

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION
BHOPAL

JUSTICE SHACHEENDRA DWIVEDI
CHAIRMAN

SHRI SYED IQBAL HUSAIN
MEMBER(P)

SHRI RABINDRA TRIPATHY
MEMBER(E)

Petition No. 4/2001

IN THE MATTER OF

Determination of Board's HT & LT tariff applicable for various categories
of consumers for the year 2001-02

Madhya Pradesh State Electricity Board,
Shakti Bhawan, Vidyut Nagar, Jabalpur

- Petitioner

V/s

State of Madhya Pradesh, Energy Department,
Bhopal

And

All HT and LT Consumers of the State

- Respondents

PETITION UNDER CLAUSE-62 OF THE M.P.ELECTRICITY REGULATORY COMMISSION
(CONDUCT OF BUSINESS) REGULATIONS, 1999 – FOR DETERMINATION OF TARIFF:

On behalf of State of
Madhya Pradesh

1. **Shri R.K.Katare,**
Under Secretary, GOMP,
Energy Department and
Officer-incharge of the case.
2. **Shri P.K.Chaturvedi,**
Under Secretary, GOMP,
Energy Department
3. **Mr. Ashok Kumar Dhanotya, Research Analyst,**
Finance Department
GOMP.
SHRI D. ROYBARDHAN (Retd. E.D. of MPSEB)
OIC of the Case.

On behalf of MPSEB

The Chairman or the Members of MPSEB did not attend any hearing, including all the public hearings, (except Shri R.B. Mishra (Member Distribution) of the Board appointed as such only on 14.7.2001).

On behalf of all HT and LT Consumers:

The list separately annexed.

O R D E R

Dated: 26th September 2001

1. INTRODUCTION

The Electricity is the dire need of the day. Its generation, transmission, distribution and supply as also the tariff was earlier being managed by the Electricity Boards and the Governments. However, the Central Government on the past experience in this regard found that for properly regulating the electricity industry and, in particular the electricity tariff a separate independent body was required to be constituted. Thus, the Electricity Regulatory Commissions Act, 1998 (The Act) (Act No. 14 of 1998) was enacted by Parliament for constituting the Central and State Electricity Regulatory Commissions with the object of rationalisation of electricity tariff, transparent policies regarding subsidies, promotion of efficiency and environmentally benign policies and for other matters connected therewith and incidental thereto.

Section 17 sub-section (1) of the Act provided that:

“17(1) The State Government may, if it deems fit, by notification in the Official Gazette, establish for the purposes of this Act, a Commission for the State to be known as the (name of the State) Electricity Regulatory Commission.”

The State Government of Madhya Pradesh opted to notify the establishment of the State Regulatory Commission, and applied the provisions of the Act, to the State of M.P. The notification in this regard was issued in the State Gazette dated 20/8/98. The appointment of the Chairman and Members of the Commission was further notified in the State Gazette dated 30/1/1999.

Section 29(1) of the Act, provided that “...the tariff shall be determined by the State Commission of that State in accordance with the provisions of this Act.”

After the above developments, when the question arose for the determination of tariff, the stalemate was caused, not by the Commission but by the M.P. Electricity Board, which continued till the entertainment of the present tariff petition. The Board, even after the provisions of the Act were made applicable to the State of Madhya Pradesh and the Government had notified the establishment of the Commission, proceeded to determine the tariff with the approval of the Government and made it applicable from 1.3.1999.

At this stage, before dealing with the present tariff-petition, filed by MPSEB, we propose to point out the circumstances and the legal position due to which this Commission had not entertained the earlier petitions relating to tariff, preferred by the Board, as it had decided the tariff itself after the establishment of the Commission.

Such determination of tariff by the Board bypassing the Commission, was challenged by different petitioners before this Commission. The Commission entertained the petitions and sought replies from the Board and the Government. All the parties were heard at length. The Commission by its order dated 6th January, 2000 held that the tariff determination done by the Board with the approval of the Government was against the provisions of Sections 29 and 52 of the Act, hence illegal and without jurisdiction.

The order 06-01-2000 was passed in petition No.1 of 1999, M.P. Textile Mills Association, Indore Vs. State of M.P. and M.P. Electricity Board. The order also disposed off the other similar petitions and the legal question involved in some of the petitions. The said order dated 06-01-2000 is being reproduced for ready reference as under:-

Quote:

“This order shall also dispose of petition Nos. 2,3,4 and 5 of 1999.

In another set of petitions Nos. 7, 8 and 9 of 1999, the petitioners, inter alia, on other grounds, have also challenged the jurisdictional competence of respondents – Madhya Pradesh Electricity Board (for short the Board hereafter) and of Government in determining the electricity tariff after the establishment of M.P. Electricity Regulatory Commission by the State Government under the Electricity Regulatory Commissions Act, 1998 (hereinafter referred to as the Act).

Since in the former set of petitions, the same legal issue has been raised and forms the sole ground, it was taken up as a preliminary issue in petition Nos. 7,8 and 9 of 1999 and is being decided by this Order.

The State Government under Notification dated 18.8.1998 had declared the establishment of the M.P. Electricity Regulatory Commission (for brevity, addressed as Commission in this order) from the date of its publication in M.P. Gazette. The Notification was published in the gazette (Extra-ordinary) on 20.8.1998.

Contentions of petitioners in petition Nos. 1,2,3, 4 and 5 of 1999:

The contention of the petitioners is that the determination of the tariff by the Board the whole tariff revision, with effect from 1.3.99, is without jurisdiction as it violates the provisions of Sections 17, 22 and 29 of the Act. It is further submitted that after the establishment of the Commission by the State Government under Section 17 of the Act, the Commission alone could fix or determine the electricity tariff. By operation of the provisions of Section 29, such jurisdiction was vested only with the Commission and, therefore, the determination of tariff by the Board is illegal and beyond jurisdiction. The petitioners have prayed that the tariff determined by the Board after the establishment of the Commission be set aside and thereafter the tariff be determined by the Commission itself.

Contention of petitioners in petition Nos. 7, 8 and 9 of 1999:

The petitioners of petition Nos. 7, 8 and 9 of 1999 have firstly challenged the jurisdiction of the Board in fixing the tariff after establishment of the Commission. In their petitions, they have also challenged the other charges being recovered by the Board from the electricity consumers. Since one common legal question is raised by all the petitioners in their petitions, those are taken up together for consideration. The legal issue raised by the petitioners alongwith other contentions in petition Nos. 7, 8 and 9 of 1999 the same has been taken up as preliminary issue.

Contention of respondents:

The respondents while controverting the contentions raised by the petitioners have submitted that the Commission could not be taken to be fully constituted till 1.4.99 as on that date its Member (Economics) had entered upon his office. It is contended that till the Commission was fully constituted, the Board had the jurisdiction to determine the tariff. The respondents had acted under the powers conferred under Section 61(3) of the Electricity (Supply) Act, 1948 and the tariff proposal of Board was also approved by State Legislature. Thereafter the Board had enhanced the tariff with effect from 1.3.99.

It is further contended by the respondent No.1 that under Section 29(2) of the Act, 'the Commission should determine by regulations, the terms and conditions of fixation of tariff' and as the regulations were not framed by Commission, the Board had revised the tariff as per the provisions of the Electricity (Supply) Act, 1948 to prevent unnecessary increase in the tariff rate due to delay. The respondent No.2 had also taken the similar plea. It is also contended by the Board that the mere constitution of Commission does not take away the power of the Board of fixation of tariff. It is further submitted by the Board that the Electricity (Supply) Act, 1948 as well as the Electricity Regulatory Commissions Act, 1998 are two statutes related to the two sources of power and in such a case, power can be exercised under any of the two sources and therefore, the fixation of tariff by the Board cannot be termed as unauthorized. The Board has also submitted that the revision of tariff done by the Board is just and proper and does not deserve to be disturbed.

Before we proceed to deal with the contention of the parties, it would be relevant to consider the history of power sector legislation earlier to the enforcement of the Act.

History of legislation:

While the country was under the colonial rule, the Indian Electricity Act 1903 was passed recognizing it to be somewhat tentative measure and it was anticipated at that time that amending legislation would be called for at an early date. After about four years, in the year 1907, the Government of India, on the experience gained in the practical working of the Indian Electricity Act, 1903, which was resulting in the dual administration came to the conclusion that the time had arrived for undertaking and amending legislation and the job was entrusted to a Committee in which the electro-technical and commercial interests were also represented. Thus in order to amend the law relating to the supply and use of electrical energy, the Indian Electricity Act, 1910 came to be passed.

Subsequently, in the year 1948 for the rationalisation of the production and supply of electricity and generally for taking measures conducive to electrical development, it was felt by the Government that it was not further possible to precisely legislate within the framework of Indian Electricity Act, 1910, which was conceived for a very different purpose therefore the Electricity (Supply) Act, 1948 was enacted. It purported to bring about uniformity in the organisation, the development of Grid system and the constitution of semi-autonomous bodies like Electricity Boards to administer the Grid system. The State Electricity boards were also entrusted with the powers to fix the electricity tariff.

With the passing time and with the policy of economic liberalisation of the country, the demand for energy grew rapidly, creating numerous problems. In order to overcome the problems and other issues which the power sector was facing, the Government of India, after the discussion with the State Governments, considered it necessary to establish regulatory commissions. Thus, the Electricity Regulatory Commissions Act, 1998 came to be passed by the Parliament. The Government had felt it essential to 'implement significant reforms by focusing on the fundamental issues facing the power sector, namely, the lack of rational retail tariffs, the high level of cross-subsidies, poor planning and operation, inadequate capacity, the neglect of consumer, the limited involvement of power sector skills and resources and the absence of an independent regulatory authority'.

Establishment of M.P.Electricity Regulatory Commission and application of the Act:

Under the Act, the State Government in August 1998 established the Regulatory Commission. M.P.Gazette (Extra-ordinary) dated 20.8.98 notified such establishment and provisions of the Act came to be applied to the State of Madhya Pradesh, with effect from 20.8.98, i.e. the date of publication of Notification.

Object of the Act:

The preamble of the Act itself describes the object of legislation as “An Act to provide for the establishment of a Central Electricity Regulatory Commission and State Electricity Regulatory Commissions, rationalization of electricity tariff, transparent policies regarding subsidies, promotion of efficient and environmentally benign policies and for matters connected therewith or incidental thereto.”

Relevant provisions of the Act and discussion:

With the above objective, Section 22 of the Act in unambiguous terms conferred the power and entrusted some functions on the State Commissions, as described under clauses a), (b), (c) and (d) of its Sub-section (1) including the power of determination of tariff.

The conferral of other functions in whole or in part on the State Commission as enumerated in Sub-section (2) were left at the discretion of the State Governments. The power and jurisdiction to discharge the functions appearing in Sub-section (1) of Section 22 of the Act, leave no alternative with the State Government or the Electricity Board for the determination of tariff, except by the State Commission.

The discharge of those functions by the State Commission has been mandated by the Act, and in fixing the tariff the regard is required to be had by the Commission to the provisions of Section 29(2) of the Act. Sub-Section (2) of Section 29 provides the guidelines. In the process of fixation of tariff by the Commission in relation to licensees it is required to adopt and apply the principles of Sections 46, 57 and 57A of the Electricity (Supply) Act, 1948, whereas in the case of Electricity Board or its successor entities the regard is to be had to the provisions of Section 59, thereof.

From the above, it would be abundantly clear that after the application of the Act and in particular, after the establishment of Regulatory Commission by the State Government, the jurisdiction and the power to determine the tariff came to be vested solely in the Commission. Although Section 17(1) stipulated that the establishment of the Commission was discretionary with the State Government yet once the Commission was established, the Commission alone and none else could determine the tariff. It would be relevant in this regard to reproduce Section 17(1) of the Act:-

“17. (1) The State Government may, if it deems fit, by notification in the Official Gazette, establish, for the purpose of this Act, a Commission for the State to be known as the (name of the State) Electricity Regulatory Commission.”

