

Chapter 4

MPSEB's TARIFF PROPOSAL FOR 2002-03

4.1 The combined application for ARR and Tariff Revision for 2002-03 presented by the petitioner, MPSEB has been scrutinized and the below mentioned features deserve particular mention:-

The Board has drawn our attention to the fact that prior to the setting up of the ERC the Board followed the general principles as prescribed in Section 59 of the Electricity (Supply) Act, 1948. Now after the Adhiniyam, 2000 has come in force, the powers for fixation of Tariff are vested in the Commission and the Regulation of the Commission prescribes that it shall consider the following:-

- a) Principles under Section 59 of the Electricity (Supply) Act, 1948
- b) That the Tariff progressively reflects the cost of supply of electricity at an adequate improved level of efficiency.
- c) The factors that would encourage efficiency and economic use of resources, good performance, optimum investment and other matters which the State Commission considers appropriate.
- d) That the interest of the consumer is safe-guarded and at the same time, the consumers pay for the use of electricity in a reasonable manner, based on average cost of supply of energy.
- e) That electricity generation, transmission, distribution and supply are conducted on commercial principles.

4.2 The Board has requested the Commission to determine the tariff in such a manner that the Board earns a minimum return of 3%. The petitioner has highlighted the overwhelming need for an increase in tariff on account of increase in cost of operation and maintenance and the high cost of supply to the LT consumers. MPSEB states that in the past there was insufficient increase in the tariff and there were high technical and commercial losses coupled with inefficiency and the subsidy provided by Govt. of M.P. was at a low level. The Board requires dedicated efforts and significant capital spending

for improvement in operational efficiency and to attract substantial amount of capital investment.

4.3 The petition points out that increasingly the Board is having to depend on power purchase and this has necessitated additional expenditure. The Board is conscious of the need for significant reduction in commercial and technical losses and significant increase in expenditure on repairs, maintenance, up-gradation and renovation of generating station. The Board has stressed the need for replacing flat rates with metered unit rates and the need for promoting consumer consciousness regarding their obligations for timely payment. Employee motivation, training, strengthening of HRD and improving close customer communication have also been emphasized in the programme of reform launched by the Board.

4.4 The Petitioner has prayed for the creation of Regulatory Assets to carry forward those portions of revenue requirements that have not been included for some reason. The purpose mentioned is that “this will allow MPSEB to separate the impact of tariff increase over a period of time and thereby mitigate the possibility of significant rate increase in a single year”. The Board has proposed that a review be instituted by the Commission whereby the actual revenues are compared with the actual expenses and in case the revenues are less than the actual expenses, the difference may be allowed to be carried forward and included in the capital base as part of the ARR of subsequent year. The Board wants the Regulatory Asset to be depreciated for a period of three years and the depreciation amount for each year to be included in the Annual Revenue Return of that year. The reasoning put-forth by MPSEB states that projected tariff revenues may not be realized and the proposed efficiency improvements also may not materialised inspite of the best efforts of MPSEB. The Board also anticipates higher expenditure on account of power purchase which may be necessitated by a drop in Hydel Generation and lower than anticipated plant load factor of thermal power station.

4.5 The petitioner has drawn the attention to the existing tariff structure which does not reflect the cost of service to each category of consumers and the high element of cross-subsidization which has created anomalies. The petitioner has stressed the need for

reduction in cross-subsidies gradually in a time bound manner. In other words this will mean that the rates for all other categories except HT Industrial categories may need to be raised so as to move closer to the cost of service level.

Annual Revenue Requirement of the Board

4.6 The petitioner states that for the year 2001-02 the Commission had approved ARR of Rs.5320.75 crore against the Board's proposal of Rs.5929.74 crore. For the year 2002-03 MPSEB has projected a revised estimate of the ARR for 2001-02 at Rs.6027.42 crore and for 2002-03 at Rs.6023.80 crore. Various assumptions underlying the projected ARR have been made and these are listed in the petition as follows:-

- (i) Revenue subsidies & grants have been taken as actually released by Govt. of M.P. during the year.
- (ii) Interest and finance charges have been taken as 73.38% of undivided Board.
- (iii) Entire expenses of undivided Board for power purchase have been considered as used by MPSEB.
- (iv) MPEB loans have been considered for MPSEB at 73.38% of the loan amount.
- (v) Interest capitalization has been bifurcated between the two States of Chhatisgarh and remaining Madhya Pradesh in the ratio of population.
- (vi) Provision for bad and doubtful debts have been considered 25% recoverable against sale of power.

4.7 As the MPSEB has come into existence w.e.f 15.4. 2001 hence accounts of MPSEB are available only from the year 2001-02 onwards. The data of MPSEB for the year 2000-01 has been provided on the basis of assumptions. Establishment expenditure have been estimated by taking into account 3% growth in salaries to account for annual increments, 22% of basic pay as additional pay, proposed Dearness allowance rate w.ef.

