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

Petition No. 111/2005 and Petition No. 5/2005

PRESENT:

P. K. Mehrotra, Chairman

D. Roybardhan, Member

R. Natarajan, Member

IN THE MATTER OF:

Determination of Tariff for Transmission for FY06 based on the tariff application made by Madhya Pradesh Power Transmission Company Limited (MPPTCL) and determination of SLDC Charges.

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 Seventh Day of February, 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 09th December, 2005 at Bhopal, having had formal interactions with the officers of Madhya Pradesh Power Transmission Company Ltd. (hereinafter referred to as "MPPTCL" or "Transmission Licensee") and Madhya Pradesh State Electricity Board (hereinafter referred to as "MPSEB" or "Board", the Trading Licensee) during the months of October and November 2005 and having met with the members of the State Advisory Committee in December 2005 and having considered the documents available on record and order issued by Government of Madhya Pradesh (Energy Department) on 31st May 2005 making the Transfer Scheme Rules effective from 1st June 2005, (order no. 3679/FRS/18/13/2002 dated 31.5.2005) hereby accepts the applications with modifications, conditions and directions as herewith attached.

2 The Commission has made modification to the estimates of Revenue Requirement proposals and has made alternative estimates thereof based on the efficient and reasonable operating parameters and expenditure and has accordingly made modifications to the tariff proposed by MPPTCL as per detailed order attached to this order.

3 The Commission, in exercise of the powers vested in it under Section 64 of the Electricity Act, 2003, directs that the transmission tariff determined by this present order shall be deemed to be effective w.e.f. 1st June 2005 i.e. the date when MPPTCL started its independent operations after the notification of the State Government issued on 31st May 2005 and will continue to be effective till 31st March 2006 when multi year tariff will become operational. The Petitioner must take immediate steps to implement the Order after giving seven (7) days public notice in accordance with clause 1.30 of MPERC (Details to be furnished and fee payable by licensee or generating company for determination of tariff and manner of making application) Regulations, 2004 and recalculate its bills for transmission capacity allocated to the long term open access customer since 1st June 2005 as per MPERC (Terms and Conditions for Intra-State Open Access in Madhya Pradesh) Regulations 2005 and must also provide information to the Commission in support of having complied with this order. The Commission also directs that these transmission charges be included

by the Distribution Licensees in their Revenue Requirement and if these have already been paid by the Trading Licensee, adjustment be carried out to book the transmission charges as expenses in the books of distribution licensees.

4 This order also disposes of the petition no. 5/2005 filed by SLDC for FY06.

Ordered as above read with attached detailed reasons and grounds,

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

Date: February 8, 2006
Place: Bhopal

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CHAPTER 1

Background of the order

Introduction

1.1 This order relates to petition number 111 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 users of transmission system for FY06. 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. The Commission has also examined the operational and the financial data of the transmission function of the period when the functions were part of MPSEB. The Commission has based this order on the past records, submission of MPPTCL and views expressed by stakeholders.

1.2 The Transmission Licensee has filed this petition for determination of transmission tariff for the period after coming into effect of 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. MPSEB, MPPTCL and the Distribution Licensees mutually entered into a provisional transmission service agreement, which provided for transmission charges on energy transmitted and measured at the input of the MP's Grid level at a price of Paise 17.82 per unit. The agreement also provided that within 30 days of signing the agreement, the parties to this agreement shall approach MPERC for determination of tariff and the terms and conditions of the agreement. As per the agreement, the terms of agreement shall stand modified as per the orders passed by the Commission. While deciding the application for retail tariff determination for year 2005-06, the Commission had directed the Petitioner vide its order dated 29th June 2005 to submit a fresh petition if MPPTCL required the Commission to determine the transmission tariff as had been provided in the State Govt. notification mentioned above. Till this was done, the Commission had directed that rates provisionally agreed between MPPTCL and MPSEB may be treated as payment on adhoc basis. The Petitioner in the present petition has formally requested the Commission to determine the tariff in accordance with the applicable regulations.

Procedural history

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

1.4 The Commission in its tariff order dated 29th June 2005 directed MPPTCL to file a separate tariff petition for FY06 before 31st July 2005. Meanwhile, on the petition no. 80/2005 which relates to the approval of the Commission to the Transmission Service Agreement i.e. the inter-se agreement, the Commission held the hearing on 12/08/2005 and expressed its disagreement with the transmission charge of Paise 17.82 per unit as in the Commission's view the principle of recovery of the transmission expenses from the long term users of the transmission system should be expressed in terms of Rs. Per MW. The Commission also directed the Transmission Licensee to identify long term users of its transmission system and to execute the long-term Transmission Service Agreements with them. The Commission further directed MPPTCL to confirm the capacity of the transmission system used by the three Distribution Companies before the execution of the Transmission Service Agreement. In view of these the Commission directed MPPTCL to file its petition for determination of the Transmission Charges for FY06 by 15/09/2005. The Petitioner requested for grant of one week's time for the filing of the petition, which the Commission had granted.

1.5 The Petitioner submitted its petition on 21st September 2005. This petition was not filed in accordance with the Commission's regulations namely "MPERC (Details to be furnished and fee payable by licensee or generating company for determination of the tariff and manner of making application) Regulations 2004 and its subsequent amendments. The Petitioner had also not deposited the requisite fee. The Commission in its order of 21st September 2005 directed that the petition, filed by the Petitioner, should be registered after ensuring that all the formalities with regard to filing of the petition had been completed by the Petitioner. The Petitioner filed the requisite formats on 04/10/2005 and the requisite fee was deposited on 19/10/2005.

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

Table-1: Summary of the Tariff Petition

Sl. No.	Particulars	Amount (Rs. Cr.)
1.	Repairs and Maintenance	24.17
2.	Employee Cost	73.26
3.	Administration and General	15.36
4.	Depreciation	114.00
5.	Interest on Loan	184.39
6.	Interest on Working Capital	12.78
7.	Return on Equity	92.82
8.	Provisions of Unfunded Liabilities of Pension and Terminal Benefits	176.53
9.	Total	693.31
10.	Less: SLDC expenses	(-) 16.12
11.	Total Annual Fixed Cost of Transmission	677.19
12.	Transmission System Capacity	5560 MW
13.	Annual Fixed Cost/Month/MW	Rs.1.01497 Lakh

1.7 The Commission in a hearing held on 21st September 2005 directed MPPTCL to submit the Executive Summary for public circulation and the gist of the petition in Hindi and English for publication in the Newspapers by 23rd September 2005. The Petitioner on 23rd September 2005 submitted the abridged version of tariff petition and gist in English for publication in newspapers. However, only on 19th October 2005 the Petitioner was able to complete the formalities for filing the petition by depositing the requisite fee. Thus 19th October 2005 is to be reckoned as the date of submission of petition under section 64(1) of the Electricity Act, 2003.

Public Hearing

1.8 The Commission in its hearing on 21st September 2005 decided to issue public notice for inviting comments from the stakeholders on the petition filed by MPPTCL. The Public notice was published in Dainik Bhaskar (Hindi, Jabalpur and Bhopal Edition), Nai Dunia (Hindi, Indore Edition), Dainik Jagran (Hindi, Rewa Edition), Avantika (Ujjain, Edition), Nav Bharat (Hindi, Gwalior Edition) and Hindustan Times (English, All Madhya Pradesh Edition) on 31st October 2005.

1.9 The Commission held a public hearing on the tariff petition of MPPTCL at Bhopal on 09th December 2005 in the Conference Hall of Urja Bhawan.

State Advisory Committee

1.10 A presentation on the tariff proposal of MPPTCL was made before the members of the Committee on 16th December 2005. The members made their observations on the petition and gave valuable suggestions, which have been kept in mind while finalising this order.

CHAPTER 2

Status of the 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)

<table>
<tr><th colspan="2">Liabilities</th><th colspan="2">Amount</th><th colspan="2">Assets</th><th colspan="2">Amount</th></tr>
<tr><td colspan="3">Equity From GoMP</td><td>845</td><td rowspan="4">Fixed Assets</td><td>Gross Assets</td><td>2407</td><td rowspan="3"></td></tr>
<tr><td rowspan="4">Project Specific Capital Liabilities (Including payments overdue)</td><td>Power Finance Corporation (PFC)</td><td>321</td><td rowspan="3"></td><td rowspan="2">Less Accumulated depreciation</td><td rowspan="2">1076</td></tr>
<tr><td>SADA Gwalior</td><td>15</td></tr>
<tr><td>Loan from GoMP (ADB)</td><td>195</td><td>Net Fixed Asset</td><td>1331</td><td>1331</td></tr>
<tr><td>Total</td><td>531</td><td>531</td><td colspan="3">Capital Works in Progress</td><td>847</td></tr>
<tr><td colspan="3">Loan from MPSEB</td><td>835</td><td colspan="3">Regulatory Assets towards Pension Liabilities</td><td>3910</td></tr>
<tr><td rowspan="3">Current Liabilities</td><td>Staff Related</td><td>20</td><td rowspan="2"></td><td rowspan="3">Current Assets</td><td>Stock</td><td>66</td><td rowspan="2"></td></tr>
<tr><td>Intt. Accrued but not due</td><td>13</td><td></td><td></td></tr>
<tr><td>Total</td><td>33</td><td>33</td><td>Total</td><td>66</td><td>66</td></tr>
<tr><td colspan="2">Pension Liabilities</td><td></td><td>3910</td><td></td><td></td><td></td><td></td></tr>
<tr><td rowspan="2">Borrowings for working capital</td><td>Overdraft</td><td>0</td><td rowspan="2">0</td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td></tr>
<tr><td>Working capital demand loan + cash credit</td><td>0</td></tr>
<tr><td colspan="3">Accumulated Surplus/ (Deficit)</td><td>0</td><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="3">Reserves and Reserve Funds</td><td>0</td><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="3">Total Liabilities</td><td>6154</td><td colspan="3">Total Assets</td><td>6154</td></tr>
</table>

Notes: -

- The values of the fixed Assets are as per the book values
- The Contingent Liabilities to the extent they are associated with or related to 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 It is necessary to go through Section 131 of the Electricity Act, 2003 (Act) at this juncture which pertains to the Reorganisation of the Board. The section reads as under:

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

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

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

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

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

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

6 (1) -----------

(2) The Undertakings forming part of Transmission Undertakings as set out in Schedule-'B' shall be transferred to and vested in TRANSCO on and from the date of the transfer to be notified by the State Government subject to the terms and conditions specified in the Act/Central Act and these Scheme Rules.

