

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



Petition No. 148/2005

PRESENT:

P. K. Mehrotra, Chairman

D. Roy Bardhan, Member

R. Natarajan, Member

IN THE MATTER OF:

Determination of Tariff for Transmission for FY07 to FY09 based on the tariff application made by Madhya Pradesh Power Transmission Company Limited (MPPTCL) under Multi Year Tariff Principles.

MPPTCL (Petitioner) represented, among others, by –

- 1. Shri D.P. Saxena, Consultant Tariff**
- 2. Shri C.S. Sharma, Director (Finance)**
- 3. Shri Vincent D'souza, Executive Engineer**
- 4. Shri Anurag Yadav, Additional Executive Engineer**

ORDER

(Passed on this 13th Day of March, 2006)

- 1 The Madhya Pradesh Electricity Regulatory Commission (hereinafter referred to as “the Commission”) having heard the applicant, interveners, consumers, consumer representatives of various consumer groups on 20th February 2006 at Bhopal, having had formal interactions with the officers of Madhya Pradesh Power Transmission Company Ltd. (hereinafter referred to as “MPPTCL” or “Transmission Licensee”) during the months of January and February 2006 and having met with the members of the State Advisory Committee on 27th February 2006 and having considered the documents available on record and order issued by Government of Madhya Pradesh (Energy Department) on 31st May 2005 making the Transfer Scheme Rules effective from 1st June 2005, (order no. 3679/FRS/18/13/2002 dated 31.5.2005) hereby accepts the applications with modifications, conditions and directions as herewith attached.
- 2 The Commission has made modification to the estimates of Aggregate Revenue Requirement proposals and has made alternative estimates thereof based on benchmarks for Availability and O&M expenditure as per MPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations 2005. The Commission has accordingly made modifications to the tariff proposed by MPPTCL as per detailed order attached to this order. The transmission charges determined by the Commission for FY07 are subject to changes, if any, in the notified opening balance Sheet that may be made by GoMP before 31st May 2006 or on availability of audited balance sheet as on 01/06/2005. Since the depreciation, interest and O&M expenses have been allowed on the basis of submissions made by the Licensee, there may be need to review the tariff determined based on the actual capitalization, loans actually availed and the physical progress which will be done at the time of review when the tariff for FY08 are determined. While determining tariff for transmission, the Commission

has kept multi year principles in mind and the MPPTCL shall be required to seek approval each year for continuation of this tariff subject to any changes necessitated on account of uncontrollable factors.

- 3 The Commission, in exercise of the powers vested in it under Section 64 of the Electricity Act, 2003, directs that the transmission tariff determined by this present order shall be deemed to be effective w.e.f. 1st April 2006 and will continue to be operative till 31st March 2009 under multi year tariff principles subject to yearly approvals of the Commission. The Petitioner must take immediate steps to implement the Order after giving seven (7) days public notice in accordance with clause 1.30 of MPERC (Details to be furnished and fee payable by licensee or generating company for determination of tariff and manner of making application) Regulations, 2004 and must also provide information to the Commission in support of having complied with this order. The Commission shall consider the transmission charges determined in this order for the Distribution Licensees in their Revenue Requirement for FY07, FY08 and FY09.

- 4 The petitioner is also directed to file its Capital Expansion Plan for FY07, FY08 and FY09 as envisaged in the Commission's Guidelines for Capital Expenditure.

Ordered as above read with attached detailed reasons and grounds,

Sd/-
(R. Natarajan)
Member (Econ.)

Sd/-
(D. Roy Bardhan)
Member (Engg.)

Sd/-
(P.K.Mehrotra)
Chairman

Date: March 13, 2006
Place: Bhopal

Table of Contents

CHAPTER 1	6
Background of the order	6
Introduction.....	6
Procedural history	7
Public Hearing and Consultation with State Advisory Committee	8
CHAPTER 2	9
Status of the Transmission Company:	9
CHAPTER 3	12
A - Intra-State Transmission System and Transmission System Capacity.....	12
B – Performance of the State Transmission System.....	17
CHAPTER-4.....	27
A. Introduction.....	27
B. Annual Fixed Charges.....	27
(a) Operation and Maintenance (O&M) Expenses.....	27
(b) Terminal benefits to be paid to retiring employees	32
(c) Taxes & Duties and others.....	36
(d) Depreciation.....	37
(e) Interest and Finance Charges	42
(f) Interest on working capital.....	46
(g) Return on Equity & Tax.....	48
(h) Non-Tariff Income	48
(i) Incentives and Penalties.....	49
(j) Annual Transmission Charges	49
(k) Charges to be paid by long term and Short term beneficiaries	49
(l) Charges to be paid by non-conventional Power producers.....	50
(m) Penalty for over utilization of allocated capacity	51
(n) Reactive Energy Charges.....	51
(o) Parallel Operation Charges	51
(p) Grid Support charges	51
(q) Penalty for causing excessive trippings on 33 KV & 11 KV feeders emanating from EHV Sub-station	52
(r) Directions for compliance.....	52
CHAPTER 5	53
Status of Compliance of directives given by the Commission	53
Objections and Comments on MPPTCL’s Tariff Proposal	59
Conclusion	68

List of Tables

Table-1: Summary of the Tariff Petition.....	8
Table-2: Provisional Opening Balance Sheet of MPPTCL.....	9
Table-3: Source wise Deployment of Fund in Commission’s Order for FY06.....	11
Table-4: Transmission System in the State.....	12
Table-5: Average Capacity of State Transmission System as proposed by MPPTCL.....	13
Table-6: The reworked Average Capacity of State Transmission System.....	14
Table-7: Average Capacity of State Transmission System Approved by the Commission:.....	15
Table-8: State Transmission System Capacity Allocated to Distribution Licensees / Long-term Customers.....	16
Table-9: Annual Transmission losses:.....	17
Table-10: Voltage wise losses in Transmission System:.....	18
Table-11: Voltage wise interruptions in Transmission System.....	18
Table-12: Quarter wise Transmission System Availability.....	19
Table-13: Transformer failure.....	20
Table-14: Interface Points.....	20
Table-15: Electrical Accidents.....	21
Table-16: Abstract of Capital Expansion Plan (Investment Plan) (Amount in Rs. Crore).....	22
Table-17: Statement showing the year wise phasing of funds tied up (Amount in Rs. Crore).....	22
Table-18: Statement showing works for which funds are yet to be tied up (Amount in Rs. Crore).....	23
Table-19: Statement showing capitalisation for FY06 as informed by MPPTCL.....	24
Table-20: Statement showing break-up of capitalisation.....	24
Table-21: Discrepancies in Capital Expenditure Plan.....	25
Table-22: Operation and Maintenance Expenses as proposed by MPPTCL.....	27
Table-23: O&M Expenses as per norms (Rs. Lakh).....	28
Table-24: Physical details of the assets projected by MPPTCL in its petition.....	29
Table-25: Physical Quantity of Assets as re-projected by MPPTCL.....	29
Table-26: Physical Quantity of Assets likely to be on 31 st March 2006.....	30
Table-27: O&M Expenses as per approved norms (Rs. Crore).....	31
Table-28: Amended O&M Expenses norms (Rs. Lakh).....	31
Table-29: Approved O&M (Rs. Crore).....	32
Table-30: Contribution towards Terminal Benefit Fund Projected by MPPTCL.....	33
Table-31: Terminal benefits paid by the Board as claimed by the Licensee.....	33
Table-32: Terminal benefits paid by the Board as provided in it’s filing of FY06.....	34
Table-33: Year wise provision and actual payment made for Pension and Gratuity.....	34
Table-34: Terminal Benefit as approved (Rs. Crore).....	35
Table-35: Details of Gross Fixed Assets, Depreciation and Net Fixed Assets.....	38
Table-36: Depreciation as per original and revised claim (Rs. Crore).....	38
Table-37: Capital Expenditure for relevant years (Rs. Crore).....	39
Table-38: Capital Expenditure incurred based on loans drawn as per the licensee’s submission (Rs. Crore.).....	39
Table-39: Year wise capitalisation provisionally considered by the Commission (Rs. Crore).....	40
Table-40: Provisional Gross Block for the relevant years (Rs. Cr.).....	40
Table-41: Account Head wise depreciation provisionally allowed.....	41
Table-42: Interest Claimed for FY07 (Rs. Cr.).....	42
Table-43: Interest Claimed for FY08 (Rs. Cr.).....	43
Table-44: Interest Claimed for FY09 (Rs. Cr.).....	43
Table-45: Split of MPSEB loan between CWIP and Working Capital (Rs. Cr.).....	45
Table-46: Net interest allowed for the tariff period (Rs. Cr.).....	46
Table-47: Working Capital and Interest claimed by the Licensee for the tariff period (Rs. Cr.).....	47
Table-48: Working Capital Requirement and interest determined by the Commission (Rs. Crore).....	47
Table-49: Working Capital allowed for the tariff period (Rs. Cr.).....	47
Table-50: Return on equity (Rs. Crore).....	48
Table-51: Annual Transmission Charges (Rs. Crore).....	49
Table-52: Transmission Charges.....	50
Table-53: Transmission Charges payable by a wind generator.....	50
Table-54: Transmission Charges to be shared between generator and Govt.....	51

CHAPTER 1

Background of the order

Introduction

- 1.1 This order relates to petition number 148 of 2005 filed by the Madhya Pradesh Power Transmission Company Limited (hereinafter referred to as “MPPTCL” or “Transmission Licensee”) for determination of transmission and allied charges to be paid by long term beneficiaries of transmission system for FY07 to FY09 under the multi year tariff principles. MPPTCL is the owner of the transmission network previously owned by Madhya Pradesh State Electricity Board (hereinafter referred to as “MPSEB” or “Board”). MPPTCL has started functioning independently from 1st June 2005. While passing the order for determination of Transmission Tariff for FY06, the Commission has examined in detail the operational and the financial data of the transmission function of the period when the functions were part of MPSEB. The order passed by the Commission for FY06 was based on the past records, submission of MPPTCL and views expressed by stakeholders. The Commission has already issued the principles for multi year tariff vide its notification of December 06/12/2005 namely “Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations 2005. The Commission directed the Transmission licensee to file its proposal on the basis of the aforementioned regulations only.
- 1.2 Consequent upon GoMP notification dated 31st May 2005, which provides that MPPTCL is to provide transmission services for conveyance of electricity from generation stations of MP Power Generating Company Limited (MPPGCL) and other generating stations and also interconnection points of Power Grid Corporation of India Limited (PGCIL) and other Transmission Licensees to the interconnection points of the long-term users in the State and also undertake the functions of the State Transmission Utility (STU), State Load Despatch Centre and System Operators as provided in the Electricity Act, 2003. The Petitioner has filed this Petition for determination of the transmission tariff and the allied charges for the period from FY07 to FY09.

Procedural history

- 1.3 In the Commission's regulations namely Madhya Pradesh Electricity Regulatory Commission (Details to be furnished and fee payable by licensee or generating company for determination of tariff and manner of making application) Regulations, 2004 and its subsequently amendments, the Transmission Licensee is required to file the its proposal for determination of transmission tariff for the next year by 15th October every year. MPPTCL requested for extension for filing of the Petition from 15/10/2005 to 15/11/2005, which the Commission accepted. MPPTCL filed the Petition on 25/11/2005. Meanwhile, the Commission issued its regulation namely MPERC (Terms and Conditions for determination of the Transmission Tariff) Regulations 2005. The Commission directed MPPTCL to revise its proposal on the basis of the norms fixed in the aforesaid regulations by 07/01/2006. MPPTCL submitted its revised proposal on 07/01/2006 through e-mail. The Commission held a hearing on the filing of MPPTCL on 12/01/2006 wherein the Petitioner was directed to make a presentation on its petition before the Commission. The Commission observed that Petitioner had not based its petition on the opening balance sheet issued by the Government of Madhya Pradesh. The Petition was not filed on affidavit and was not accompanied by authorisation letter in favour of the officer filing the Petition before the Commission on behalf of Transmission Licensee. The Transmission licensee in its petition had neither indicated the Respondents nor the long-term users of the transmission system. In view of the aforementioned discrepancies, the Commission directed the Transmission Licensee to revise and resubmit the petition by 31/01/2006. The Petitioner finally filed the petition on 01/02/2006. The petition has been filed for determination of revenue requirement and the Transmission Tariff on the basis of the multiyear principles notified in MPERC (Terms and Conditions of Transmission Tariff) Regulations 2005 for FY07 to FY09.

1.4 The Summary of the petition filed by MPPTCL is given below:

Table-1: Summary of the Tariff Petition

Sl. No.	Particulars	Amount (Rs. Cr.)		
		FY07	FY08	FY09
1.	Repairs and Maintenance	25.44	26.97	28.58
2.	Employee Cost	90.21	95.62	101.36
3.	Administration and General	15.97	16.94	17.95
4.	O&M (1+2+3)	131.61	139.52	147.89
5.	Depreciation (Incl. AAD)	139.00	153.73	163.80
6.	Interest Charges	167.65	162.30	168.42
7.	Interest on Working Capital	17.00	19.11	22.15
8.	Return on Equity	95.97	111.13	113.44
9.	Provisions of Unfunded Liabilities of Pension and Terminal Benefits	121.83	169.02	246.13
10.	Others (Taxes & Duties, MPERC Fees, Service Charges to MPSEB)	7.01	7.67	8.26
11..	Total	680.08	762.49	870.09
12.	Transmission System Capacity	6063 MW	7191 MW	8114 MW
13.	Annual Fixed Cost/Month/MW	Rs.0.9347 Lakh	Rs.0.8836 Lakh	Rs.0.8936 Lakh

Public Hearing and Consultation with State Advisory Committee

- 1.5 The Commission decided to issue a public notice for inviting comments from the stakeholders on the petition filed by MPPTCL. The Public notice was published in Dainik Bhaskar (Hindi, All Madhya Pradesh Editions) and Hindustan Times (English, All Madhya Pradesh Edition) on 04th February 2006.
- 1.6 The Commission held a public hearing on the tariff petition of MPPTCL at Bhopal on 20th February 2006 in the Conference Hall of Urja Bhawan.
- 1.7 A presentation on the tariff proposal of MPPTCL was made before the members of the Committee on 27th February 2006. The members made their observations on the petition and gave valuable suggestions, which have been kept in mind while finalising this order.

CHAPTER 2

Status of the Transmission Company:

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

Table-2: Provisional Opening Balance Sheet of MPPTCL

(Rs. Crore)

Liabilities		Amount		Assets		Amount	
Equity From GoMP		845			Gross Assets	2407	
Project Specific Capital Liabilities (Including payments overdue)	Power Finance Corporation (PFC)	321		Fixed Assets	Less Accumulated depreciation	1076	
	SADA Gwalior	15					
	Loan from GoMP (ADB)	195				Net Fixed Asset	1331
	Total	531	531		Capital Works in Progress	847	
Loan from MPSEB		835			Regulatory Assets towards Pension Liabilities	3910	
Current Liabilities	Staff Related	20		Current Assets	Stock	66	
	Intt. Accrued but not due	13					
	Total	33	33			Total	66
Pension Liabilities		3910					
Borrowings for working capital	Overdraft	0					
	Working capital demand loan + cash credit	0		0			
Accumulated Surplus/ (Deficit)		0					
Reserves and Reserve Funds		0					
Total Liabilities		6154		Total Assets	6154		

Notes: -

- The values of the fixed Assets are as per the book values
- The Contingent Liabilities to the extent they are associated with or related to transmission activities or to the Undertakings or Assets of MPTRANSCO shall vest in MPTRANSCO. (Estimated to be Rs. 41.66 Cr.)
- The above balance sheet is provisional till finalisation of actual balance sheet as on date of transfer date.