1.5.2002 at 41% and w.e.f. 1.1.2003 at 49% and Rs.40.00 lac has been considered for payment of bonus.

4.8 Operation, Repair & Maintenance expenses have been estimated on the trend of past years.

4.9 It has been mentioned that addition in gross assets has been taken on the basis of commissioning schedule and depreciation has been calculated on the asset in use at the beginning of the year.

4.10 Interest and finance charges have been calculated by including a State Government loan inclusive of load from ADB at Rs.520.00 crore @ 11% interest and a loan from Power Finance Corporation of Rs.100.40 crore at 12.5% rate of interest.

4.11 The petitioner has given some details of the outstanding dues for more than three years which stood at 434.57 crore in March, 1999 and increased to Rs.597.43 crore in March, 2000 and further increased to Rs.730.46 crore in March, 2001. These arrears are from HT Consumers. The corresponding figures for LT consumers are Rs.51.32 crore in March, 1999 rising to Rs.59.19 crore in March, 2000 and Rs.85.02 crore in March, 2001. While the rising trend of arrears speaks volumes for the lack of determination on the part of MPSEB to recover the outstanding efficiently, the petition fails to report the status as on March, 2002. This shows the casual approach adopted by the Board towards recovery of its dues. The Board has prayed that 45% of the outstanding dues may be considered as doubtful debts and may be permitted to be included in the ARR. The petition does not explain what action the Board management has taken to intensify its recovery efforts.

4.12 The petitioner has reported a security deposit of Rs.366.22 crore available with it in March, 2002. The petitioner has tried to justify the upward revision of tariff by saying that in the past six years tariff revision was made in July, 1996 followed by a revision in March, 1999 and the Tariff Revision Order given by this Commission in October, 2001. Mention has been made of a general annual inflation rate of 5 to 6% and the revision of

the cost of coal in February, 2002. The petition also highlights that while in undivided Madhya Pradesh Korba Power Station used to get coal from South East Coal Fields Ltd. now Sarni Power Station is having to depend on higher cost coal supplied from Western Coal Fields Ltd. The petitioner also repeats the earlier mention of the adverse impact of division of the State and MPEB.

4.13 The accumulated unpaid liabilities of the Board stood at Rs.6092 crore in March, 2002. The petitioner has made no mention of the decision taken by the State Government to accept the principles outlined in the Report of the Expert Group on settlement of SEB dues (Popularly known as Montek Singh Ahluwalia Committee Report). This report recommended that the State Government may take on the liability of the SEBs and discharge it in future from General Revenue. “A solution along these lines would help the SEBs to clean their balance sheets and place them in a position where they can concentrate on solving the current deficit problem, which is itself formidable”, the report has said. In view of the acceptances of these recommendations by the State Government, MPSEB should now focus on improving its current performance.

4.14 Petitioner has mentioned the high cost of power purchase and the Board’s inability to find adequate funds from its current revenues to make a payment of Rs.200.00 crore per month. The Board has also drawn attention to the old-age of the existing plants at Sarani & Amarkantak and has stressed the need for their modernization and renovation.

Revenue Requirement for 2002-03

4.15 The petitioner has anticipated a revenue gap of Rs.382.49 crore as given below:-

S.No.	Particulars	Amount (Rs. in Crore.)
1.	Total Revenue Expenditure	6346.73
2.	Less other non-tariff income	322.93
3.	Total revenue requirement (1-2)	6023.80
4.	Less expected revenue from sale of power according to existing tariff	4029.15
5.	Less estimated additional revenue from proposed tariff (proposal has been discussed in detail in para-8)	999.20
6.	Uncovered revenue gap (3-4-5)	995.45
7.	Saving by improvement in performance (Form T-1.3)	(-) 142.25
8.	Adjustment of E.D. towards subsidy (Form T-1.4)	(-) 398.86
9.	Net uncovered revenue gap	454.34

4.16 The petitioner acknowledges the fact that the advantage of any increase in tariff granted by the Commission will not be available to the Board for the full Financial Year 2002-03 and has therefore requested that the uncovered revenue gap may be treated as Regulatory Asset. The Petition mentions the sector wise details of required subsidies as given below:-

S.No.	Tariff Category	Amount
1.	Agriculture	Rs.1612.58 Crs.
2.	Domestic L&F	Rs. 651.36 Crs.
3.	SLP	Rs. 35.05 Crs.
4.	Other Govt./Public Bodies	Rs. 62.20 Crs.
5.	RE Coop. Societies	Rs. 10.77 Crs.