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

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

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

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

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

(i) Revenue earning potential, or
(ii) Depreciated replacement value, or
(iii) Book value

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

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

Rule 10 of the Scheme Rules is given hereunder:

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

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

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

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

2.5 Vide Notification No. 6269-XIII-2003 dated 1st October 2003, the State Government notified the date of commencement of the said Madhya Pradesh Electricity Reforms First Transfer Scheme Rules, 2003 as 1st October 2003. Vide Notification No. 6271-XIII-2003 dated 1st October 2003, the State Government notified 1st October 2003 as the date of transfer under sub-rule (1) of the Rule 5 and sub-rules (1) to (5) of Rule 6 of the said Scheme Rules. Thus, the properties and all interest, rights and liabilities of the Board stood transferred to and got vested in the State Government on 1st October 2003. Again on 1st October 2003, the Undertakings forming part of Transmission Undertakings as specified in Schedule 'B' of the Scheme Rules stood transferred to MPPTCL. However, the value of the assets to be transferred to MPPTCL was notified by the State Government vide its notification dated 31st May 2005 which states the values of the Fixed Assets are as per the book values. Thus the valuation falls within the provisions of Rule 8(b) of the Scheme Rules of 2003. As mentioned earlier, as per the notification, the opening balance sheet is provisional for a period of twelve months and at any time during the said period, the Government of Madhya Pradesh may change the values stated in the opening balance sheet including but not limited to value assigned to the Fixed Assets, Capital Expenditure in progress, Project Specific Liabilities, Loan from Madhya Pradesh State Electricity Board, borrowings for Working Capital etc.

2.6 Thus the State Government has got a right to amend, vary, modify or otherwise change the values or the terms and conditions or any one or more of them during the provisional period, which is ending on 31st May 2006.

CHAPTER 3

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 01/04/2005 the intra-State transmission system comprises the following transmission lines and substations: -

Table-3: Transmission System in the State

Sl. No	Voltage Level	EHV Lines	EHV Substation	
		Circuit kMs	No.	MVA Capacity
1	400kV	2314.31	4	3255.00
2	220kV	6880.22	33	8530.00
3	132kV	10055.04	139	10007.50
4	66kV	61.00	1	20.00
Total		**19310.57**	**177**	**21812.50**

3.2 The Commission, in its open access regulation namely "MPERC (Terms and Conditions for intra-State Open Access in MP) Regulations, 2005", 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 MPPTCL in its subject petition has attempted to derive the capacity of the State transmission system by considering a number of alternatives. The Petitioner has made an attempt to indicate that in the present conditions the transmission system capacity is around 3000 MW. The basis and the results of different alternatives is given in the following table:

Table-4: Transmission System Capacity

Sl. No.	Transmission System Capacity of EHV network up to 132kV on the basis of	Capacity in MW
i.	Actual power factor and contingency	2988 MW
ii.	Energy handled by the system during 2003-04	2989 MW
iii.	Hourly demand handled by the system during 2003-04	3047 MW
iv.	Maximum demand met during 2004-05	5241 MW
v.	As per Commission's Open Access Regulations	5560 MW

3.4 During the course of the discussions with the Commission, the officers appearing for the Petitioner have indicated that in the present situation if the Petitioner is directed to meet the demand as defined in the Commission's Open Access Regulations, the transmission performance parameters may not be adhered to as per the MP Electricity Grid Code. The Commission does not agree with this contention of the Petitioner, as it is the duty of the Petitioner to ensure to maintain its system to feed the system demand and that too as per the standards defined in the Grid Code. The Petitioner shall have to necessarily invest in building up the capacity of the system. The Petitioner's statement gives the impression that he is taking a partisan view only to block any requests for open access. It begs explanation as to how the Petitioner has handled the maximum demand of over 5200 MW during FY05 without any murmur.

3.5 The Commission has directed that the capacity of the Intra-State Transmission System should be taken as per the definition provided in the Commission's open access regulations. The Petitioner has derived the capacity of the State Transmission System by adding all the generation and then subtracting the auxiliary consumption. The Petitioner has thus proposed the transmission system capacity of the order of 5560 MW. The details are given below:

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

Sl. No.	Particulars	Capacity (MW)	Auxiliary Consumption		Capacity Proposed for Transmission system
			%	MW	
1.	MPPGCL Thermal	2147.50	10.04	215.71	1931.79
2.	MPPGCL Hydel	837.50	0.28	2.35	835.15
3.	Joint Venture Hydel i.e. ISP and SSP	1256.50	0.30	3.77	1252.73
4.	Central Sector	1570.32	9.00	141.33	1357.54
5	Addl. Share EREB	200.00	9.00	18.00	172.90
6	Total Generation	6011.62		381.15	5550.12
7	SEZ				10.00
8.	Grand Total				5560.12

Say 5560 MW

3.6 The Commission has issued the order for determination of Generation Tariff on 25/01/2006. The auxiliary consumption as indicated in the aforesaid table by MPPTCL has now been revised. The average auxiliary consumption for thermal power stations of the State is given as 9.95% and for Hydel power stations 0.18%. Accordingly the capacity of the State Transmission System shall be as follows:

Table-6: Average Capacity of State Transmission System Approved by Commission:

Sl. No.	Particulars	Capacity (MW)	Auxiliary Consumption		Capacity for Transmission system
			%	MW	
1.	MPPGCL Thermal	2147.50	9.95	213.68	1933.82
2.	MPPGCL Hydel	837.50	0.18	1.50	836.00
3.	Joint Venture Hydel i.e ISP and SSP	1256.50	0.30	3.77	1252.73
4.	Central Sector	1570.32	9.00	141.33	1357.54
5	Addl. Share EREB	200.00	9.00	18.00	172.90
6	Total Generation	6011.62		381.15	5552.99
7	SEZ				10.00
8.	**Grand Total**				**5562.99**

Say 5563 MW

3.7 For FY06 the capacity of the State Transmission System shall be considered as **5563 MW.**

3.8 The Petitioner has proposed to allocate the transmission system capacity among the Distribution Licensees on the basis of their average demand met in past. The average demand of the three Distribution Companies for FY04 is tabulated below:

Table-7: Average Demand of the Distribution Companies Served in FY04:

Sl.No.	Average Demand served in year 2003-04 to	MW
1	MP Poorv Kshetra Vidyut Vitaran Company	888 MW
2	MP Madhya Kshetra Vidyut Vitaran Company	975 MW
3	MP Paschim Kshetra Vidyut Vitaran Company	1125 MW
4	Total	2988 MW

3.9 For FY06 the Commission has determined the capacity of the State Transmission System as 5563 MW. SEZ Pithampur as a long-term user of transmission system has already contracted for 10MW capacity. Hence, the remaining capacity of 5553 MW has been proposed by the Petitioner to be distributed among the Distribution Companies of the State in the same ratio of the demand served in FY04. Accordingly, the proposal given by the Petitioner and the allocation of the transmission system capacity on the basis of the historical use of the system is tabulated below:

Table-8: Transmission Capacity Allocated to Distribution Companies in FY06:

Sl. No.	Transmission System Capacity Allocated to	Capacity in MW	
		MPPTCL	MPERC
1	MP Poorv Kshetra Vidyut Vitaran Company	1650 MW	1650 MW
2	MP Madhya Kshetra Vidyut Vitaran Company	1810 MW	1812 MW
3	MP Paschim Kshetra Vidyut Vitaran Company	2090 MW	2091 MW
4	SEZ Pithampur	10 MW	10 MW
5	Total	5560 MW	5563 MW

3.10 The Commission has already indicated that the basis of the transmission charges to be recovered from the long-term users of the Intra-State Transmission System will be Rs. per MW. The Transmission Licensee has also proposed that as soon as the Distribution Companies are in the position to indicate their capacity allocation requirement, the transmission capacity of 5553 MW can be redistributed among the Distribution Companies. The Petitioner has also indicated that it has already asked the Distribution Companies to execute the long-term agreements for the use of State transmission system on the basis of average demand imposed by them on the system. The Commission has looked into this issue and directs that in the absence of the firm long-term agreement made by Distribution Companies for use of the transmission system capacity, the proposal put forth by the Petitioner is acceptable. However, in order that the transmission charges can be recovered by the Transmission Licensee, long-term transmission service agreement clearly indicating the capacity of the transmission system contracted by a distribution company should be in place. *The Transmission licensee is directed to enter into proper agreement with the long-term users for the determined capacity 5563 MW.* However, the Commission had noted that the Distribution Companies, in their Petition for determination of retail tariff for FY06 and FY07, have indicated the following projections of demand in MW for FY06:

Table- 9: Projection of Demand by Distribution Companies

Distribution Company	Maximum Demand	Month
MP Poorv Kshetra Vidyut Vitaran Company	1848 MW	December to March
MP Madhya Kshetra Vidyut Vitaran Company	1990 MW	February
MP Paschim Kshetra Vidyut Vitaran Company	2388 MW	October

3.11 While the Commission has taken into account the entire installed capacity of MPPGCL and also the allotted capacity connected to the system in reaching the figure of 5563 MW as the system capacity, it has to be borne in mind that the transmission system has overall limitations and has to resort to load shedding. This is not a positive sign for the health of the transmission system. In fact, there should be adequate redundancy inbuilt in the system to take care of seasonal peak demands and to meet requests for short-term procurement of power. The Commission will always look sympathetically towards any proposals for investment to enhance system capacity. If the Distribution Companies / Licensees so desire, the Commission will also look into reallocation of long-term capacity to them on their request.