- As per the notification, the above balance sheet is provisional for a period of 12 months. During the provisional period, the GoMP may change the values stated in the opening balance sheet.**
- 2.2 MPPTCL has assumed independent functioning from 1st June 2005 consequent to the notification of its Balance Sheet by the State Government on 31st May 2005. On the Petition filed by the Transmission Licensee for determination of Transmission tariff for FY06, the Commission had already passed the Tariff Order on 07/02/2006.
- 2.3 The Transmission Tariff Order of the Commission for FY06 was based on the Balance Sheet notified by the GoMP. The Commission has given a detailed note on the deployment of the equity, project specific loans and MPSEB loans in the Transmission tariff Order for FY06. The same is reproduced in the following paragraphs.
- 2.4 Allocation of Equity and Loans between Completed Works and Capital Works-in-Progress:
- 2.4.1 As per the Government of Madhya Pradesh notification of 31st May 2005, MPPTCL had been allocated an amount of Rs. 845 Crore as Equity from Government of MP. They have also been allocated project specific capital liabilities of Rs. 531 Crore comprising of Rs. 321 Crore from PFC, Rs. 15 Crore from SADA, Gwalior and Rs. 195 Crore of ADB loan through Government of MP. In addition, Rs. 835 Crore of loan from MPSEB (not identifiable with any project) has also been allocated to MPPTCL. The notification does not separately indicate the amount of equity invested in completed Works and that invested in Capital Works-in-Progress. It is necessary, therefore to allocate the equity into completed Works and Capital Works-in-Progress because the Commission will be able to allow return on equity only on commissioned projects.
- 2.4.2 As per the notification, the Gross Assets allocated on the basis of book values amount to Rs. 2407 Crore. Considering a normative debt equity ratio of 70:30, it is assumed that equity amount invested on Fixed Assets would be Rs. 722.10 Crore leaving a balance of Rs. 122.90 Crore as equity component in Capital Works-in-Progress. Rounding it off, it could be assumed that Rs. 722 Crore had been invested in completed Works that is eligible for Return on Equity at 14% per annum. Return on Equity on the balance amount of Rs. 123 Crore would be allowed as and when the Capital Works-in-Progress gets commissioned.
- 2.4.3 In the notified opening balance sheet an amount of Rs. 847 Crore has been indicated as Capital Works in Progress. The MPPTCL had not indicated in their Petition how this has been funded. As stated in the previous paragraph, the Commission considers Rs. 123 Crore as equity component of the Capital Works in Progress and the balance as loan component.

- 2.4.4 Out of the PFC loan of Rs. 321 Crore, MPPTCL has identified Rs. 315 Crore as utilized for completed Works as also the entire SADA loan of Rs. 15 Crore. Out of the ADB loan (through Government of MP) of Rs. 195 Crore, Rs. 189 Crore (444.31/458.59) has been utilised for completed Works according to MPPTCL. Thus, out of the total project specific loans of Rs. 531 Crore only Rs. 12 Crore has been considered by the Commission as utilised for Capital Works-in-Progress.
- 2.4.5 As per the Government of Madhya Pradesh notification of 31st March 2005, Rs. 835 Crore had been allotted to MPPTCL as MPSEB loan. As stated earlier, the Commission considers Rs. 724 Crore as loan component in the Capital Works-in-Progress, which are stated to be worth Rs. 847 Crore. Rs. 12 Crore of loan has been deemed to be utilised from the project specific portion of the loans and the rest Rs. 712 Crore from MPSEB loan. Thus out of the total MPSEB loan of Rs. 835 Crore, Rs. 123 Crore has been considered by the Commission as used for working capital requirements.
- 2.4.6 Interest on the loans identified with completed Works and Working Capital will be dealt with in the section on Interest and Finance charges. Interest on the loans considered as used in Capital Works-in-Progress will be capitalized and will not be considered in the Revenue Requirement till these Works get commissioned. The deployment of equity, project specific loans and MPSEB loan as considered by the Commission is shown in the following table:

Table-3: Source wise Deployment of Fund in Commission’s Order for FY06

Amount in Rs. Crore					
Sl. No.	Source	Amount as per notified Balance Sheet	Fixed Assets	Capital Works In Progress (CWIP)	Working Capital
1.	Equity	845.00	722.00	123.00	
2.	Project Specific Loans	531.00	519.00	12.00	
3.	MPSEB Loan	835.00		712.00	123.00

CHAPTER 3

A - Intra-State Transmission System and Transmission System Capacity

- 3.1 The intra-State transmission system is a conglomerate of extra high voltage transmission lines and substations. As on 30/09/2005 the intra-State transmission system comprises the following transmission lines and substations: -

Table-4: Transmission System in the State

Sl. No	Voltage Level	EHV Lines	EHV Substation	
		Circuit kMs	No.	MVA Capacity
1	400kV	2314.31	4	3885.00
2	220kV	6880.22	33	8530.00
3	132kV	10444.38	140	10077.50
4	66kV	61.00	1	20.00
Total		19310.57	178	22512.50

- 3.2 In the regulations issued by the Commission on Open Access namely, “MPERC (Terms and Conditions for intra-State Open Access in MP) Regulations, 2005”, the Commission has defined the Average Capacity of the Intra-State Transmission System as

“Av Cap means the average capacity in MW served by the Intra-State transmission system of the Transmission Licensee in the previous financial year, and shall be the sum of the generating capacities, connected to the transmission system and contracted capacities of other Long Term transactions handled by the system of the Transmission Licensee.”

- 3.3 In the subject Petition, MPPTCL has proposed the determination of the capacity of its transmission system by considering various options, such as on the basis of maximum demand met in last four years, load flow studies carried out and in accordance with the definition given in the Commission’s regulations on open access. While passing the order for Transmission Tariff for FY06, the Commission has considered the determination of transmission system capacity on the basis of the definition given in the Commission’s regulations on open access. The details as per the filing of the Transmission Licensee are given below:

Table-5: Average Capacity of State Transmission System as proposed by MPPTCL

Particulars	FY07			FY08			FY09		
	Total Capacity	Aux. Cons.	Capacity for Trans. System	Total Capacity	Aux. Cons.	Capacity for Trans. System	Total Capacity	Aux. Cons.	Capacity for Trans. System
MPPGCL Thermal	2147.50	215.71	1931.79	2857.50	284.36	2573.14	2857.50	284.36	2573.14
MPPGCL Hydel	897.50	2.57	894.93	917.50	2.64	914.86	1177.50	3.60	1173.90
Joint Venture Hydel i.e.ISP & SSP	1623.50	4.87	1618.63	1851.50	5.55	1845.95	1851.50	5.55	1845.95
Central Sector	1660.32	149.43	1435.35	1937.32	174.36	1674.81	2705.32	243.48	2338.75
Additional Share EREB	200.00	18.00	172.90	200.00	18.00	172.90	200.00	18.00	172.90
SEZ	10.00	0.00	10.00	10.00	0.00	10.00	10.00	0.00	10.00
Grand Total	6538.82	390.58	6063.60	7773.82	484.91	7191.66	8801.82	554.99	8114.64
Say	6063 MW			7191 MW			8114 MW		

3.4 MPPTCL has worked out the aforementioned capacity on the following basis:

- 3.4.1 From the share of MP in the generating stations within the State, the power corresponding to Auxiliary consumption has been reduced to take into account ex-bus capacity.
- 3.4.2 From the share allocated in Central Sector generating stations, the power corresponding to Auxiliary consumption and Inter-State transmission losses (@5%) has been reduced to know the available capacity at MP periphery.
- 3.4.3 Short Term or infirm transactions have not been considered.
- 3.4.4 Generating plants feeding directly to Discoms (at 33 KV or 11 KV) have not been considered.

3.5 The Commission has agreed with the principle adopted by MPPTCL for working out the capacity of the State Transmission System. MPPTCL has not considered the auxiliary consumption of thermal power stations of MP Power Generating Company Limited (MPPGCL) in accordance with the Commission’s regulations “MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations’ 2005”. The Transmission had indicated the capacity of Satpura stage – I as 187.50 MW where as the Commission has considered the capacity as 312.50 MW as the power station is located in Madhya Pradesh and the transmission capacity of MPPTCL is being used for evacuation of power. Further, for thermal power stations that will be commissioned during FY07 to FY09, the auxiliary consumption shall have to be taken as per CERC norms as stipulated in the Commission’s aforesaid regulations. Accordingly, the auxiliary consumption of all the thermal power stations of MPPGCL has been recalculated. The Hydel power stations viz. Ranapratap Sagar and Jawahar Sagar do not feed to State Transmission System, hence their installed capacity has been omitted for deriving the State Transmission System Capacity. For Gas based thermal power stations of Kawas and Gandhar, MPPTCL has taken the auxiliary consumption different from that has been specified by CERC, therefore, the same has been revised. The MPPTCL through their additional submission has indicated that the allocation of power to SEZ from NTPC shall be 25 MW from FY08 onwards instead of 10 MW and the additional share allocation from Eastern Region has been reduced to 50 MW against 200 MW as indicated in the Petition. Accordingly, the capacity of the State transmission system has been reworked. The revised State transmission capacity is tabulated below:

Table-6: The reworked Average Capacity of State Transmission System

Particulars	FY07			FY08			FY09		
	Total Capacity	Aux. Cons. / ext. line losses	Capacity for Trans. System	Total Capacity	Aux. Cons. / ext. line losses.	Capacity for Trans. System	Total Capacity	Aux. Cons. / ext. line losses	Capacity for Trans. System
MPPGCL Thermal	2272.50	216.17	2056.33	2982.50	276.99	2705.51	2982.50	274.18	2708.32
MPPGCL Hydel	835.00	2.51	832.50	915.00	2.80	912.20	915.00	2.80	912.20
Joint Venture Hydel i.e. ISP & SSP	1623.50	4.87	1618.63	1851.50	5.55	1845.95	2111.50	5.55	2105.95
Central Sector	1660.32	131.77	1452.12	1937.32	156.70	1691.59	2705.32	201.82	2378.32
Additional Share EREB	50.00	4.50	43.23	50.00	4.50	43.23	50.00	4.50	43.23
SEZ	10.00	0.90	8.65	25.00	2.25	21.61	25.00	2.25	21.61
Grand Total	6451.32	360.72	6011.45	7761.32	448.80	7220.08	8789.32	491.11	8169.62

- 3.6 The average transmission system capacity for FY07 to FY09 as approved by the Commission is given below:

Table-7: Average Capacity of State Transmission System Approved by the Commission:

FY07	FY08	FY09
6011 MW	7220 MW	8170 MW

- 3.7 The Commission would like to point out that while the transmission capacity for FY07 can be considered as certain, the capacity determined for the other two years are based on projections. These can become firm only when the additional generation capacities considered as added during these years become a reality. It is advisable that the long-term customers enter into agreements for sharing the additional capacities and agree to pay MPPTCL on the basis of these contracted capacities so that MPPTCL would be in a position to invest in creating additional transmission capabilities to meet their needs.
- 3.8 In the filing for determination of transmission tariff for FY06, the Petitioner requested the Commission that in absence of allocation of the capacity of the State transmission system among the long-term users the Commission may consider to allocate the transmission system capacity among the Distribution Licensees on the basis of their average demand met in past.
- 3.9 *In the Order for determination of Transmission Tariff for FY06, the Commission directed the Distribution Licensees to urgently take steps to finalise their long-term transmission capacity utilisation agreement with the Transmission Licensee failing which the Distribution Licensees will have to face the difficulty of being left high and dry without any long-term agreement. The Distribution Licensees may also be not in a position to recover the transmission expenses unless they have a proper agreement with the Transmission Licensee. Neither the Transmission Company nor the Distribution Companies have filed any report in compliance of this direction to the Commission. In view of this, the Commission once again reiterates that in absence of a proper long-term bulk power transmission agreement between the Transmission Licensee and the Distribution Licensees, the Transmission Licensee will be entitled to recover Transmission charges from the MPSEB which is procuring all power on behalf of the Distribution Licensees. Distribution Licensees have agreed with MPSEB to give control over all their revenue to MPSEB and hence in order to ensure payment security to the suppliers and service providers, the Commission hereby directs that MPSEB shall make payments to Transmission Licensee in settlement of bills for transmission capacity used by the Distribution Licensees operating under agreement with MPSEB, as long as the revenue stream is controlled by MPSEB.*

- 3.10 The Commission in its Transmission tariff order for FY06 indicated that if the Distribution Licensees / Companies desire, the Commission will look into reallocation of long-term capacity to them. However, the Distribution Licensees have not made any such request to the Commission. Thus it can be construed that the Distribution Licensees have no objection on the principle applied for allocation of transmission system capacity in the Transmission Tariff Order for FY06. Hence, the Commission using the allocation ratio used for FY06 allocates the State transmission capacity as determined in Table-7 for FY07 to FY09 among the long-term users as given below:

Table-8: State Transmission System Capacity Allocated to Distribution Licensees / Long-term Customers

Sl. No.	Distribution Licensee / Long-term Customer	Capacity Allocation (MW)		
		FY07	FY08	FY09
1	MP Poorv Kshetra Vidyut Vitaran Company Limited	1783	2138	2421
2	MP Madhya Kshetra Vidyut Vitaran Company Limited	1958	2348	2658
3	MP Paschim Kshetra Vidyut Vitaran Company Limited	2259	2709	3067
4	SEZ	10	25	25
	Grand Total	6011	7220	8170

B – Performance of the State Transmission System

Transmission Loss:

3.11 MPPTCL has claimed that the addition in the capacity of the transmission system has helped in reducing the transmission losses. The transmission loss of 6.12% in FY04 has been projected to reduce to 5.22% in FY06 and further to 4.90% by FY09. The transmission loss profile as submitted by MPPTCL from FY04 is given below:

Table-9: Annual Transmission losses:

Details	FY04	FY05	FY06	FY07	FY08	FY09
	Actual	Actual	Estd.	Estd.	Estd.	Estd.
Energy Received into System (MUs)	27555	29531	31716	31603	33186	34763
Energy Sent Out of System (MUs)	25870	27871	30062	30023	31559	33059
Energy Lost (MUs)	1685	1660	1655	1580	1627	1704
Transmission Loss (%)	6.12%	5.62%	5.22%	5.00%	4.90%	4.90%
Reduction in loss (%)	1.81%	0.50%	0.40%	0.22%	0.10%	0.00%

3.12 The Commission has noted that MPPTCL has estimated a reduction of 0.32% in transmission losses will be possible from FY06 to FY09. The Commission is not very much convinced that with all the efforts and investments being put in by the Licensee the losses will still remain at 4.90%. In this context it is worth mentioning that the National Electricity Policy and Tariff Policy set store by significant improvement in this area and very often international comparisons are made with a view to achieving those levels by 2012. The Commission would therefore urge the Transmission Licensee to concentrate on this area and particularly on the 220kV network where losses are the highest. Even within the country some State Transmission Systems like Gujarat, Karnataka and Rajasthan have been successful in bringing down transmission losses to a figure of 4.40% in Gujarat, 4.86% in Karnataka and 4.6% in Rajasthan. It has been suggested that the Western Regional Grid losses which are external to Madhya Pradesh are also at a level of 5%. This should not be matter of comfort and our endeavour should be to reach a level near the best. It may be noted that each one percent of reduction in losses will save the State an amount of approximately Rs.60 Crore. For the present however the Commission accepts the proposal of MPPTCL for FY07 and will review the position in subsequent years when the investment proposals of the Licensee are firmed up.