4.17 While pressing for its proposal for state subsidy the petition mentions that the amount of subsidy provided/committed by other State Government is of the below mentioned order:-

Gujarat	-	(2001-02)	1260.00 crore
Haryana	-	(2000-01)	613.08 crore
Andhra Pradesh	-	(2001-02)	1560.00 crore
Uttar Pradesh	-	(2001-02)	950.00 crore
Rajasthan	-	(2001-02)	1013.00 crore
Maharashtra	-	(2000-01)	740.00 crore

4.18 Projection of Energy Sales and Revenue under Existing Tariff

The Petitioner has generally adopted a 5 year CAGR, consumer category-wise, to project number of consumers, connected load and energy sales for the year 2002-03. In certain categories where the Petitioner felt that the 5 year CAGR is not likely to be achieved, it has modified the growth rate for projecting data. Accordingly the Petitioner projects to sell 15062 million units of electricity to different categories of consumers.

4.19 Estimation of T&D Losses

The Petitioner has mentioned that actual T&D losses for the year 2000-01 were determined at 50.97% for the year 2000-01 and estimated 47.29% for 2001-02, resulting into a loss reduction of 3.7%. Since 10 nos. RE Societies had been merged with the Board in the month of March, 2002, the Petitioner mentioned that the losses during FY 2001-02 would be 48.77% due to higher losses in the areas of operation of RE Societies during the year 2002-03. The additional reduction in T&D losses by 1.57% would mean less generation/purchase of power by 770.54 MUs and will result in additional saving of Rs.132.53 Crores during the year 2002-03.

4.20 As the agricultural and single light point connections are un-metered categories, their consumption pattern has to be studied for projecting sales in respect of these categories. Due to non-metering of all consumers, estimation of agricultural/SLP sales and the T&D losses has been a guesswork and the estimation based on the studies conducted on limited basis i.e. comparatively with small sample size, for assessment of agricultural and SLP consumption.

4.21 In the earlier Tariff Petition No.4/2001, the Board based on the study of limited number of agricultural consumers proposed a load factor of 14% for the year 2000-01 being drought year and load factor of 18% for the normal year 2001-02. The Commission had got the study conducted and had estimated the agricultural consumption for the year 2000-01 on the basis of 12% load factor i.e. 3640.33 MUs and for the year 2001-02 on the basis of average load factor of 15%.

4.22 T&D Losses Reduction Programme

Ever since the flat rate tariff was introduced for agricultural consumers and subsequently the free electricity facility was extended to the agricultural consumers upto to 5 HP and facility of single light point connection to domestic consumers, it became difficult to segregate the legitimate consumption based on flat rate and assessment of consumption. The commercial losses, theft and illegal hooking continued to increase and it became convenient to hide the technical and commercial losses under the coverage of un-metered consumption.

4.23 Amongst various reform activities, Board has given utmost importance for 100% meterisation of all categories of consumers, since it is one of the most important factor for reduction of commercial losses, a massive drive has been launched since January, 2001 for installation of high quality electronic energy meters to new and existing consumers. The 100% meterisation is a massive task which may take about 3 years to complete, therefore, MPSEB has chalked out a year-wise programme, with priority to HT/LT consumers situated in big cities and urban areas. Gradually tehsil and rural areas would be covered. All new consumers are being given only metered connection.

4.24 Steps have been taken to effectively reduce the technical losses for which pilot projects such as LT Less Distribution System and Renovation of existing HT lines would be covered through 5 years plan programme.

4.25 As regards reduction of commercial losses, following specific steps have been taken:-

- i) Massive checking campaign
- ii) Electro Mechanical meters are replaced gradually by high quality electronic meters.
- iii) Meters of HT consumers are being regularly tested every year so that accuracy in recording is maintained.
- iv) Incentive schemes for police staff have been launched for their active role in apprehending culprits and putting challan against them in courts.
- v) In theft prone areas, bare LT conductors are being replaced by PVC cables.
- vi) Regular MRI printers are being taken and studied to curb the possibility of theft.
- vii) Remote control arrangements are being made to study the consumption pattern of HT/LT consumers (through modems and computer systems).
- viii) Energy audit programme has been initiated to detect the most theft prone areas so that special drive can be made to detect the illegal connections.

4.26 Further, to strengthen the checking against un-authorized use of energy, the Board has formed a Flying Squad under the administrative control of Board Member at Jabalpur. Board has posted various officers of the rank of EE & AE (Vig.) at all the HQs of SE(O&M)/City Circles in the State.