Now, we proceed to examine the contention of respondents that although the establishment of Regulatory Commission was notified by the State in Government Gazette dated 20.8.98, the tariff could not be fixed by the Commission as it could not be taken to be constituted till the Chairman and its Members had joined on their posts and since its Members (Power and Economics) had entered upon their office on 9th March and 1st April, 1999 respectively, the Board in the circumstances had the jurisdiction under Electricity (Supply) Act, 1948 to determine the power tariff, which was made applicable from 1.3.99, earlier to the joining of Members of Commission on their posts.

The contention is wholly misconceived.

The term ‘**State Commission**’ has been defined under Clause (j) of Section 2 of the Act. It means:-

“the State Electricity Regulatory Commission established under Sub-Section (1) of Section 17.”

(emphasis supplied by us)

The provisions of the Act, confer exclusive jurisdiction on the State Commission to determine electricity tariff. The operation of the provisions is stipulated by the Act on the establishment of the State Commission without being subjected to its Constitution. Its corporation or the constitution has to be processed under the provisions of the Act at the later stage, which has to follow the establishment. The respondent State had established the Commission vide Notification dated 18.8.1998, with effect from the date of publication of the notification in official gazette, which was published on 20.8.1998 whereas for constituting the Commission the order of appointment of Chairman and Members was passed by the Government on 30.1.1999.

Thus, under the Act, after the establishment of Commission, the electricity tariff could be determined only by the Commission under Section 22 read with Section 29, and in accordance with the provisions of the Act. The main function of the Commission under Section 22 of the Act is to determine the tariff for electricity. Section 29 of the Act confers the exclusive jurisdiction for such determination on the Commission alone, giving over-riding effect to its provisions on the other enactments. Section 29 of the Act may be reproduced with profit:-

“29. (1) Notwithstanding anything contained in any other law, the tariff for intra-state transmission of electricity and the tariff for supply of electricity, grid, wholesale, bulk or retail, as the case may be, in a State (hereinafter referred to as the “tariff”), shall be subject to the provisions of this Act and the tariff shall be determined by the State Commission of that State in accordance with the provisions of this Act.

(2) The State Commission shall determine by regulations the terms and conditions for the fixation of tariff, and in doing so, shall be guided by the following, namely:-

- (a) the principles and their applications provided in sections 46,57 and 57 A of the Electricity (Supply) Act, 1948, and the Sixth Schedule thereto;
- (b) in the case of the Board or its successor entities, the principles under section 59 of the Electricity (Supply) Act, 1948;
- (c) that the tariff progressively reflects the cost of supply of electricity at an adequate and improving level of efficiency;
- (d) the factors which would encourage efficiency, economical use of the resources, good performance, optimum investments, and other matters which the State Commission considers appropriate for the purposes of this Act;
- (e) the interests of the consumers are safeguarded and at the same time, the consumers pay for the use of electricity in a reasonable manner based on the average cost of supply of energy;
- (f) the electricity generation, transmission, distribution and supply are conducted on commercial principles;
- (g) national power plans formulated by the Central Government.

(3) The State Commission, while determining the tariff under this Act, shall not show undue preference to any consumer of electricity, but may differentiate according to the consumer’s load factor, power factor, total consumption of energy during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required.

(4) The holder of each licence and other persons including the Board or its successor body authorized to transmit, sell, distribute or supply electricity wholesale, bulk or retail, in the State shall observe the methodologies and procedures specified by the State Commission from time to time in calculating the expected revenue from charges which he is permitted to recover and in determining tariffs to collect those revenues.

(5) If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission under this section, the State Government shall pay the amount to compensate the person affected by the grant of subsidy in the manner the State Commission may direct, as a condition for the licence or any other person concerned to implement the subsidy provided for by the State Government.

(6) Notwithstanding anything contained in sections 57A and 57B of the Electricity (Supply) Act, 1948 (54 of 1948) no rating committee shall be constituted after the date of commencement of this Act and the Commission shall secure that the licensees comply with the provisions of their licence regarding the charges for the sale of electricity both wholesale and retail and for connections and use of their assets or systems in accordance with the provisions of this Act.”

As may be seen from the above, Section 29(2) provides that while fixing the tariff, the Commission would be guided by the considerations and principles described in Section 59 of the Electricity (Supply) Act, 1948 when those relate to the Electricity Board.

It is significant to note that appointment of Chairman and Members of Commission was made by Respondent No1 on 30.1.99 prescribing no date for them to enter upon their office. The Chairman had joined the Commission on 10.2.99. The Members

were also likely to join in the near future. However, the Act does not stipulate the minimum number of Members for the State Commission. Section 17(4), the Act only prescribed that 'the State Commission shall consist of not more than three Members including the Chairperson. Therefore, the Commission would not be defunct due to the posts remaining vacant of either Chairperson or Member/Members.

Further the Act does not contain any provision that due to the vacancy of the post of Chairman or Member/Members, the jurisdiction and powers vested by the Act, in the Commission for the determination of power tariff would revert to the Board. Section 29 of the Act in clear terms provides that 'notwithstanding anything contained in any other law, the tariff shall be determined by the State Commission of that State in accordance with the provisions of this Act.' As such the contention of respondents i.e. the Government and of the Electricity Board, that determination of tariff and its application by the Board, since 1.3.99, under the whole tariff revision, with effect from 1.3.99, is legal and not without jurisdiction, is devoid of substance.

It may also be worth mentioning at this stage that according to respondents themselves, the electricity tariff was not revised by the Board after the year 1996. The Board under the Electricity (Supply) Act, had the jurisdiction to revise or fix the tariff. But under the Act on the establishment of the Commission with effect from 20.8.98 it was lost. Thereafter, the power and jurisdiction of determination of tariff came to be vested exclusively in the Commission. Thereafter the Board could not determine the tariff nor the stated approval of its proposal for the fixation of tariff by the State Cabinet could be of any avail under the law.

The other contention of the State appearing in para 4 of return that the tariff proposal of Board also had the approval of State Legislature is unfortunate as it was made in order to impress upon the Commission that its legality could not be examined. We had allowed opportunities to the respondent State to support such a Statement by document, but it failed to produce the document and instead submitted the copy of Cabinet decision. It is a mis-statement made before this Commission, supported by the affidavit of Officer-in-charge of the case. Instead of taking any stringent action, we only deprecate such practice and issue a warning against him. Shelter of Section 61 of Supply Act, 1948 cannot be availed by respondent. It only provides that the annual financial statement of the Board shall be submitted to the State Government each year, which shall be caused to be laid on the table of the House. The provision does not deal with nor relates to the determination of tariff. The Section did not vest any power in the State for approving the Board's tariff determination proposal. The tariff determination, earlier under the Electricity (Supply) Act, was exclusively within the jurisdiction of the Board but it did not determine or revise it for the long two years. After the establishment of the Commission under the Act, the Commission alone and no other 'body' can exercise that jurisdiction. In view of clear legal provisions, the theory of hardship is of no avail to the respondents.

Now we turn to the sensitive contention of the parties. The petitioners have attributed delay on the part of Commission in drawing proceedings against the respondents for their alleged illegal venture of fixing tariff, after its establishment, whereas the respondents have submitted that the determination of tariff can still not be done by the Commission as it has no regulations in that regard, providing the terms and conditions, as stipulated by Section 29(2) of the Act.

In view of the nature of contention, it has become necessary for us to state some broad facts, in order to ensure transparency in the functioning of the Commission, while exercising its powers conferred by the Act.

With all the humility at our command, we are constrained to write that even after the Chairman and the Members of the Commission had entered upon their offices, no vehicle, no staff and no accommodation for the office or residence were provided. After the Herculean efforts and the long-wait, the small portion occupied by Brahma Swarup Samiti in Urja Bhawan was allotted temporarily for its office. On its vacation, it came in possession of the Commission on 1.7.1999. The accommodation is housing and can house only 4-5 officers. The staffing pattern sent by the Commission on 29.4.99 to the Government is still awaiting its complete approval. The sanction of the posts under the staffing pattern would be subsequent. The office accommodation is so insufficient that it cannot accommodate even the sanctioned staff of first phase which was to be taken on deputation from M.P. Electricity Board. The Board was informed by Government to send the list of its Officers who were willing to go on deputation. The Commission had also reminded the Board later to send the list, which has just been received. The Commission, at present, is working with a Deputy Secretary, Joint Director, one Private Secretary, an Assistant Cashier and few peons. The Commission after framing the necessary regulations, i.e. Madhya Pradesh Electricity Regulatory Commission (Method of Recruitment and Conditions of Service of Officers and Employees) Regulation 1999 and Madhya

Pradesh Electricity Regulatory Commission (Conduct of Business) Regulation 1999 had respectively sent them to the Government for approval on 13.10.99 and for publication on 30.10.99 which are still begging approval and publication.

The Commission had been writing to the Government about its difficulties and when there was no response even after the lapse of reasonable time, it had a meeting with the Chief Minister and the concerned officers on 15.10.1999. The decisions were taken by the Chief Minister but the bureaucracy continues to play its negative role and so far, even all the settled terms, conditions of service of the Members have not been determined. However, the constraints may only delay but cannot be allowed to debar the functioning of the Commission. The provisions of the Act cannot be permitted to be circumvented by not providing to the Commission the required working atmosphere and the essentials.

We are pained in writing the above, but the circumstances and the contentions advanced by parties have necessitated the above narration, in order to clear the clouds and inspire faith and confidence of public. In the above circumstances, it is neither legally nor morally open to the respondents i.e. the Government and the Board to raise the above contention. The Commission is a quasi-judicial body. The judiciary imparts justice to others, but itself suffers injustice at times. It has no platform. It is bound by discipline and the strict judicial norms. It functions on the strength of public faith and confidence.

The Act is the substantive law. The function of substantive law is to define, create or confer substantial legal rights or legal status on the person or body or to impose and define the nature and extent of the legal duties. The function of procedural law (of practice and procedure) is to provide the machinery or the manner in which legal rights or status and legal duties may be enforced or recognized.

So far as the Act is concerned, it not only confers the exclusive jurisdiction on the Commission of determining the power tariff, on its establishment under Section 29(1), with over-riding effect of the provision on all other laws by specifying that –

“the tariff shall be determined by the State Commission of that State in accordance with the provisions of this Act.”

it also prescribes under this Section the manner and mode of its determination. It is to be clearly understood that any act done or performed by any authority, not authorized under the law, would be illegal and without jurisdiction. The law is to be applied impartially, objectively, clearly and fairly.

The object of the Act, its scheme and the provisions amply indicate that the Board had been divested of its power to determine the tariff under the later legislation i.e. the Act. For the sake of argument if it be accepted that after the establishment of the Commission, the Board continues to have the power to determine the tariff, it would lead to inconsistency and contradictions in the determination of tariff, which would defeat the very object of the Act. In *Daw V/s Metropolitan Board of Works (1862)* 142 ER 1104:31 LJCP, it was observed by Erle, C.J. –

“I think that where the same power is given in two different bodies to number house, the exercise of these powers concurrently by both bodies would be entirely destructive of the object for which they were conferred; they cannot, therefore, exist together, and in accordance with general principles, the power more recently conferred overrides that which was conferred by the prior Act.”

However, the provisions of the present Act under Sections 29 and 52 leave no room for doubt as those have been given the overriding effect on the other laws except the Consumer Protection Act, 1986 and Atomic Energy Act, 1962 as provided in Section 49 of the Act. The provisions of the Act clearly contemplate the conferral of exclusive jurisdiction on the Commission, for fixing the power tariff. Hence the above argument of respondents is wholly untenable.

There can be no departure from the mandate of law. Only that authority which is authorized by law can perform the mandated function, that too in the manner provided. In the celebrated case of *Nazir Ahmad V/s King-Emperor (AIR 1936 Privy Council 253(2))*, the well recognized rule was applied with approval that –

“where a power is given to do a certain thing in a certain way the thing must be done in that way or not at all.”

The rule has also been followed in series of decisions by the Hon'ble Supreme Court.