3.13 The losses that occur in the network of PGCIL during transmission of energy from a generating source situated outside the State of Madhya Pradesh up to MPPTCL's periphery are in addition to the losses that occur in the MPPTCL transmission system.

- 3.14 The Commission has in the past directed the Transmission Licensee to compute the voltage wise transmission losses. The purpose behind the Commission’s direction for making voltage wise losses available is to locate the voltage level where the major bottleneck lies, which has been amply demonstrated in the table given below. The 220kV system urgently requires the Transmission Licensee’s attention. For removal of these bottlenecks investment is required for addition of transformation capacity and strengthening of transmission lines.

Table-10: Voltage wise losses in Transmission System:

Sl. No.	Total Losses at	Losses in %				
		FY05		FY06		
		Oct-Dec.'04	Jan-Mar.05	Apr-Jun.'05	Jul-Sep.'05	Oct-Dec.'05
1	400 kV	1.36	1.12	1.49	1.33	1.44
2	220 kV	3.55	3.04	2.88	2.92	3.57
3	132 kV	1.73	1.57	0.97	1.21	1.48
4	Total Transmission Losses	5.48	4.87	4.35	4.42	5.43

Reliability & Quality of Supply

- 3.15 For reliable and quality supply to Distribution Companies and thereby to retail consumers the transmission network should remain in a healthy state. The voltage wise interruptions are as follows:

Table-11: Voltage wise interruptions in Transmission System

Sl. No.	Voltage Level	FY04		FY05		FY06 (upto June 05)	
		Nos.	Duration (Hrs.)	Nos.	Duration (Hrs.)	Nos.	Duration (Hrs.)
1	400	6	76.26	2	40.07	1	95.42
2	220	35	459.73	51	713.25	17	262.42
3	132	30	546.63	68	856.08	21	461.24

- 3.16 The total duration and the numbers of interruptions have increased in FY05 over FY04 and the trend that is visible upto June 2005 in FY06 indicates that the duration and the number of interruptions are likely to exceed FY04 level. However, the voltage wise system availability remained above 98% in FY05. The quarter wise and voltage wise transmission system availability for FY05 and for the three quarters of FY06 is given below:

Table-12: Quarter wise Transmission System Availability

System Voltage	Actual System Availability during the Year 2004-05				Actual System Availability during the Year 2005-06		
	April – June	July – September	October – December	January – March	April - June	July – September	October – December
400 kV	99.93%	98.62%	99.97%	98.88%	98.37%	94.35%	99.08%
220 kV	99.87%	98.25%	99.83%	98.71%	98.27%	99.45%	99.31%
132 kV	99.83%	99.57%	99.83%	99.26%	99.17%	99.15%	99.33%
Total	99.85	98.97	99.12	98.80	98.55	98.46	99.25

- 3.17 The overall system availability compares favourably with the target availability of 97% for FY07 and FY08 and 97.5% for FY09 as per MPERC (Terms and Conditions for determination of Transmission Tariff) Regulations, 2005. The availability achieved by MPPTCL compares favourably with the normative availability of 98% fixed by CERC in its order dated 16th January 2004. The Commission has specified incentive / penalty mechanism for MPPTCL for deviation in availability from the norms specified in MPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations 2005.

EHV Transformer failure

- 3.18 Failure of EHV transformer results in disruption of power supply to a large area. Most of the failures can be attributed to operational causes. The failure rate reported for FY04 and FY05 is as follows:

Table-13: Transformer failure

Sl. No.	Particulars	FY04		FY05		FY06 (up to July'05)	
		Nos.	%	Nos.	%	Nos.	%
1	Auto Transformer	1	1.09	1	1.05	1	0.97
2	Power Transformer	4	1.3	7	2.16	7	1.21

- 3.19 It is observed that the overall transformer failure rate has shown an increasing trend and this is a cause for concern. The Commission would like the Licensee to keep such failures to the minimum so as to achieve the availability targets.

Interface points

- 3.20 MPPTCL has identified 438 interface points with MPPGCL, other generators viz. Indira Sagar Project, PGCIL, Distribution Companies of the State, HT consumers and neighbouring states. The gist of interface points is indicated in the table below:

Table-14: Interface Points

Interface Point With	No. of Interface Points as on 31-03-2005	No. of Meters Installed as on 31-03-2005
MPPGCL	28	43
Indira Sagar Project	3	4
PGCIL / Central Sector	11	19
Inter State	16	19
MP Poorv KVVCL	95	95
MP Madhya KVVCL	100	100
MP Paschim KVVCL	133	133
CPP Wheeling	1	1
HT Consumers Wheeling	51	51
Total	438	465

- 3.21 These interface points do not have ABT compliant meters except at interface points with PGCIL. The National Electricity Policy stipulates that ABT shall have to be introduced in the State by the respective State Commissions by April 1, 2006. The Commission has already directed MPPTCL to make all necessary arrangements so as to achieve the target as envisaged in the National Electricity Policy. *The Commission in this order once again directs the Transmission Licensee to implement the ABT regime in the State as per the programme given in the Policy i.e. by 01/04/2006 and report compliance to the Commission. Any delay in implementing intra-State ABT shall result in the Transmission Licensee being deprived of a part of its transmission charges as may be determined by the Commission. The progress will be reviewed in April 06.*
- 3.22 The operational performance should be reflected not only in terms of reduction in losses, improvement in voltage profile but also in terms of reduction of loss of human and animal life as well. The number of accidents, both fatal and non-fatal, was higher in FY05 as compared to FY04. MPPTCL is advised to take stock of such happenings and prevent them from occurring. Safety of personnel and others should be of paramount importance in the operation of transmission network and should be appropriately taken care of. The track record shows that number of such accidents in FY05 was 14 as compared to 7 in FY04.

Table-15: Electrical Accidents

FY04				FY05				FY06 (up to 30/06/2005)			
Fatal		Non-Fatal	Total	Fatal		Non-Fatal	Total	Fatal		Non-Fatal	Total
Human	Animal	Human		Human	Animal	Human		Human	Animal	Human	
2	0	5	7	2	0	12	14	1	0	2	3

Transmission Capital Expansion Plan

- 3.23 MPPTCL has filed a detailed list of the works under its Capital Expansion Plan (Comprehensive Transmission Investment Plan) in its petition for the period from FY06 to FY10. The abstract of this investment plan is given below:

Table-16: Abstract of Capital Expansion Plan (Investment Plan) (Amount in Rs. Crore)

Sl. No.	Particulars of Works	Year wise Fund Requirement					
		FY06	FY07	FY08	FY09	FY10	Total
1	Power Evacuation System	0.00	104.45	382.50	174.35	105.00	766.30
2	Interconnection with PGCIL	0.00	17.00	58.00	0.00	0.00	75.00
3	System Improvement Works	0.00	3.45	3.00	1.60	0.00	8.05
4	Other Transmission Works						
i	400kV Lines	0.00	4.00	14.25	0.00	0.00	18.25
ii	400kV S/s	7.90	3.00	12.00	0.00	0.00	22.90
iii	220kV Lines	135.04	503.38	89.80	29.90	0.00	758.12
iv	220kV S/s	56.65	201.98	96.75	33.70	28.30	417.38
v	132kV Lines	84.08	205.99	215.93	90.85	63.25	660.10
vi	132kV S/s	83.41	164.33	184.47	144.00	118.80	695.01
vii	Misc. Works	14.85	0.00	0.00	0.00	0.00	14.85
5	Total	381.93	1207.58	1056.70	474.40	315.35	3435.96

3.24 The Petitioner has tied up the funds of the order of Rs.1092.63 Crore from different financial institutions. The balance amount of funds of Rs. 2343.33 Crore is yet to be tied up. The details are as under:

Table-17: Statement showing the year wise phasing of funds tied up (Amount in Rs. Crore)

Sl. No.	Particulars of Works	Year wise Fund Requirement					
		FY06	FY07	FY08	FY09	FY10	Total
1	400kV Lines	0.00	4.00	14.25	0.00	0.00	18.25
2	400kV S/s	7.90	3.00	12.00	0.00	0.00	22.90
3	220kV Lines	135.04	338.24	30.55	0.00	0.00	503.83
4	220kV S/s	55.88	100.78	17.25	0.00	0.00	173.91
5	132kV Lines	84.08	112.13	1.76	0.00	0.00	197.97
6	132kV S/s	83.41	76.31	1.20	0.00	0.00	160.92
7	Misc. Works	14.85	0.00	0.00	0.00	0.00	14.85
8	Total	381.16	634.46	77.01	0.00	0.00	1092.63

Table-18: Statement showing works for which funds are yet to be tied up (Amount in Rs. Crore)

Sl. No.	Particulars of Works	Year wise Fund Requirement					
		FY06	FY07	FY08	FY09	FY10	Total
1	Power Evacuation System	0.00	104.45	382.50	174.35	105.00	766.30
2	Interconnection with PGCIL	0.00	17.00	58.00	0.00	0.00	75.00
3	System Improvement Works	0.00	3.45	3.00	1.60	0.00	8.05
4	Other Works						
i	220kV Lines	0.00	165.14	59.25	29.90	0.00	254.29
ii	220kV S/s	0.77	101.20	79.50	33.70	28.30	243.47
iii	132kV Lines	0.00	93.86	214.17	90.85	63.25	462.13
iv	132kV S/s	0.00	88.02	183.27	144.00	118.80	534.09
v	Misc. Works	0.00	0.00	0.00	0.00	0.00	0.00
5	Total	0.77	573.12	979.69	474.40	315.35	2343.33

3.25 The Commission, in its order for FY06 on Transmission Tariff, had accepted the Petitioner's proposal for investment of Rs.462.51 Crore out of which the funds of Rs. 451.60 Crore had already been tied up. In the subject Petition filed for FY07 to FY09, the Transmission Licensee has revised the investment plan for FY06. The Licensee has indicated that in FY06, the investment will be of Rs.381.93 Crore, out of which funds of Rs. 381.16 Crore have been tied up. The Transmission Licensee vide its letter no. 04-01/2242 dated 7th March 2006 has indicated that out of the approved capital expenditure of Rs. 462.51 Crore they have undertaken capital expenditure of Rs. 281.83 Crore only. They have also stated that they have completed works amounting to Rs. 122.04 Crore upto January 2006 and are expecting to complete further works of Rs. 64.74 Crore by March 2006. Thus the total works expected to be completed in FY06 amount to Rs. 186.78 crore. MPPTCL vide their letter no 04-01/Const./CRA Cell/2165 Dated 06/03/2006 had indicated the figures of capitalisation for FY06 differently as under:

Table-19: Statement showing capitalisation for FY06 as informed by MPPTCL

Particulars	Amount
CWIP at the beginning of the year	Rs. 847 Crore
CWIP added on account of funds received or expected	Rs. 210 Crore
Total	Rs.1057 Crore
Assets Capitalised during the year	Rs.621 Crore
CWIP at the end of the year	Rs. 436 Crore

- 3.26 In the Petition submitted on 31/01/2006 the Company had indicated the break-up of capitalisation as under:

Table-20: Statement showing break-up of capitalisation

Particulare	Amount Rs. in Lakh
EHV line works	43,104
Substation works	18,716
Land and land rights	30
Buildings and Civil works	150
Vehicles	50
Furniture Fixtures and Office equipments	50
Total	62,100

Thus there seems to be inconsistency in the figures of capitalisation during FY06 reported.

- 3.27 In view of the above, the Commission directs the Transmission Licensee to file the completion report for the works executed during FY06. In the absence of completion reports and the discrepancy in the value of the capitalisation of the assets as pointed out above, the Commission will not be in a position to consider asset addition for computation of depreciation and interest charges for FY07, FY08 and FY09. Further, the Transmission Licensee is instructed to prepare and file plans which are realistic and within its capability to execute. Any tendency on the part of the Transmission Licensee to inflate capital expenditure plan for the purpose of claiming higher interest cost, O&M, depreciation and return on equity is self defeating as while truing up in subsequent years the excess that the Licensee claims on these accounts shall be adjusted in the total allowable cost for that year along with the carrying cost.
- 3.28 There are major discrepancies in the capital expenditure filed along with the petition. The flow of loans considered in the capital expenditure plan does not match with loan additions considered for computation of interest cost. The Capital expenditure plan also does not tally with the difference in the closing balance of gross block & CWIP and opening balance of gross block & CWIP. Similarly the asset capitalisation as per the capital expenditure plan does not match with the asset addition considered for the purpose of depreciation claim. These discrepancies have been highlighted in the table below:

Table-21: Discrepancies in Capital Expenditure Plan

Sl. No.	Details	FY06	FY07	FY08	FY09
I	Discrepancy in fund availability				
a.	Funds required as per the plan (Rs. Cr.)	381.16	635.46	77.01	0.00
b.	Funds as per loan details (Rs. Cr.)*				
i	PFC	150.00	150.00	150.00	150.00
ii	REC		95.00	19.82	0.00
iii	ADB	60.00	130.00	0.00	0.00
iv	State Gov. Loan (though not considered in the capex plan)	0.00	100.00	0.00	0.00
v	Equity (though not considered in the capex plan)	25.59	38.39	0.00	0.00
	Total	235.59	513.39	169.82	150.00
II.	Discrepancy in capitalisation of assets				
a.	As per capital expenditure plan (Rs.Cr.)	208.24	761.07	17.49	0.00
b.	Asset capitalised as per filing				
i.	Closing balance of GFA	3028	3530	4317	4721
	Closing balance of CWIP	438	467	450	387
Less	Opening balance of GFA	2407	3028	3530	4317
(ii)	Opening balance of CWIP	847	438	467	450
	Total	212	531	770	341

- 3.29 Further, the Transmission Licensee has included capital expenditure works to be carried out by SLDC in its capital plan although such works should be a part of the revenue requirement of SLDC though in its petition it has stated that the expenditure of the SLDC has not been considered. The Transmission Licensee in its petition has included NABARD as one of the many funding agencies for its capital expenditure plan. The Transmission Licensee in its interest cost computation has not included any loan from this source. When this discrepancy was pointed out the Transmission Licensee vide its letter dated 7th March 2006 has claimed that the loan from NABARD forms a part of MPSEB loan of Rs. 835 Crore. However as per the details submitted by MPPGCL NABARD does not figure in the sources of loan considered as MPSEB loan. Source wise details available with the Commission have been quoted in the order for MPPGCL for FY07 to FY09 issued on 7th March 2006. The Transmission Licensee is thus directed to reconcile its capital expenditure plan for FY07 to FY09 with the availability of loans.