4.27 While passing the tariff order for the year 2001-02, the Commission had directed that the T&D losses as prevailing at the end of 2000-01 which was determined at the rate

of 51%, shall be reduced to 42.88% by 2001-02. Further, the Commission had prescribed the following programme for reduction of T&D loss over next five years as under:-

<i>Year</i>	<i>Total Loss (%)</i>	<i>Reduction (%)</i>
2000-01	51.00	-
2001-02	42.88	8.12
2002-03	37.00	5.88
2003-04	32.00	5.00
2004-05	28.00	4.00
2005-06	25.00	3.00

4.28 To curb the commercial losses (due to theft, un-authorized hooking, tampering of metering devices and other commercial losses), MPSEB has taken various steps. In spite of this, due to number of hurdles coming in the way during the first year of the tariff order, the losses are expected to be reduced to the level of 49% by 2001-02. The Petitioner explained that during first two years, technical losses cannot be reduced; as it would require huge investment for renovation of HT/LT transmission & distribution system. Under Reform & Restructuring process, the Asian Development Bank is coming forward for funding for renovation of the transmission and distribution system in a phased manner, for which action has already been initiated for preparation of Tender documents & procurement of material.

4.29 For reducing commercial losses intensive checking is being done by vigilance staff as well as O&M staff & replacement of defective & old mechanical meters by electronic meters. However, meterization scheme being cost intensive and MPSEB being in severe shortage of funds & cash flow, it would be difficult to keep pace with the bench mark fixed for the first year. MPSEB proposes following programme for reduction in line losses for next 5 years.

<i>Year</i>	<i>Total Loss (%)</i>	<i>Reduction (%)</i>
2000-01	51%	-
2001-02	49%	2%
2002-03	44%	5%
2003-04	40%	4%
2004-05	37%	3%
2005-06	34%	3%

4.30 The petitioner has mentioned about difficulties being faced by MPSEB staff against unauthorized hooking & theft etc. and bringing the culprits to task. Attacks on MPSEB vigilance person and O&M staff by defaulting consumers when the former made efforts to detect thefts, effective disconnection, removal of un-authorized connections, has demoralized the staff to some extent. It is necessary that police personnel should be available to accompany them during checking mission. However, due to variety of familiar reasons, such as general law and order situation, VIP bandobast duties etc., such police personnel in sufficient numbers are not generally available. ***In short, MPSEB claims that it has done all in its power to tackle the commercial loss problems, but with limited success.***

4.31 MPSEB has taken some action to distribute consumers connection on individual feeder-wise allocation and the concerned officers incharge for that feeder shall be taken to task if they fail to reduce the losses and identify the culprits.

4.32 Requirement of Energy and sources

Keeping in view the projected sale of electricity and level of T&D losses, the requirement of energy and sources are as indicated below:-

<i>Particulars</i>	<i>2000-01 Actuals</i>	<i>2001-02 Estimates</i>	<i>2002-03 Projections</i>
<i>Sales (MUs)</i>	13045	13627	15062
<i>T&D Loss (%)</i>	50.97%	48.77%	45.34%
<i>T&D Loss (MUs)</i>	13560	12972	12495
<i>Total Energy Required (MU)</i>	26605	26599	27556
<i>Net Generation (MUs)</i>	12868	12852	14327
<i>Purchase of Energy (MUs)</i>	13737	13747	13229

Generation from MPSEB-owned and joint projects for 2002-03 is project as under:-

	Power Station	No.	Generation MUs	PLF %	Auxiliary Consumption %
<i>A</i>	<u>THERMAL</u>				
a)	Amarkantak	I	200	45.70	12.00
b)	Amarkantak	II	1060	50.40	9.81
	Amarkantak		1260	49.60	10.16
c)	Satpura	I	2000	73.10	9.00
d)	Satpura	II	2700	75.20	9.19
e)	Satpura	III	2800	76.10	8.93
	Satpura		7500	74.90	9.04
f)	Sanjay Gandhi	I	2500	67.90	10.00
g)	Sanjay Gandhi	II	2700	73.40	10.00
	Sanjay Gandhi		5200	70.70	10.00
h)	Total Thermal		13960	70.10	9.5
i)	MP Share		13160	70.00	9.53
j)	Auxiliary consumption		1310		
k)	Ex-Bus		11850		
<i>B</i>	<u>HYDEL</u>				
l)	MP Chambal		500		1.87
m)	MP Pench		260		0.41
n)	Bargi		550		0.18
o)	Tons Bansagar	I	925		0.57
p)	Bansagar	II	50		0.24
q)	Bansagar	III	100		0.24
r)	Birsinghpur		50		0.50
s)	MP Rajghat		60		0.44
t)	M.P. Share		2495		0.70
u)	Auxiliary consumption		18		
v)	Net Ex-bus		2477		
<i>C</i>	TOTAL Ex-bus (Thermal + Hydel)		14327		

