Sarni	361.14	352.30	361.30	
3	SGTPS Birsinghpur (PH-I&II)	385.82	382.15	378.64	
4	SGTPS (PH-III) 500MW	383.29	376.27	369.41	
5	Gandhi Sagar	7.77	8.19	8.63	
6	Pench	16.19	15.35	15.81	
7	Rajghat	11.00	10.76	10.53	
8	Bargi	12.33	12.34	10.33	
9	Bansagar (I to III)	151.42	146.70	142.07	
10	Bansagar-IV (Jhinna)	14.60	14.31	14.02	
11	Madhikheda	28.52	27.92	27.34	
12	Birsinghpur	6.08	5.86	5.68	

3.77 The recovery of annual capacity (fixed) charges shall be made by the petitioner in accordance with the Regulations 38.2 and 38.3 in case of Thermal Power Stations and Regulations 50.1 and 50.3 in case of Hydro Generating Stations.

3.78 The Commission has issued tariff orders in respect of some new capacity additions allowing recovery of charges on provisional basis as the petitioner had not filed full required details especially in respect of capital cost as on the date of CoD.. The details of all such units along with the Date of Commercial Operation and the date of provisional Order issued by the Commission has been provided in Table 18 of Para 3.15 of this order. It is noted that the required details have still not been filed by the petitioner thereby the Commission could not determine final tariff for all such generating units. The petitioner, is, thus allowed to recover the fixed charges only to the extent of 95% of the fixed charges determined in this Order on provisional basis subject to retrospective adjustment on determination of final tariff for the following generating units/stations:-

S. No.	Unit
1	Madhikheda HPS - Unit No.1, Unit No.2
2	Madhikheda HPS Unit No.3
3	Bansagar IV - Jhinna Unit No.1, Jhinna Unit No.2
4	SGTPS, Extn. Unit 500MW (PH-III)

CHAPTER 4

ENERGY CHARGES (VARIABLE CHARGES)

Provision of the Regulation

4.1 For calculating the energy charges (variable charges) of thermal power stations, the clause 39 of the regulation, MPERC (Terms and Conditions for determination of tariff) (Regulation, 2009 RG-26(I)) of 2009 state that,

The energy (variable) charges shall cover main fuel costs and shall be payable for the total energy scheduled to be supplied to such Beneficiary during the calendar month on ex-power plant basis, at the specified variable charge rate (with fuel price adjustment).

Energy (variable) Charges in Rupees per kWh on ex-power plant basis shall be determined to three decimal places as per the following formula:

i) For coal fired stations

 $ECR = (GHR - SFC \times CVSF) \times LPPF \times 100 / \{CVPF \times (100 - AUX)\}$

Where,

AUX= Normative Auxiliary Energy Consumption in percentage.

ECR = Energy Charge Rate, in Rupees per kWh sent out.

GHR = Gross Station Heat Rate, in kCal per kWh.

SFC = Specific Fuel Oil Consumption, in ml/kWh

CVSF = Calorific value of Secondary Fuel, in kCal/ml.

LPPF = Weighted average Landed price of Primary Fuel, in Rupees per kg, per liter or per standard cubic meter, as applicable, during the month.

 $CVPF = Gross\ Calorific\ Value\ of\ Primary\ Fuel\ as\ fired,\ in\ kCal\ per\ kg,$ per liter or per standard cubic meter.

Variable charge for the month shall be worked out on the basis of ex-bus energy scheduled to be sent out from the generating station in accordance with the following formula:

Monthly Energy Charge (Rs) =

Variable Charge Rate in Rs/kWh X Scheduled Energy (ex-bus) for the month in kWh corresponding to Scheduled Generation.

Commission's analysis

4.2 The energy (variable) charges shall cover main fuel costs and shall be payable for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-

power plant basis. For coal based thermal power stations, the main fuel is coal and per unit cost of coal shall be the energy (variable) charges.