As such under the mandate of the Act, the power tariff can be determined only by the Commission in the manner provided. The determination of tariff by the Board is in contravention to the provisions of the Act, hence illegal and without jurisdiction.

Senior Counsel Shri M.L. Jaiswal, appearing for respondent No.2 has cited Sat Narain Gurwala Vs Hanuman Prasad and another (AIR (33) 1946 Lahore 85), Swadeshi Cotton Mills etc. etc. Vs Union of India, etc. (AIR 1981 Supreme Court 818), The Marathwada University Vs Sheshrao Balwant Rao Chavan (AIR 1989 Supreme Court 1582), I.J. Rao Vs Bibhuti Bhushan (AIR 1989 Supreme Court 1884), Krishna Kumar Vs State of Rajasthan and others (AIR 1992 Supreme Court 1789) and Collector of Central Excise Vs New Tobacco Co. etc. (AIR 1998 Supreme Court 668), in support of his arguments but none of the authorities deal with the issue involved in these petitions and are of no avail to the respondent.

Conclusion:

On the foregoing discussion, cumulative consideration of the aforementioned provisions of the Act and for the reasons assigned, it is abundantly clear that respondent No. 2, the Electricity Board acted beyond its jurisdiction, in utter disregard to the provisions of the Act, by revising/determining the electricity tariff from 1.3.99, after the establishment of the Commission and respondent No.2 Government had no authority to accord its approval thereto. The revision of tariff by Board is unsustainable in law.

The petition alongwith petition Nos. 2,3,4 and 5 of 1999 (-----) are, therefore allowed. The notification of respondent No.2 dated 1.3.99 as contained in whole tariff revision, with effect from 1.3.99 filed with the rejoinder is set aside.

In the second set of petitions Nos. 7,8 and 9 of 1999 (-----), the preliminary issue is decided in favour of the petitioners, against the respondents. The second set of petitions shall now be listed for the consideration of the other questions raised therein.

Direction:

“It is directed that the whole tariff revision, with effect from 1.3.99 having been set aside, shall forthwith cease to have effect and respondent No.2 shall not recover from consumers any charges there under. However, it shall be open to respondent to file a comprehensive tariff proposal in accordance with the regulations framed by the Commission, on their publication in M.P. Gazette. The Commission may take up the matter thereafter for the determination of electricity tariff.

The respondents shall bear their own costs as also the cost of petitioners, which we quantify at Rs. 500/- each petition. The cost shall be paid within one month from to-day. Let copy of this order be placed on record of each petition.”

Unquote

Challenging the above order of the Commission, the State Government and also the Board preferred the appeals before the High Court. The High Court admitted the appeals and stayed the operation of the order of Commission. While the appeals remained pending before the High Court, the Board had filed a petition concerning the tariff of free supply of power to agricultural consumers having connected load upto 5 HP and to the consumers of Single Light Point. Curiously it was stated in paras 7,8 and 9 of the Petition No. 1/2000 that:-

“7. Considering the limited scope of drastic increase in the tariff levels of the agriculture category and domestic category the Board has decided to do away with free supply of Electrical Energy to SLP connection and agriculture consumer having connected load upto 5 HP and bills will be directly issued to the consumer of these categories.

8. **In view of aforesaid decisions, the following proposals are made for concurrence of MPERC.**

9. The aforesaid proposals may kindly be concurred.”

The Commission on the above statement observed on 29-01-2000 that the Board was labouring under a wrong conception that the Commission is their rubber stamp and since they had already taken a decision, the Commission was only to concur with the decision. The Board was as such directed to know its legal status and that of the Commission and also to clearly understand the provisions of the Act. It was held that the very approach of the Board, was illegal based on the misconception of law and the Board's petition was dismissed by the Commission by order dated 29th January, 2000.

It may be noted that thereafter Madhya Pradesh Electricity Board further filed another petition (Petition No. 6 of 2000), for the determination of electricity tariff for HT Railway Traction and Coal Mines. The Commission, after hearing the arguments of the parties dismissed the petition in motion hearing, by Order dated 17th October, 2000, which reads as follows:-

Quote:

“Madhya Pradesh Electricity Board (for short 'the Board' hereinafter) seeks determination of electricity tariff for HT Railway Traction and Coal Mines, while the appeal preferred by it against the order of this Commission dated 6/1/2000, through which the last tariff revision done by Board had been set aside, is pending before the Hon'ble High Court.

Shri V.K. Tankha, learned Advocate General, Madhya Pradesh appearing for the Board made two fold arguments for admission of this petition. He firstly submitted that the Board is recovering the electricity charges from the consumers according to its last tariff determination, (set aside by this Commission) on the strength of the order of stay passed by the High Court in appeal, on 10/1/2000. Since the order of this Commission has been stayed by High Court, it does not remain effective and it is open to the Board to seek the further determination of tariff from this Commission.

The second contention advanced by Shri Tankha is to the effect that the High Court by another Order passed in the said appeal dated 12/7/2000, has also allowed liberty to Board to file the petition for tariff determination before this Commission.

It is, therefore, submitted by Shri Tankha that the petition be admitted and tariff be determined according to law.

The other side has opposed the prayer. Shri Kale, Senior Advocate, inter alia, has also contended that the very language used by the Board in the prayer clause of this petition, depicts their unholy approach towards the Commission as they want to determine the tariff themselves and only seek the permission of this Commission. Regarding this contention, the Commission is of the view that the language used is much objectionable and the Board was warned for the use of similar language in the last petition. In this regard, it appears that the Board officials do not understand the language, either to be written or read, and are still unaware of their status as also of the status of this Commission under the Act. But for the fault of a party, the cause should not be made to suffer. In the interest of justice the Commission would therefore, consider the substance and would not be carried away by the language used.

Shri Vikas Singh, Advocate from Delhi appearing for NCL and the representatives of Railways argue that the tariff cannot be decided in parts for one or two categories of customers by isolating them from the other categories. The Commission is to discharge quasi judicial functions, maintaining the balance between different categories of consumers. The tariff for one or two categories can neither be reduced nor increased, without taking into account, all the relevant facts and circumstances. The Commission can also not discharge its legal obligation to ensure 3% surplus as required u/s 59 of Electricity (Supply) Act, 1948 by determining the tariff for one or two categories isolating those categories from all others. It is, therefore, submitted that the petition be dismissed at the motion hearing stage itself.

We at once proceed to examine the first contention advanced by Shri Tankha.

It may be seen that after the establishment of Commission by the State Government on 20/8/98, under Section 17 of Electricity Regulatory Commissions Act, 1998, the jurisdiction of tariff determination came to be exclusively vested in the Commission and the Electricity Board was divested of such power. It is mandated by Section 29(1) of E.R.C. Act that "...the tariff shall be determined by the State Commission....". The over-riding effect has been given to the provision by the Act. Since the last tariff revision in 1999 was done by the Board, after the establishment of Commission, it was set aside by this Commission, holding it to be without jurisdiction.

The Board and the State, preferred appeal against the order of the Commission dated 6/1/2000 before the High Court u/s 27 of the Act. It is submitted by learned Advocate General that High Court was pleased to grant stay in the appeal and on the strength thereof, the Board is recovering the charges under its tariff revision (which was set aside by the Commission). The appeal is admittedly pending before the Hon'ble High Court.

The bone of contention of Shri Tankha is that by the order of stay passed by High Court, the Commission's order under challenge in appeal has been made ineffective, conferring right on the Board to seek the next tariff revision from this Commission, despite the pendency of appeal. The contention appears to be fallacious. The order of stay is merely provisional in its nature and does not conclude the issue or the right agitated. Interlocutory order of stay is either to continue until the hearing of the cause upon merits or until further orders. The interim order ultimately merges in the final order. The effect and object of

stay is to suspend the operational part of the order under challenge in appeal and to maintain the factual position in status quo, until the hearing of appeal. The order of the stay does not wipe out the existence of order appealed against.

Their Lordships of Supreme Court in Shri Chamundi Mopeds Ltd V/s Church of South India Trust (AIR 1992 S.C. 1439), have laid down the effect of stay order at page 1444 holding that:-

"While considering the effect of an interim order staying the operation of the order under challenge, distinction has to be made between quashing of order and stay of operation of an order. Quashing of an order results in restoration of the position as it stood on the date of passing of the order which has been quashed. The stay of operation of an order does not, however, lead to such a result. It only means that the order which has been stayed would not be operative from the date of the passing of the stay order and it does not mean that the said order has been wiped out from existence."

Having discussed the first fold of contention advanced by learned Advocate General, we proceed to consider the second limb of his argument and thereafter we will examine the merits of the prayer and see whether in the circumstances and under the provisions of the Act we can legally proceed to determine the tariff by admitting the petition, pending appeal.

It may be seen that Hon'ble High Court by order dated 12/7/2000, has only allowed liberty to the petitioner Board, of filing the petition before this Commission, if it was so advised. By the granted liberty the Board received the right to move the petition before this Commission. Now the circumstances which may be stated even at the risk of repetition are that this Commission was established under the Electricity Regulatory Commissions Act, 1998, by Notification dated 20/8/1998. Thereafter the Board had determined the tariff by its order dated 1/3/1999. The petitions were moved by consumers' associations before this Commission challenging the tariff determination done by the Board and the Commission after long hearings, and on the perusal of provisions of the Act came to the conclusion that the tariff determination by petitioner Board was against the provisions of law and was without jurisdiction.

On the establishment of Commission, the provisions of E.R.C. Act cast legal obligation on the Commission under its functions to fix the tariff. The provisions of Sec. 22(1) may be reproduced with profit:-

"22.(1) Subject to the provisions of Chapter III, the State Commission shall discharge the following functions, namely:-

- (a) to determine the tariff for electricity, wholesale, bulk, grid or retail, as the case may be, in the manner provided in section 29;
- (b) to determine the tariff payable for the use of the transmission facilities in the manner provided in section 29;
- (c) to regulate power purchase and procurement process of the transmission utilities and distribution utilities including the price at which the power shall be procured from the generating companies, generating stations or from other sources for transmission, sale, distribution and supply in the State;
- (d) to promote competition, efficiency and economy in the activities of the electricity industry to achieve the object and purposes of this act."

Further section 29 (1) mandates that "... the tariff shall be determined by the State Commission of that State in accordance with the provisions of this Act."

Therefore, the Commission found that it was not within the powers and jurisdiction of the Board to fix the tariff. Thereafter the matter became *subjudice* as the order of Commission was challenged by Board before the High Court in appeal. The appeal is pending and stay granted by High Court is still reported to be operating against the order of Commission.

Although there is no direction in the order of Hon'ble High Court dated 12/7/2000 we could have (for reasons stated in next paragraphs) only accepted the petition, if it was otherwise competent. But at this stage we may consider the objection of Senior Counsel Shri Kale, against admission of this petition that in the past the Board had filed the similar petition for determination of tariff for Coal Mines and he had appeared in that petition for the respondents on the notice issued by this Commission, and had raised the objection that the tariff cannot be legally decided for one category independent of other categories of consumers. The petitioner Board had withdrawn that petition, stating that a comprehensive proposal would be moved before this Commission for tariff determination by including the category of coal mines therein. But soon thereafter the

Board has again filed this petition including only one more category of consumer i.e. HT Railway Traction, that too without assigning any reason for such conduct. No party can be allowed to play with or misuse the process of law.

The respondents as stated above, have again taken the very serious objection agitating that the tariff fixation is possible only on the overall assessment of Board's expenditure, revenue collection, additional revenue requirement and reasonability of the rates for different categories of consumers in order to ensure minimum 3% surplus, in accordance with the provisions of section 59 of Electricity (Supply) Act, 1948.

It is worth mentioning that different performance levels on being fixed under the Act and followed by Board would form the foundation to assess the energy availability, revenue accrual and expenditure so that overall additional revenue required to be generated in any accounting year could be worked out and made the basis for revision of tariff of different categories of consumers. Firstly, the procedure as per provisions of ERC Act, 1998, cannot be adopted for determining the tariff in piecemeal for some categories and secondly, in such situation the important aspect of cross-subsidisation amongst different categories of consumers cannot be looked into and considered for ensuring 3% surplus as required. Resultantly, the tariff under the Act, cannot be fixed in part for some categories only while leaving others. However, since the Board has now filed a comprehensive tariff proposal and has also included the category of railway traction and coal mines therein, this petition has become infructuous.