3.12 *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.*

B – Performance of the State Transmission System

Transmission Loss:

3.13 The transmission function has assumed greater importance in view of the provisions of Open Access for Distribution Licensee, Traders and Consumers in Electricity Act 2003. The competitive model envisaged in the Act requires the existence of a robust transmission network. Presently, the supply of electricity to the consumers of the State has been on a restricted basis during some months owing to inadequate availability of power. The State Government has initiated steps for augmentation of availability of power and it would be reasonable to expect with better availability in future, the transmission network would be required to carry large volume of energy. In Madhya Pradesh most of the power is generated in the eastern part but the major consumption occurs in the western part necessitating transmission over long distances. In recent past considerable Hydel generation capacity has been added to the system. Indira Sagar Project and Sardar Sarovar Project have been commissioned in the western part of the State. Hence, a sound transmission network is necessary for delivery of reliable and quality power to end-users. MPPTCL, realizing the importance of reliable transmission network has taken up massive investment in this sector with funding from ADB, PFC and SADA Gwalior.

Table-10: Addition to the State Transmission network

Sl.No.	Voltage (KV)	Particulars		
		Transmission Line	EHV Substations	
		(Ckt.KM)	No.	MVA
As on 31st March 2004				
1	400	1723.51	4	2940
2	220	6740.71	28	7730
3	132	9842.54	138	9799
4	66	61	1	20
As on 31st March 2005				
1	400	2314.31	4	3255
2	220	6880.22	33	8530
3	132	10055.04	139	10007.5
4	66	61	1	20

3.14 The addition in the capacity of the transmission system has helped in reducing the transmission losses. The total EHV losses in FY03, FY04 and FY05 attributable to MP Transmission System have been as shown in the table below:

Table-11: Annual Transmission losses

Details	FY03	FY04	FY05	FY06
	Actual	**Actual**	**Actual**	**Estimated**
Energy Received into System (MUs)	27129	27555	29531	31716
Energy Sent Out of System (MUs)	24978	25870	27871	30062
Energy Lost (MUs)	2151	1685	1660	1655
Transmission Loss (%)	**7.93%**	**6.12%**	**5.62**	**5.22**
Reduction in loss (%)		1.81%	0.50%	0.40%

3.15 MPPTCL has estimated a reduction of 0.40% in the transmission loss during the FY06.

3.16 The Commission has in the past directed MPPTCL to compute voltage wise transmission losses. The voltage wise losses as stated by MPPTCL for the last two quarters of FY05 and for the first two quarters of FY06 are given below:

Table-12: Voltage wise losses in Transmission System

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

3.17 The purpose behind the Commission's direction for making available voltage wise losses is to find out where the major bottleneck lies and this has been amply demonstrated in the table above which puts the finger on the weak spot i.e. the 220kV system. There is urgent need for the Transmission Company to put in more investment at this level both in respect of transformation capacity and in strengthening of lines.

3.18 The Commission had earlier allowed average transmission loss of the order of 5.86% for FY05. MPPTCL has proposed to reduce the transmission losses to 5.22% for FY06. The Commission accepts the proposal of MPPTCL. The average transmission losses for the FY06 shall be pegged at 5.22%. According to information available with the Commission the loss level prevailing in the intra-state system is around the same level (Maharashtra – 7.6%, Rajasthan – 5.88%, AP – 6.25%, Karnataka – 6.39 %.)

3.19 The losses that occur in the network of PGCIL during transmission of energy from a source situated outside the State of MP up to MPPTCL's periphery are in addition to the losses that occur in the MPPTCL transmission system. Presently, the PGCIL system loss on the basis of average of 52 weeks is of the order of 5.07%. CERC has not fixed any norms in this regard.

Reliability & Quality of Supply

3.20 For reliable and quality supply to Distribution Companies and thereby to retail consumers the transmission network should remain in a healthy state. The performance of MPPTCL from FY03 is as follows.

Table-13: Voltage wise interruptions

Sl. No.	Voltage Level	FY03		FY04		FY05	
		Nos.	Duration (Hrs.)	Nos.	Duration (Hrs.)	Nos.	Duration (Hrs.)
1	400	1	15.02	6	76.26	2	40.07
2	220	42	527	35	459.73	51	713.25
3	132	36	543.98	30	546.63	68	856.08

3.21 The duration and the numbers of the interruptions have increased in FY05 as compared with FY04. 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 two quarters of FY06 is given below:

Table-14: 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
400 kV	99.93%	98.62%	99.97%	98.88%	98.37%	94.35%
220 kV	99.87%	98.25%	99.83%	98.71%	98.27%	99.45%
132 kV	99.83%	99.57%	99.83%	99.26%	99.17%	99.15%

3.22 The overall system availability compares favourably with the target availability of 98% fixed by CERC in its order dated 16th January 2004 and 95% as per the Transmission performance Standards specified by the Commission for FY06. The Commission has introduced the incentive / penalty mechanism for MPPTCL if its availability deviates from the normative values in MPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations 2005 to be applicable from FY07. For FY06, the incentive payable to the Transmission Licensee will be in accordance with the above-referred regulations of MPERC. The issue has been dealt with in Chapter 5 at an appropriate place.

Frequency profile

3.23 The maintenance of grid frequency profile is the responsibility of all the constituents of Western Region including MP. Frequency profile is an important criterion for judging the quality of supply particularly when there is a large-scale use of frequency sensitive appliances such as computers etc. The frequency profile in FY03, FY04 and FY05 was as follows:

Table-15: Frequency Profile

FY03		FY04		FY05	
< 48.5 Hz	> 50.5 Hz	< 48.5 Hz	> 50.5 Hz	< 48.5 Hz	> 50.5 Hz
12.79%	3.93%	0.94%	2.58%	0.03%	0.88%

3.24 The frequency profile improved in FY05 and for about 99% of the time frequency remained between 48.5 Hz to 50.5 Hz.

EHV Transformer failure

3.25 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-16: Transformer failure:

Sl. No.	Particulars	FY03		FY04		FY05	
		Nos.	%	Nos.	%	Nos.	%
1	Auto Transformer	0	0	1	1.09	1	1.05
2	Power Transformer	7	2.11	4	1.30	7	2.16

3.26 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 adhere to availability targets.

3.27 **Interface points:**

3.28 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-17: 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**

3.29 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 substantial part of its transmission charges as may be determined by the Commission. The progress will be reviewed in April 06.*

3.30 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, were 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-18: Electrical Accidents

FY04				FY05			
Fatal		Non-Fatal	Total	Fatal		Non-Fatal	Total
Human	Animal	Human		Human	Animal	Human	
2	0	5	7	2	0	12	14

Transmission Capital Expansion Plan

3.31 MPPTCL has submitted a Comprehensive Transmission Plan (Investment Plan) to the Commission. This plan has the details of the works to be completed by MPPTCL during the period FY06 to FY10. In this order the Commission has considered the annual investment plan for FY06 only. The investment plan for FY 07 to 09 will be considered during transmission tariff determination under the multi year principles. The abstract of the works to be taken up under the capital expansion plan of MPPTCL for FY06 is given below:

Table-19: Transmission capacity Addition Plan for FY06

Amount in Rs. Crore

Particulars of Works	2005-06 (Proposed)		
	Tied up works	**Un-tied up works**	**Total**
400kV Lines	0.00	0.00	0.00
400kV S/s	7.90	0.00	7.90
220kV Lines	173.30	2.10	175.40
220kV S/s	67.63	1.16	68.79
132kV Lines	107.35	0.00	107.35
132kV S/s	95.42	7.65	103.07
Misc. Works	0.00	0.00	0.00
Total	**451.60**	**10.91**	**462.51**

3.32 The Commission approves the above capacity addition plan of Rs. 462.51 Crore with the direction that the remaining amount also be tied up immediately.

Results of Load flow study

3.33 The results of the Load flow study carried out for FY05, by MPPTCL as per the directions of the Commission have been made available and the results indicate that there were serious bottlenecks in the system during FY05. The permissible variation as per Transmission Performance Standards is +/- 10% for 132kV and for 220kV voltage levels. The list of substations where the prescribed voltage limit has been violated by significant margin is given below:

Table-20: Name of the Substations where the Voltage limit has been violated in FY05

Sl. No.	Voltage	Name of Bus / Substation	Extent of variation observed
1	132 kV	Ambah	94.36 kV
2	132 kV	Banmore	97.80 kV
3	132 kV	Bareli	115.34 kV
4	132 kV	Bhind	96.43 kV
5	132 kV	Bijawar	113.71 kV
6	132 kV	Biora	110.58 kV
7	132 kV	Chhatarpur	112.52 kV
8	132 kV	Dabra	97.14 kV
9	132 kV	Datia	96.54 kV
10	220 kV	Gwalior	168.90 kV
11	132 kV	Gwalior	99.21 kV
12	132 kV	Jora	91.94 kV
13	132 kV	Karera	101.17 kV
14	132 kV	Khilchipur	117.77 kV
15	220 kV	Malanpur	167.10 kV
16	132 kV	Malanpur	99.95 kV
17	132 kV	Mehgaon	98.35 kV
18	220kV	Mehgaon	165.27 kV
19	132 kV	Morena	97.35 kV
20	132 kV	Motizeel	97.74 kV
21	132 kV	Pachore	114.38 kV
22	132 kV	Pichhore	104.81 kV
23	132 kV	Pipariya	117.78 kV
24	132 kV	Prithvipur	107.79 kV
25	132 kV	Sabalgarh	85.94 kV
26	132 kV	Seondha	96.30 kV
27	132 kV	Sheorpurkalan	80.49 kV
28	132 kV	Shivpuri	101.33 kV
29	132 kV	Tigra Road	98.35 kV
30	132 kV	Tikamgarh	109.55 kV

3.34 The above results are derived from an academic load flow study used for planning purposes and points out the need for making investment in the transmission system. Another valuable information 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.*

3.35 MPPTCL has undertaken a load flow study for the scenario likely to prevail in FY08 and this shows that as the result of proposed investments and after execution of the works the loading profile of the State transmission system will improve significantly and there would not be any bus / substation where the voltage limits would be violated.

3.36 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, and taking up the execution after due regulatory approvals. Further, the Commission has already specified the guidelines for Capital Expenditure by the Licensees in the State wherein the Licensee is directed to file its capital expansion plan of five years to the Commission and which shall be reviewed on yearly basis.