4.3 The petitioner has adopted the following operational norms for Thermal Power Stations as notified by the Commission in the clause 33.1 of the Regulation:

Table: 47 Gross Station Heat Rate (Kcal/kWh)

Power Station	FY2009-10	FY2010-11	FY2011-12
ATPS	3400	3350	3300
STPS	2855	2805	2755
SGTPS(PH-I&II)	2700	2650	2600
SGTPS PH-III	2425	2425	2425

Table: 48 Specific Fuel Oil Consumption (ml/kWh)

Power Station	FY2009-10	FY2010-11	FY2011-12
ATPS	3.00	2.5	2.5
STPS	2.05	1.84	1.70
SGTPS (PH-1&II)	1.00	1.00	1.00
SGTPS PH-III	1.00	1.00	1.00

Table : 49 Auxiliary Energy Consumption (%)

Power Station	FY2009-10	FY2010-11	FY2011-12
ATPS	10.00	10.00	10.00
STPS	8.27	8.27	8.27
SGTPS (PH-1&II)	8.50	8.25	5.00
SGTPS (PH-III)	6.00	6.00	6.00

- 4.4 The petitioner vide its letter NO. 07-12 (i)/CP-MPPGCL/MPERC/BM/369 dated 26th August,2009 had filed petition for the relaxation in operational parameters bench marked for FY2009-10 on account of shortage of water at STPS, Sarni. The Commission vide order dated 29th December 2009 had revised the norms for STPS, Sarni for FY2009-10. The same revised norms has been considered by the Commission for determination of energy (variable) charges in this order.
- 4.5 The Commission has considered following revised norms for STPS, Sarni for FY2009-10:-

Table: 50 Revised Norms considered for STPS, Sarni for FY 2009-10

Component	Unit	Revised norms
Gross Station Heat Rate	Kcal/kWh	8.58
Sec. fuel oil consumption	ml/kWh	2.45
Aux. Energy consumption	%	2902

- 4.6 The petitioner has claimed the rate of energy charges based on the operational parameters as specified in the regulation and weighted average price and GCV of Coal procured during FY2008-09.
- 4.7 The Commission vide its letter dated 11/11/2009 asked the petitioner to submit the weighted average GCV and price of coal for three preceding months. The petitioner in its additional submissions on affidavit has submitted the weighted average GCV of Coal and weighted average price of coal and oil for three preceding months and the same has been considered for determination of energy (variable) charges in this order.
- 4.8 The station wise base rate of energy charges worked out by the Commission for the control period FY2009-10 to FY2011-12 as per following table:-

Table: 51 ATPS, Chachai

Description	Unit	FY2009-10	FY2010-11	FY2011-12
Capacity	MW	240.0	240.0	240.0
Gross Station Heat Rate	kCal/kWh	3400	3350	3300
Sp. Fuel Oil Consumption	ml/kWh	3.00	2.50	2.50
Aux. Energy Consumption	%	10.00	10.00	10.00
Wt, Average GCV of Oil	kCal/ltr.	10,000	10,000	10,000
Wt, Average GCV of Coal	kCal/Kg	4652	4652	4652
Wt. Average price of Coal	Rs./MT	1421	1421	1421
Heat Contributed from Oil	kCal/kWh	30	25	25
Heat Contributed from Coal	kCal/kWh	3370	3325	3275
Sp. Coal Consumption	Kg/kWh	0.72	0.71	0.70
Sp. Coal Consumption including transit loss	Kg/kWh	0.73	0.72	0.71
Rate of Energy Charge	Paise/kWh	103	102	100
Rate of Energy Charge ex-bus per kWh sent	Paise/kWh	115	113	111

4.9 Energy charges for STPS, Sarni has been calculated by considering the revised norms as fixed by the Commission for FY2009-10 in its order dated 29th December, 2009:-