Sources for purchases during 2002-03 are projected to be as under:-

S.No.	Name of Power Station	Projected energy 2002-03 (in MUs)	Average rate including incentive/disincentive, income tax/duty & other charges (p/u)
1	2	3	4
i.	Korba (Thermal)	3971.73	84.37
ii.	Vidhyachal Thermal-I	2275.92	148.08
iii.	Vindhyachal Thermal-II	1581.13	163.64
iv.	Kawas (Gas)	1308.54	355.82
v.	Gandhar (Gas)	1270.43	305.72
vi.	ER Power NTPC	1893.64	190.04
vii.	SR Power (NTPC)	26.57	179.40
viii.	NR Power (NTPC)	181.03	146.02
ix.	Bilateral Purchases.		
	• RSEB	672.00	271.03
	• UPSEB	3.65	465.91
	• MSEB	0.65	165.00
x.	Others	12.16	225.00
xi.	Total	13197.47	179.02
xii.	Wheeling Charges		
	PGCIL @ 13.19 p/u	12301.40	
	GRIDCO @ 17.50 p/u	1828.90	14.72
xiii.	Grand Total	13197.47	193.74

4.33 Category-wise Tariff revision Proposals

Petitioner has also proposed rationalization of tariffs to provide simplicity, transparency, convenience in billing and accounting and to curb malpractices. The rationalization is proposed through reduction in number of categories and slabs and introduction of fixed cost elements alongwith a single rate of energy charge. The rationale behind proposed increase of rates and the impact of the same on various consumer categories is discussed below:-

4.33.1 L.T. CONSUMERS

4.33.1 Domestic Consumers

4.33.1.1 Presently, the cost of supply at LT is 515 paise per unit as against the average domestic tariff of about 213 p/u, which is 41% of cost of supply. The average domestic tariff proposed for the year 2002-03 is 315 p/u (61% of cost of supply at LT i.e. 515 p/u)

4.33.1.2 At present tariff minimum charges of Rs.50/- per month for single phase and Rs.150/- per month for 3 phase connections are also prevalent and no fixed charge is payable separately. To ensure that there is a minimum fixed revenue to the Board, fixed charge of Rs.150/- per month (charge of 50 units @ 300 p/u) for single phase as well as 3 phase connections is proposed with first 50 units per month free and no tariff minimum charges are proposed to be separately billed for single phase domestic consumers. However, as the monthly consumption of three phase domestic consumers is higher, the minimum charge for Three Phase domestic consumer having connected load upto 10 KW is proposed as Rs.450/- per month. It is felt that for loads above 10 KW, higher tariff minimum charges should be prescribed and accordingly the tariff minimum of 45 units per month/KW is proposed for domestic consumers having connected load upto 75 KW (100 HP). A tariff minimum of 80 units/KW is proposed to be prescribed for the consumers having connected load upto 112 KW (150 HP)

4.33.1.3 Concessional Tariff for the consumers living below poverty line:

In the case of domestic consumers below poverty line other than SC/ST SLP for monthly consumption upto 30 units, tariff of Rs.75/- per month/connection is proposed. For consumption exceeding 30 units, tariff proposed is @ 300 p/u for the next 20 units (i.e. upto 50 units), @ 350 p/u for next 250 units and for additional units in excess of 300 units @ 400 p/u.

4.33.1.4 Single Light Point Connections:

Minimum charges are proposed to be Rs.75/- per month/connection, which may be paid by the State Govt. For the consumption in excess of 30 units and upto 50 units, the energy charge of 300 p/u and for next 250 units the energy charge @ 350 p/u and for

consumption in excess of 300 units per month the energy charge of 400 p/u as applicable for domestic consumers is proposed for single point connections also.

4.33.1.5 Non-domestic consumers:

These consumers contribute heavily towards coincident demand at evening time when the rate of power purchase is highest. It is proposed that fixed charges of Rs.315/- per month (equivalent to charge of 60 units @ 525 p/u) for single phase as well as 3 phase connections with first 60 units free may be levied on these consumers with the energy charge of 575 p/u for additional consumption over and above 60 units per month. It is also proposed that no tariff minimum charges may be billed for single phase non-domestic consumers. However, for 3 phase consumers, the existing tariff minimum charges of 45 units per month per KW may be continued to be billed for connected load upto 75 KW (100 HP). A tariff minimum of 80 units/KW is proposed to be prescribed for the consumers having connected load above 75 KW (100 HP) and upto 112 KW (150 HP).

4.33.1.6 It is proposed that the supply to cattle breeding farm, which is non-domestic in nature (and no agricultural), may also be considered as non-domestic category. It is also proposed that if the chaff cutters / sugarcane crushers / threshers are run for commercial purposes, supply to these may also be treated as non-domestic instead of agricultural.

4.33.1.7 X-Ray Plants

The energy charge of 575 p/u (with merged FCA of 76.59 paise/unit) for all units consumed during the month is proposed for X-ray plants. No change in minimum charges is proposed.