- 3.30 The Transmission Licensee has submitted a revised capital expenditure plan on 8th March 2006 for the period FY07 to FY12. The Commission at this short notice cannot consider the revised plan, as it would inordinately delay the order. In-depth analysis of the revised proposal would require time. Further, the Transmission Licensee would also be required to compute afresh the interest cost, depreciation and ROE based on the funding and asset capitalisation considered in the proposal. The Transmission Licensee should have considered its capital expenditure requirement at the time of filing. The Commission directs the Transmission Licensee to file its Capital Expenditure Plan strictly in accordance with the guide lines issued by the Commission on capital expenditure. This should be done latest by 30th April 2006 in respect of FY07. This should be accompanied with confirmation letters of the lending agencies and the priority order of the works to be taken up. The Commission while reviewing for FY08 shall consider only the approved capital expenditure plan.
- 3.31 National Tariff Policy stipulates that the overall tariff structure should be such as not to inhibit planned development / augmentation of the transmission system, but should discourage non-optimal transmission investment. The Policy has further indicated that prior agreement with the beneficiaries would not be a precondition for network expansion. CTU/STU should undertake network expansion after identifying the requirements in consonance with National Electricity Plan and in consultation with stakeholders but the execution of these works should be done after due regulatory approvals. The Commission shall approve the Capital Expenditure plan when MPPTCL files this investment plan as per the guidelines specified for Capital Expenditure.
- 3.32 *The Commission directs that the Transmission Licensee should file the details of its Capital Expenditure as per the Commission's guidelines issued in this regard. The Capital Expenditure plan for FY07 should be filed by 30th April 2006 and for the remaining years of the tariff period it should be filed as per the time table envisaged in the guidelines i.e. by 31st July. MPPTCL shall prioritise all the works considered in the plan.*
- 3.33 The Commission shall consider capitalisation of asset for depreciation, interest and ROE claims only when such claims are substantiated by works completion reports duly certified by Chartered Accountants indicating description of assets, amount capitalised and sources of funding together with loan details, rates of interest, repayment schedule, etc. However, in the present order the Commission is determining the depreciation, interest, etc. provisionally on the basis of the funding plan submitted by the Licensee.

CHAPTER-4

Transmission Cost

A. Introduction

- 4.1 In this chapter the Commission has discussed in detail the basis for determination of allowable expenses for MPPTCL for the period from FY07 to FY09. The principles for multi year tariff determination have been notified and shall be as per MPERC (Terms and Conditions for Determination of the Transmission tariff) Regulations, 2005 and its subsequent revisions. The availability targets for transmission system for computation of allowable charges shall be as per the above referred regulations.
- 4.2 The allowable expenses shall be recoverable from long-term users of the transmission system of MPPTCL. The Commission has already notified the principles of fixing the tariff payable by Long-term users under MPERC (Terms and Conditions for Intra-State Open Access in Madhya Pradesh) Regulations, 2005. The tariff determined by the Commission shall be recoverable from long-term users in the ratio of their allocated capacity. Short-term users shall pay as per terms and conditions notified for them in open access regulations.

B. Annual Fixed Charges

(a) Operation and Maintenance (O&M) Expenses

- 4.3 The Operation and Maintenance (O&M) Expenses comprise Employee Expenses, Administrative and General (A&G) Expenses and Repairs and Maintenance (R&M) Expenses. The Petitioner in the subject Petition has submitted the following expenses against Operation and Maintenance (O&M) Expenses:

Table-22: Operation and Maintenance Expenses as proposed by MPPTCL

Sl. No.	Particulars	Amount in Rs. Crore		
		Year wise O&M Expenses		
		FY07	FY08	FY09
1	Employee Expenses	90.21	95.62	101.36
2	A&G Expenses	15.96	16.94	17.95
3	R&M Expenses	25.44	26.96	28.58
	Total	131.61	139.52	147.89

- 4.4 The expenses proposed by the MPPTCL are not in accordance with the regulations framed by the Commission. The Commission has specified norms for O&M Expenses in MPERC (Terms and Conditions for Determination of Transmission Charges) Regulations, 2005 as given below:

Table-23: O&M Expenses as per norms (Rs. Lakh)

Sl. No.	Particulars	Year wise O&M Expenses		
		FY07	FY08	FY09
1	400 kV Level			
i	Per 100 Ckt Km or part thereof	9.48	10.04	10.65
ii	Per Bay	4.31	4.56	4.84
2	220 kV Level			
i	Per 100 Ckt Km or part thereof	10.66	11.30	11.98
ii	Per Bay	4.87	5.17	5.48
3	132 kV Level			
i	Per 100 Ckt Km or part thereof	10.66	11.30	11.98
ii	Per Bay	4.60	4.87	5.17

- 4.5 The Transmission Licensee in its petition has projected the physical assets for FY07, FY08 and FY09 but no backup data has been provided to substantiate the claim. The allowable O&M expense is output driven and hence MPPGCL as per the requirement of the regulations should have provided the backup data. The backup data that was required for this purpose was details of 400/220/132 KV lines and 400/220/132 KV Bays that were likely to be commissioned during the respective years. These lines and bays should have formed either a part of the ongoing works or the capital expenditure plan proposed for the tariff period. The Commission has discussed in detail the capital expenditure plan submitted along with this petition and has concluded that it is not backed up by the loans that are likely to be contracted during the tariff period. As per the tariff petition the Transmission Licensee has projected its physical quantity of assets as given in the table below:

Table-24: Physical details of the assets projected by MPPTCL in its petition

Sl. No.	Particulars	Physical Assets at the end of			
		FY06 (31.12.05)	FY07	FY08	FY09
1	400 kV				
i	Transmission Lines (Ckt. Km)	2314.8	2314.8	2314.8	2364
ii	Bays (Nos.)	57	59	59	63
2	220 kV				
i	Transmission Lines (Ckt. Km)	6922	7179	9487	11010
ii	Bays (Nos.)	250	264	308	348
3	132 kV				
i	Transmission Lines (ckt. Km)	10530	10782	11672	13143
ii	Bays (Nos.)	972	1032	1088	1152

- 4.6 Based on these physical numbers and the applicable O&M norms the Transmission Licensee has projected allowable O&M expense at Rs. 84.21 Crore, Rs. 97.83 Crore and Rs. 110.90 Crore.
- 4.7 The Licensee resubmitted the physical details of its assets vide its letter dated 04/03/2006. However only for FY06 the list of lines and the substations that are likely to be commissioned during the year have been provided but for FY07, FY08 and FY09 no such details have been provided. According to these details the physical quantity is as given in the table below:

Table-25: Physical Quantity of Assets as re-projected by MPPTCL

Sl. No.	Particulars	Physical Assets at the end of			
		FY06	FY07	FY08	FY09
1	400 kV				
i	Transmission Lines (Ckt. Km)	2314.8	2314.8	2354.8	2354.8
ii	Bays (Nos.)	59	59	61	61
2	220 kV				
i	Transmission Lines (Ckt. Km)	7025.34	9571.34	12117.4	12117.4
ii	Bays (Nos.)	267	315	319	319
3	132 kV				
i	Transmission Lines (ckt. Km)	11035.67	11918.7	12801.7	12801.7
ii	Bays (Nos.)	1068	1145	1150	1150

- 4.8 Physical details provided by the Transmission Licensee in its petition and in supplementary submission do not tally. It is difficult to understand the reasons for differences in the two figures when the capital expenditure during the period when these data were submitted remained unchanged. Revised capital expenditure plan has been submitted by MPPTCL only on 8th March 2006. In the absence of the relevant details the validity of the either set of data is difficult to establish. The Commission would like to express its unhappiness over the lackadaisical approach adopted by MPPTCL towards tariff filing. First of all the Transmission Licensee has not filed its petition in accordance with the regulations and secondly it has not bothered to provide justification for the projected numbers. The Commission in the absence of proper justification and details of the projected output cannot accept the figures provided by the Transmission Licensee consequently MPPTCL in the present output driven MYT regime shall stand to loose allowable cost.
- 4.9 The Transmission Licensee has provided details and justification for the projected output as on 31st March 2006. The Commission in the absence of relevant details for FY07, FY08 and FY09 considers assets for these years as on 31st March 2006 and determines the O&M expense accordingly.

Table-26: Physical Quantity of Assets likely to be on 31st March 2006

Sl. No.	Particulars	Assets against Rs. 2407 Cr.	Assets added against Rs. 621 Crore	Expected progress upto 31.3.06	FY06
1	400 kV				
i	Transmission Lines (Ckt. Km)	1724	590.8	0	2314.8
ii	Bays (Nos.)	54	3	2	59
2	220 kV				
i	Transmission Lines (Ckt. Km)	6594	384.21	47.13	7025.34
ii	Bays (Nos.)	219	34	14	267
3	132 kV				
i	Transmission Lines (Ckt. Km)	9731	802.3	502.36	11035.7
ii	Bays (Nos.)	878	151	39	1068

- 4.10 The O&M Expenses on the basis of the norms as specified by the Commission in its regulations “MPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2005 for FY07, FY08 and FY09 shall be as follows:

Table-27: O&M Expenses as per approved norms (Rs. Crore)

Sl. No.	Asset	Year wise O&M Expenses		
		FY07	FY08	FY09
I	400 KV			
1	400kV Lines	2.19	2.33	2.46
2	400kV Bays	2.54	2.69	2.85
II	220 KV			
1	220kV Lines	7.49	7.94	8.42
2	220kV Bays	13.01	13.79	14.62
III	132 KV			
5	132kV Lines	11.77	12.47	13.32
6	132kV bays	49.10	52.04	55.17
Total		86.10	91.263	96.74

- 4.11 The Commission while fixing the norms had considered capitalisation rate at 33.14% for employee cost, 22% for A&G Cost and 12% for R&M Cost for FY05. These rates were based on the capitalisation rates for FY02, FY03 and FY04 submitted by MPSEB in its petition for FY06 and by MPPTCL for tariff petition for FY06. MPPTCL had provided reasons for not considering capitalisation rates at past values. The Commission in its order for FY06 has considered the reasons provided by MPPTCL and had considered capitalisation rate for these expenses at 10%. The Commission for the same reason considers capitalisation rate at 10%. The Commission in the regulations has provided for adding, varying, altering, modifying or amending any provision of the regulations. Accordingly, the O&M norms applicable are amended as given in the table below:

Table-28: Amended O&M Expenses norms (Rs. Lakh)

Sl. No.	Particulars	Year wise O&M Expenses		
		FY07	FY08	FY09
1	400 kV Level			
i	Per 100 Ckt Km or part thereof	10.29	10.90	11.56
ii	Per Bay	4.62	4.90	5.19
2	220 kV Level			
i	Per 100 Ckt Km or part thereof	11.57	12.27	13.00
ii	Per Bay	5.23	5.54	5.88
3	132 kV Level			
i	Per 100 Ckt Km or part thereof	11.57	12.27	13.00
ii	Per Bay	4.93	5.23	5.54

- 4.12 *The Licensee is directed to keep the cost incurred on Employees, Administration and General Expenses and Repair and Maintenance for construction works separately for inclusion in incidental expenses during construction (IEDC).*
- 4.13 The Commission on this account provides additional amount of Rs. 6.56 Crore for FY07, Rs. 6.95 Crore for FY08 and Rs. 7.37 Crore for FY09. The O&M amount allowed by the Commission is as given in the table below:

Table-29: Approved O&M (Rs. Crore)

Details	FY07	FY08	FY09
O&M	92.66	98.21	104.11

- 4.14 It may be pointed out that the Commission has allowed O&M cost based on the possible increase in physical quantities of assets of the Transmission Licensee in FY06 as given in **Table-26**. This increase in the physical numbers is based on the capital expenditure plan approved by the Commission and the physical progress likely to be achieved as stated by the Licensee. The Commission believes that this would incentivise MPPTCL to expand the network economically and efficiently. In view of the uncertainty in physical progress, the Commission will review the O&M cost in every year of the tariff period for the works actually completed subject to the capital expenditure getting approved in time as per the capital expenditure guidelines of the Commission. If the number of bays and Ckt. Km of lines commissioned are less than what has been envisaged in this order than the O&M Cost for FY07 shall be correspondingly reduced while reviewing the progress. However, if the progress achieved is more than the quantities considered in this order higher amount of O&M will be allowed. Since the allowable O&M cost is output driven it is in the interest of the Transmission Licensee to implement prudent project management practices and achieve the physical achievement projected by it otherwise it stands to lose on allowable expenses.

(b) Terminal benefits to be paid to retiring employees

- 4.15 The Transmission Licensee has claimed for contribution for funding of terminal benefit trust to be formed for the purpose for meeting the terminal liabilities of the pensioners. The amount claimed is for meeting current pension and other terminal benefits and for building up corpus for unfunded terminal liabilities. The amount claimed has been projected by the Corporate Planning Group of MPSEB for the five companies based on the Actuarial Report 140-02 B prepared by MPSEB in FY03. The date of transfer for this purpose has been treated as 1st April 2006.

- 4.16 The Transmission Licensee on the basis of above projections has claimed the following amounts for FY07, FY08 and FY09.

Table-30: Contribution towards Terminal Benefit Fund Projected by MPPTCL

Rs. Crore				
Sl. No.	Pension and Gratuity Contribution for	FY07	FY08	FY09
1	Pensioners Existing as on 31/03/2006	100.75	143.65	213.75
2	Pensioners to be added after 31/03/2006	10.00	10.00	10.00
	Total	110.75	153.65	223.75
3	Expected Additional 10% increase in DA	11.08	15.37	22.38
	Total requirement	121.83	169.02	246.13

- 4.17 The Licensee has also submitted the past data on actual terminal benefits disbursed by the Board during the period FY03 to FY05. The details are as given below:

Table-31: Terminal benefits paid by the Board as claimed by the Licensee

Rs. Crore				
Sl. No.	Details	FY03	FY04	FY05
1.	Gratuity	32.10	29.41	30.84
2.	Pension	94.03	87.71	89.56
3.	Annuity	1.04	0.90	1.00
4.	Leave Encashment	7.06	7.50	7.00
	Total	134.23	125.52	128.40

- 4.18 The Licensee has also provided details of the terminal benefits disbursed in FY06 during the period April 05 to December 05. According to the details provided the Transmission Licensee has during the referred period disbursed Rs. 114.89 Crore i.e. Rs. 12.75 Crore per month on behalf of all the Companies formed out of reorganisation of the Board. The Licensee has however not provided the breakup of the amount paid for various constituents of terminal liabilities. The Transmission Licensee considers leave encashment as a part of terminal liability as evident from their petition. The Commission in its order dated 7th February 2006 has clearly stated the reasons for not considering leave encashment as a part of terminal liability.

- 4.19 The Commission in its order for FY06 for transmission charges had recorded its unhappiness over inconsistency in the data reported by the Transmission Licensee and MPSEB. To recapitulate, the Board in its filing for FY06 had estimated the following figures.

Table-32: Terminal benefits paid by the Board as provided in it's filing of FY06

Sl. No.	Details	Rs. Crore			
		FY02	FY03	FY04	FY05 (Est.)
1.	Gratuity	20.46	22.48	22.86	34.29
2.	Pension	69.96	76.52	78.25	117.38
3.	Provident Fund Contr.	0.19	0.52	0.60	0.90
4.	Others	2.08	1.85	2.11	3.17
	Total	92.69	101.38	103.83	155.75

- 4.20 The Commission had further noted that the terminal benefits paid in FY04 and FY03 as per the printed Balance Sheet of the Board are Rs. 107.20 Crore and Rs. 104.81 Crore respectively. The figures filed by the Board for these years in its tariff petition were on the lower side.
- 4.21 The Transmission Licensee vide its letter dated 1st February 2006 submitted certain clarifications in this regard. As per this letter year wise provision and actual payment made for Terminal benefits by the Board during FY03 to FY05 is as given below:

Table-33: Year wise provision and actual payment made for Pension and Gratuity

Details	(Rs. Crore)		
	FY03	FY04	FY05
Provision	104.81	107.20	151.46
Actual Payment	126.13	117.12	120.40

- 4.22 The Commission observed that there were significant differences between the provisions and the actual payouts for terminal benefits for the past years even though at the time of preparations of the Balance Sheets for these years the actual payouts were known.