Table: 52 STPS, Sarni

Description	Unit	FY	FY	FY
•		2009-10	2010-11	2011-12
Capacity	MW	1142.5	1142.5	1142.5
Gross Station Heat Rate	kCal/kWh	2902	2805	2755
Sp. Fuel Oil Consumption	ml/kWh	2.45	1.84	1.70
Aux. Energy Consumption	%	8.58	8.27	8.27
Wt, Average GCV of Oil	kCal/ltr.	10,000	10,000	10,000
Wt, Average GCV of Coal	kCal/Kg	3609	3609	3609
Wt. Average price of Coal	Rs./MT	1577	1577	1577
Heat Contributed from Oil	kCal/kWh	25	18	17
Heat Contributed from Coal	kCal/kWh	2878	2787	2738
Sp. Coal Consumption	Kg/kWh	0.80	0.77	0.76
Sp. Coal Consumption including transit				
loss	Kg/kWh	0.80	0.78	0.76
Rate of Energy Charge	Paise/kWh	127	123	121
Rate of Energy Charge ex-bus per kWh				
sent	Paise/kWh	139	134	131

4.10 In SGTPS Birsinghpur, the Commission has fixed norms for old units (PH-1&2) and new unit (PH-3) separately so the energy charges for old units and new units has been calculated separately.

Table: 53 SGTPS, Birsinghpur (PH I&II)

Description	Unit	FY2009-10	FY2010-11	FY2011-12
Capacity	MW	840	840	840
Gross Station Heat Rate	kCal/kWh	2700	2650	2600
Sp. Fuel Oil Consumption	ml/kWh	1.00	1.00	1.00
Aux. Energy Consumption	%	8.50	8.25	8.00
Wt, Average GCV of Oil	kCal/ltr.	10,000	10,000	10,000
Wt, Average GCV of Coal	kCal/Kg	3966	3966	3966
Wt. Average price of Coal	Rs./MT	1536	1536	1536
Heat Contributed from Oil	kCal/kWh	10	10	10
Heat Contributed from Coal	kCal/kWh	2690	2640	2590
Sp. Coal Consumption	Kg/kWh	0.68	0.67	0.65
Sp. Coal Consumption including				
transit loss	Kg/kWh	0.68	0.67	0.66
Rate of Energy Charge	Paise/kWh	105	103	101
Rate of Energy Charge ex-bus per				
kWh sent	Paise/kWh	115	112	110

Table: 54 SGTPS, Birsinghpur (PH-III)

Description	Unit	FY2009-10	FY2010-11	FY2011-12
Capacity	MW	500	500	500
Gross Station Heat Rate	kCal/kWh	2425	2425	2425
Sp. Fuel Oil Consumption	ml/kWh	1.00	1.00	1.00
Aux. Energy Consumption	%	6.00	6.00	6.00
Wt, Average GCV of Oil	kCal/ltr.	10,000	10,000	10,000
Wt, Average GCV of Coal	kCal/Kg	3966	3966	3966
Wt. Average price of Coal	Rs./MT	1536	1536	1536
Heat Contributed from Oil	kCal/kWh	10	10	10
Heat Contributed from Coal	kCal/kWh	2415	2415	2415
Sp. Coal Consumption	Kg/kWh	0.61	0.61	0.61
Sp. Coal Consumption including transit loss	Kg/kWh	0.61	0.61	0.61
Rate of Energy Charge	Paise/kWh	94	94	94
Rate of Energy Charge ex-bus per kWh sent	Paise/kWh	100	100	100

- 4.11 The base rate of the energy charges shall however, be subject to month to month adjustment of fuel price and GCV of main fuel.
- 4.12 The above energy charges have been calculated for the purpose of calculation of two month's billing which is used for calculation of interest on working capital. The actual billing of energy charges shall be as per the formula and other provisions detailed in Regulation 39.

4.13 Energy charges for Hydro generating stations:

Energy charges for hydro generating stations shall be recovered in accordance with Regulation 50.4 to 50.7.