4.33.1.8 Water Works

Tariff is proposed to be increased to 270 p/u. No change in tariff minimum charges is proposed.

4.33.1.9 L.T. Industrial

The proposed tariff are as under:-

<i>LT Industrial consumers</i>	<i>Energy charges paise per unit</i>
<i>Flour mills/Hullers upto 15 HP</i>	300
<i>Power Looms upto 25 HP</i>	300
<i>Other LT Ind. Upto 25 HP</i>	400
<i>Above 25 HP upto 100 HP</i>	550
<i>Above 100 HP upto 150 HP</i>	11 KV HT tariff

The proportionate increase in demand charges and energy charges, wherever applicable has been proposed in alternative-II and alternative-III of various sub-categories of LT industries. At present, tariff minimum charges of 45 units per HP per month is prevalent for all LT industries upto 100 HP and the same is proposed to be continued.

LT industrial consumers have been permitted to avail supply at LT even when their connected load is upto 150 HP and for connected load above 100 HP but upto 150 HP a separate tariff sub-category is existing at present. It is proposed that looking to the higher level of technical losses, the LT industries (or any other LT consumer) having connected load more than 100 HP may necessarily be given supply at HT. For this purpose, 11 KV HT two part tariff with demand charges of Rs.144/- per KVA and energy charges of 386.59 paise/unit inclusive of FCA of 76.59 p/u (now proposed to be rounded off to 387 p/u with merged FCA shall be applied to the LT industries having connected load above 100 HP. At present, if these consumers opt for demand based alternative-II of LT industrial tariff applicable for connected load above 100 HP and upto 150 HP, then the demand charges of Rs.160/- per KW (equivalent to Rs.144/- per KVA) and energy charge of 369 p/u + FCA of 76.59 p/u are made applicable to these consumers. Thus, it may be seen that the proposed 11 KVA tariff would be cheaper by about 59 p/u. However, as is the practice, till such time these LT industries to be converted to HT industries, install their own transformer for taking HT supply, 11 KV HT tariff would be applied to them even if they are at LT and the transformer rent and 3% transformation losses would be recovered from them.

4.33.1.10 Agricultural

4.33.1.10.1 **Metered Connections:** The maintenance charge of Rs.5/- per HP per month is payable by metered agricultural consumers during initial agreement period and the same is proposed to be continued. The energy charge is proposed to be increased to 200 p/u. No change in minimum charges of 360 units per annum per HP of connected load is proposed.

4.33.1.10.2 **Flat rate connections:** The consumption of agricultural consumers depends upon the number of crops being taken by the cultivators, water availability in the area, depth of wells etc. In certain areas only one crop is taken whereas in some other areas, 2 or 3 crops are taken by the cultivators. As the consumption pattern depends upon number of crops being taken by the cultivators, thus the consumers who are using only one crop are compelled to pay the flat rate for 6 to 7 months without consuming the electricity. It is, therefore, proposed that flat rate / un-metered consumers may be billed on the basis of declared crop pattern instead of flat rate tariff on per HP basis. Accordingly, the proposal has been prepared on crop pattern basis and the tariffs have been formulated based on the use of electricity during different crop season i.e. lowest during Kharif season and higher during Rabi and summer season. The following crop-wise rates are proposed for agricultural consumers:-

Crop	Flat Rate	Period	Monthly Payment
Kharif	Rs.400/- per HP	July to September	Rs.133/- HP/month
Summer Crop	Rs.1200/- per HP	April to June	Rs.400/- HP month
Rabi	Rs.1200/- per HP	October to March	Rs.200/- HP/month

4.33.1.10.3 It is also proposed to offer a rebate of 10% in the aforesaid rates if the cultivator pays the total amount of bill for a particular season in advance.

4.33.1.10.4 It is assessed that for a pump set, the consumption for 6 months of Rabi crop would be about 685 units per HP and the same for 3 months of summer crop would also be about 685 units per HP. Consumption for 3 months of Kharif crop is assessed to

be around 235 units per HP. The aforesaid rates have been proposed keeping in view the assessed agricultural consumption per HP for different crops.

4.33.1.10.5 In the last Tariff Order of the Commission, the Board was directed to bring up performance for installation of LT capacitors to agricultural pump connections in the next tariff petition. Board has allowed a period of six months for installation of capacitors of specified ratings with the pumps failing which 10% extra charge or 20 p/u for metered connections and Rs.40/- per HP for Kharif Crop and Rs.120/- per HP for each Rabi and Summer crops for flat rate/unmetered connections may be recovered.

4.33.1.11 Public Street Lighting

It is proposed to increase the rate of energy charge to 330 p/u (with merged FCA of 76.59 p/u) i.e. an increase of 54.41 p/u only. No change in tariff minimum charge is proposed.