- 4.23 The Transfer scheme prescribes fulfilment of certain conditionalities for the operation of the pension scheme envisaged by GoMP. Apart from other conditions the major ones are the setting up of a trust for managing the fund and the transfer of the personnel of the Board to respective Companies. The Transmission Licensee in Annexure-XVI of its petition has made a reference to draft trust deed sent to the State Government and the modified trust deed sent by the State Government.
- 4.24 At the time of the issuance of this order, the trust deed had not been finalised and the personnel of the Board had not been transferred to respective Companies. The amount claimed for funding the trust are based on an old actuarial study, which needs to be updated based on the latest available data. Thus the provisions envisaged in the transfer scheme for funding unfunded liabilities towards pension and other terminal benefits are yet to be implemented. Presently MPPTCL is paying terminal benefits on behalf of the five companies formed out of reorganisation of MPSEB. The present arrangement is likely to continue for FY07 as well. For FY07, the Commission therefore determines the allowable terminal liability on the basis of existing practice. The Commission shall consider the actual expense incurred for funding the trust after it is operationalised while truing up in subsequent orders. The Generating Company in its petition for the period FY07 to FY09 had claimed expenses for earned leave encashment payable to employees at the time of retirement as terminal benefits. The Commission while fixing O&M norms has taken into consideration earned leave encashment paid to employees, as a part of employee cost and therefore no additional claim for this expense is admissible. The Commission in its order dated 7th February 2006 for MPPTCL has clarified that payments of earned leave encashment are not a part of terminal liabilities and these claims have to be met by the respective companies through their O&M expenses allowed. *The Commission directs that MPPTCL shall exclude any payment made either towards leave encashment or for funding this liability while projecting terminal benefits for the ensuing year.*
- 4.25 The Commission allowed 6% rise over the amount of Rs.120.40 Crore actually paid in FY05. Thus, the Commission allowed Rs.127.40 Crore for payment of terminal benefits during FY06. MPPTCL vide its letter dated 8th March 2006 has provided details of the amount paid to retired employees for pension and gratuity. MPPTCL as per the details provided has paid Rs. 111.79 Crore for the period June 2005 to February 2006 for pension and gratuity i.e. Rs. 12.42 Crore per month on an average. For FY07 and onwards a 6% rise is allowed each year over the average monthly payment done in FY06. Year wise expenditure towards the Pension and Gratuity allowed by the Commission for all five companies formed out of the reorganization of the Board is given in the table below:

Table-34: Terminal Benefit as approved (Rs. Crore)

Year	FY07	FY08	FY09
Terminal benefit	160.00	167.48	177.52

- 4.26 The Commission expects that the respective company will take care of the payments to retiring employees as envisaged in the notification dated 13th June 2005 of GoMP after transfer of the employees from FY08 and hence no additional provision (other than normal increase at 6%) is provided under this head for the Transmission Licensee. The provision in this regard as contained in the notification is reproduced below:

“(10) In regard to funding of the pension fund and other personnel related funds by the transferees to the extent they are not funded on the date of the transfer of the personnel from the Board including the due payment of the amounts to personnel who retire after the date of the transfer, by the respective transferees to which these personnel are transferred following arrangements, but not limited to them shall be made and till such time such payment shall be made by the Board:-

(a) All the personnel of the Board who retire after the date of the transfer shall be the pensioners of the respective transferees to which these personnel are transferred and they shall be paid the pension and other terminal benefits regularly by the respective transferees.-----

(b) A separate fund shall be created by the transferees for payment of pension and other terminal benefits of the personnel who retire after the date of the transfer through regular subscription of appropriate amount in to a Terminal Benefit Trust being created by the State Government.

(c) The amount of pension and other terminal benefits payable each year as well as subscription to the fund to be built-up for payment of pension and other benefits in future, to the personnel of the Board, who retire after the date of transfer, shall be a charge on the revenues of the respective transferee, till the requisite fund is built-up with the Terminal Benefit Trust.”

(c) Taxes & Duties and others

- 4.27 The Transmission Licensee has claimed expenses for taxes & duties, fee payable to MPERC and service charges to MPSEB. The Transmission Licensee has claimed Rs. 7.01 Crore, Rs. 7.67 Crore and Rs. 8.26 Crore for these expenses for FY07, FY08 and FY09.
- 4.28 MPPTCL has computed taxes & duties considering the possible increase in the number of substations from FY05 level, when this liability on this account was Rs.0.43 Crore. The projection done by the Transmission Licensee is acceptable. The projected amount is therefore allowed. However the Transmission Licensee shall bill the Long-term beneficiaries every month for the actual amount of taxes and duties paid by it for that month. Any difference in the tax actually paid and that billed to the Long-term beneficiaries shall be adjusted in the subsequent bill.

4.29 Fee payable to MPERC has been calculated in accordance with MPERC (Fees, Fines and Charges) Regulations 2005. According to these Regulations the Transmission Licensee is required to pay Rs. 300 per MU of energy input in the EHT transmission system. The Transmission Licensee has submitted that it is likely to transmit 31603 MU, 33186 MU and 34763 MU in FY07, FY08 and FY09 respectively. The fee payable to MPERC as projected by the Transmission Licensee is therefore acceptable.

4.30 The Transmission Licensee in its petition has provided for charges to be paid for services provided by MPSEB on behalf of MPPTCL. This provision has been done in accordance with the instructions of Secretary MPSEB, a copy of which has been annexed with the petition. The said letter refers to the provisions of Inter-se Agreements executed amongst the MPSEB and its successor companies after reorganisation of the Board, wherein it is stated that successor companies will pay 1% of their respective ARR to MPSEB. This charge is to be paid by successor companies for common services rendered by MPSEB. The Transmission Licensee has included this expense at 1% of the ARR excluding the contribution for past unfunded liabilities towards building up the pension fund. The Transmission Licensee has proposed following amount towards this expense:

FY07 -	Rs. 5.58 Crore
FY08 -	Rs. 5.94 Crore
FY09 -	Rs. 6.24 Crore

4.31 This item of expense is not in accordance with the applicable regulation and hence cannot be accepted. The expenses claimed by MPSEB have no basis because MPSEB, which is a Trading Licensee, cannot claim expenses without approval from the Commission. MPSEB can approach the Commission for fixation of trading margin for its trading business. The Commission shall fix trading margin when MPSEB approaches it. MPPTCL is directed not to entertain any such claim of MPSEB without the prior approval of the Commission.

(d) Depreciation

4.32 The Transmission Licensee for FY07, FY08 and FY09 has claimed depreciation on the opening gross block of the relevant years. The details are as provided in the table below:

Table-35: Details of Gross Fixed Assets, Depreciation and Net Fixed Assets

(Rs. Crore)

Year	Gross Fixed Assets			Depreciation			Net Fixed Asset		
	At Beginning of Year	Added During Year	At the End of Year	At Beginning of Year	Added During Year	At the End of Year	At Beginning of Year	Added During Year	At the End of Year
FY06	2407.00	621.00	3028.00	1076.00	79.22	1155.22	1331.00	541.78	1872.78
FY07	3028.00	501.85	3529.85	1155.22	97.89	1253.11	1872.78	403.96	2276.74
FY08	3529.85	787.00	4316.85	1253.11	113.97	1367.08	2276.74	673.03	2949.77
FY09	4316.85	404.05	4720.90	1367.08	139.34	1506.42	2949.77	264.71	3214.48

- 4.33 MPPGCL in its supplementary submission dated 18th February 2006 has requested the Commission to provide depreciation as per clause 2.23 of MPERC (Terms and Conditions of Transmission Tariff) Regulations 2005. This clause provides for depreciation even if the asset has been in use for part of the year. Depreciation in the petition has been computed as per ESSAR 1985, which provides that the depreciation on a newly commissioned asset shall commence in the year immediately following the year of Commissioning. MPPTCL in addition to the depreciation on opening gross block of the year has also claimed depreciation on assets added during the year as per clause 2.23 of MPERC (Terms and Conditions of Transmission Tariff) Regulations 2005. The assets added during the year have been assumed to be in operations for six months i.e. these assets have been assumed to be added at midyear of the relevant tariff year. MPPTCL has accordingly revised the depreciation claim made in the tariff year. The original and the revised claims are given in the table below:

Table-36: Depreciation as per original and revised claim (Rs. Crore)

Sl. No.	Year	Claim as per petition	Revised Claim
1.	FY07	97.89	105.93
2.	FY08	113.97	126.66
3.	FY09	139.34	45.88

- 4.34 The Commission in its order for FY06 for the Transmission Licensee had allowed depreciation of Rs. 74.85 Crore on gross block of fixed assets of Rs. 2407 Crore. The depreciation had been computed on the opening gross block notified by GoMP as on 1st June 2005 in the transfer scheme at rates specified by CERC. MPPTCL had not claimed any addition of fixed assets to the notified gross block for calculation of depreciation since it had followed the provisions of ESSAR 1985. The Licensee had however submitted that the gross block notified by GoMP is provisional and may change depending upon the finalization of the notified gross block by GoMP. The Commission will consider any change in the notified balances as and when the GoMP notifies the final balance sheet or when the audited balance sheet as on 1.6.2005 is made available.

- 4.35 The Capital expenditure plan considered by MPPTCL for the tariff period as discussed in earlier paragraphs is not backed up by the funding plan. The Transmission Licensee has quoted different capitalisation figures at different times. The details of the assets proposed to be capitalized has not been provided in support of the contention.
- 4.36 The Commission for determining allowable depreciation has gone by the funding that is available. The Capital expenditure considered for FY07, FY08 and FY09 is given in the table below:

Table-37: Capital Expenditure for relevant years (Rs. Crore)

Sl. No.	Source	FY06	FY07	FY08	FY09
1.	PFC	150	150	150	150
2.	ADB	60	130	0	0
3.	REC	0	95	19.82	0
4.	State Govt. Loan	0	100	0	0
5.	Equity	25.59	38.39	0	0
	Total	235.59	513.39	169.82	150

- 4.37 The Commission has split the capital expenditure determined above into completed and ongoing projects on the basis of interest capitalized by the Transmission Licensee in its petition. Information of the schemes proposed to be capitalized has not been provided. In the notified balance sheet, capital WIP is indicated as Rs. 847 Crore. The Licensee had claimed of Rs. 621 Crore in FY06. Considering capitalisation of Rs. 621 Crore out of the opening capital WIP, the balance amount of Rs. 226 Crore is considered by the Commission as capitalised in FY07. As proposed by the Transmission Licensee in the revised submission made on 07/03/2006, capital works done in FY06 have been considered to be commissioned during FY07. The following table will illustrate the capitalisation during the tariff period upto FY09 on fresh loans proposed by the Transmission Licensee.

Table-38: Capital Expenditure incurred based on loans drawn as per the licensee's submission (Rs. Crore.)

Sl. No.	Source	FY06	FY07	FY08	FY09	Total
1.	PFC	150	150	150	150	600
2.	ADB	60	130	0	0	190
3.	REC	0	95	19.82	0	114.82
4.	State Govt. Loan	0	100	0	0	100
	Sub-Total	210	475	169.82	150	1004.82
5.	Equity	25.59	38.39	0	0	63.98
	Total	235.59	513.39	169.82	150	1068.80
6.	Capitalised value	0	230.48	237.95	234.45	702.88
7.	Capital WIP	235.59	282.91	(68.13)	(84.45)	365.92

- 4.38 Along with the opening capital WIP of the notified balance sheet, year wise capitalisation provisionally considered by the Commission is given below:

Table-39: Year wise capitalisation provisionally considered by the Commission (Rs. Crore)

Sl. No.	Details	FY06	FY07	FY08	FY09
1.	CWIP as on 1.6.2005	621.00	226.00		
2	Capex done in FY06		230.48		
3	Capex done in FY07			237.95	
4	Capex done in FY08				234.45
	Total	621.00	456.48	237.95	234.45

- 4.39 The year wise provisional gross block considered for depreciation is provided in the table below:

Table-40: Provisional Gross Block for the relevant years (Rs. Cr.)

Year	Gross Block at Beginning of Year	Added During Year	Gross Block at the End of Year
FY06	2407	621	3028
FY07	3028	456	3484
FY08	3484	238	3722
FY09	3722	234	3956

4.40 The depreciation amount allowable for three years of the control period has been determined by allocating the gross block in proportion to the opening gross block considered by the Transmission Licensee. The depreciation on assets added during the year has been allowed for six months only. The Transmission Licensee has computed the depreciation on the opening gross block of the year at rates specified by the Commission. This is an incorrect method for computation as depreciation has been considered on some of the assets that constitute the gross block and have depreciated to 90% of the historical values. The better method is considering the asset capitalisation year wise and the applicable rates. No computation of depreciation should be done on assets when it reaches 90% of value. This could have been done using a simple excel sheet. This exercise was done by MPPGCL while claiming depreciation for the period FY07 to FY09. However in the absence of year wise addition of assets the Commission has recomputed the allowable depreciation considering the asset capitalisation described above based on opening balance and allowing for six months of depreciation on the asset added during the year. The depreciation has been provisionally allowed at rates prescribed by the Commission. The Commission shall firm up the depreciation allowed in subsequent tariff orders based on actual capital addition as per the audited balance sheets. *The Commission directs that in its future tariff petition the Transmission Licensee shall compute the depreciation on the basis of year wise addition of the assets as per the categories (as per depreciation rates) defined in the regulations ensuring that no depreciation is claimed on assets which depreciate to 90% of the historical cost.*

Table-41: Account Head wise depreciation provisionally allowed

A/c Code	Particulars	Depreciation Rate	Amount in Rs. Crore		
			FY07	FY08	FY09
10.1	Land & Land rights	0.38%	0.01	0.01	0.01
10.2	Building & Civil works	1.80%	0.73	0.94	1.08
10.5	Plant & Machinery	3.60%	51.72	57.21	60.90
10.6	Lines & Cables	2.57%	44.73	49.33	52.53
10.5	Communication Equipment*	0%	0	0	0
10.5	Meters	6%	0.12	0.26	0.29
10.7	Vehicles	18%	0.62	0.70	0.87
10.8	Furniture & Fixtures	6%	1.81	1.85	1.88
10.9	Office Equipments				
	Total		99.74	110.31	117.56

- In the absence of details it has been included in Plant & Machinery

4.41 *The Commission had given the following directions with regard to the maintenance of MPPTCL asset records in the Transmission Tariff Order for FY06. These directions are to be complied with for FY07 as well:*

4.41.1 *The Licensee is directed to update its fixed asset registers in accordance with the requirement of the accounting principles applicable to Companies registered under Companies Act and further it should codify all its assets. The Licensee shall submit its report in this regard within three months of this order. The Codification of assets shall be completed by October 2006 and failure to comply with this direction may result in non-allowance of depreciation for FY08.*

4.41.2 *The Licensee shall confirm that no depreciation has been charged on any asset, which has depreciated to 90% of its historical cost. The confirmation shall be provided within three months of this order.*

4.41.3 *The Licensee shall submit work completion report for all schemes/assets that are added during the year for which the licensee wishes to claim depreciation. The licensee shall state the date on which the Commission’s approval was granted for carrying out the work.*

(e) Interest and Finance Charges

4.42 The transmission Licensee for FY07, FY08 and FY09 has claimed interest charges as given in the tables below:

Table-42: Interest Claimed for FY07 (Rs. Cr.)