Other Charges

4.14 The petitioner has claimed MPERC fee, MPSEB expenses, Cess on auxiliary consumption and water charges in the petition. The petitioner is allowed to recover the fee paid by the petitioner to MPERC for determination of generation tariff, water charges and cess on usage of water for hydro stations and E.D. and cess on auxiliary power consumption levied by the Statutory Authorities from the beneficiaries on pro-rata basis. The Commission has not allowed the MPSEB expenses since the erstwhile MPSEB has already been disintegrated into its successor companies and one of them has been entrusted with the responsibility of trading company i.e. MP Power Transmission Co. Ltd. The Commission has not been allowing the MPSEB common expenses in past to any of the successor entities.

CHAPTER 5

Objections and Comments on MPPGCL's Proposal

- 5.1 The Commission has got published the abstract of the application and the tariff proposal filed by MPPGCL with the Commission in the following newspapers:
 - a) Free Press, Indore (English)
 - b) Dainik Bhaskar, Bhopal (Hindi)
 - c) Nava Bharat, Gwalior (Hindi)
 - d) Dainik Jagaran, Rewa (Hindi)
 - e) Dainik Bhaskar, Jabalpur (Hindi)
- 5.2 The date of the public hearing was fixed on 5th January, 2010 as mentioned in the above public notice. The public hearing on the application and tariff proposals filed by the Petitioner was conducted in the Commission's office at 11.30 Am on 5th January, 2010 when the representatives of the Petitioner and the West Discom, Indore were present. The representative of the West Discom has submitted the following:-

"The normative norms fixed by the Commission may be taken care of while determining the generation tariff for control period FY 2009-10 to FY 2011-12. However, the difficulties experienced by the MP Generating Company may be redressed by the Commission".

5.3 No one, other than the representative from the West Discom appeared in the public hearing as objector to offer comments/suggestions on the tariff petition. The Commission expressed during the course of public hearing that the petition shall be scrutinized based on the principles, methodology and norms specified in the MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2009 {RG-26 (I) of 2009} notified on 8th May, 2009.

CHAPTER 6

(A) Status of Compliance of directives given by the Commission

(i) Commission's Directive

Data Based Management and Management Information System:- The Commission in its Generation Tariff Order for FY06 has already directed the Generating Company to prepare a time bound programme / action plan and apprise the Commission on the implementation of the action plan.

Status of Compliance

MPPGCL is submitting updated status on the main issues mentioned by Commission in the Tariff Orders from time to time. The present status is, as below;-

(ii) Commission's Directive

Improvement in Performance of Generating Units:- The units of ATPS, Chachai PH-1 have been decommissioned permanently from 1st April,09.

The Commission has been expressing its concern over the deterioration of the performance of generating units of MPPGCL. Vide letter MPERC/DD(Gen.)/263 dated 2nd Feb.2009, the Commission had also expressed its serious concern to state Govt. in this regard.

To carry out the renovation and modernization works for improving the performance of generating units, the Commission had registered Suo Moto against MPPGCL. Hearing in the matter was held on 25th March, 09. The petition was disposed off with certain directives issued to the company.

Status of Compliance

A scheme of Rs.28 Crores has since been approved by BoD of MPPGCL as well as GoMP. PFC has also agreed to finance the scheme upto Rs.22 Crores and has been consented by MPPGCL. MoA has been signed on 12.12.07 DFID provided support in preparation of Technical specification. The implementation is being planned in phases. The Tender is being issued for appointment of Consultant for implementation support.

(iii) Commission's Directive

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

Status of Compliance

The Detailed Project Report of (R&M) in respect of STPS, Sarni already submitted after the approval of BoD MPPGCL. The queries raised recently by Commission are being replied. The other (R&M) activities in respect of SGTPS, Birsinghpur are recommended by CEA to be taken up in the 13th Plan. Further, MPPGCL have awarded contract to M/s. NTPC, for gap analysis, technical audit and preparation of improvement plan for all Thermal Power Stations. M/s. NTPC, have visited all the Power Stations and their report is awaited.

(iv) Commission's Directive

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

Status of Compliance

The Energy Audit of ATPS, Chachai & SGTPS, Birsinghpur has been got conducted through M/s ERDA, Vadodara and for STPS, Sarni through CPRI. Firms have submitted their recommendations. Station Heat rate and other parameters are calculated in line with the recommendation issued. The quarterly report was being submitted regularly as directed.