4.33.1.12 Electric Crematorium

A very nominal rate of 60 p/u only is applicable for electric crematorium generally run by Municipal Corporation. Looking to the present cost of supply of around Rs.5/- per unit at LT end, it is proposed to increase the rate for electric crematorium at least to 100 p/u. No change is proposed in the existing tariff minimum charges of 60 units per month per KW of the connected load.

4.33.1.13 LT Industries with connected load above 100 HP

LT industries having connected load upto 150 HP were permitted supply at LT. Some LT consumers of other categories are also reported/ found to be availing supply for connected load more than 100 HP. In such cases, it is proposed to levy tariff minimum charges equivalent to 60 units per HP per month as is prevalent for LT industries having connected load above 100 HP and upto 150 HP. Though, it has been proposed to convert all LT industries having connected load above 100 HP into HT connections and to apply on them immediately 11 KV HT two part tariff, it is proposed that for domestic/non-

domestic consumers availing supply for connected load more than 100 HP, the tariff minimum charges equal to 80 units per KW (i.e. 60 units per HP) may be levied for connected load upto 112 KW (150 HP).

4.33.1.13.1 No increase is proposed in the existing rate of welding surcharge of 75 p/u being levied for non-installation of adequate rated capacitors in the installations with welding transformers. Similarly, no increase in the capacitor surcharge of 26 p/u being levied for non-installation of LT shunt capacitor of specified rating across the terminals of the motors by LT Industrial/Commercial (non-domestic) consumers, is proposed.

4.33.1.14 Reduction in late payment surcharge for LT consumers

If the LT bills are not paid by the consumers within the period (due date) prescribed, the surcharge of 2% of the total amount of current month's bill (excluding arrears) and the surcharge of 2.5% per month of outstanding arrears is payable, in addition. Even if the consumers pay the bill amount even after one day of due date, the surcharge for whole month @ 2% is levied on him. The rate of surcharge of only 1.5% per month on the total amount of monthly bill (including outstanding arrears) is proposed to be levied on the LT consumers in case of non-payment of bills within the prescribed period.

4.33.2 HT consumers

The HT consumers have been subsidizing category in the past and paying much above the cost of supply. This has led to switching over to installation of captive sets by them. To ensure the HT industries are not further burdened by tariff hike, no increase has been proposed for HT industries including Mini Steel Plants, Cement Factories, Electro-Chemical/Electro-Thermal industries, Ferro Alloys units, HT consumers availing supply at general purpose tariff and Railway Traction except rounding off of the energy charge rates due to merger of FCA with the energy charge. An increase of about 20% has been proposed for HT irrigation, HT water works, R.E. Cooperative Societies, Border villages.

Further, an increase of 25% in the tariff for Coal Mines has also been proposed an overall increase of only 3.92% in the HT tariffs has been proposed. The details are as under:-

Category of consumers		Proposed tariff rates at 33 KV supply	
		Demand Charges (Rs./KVA)	Energy Charges with merged FCA (paise/unit)
1	Railway Traction (132 KV)	150/-	391
2	Coal Mines	190/-	525
3	Mini Steel Plants	-	378
4	Cement Factories	140/-	399
5	Electro-Chemical/Electro Thermal	140/-	374
6	Ferro Alloys	130/-	346
7	Grid/General purpose	130/-	411/391/379
8	Two Part Tariff	140/-	376
9	Slab Tariff	-	451/441/424
10	HT Irrigation	-	295
11	HT Water Works	-	300
12	Border Villages	-	300
13	RE Co-op Society	-	180

The existing rates at 132 KV and 11 KV supply have been proportionately increased as per proposed tariff rates at 33 KV supply. Presently, HT water works tariffs are prescribed for supply at 33 KV and 11 KV only. There is no separate tariff prescribed for water works at 132 KV supply. In the recent past, the Indore Municipal Corporation had filed a petition No.61/2002 before Hon'ble Commission for redressal of their grievance and one of the point included was that separate 132 KV tariff be prescribed for Indore Water Supply scheme at Jalud Works, which is about 60 Km from Indore. Accordingly separate 132 KV tariff has been proposed.

4.33.3 Time of the Day (TOD) Tariff:

The Petitioner has explained that presently, it is passing through acute power shortage and for the most of the period of the year the System Load Curve, is generally flattened. Due to flatten load curve, net impact of TOD tariff is that without any additional consumption, the consumer is getting the benefit of concessional tariff at night hours without any relief to the system. Due to this, the Board is put to revenue loss and the very purpose of introduction of TOD tariff is being defeated. It is accordingly proposed that the Hon'ble Commission may consider to abolish the TOD tariff.