Sl. No.	Source	FY07		
		Total Interest	Capitalised	Chargeable to revenue
1.	PFC	43.82	13.50	30.32
2.	ADB	35.49	8.47	27.02
3.	SADA	0.48	0.00	0.48
4.	MPSEB	90.18	0.00	90.18
5.	REC	4.75	4.25	0.50
6.	State Govt.	5.00	5.00	0.00
	Total	179.72	31.22	148.50

Table-43: Interest Claimed for FY08 (Rs. Cr.)

Sl. No.	Source	FY08		
		Total Interest	Capitalised	Chargeable to revenue
1.	PFC	53.09	20.25	32.84
2.	ADB	35.36	0.00	35.36
3.	SADA	0.24	0.00	0.24
4.	MPSEB	80.16	0.00	80.16
5.	REC	9.18	6.12	3.06
6.	State Govt.	5.00	3.50	1.50
	Total	183.03	29.87	153.16

Table-44: Interest Claimed for FY09 (Rs. Cr.)

Sl. No.	Source	FY09		
		Total Interest	Capitalised	Chargeable to revenue
1.	PFC	62.28	20.25	42.03
2.	ADB	34.78	0.00	34.78
3.	SADA	0.00	0.00	0.00
4.	MPSEB	70.14	0.00	70.14
5.	REC	9.09	2.97	6.12
6.	State Govt.	4.50	1.00	3.50
	Total	180.79	24.22	156.57

PFC

- 4.43 The PFC loan as per the notified balance sheet is Rs. 321 Crore. MPPTCL expects Rs. 150 Crore of loan from PFC in each of the financial years 06 to 09. The total amount of loan thus expected to be received during the period is Rs. 600 Crore. All schemes funded out of the loan amount of Rs.321 Crore as on the date of notification are stated by the Transmission Licensee to be completed by the end of FY06. As per the submission of the Transmission Licensee none of the schemes funded by the loan amount of Rs. 150 Crore drawn during FY06 are expected to be complete during FY06 and these schemes are likely to be commissioned during FY07 only. Similarly, none of the schemes funded out of the loan drawn during FY07 is likely to be completed during the years FY07 and FY08. 50% of the schemes funded by this loan are expected to be completed by FY09 and only 50% of the schemes funded out of the loan of Rs. 150 Crore drawn in FY08 are expected to be complete in FY09 and none of the schemes funded by the loan of Rs. 150 Crore drawn in FY09 are expected to be complete in FY09. The Transmission Licensee has accordingly allocated interest for these years between revenue and capital WIP. The Transmission Licensee has not provided the details of the schemes to be funded from these loans. As per the details provided in earlier paragraphs the schemes that were funded by the loan drawn during FY06 are likely to be commissioned during FY07. Assuming that the asset *gets* commissioned during mid year (same has been assumed for computing depreciation) only Rs. 3.38 Crore is being considered as amount chargeable to revenue account for this loan and the balance amount is being capitalised. Therefore for FY07, Rs. 16.87 Crore has been considered as capitalised. *The Commission directs the Transmission Licensee to provide details of all the schemes to be funded from the loans considered for the computation of interest cost and if these details are not provided the interest claimed for all such loans will be disallowed when review is taken up for FY08.*

ADB

- 4.44 The schemes funded out of the ADB loan amount existing as on the date of notification amounting to Rs. 195 Crore have been stated to be complete. The Licensee expects to receive further Rs. 60 Crore in FY06 and Rs. 130 Crore in FY07 from ADB. The works funded from the loan considered during FY06 are expected to be complete in FY07 and FY08. Similarly out of the loan of Rs. 130 Crore expected in FY07, 40% of the works are expected to be complete in FY07 and 60% in FY08. Accordingly interests on these loans for these years are allocated between revenue and capital WIP.

SADA

- 4.45 This loan was availed from SADA Gwalior for commissioning of 132 KV sub-station and allied works at Tighra (Gwalior). The substation has already been complied. The interest liability computed by the Transmission Licensee is therefore allowed.

REC

4.46 The Transmission Licensee expects to receive s 95 Crore in FY07 and a further loan of Rs. 19.82 Crore in FY08.. The Transmission Licensee has indicated that works funded out of these loans shall get completed in the following manner:

- FY07: Rs. 9.5 Crore
- FY08: Rs. 24.95 Crore
- FY09: Rs. 34.44 Crore

Accordingly, interest has been allocated between revenue and capital WIP.

State Government Loan

4.47 In addition to ADB loans routed through the State Government another amount of Rs.100 Crore has been anticipated by the Licensee on the basis of internal discussions. Out of this loan, the Transmission Licensee has indicated that works amounting to Rs. 30 Crore will be capitalised in FY08 and Rs. 50 Crore in FY09. Accordingly interest has been allocated between revenue and capital WIP. The implications of this loan shall be included as and when the picture is clear.

MPSEB Loan

4.48 Only prudently incurred cost can be allowed to be recovered through tariffs. MPPTCL has failed to establish the purpose for which loan from MPSEB has been availed. In the absence of details the Commission cannot accept that these loans have been contracted primarily for the purpose of meeting working capital requirement. The Commission decides this to allocate the loan between work in progress and working capital requirement as given in the table below:

Table-45: Split of MPSEB loan between CWIP and Working Capital (Rs. Cr.)

Sl. No.	Details	FY07	FY08	FY09
1	Opening Gross Block	3028	3484	3722
2.	Maximum Equity that can be allocated (30% of 1)	908	1045	1117
3.	Equity actually invested at the beginning of the year	845	909	909
4.	CWIP (Opening Balance)	462	519	450
5.	Loans for On-going works	210	519	450
6	Additional Equity	25.59	0	0
7.	MPSEB Loan	751.5	668.0	584.5
	MPSEB Loan utilized for WC	525.5	668.0	584.5

- 4.49 The interest portion on MPSEB loan allocated to CWIP shall be capitalised and the remaining amount shall be considered as working capital loan. The above allocation has been done using the principle followed in the order issued by the Commission for FY06 on 7th February 2006. The net interest allowed for the tariff period is given in the table below

Table-46: Net interest allowed for the tariff period (Rs. Cr.)

Sl. No.	Details	FY07	FY08	FY09
1	PFC	26.94	32.84	42.03
2.	ADB	27.02	35.36	34.78
3.	SADA	0.48	0.24	0.0
4.	MPSEB	0.00	0.00	0.00
5.	REC	0.50	3.06	6.12
6.	State Govt	0.00	0.00	0.00
	Total	54.94	71.50	82.93

- 4.50 The transmission Licensee has claimed Advance Against Depreciation for principal repayment exceeding the available depreciation. The advance against depreciation is available to meet the repayment liability of long term loans availed for funding the capital cost of the project. There is no provision for providing advance against depreciation for loans contracted for meeting working capital requirements. The Commission has considered loan from MPSEB as working capital loan for reasons stated in earlier paragraphs of this order. Hence on excluding the repayment liability for this loan as claimed by the Transmission Licensee, the depreciation amount allowed by the Commission is sufficient to meet the repayment liability of project specific long term Loans. The claim for Advance Against Depreciation is therefore not being admitted.

(f) Interest on working capital

- 4.51 MPPTCL has claimed the interest on working capital on the norms prescribed in the regulations.
- O&M Expense of 1 month
 - Maintenance spares @ 1% of historical cost
 - Receivable of 2 month of transmission charges
- 4.52 The interest rate for the purpose of computation of working capital has been considered as 11%. The Transmission licensee for FY07, FY08 and FY09 has computed the following working capital requirement.

Table-47: Working Capital and Interest claimed by the Licensee for the tariff period (Rs. Cr.)

Sl. No.	Details	FY07	FY08	FY09
1	Working Capital required	154.58	173.77	201.33
2.	Interest on working capital	17.0	19.11	22.15

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

Table-48: Working Capital Requirement and interest determined by the Commission (Rs. Crore)

Sl. No.	Details	FY07	FY08	FY09
1.	O&M (1 month)	7.72	8.18	8.68
2.	Maintenance spares (1% of HC)	30.28	34.84	37.22
3.	Receivables (2 months)	91.01	98.74	104.72
	Total	124.01	141.77	150.62
	Interest on WC (@11.25%)	14.51	15.95	16.95

- 4.54 The Commission has allocated MPSEB loan towards working capital requirement and it is much in excess of the normative requirement as computed by the Commission in the above table. The interest on average MPSEB loan allocated during the year for meeting working capital requirement is being allowed. The average has been worked out of the opening and the closing balance of the allocated MPSEB loan of the relevant year for working capital requirement. The allowed interest is being given in the table below:

Table-49: Working Capital allowed for the tariff period (Rs. Cr.)

Sl. No.	Details	FY07	FY08	FY09
1	Average MPSEB loan allocated towards Working Capital required	596.8	626.3	542.8
2.	Interest on Working Capital	67.13	70.45	61.06

(g) Return on Equity & Tax

- 4.55 The Licensee is being provided 14% return on equity employed in assets that have been commissioned. The return allowed on equity for the respective years is given in the table below:

Table-50: Return on equity (Rs. Crore)

Sl. No.	Details	FY07	FY08	FY09
1	Opening Gross Block	3028	3484	3722
2.	Maximum Equity that can be allocated (30% of 1)	908	1045	1117
3.	Equity considered as invested at the beginning of the year	845	909	909
4.	Equity employed during the year*	877	909	909
	Return on Equity allowed	122.78	127.26	127.26

* Asset funded out of Rs. 63.98 Crore has been assumed to be commissioned

- 4.56 The Transmission Licensee in its supplementary submission has recalculated its income tax liability by grossing the post tax return on equity, which it had omitted in its petition. The tax liability now expected for FY07, FY08 and FY09 are Rs. 55.34 Crore, Rs. 64.08 Crore and Rs. 65.42 Crore. The Commission has recomputed the tax liability based on the rates applicable for the assessment year FY07. The applicable rates are 30% plus 10% surcharge and 2% education Cess. The tax liability at the applicable rates is Rs. 62.30 Crore for FY07 and Rs. 64.57 Crore FY08 and FY09 respectively. However the tax liability is dependent on the other expenses and will be known when the accounts are finalised. Hence the Transmission Licensee shall bill the Long-term beneficiaries of its system for tax liability to be incurred by it subject to the maximum of Rs. 62.30 Crore for FY07 and Rs. 64.57 Crore FY08 and FY09 respectively. The amount billed is a pass through item and shall be payable by long term beneficiaries monthly subject to truing up at the end of the financial year.

(h) Non-Tariff Income

- 4.57 The Transmission Licensee has not projected any income under this head for all the three years of the tariff period. The Commission is therefore not considering any income under this head. However if an income accrues under this head MPPTCL shall reduce the allowable Annual Transmission Charges (TSC) by this amount. The charges to be paid by the long term beneficiaries shall be reduced accordingly.

(i) Incentives and Penalties

4.58 The Transmission Licensee shall be entitled to receive incentive on achieving weighted annual availability beyond the target availability as per the regulations.

(j) Annual Transmission Charges

4.59 The annual transmission charges allowed for FY07, FY08 and FY09 are as per the details given in the table below:

Table-51: Annual Transmission Charges (Rs. Crore)

Sl. No.	Details	FY07	FY08	FY09
1.	O&M	92.66	98.21	104.11
2.	Depreciation	99.74	110.31	117.56
3.	Interest on Loans	54.94	71.50	82.93
4.	Interest on working capital	67.13	70.45	61.06
5.	Return on Equity	122.78	127.26	127.26
6.	Provision for terminal liabilities	160	167.48	177.52
7.	Taxes and fee paid to MPERC	1.43	1.73	2.02
	Total	598.69	646.95	672.45

(k) Charges to be paid by long term and Short term beneficiaries

4.60 The long term beneficiaries of the Transmission Licensee shall be required to pay charges as given in the table below:

4.61 The short term users is required to pay 25% of the charges payable by the long term users and shall pay the charges computed for different period of supply availed as given in the table below:

Table-52: Transmission Charges

Sl. No.	Details	FY07	FY08	FY09
1.	Allowed Transmission Charges (Rs. Crore)	598.69	646.95	672.45
2.	Transmission System Capacity (MW)	6011.00	7220.00	8170.00
3.	Transmission Charges to be paid by long term beneficiaries per MW per annum(1/2)(Rs.Lakh)	9.96	8.96	8.23
4.	Transmission Charges to be paid by long term beneficiaries per MW per day (Rs.)	2728.73	2454.93	2254.99
5.	Short term beneficiaries (0.25* (4)) (Rs./MW/Day)	682.18	613.73	563.75
(a)	Upto 6 hours in one block (0.25* (5))(Rs./MW/)	170.55	153.43	140.94
(b)	More than 6 hours and upto 12 hours in one block (0.5*(5)) (Rs./MW)	341.09	306.87	281.87
(c)	More than 12 hours and upto 24 hours (5) (Rs/MW)	682.18	613.73	563.75

(I) Charges to be paid by non-conventional Power producers

4.62 The Commission in its tariff order dated 7th February 2006 had determined the transmission charges payable by non-conventional energy generators in MU terms. Per unit charges as per this order for a wind generator would be as given in the table below:

Table-53: Transmission Charges payable by a wind generator

Sl. No.	Details	FY07	FY08	FY09
1.	10 MW wind generator gets an allocation of 10 MW of transmission capacity	10 MW	10 MW	10 MW
2.	Annual Transmission Charges payable for 10 MW of allocated transmission capacity (Rs. Lakh)	100.16	89.81	82.74
3.	Energy sent out at 22.5 CUF (after considering auxiliary consumption) MU	19.71	19.71	19.71
4.	Transmission Charges payable per unit	0.51	0.45	0.42

- 4.63 As per the Government of MP notification the non-conventional energy generators are required to bear 2% of the energy transmitted as transmission losses while the Government will reimburse the Licensees the cost of 4% loss. The transmission charges determined in previous paragraph is being allocated between the generators and the Government in the same ratio as 1:2. The charge which the generator will pay and the State Government will reimburse as per this ratio is as given in the table below. The payments need to be made by the generator and the Government only when the generating unit is connected to 132 KV and above voltage levels. For generating unit connected to the grid at voltage level lower than 132 KV/6 6 KV, the Commission shall determine the wheeling charges while determining the retail tariff.

Table-54: Transmission Charges to be shared between generator and Govt.

Sl. No.	Details	FY07	FY08	FY09
1.	Non-conventional energy generator Rs./U)	0.17	0.15	0.14
2.	State Government to reimburse (Rs. /U)	0.34	0.30	0.28

(m) Penalty for over utilization of allocated capacity

- 4.64 The Commission has already commented on this issue in the previous order and would like this issue to be addressed the state grid code.

(n) Reactive Energy Charges

- 4.65 The Commission shall take a view on this matter while finalising its balancing and settlement code for applicability of intra-State ABT.

(o) Parallel Operation Charges

- 4.66 The Commission has already commented upon this charge in its order dated 7th February 2006 and there is no change in the stand of the Commission.

(p) Grid Support charges

- 4.67 The Commission has commented upon the proposed charge in its previous order. No new facts have been presented which warrants a change in the opinion of the Commission.