It would be appropriate to further note at this stage that as the tariff cannot be decided for some categories, independent of the other categories, the next tariff revision cannot be done independent to the past tariff order as that would provide the foundation on which the additional revenue requirement and next tariff structure would stand. Tariff determination is a complex process. It has to take into account many factors. The revenue collection on existing tariff, the effect of cross subsidization on the related categories of consumers and the difficulties faced by them would also be relevant consideration. The Commission cannot determine the tariff with closed eyes without looking into the past performance, related to revenue and expenditure and deficiencies thereof, if any. For the future improvements, the causes of past deficiencies are required to be examined. The Commission, only on the assessment and effects of existing tariff, would be able to seek the guidance for the future tariff from the factors which would encourage efficiency, economical use of the resources, good performance and optimum investments, as provided under section 29 (2)(d) of the ERC Act and accordingly shall fix different levels of efficiencies and performance. The provisions of section 59 of the Electricity (Supply) Act would also be the guiding factors in fixing the tariff. The Commission has not to work as computer, but apart from the interest of the utility it has to protect consumers' interest and consider the aspect of tariff sensitivity.

The Board has itself based its tariff proposal on its own tariff revision, made effective from 1/3/99, although that has been set aside by this Commission. The legality and the jurisdictional aspect of Board's past tariff revision is a *sub-judice* matter and the Hon'ble High Court is yet to decide the issue. The past tariff revision done by the Board is under clouds. As such until and unless the clouds are cleared, the past tariff revision cannot be made the foundation for the next tariff revision. The petition is also liable to be dismissed for this reason.

The question, whether, in the given circumstances, we can decide the tariff and make changes in existing tariff, is also to be viewed from another angle. The order passed by this Commission on setting aside the last tariff revision done by Board was

challenged in appeal before the Hon'ble High Court and stay was granted to the Board, thereby the Board is recovering the electricity charges from consumers under its tariff revision on the strength of the order of stay, which is reported to be still operative. The appeal is admittedly pending in the High Court. In the circumstances, it is also not legally open to this Commission to determine the tariff, as it would be the interference in the order of stay passed by Hon'ble High Court and would tantamount to the breach of the order. The Commission would, therefore, refrain from the tariff determination, during the pendency of appeal before the Hon'ble High Court.

On the foregoing discussion, regarding the facts and the law and the reasons assigned, the petition does not deserve admission. It is dismissed *in limine*."

Unquote

The Commission had earlier in its another order dated 29th January, 2000 as quoted on page 22 of this order had held that the next tariff revision cannot be done independent to the past tariff order as that would provide the foundation on which the additional revenue requirement and next tariff structure would stand. It was further observed that the legality and the jurisdictional aspect of Board's past tariff revision is a *subjudice* matter and the Hon'ble High Court is yet to decide the issue. The past tariff revision done by the Board is under clouds. As such, until and unless the clouds are cleared, the past tariff revision cannot be made the foundation for the next tariff revision.

Before the admission of the tariff proposal for year 2000-01, by the Commission, the State of Madhya Pradesh was bifurcated and the Chhattisgarh Electricity Board was also separately constituted. Therefore Madhya Pradesh State Electricity Board (the

new name) came up at the later stage with the tariff petition for the year 2001-02, armed with an interim order of the High Court, dated 02-03-2001 which has been quoted by the Board in extenso at page 2 of the tariff petition. But as that was not enough since the High Court had not considered that for the future tariff the base year would be the tariff-year of 1999-2000, which was *subjudice* before it in appeals after having been set aside by the Commission. The legal issue was yet to be decided by the High Court, therefore Board filed an undertaking before the Commission in that regard in order to overcome that situation.

In the above circumstances while the appeals remained pending in the High Court, the State Government moved a bill "The Madhya Pradesh Vidyut Sudhar Adhiniyam, 2000". The bill was considered by the Legislative Assembly and was passed. It received the Presidential assent on 12.2.2001 and became Act No. 4 of 2001. But after the Presidential assent when the State Government had not yet notified the Act the Board moved the comprehensive tariff proposal before the Commission with an undertaking that if the High Court rejects the appeal it would abide by the consequences of the order.

2. SCRUTINY OF PETITION

2.1 The Commission considered the Board's tariff proposal dated 7th April, 2001 in its Technical Sessions held on 23rd and 24th April, 2001 having regard to the provisions of the Act, the tariff philosophy, the prescribed procedure and the formats. The aforesaid proposal was filed before the Commission by the Board as the petitioner. The State of Madhya Pradesh (Energy Department) and all HT and LT consumers of the State were impleaded as the Respondents. Having noticed during the Technical Sessions that the Board had not given the data on the cost and revenue in accordance with the procedure and the formats prescribed by the Commission, besides a number of deficiencies in the proposal, the Commission directed the Board to remove deficiencies.

Thereafter the Board filed the revised Proposal i.e the present petition dated 4th May, 2001 for Determination of Tariff for 2001-02 before the Commission on 8th May, 2001 under clause 62 of the Regulations of the Commission. Although the complete required information in the formats and all necessary data were not made available by the Board, yet in view that the Commission was to pass the first tariff order, in the above stated circumstances, and that the Board had not done the required exercise in the past for seeking the tariff determination and it also did not possess the necessary data, the Commission relaxed the formalities, considered the petition and passed orders on 9th May 2001 registering and admitting the petition.

2.2 Public Notice

2.2.1 The Commission issued Notice dated 15th May, 2001 inviting comments / objections from the public on the petition filed by the Board within 21 days of the publication of notice. The copies of the tariff petition were also made available for inspection and sale at the selected offices of MPSEB and also of the Commission. The notice was published in major local and all India news papers.

2.2.2 The notice also stated that the Commission may hear the persons filing the objections or comments at Bhopal and at such other place(s) as the Commission may decide and publish through newspapers.

2.2.3 The notice was given wide publicity in the following newspapers on the date(s) mentioned against each:

S. No.	Name of Newspaper	Date of publication
1.	Dainik Bhaskar (Hindi) All editions in M.P.	20 th May 2001
2.	Nai Duniya (Hindi) Bhopal and Indore	20 th May 2001
3.	The Central Chronicle (English) - All editions in MP	20 th May 2001
4.	The Hindustan Times (English), Delhi Editions	20 th May 2001

2.3 Technical Validation Sessions

The Commission once again held hearings of the Board on the revised petition on 28th, 29th May and 11th June, 2001. During these hearings the Board was asked to validate the cost and revenue data in its tariff proposal. During the validation sessions, the Commission sought clarifications and additional data on various items of cost and revenue for validation of the proposal. The Board submitted some additional data during the above hearings and also subsequently as detailed in Annexure I.

2.4 Public Objections

The Commission received 564 written objections / comments (Annexure II) in response to the public notice as detailed below:

S. N.	Interest Groups	Jabalpur/ Satna	Indore/ Ujjain	Gwalior/ Chambal	Bhopal/ H'bad	Total
1.	Domestic LT	4	7	2	-	13
2.	Commercial	-	4	1	1	6
3.	Industrial	6	15	2	8	31
4.	Agricultural	2	452	-	-	454
5.	NGO	3	6	1	3	13
6.	RE Coop. Society	4	-	-	-	4
7.	Govt. Deptt. / Public utility	-	-	-	1	1
8.	Political Parties / MLA / MP	-	1	-	4	5
9.	Chamber of Commerce / Industry Associations	3	22	4	5	34
10.	Railways	-	-	-	2	2
11.	Others	-	1	-	-	1
	Total	22	508	10	24	564

The Board was given opportunity to file its replies to the objections.

2.5 Constitution of State Advisory Committee

The Commission reconstituted the State Advisory Committee pursuant to section 24 of the Electricity Regulatory Commission Act, 1998 vide notification dated 14th May, 2001 for advising the Commission on matters specified in section 25 of the above Act.

The said Committee held its first meeting on 6th July 2001.

2.6 Studies Conducted by the Commission

The Commission conducted studies on Transmission and Distribution Losses, Operational Norms and efficient metering, billing, collection, etc. through the Consultants. The studies have been taken into consideration for the purpose of determination of tariff.

2.7 Regulatory and Procedural Compliance by the Board

The Commission is constrained to observe that the Board did not fully comply with the regulatory and procedural requirements of the Commission in the preparation and submission of the data in the petition for tariff determination for 2001-02, particularly the data for the previous year, current year and ensuing year, in the prescribed forms. This resulted in considerable delay in reconciliation and validation of the data on costs and revenue. In the absence of authentic data, the Commission had to make many assessments on assumptions. This being the first petition for tariff determination filed by the Board and having regard to the fact that the Board has been facing certain difficulties in finalisation and firming up of the accounts due to the reorganisation of the State, the Commission relaxed the lapses and proceeded to decide the petition. However, for the future, Commission directs that:

- (i) **the Board shall ensure full compliance of the regulatory and procedural requirements of the Commission while submitting its petition / proposal for determination of tariff in future.**
- (ii) **the Board shall supply information in the formats prescribed by the Commission in the following manner:**
 - (a) **Information in forms prescribed in Part I of the Appendix ('A' Series Forms) shall be filed annually on or before 31st October of each year, irrespective of whether or not tariff determination is sought for.**
 - (b) **Information in forms prescribed in Part II of the Appendix ('T' Series Forms) shall be filed alongwith the proposal for tariff determination on or before 30th November each year.**

2.8 Public Hearings

2.8.1 In view of the objections received, the Commission held public hearings at the following places on the dates mentioned against each:

Jabalpur	28.6.2001 29.6.2001
Satna	30.6.2001
Indore	9.7.2001 10.7.2001 11.7.2001
Gwalior	16.7.2001 17.7.2001
Bhopal	23.7.2001 24.7.2001 25.7.2001

2.8.2 The public was informed of the above dates of hearings by a public notice in the newspapers. Those objectors who had not filed their objections / affidavits and had indicated that they be heard in person, were also allowed to make oral submissions in the public hearings by relaxing the requisite conditions in the public interest and in the interest of justice.

2.8.3 The list of participants in Technical Sessions and Public Hearings is given in Annexure III.

2.9 While the Commission was holding the public hearing at Inodre, it was informed that the State Government had notified. "The Madhya Pradesh Vidyut Sudhar Abhiniyam, 2000 (Madhya Pradesh Act No. 4 of 2001)" (for short the Act), as per notification No. 3973-3-14-XIII-2001 published in the Madhya Pradesh Gazette (Extra-ordinary) dated 4th July, 2001, that it shall be deemed to have come into force from 3rd July, 2001. The Act is for the purpose of:

- (i) establishing State Electricity Regulatory Commission; restructuring of the Electricity Industry;
- (ii) rationalisation of Generation, Transmission, Sub-Transmission, Distribution and Supply of Electricity in the State;
- (iii) regulating the licensing of transmission and supply of electricity;
- (iv) regulating the purchase, Transmission, Sub-Transmission, Distribution, Supply and utilisation of electricity;
- (v) providing quality of service and the tariff and other charges considering the interest of the consumers and utilities;
- (vi) taking measures conducive to the development and management of the electricity industry in the State in an efficient, economic and competitive manner;

According to Section 3 of the Adhiniyam, the State Electricity Regulatory Commission constituted and existing on the date of commencement of the Adhiniyam shall be the first Commission for the purposes of the Act and shall be deemed to have been constituted under the Act. The Commission has been mandated under section 9 of the Act to determine the tariff and charges electricity, wholesale, bulk, grid or retail and tariff payable for use of the intra-state transmission facilities in accordance with the provisions of the Act. The functions of the Commission as regards tariff fixation are further elaborated in section 26 of the Adhiniyam, and its proviso to Section 26(1), validates the tariff notifications of the Board dated 01.03.1999, which were sub-judice before the High Court since those were set aside by the Commission and were challenged by the Government and the Board in separate appeals.