3.37 *The Commission further directs that 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.*

3.38 The Commission shall consider capitalisation of asset for depreciation, interest and ROE claims only when such claims are substantiated by works completion report.

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 FY06. 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 for use of intra-State transmission system shall be recoverable from long-term users in the ratio of their allocated capacity and any short-term users will pay as per terms notified for open access and will be treated in accordance with the terms and conditions included therein. The availability target for transmission system for computation of allowable charges shall be as per the MPERC (Transmission Performance Standards) Regulations 2004 and its subsequent revisions.

4.2 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. The Licensee would thus be functional for 10 months only during FY06. The Commission for FY06 has estimated the operating and financial parameters for the whole year. The Commission believes that this is an acceptable method as trend available from previous years data can be extrapolated to project parameters for FY06 and also monthly variations would not be required to be guess-estimated. The projections can be compared with past data for checking the reasonableness. The allowable expenses have to be determined for 10 months on a pro rata basis.

4.3 At this point it is necessary to discuss the matter regarding allocation of equity and loans.

B. Allocation of Equity and Loans between Completed Works and Capital Works-in-Progress

4.4 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.

4.5 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.

4.6 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.

4.7 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.

4.8 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.

4.9 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-21: Source wise Deployment of Fund

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

C. Annual Fixed Charges

(a) Employee expenses

4.10 The actual employee cost incurred by the Transmission Licensee in previous years and the cost projected by the Licensee for FY06 is given in the table below:

Table-22: Employee Cost

Amount in Rs. Crore

Particulars	FY02	FY03	FY04	FY05	FY06 (P)
Employee cost	41.56	44.36	59.29	58.63	60.62
Contribution for pension and gratuity	12.35	6.58	9.68	14.52	18.15
Total	**53.91**	**50.94**	**68.97**	**73.15**	**78.77**
Expenses capitalised	19.09	20.90	18.02	3.66	5.51
Expenses chargeable to revenue account	**34.82**	**30.04**	**50.95**	**69.49**	**73.26**

4.11 The employee expenses from FY02 to FY04 pertain to the period when the Transmission Licensee was a part of the integrated MPSEB. Direct expenses for this period have been collected from RAOs catering to both Transmission & Distribution wing of MPSEB and the common cost of the Headquarter has been apportioned on the basis of relative share of direct cost of each function in the total direct cost of MPSEB.

4.12 The Employee cost for FY05 is not the actual cost but has been projected on the basis of FY04 cost. MPSEB has not been able to draw its Trial Balance for FY05 even after the passage of more than eight months. It is a sad reflection on the efficiency of the accounts department of MPSEB. The projected increase for FY05 is 6.06%. The projected increase is mainly on account of increase in provision for contribution for pension & gratuity, DA and wage revision. The projected cost is significantly lower than Rs. 81.4 Crore which was allocated for Transmission function by the Commission on the basis of the submissions made by the then Licensee in its tariff order for FY05.

4.13 The Licensee for FY06 has projected an increase of 7.69% over FY05 and 6.87% on an annualised basis over FY04. The rise in the employee cost is expected to be mainly on account of anticipated increase in payout for pension and gratuity about 25% over FY05 and 36.93% an annualised basis over FY04. The Licensee has contended that it is providing for increase in pension and terminal liabilities due to increase in the number of retiring employees. In FY06 around 4.1% i.e. 207 of the existing employees are expected to retire.

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

4.15 The Transmission Licensee after the filing of the petition has claimed that the employees of the pension section, three RAOs and three stores have been transferred to it. This is expected to increase the employee cost by about Rs. 1.32 Crore.

4.16 As per the Trial Balance of FY05, the licensee is likely to incur an expenditure of Rs. 72.05 Crore in FY05 (excluding payout for terminal benefits). The indicated amount includes a provision of Rs. 5.34 Crore for anticipated IR/Wage revision. For FY06 the Commission has determined the employee cost by allowing an inflationary increase of 6% over the actual amount of Rs. 66.71 Crore incurred in FY05. The amount therefore that is being allowed for FY06 is Rs. 70.71 Crore. As the issue of transfer of employees is still to be settled, it is premature for the Commission to take a firm view and the issue will be examined only when a formal notification is issued. The Commission expects the Licensee to take into account the reduction in cost due to retirement of employees when they come with their proposal for next tariff period. The 6% increase allowed by the Commission is higher in real terms as the savings on account of retiring employees will also be available to Licensee. However, while truing up the figures when the audited balance sheet is made available, the Commission will make necessary adjustment in tariff on account of the actual expenditure incurred by the Licensee. The Commission expects the Licensee to improve employee productivity and out source non-technical activities.

4.17 The Capitalisation rate for employee expenses during FY02, FY03 and FY04 has been considered by the Petitioner as 35.4%, 41.0% and 26.1% respectively. As capitalisation of expenses on terminal benefits is not admissible, the real capitalisation rate for these years works out to 45.9%, 47.1% and 30.4% respectively. It is noteworthy that making a departure from previous years, the Licensee has proposed a capitalisation rate of 5% and 7% for FY05 and FY06. The Licensee has not provided any justification for this downward revision but has claimed that the amount capitalised during the period when it was a part of the MPSEB was incorrectly apportioned to it. According to the Petitioner, cost segregation between Transmission and Distribution during that period was done only to estimate notional transmission cost. The total capitalized amount was distributed between Transmission and Distribution on pro-rata basis of the total cost of the schemes executed by them. The Licensee for computation of capitalised amount has quoted the relevant guideline of ESAAR 1985, which stipulates that the employee cost of the construction units should be capitalized whereas the cost of O&M unit should be charged to revenue account. It is also mentioned in Section 2.10(4) "In respect of other permanent employees who work on both Capital and O&M jobs without additional emoluments, no part of employee cost shall be capitalized." According to the Petitioner, presently it has 5179 employees of which only 417 are involved in construction activities. Thus, according to MPPTCL only 8% of the employee cost should be capitalised.

4.18 The average capitalisation rate for the period FY02 to FY04 has been 33.4%. On excluding the terminal benefits provided to retiring employees this rate is 39.9%. The average capitalised amount is Rs. 19.34 Crore. The data for these years has been provided in tariff filing by the Board under affidavit. The Transmission Licensee in its petition has reproduced this data. It is strange now the Licensee disowns it. To understand the implications of this hypothetical calculation one must look at the question from the point of view of the consumer also. By keeping the capitalisation rate high the Board succeeded in adding to value to the fixed assets and was the direct beneficiary of the higher depreciation allowed on this amount. In the balance sheet notified by the State Government the same value of fixed assets continues to be shown for claiming depreciation. Now it does not suit the Licensee to depress the revenue expenditure by over capitalisation and therefore, the MPPTCL is claiming that all that was done by the MPSEB was wrong. This way the matter is sought to be tilted without actually committing to the figures of expenditure in the financial statement. The Commission is pointing this out only to caution the Licensee that the salary expenditure of employees engaged in construction should be separately maintained as far as possible. The licensee on the basis of ratio of employees working in Capital and O&M units cannot justify its claim of capitalisation ratio. It is common experience that more senior and skilled staff is employed in construction works and their average salary is higher than the average salary of employees in O&M units. The relevant section of the Electricity (Supply) Annual Accounts Rules, 1985 referred to by the Licensee has been quoted out of context. The ESAAR provides for proper capitalisation of employee cost. Section 2.9 provides "All employee costs in respect of construction units shall be fully charged as cost of capital assets". Section 2.10 (1) provides for capitalisation of monthly payments such as Salaries/Wages, DA, overtime and other allowances to temporary employees. Section 2.10 (2) provides for capitalisation of additional emoluments (e.g. Project allowance) to O&M staff for working additionally on capital works. Similar provisions exist in section 2.10 (3) for all monthly payments made to a group of permanent staff members, deployed exclusively or largely on capital jobs. Section 2.10 (4) in respect of other permanent employee who work on both capital and O&M job without additional emoluments provides for non- inclusion of employee cost for capitalisation. As per the submission made by the Licensee the capital works are carried out exclusively by the capital units therefore the situation where the same person is working on O&M and Capital works is not likely to arise and therefore the accounting situation referred to in section 2.10(4) is not realistic. The Licensee was asked to provide the relevant figure based on the Trial Balance for FY05 and six months of Trial Balance for FY06 but the Licensee has provided no such clarification in spite of opportunity. However, the Commission has taken a liberal view and has considered the capitalisation rate of 10% for FY06. 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.

4.19 The net employee cost allowable for FY06 is Rs. 63.64 Crore. The approved amount does not include amount approved for the payment of terminal benefits, which has been separately provided. For 10 months of its operations the licensee is entitled to receive Rs. 53.03 Crore.

(b) Terminal benefits to be paid to retiring employees

4.20 The Licensee has projected contribution towards terminal benefits for employees at 194.68 Crore. The amount claimed is on the basis of projection made by MPSEB in its petition filed for FY06 prior to the notification of 31st May 2005. MPSEB had projected this amount for FY06 by considering an increase of 25% over FY05, which itself had been estimated by considering a 50% increase over FY04. The payout on this accounting head for the retiring employees in the past few years as provided by the licensee in the petition is given in the table below:

Table-23: Terminal benefits paid by MPSEB as claimed by the Licensee

Amount in 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**

4.21 These details are very significantly at variance with the details provided by MPSEB in its filing for FY06. MPSEB for FY05 had estimated the figures by considering a 50% rise over FY04.

Table-24: Terminal benefits paid by MPSEB as provided in its earlier filing of FY06

Amount in Rs. Crore

Sl. No.	Details	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**

4.22 The terminal benefits paid in FY04 and FY03 as per the printed Balance Sheet of MPSEB for FY04 are Rs. 107.20 Crore and Rs. 104.81 Crore respectively. The figures filed by MPSEB for these years in its tariff petition were on the lower side.

4.23 The Transmission Licensee vide its letter dated 1st February 2006 has provided certain clarification in this regard, which are being reproduced.

" *The accounting procedure for terminal benefit is as under:*

(i) At the year end, a provision is being made for pension & gratuity which is reflected in the annual accounts.