(q) Penalty for causing excessive trippings on 33 KV & 11 KV feeders emanating from EHV Sub-station

4.68 Suitable directions in this regard have already been issued in the previous order. The Transmission Licensee is advised to comply with those directions for the addressal of its genuine grievance.

(r) Directions for compliance

4.69 National Electricity Policy stipulates that

“The national tariff framework implemented should be sensitive to distance, direction and related to quantum of power flow. This would be developed by CERC taking into consideration the advice of CEA. Such tariff mechanism should be implemented by 1st April 2006. After implementation of proposed framework for inter-State transmission, a similar approach should be implemented by SERCs in next two years for intra-State transmission, duly considering the factors like voltage, distance, direction and quantum of flow.”

In view of the foregoing, the Commission directs the Transmission Licensee to prepare a discussion paper conforming to the provisions of National Tariff Policy on the Transmission pricing considering the voltage, distance, direction and quantum of power flow and submit the same to the Commission by 30/06/2006,

4.70 *The Commission also directs the Transmission Licensee to file a consolidated and comprehensive report on the compliance of various directions given in Commission’s Transmission Tariff Order for FY06 and included in this order by 30/06/2006.*

4.71 *The Commission in various paragraphs has indicated the discrepancies in the information supplied and has also expressed its unhappiness at the inadequacy of the data filed in the petition. The Transmission Licensee is directed that from the next filing onwards it should submit a self explanatory working model in excel sheets wherein all calculations and assumptions are clearly indicated and is backed up relevant records. The practise of punching hard numbers for ensuing years must be done away.*

CHAPTER 5

SECTION – A

Status of Compliance of directives given by the Commission

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

Directive: Maintenance of Asset registers.

- 5.1.1 The Commission had directed Board / MPPTCL to prepare a time bound action plan for finalizing its asset records and submit the same to the Commission. The Transmission Licensee submitted the records of its assets to the Commission. The Commission in its Transmission Tariff order for FY06 directed the Transmission Licensee that the asset shall have to be matched with the capital expenditure plan.
- 5.1.2 **MPPTCL Compliance Reported:** MPPTCL has not submitted any report to the Commission in this regard.
- 5.1.3 **Commission's Observation:** The Commission has directed that MPPTCL shall submit the detailed report on progress of the implementation of capital expenditure plan matched with the assets created as part of the capital expenditure plan to be submitted on 31st July every year.

Directive: Data based management and management information system

- 5.1.4 In the Transmission Tariff Order for FY06 the Commission had directed that MPPTCL should build up a database comprising the technical, operational and financial information / data. MPPTCL should prepare a time bound programme / action plan and apprise the Commission on the implementation of the action plan. This task should be completed by 30/09/2006.
- 5.1.5 **MPPTCL Compliance Reported:** MPPTCL has not submitted any action plan in this regard.
- 5.1.6 **Commission's Observation:** The Commission has reiterated in this order that MPPTCL should build up a strong database of technical, operational and financial information /data. A time bound programme should be prepared and appraised to the Commission by 30/04/2006 so that the task could be completed by 30/09/2006.

Directive: Man Power planning.

- 5.1.7 The Commission in its past Tariff Orders had directed the Board and Transmission Licensee to undertake a work-study and redesign the workforce according to manpower output norms. The Commission noted in its order for FY06 that the Licensee had not proposed to conduct any study for redesigning its work force according to the manpower output norms. Hence, the Commission once again directed the Licensee to undertake a work study so as to redesign its manpower for better results.
- 5.1.8 **MPPTCL Compliance Reported:** MPPTCL has not proposed to conduct any study for redesigning its work force according to the manpower output norms in its present Petition.
- 5.1.9 **Commission's Observation:** The Commission feels that the redeployment of the workforce is certainly a better option. The Commission has considered O&M expenses on a normative basis for FY07 and onwards.

Directive: Project wise details of the Loans.

- 5.1.10 In the past Tariff Orders the Commission had directed the Board to submit all the loans categorised into project related and working capital related.
- 5.1.11 **MPPTCL Compliance Reported:** MPPTCL has submitted the details of the loan liability parked with MPPTCL as given in the balance sheet given by the State Govt.
- 5.1.12 **Commission's Observations:** The Commission has observed that MPPTCL has given details of the project specific loans only. In the absence of full information, the Commission had to draw its own inference.

- 5.2 In the Transmission Tariff Order for FY06 the Commission had given certain directions to the Transmission Licensee. The Transmission Licensee has not submitted any report on the compliance of those directives. The Commission understands that due to paucity of time after the issue of the Transmission tariff order for FY06 the Transmission Licensee could not able to file the report. In the following paragraphs the directives given in the Transmission Tariff Order for FY06 have been reproduced. Some of the directives given in FY06 are also included in the present order at appropriate places. The Commission directs the Transmission Licensee to comply with all the directives given in the Transmission Tariff order for FY06 and also in the present Transmission Tariff Order for FY07 to FY09.
- 5.2.1 The Transmission licensee is directed to enter into proper agreement with the long-term users for the determined transmission system capacity.
(Paragraph 3.10 Transmission Tariff Order FY06)
- 5.2.2 The Distribution Licensees are directed to urgently take steps to finalise their long-term transmission capacity agreement with the Transmission Licensee failing which the Distribution Licensees will have to face the difficulty of being left high and dry without any long-term agreement. They may also be not in position to recover the transmission expenses unless they have a proper agreement with the Transmission Licensee. Compliance of this direction must be reported to the Commission well before the finalisation of Tariff determination exercise for retail tariff for FY07 to FY09.
(Paragraph 3.12 Transmission Tariff Order FY06)
- 5.2.3 The Commission in this order once again directs the Transmission Licensee to implement the ABT regime in the State as per the programme given in the Policy i.e. by 01/04/2006 and report compliance to the Commission. Any delay in implementing intra-State ABT shall result in the Transmission Licensee being deprived of a substantial part of its transmission charges as may be determined by the Commission. The progress will be reviewed in April 06.
(Paragraph 3.29 Transmission Tariff Order FY06)
- 5.2.4 Valuable information with regard to the voltage variation at different places has been provided by the Licensee in the Tariff petition at format P-4. It shows that at some stations the extent of variation over and above prescribed limits has been more than 50% of time in FY05. The Licensee is directed to report the action taken in this regard.
(Paragraph 3.34 Transmission Tariff Order FY06)
- 5.2.5 The Transmission Licensee should file the details of its Capital Expenditure as per the Commission's guidelines issued in this regard for the approval of the Commission for the next year as per the time table envisaged in the guidelines i.e. by 31st July 2006. Details of Transmission lines where capital expenditure is proposed to be incurred should be submitted by MPPTCL within three months of this order i.e. by 07/06/2006.
(Paragraph 3.37 Transmission Tariff Order FY06)

- 5.2.6 The Licensee is directed to provide the actual amount capitalised for FY06 for truing up in the next order. The Licensee in future must accurately capture all costs incurred on capital works and should separately account for it.
(Paragraph 4.18 Transmission Tariff Order FY06)
- 5.2.7 The Transmission Licensee is directed to properly account for A&G expenses incurred by it on capital works. In future, the Commission may disallow the capitalisation amount claimed by the Transmission Licensee if required details are not provided.
(Paragraph 4.34 Transmission Tariff Order FY06)
- 5.2.8 The Licensee is directed to update its fixed asset registers in accordance with the requirement of the accounting principles applicable to Companies registered under Companies Act and further it should codify all its assets. The Licensee shall submit its report in this regard within three months of this order. The Codification of assets shall be completed by October 2006 and failure to comply with this direction may result in non-allowance of depreciation for FY08.
(Paragraph 4.46 Transmission Tariff Order FY06)
- 5.2.9 The Licensee shall confirm that no depreciation has been charged on any asset, which has depreciated to 90% of its historical cost. The confirmation shall be provided within three months of this order.
(Paragraph 4.47 Transmission Tariff Order FY06)
- 5.2.10 The Licensee shall submit work completion report for all schemes/assets that are added during the year for which the licensee wishes to claim depreciation. The licensee shall state the date on which the Commission's approval was granted for carrying out the work.
(Paragraph 4.48 Transmission Tariff Order FY06)
- 5.2.11 The Licensee is directed to provide details of the schemes funded by ADB loan and explain how it managed to do the works of more than double the value of loan. These schemes must be linked to various phases to loan received from ADB.
(Paragraph 4.54 Transmission Tariff Order FY06)
- 5.2.12 The Licensee is directed that in future it shall keep accurate details of utilisation of all sources of funds for the purpose of creation of fixed assets and meeting working capital requirement.
(Paragraph 4.70 Transmission Tariff Order FY06)
- 5.2.13 The Transmission Licensee while submitting its tariff proposal for FY07 should exclude all charges incurred by the SLDC in FY06. In the petition for FY07 it should state this categorically. The Licensee is also directed that it should draw a separate profit & loss account and Balance Sheet for SLDC. This should be published as a part of its own Profit & Loss Account and Balance Sheet. Failure to comply with this direction shall result in non-determination of charges for SLDC.
(Paragraph 4.82 Transmission Tariff Order FY06)

5.2.14 The Licensee has requested to consider a proposal for levy of penalty on an open access customer for utilising capacity more than that had been allocated to it. The Commission is in agreement with the proposal but will like this matter to be addressed to the State Grid Code and would recommend Transmission Licensee a suitable provision for being included in the Grid Code.

(Paragraph 4.88 Transmission Tariff Order FY06)

5.2.15 The Transmission Licensee is directed to identify all such feeders, which are experiencing more than the average number of trippings. The concerned Distribution Licensees must be informed of such happenings and must be asked to take preventive measures. The Transmission Licensee must take up this issue in the Grid Code Review Committee along with its proposal to levy penalty for trippings in excess of the agreed number.

(Paragraph 4.95 Transmission Tariff Order FY06)

5.2.16 The Commission directs MPPTCL to pay attention to strengthening its accounting function by coding its accounting policies and inducting trained accounting professionals. The accounting function needs to be fully computerised so that the requirements of the Companies Act of publishing half yearly accounting reports and finalising the financial statements within six months of the close of the financial year can be met. The Licensee is directed to formulate its accounting code in such a fashion so that transmission charges can be determined voltage wise and for each voltage level the cost of operation of substation and line can be separately computed.

(Paragraph 4.96 Transmission Tariff Order FY06)

5.2.17 The Licensee is directed to properly account the expenses incurred on ongoing projects for capitalisation purposes. The capitalised expenses should be made part of the capital cost of the project on which they are incurred.

(Paragraph 4.97 Transmission Tariff Order FY06)

5.2.18 The Licensee is directed to file capital expenditure plans as per the terms and conditions of the transmission license and the capital expenditure guidelines for the Commission's approval. Claim for asset capitalisation should always be accompanied by work completion report. Failure to do so shall result in disallowance of depreciation, interest cost and ROE claims.

(Paragraph 4.98 Transmission Tariff Order FY06)

5.2.19 The Licensee is directed to codify all its assets by October 2006. If the Licensee fails to comply with this direction no depreciation shall be provided for FY08 when the ARR proposal shall be scrutinised in November – December 2006.

(Paragraph 4.99 Transmission Tariff Order FY06)

5.2.20 The Licensee is advised to fill up the post of Directors as required under its Memorandum and Articles of Association and also advised to appoint fulltime Director (Finance) to have better operational control, transparency and professional governance of the Transmission Licensee. The Commission feels Licensee given the importance of the transmission function should have benefit and support of the full time services of professional managers in the field of finance. The Licensee should also explore the possibility of utilizing opportunity of third party audit of technical processes and efficiency.

(Paragraph 4.100 Transmission Tariff Order FY06)

5.2.21 The Licensee is directed to codify its planning, construction, maintenance and operation practices for substations and lines for all voltage levels. The Licensee shall submit all the relevant documents in this behalf latest by October 2006.

(Paragraph 4.101 Transmission Tariff Order FY06)

SECTION – B

Objections and Comments on MPPTCL's Tariff Proposal

5.3 The Commission had given wide publicity to the proposal received from MPPTCL and invited stakeholders to offer comments/objections. In response to the Commission's public notice of 04th February 2006, the following stake holders submitted their comments/objections:-

1. MP Electricity Consumer Society, Indore
2. M/s HEG Limited. Mandideep, Bhopal

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

5.5 **MP Electricity Consumer Society (Respondent)**

5.5.1 **Objection/Comments:** There is hardly much of operational difference between EHV transmission system with the Central and State Govt. The only difference will be in respect of losses, which could be different, based on capacity and load carried. We therefore firmly feel that the charges for transmission in case of MPPGCL have to be same as those fixed by CERC for Central Transmission Lines of PGCIL. This will be in line with the National Tariff Policy. Under para (f) operating norms, the following is stated under tariff policy.

“The Central Commission would in consultation with Central Electricity Authority, notify operating norms from time to time for generation and transmission. The SERC would adopt these norms.”

5.5.2 **MPPTCL Comments:** MPPTCL has submitted that the rate for Long Term for PGCIL intra-region and inter-region transaction are different and varies from Rs. 4866.77 MW/Day to Rs. 1438.73 MW/Day. There is no uniform rates can be fixed applying to all the Regions of the country itself. Therefore, adopting a uniform rate for all States may not be possible. In the cost plus tariff, the charges are mainly on account of liabilities of repayment of loans and interest and these may differ on case to case basis.

5.5.3 **Commission's View:** The Commission agrees with the Petitioner's comments. It is not possible to adopt same charges as fixed by the CERC. However, the Commission has adopted the same methodology for determining the Transmission Tariff for MPPTCL as provided by the CERC.

- 5.5.4 **Objection/Comments:** The Transmission Licensee has not discussed in its Petition regarding the operations of the Licensee are below the norms. The Transmission Licensee should have drawn a transition path and a period is to be fixed to come to CERC norms.
- 5.5.5 **MPPTCL Comments:** The MPPTCL has proposed a transition path in case of transmission losses etc. for reaching from the existing State to the ideal State. In certain cases, the final target proposed by the MPPTCL is of better performance than the CERC's norms.
- 5.5.6 **Commission's View:** The Commission has specified the standards of performance for Transmission Licensee and the Transmission Licensee is obliged to maintain minimum level of standards. The Commission has also specified a transition path for the Licensee to achieve the desired level of performance.
- 5.5.7 **Objection/Comments:** As per National Electricity Policy and tariff policy, it is mandated that the transmission tariff framework implemented should be sensitive to distance, direction and related to quantum of power flow. This would be developed by CERC taking into consideration the advice of the CEA. Such tariff mechanism should be implemented by 1st April 2006.
- 5.5.8 **MPPTCL Comments:** MPPTCL has replied that the net work of PGCIL is more or less linear one, whereas the network of the MPPTCL is a complex one with main lines and spurs lines. It would be easier for the CTU to device a tariff sensitive to distance direction whereas the similar conditions do not exist for State Transmission Utilities. The Respondent has indicated that this mechanism is to be implemented in case of Inter State transmission w.e.f. 1st April '06. MPPTCL has not received any background or discussion paper on this subject. Once CERC approves any such methodology, the MPPTCL would be able to examine and workout the possibility of implementation of the same to the State System. Further, there are only three Discoms in the State which are using the transmission facility from main transmission lines as well as spur network of MPPTCL. There may not be much difference in tariff by adopting above methodology.
- 5.5.9 **Commission's View:** In the present Transmission Tariff Order the Commission has already directed MPPTCL to prepare a discussion paper conforming to the provisions of National Tariff Policy on the Transmission pricing considering the voltage, distance, direction and quantum of power flow and submit the same to the Commission by 30/06/2006.
- 5.5.10 **Objection/Comments:** National tariff policy also mandates the following;
- “(5) *The Central Commission would establish, within a period of one year, norms for capital and operating costs, operating standards and performance indicators for transmission lines at different voltage levels. Appropriate base lines studies may be commissioned to arrive at these norms.*”

“(7) After the implementation of the proposed framework for the inter state transmission, a similar approach should be implemented by SERC in next two years for the intra state transmission, duly considering the factors like voltage, direction and quantum of flow.”