"26(1) Notwithstanding anything contained in any other law, the tariff for intra-state transmission of electricity and the tariff for sub-transmission, distribution and supply of electricity, grid, wholesale, bulk or retail, as the case may be, in a State (hereinafter referred to as the "tariff"), shall be subject to the provisions of this Act and the tariff shall be determined by the Commission in accordance with the provisions of this Act:

Provided that the tariffs and charges set by the Board by notifications No. 05-01/GA/192/A/134, No. 05-01/GA/192/B-2, No. 5-01/GA/192/C-1, No. 5-01/GA/192/C-2, No. 5-01/GA/192/C-3, No. 5-01/GA/192/D-1, No. 5-01/GA/192/D-2, No. 5-01/GA/192/D-3, No. 5-01/GA/192/E, and No. 5-01/GA/192/F, all dated 1st March 1999 shall be valid and enforceable notwithstanding any order or direction made by the Madhya Pradesh Electricity Regulatory Commission constituted under section 17 of the Central Act.

- (2) The Commission shall determine by regulations the terms and conditions for the fixation of tariff, and in doing so, shall be guided by the following factors, namely:
- a) that the tariff progressively reflect the cost of supply of electricity at an adequate and improving level of efficiency;
 - b) the factors which would encourage efficiency, economical use of the resources, good performance, optimum investments, and other matters which the Commission considers appropriate for the purpose of this Act.
 - c) the electricity generation, transmission, distribution and supply are conducted on commercial principles;
 - d) the interests of the consumers are safeguarded and at the same time, the consumers pay for the use of electricity in a reasonable manner.
 - e) the principles and their applications provided in sections 46 and 57 of the Electricity (Supply) Act, 1948 and the Sixth Schedule thereto;
 - f) in the case of the Board the principles under section 59 of the Electricity (Supply) Act, 1948 are observed;
- (3) The holder of each license and other persons including the Board or its successor body authorized to transmit, sell, distribute or supply electricity wholesale, bulk or retail, in the State shall observe the methodologies and procedures specified by the State Commission from time to time in calculating the expected revenue from charges which the holder is permitted to recover and in determining tariffs to collect those revenues.
- (4) If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariffs which is determined by the State Commission under this section, the State Government shall pay the amount to compensate the person affected by the grant of subsidy in the manner which the Commission may direct, as a condition for the license or any other person concerned to implement the subsidy provided for by the State Government.
- (5) Any retail tariff determined or implemented under this Act:
- a) shall not show undue preference to any consumer of electricity, but may differentiate according to the consumer's load factor, and total consumption of electricity during any specified period of the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required or paying capacity of category of customers and need for cross subsidisation.
 - b) shall except in the case of financially weak consumers who are to be provided limited quantum of electricity at reduced tariff for meeting the basic needs, be in manner that the existing subsidy given to any class or classes of consumer is progressively reduced and within a period of five years from the commencement of this Act the tariff to any class of consumer shall reflect a minimum of seventy five percent of the licensee's average cost of supply of electricity to that class;
 - c) shall be just and reasonable and be such as to promote efficiency in the supply and consumption of electricity; and
 - d) shall satisfy all other relevant provisions of the Act, regulations and conditions of license".

2.10 It is useful to mention that the Commission had earlier formulated its tariff philosophy setting out its approach to the tariff determination guided by the factors specified under the Act. It endeavours to address several complexities involved in tariff determination. These include:

- | | | |
|-------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (i) | Methodology for Price Regulation | The Commission has followed Rate of Return (ROR) method until such time as data become available to apply a comprehensive form of Performance Based Return (PBR). |
| (ii) | Determination of Revenue Requirement | Considering the desirability of being able to audit historical costs and the stability of the resulting tariffs, the Commission has adopted Ensuing Year relying mainly on the Past and Current year's achievement. |
| (iii) | Valuation of Assets | Having regard to the need to ensure reliability and acceptability, the Commission has followed the methodology of original cost minus depreciation as provided in the Statement of Accounts of the Board. |
| (iv) | Allowed Rate of Return | The Commission is guided by the provisions of section 59 of the Electricity (Supply) Act, 1948 in the matter of allowed rate of return (surplus). |

- (v) **Allocation of Revenue Requirement to Consumer Classes / Tariff Schedules** Until such time, the utility submits marginal cost analysis, the Commission will adopt the tariff to be based on the accounting costs, modified by the need to phase out existing subsidies and cross subsidies.
- (vi) **Performance Improvements and Reduction of Operational Costs** The Commission believes that any bench marking for reduction of operational costs need to take into account the ability of the utility to achieve the set targets.

3. SALIENT FEATURES OF THE BOARD'S PROPOSAL

3.1 The Board has submitted petition for revision of the existing tariff in order to meet its revenue expenses on account of fixed charges, variable charges, purchase of power and the statutory requirements of surplus.

3.2 Projection of Energy Sales and Revenue under Existing Tariff

3.2.1 The projections of energy sales, growth in load and number of consumers for 2001-02 are made in the petition on the basis of historical data of the past five years and compound annual growth rate (CAGR). The data provided for 2001-02 in the petition were subsequently revised by the Board as below:

S.No	Item	Unit	Petition	Revised
1.	Energy Sold	MU	15,332.43	15,507.11
2.	Revenue Demand	Rs Cr	3,265.65	3,348.48

3.2.2 The units sold have been computed on the basis of restricted demand.

3.3 Supply of Energy

3.3.1 Supply of energy for 2001-02 estimated on the basis of restricted demand, from different sources by MPSEB is as follows:

S.No.	Source	Availability (MU)
1.	Thermal Generation (Net)	11,730
2.	Hydel Generation (Net)	2,089
3.	Total Generation (Net)	13,819
4.	Power purchase including inter-state exchange	13,181
5.	Total units available for sale	27,000

3.3.2 Besides, the Board proposed following additional availability of energy from its hydel stations.

Bansagar	325 MU
Rajghat	50 MU
Total additional	375 MU
Total Hydel generation	2464 MU

3.4 Transmission and Distribution Losses

3.4.1 The transmission and distribution losses consist of both technical and commercial losses. The commercial losses are due to unmetered connections, faulty and damaged meters, theft, hooking, etc. Both types of losses are quite high. There has been very little investment on improvement and strengthening of transmission and distribution system for last two decades, while the load has been increasing at a rapid pace, resulting in heavy increase in the technical losses. It would take considerable investment and time to reduce the technical losses to a reasonable level.

3.4.2 The study of transmission and distribution losses conducted by Descon Consultants, revealed that out of the total T&D losses of 47.17 % for 2000-01, in undivided Madhya Pradesh, the commercial losses accounted for as much as 27.5%. Reduction of commercial losses requires heavy investment in providing high quality and tamper proof metering devices, improvement in meter reading system, billing and accounting system and payment handling facilities. In addition, tough measures have to be taken against theft and pilferage. In view of the magnitude of the problem and limited resource availability, a modest reduction of T&D losses from 48.71% in 2000-01 to 42.88% in 2001-02 has been proposed i.e. by 5.83 percentage points.

3.5 Estimated Consumption of Agriculture Sector

The lack of precision in assessment of T&D losses is mainly due to absence of metering at HT feeders and Distribution transformers, besides consumption of Single Light Point (SLP) connections for weaker sections and for most of the agricultural consumers upto 20 HP. In order to obtain some precise information about actual agricultural consumption, the Board conducted a sample study during 2000-01 in seven of its regions. The study revealed that the consumption per horse power of motor used by the agricultural consumers widely varies from region to region. In Sagar region this was found to be as low as 14.68 units per HP per month, while in Indore region it was found to be 220.36 units per HP per month. About 75% of the consumers have bore wells with depths varying between 150-250 ft. Submerged motors of more than 5 HP are used specially in Western region where depth of water is more than 150 ft. Based on above sample study, the weighted average consumption for agriculture worked out to 79.46 units per HP per month equivalent to 14.59% load factor. The reason for this low consumption in the year 2000-01 was stated to be the prevalent drought conditions. The Board has assessed consumption for 2001-02 at a higher load factor of 18% (5590.70 MU).

3.6 Estimated Consumption of SLP Connections

Single Light Point (SLP) consumers are permitted to use only one 40 watt lamp which consumes about 10 units per month. A study of the consumption of SLP connections conducted by the Board in Indore, Bhopal and Ujjain revealed that the actual consumption per SLP consumer varies between 25 units to 460 units per month which shows misuse of facility / pilferage. The State Government has withdrawn the facility of free electricity to SLP consumers with effect from January 2001 except that SC/ST consumers below poverty line are entitled for free electricity upto 20 units per month for which the State Government shall provide the subsidy. The consumption by SLP consumers has been assumed at an average of 20 units per month for 2001-02.

3.7 Revenue Requirement and Revenue Gap for 2001-02

3.7.1 The Board has calculated expenditure for 2001-02 on generation and purchase of power, employees and administration, depreciation, interest and finance charges, miscellaneous expenses, bad debts and reasonable surplus on the value of fixed assets. The revenue requirement has been worked out as Rs. 5929.74 crores and the expected revenue at the existing tariff as Rs. 3348.48 crores.

3.7.2 The revenue gap for the year 2001-02 will thus, be Rs 2581.26 crores. The Board has proposed increase in tariffs to bring in additional revenue of Rs. 1545.68 crores. The average increase proposed in LT tariffs is 66.93% and HT tariffs 31.89%; the overall increase being 47.14%. This will still leave an uncovered revenue gap of Rs. 1035.58 crores which will be covered only partially by State Government subsidy.

3.8 Category wise Tariff revision Proposals

3.8.1 The Board has proposed increase in existing tariffs for different categories of consumers in order to obtain additional revenue of Rs. 1545.68 crores. It has also proposed rationalisation of tariffs to provide simplicity, transparency, convenience in billing and accounting and to curb malpractices. The rationalisation is proposed through reduction in number of categories and slabs and introduction of fixed cost elements alongwith a single rate of energy charge. The salient features of the category-wise tariff proposals are brought out in the following paragraphs.

3.8.2 Domestic Consumers

It is proposed to simplify the present three slab structure by having a fixed charge element of Rs 180/- per month (with first 60 units per month free) alongwith a single rate of energy charge of Rs. 3.50 per unit on additional consumption above 60 units per month.

3.8.3 SLP Connections

With effect from January 2001, about 2,50,000 SLP connections for benefit of SC/ST consumers are treated as SLP connections and only their consumption will be subsidised to the extent of 20 units per month per connection by the State Government. All other SLP connections will come under the category of domestic connections and charged accordingly. They will all be metered at the earliest.

3.8.4 Non-domestic Tariff

The existing two slabs are proposed to be replaced by a fixed cost element of Rs. 300/- per month with a single rate of energy charge of Rs 5.50 per unit.

3.8.5 Agricultural Consumers

Presently only about 0.15% of agricultural consumers are metered. Unmetered agricultural consumers are charged monthly tariff on flat rate depending upon the horsepower of motors. The Board has proposed levy of flat rates depending upon the crop irrigated by the cultivator. The proposed rates are:

Crop	Flat rate Rs/HP	Period	Monthly payment Rs/HP
Kharif	300	July to September	100
Rabi	900	October to March	150
Summer	900	April to June	300

3.8.6 LT Industries

3.8.6.1 It is proposed to have only two categories with connected load upto 150 HP as under:

- (i) Flour mills and power looms with connected load upto 25 HP Rs. 2.75 per unit
- (ii) All other LT industries upto 150 HP Rs. 5.50 per unit

3.8.6.2 As per proposal, Alternative I is for non-seasonal consumers, Alternative II for consumers opting for two part tariff (demand charge as well as energy charge) and Alternative III for seasonal consumers.

3.8.7 Municipal Services

Rate of Rs. 2.25 per unit for water works on LT and Rs. 2.75 per unit for public street lighting is proposed. For electric crematoria, energy charge of Rs 1.80 per unit is proposed.