(ii) The actual payment is being made through the existing provision.

(iii) The provisioning is being made only for pension and gratuity. The year wise break up of amount provided and actual payment are as under

	FY03	***FY04***	***FY05***
Provision	*Rs. 104.81 Crore*	*Rs. 107.20 Crore*	*Rs. 151.46 Crore*
Actual Payment	*Rs. 126.13 Crore*	*Rs. 117.12 Crore*	*Rs. 120.40 Crore*

4.24 It needs pointing out that the printed balance sheet of the MPSEB shows a provision significantly lower than the actual payment in FY03 and FY04 while the position would have been known with certainty when the relevant publication was being prepared. For the purpose of determination of allowable terminal benefits the Commission has considered the figure available in the printed Balance Sheet and wishes to caution the Licensees and Utility to avoid discrepancies which lead to confusion.

4.25 The Licensee has considered leave encashment as a part of the Terminal Benefits. As per the chart of accounts prescribed by ESAAR, items of employee cost falling under account group code 75.8 have been considered as constituting terminal benefits. Therefore as per this classification, leave encashment cannot be considered as a part of the terminal benefits. Further the Commission in its order for Generating Company has considered the leave encashment as a part of the regular employee cost and has accordingly allowed it. The Transmission Licensee has also considered leave encashment as a part of the employee cost. The amount claimed for FY06 for terminal benefits does not include any provision for leave encashment. Provision for leave encashment for the Transmission Licensee has been considered as a part of the employee cost. The leave encashment is therefore not being considered as a part of the terminal benefits.

4.26 The licensee has also claimed Rs. 44 Crore for FY06 for funding the trust for serving the terminal liabilities of the retiring employees The transfer scheme provides for setting up of a Fund for meeting the terminal liabilities of;

- Existing pensioners (including family pensioners) of MPSEB who are eligible for pension as on date of transfer.
- Towards the pension and other benefits for the past service rendered by the employees upto the date of transfer in Board of prospective pensioners who retire after the date of transfer
- Prospective pensioners working in MPPTCL who retire after the date of transfer for total pension and other terminal benefits.

For this purpose the State Government has to constitute a Terminal Benefit Trust and the existing employees were to be transferred to companies created out of reorganisation. None of these conditions have been met so far. Further, the transfer scheme provides that till the time the proposed arrangements are established, the due payments shall be made by the Board. The State Government through an amendment of the transfer scheme dated 13th June 2005 has transferred the responsibility of meeting the pension liabilities to MPPTCL.

4.27 The Commission has therefore determined the terminal liability to be paid by MPPTCL on behalf of all the five companies for FY06 in accordance with the practice prevailing so far. The Commission shall take a decision on the funding pattern envisaged in the transfer scheme when action for establishing the Fund has been completed and all necessary details have been submitted to the Commission. For FY06 the Commission allows a 6% rise over the amount of Rs. 120.40 crore actually paid in FY05. Thus for FY06 Rs. 127.62 Crore is being allowed for payment of terminal liability. For 10 months the Transmission Licensee shall be entitled to receive Rs. 106.35 Crore.

(c) Administrative and General Expenses

4.28 The A&G cost incurred by the Transmission Licensee in previous years and that proposed for FY06 is given in the table below:

Table-25: Administrative and General Expenses

Amount in Rs. Crore

Particulars	**FY02**	**FY03**	**FY04**	**FY05**	**FY06 (P)**
A&G cost	6.42	5.43	8.27	10.73	16.67
Expenses capitalised	0.39	1.11	2.93	0.86	1.31
Total	**6.03**	**4.32**	**5.34**	**9.87**	**15.36**

4.29 The expenses for FY05 have been projected using FY04 as the base data. The Licensee for FY05 has projected this expense to go up by 29.6%. The increase is claimed on account of increased provision of charges for operations of substations and cost of running of vehicles.

4.30 Expenses for FY06 are projected to go up by 55.3% over FY05 and by 41.9% on an annualised basis over FY04. According to the Licensee significant increase in this expenditure is expected to be an account of (i) Increase in computer stationery and other materials cost due to switching over from manual computation to computer based systems (ii) Cost of softwares in System Study Cell (iii) Cost of hiring of services of outside professions for EHV substations (iv) Cost of running of vehicles

4.31 The Licensee has submitted that the gross expenditure for FY05 as per the Trial Balance is expected to be Rs. 9.79 Crore. If fee of Rs. 0.39 Crore paid to MPERC is excluded the increase is of 18.3% over FY04 levels. The Licensee should exercise prudence while incurring expenses under this head as A&G cost is controllable. The Licensee must account for the manpower savings from introduction of IT. The Commission, looking into past annualised increases and the requirement of a newly formed company, allows 10% increase over FY05 actual expenditure (excluding fee paid to MPERC) and the projected MPERC fee for FY06. Thus Rs. 11.20 Crore is being allowed for FY06.

4.32 The Capitalisation rate in FY02, FY03 and FY04 is 6.1%, 20.5% and 35.4%. In its petition for FY06, the licensee for FY05 has considered the rate at 8.0% while for FY06 the rate has been revised to 7.83%. The licensee has not provided reasons for deviating from rates considered in past and for charging different rates for FY05 and FY06. Clause 2.12 of the Electricity (Supply) Annual Accounts Rules 1985 provides the accounting principles for determination of A&G expense to be capitalised.

4.33 The Commission for FY06 considers a capitalisation rate of 10%. Net A & G amount allowed for FY06 is Rs. 10.08 Crore. For 10 months of its operations the licensee is entitled to receive Rs. 8.40 Crore.

4.34 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.

(d) Repairs and Maintenance Expenses

4.35 The R&M cost incurred by the Transmission Licensee in previous years and that proposed for FY06 is given in the table below:

Table-26: Repairs and Maintenance

Amount in Rs. Crore

Particulars	FY02	FY03	FY04	FY05	FY06 (P)
R&M cost	4.24	5.37	10.71	18.57	24.68
Expenses capitalized	1.08	0.95	0.40	0.48	0.51
Total	3.16	4.42	10.31	18.09	24.17

4.36 The licensee has projected an increase of 73.4% in gross expenses over FY04 levels. For FY06 the licensee has projected an increase of 33% over estimated value of FY05. This represents an increase of nearly 52% on an annualised basis over FY04. The licensee has justified the projected increase on the ground that as assets get older more expenditure on maintenance is required and that inflation leads to increase in price of labour and material. With addition of new assets R&M expenditure increases. The financial crunch in the past has inhibited proper and adequate maintenance of its assets, which it wishes to rectify now.

4.37 The licensee has reported that in FY05 it incurred Rs. 14.63 Crore on repairs and maintenance which is much lower than what has been projected in the Petition. The revised lower figure is on the basis of trial balance of FY05. This expenditure is likely to be 36% more than that incurred in FY04. The Commission is in favour of adequate spending on repairs and maintenance as it leads to better availability of lines, which improves the quality of supply delivered to the end consumer. The Commission in the past had allowed the amount that the Board had asked for but could not spend.

4.38 The Commission has decided to allow an increase of 6% for FY06 over gross expenditure incurred in FY05. Thus Rs. 15.50 Crore is being allowed for FY06. In order to incentivise greater spending under this head the Commission shall consider actual amount spent in excess of the allowed amount while truing up in subsequent orders.

4.39 The Capitalisation rate considered for FY02, FY03 and FY04 are 25.5%, 17.7% and 3.7%. The average for these years is 12.0%. The Commission therefore considers capitalisation rate of 10% for FY06.

4.40 The net R&M expenses allowed for FY06 is therefore Rs. 13.95 Crore. The allowed net expenditure compares favourably as a percentage of opening gross block of the year. For FY04 net expenditure was 0.53%, in FY05 it is expected to be (taking capitalisation rate as 10%) 0.56% and that allowed for FY06 is 0.58%. For 10 months of operation the licensee is thus entitled to receive Rs. 11.63 Crore.

(e) Depreciation

4.41 Transmission Licensee in its tariff petition for FY06 has claimed depreciation on gross block of fixed assets of Rs. 2407 Crore, the value notified by GoMP as on 1st June 2005 in the transfer scheme. The depreciation for FY06 has been claimed at rates specified by the Ministry of Power at the notified opening gross block. The account head wise breakup of the value of the fixed assets of the licensee on which depreciation has been claimed is summarized in the table below. The Licensee has estimated that during FY06 it expects to add fixed assets worth Rs. 621 Crore. Further the licensee has also submitted that the gross block notified by GoMP is provisional as the balances pertain to FY04 as the transfer scheme was drawn up on the basis of the latest trial balances available at the time of notification. As per the Licensee the actual gross block as on 1.6.2005 is likely to be higher. The Commission will consider any increase only when the Government notification in respect of opening balance sheet is finally issued.

Table-27: Accounting code wise Opening Gross & Net Block for FY06

Amount in Rs. Crore

A/c Code	Particulars	Gross Value	Accum. Dep.	Net Value	Net value as a % of GV
10.1	Land & Land rights	2.33	0.06	2.27	97.4%
10.2	Building & Civil works	151.03	51.73	99.30	65.8%
10.3	Hydraulic Works	0.93	0.76	0.17	18.3%
10.4	Other Civil Works	0.49	0.25	0.23	46.9%
10.5	Plant & Machinery	1240.97	698.23	542.74	43.7%
10.6	Lines Cable Networks etc	1006.33	321.62	684.71	68.0%
10.7	Vehicles	1.16	1.06	0.10	8.6%
10.8	Furniture & Fixtures	0.53	0.39	0.14	26.4%
10.9	Office Equipments	3.23	2.01	1.22	37.8%
	Any other items				
	Total	**2407**	**1076.1**	**1330.9**	**55.3%**

4.42 The Licensee has claimed depreciation at rates as notified earlier by the Ministry of Power instead of CERC specified rates. MoP rates are higher than the CERC specified rates. The Depreciation amount claimed by the licensee for FY06 is given in the table below: -

Table-28: Depreciation projected for FY06

Amount in Rs. Crore

A/c Code	Particulars	Amount
10.1	Land & Land rights	0.01
10.2	Building & Civil works	1.28
10.3	Hydraulic Works	0.03
10.4	Other Civil Works	0.00
10.5	Plant & Machinery	60.58
10.6	Lines Cable Networks etc	51.97
10.7	Vehicles	0.00
10.8	Furniture & Fixtures	0.02
10.9	Office Equipments	0.11
	Any other items	
	Total	**114.0**

4.43 As can be seen from Table-27 the net value of vehicles is only 8.6% of the gross block as against the minimum value of 10%. The Commission for this order shall adopt the rates specified by CERC for Transmission Licensee applicable for the tariff period FY04 to FY09. MPERC, as provided in section 61(a) of the Electricity Act 2003, is to be guided by the principles and methodologies specified by the CERC for determination of the tariff applicable to the generating companies and transmission licensees. The Commission has followed the same principle while determining generation tariff of MPPGCL. The rates adopted by the CERC have been notified by the Commission as a part of the MPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2005.