In view of the above the society submits that the tariff proposed under the subject Petition may be fixed only for FY07 and future tariffs may be decided after the impending changes take place.

- 5.5.11 **MPPTCL Comments:** CERC has fixed the O&M norms allowable for Inter State transmission based on length of EHV lines and number of bays in the Sub-stations. MPPTCL has requested to allow same norms to MPPTCL for allowing O&M expenses. Further, MPERC has already made a provision for submission of review/truing up petition by 15th October each year and the tariffs for FY08 and FY09 may be firmed up that time as well as tariff for FY07 may be reviewed for any development emerged out subsequently.
- 5.5.12 **Commission’s View:** The Commission has already provided in its regulations on Terms and Conditions for Determination of Transmission Tariff, the provisions for review / truing up of the through filing of the petition by 15th October every. In the opinion of the Commission this shall take care of any subsequent development.
- 5.5.13 **Objection / Comment:** The Respondent has submitted that any additional expenditure over and above the earlier years expenditure be allowed only after operational norms and tariff charges are fixed. Till then the charges allowed shall only account for normal growth and inflation if any.
- 5.5.14 **MPPTCL Comments:** The normal growth inflation can be considered where there is no possibility of change in other functions. Whereas in case of determination of tariff, the scenarios of Loans, Equity, Assets and Wage Revision may change and it may not be possible to adopt such approach.
- 5.5.15 **Commission’s View:** The Commission has agreed with the view expressed by the Petitioner.
- 5.5.16 **Objection / Comment:** The Respondent has submitted that allied charges as proposed in Chapter-XIII of the Petition can only be allowed to the extent these are allowed by CERC. The respondent has strongly opposed the levy of parallel operation charges and similarly Grid support charges also are not justified. The consumers who create Harmonics in the system could be asked to install Harmonic filters to suppress the harmonics.

- 5.5.17 **MPPTCL Comments:** The benefits from parallel operation are of two natures, tangible and intangible. Gujrat Electricity Regulatory Commission has already examined the matter and mentioned that there are benefits by parallel operation and there are charges which can be levied if the same can be quantified. The MPPTCL has made efforts to quantify the benefits and to workout corresponding charges. In case the benefits would not have been there, the captive generator would not have asked for paralleling with the utilities grid and would have adopted stand alone system. The benefits are mainly to the independent generator having a negligible installed capacity as compared to pool of the utility. Taking into consideration, some benefits to the utility we have proposed the charges as Rs. 45 per KW/Month in place of calculated charges Rs. 388 per KW/Month. With regard to comparison with Central system the Petitioner has stated that The installed capacity of the generators of the beneficiary States of the Western Region is about 4 times the installed capacity of the Central Sector Generation stations and hence comparison made by the Respondent is not equitable. The grid support charges are proposed to compensate the ill effects of the function and unbalance load. Harmonic generation is only one aspect.
- 5.5.18 **Commission's View:** MPPTCL has proposed parallel operation charges and grid support charges on open access customers using the State transmission grid. These charges have neither been provided in the Open Access regulations nor in the regulations on terms and conditions of transmission tariff. Further, these charges have not been proposed for a generating station and a captive generating plant under section 9 of the Electricity Act has to be treated at par with a generating station. In view of this the Commission does not agree with the Transmission Licensee's contention.
- 5.5.19 **Objection / Comment:** Additional income can be obtained if MPPTCL engages in other business as per Section 41 of Electricity Act 2003.
- 5.5.20 **MPPTCL Comment:** MPPTCL has started function w.e.f. 1.6.05 itself on getting the Company well established on sound financial footings, the possibility of diversifying in other business will be examined by the management of the Company.
- 5.5.21 **Commission's View:** The Commission has no objection if the Transmission Licensee explores other avenues to generate the additional income provided it should be done in accordance with the Electricity Act 2003 and Commission's regulations framed in this regard.

5.6 **M/s HEG Limited, Mandideep, Bhopal (Respondent)**

- 5.6.1 **Objection / Comment:** MPPTCL is not functioning as an independent company as the financial control is with the Board. The O&M activities of the Company are suffering as the approved funds are diverted for other purposes by the Board. The Respondent has the apprehension that the Transmission Company can not be made accountable unless the Company's cash flow management is with the Company. Presently the

5.6.2 **MPPTCL Comment:** The Cash Flow Management as incorporated in the State Govt.'s order of 31.5.05 is for transition period. The Cash Flow Mechanism will be valid till;

(a) The cash deficit in the revenue earnings and expenditure requirement is resolved to the satisfaction of all the Companies.

Or

(b) Transfer of bulk power trading function from MPSEB to the Discoms.

Or

(c) Issue of further directives from the State Government.

MPPTCL has mentioned that the ARR and the bills raised by the Transco will be on accrued basis and the Cash Flow Management is not very much pertinent to the process of tariff determination. The billed amount not paid to the MPPTCL will appear as arrears and attract surcharge as approved by the Commission.

5.6.3 **Commission's View:** The Commission agrees with the reply of MPPTCL. The Transmission Licensee has to calculate the bills on the basis of the Commission's Tariff Order and not as per the Cash Flow Mechanism.

5.6.4 **Objection / Comment:** The Petitioner has proposed to levy a common facility charge @1% of its approved ARR to be reimbursed to MPSEB against the services rendered by the Board.

5.6.5 **MPPTCL Comment:** The Petitioner has not included the expenses of the employees not assigned to any of the Companies and presently working on Common Service in MPSEB in its ARR. Petitioner shall not recover such charges unless approved by the Commission and the proposal has been submitted before the Commission for inclusion of these charges in to its ARR from 01/-4/2006. On final allocation of the employees on Common Service Charges to the various Companies, the expenses shall appear in the ARR of the respective Companies.

5.6.6 **Commission's View:** The Commission does not agree with the proposal as the Board is functioning as the Trading Licensee in the State. The Trading Licensee, if submits a request with all material facts and figures, for fixation of the Trading margin, the Commission may consider but the Commission has not approved the common service charge to be levied by the Transmission Licensee for meeting the expenses of the Board.

5.6.7 **Objection / Comment:** The Respondent has the apprehension that if the pension and other terminal liabilities have been included in MPPTCL ARR, it will adversely affect the ARR of MPPTCL.

5.6.8 **MPPTCL Comment:** The Pension and other Terminal Benefit liabilities have been included in the ARR of MPPTCL as per the transfer scheme notified by the State Government.

- 5.6.9 **Commission’s View:** As per the Transfer Scheme notified by GoMP the liability towards the Pension and Terminal benefits of the retired employees have been parked with the Transmission Licensee. However, the Commission has not included this liability under the employees expenses but has treated the same under a separate head and has accepted the claim of the Licensee after duly scrutinising the claim.
- 5.6.10 **Objection / Comment:** The Capacity allocation among the Distribution Companies is tentative as the Transmission Licensee and the Distribution Companies have not entered into agreement.
- 5.6.11 **MPPTCL Comment:** The transmission charges are to be shared by the Distribution Companies and other Long Term Open Access customers in the ratio of their capacity allocation. Any change in the capacity allocation will not affect the ARR of MPPTCL.
- 5.6.12 **Commission’s View:** The Commission agrees with the comment of MPPTCL.
- 5.6.13 **Objection / Comment:** The Transmission Licensee’s contention to take the FY06 as the base year for arriving at the O&M cost may not be accepted unless the audited balance sheets are made available by the Licensee. The Commission has prescribed adequate norms for that. The O&M norms for the Petitioner system can not be compared with the Central Transmission System because of basic difference in distribution system, class of voltage etc. Any variation in the O&M cost could be absorbed through ROE.
- 5.6.14 **MPPTCL Comment:** The Petitioner has asked for O&M cost over and above the norms because of the fact that the norms have been fixed on the basis of expenses of year FY-02, FY-03 & FY-04 which do not take into account the developments of recent years. The O&M norms should have been fixed on the basis of FY-04, FY-05 & FY-06. This could not be done; as the audit certificate on MPSEB’s account is yet to be obtained. The Commission has realised the importance of expenses on R&M and it has resulted in the improvement in services to the consumers, and saving in cost on account breakdowns.

The Respondent has mentioned that the maintenance norms of Petitioner can not be compared with the CERC norms because of their difference in distribution system, class of voltage and location of their switchyards. In this regard it is not understood that in case of fixing the O&M norms against the 400 KV lines what basis of difference the Respondent wants to justify in case of the CERC norms and MPERC norms.

The Respondent has mentioned that the Commission could consider revising the maintenance norms based on average expenses taking FY-06 as base year, since Petitioner is now working as independent Company and has been control on finance and resources. The above suggestion from the Respondent is welcome and the Petitioner will approach the Commission in this regard as soon as the trial balance of the Employee Cost, A&G and R&M for FY-06 are finalized.

- 5.6.15 **Commission’s View:** The Commission may consider revising the O&M only after submission of audited values by the Transmission Licensee.
- 5.6.16 **Objection / Comment:** The Advance Against Depreciation should not be allowed.
- 5.6.17 **MPPTCL Comments:** It may kindly be considered by the Commission that the revision of the depreciation rate adequately to take care of debt repayment liabilities considered the prevalent market conditions and loan tenure etc. for average situation is precondition for reaching to a situation where need of AAD may not be there. However, it may be considered that the depreciation rates applicable earlier as per the MoP norms were higher and the weighted average in case of transmission utility was of the order of 4.85%. Whereas the recent norms prescribed by the CERC and adopted by the MPERC are based on the Straight Line Method and the weighted average is about 3%. It may be considered that the norms are based on the period in which the asset will turn into scrap and not on debt repayment liability. In the above situation, the approval of the AAD is very important to keep the transmission utility in a condition of not making default in payments.
- 5.6.18 **Commission’s View:** The Commission shall adhere to the provisions of the National Tariff Policy.
- 5.6.19 **Objection / Comment:** Some of the works would not be completed in FY07, require detailed scrutiny too and hence capitalization of interest shall change. The loan of Rs. 835 Crore should be treated as capital works in progress, as done for tariff order for FY06.
- 5.6.20 **MPPTCL Comments:** The Petitioner has indicated that the petitioner has already excluded the interest on the works which are not expected to get completed in FY07. With regard to the treatment of loan of Rs.835 Crore as capital works in progress the Petitioner has indicated that the Respondent’s view is not in order and this has to be considered by the Commission as per the balance sheet of FY07 and not as per balance sheet of FY06.
- 5.6.21 **Commission’s View:** The Commission will not allow the interest on the loans for capital works in progress. The Commission shall also consider the audited figures and in absence on audited figures the trial balance duly certified and submitted by the Petitioner.
- 5.6.22 **Objection / Comment:** The reactive energy charges @ 29 Paise should be disallowed and the Commission may consider to incentivise the installation of capacitors through the tariff.

- 5.6.23 **MPPTCL Comments**: The Petitioner has not recommended the reactive energy charges as 29 Paise per RKVAH but has prayed the Commission to allow reactive energy charges @ 5 Paise per RKVAH Unit from Discoms for FY07 taking into consideration that no power factor surcharge is imposed by the Distribution Licensees on LT consumers. In the tariff order of petition for FY06, the Commission has already mentioned that this will be considered while finalizing the Balancing and Settlement mechanism. As regards for other Open Access consumers, the Commission has already made an order on 30th June 2005.
- 5.6.24 **Commission's View**: The Commission shall consider the imposition of reactive energy charges in its balancing and settlement code.
- 5.6.25 **Objection /Comment**: The Commission has already disallowed the parallel operation charges in its Transmission Tariff Order for FY. The Petitioner has again filed its request to levy such charges in the Petition for FY07 to FY09. The Commission should not consider the request of the Petitioner.
- 5.6.26 **MPPTCL Comments**: The Petitioner has tried to quantify the benefits to the generator and converted them to many terms which come to Rs. 388 per KW/Month. However, to take into account that the benefits to the generator may not result into exactly equal loss to the Licensee, the Petitioner has proposed a very nominal charges i.e. Rs. 45 per KW/Month in the subject Petition.
- 5.6.27 **Commission's View**: The Commission has already disallowed the levy of the parallel operation charges in its Transmission Tariff Order for FY06. For FY07 to FY09 the Commission shall not consider the levy of the parallel operation charges.
- 5.6.28 **Objection / Comment**: the grid support charges should be based on harmonics generated by the load of the Open Access customers.
- 5.6.29 **MPPTCL Comments**: The grid support charges have been proposed for the Open Access customers whose load not only creates the harmonics but other ill effect such as voltage fluctuations, unbalance etc.
- 5.6.30 **Commission View**: The issue has already been dealt in detail in the Commission's Transmission Tariff Order for FY06 and advised the Transmission Licensee that the issue warrants a deeper study either by the Licensee or such some research organisation. As this charge has neither been prescribed in the Open Access regulation nor in the regulations on terms and conditions of tariff the Commission has disallowed.

- 5.6.31 **Objection / Comment:** The excessive tripping cause harm to system but for this the Transmission Licensee should take the corrective acting to have penal action. The ill effect of the tripping could be minimised through effective protection and earthing system. The direction of the Commission in the Transmission Tariff Order for FY06 in this regard are appropriate and no further actin is necessary in this matter.
- 5.6.32 **MPPTCL Comments:** The Petitioner has suggested that the imposition of the such charges may automatically bring a rapid corrective action by the Distribution Licensees. With regard to the type of circuit breakers installed in the MP transmission system the Transmission Licensee has informed that there are varieties of Circuit Breakers such as minimum Oil Circuit Breakers, Vacuum Circuit Breakers and SF₆ Circuit Breakers operating. The maintenance requirement is different for different type and class of circuit breakers. The effect of external fault especially the short circuits are very hazardous in case of the transformer which is costliest equipment in a Sub-station. There are feeders which undergo about 100 tripping in a month and until unless some limit is fixed and charges are imposed for tripping beyond that limit, there may not be much impact on the Discom to take corrective action.
- 5.6.33 **Commission's View:** the Commission has already dealt the issue in detail in its Transmission tariff Order for FY06. The Commission here reiterates that clauses 5.6 and 5.7 of the MP Electricity Grid Code, Revision 1, 2005 provide sufficient scope for STU to enforce discipline in Distribution Licensees in maintenance practices. The Transmission Licensee should identify all such feeders, which are experiencing more than the average number of trippings. The concerned Distribution Licensees must be informed of such happenings and must be asked to take preventive measures. The issue must be taken up by the Transmission Licensee in the Grid Code Review Committee Meetings and also the Transmission Licensee may seek the right to inspect interconnection points with its system through appropriate modification in the Grid Code. Further the Transmission Licensee may provide for measures to be taken for preventing such frequent trippings along with the penalty clause if the agreed measures are not adhered to in the Transmission Service Agreement to be executed with all long-term users. In the present order the Commission has not consider to levy such charges.

SECTION – C

Conclusion

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