3.8.8 Railways

The Railway's tariff has not increased since July 1996. An increase of 28.4% is proposed.

3.8.9 Coal Mines

Electricity tariff for coal mines has also not been revised since July 1996 even though rates for coal supplied by them have gone up by 45% to 53% during this period. An increase of 33.7% in electricity tariff is proposed.

3.8.10 Other HT Consumers

These comprise cement factories, mini-steel plants, electro-chemical industries, electro-thermal industries, other general industries and bulk consumers. Their tariffs are proposed to be increased by about 6-12%. Higher increase is proposed in the case of water works and public irrigation.

3.8.11 Rural Electric Cooperative Societies

There are 14 Rural Electric Cooperative societies in the State which have been licensed by the State Government under Section 3 of Indian Electricity Act 1910 for distribution of electric energy. They are supplied power at 11 kV by the Board at rates ranging from 3 to 12 paise per unit. The societies sell power to LT consumers at the same rate as prevalent in the Board's area. The tariff of the societies has not been revised for the last ten years. The Board has proposed that the tariff applicable to societies may be increased uniformly to 150 paise / unit.

3.9 Measures Proposed by the Board for Improvements of Performance and Cost Control

3.9.1 The Board has recently taken a decision to:

- ?? Reduce the staff strength by reducing retirement age from 60 to 58 years.
- ?? Not to fill up vacancies created on retirement or those lying vacant.

Other cost control measures proposed are:

- ?? Control on use of vehicles
- ?? Suspension of payment of earned leave encashment and LTC encashment
- ?? Restriction on promotion.
- ?? Measures adopted by State Government regarding terminal benefits have been made applicable in the Board.
- ?? Consumers have been permitted to use their own materials for construction and service connection as per Board's specification, which has reduced the stores inventory level and reduced procurement cost.

After bifurcation of the State, the Board is bearing heavier burden of staff cost and pension as the number of sanctioned posts in Chattisgarh SEB vis-à-vis the Board is much lower than the respective population ratio of 26:74. Due to the above, although several steps have been taken to reduce the cost on employees, administration and generation, yet desired results have not been achieved.

3.9.2 Realisation of Arrears

A substantial portion of revenue from government departments remains in arrears. Out of a total arrears of Rs. 1706.77 crores as at the end of December 2000, the arrears pertaining to government departments was Rs. 947.55 crores. Total amount under litigation is Rs. 229.13 crores. The present collection efficiency as stated is 94% which is proposed to be improved to 95% in 2001-02.

3.9.3 Control on theft of energy

The following steps have been taken by the Board to prevent theft of energy and malpractices:

- (i) Formation of Flying Squad under administrative control of Member (F&RM).
- (ii) Formation of District Level Team with the help of District administration and Police.
- (iii) Intensive checking by O&M staff.
- (iv) Checking by AE (Vig.)
- (v) Incentive to persons who give information about theft of energy leading to its detection.
- (vi) Meter reading by qualified ITI persons engaged on contract.
- (vii) Instructions issued to all field officers to take check readings of the private HT consumers after a fortnight and to ensure that the consumers do not get opportunity to tamper with the meter or manipulate.
- (viii) Every year, the connections of all the HT consumers are tested to ensure that they are recording correct energy consumed by them. Fortnightly meter reading of HT consumers is also being done.

3.10 Status of Accounts

3.10.1 On the reorganisation under the Madhya Pradesh Reorganisation Act, 2000 from 1st November, 2000, the Government of the State of Madhya Pradesh constituted the Madhya Pradesh State Electricity Board (MPSEB) and the Government of the State of Chattisgarh constituted the Chattisgarh State Electricity Board (CSEB) under section 5 of the Electricity (Supply) Act, 1948 in pursuance to section 58(4) of the said Act. The Government of India (Ministry of Power) in its Order No. 42/8/2000 - R&R dated 12th April, 2001 notified that the assets, liabilities, rights and undertakings of the existing Board (MPEB) shall provisionally pass on to the successor Boards w.e.f. 15.04.2001 in the following manner:

- (i) Fixed assets (land and buildings, installed plants and machinery, transmission and distribution systems etc.) situated in either State will pass on to the successor Board.
- (ii) Movable assets and stores of the field units shall be transferred on the basis of location. Stores, furniture and vehicles of the Head Office shall be apportioned according to the year of purchase in the population ratio of 1762: 4857 (26.62% : 73.38%).
- (iii) Project / Asset specific liability of the existing Board shall be passed on to the State / successor Board to which the asset has been allocated.
- (iv) The liabilities of the existing Board which cannot be assigned under (iii) above to any asset shall be apportioned between the successor Boards in the aforesaid population ratio.

3.10.2 For consideration of tariff proposal of the Board for determination of tariff for 2001-02, the year 1999-2000 is taken as the Previous Year (Actuals), 2000-01 as the Current Year (Estimated) and 2001-02 as the Ensuing Year (Projected). The Board submitted the actual cost and revenue data in its proposal as provisional for 1999-2000 based on the Statement of Accounts of that year of undivided Board by bifurcating the figures in the ratio of 26:74, estimated figures for 2000 - 01 over the bifurcated

figures of 1999-2000 and projected figures for 2001-02 over 2000-01 since the Statement of Accounts for the 1999-2000 of the Board is not finalised and audited as yet. In view of the above, the Commission has relaxed the requirements of audited accounts of 1999-2000.

4. PUBLIC RESPONSE TO BOARD'S PETITION

4.1 Public Hearings and Written Responses

4.1.1 The Commission gave wide publicity to the tariff proposals submitted by Board and invited the public objections / comments. Written observations from 564 individuals and representatives of various organizations (listed at Annexure II) were received by the Commission. Special public hearing of farmers was also conducted on 11th July 2001 at Indore.

4.1.2 The Commission received valuable suggestions on a number of specific issues during public hearings and through written responses, besides a large number of general observations for improving the efficiency of Board and thereby minimising the need for enhancement of tariff. Observations having bearing on tariff determination have been classified and are being dealt with in the following paragraphs.

4.1.3 The Commission has considered all the suggestions, observations and objections while finalizing its Order. The Commission has to strike a balance between the interests of the consumers on the one hand and that of the Board on the other. While the rationale for the conclusions arrived at by the Commission are given in the subsequent paragraphs of this Order, definite views of the Commission on the suggestions and observations of the public are indicated briefly against the different items.

4.2 General Issues

4.2.1 Public, in general, has strongly opposed the substantial increase in tariff proposed by the Board for the reasons such as supply of irregular and poor quality of power, theft / pilferage of energy and the inefficiency of the Board.

4.2.2 The Commission has given specific directions to the Board for checking and controlling the theft and for improving its performance. The Commission has adopted a judicious approach in determining the tariff.

4.3 Meter Installation, meter-reading and billing

4.3.1 Shri Jawahar Lal Rathore, Indore, Mandsaur Chamber of Commerce and Pithampur Udyogik Sangathan objected to the high price of meters charged. Shri Bharat Bhushan Bhargava, Shri Suresh Mittal (Gwalior), Viapari Association, Khargone and others said that electronic meters should be provided at reasonable cost or at Board's expense and only when necessary. It was also objected that meter reading is irregular and wrong bills showing very high charges are being issued in large number of cases and there are several instances, where bill amounts are reduced subsequently.

4.3.2 Electronic meters are essential to measure the electricity consumption more accurately and to help checking of theft and pilferage. The Commission expects that the Board will practice transparency and exercise due economy in their purchase so that the consumer is satisfied and not burdened unduly. The Board will also improve its meter reading and billing system making it more transparent and less liable to errors, so as to reduce consumer grievances on this account.

4.4 Transmission and Distribution Losses

4.4.1 Almost all the respondents have very vehemently contended that the high T&D losses indicate the callous negligence and inefficiency of the Board and its utter failure to check theft and pilferage, being caused partially due to the abetment and involvement of its own staff. Ujjain Power-Loom Cloth Association represented that with additional revenue generated by curbing theft, the increase in tariff will not be required. Similar views were expressed by Shri Pratap Verma and Shri N.K. Janglwa of MP Chamber of Commerce and Industry, Indore, Shri Kailash Vijayavargiya (Mayor Indore) and Shri Lodha, Chartered Accountant, for M.P. Chamber of Commerce and Industry, Gwalior. Public participation in checking thefts was emphasized by Shri N.K. Janglwa by citing example of Bangladesh. Shri P.L. Nene proposed installation of capacitors to reduce T&D losses.

4.4.2 Realising the importance of correct assessment of T&D losses, the Commission got a sample survey conducted which confirmed the high level of T&D losses of about 50 percent in the existing system of the Board. The Commission has directed the Board to take appropriate steps to reduce these losses progressively.

4.5 **Operational Norms for Thermal and Hydroelectric Power Stations**

4.5.1 A number of individuals and organizations including Shri Ajit Verma of Jailok Study Circle Jabalpur pointed out that the expenditure of the Board can be reduced significantly by improving operational parameters to feasible limits. They pointed out irregularities in transport of coal and payment thereof without considering the grades of coal actually received. Reduction in auxiliary consumption, coal consumption and fuel oil consumption was also suggested.

4.5.2 The Commission got a detailed study conducted on operational norms taking into consideration the efficiencies achieved by the Board's plants in earlier years, by similar plants working in other states and by Central undertakings and also the norms suggested by the Central Electricity Authority / Ministry of Power Government of India. The Commission has not allowed the figures of expenditure projected by the Board in the petition and has reduced it on relevant items on the basis of norms, worked out on the above basis which also conforms to the prudent commercial practice.

4.6 **O&M Expenditure**

4.6.1 It has been pointed out that O&M Expenses of the Board are higher than the norms fixed by the Central Electricity Authority. Expenditure on employees can also be curtailed.

4.6.2 The Commission got a study conducted for expenditure on repairs and maintenance as also the expenditure on employees, considering various norms and the performance of other utilities. The Commission has accordingly curtailed the O&M expenditure indicated by the Board in its petition.

4.7 **Outstanding Dues of Board**

4.7.1 Sri P.L. Nene (Indore) and others were critical of the Board for the high level of its revenue arrears. Sri Bharat Bhushan Bhargava (Gwalior) doubted as to how the figures of bad debts (which were very high) could be the same for different years and how much of these had been written off. They were also critical of the non-realization of arrears from large industries.

4.7.2 The Commission has taken serious note of the unacceptable high level of arrears and the lack of determination shown by the Board in liquidating it. The Commission has directed the Board to ensure dis-connection of defaulting consumers and realization of arrears in a determined manner.

4.8 **Government Subsidy**

4.8.1 The State Government subsidises the Board against free supply of electricity to weaker sections and agriculture consumers. Several individuals, and organizations deplored that the level of subsidy provided by the State Government to the Board has been going down which is the main cause of financial problems of the Board. The level of subsidy indicated in the Board's petition was considered inadequate by Pithampur Audyogik Sangthan. Shri Kailash Joshi, Member Rajya Sabha, expressed similar views.

4.8.2 The State Government, in the budget for 2001-02 has made provision for subsidy against free supply to SLP connections and agriculture connections upto 5 HP and also towards compensation of rural electrification losses (subsidy against low agriculture tariff) to the Board. The Commission has considered the same while deciding tariff. However, the Commission too, feels that current level of subsidy is inadequate.

4.9 **Domestic Tariff**

4.9.1 Shri Babulal Gaur, MLA, Shri Shailendra Pradhan (Bhopal), Shri Bhawani Shanker Ghosh (Jabalpur), Shri B.N Sharma (Indore) and others stated that minimum charge of Rs. 180 per month proposed by the Board was very high. Shri G.D. Agarwal and Shri MBL Bhatnagar (Gwalior) suggested that number of slabs in domestic tariff should be increased. Viapari Association, Khargone stated that abolition of slabs will place undue burden on the middle class. Shri Hemant Khode, President, Abhibhaskar Sangh

Indore, Shri L.N. Sharma, Advocate Indore and several others also objected to the high minimum charge of Rs. 180 pm proposed by the Board.