4.44 The Licensee has revised the earlier provided figures of account code wise asset breakup of Rs. 2407 Crore and total accumulated depreciation. According to the licensee this revision has been necessitated to make values compatible with the figures recorded in fixed asset registers. Based on the CERC's depreciation rates the Commission has re-computed the allowable depreciation for FY06 on the opening gross block notified by GoMP and the revised breakup provided by the licensee. The allowable depreciation for FY06 is as given in the table below:

Table-29: Depreciation allowed for FY06

Amount in Rs. Crore

A/c Code	Particulars	Opn. Gross block	Acc. Dep. at the beg. of the year	Dep. for the year	Rate (%)
10.1	Land & Land rights	2.32	0.06	0.01	0.38
10.2	Building & Civil works	30.09	6.16	0.54	1.80
10.3	Hydraulic Works				
10.4	Other Civil Works				
10.5	Plant & Machinery	1149.10	499.82	41.37	3.60*
10.6	Lines Cable Networks etc	1193.50	561.28	30.67	2.57
10.7	Vehicles	2.84	2.00	0.51	18.0**
10.8	Furniture & Fixtures	29.15	6.68	1.75	6.0
10.9	Office Equipments				
	Any other items				
	Total	**2407.00**	**1076**	**74.85**	**3.27**

* Depreciation rate applicable for transformer & switchgear.

** In earlier computation the licensee had claimed depreciation though the asset was shown to have depreciated more than 90% of cost, as evident from Table 27 above. (Total may not tally due to rounding off)

4.45 The Transmission Licensee for 10 months of its operations shall be entitled to recover Rs. 62.38 Crore.

4.46 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.

4.47 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.

4.48 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.

(f) Interest Cost

4.49 MPPTCL consequent to reorganization of MPSEB and the notification of GoMP dated 31st May 2005 has been allocated a loan liability of Rs 1366.00 Crore as detailed below.

Table-30: Loan Liability allocated to MPPTCL

Amount in Rs. Crore

Particulars			Amount
1	**PFC**	**Project Specific**	321.00
2	**GoMP (ADB)**	**Project Specific**	195.00
3	**SADA Gwalior**	**Project Specific**	15.00
5	**MPSEB**		835.00
	Total		**1366.00**

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

4.51 The Transmission Licensee for FY06 has claimed Rs. 162.55 Crore as interest on loans allocated to it by GoMP and Rs. 12.78 Crore towards interest on working capital borrowings. Thus the licensee has claimed a total net interest liability of Rs. 175.33 Crore. The Source wise interest liability as claimed by the Licensee is given in the table below:

Table-31: Interest Liability for FY06

Amount in Rs. Crore

Sl. No.	***Particulars***	**Amount**
1	PFC	41.75
2	ADB (GoMP)	23.84
3	SADA Gwalior	00.72
4	MPSEB	107.24
	Total	**173.55**
Less	**Interest Capitalised**	**11.00**
	Total	**162.55**
	Interest on Working Capital borrowings	**12.78**
	Total interest claimed in the petition	**175.33**

4.52 All the loans, except the loan from MPSEB, have been indicated to be project specific loans in the notified Balance Sheet. The Licensee has provided details of schemes/assets funded from loans from PFC, ADB and SADA. The interest cost computation for all such loans has been done on the basis of terms and conditions of the loans. The details of the loan from MPSEB allocated to MPPTCL consequent upon reorganisation are not available with them. Interest cost to be paid by MPPTCL for this loan has been computed on the basis of its allocated share in the total loan. The interest cost on these loans as computed by MPSEB in its petition for FY06 has been considered for prorata allocation. The Licensee has claimed that this loan was for works already completed in past and the assets have been put to use. The Licensee has not identified the assets created out of this loan. The Licensee has quoted clause 1.42(3) of the ESAAR 1985 for not identifying the assets created. " In view of difficulties in identifying a source of its use, no attempt shall be made for source use identification"

4.53 The Licensee has provided details of completed schemes and on going schemes that have been funded from Loans from PFC. The licensee by the date of notification has already drawn PFC loans of Rs. 321.15 Crore and it expects to draw Rs. 150 Crore in FY06. As per the details provided there has been no default on principal and interest payments. The Licensee has provided details of completed schemes for which the licensee has received Rs. 314.93 Crore from PFC. Further Licensee has claimed that Rs. 156.22 Crore of loan contracted with PFC for ongoing schemes. The licensee has not provided details of the on-going schemes. Since the interest on loans received for on going schemes is to be capitalised the Commission is not now insisting for the details. Effective interest rate for proposed interest liability works out to 10.95%, which is acceptable. The Commission allows the proposed interest liability of Rs. 34.48 Crore for PFC loans utilised in projects that have been commissioned.

4.54 The Licensee has provided the details of drawals from ADB. Loans amounting to Rs. 15.24 Crore have been drawn during the period October 2003 to 31st March 2005. The interest rate on earlier drawals was 12% while on the later drawls the interest rate payable is 10.5%. The Licensee during FY06 expects to draw Rs. 60 Crore at an interest rate of 10.5%. The Licensee has provided details of the scheme funded through these loans. As per the details provided by the licensee works of estimated cost of Rs. 444.31 Crore have been completed while works of estimated cost of Rs. 14.28 Crore are under progress. The Licensee however has not correlated various schemes with various phases of loan drawals. *It needs to be clarified as to how works worth Rs. 444.31 Crore could be executed with loan amount of Rs. 195.24 Crore and in the absence of convincing reply the data is suspect.* The Licensee has claimed interest at 10.63%, which is acceptable. The interest liability of Rs. 20.11 Crore claimed on ADB loans for FY06 for completed schemes is acceptable. *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.*

4.55 Loan of Rs. 15.00 Crore was availed by the licensee from SADA Gwalior for commissioning of 132 KV Sub-station and allied works at Tighra (Gwalior). This work has already been commissioned. The proposed interest liability of Rs. 0.72 Crore is therefore being allowed for FY06.

4.56 The Commission has consistently followed the principle that only prudent cost is allowed to be recovered through tariffs. It is therefore imperative for the Transmission Licensee to establish the purpose for which loans have been availed. The Licensee except for loan from MPSEB has been able to establish the purpose of the loans.

4.57 The specific terms and conditions of Generic loan have not been disclosed even though the licensee has been a part of the integrated MPSEB. Further the petition states that these loans were availed for projects, which have been completed and commissioned. The licensee and MPSEB are unable to identify the assets for which this loan has been availed. Further the licensee has claimed that as per ESAAR source use identification is not required. It is apparent that the MPSEB as well as MPPTCL are not revealing the truth and are reluctant to admit that these loans have been contracted by MPSEB in order to meet revenue requirement. The Loan agreement specifies the purpose for which loan is being contracted therefore MPPTCL cannot be absolved of the responsibility under ESAAR rules to reveal the purpose for which these loans were contracted. It has also not been clearly admitted that the assets of MPSEB which continues to exist and operate as a Trading Licensee shall devolve on the unbundled entities after MPSEB's operations cease.

4.58 In the absence of details of the purpose for which these loans have been contracted, the Commission cannot accept that these loans are anything but towards working capital purposes. However, as stated in paragraph 4.8, the Commission has decided to allocate Rs. 712.00 Crore out of MPSEB loan of Rs. 835.00 Crore to capital works in progress. The interest on this portion of the loan will be capitalised as and when the works are commissioned. The remaining amount of Rs. 123.00 Crore has been considered as working capital loan.

4.59 The Transmission Licensee for FY06 is allowed an interest liability of Rs. 55.31 Crore. However for 10 months of its operations it shall be entitled to recover Rs. 46.09 Crore.

(g) Interest on working capital

4.60 In the tariff petition, MPPTCL has computed the interest on working capital on the following basis:

i. O&M Expenses for one month

ii. Maintenance spares @1% of historical cost escalated @ 6% per annum from date of commercial operation

iii. Receivable on two months of transmission charges calculated on target availability basis

iv. The interest rate of 11% (SBI's PLR)

4.61 The proposal of MPPTCL is based upon the norms prescribed by MPERC for its MYT framework applicable for the period FY07 to FY09. The Commission considers the request of MPPTCL as reasonable as the norms proposed for computation of working capital requirement are as per the prevailing norms of CERC and MPERC.

4.62 The interest rate i.e. 11% used for computation of interest on working capital is equivalent to SBI's PLR rate.

4.63 The Licensee based on these norms has computed a working capital requirement of Rs. 116.17 Crore on which interest liability of Rs. 12.78 Crore has been claimed. The Commission has recomputed the working capital requirement based on expenses allowed by the Commission.

Table-32: Working Capital projected and allowed for FY06

Amount in Rs. Crore

Sl. No.	Details	Working Capital (Projected)	Working Capital (Allowed)
1	O&M Expenses (1 month)	9.40	7.31
2	Maintenance spares	24.07	24.07
3	Receivables (2 months)	82.70	54.73
	Total	**116.17**	**86.11**
	Interest (@ 11%)	12.7	9.47

4.64 The above claim of Rs. 116.17 Crore is over and above the loan liability of MPPTCL as shown in the balance sheet notified by the State Government on notional basis. This matter has been analysed in detail in Paragraph 4.8 of this order where it has been considered by the Commission that out of the total loan liability of Rs. 1366 Crore, Rs. 123 Crore shall be treated as working capital borrowings even though it is much in excess of the normative needs of Rs. 86.11 Crore as computed in the above table. The Commission has taken a lenient view and made a departure from the normative principles and thus accepts the generic loan of Rs. 123.00 Crore as working capital loan.