In April'09, Commission have revised the formats and advised to send report every month instead of quarterly basis. Now, Commission has consented to send this report on Quarterly basis. The Report for quarter ending June, 2009 has already been sent to the Commission and next Report is due in October, 2009.

(v) Commission's Directive

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

Status of Compliance

The Detailed Project Report of (R&M) in respect of STPS, Sarni already submitted after the approval of BoD MPPGCL. The equerries raised recently by Commission are being replied. The other (R&M) activities in respect of SGTPS, Birsinghpur are recommended by CEA to be taken up in the next Plan. The balance activities of R&M Scheme of ATPS, Chachai is under implementation in Unit-4 (under shut-down upto December, 2009) and immediately thereafter the work shall be under taken in Unit-3 of ATPS, Chachai.

(vi) Commission's Directive

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

Status of Compliance

MPPGCL have requested Commission to allow preparation of station-wise balance sheets for the year FY 2010 onwards with computerization of Accounting Functions, which has been consented by the Commission with further directives to implement positively.

(vii) Commission's Directive

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

Status of Compliance

MPPGCL have requested Commission to allow preparation of station-wise balance sheets for the year FY 2010 onwards with computerization of Accounting Functions, which has been consented by the Commission with further directives to implement positively. However, MPPGCL is submitting Station-wise cost elements in the Petitions, as desired by Commission.

(viii) Status of Compliance

In view of coal shortage in the country at present, Govt. of India have given allocation for imported coal to the tune of 6.00 lakh ton per annum for which the Company is making necessary arrangements for blending and procurement.

(B) Fresh directives issued by the Commission

1) Filing the tariff petition for determination of final Tariff:-

The Commission had issued the provisional tariff orders for new units of Madhikheda (unit I to III), Baansagar (Unit-VI) and SGTPS Birsinghpur (Unit-V) 500 MW as follows:-

S.	Unit		CoD	Date of Order
No.				
1	Madhikheda HPS			11 th January, 2008
	Unit No.1		28 th August, 2006	
	Unit No.2		9 th September, 2006	
2	Madhikheda HPS U	Init	18 th August, 2007	5 th January, 2010
	No.3			
3	Bansagar IV			11 th January, 2008
	Jhinna Unit No.1		20 th August, 2006	
	Jhinna Unit No.2		30 th August, 2006	
4	SGTPS, Extn. U	Jnit	28 th August, 2008	24 th November, 2009
	500MW			

In the provisional orders the Commission had directed to file the tariff petition for determination of final tariff of these units based on audited account. The petition for determination of final tariff has not been yet filed by the Company. MPPGCL is directed to file the tariff petition for determination of final tariff along with the audited account.

2) Station wise accounting statement:-

The MYT Regulation notified by the Commission with regard to terms and condition for determination of generation tariff provides for power station wise generation tariff. The Commission has observed that MPPGCL could not provide power station wise account and cost verification. This has led to many assumptions for determination of tariff.

During the course of CMD meeting held on dated 27th August, 2009, the MPPGCL committed before the Commission to provide station wise balance sheet for FY 2009-10. The Commission directs MPPGCL to implement station wise accounting from FY 2009-10 onwards positively.

3) Tariff petition for ATPS Chachai unit no. 5:-

The 210MW ATPS Chachai unit no. 5, 210 MW has already commissioned on MPPGCL has not filed the petition for determination of tariff till date. It is directed to file the petition for determination of tariff along with all necessary documents.

4) Implementation of the recommendation M/s A.F. Ferguson:-

During the course of CMD meeting dated 27th August, 2009, MPPGCL was directed to implement new coal accounting system as recommended by M/s A.F. Ferguson at earliest. MPPGCL is directed to make all out efforts for implementation of the new coal accounting system as recommended by M/s A. F. Ferguson at the earliest.