4.9.2 The Commission shares these concerns and has decided that the domestic tariff will have five slabs in place of existing three and not one alone as proposed by the Board. Considering the problems of small consumers, the Commission has allowed only a nominal increase in minimum charges.

4.10 Agricultural Tariff

4.10.1 The Commission allowed special public hearing to cultivator group on 11th July, 2001 at Indore. Sarva Shri Amba Ram Mukati, Chandra Vallabh, Kanhaiya Lal Yadav Indore and others opposed Board's proposal concerning this category and prayed that load factor for agriculture for 2001-02 should be 15 percent instead of 18 percent as proposed by the Board. They also expressed concern over poor quality, frequent interruptions and long spells of non-availability of power. The cultivators have also expressed strong opposition to the cropwise flat rate tariff proposed by the Board as the crop seasons overlap and the cultivators may not irrigate their total land in any particular crop season. . Shri. Raj Narayan Bharadwaj, Shri Shyam Sunder Mishra of Akhil Bhartiya Kisan Sabha, (Jabalpur) Shri Satish Tiwari President, Nagar Panchayat Barahi (Jabalpur) and Shri Ram Narayan Sharma, Mudhyakheda (Morena) submitted that villages were being neglected in supply of Power

4.10.2 The Commission has considered these observations. A study by the Commission also indicated a load factor of 15 percent for 2001-02 which has been adopted. The Commission is in agreement that the crop wise tariff proposed by the Board is not amenable to fair assessment and has thus retained the present horse-power-wise classification of agricultural pump sets for tariff determination, on the basis of monthly slab rate per HP per month. Commission has given directions to the Board for improvement of quality and reliability of power for the agricultural sector.

4.11 LT Industrial Tariff

4.11.1 Several Consumers of this sector, including, MP Cold Storage Association objected to the proposal of the Board to have a uniform tariff for all LT industrial consumers in the range of 25 HP to 150 HP as the burden of such uniform tariff will fall unfairly on the consumers having low load. Moira Steel Ltd., Indore complained that since regular theft takes place in domestic and commercial sectors, those sectors should be penalized rather than the industrial sector. Many consumers objected to the proposed increase in minimum charges as large number consumers were not able to consume the energy equivalent to the existing minimum charges.

4.11.2 The Commission has considered it prudent to retain the horsepower-wise classification of LT industry as at present. The lower end of LT industry will still remain subsidized as compared to the cost of supply to this sector. Considering the current recession in industry, the Commission has retained minimum units consumption at the existing level.

4.12 Mini Steel Plants, Rolling Mills and Sponge Iron Plants

4.12.1 Anant Steel Ltd., Pithampur, Iron and Steel Association, Indore and Tirupati Steel, represented that mini-steel plants in MP are, at present, not able to compete with those in other states. Chattisgarh is offering incentive to power intensive industries.

4.12.2 The Commission has allowed only a nominal increase in tariff which will be applicable to mini-steel plants or mini steel plants with rolling mills/ sponge iron plants in the same premises.

4.13 Cement Industry

4.13.1 A detailed presentation was made by Shri P.L. Nene on behalf of MP Cement Manufacturers' Association. Shri Nene pointed out that the tariff increase proposed by the Board will increase the cost of cement by Rs. 50 per bag which will be a burden on the public. He stated that comparison of this tariff with that of other States was not logical in view of the difference in the cost of inputs.

4.13.2 The Commission has considered constraints of the cement industry and allowed only a nominal increase in tariff to partly cover the additional cost of supply by the Board as a result of inflation.

4.14 Railways

4.14.1 A detailed presentation was made by the Railways in addition to their written submissions. It was argued that tariff for Railway Traction is lower in adjoining States. The tariff proposed by the Board will make it costlier even as compared to the

cost of Dabhol power. Rationale for levy of minimum charge, surcharge for 'leading' power factor, supply affording charges, etc. were also questioned.

4.14.2 The Commission has taken a balanced view between the objections of the Railways and the present financial condition of the Board. The Commission has, thus, allowed only a very modest increase in the tariff for Railway Traction.

4.15 RE Cooperative Societies

4.15.1 MP Rajya Sahakari Gramin Vidyut Sangh, Jabalpur, Gramin Vdyut Sahakari Samiti, Amarpatan and others represented that they were being supplied power at a very concessional rate of 10 paise / kWh or less, right from their inception. Power at this subsidized rate was provided in view of un-remunerative and high cost of distribution in the rural areas. RE Corporation has also withdrawn the subsidy previously given to these societies.

4.15.2 The Commission has determined future tariff to RE Cooperative Societies as proposed by the Board, on the consideration of the contention of the Board that these societies realize charges from consumers at the rates applicable to Board's consumers of nearby areas and now when cost of supply has increased substantially there is no justification for applying the highly subsidised tariff.

4.16 Fuel Cost Adjustment (FCA) charges

4.16.1 All the industrial associations and several individuals have represented that FCA charges should not be merged with the basic tariff as has been proposed by the Board. These charges should also be fixed in a scientific manner as the Board itself has so admitted in the petition.

4.16.2 The Commission recognizes the problem arising out of the merger of FCA with basic tariff proposed by the Board. The Commission has ordered that FCA charges shall continue to be shown separately for all the tariff classes as hitherto and shall remain unchanged till further orders. The Commission will consider the proposal of the Board for determination of FCA charges separately as and when received. However, it should be prior to the submission by the Board of the next tariff petition.

4.17 Computer Charges

4.17.1 A large number of respondents have objected to the inclusion of computer charges in their bills, for the last many years.

4.17.2 The Commission is of the view that any expenditure incurred by the Board in the preparation of bills, whether manually or by computer, is a part of the basic tariff which includes employee costs and general administration expenses. The Board has also sufficiently realised the investments and expenses made on the installation of the computer system. The Commission, therefore, disallows levy of separate computer charges with effect from the date from which this revised tariff becomes effective.

4.18 Time of the Day (ToD) Tariff

4.18.1 In order to induce consumers to use off-peak power, the existing tariff for off-peak power has been kept as 65 percent of the normal tariff. The Board has proposed that off-peak power may now be priced at 75 percent of the normal rate. Several entrepreneurs have protested and have said that this increase will make ToD tariff unattractive as they already face great difficulties in utilizing power for industry at night time.

4.18.2 The Commission has considered the difficulties of entrepreneurs operating industries during off-peak hours at night. The Commission has determined that off-peak power during the hours 2200 to 0600 (next day) will be available at 70 percent of the normal tariff.

4.19 Captive Power

4.19.1 Shri P.L. Nene representing MP Cement Manufacturers' Association, Shri Bharat Bhushan Bhargava, Gwalior and others stated that the Board is not in a position to meet the electricity demand of the industry in full. Consumers should, therefore be allowed to use their captive power to full capacity without restraint. They also said that parallel operation charges should not be levied as the parallel operation of captive plant is beneficial to Board and not harmful to system. Levy of cess is not called for. TOD tariff should be made applicable to industries having captive power plants.

4.19.2 The issue of parallel operation charge is being examined by the Commission in detail. The Commission has directed the Board to submit its proposals for tariff determination for power which can be purchased by it from captive plants and taking into account the present position in order to improve supply position.

4.20 Security Deposit

4.20.1 A number of objectors requested the Commission to direct the Board to make payment of interest on security deposit as this amount is used by the Board as working capital. Objectors also demanded yearly account of the security held.

4.20.2 The Commission informed during the course of public hearings that the Hon'ble Supreme Court has held that it was not obligatory on the Board to pay interest on security deposit. In Ferro Alloys Corporation Ltd. Vs. A.P. State Electricity Board (AIR 1993 S.C. 2005 at page 2022) the Hon'ble Supreme Court observed in para 70 that:-

“The obligation to pay interest to the consumer proceeds on the assumption that the Board in keeping the security deposit and depriving the consumer of the use of the money which is alleged to be earning interest with the Board. This assumption is not warranted for the following reasons:

(i) The cycle of billing demonstrates that in the very nature of things the consumer is supplied energy on credit. The security deposit is hardly sufficient to secure the payment to the Board by the time the formal bill by the Board is raised on the consumer.

(ii) The consumption security deposit indeed represents only part of the money which is payable to the Board at the end of the billing cycle. The said amount can be appropriated at any time towards the payments that are due to the Board and reflected in the formal bill.

(iii) In the nature of billing cycle it is the Board which has to receive interest on the energy supplied to the consumers on credit.

(iv) The concept of interest earned on a fixed deposit is alien to the issue. The liabilities of the consumer increase on a daily basis depending on the level of supply and consumption. Therefore, the amounts due are liable to be appropriated forthwith. That is not possible where money's are placed either on fixed deposit or a savings bank account.”

As such, we have found no substance in the objection / prayer of objectors that the Board be directed to pay interest on deposits.

However, regarding the other objection, Commission advises the Board to devise a procedure for informing the consumers at least once in a year about the details of security deposits held.

4.21 **Serving Semi-permanent Connections**

4.21.1 A number of objectors drew attention of the Commission on the Circular No.0801 / Rev / 9135, dated 11.1.2001 issued by Board, particularly with regard to serving semi-permanent connections to agriculture consumers, provided their pump is at a distance upto 500 meters from the existing line, subject to the condition that such semi permanent connection shall be on the entire risk of the consumer, till Board draws a permanent line. Serious doubts in this regard were expressed about the statutory requirement of safety, voltage regulation, overloading of distribution lines and transformers, etc.

4.21.2 The Commission has taken cognizance of the views expressed by the objectors which shall be examined in details and suitable directives shall be issued.

4.22 **Meter Reading Cards**

4.22.1 Suggestions were made that meter reading cards may be provided to all consumers having meters. Shri Rajendra Sharma, Indore, representing NGO Vidyut Uphokta Association, while raising this question, offered to supply the printed cards.

4.22.2 The Commission considers this suggestion of the consumers as proper and the offer made by Shri Rajendra Sharma, to be a constructive offer. The Board to ensure this by first obtaining a sample card from Shri Sharma and to return the same after making necessary amendments / suggestions, for printing and then to provide it to consumers.

4.23 Petition to be in Hindi

4.23.1 A number of objectors suggested that Madhya Pradesh being a Hindi speaking State, the Tariff Petition should be in Hindi.

4.23.2 The Commission directs the Board to ensure submission of the Tariff Petition in future, also in Hindi.

5. ANALYSIS OF BOARD'S PROPOSAL

5.1 Sale of Energy ...

In the absence of Board's audited accounts and necessary data in this regard, the passing of tariff order is like shooting an arrow in the dark. Item wise sale of energy as given by the Board in its petition and the revised information was scrutinised. The Commission found that figures of sale of energy against SLP connections and agriculture consumers need revision. Consumption estimate for X-ray plants and electric crematoria are not available but these categories do not have any significant bearing on the total revenue as their consumption is only nominal. However, computation of revenue for several categories such as domestic, LT industry, HT, grid tariff and slab tariff etc. can only be approximate as consumption against each tariff sub-class within the same tariff category is not available with the Board.

5.1.1 SLP Connections

5.1.1.1 The data for 1999-2000 supplied by the Board shows a consumption of 23 kWh per month for SLP connections. A single light point consumer permitted to use a 40 watt lamp, would normally consume about 10 units per month, if the lamp is used for about 8 hrs per day.

5.1.1.2 A study made by the Board for SLP connections in Indore, Bhopal and Ujjain regions showed the consumption to be very high. It varied from 25 to 460 units per month, indicating gross misuse of unmetered energy.

5.1.1.3 The Government of Madhya Pradesh has withdrawn the facility of free electricity to SLP consumers from January 2001 except for SC/ST consumers below poverty line who are entitled to free electricity upto 20 units per month for which the State Government shall provide subsidy. The total number of such SC/ST SLP consumers is estimated as about 2,50,000 and remaining SLP consumers would be treated as domestic consumers. Accordingly the consumption of electricity in case of above SC/ST consumers (2,50,000) is assessed at 20 units per month per connection. The balance 17,05,435 SLP consumers as estimated by the Board are assessed at 60 units per month per connection.