4.65 The Commission for computation of interest on working capital has considered the rate as 12.75% as allowed to MPPGCL. This is being done to so that there parity in treatment of this issue for both MPPGCL and MPPTCL. Further MPERC (The terms and Conditions of determination of transmission tariff) Regulations 2005 provide for working capital interest at short-term prime lending rate of SBI plus 1%.

4.66 Interest on Working Capital borrowings of Rs. 123 Crore at 12.75% will amount to Rs. 15.68 Crore. For 10 months of operation the Transmission Licensee shall be entitled to receive Rs. 13.07 Crore. Together with the interest on project specific loans amounting to Rs. 55.31 Crore as shown in Paragraph 4.59, the total interest allowed by the Commission amounts to Rs. 70.99 Crore as against the claim of Rs. 175.33 Crore by the MPPTCL.

(h) Return on Equity & Tax

4.67 MPPTCL has submitted that GoMP vide its notification dated 31st May 2005 has provided for an equity base of Rs. 845 Crore. The licensee has claimed 14% return on 30% of Rs. 2211 Crore (debt + equity) i.e. 663 Crore only and the balance Rs. 182 Crore has been treated as long-term loan. On this balance amount the licensee as provided in CERC's and draft MPERC's regulations (existing at the time of filing) has claimed interest cost at 12% (weighted average rate of interest). The Licensee thus has claimed Rs. 92.82 Crore as return on equity and Rs. 21.84 Crore as interest on equity in excess of 70:30 norms.

4.68 The Licensee is eligible to earn return only on equity employed in assets that have been commissioned. As per the reasons provided in 4.5 Equity employed in completed works is considered to be Rs. 722 Crore and is eligible for 14% return.

4.69 The Commission allows Rs. 101.08 Crore as return on equity. For 10 months of its operations the licensee shall be eligible to receive Rs. 84.23 Crore.

4.70 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.

4.71 MPPTCL has not computed the tax liability that it would be required to meet on the allowable return of Rs. 101.08 Crore at the prevailing rate of 30%, surcharge thereon @ 10% and educational CESS at 2%.

4.72 The Commission based on assumptions given in the above paragraph has computed the tax liability that MPPTCL would be required to meet. The tax liability for FY06 is likely to be of Rs. 38.37 Crore. For 10 months of operation of the licensee the tax liability shall be Rs. 31.98 Crore. However, the tax liability of Transmission Licensee is based on other expenses also and will be known only when the accounts are finalized. Hence, the Transmission Licensee shall bill long-term open access customer for the actual tax liability incurred by it subject to the maximum of Rs 31.98 Crore. The amount billed by the Transmission Licensee shall be a pass through item in tariff and shall be payable by long term beneficiaries at actuals subject to the maximum of Rs. 31.98 Crore.

(i) Non-Tariff Income

4.73 The Licensee has not projected any income under this head for FY06. The Commission is therefore not considering any income under this head. However if any income accrues under this head the licensee shall reduce the Annual Transmission Charges (TSC) allowed by the Commission by this amount. The charges to be paid by the long-term beneficiaries shall be reduced accordingly.

(j) Incentives and Penalties

4.74 For FY06, the Transmission Licensee shall be entitled to receive incentive on achieving weighted annual availability beyond the target availability of 95 % indicated in Transmission Performance Standards. The availability shall be paid in accordance with the following formula:

$$\textbf{Incentive} = \textbf{722 (Equity employed in completed assets)} * \frac{\textbf{(Annual availability achieved} - \textbf{95\%)}}{\textbf{100}}$$

4.75 The incentive shall be paid by all beneficiaries who are liable to pay to annual transmission charges in the ratio of their average allotted capacity for the year.

4.76 Recovery of transmission charges below the level of target availability shall be on pro rata basis. At zero availability, no transmission charges are recoverable.

(k) Annual Transmission Charges

4.77 Based on the expenses allowed in the preceding paragraphs, the Annual Transmission Charges are Rs. 462.21 Crore as per the details given in the table below:

Table-33: Annual Transmission Charges allowed by the Commission

Amount in Rs. Crore

Sl. No.	Particulars	Amount
1.	Employee Cost	63.64
2.	A&G Cost	10.08
3.	Repairs & Maintenance	13.95
4.	Depreciation	74.85
5.	Interest on loans	55.31
6.	Interest on working capital	15.68
7.	Return on Equity	101.08
8.	Provision for terminal liabilities	127.62
9.	**Total**	**462.21**
10.	**For 10 months the Transmission Licensee is entitled for**	**385.18**

4.78 The long-term users of transmission system shall pay the allowable transmission charges to the Transmission Licensee every month.

(l) SLDC Charges

4.79 SLDC is entitled to recover its expenses by way of levy of fees and charges by the user of transmission system as provided in the existing MPERC (Levy of fees and Collection of fees and Charges by SLDC) Regulations 2004. The existing regulation is proposed to be revised in accordance with the Ministry of Power notification dated 8th June 2005 for levy and collection of fees and charges by SLDC wherein it has been clarified that SLDC charges shall be recovered from licensees using intra-state transmission system. These charges therefore shall not be recoverable from Generating Companies. The Commission after incorporating changes necessitated due to the notification of MoP has published the draft regulation namely MPERC (Levy and Collection of Fees and Charges by SLDC) Regulation 2004, Revision 1 on 30th December 2005 for determination of SLDC Charges and the user of the transmission system liable to pay these charges.

4.80 The SLDC has not been maintaining separate account in the past. The revenue expenses, assets and its liabilities are a part of the profit & Loss and Balance Sheet of the Transmission Licensee. Even the Transmission Licensee while projecting its expenses for FY06 has considered the expenses of SLDC as a part of its revenue requirement and thereafter has segregated the expenses projected by the SLDC.

4.81 The Commission has also adopted the same approach, as it has no basis, as past data is not available on which expenses of SLDC can be determined separately. Thus the annual transmission charges of the Transmission Licensee determined by the Commission in this order for FY06 are inclusive of charges for SLDC for FY06. The Commission therefore disposes of the petition no. 5/2005 of SLDC in this order.

4.82 The SLDC has confirmed that they are now maintaining separate accounts. *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.*

4.83 The SLDC should file its petition for FY07 based on its financial statements of FY06.

(m) Charges to be paid by long-term users

4.84 The long-term users of transmission system of the licensee shall be required to pay Rs. 2276.34 per MW per day. The long-term users for this purpose shall be the long-term open access customers defined in accordance with MPERC (Terms and Conditions for Open Access in MP), Regulations 2005. The computation of charges is given in the table below:

4.85 The short term users is required to pay 25% of the charges payable by the long term users and accordingly shall pay Rs. 569.09 per MW per day. Further, if a short term user avails supply for a period less than 24 hours, the following charges shall be payable.

- Upto 6 hours in one block- Rs. 142.27 per MW (1/4 of the short term rate)

- More than 6 hours and upto 12 hours in one block- Rs. 284.54 per MW (1/2 of the short term rate)
- More than 12 hours and upto 24 hours in one block-Rs. 569.09 per MW (Short term rate)

Table-34: Computation of charges payable by the Open Access Customer

Sl. No.	Details	
(i)	Annual Transmission Charges (Allowed)	Rs. 462.21 Crore
(ii)	Transmission System Capacity	5563 MW
(iii)	Transmission Charges to be paid by long term open access customer (i/ii)	Rs. 2276.34 per MW per day
(iv)	Transmission Charges to be paid by short term open access customer (0.25* (iii))	Rs. 569.09 per MW per day

4.86 Non-conventional Independent Power Producers or Non-conventional Captive Generators have often complained that since their plant utilisation factors are very low, transmission charges (for allocated capacity) in terms of per unit charges become quiet high. This substantially increases the delivery cost of generation from non-conventional source, making it financially unviable business proposition. This is brought clearly by an example given in the table below:

Table-35: Transmission Charges payable by a wind generator

Sl. No.	Details	
1.	10 MW wind generator gets an allocation of 10 MW of transmission Capacity	10 MW
2.	Annual Transmission Charges payable for 10 MW of allocated transmission capacity	Rs. 83,08,646
3.	Net Energy sent out at 22.5 CUF (after considering auxiliary consumption)	197,10,000 Units
4.	Transmission Charges payable per unit	Rs. 0.42/Unit transmitted

4.87 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 of 42 Paise per unit determined in previous paragraph is also being allocated between the generators and the Government in the same ratio of 1:2 as per which the generator will pay 14 Paise per unit and the Government will reimburse the Licensee 28 Paise per unit. This payment needs to be made by the generator and the Government only when the generating unit is connected to the grid at 132 kV and above. For generating units connected to the grid at lower than 132 kV/66 kV, the Commission shall determine the wheeling charges while determining the retail tariff.

(n) Penalty for over utilization of allocated capacity

4.88 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.*

(o) Reactive Energy Charges

4.89 The Licensee has proposed reactive energy charges at 29 Paise per KVARH for reactive energy drawn by the Open Access Customer for FY06. The Commission shall take a view on this matter while finalising its balancing and settlement code for applicability of intra-State ABT.

(p) Parallel Operation Charges

4.90 The Licensee has proposed parallel operation charges on all open access customers whose generators are connected to the transmission system at Rs. 388/KW/Month. The charge proposed by the Licensee has neither been provided in the Open Access regulations nor in the regulations on terms and conditions of transmission tariff. The Commission would not go into the issue of levying these charges once again. This issue was discussed with the Transmission Licensee while framing regulations on Open Access and Terms and Conditions of tariff. The proposed charge was not included in the list of allowable charges for the inability of the Licensee to quantify the perceived benefits in monetary terms after the applicability of open access charges for the use of transmission system. 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. The discrimination proposed is not acceptable to the Commission.