4.33.3.1 The system is severally stressed on account of huge demand in the peak load hours i.e. from 1800 hours to 2300 hours as compared to other hours of a day. Due to coincident demand in the system, sometime the Board is required to overdraw power from Central Sector and is required to pay so much penalty that the rate of power purchase at the sending end is around Rs.4.0 per unit. About 180 MW to 200 MW relaxation to HT industries during peak load hours is given in Rabi season every year. It is, therefore, necessary that the HT consumers who are availing power during peak load hours should share some burden borne by the Board on account of costly purchase of power in peak load hours. It is accordingly proposed that peak load additional tariff of only 15% of energy charges may be recovered from such industrial consumers. For HT industries availing power at slab tariff, the 15% additional tariff is proposed to be levied on the first slab of the energy charges. It is also proposed that the peak load additional tariff may be levied only on the HT industries and not on the HT consumers availing supply under grid/general purpose tariff, hospitals, water works, coal mines, Railway traction, REC societies, irrigation and those availing temporary supply.

The feasibility of levying peak load surcharge or additional tariff on non-domestic consumers viz. shopping complex and private nursing homes/hospitals etc. having connected load above 10 KW was also studied and it was found that number of such consumers is very small and not much relief in demand in peak load hours would come from such consumers and on the contrary Board may lose the revenue from such high paying consumers. It is, therefore, proposed that no peak load surcharge/additional tariff may be levied on these consumers.

No changes are proposed in the existing late payment surcharge, power factor penalty as well as power factor incentive rates and tariff minimum charges applicable for HT consumers. However, as regards tariff minimum applicable to 132 KV two part consumers, it may be mentioned that earlier i.e. prior to 5th October, 2001, the tariff minimum was equivalent to the payment of guaranteed minimum monthly consumption equivalent to a load factor of 40% of the contract demand plus the demand charge on the billing demand for the month whether any energy was consumed or not. This condition

was also applicable to the Rolling Mill consumers availing supply 1t 132 KV. However on the persistent demand of these Rolling Mill consumers that they are unable to consume the minimum guaranteed consumption equivalent to 40% load factor, the Board decided to restrict the condition of minimum guaranteed consumption in respect of Rolling Mills availing supply at 132 KV to 10% and the Board's decision was implemented vide circular No. 5/GA/185/Vol.VIII/25/5930 dated 15.11.1994. Here it may be mentioned that at present the tariff minimum of 132 KVA two part consumers is based on the minimum monthly guaranteed consumption at 30% load factor as per Tariff Order dated 26.9.2001 of the Hon'ble Commission.

4.33.4 Temporary Supply Tariff:

4.33.4.1 For HT temporary supply, the charges are payable at 1.5 times of the standard HT tariff for supply at 33 KV or 11 KV as the case may be, including fuel cost adjustment charge. This is proposed to be continued. Similarly temporary supply at LT to any consumer is charged at 1.5 times the normal tariff (inclusive of FCA/fuel charge) applicable to that consumer. It is also proposed to continue to recover temporary supply tariff at 1.5 times of the normal tariff including FCA/fuel charge from LT consumers.

4.33.5 The above tariff proposal of the Board would contribute as under:-

Particulars		Addl. Revenue per annum (Rs. in Crores)	Percentage increase in tariff.
<i>(i)</i>	LT Tariffs	912.83	50.05%
<i>(ii)</i>	HT Tariffs	86.37	3.92%
<i>(iii)</i>	TOTAL	999.20	24.80%

4.34 Group Billing of Rural Agricultural Consumers:

The Board in its proposal has mentioned that in rural areas the agricultural load is scattered due to which, more time is required to take meter reading, bill distribution and checking of connection etc. Further an agricultural consumer is required to construct a pump house for installation of energy meter and pump and their safety. However, it is observed that most of the agricultural consumers in rural areas are not making these protective arrangements. The Board has proposed that to solve this problem, one alternate would be group billing of cluster of agricultural consumers getting supply from

the same transformers with an energy meters installed on the out-going side of the transformers. The Gram Panchayat will have to take a leading role and execute a common agreement with the Board taking responsibility (individually and severally) for monthly payment as per the meter reading. A concessional tariff could be offered for supply to such group of agricultural consumers agreeing for the aforesaid arrangement. However, it would be the responsibility of Panchayat or Group leader to collect the amount from individual consumers and pay the Board for the energy recorded in the meter installed near the transformer as per the concessional tariff. In case of failure to make payment of Board's bill by the group leader or Gram Panchayat within the due dates, the aforesaid arrangement may be discontinued.

4.35 The above proposals of the petitioner have been examined critically by the Commission after taking into consideration the objections raised during public hearings and the written objections filed before the Commission. View of MPSEB on each objection are described in a subsequent chapter.