(q) Grid Support charges

4.91 The Transmission Licensee has proposed a surcharge equal to 25% of transmission charges on arc induction furnaces, rolling mills and unbalanced railway traction supply at two phases to compensate for the ill effects of such loads if such load avail supply from other than the licensee. According to licensees these loads pass on the harmonics in the licensee system and results in voltage jerks and unbalancing of licensee's system resulting in the failure of EHV transformers. The Licensee has computed the loss at Rs. 3.61 Lakh per MVA. The concept that dirty loads should pay for the ill effects caused by them on the system is widely accepted. However characteristics of various types of load on the distribution need to be studied and categorised according to their effects on electrical network. The quantum of adverse impact on the electrical network due to such load needs to be established in monetary terms. No such data is available with the Commission and the Licensee is advised to collect information on the subject from other State Transmission Utilities and orders passed by other State ERCs. The Licensee has provided data on failure of transformers which were supplying to such loads but it could not establish that the failure of these transformers took place due to ill effect of these loads. This issue warrants a deeper study either by the Licensee or such some research organisation. The Licensee if it wishes to proceed ahead on this issue may do so for which it should seek the help of some reputed research organisation in getting the ill effects of dirty loads probed and the quantification of implication of such effects in monetary terms. As this charge has neither been prescribed in the Open Access regulation nor in the regulations on terms and conditions of tariff the Commission would like to impose any such charge only after receiving report of the detail study as suggested and the views of other stakeholders have been sought.

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

4.92 The Transmission Licensee has suggested a penalty on Distribution Licensee for excessive trippings on 33KV and 11 KV feeders emanating from EHV substation due to poor maintenance. According to the Transmission Licensee excessive trippings adversely affect it in the following ways:

- The life of costly sub-station equipments, such as transformer, circuit breaker, CT/PTs and other equipments is adversely affected.
- Increase in operational and maintenance requirements in EHV sub-stations as the circuit breakers etc. are to be maintained after a fixed number of trippings.
- Under utilization of capacity of EHV sub-stations during the period of outage as well as overloading of other EHV sub-station from where alternate feed is arranged for the affected area.

4.93 The testing division of the licensee did a study on the average number of trippings per month per 33/11 KV feeder emanating from EHV Substation for the period January to December 2003 and found that average trippings are 10.4/month. The Licensee has also reported 40/50 trippings per month in some of the feeders. The trippings in some of the isolated cases have been as high as 100/month. The Licensee has proposed penalty of Rs. 1450 per each tripping in excess of the norm of 10 trippings per month.

4.94 The Commission is in agreement with the Licensee that poor maintenance of feeders emanating from EHV substation by the Distribution Licensee adversely affects it. Further it has also been found that in some of the 33/11 KV substations even basic protection scheme (CB) is missing and any fault at the 33/11 KV substation gets reflected at EHV substation. Trippings at the end of the Transmission Licensee affects supply to a greater area.

4.95 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 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*. 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.

(s) Directions for compliance

4.96 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.

4.97 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.

4.98 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.

4.99 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.

4.100 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.

4.101 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.

CHAPTER 5

SECTION – A

Status of Compliance of directives given by the Commission

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

Directive: Maintenance of Asset registers.

5.2 While passing the Tariff Order of 30th November 2002, the Commission observed that the amount against depreciation was not properly charged and the requisite asset registers were not properly maintained. Hence, the Commission directed the Board to come up with a time bound programme for proper and up to date maintenance of asset registers. The Commission at the time of passing the Tariff Order for 2004-05 i.e 10th December 2004, again noted that the Board could not able to produce the asset registers before the Commission. The Commission directed that the asset register be maintained properly by 30th June 2005. While scrutinizing the data for passing the Tariff Order for 2005-06, the Board / MPPTCL had shown the records of assets as maintained by the Board at different accounting unit. The Commission has directed Board / MPPTCL to prepare a time bound action plan for finalizing its asset records.

5.3 **MPPTCL Compliance Reported:** MPPTCL has prepared and submitted the records of its assets to the Commission.

5.4 **Commission's Observation:** The Commission has found that MPPTCL has documented all its assets substation and line wise. The Commission has directed that the asset shall have to be matched with the capital expenditure plan.

Directive: Data based management and management information system

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

5.6 **MPPTCL Compliance Reported:** MPPTCL has been submitting the information as prescribed in the MIS regulation and the transmission performance Standard regulation to the Commission regularly.

5.7 **Commission's Observation:** The Commission has noted on a number of occasions that there should be a strong database management and management information system in place. The Commission has 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.

Directive: Man Power planning.

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

5.9 **MPPTCL Compliance Reported:** MPPTCL has not proposed to conduct any study for redesigning its work force according to the manpower out put norms.

5.10 **Commission's Observation:** The Commission feels that the redeployment of the work force is certainly a better option. The Commission once again directs MPPTCL to conduct a work-study so as to redesign their manpower for better results. The Commission shall consider O&M expenses on a normative basis for FY 2007 and onwards.

Directive: Norms for O&M expenses.

5.11 The Commission shall consider the O&M expenses (R&M expenses + Employee expenses + A&G expenses) in the licensee's revenue on a normative basis from the next year onwards. The Board should benchmark their O&M costs with better performing utilities and identify areas of improvement and cost reductions

5.12 **MPPTCL Compliance Reported:** MPPTCL has proposed the O&M expenses on the basis of the norms for the tariff determination of FY07 and onwards.

5.13 **Commission's Observation:** The Commission has fixed the norms for O&M expenses on the multi year principles for the year 2006-07 and onwards.

Directive: Project wise details of the Loans.

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

5.15 **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.

5.16 **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.

Chapter 6: Section B

Objections and Comments on MPPTCL's Tariff Proposal

5.17 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 31st October, 2005, the following stake holders submitted their comments/objections:-

1. M/s Enercon (India) Limited

5.18 A public hearing was arranged at Bhopal on 09th December, 2005 at Urja Bhawan hall, Bhopal. Before the hearing comments/objections had been forwarded to MPPTCL for reply, the gist of the objections, MPPTCL's response and Commissions view is given below:-

M/s Enercon (India) Limited (Respondent)

1. Objection/Comments

5.19 The respondent has requested that for own use/sale to third party from non-conventional energy based generating sets, only 2% wheeling charges should be charged for utilization of transmission/distribution system of the State utility and State Govt. will compensate line losses @ 4% to the utility according to the existing policy of the State. as per its order dated 26th Sept. 1994. As regarding the sharing of losses, the same has been proposed on "pool sharing" basis i.e. every user of Intra State transmission system will share the losses in proportion to the energy drawal at the drawal point. The pool losses of MPPTCL are of the order of 5% which should be shared by the Respondent otherwise the same will have to be loaded on some other beneficiaries, which is not equitable.

MPPTCL's Response:

5.20 The respondent has requested that for own use/sale to third party from non-conventional energy based generating sets, only 2% wheeling charges should be charged for utilization of transmission/distribution system of the State utility and State Govt. will compensate line losses @ 4% to the utility according to the existing policy of the State. as per its order dated 26th Sept. 1994.

5.21 The petition submitted by the Petitioner is regarding the determination of transmission charges on the basis of annual fixed cost of Rs. 677.19 Crore. These charges are to be distributed among the Distribution Companies and other long term customers. The Wind Electricity Generators are long term customers, in case they wheel power to other consumers or for self-use on long term basis. The concessions allowed by the State Government under policy dated 26.09.04 is to be settled separately by the Commission keeping in view the provision of subsidy under Section 65 of Electricity Act 2003, in case concessional charges are allowed. The State Government policy of 1994 is the policy when the sole licensee was MPSEB. On account of the restructuring, the MPPTCL has submitted the petition for determination of transmission charges. In the process of Open Access to the Respondent, the Transmission as well as the Distribution systems are involved. In such case the 2% wheeling charges allowed under the State Government's policy dated 26th Sept. 1994 are to be reconsidered and transmission charges should be payable to the Petitioner.

Commission's View:

5.22 The Commission has already directed in its regulations on Terms and Conditions for Open Access in Madhya Pradesh that

> "The non-conventional energy generators and users shall be provided with open access with immediate effect and they shall be governed by the existing policy of State Government**.**

2. Objection/Comments

5.23 The Commission in Petition No 4/2003 in the matter of Misc. charges, has determined vide its order dated 09.12.2004 the maintenance charges for dedicated feeder @ 1% per month of the actual cost of extension (excluding supervision charges). The respondent has objected that aforesaid charges are highly expensive compared to the actual cost of O&M charges.

MPPTCL's Response:

5.24 The Respondent has related the O&M charges to the assets of the Petitioner which are charged on the beneficiaries for sharing the Intra State system as per the allocated capacity. The O&M charges determined by the Commission under miscellaneous charges in case of dedicated feeder is a separate matter for the special facility of maintaining the dedicated feeder, which is not related to the instant petition

Commission's View:

5.25 The Commission agrees with the comments of MPPTCL.

3. Objection/Comments

5.26 Respondent has prayed that proposed parallel operation charges @ Rs. 45/KW/Month should not be levied on Wind Power Projects because wind generation shall depend upon natural wind which cannot be controlled and there can not be any savings due to increased fuel efficiency.

MPPTCL's Response:

5.27 In this connection, it is to submit that in case saving on account of increased fuel efficiency i.e. Rs. 2.16 Lacs/MW/Month is ignored in respect of wind power generator, saving on account to of other advantages works out to Rs. 172/KW/Month. However, very nominal parallel operation charge of Rs. 45/KW/Month has been proposed whereas the wind generators owners will get the following advantages:

i. Fluctuations and variation of load is absorbed by the licensee's system thus their generators are relieved of the strain/stress on account of such loads.
ii. Negative phase sequence current generated by the load is passed on to the licensee's system.
iii. They get uninterrupted power to the essential load.
iv. They are able to protect their generator from single phase to ground fault as the short circuit current flows to licensee's supply and not from the consumer's generator.

Commission's View:

5.28 MPPTCL has proposed parallel operation charges on all open access customers whose generators are connected to the transmission system. This charge proposed by MPPTCL has 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 Licensee's contention. There shall not be any parallel operation charges.

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