5.1.2 Agricultural Consumption and Load Factor

5.1.2.1 The number of agricultural consumers in Madhya Pradesh State in the year 2001-02 is estimated to be 12,28,772 of which only 1838 are metered. Studies were carried out for assessing consumption of the agricultural consumers.

(i) Study by the Board of 128 metered connections in Indore, Ujjain, Bhopal, Rewa, Jabalpur and Gwalior regions, showed average monthly consumption varying from 98.2 kWh/HP/month to 165.53 kWh/HP/month.

(ii) Another study by the Board based on cropwise number of waterings / number of running hours of pumpsets of unmetered consumers in seven regions, showed that there is wide variation in consumption ranging from 14.68 kWh / HP / month for Sagar region to 220.36 kWh/HP/month for Indore region.

(iii) Study through Consultant in Indore region revealed that the average consumption was only 130.77 kWh / HP / month.

The studies also took into consideration the reports from Uttar Pradesh and that of M/s DESCON in this regard.

- 5.1.2.2** It was found during the study that a number of pumpsets were utilised for providing drinking water. Since there is no separate tariff for pumpsets providing drinking water, the assessed hours for drinking water were added by the Board to the hours of irrigation arrived at on crop-wise basis, but such use of water, being commercial, cannot be taken to be for agriculture use.

DESCON report has assumed that on each pumpset 2 nos. of 100 watt bulbs are used for lighting purpose. As such lighting consumption per connection has been assessed on the basis of 25 units per month for 6 months. This assessment based on adhoc assumption is not acceptable to the Commission.

Use of power from agriculture connection for operation of thresher, etc. has been assumed for agriculture purpose.

The consumption per HP per month from different studies works out as follows:

Board's study (average for 7 regions)	79.46 units / HP / month
Consultants study for Indore and Ujjain regions	89.59 units / HP / month

The studies done by the Board and Commission's consultants indicate that, there are large variations in the usage of irrigation pumps in different regions of the State. The reason for high usage in Indore, Gwalior and Ujjain appears to be selection of pumps near these large cities where power availability is better, as they are being fed from town feeders and also selection of cultivators taking cash crops. A statement showing the region wise study done by Board alongwith the verification done by consultant for Indore and Ujjain regions is given at Annexure IV.

In Indore, Board's study shows an average consumption of 220.36 units / HP / month, which is very abnormal and unreasonable and which means that a pump runs for approximately 10 hrs per day for all the 365 days a year, which is practically not possible. Consultants study of Indore region shows an average consumption of 130.77 units/HP/moth which the Commission accepts. By only modifying Board's figure of Indore region, the Load Factor (LF) for the State for the year 2000-01 works out to 11.77% (say 12%). This LF has been taken for 2000-01. Based on this LF, the agriculture consumption for the year 2000-01 works out to 3640.33 MUs as against 4247.05 MUs indicated by the Board. This will affect overall T&D loss for 2000-01.

5.1.2.3 The Average Load Factor for 2001-02

The Board has assumed the LF for agriculture consumers as 14% for 2000-01 whereas, as per sample studies and counter checks by the consultants, it hardly comes to 12%, that too with liberal approach and because of non-availability of authentic data of sample studies. The Board, for the year 2001-02, has assumed the LF of 18% whereas in para 13-A(iii) of the petition, the Board has indicated that for a 4 HP pumpset, the consumption during kharif crop would be 1000 units and for Rabi crop 3000 units. This means a LF of 15.3%. Considering the LF of 12% for 2000-01 and Board's own submission as above, the Commission has considered the LF for 2001-02 as 15%, which means that correctly assessed agriculture consumption projected for this year shall be 4659.00 MUs and not 5590.70 MUs as indicated by the Board.

- 5.1.2.4** The correct assessment of agricultural consumption is important on account of its very significant weightage in the total energy use in the State. The flow of required amount of energy to the agricultural sector has also to be ensured in view of the importance of this sector to the State's economy. It is, therefore, necessary that the power flowing to this sector is correctly measured and plans for future requirements are based upon realistic measurement of energy consumption in the agricultural sector.

The Government of Madhya Pradesh has declared the policy of providing meters on all un-metered connections including agriculture. **The Commission directs that all unmetered agriculture connections be metered within 3 years from the date of this order and that no new connection shall be given to any consumers without the meter. Progress of metering be submitted to the Commission on quarterly basis.**

It is also directed that for the correct assessment of existing agriculture consumption, the following action be taken by the Board. Analysis of Board's proposal contd...

- (i) Meters installed for sample studies be changed to electronic meters and be continued so as to cover the consumption of the whole year and also to give realistic pattern of cropwise consumption.
- (ii) All further meters installed for sample studies should also be electronic meters.
- (iii) The selection of agriculture consumers for sample studies shall be such that for every region it represents different types of consumers (large, medium and small on open wells, tube wells, perennial sources like river / nallah, etc.), different cropping patterns and the number of crops, in proportion to total number of consumers of the aforesaid nature.

The results of the above sample studies would provide the basis for deciding Load Factor (LF) for 2002-03.

5.2 Category wise Consumption Pattern

The consumption pattern of various categories with restricted supply, is clear from the figures of sale of energy to such categories given in the petition and subsequently revised vide Board's letter dated 22-6-2001. The pattern of consumption for the years 1995-96, 2000-01 and 2001-02 is given below showing the change in pattern of use.

Category wise Consumption Pattern in Percentage

S.No.	Category	Consumption Pattern %		
		1995-96	2000-01	2001-02
LT Consumers				
1.	Domestic	10.56	17.71	16.85
2.	SLP	4.02	2.00	3.03
3.	Non Domestic	3.02	4.19	3.83
4.	Water Works Scheme	0.68	1.1	1.03
5.	LT Industrial	3.42	4.55	4.14
6.	LT Agricultural	43.51	30.76	36.05
7.	Street Light	0.58	0.92	0.86
Total for LT Consumers		65.80	61.22	65.60
HT Consumers				
1.	Railway Traction	4.29	7.60	7.31
2.	Coal Mines	2.76	3.58	3.24
3.	Mini Steel Plants	1.21	0.44	0.37
4.	HT Irrigation	0.10	0.10	0.11
5.	HT Water Works Scheme	1.54	2.09	1.91
6.	Other HT Consumers	20.74	18.81	15.82
7.	RE Cooperative Societies	3.46	6.03	5.78
8.	Border Villages	0.09	0.13	0.12
Total for HT		34.20	38.78	34.40
Grand Total LT & HT Consumers		100.00	100.00	100.00

The high LT agriculture consumption during 1995-96 at 43.51% is due to the fact that a heavy quantum of theft and wastage of energy was being booked in this category.

Analysis of Board's proposal contd...

5.3 Forecast of Energy and Peak Demand

As per data submitted by the Board for undivided State of Madhya Pradesh (including Chattishgarh) for years upto March 2000 and for new State of Madhya Pradesh thereafter, the average compound growth rate of energy and peak demand over the period 1995-96 to 2000-01 is mentioned as under:

Energy Demand (unrestricted)	5.23%
Energy Demand (restricted)	4.67%
Peak Demand (unrestricted)	3.61%
Peak Demand (restricted)	4.29%

5.4 Power Generation

5.4.1 Power Station-wise installed capacity of Board (as per its publication) as on 31.3.2001 is as follows:

A.	Thermal Power Stations	Capacity (MW)
	1. Amarkantak Thermal Power Station (Chachai)	
	Amarkantak-I (20+30)	50.00
	Amarkantak-II (2x120)	240.00
	Total	290.00
	2. Satpura Thermal Power Station, Sarni	
	STPS PH-I (5x62.5)	187.50*
	STPS PH-II(200+210)	410.00
	STPS PH-III(2x210)	420.00
	Total	1017.50
	3. Birsinghpur Thermal Power Station	
	Birsinghpur-I (2x210)	420.00
	Birsinghpur-II (2x210)	420.00
	Total	840.00
	Total (Thermal)	2147.50
B.	Hydel Power Stations	
	Gandhi Sagar (5x23)	57.50*
	RanaPratap Sagar (4x43)	86.00*
	Jawahar Sagar (3x33)	49.50*
	Bargi (2x45)	90.00
	Bansagar Tons (3x105)	315.00
	Birsinghpur (1x20)	20.00
	Rajghat (3x15)	22.50*
	Pench, Totladoh (2x80)	107.00*
	Total (Hydel)	747.50
	Mini / Micro Hydel	5.455
C.	Total	2900.455

* *MP'Share* *The Board has not clarified that although MP's share in the hydel power stations in Rajasthan has been included, but the share in Rihand and Matatila hydel power stations in UP, has not been accounted for.*

5.4.2 MPEB has not been drawing any power from Rihand since November 1992. Power, in excess of its share, has generally been drawn from Matatila. The Board draws power from UPSEB (now UPPCL) from its Chitrakoot sub-station for supply to MP's border villages. The Board in this petition has not shown any availability of power from Matatila and Rihand Power Houses in UP. Because of non-supply of due share of power to MP from above interstate power stations of UP, the UPSEB (now UPPCL) owes Rs. 92.24 crores to MSPEB as on 31.3.2001. The Board is not supplying the share of UPPCL from Rajghat. This is to be adjusted against the outstanding of Rs. 92.24 crores Therefore, UP's share from Rajghat power station indicated in the petition is taken as available to MP.

5.4.3 Performance Evaluation of Thermal Stations of the Board

5.4.3.1 The overall performance of Board's thermal generating stations during the past five years has been as follows:

Indicator	Unit %	Year				
		1996-97	1997-98	1998-99	1999-2000	2000-01
PLF	%	59.0	64.5	70.0	70.8	66.7
Station Heat Rate	KCal/Unit	3015	2910	2939	3119	3107
Auxiliary Consumption	%	9.59	9.54	9.24	9.36	9.50
Specific Coal Consumption	Kg/Unit	0.82	0.82	0.78	0.75	0.78
Specific Oil Consumption	ml/unit	5.80	4.02	3.07	2.16	3.80

5.4.3.2 The detailed information about individual power stations provided by the Board indicates that performance of a number of units in different power stations during 2000-01 has been lower than that in previous years. As such, the performance of 2000-01 cannot be made the basis for 2001-02.

5.4.3.3 **The Board shall make schedule of annual maintenance / overhaul for all units in advance for every year and ensure its implementation, so that all units are available for generation before commencement of Rabi season. The schedule shall be submitted alongwith next tariff petition.**

5.4.4 **Generation Performance – Operational Norms**

5.4.4.1 **Plant Load Factor (PLF)**

Thermal

The Board has projected thermal generation of 13800MU (MP Share 12948 MU) at the PLF of 69.3% for the year 2001-02. The Commission, after taking into consideration plans for outages, R&M and performance level achieved by the individual power houses during 1999-2000 and 2000-01, has approved a thermal generation target of 14155 MU (MP Share 13303 MU) at the overall PLF of 71.1%. Taking auxiliary consumption as 8.98% (say 9%) (1195 MU), the net thermal generation shall be 12108 MU (MP Share).

The power station wise PLF is discussed below:

Satpura Thermal Power Station

During the 2000-01, PH-I has operated at 72% PLF. For 2001-02 the Board has proposed 2130 MU generation at the PLF of 78%. The Commission has approved the same.

During 2000-01, PH-II has achieved PLF of 68% and PH-III has achieved PLF of 76%. The Board has proposed 5500 MU generation combined from PH-II&III at the PLF of 75% for PH-II and 76% for PH-III. The Board has proposed an improvement by 7% for PH-II but no change for PH-III over the previous year 2000-01. The Board has stated that due to rotor vibration in unit no.9 of PH-III, the unit will remain under shutdown for a period of about 3-4 months in the year 2001-02. The Commission has, therefore, approved the generation target as proposed by Board.

Amarkantak TPS:

All the units of this power station are quite old and their performance is very poor. For 2001-02, the Board has proposed 1120 MU generation at 44% PLF. The Board has also intimated that two units of this power house (2x120MW) will remain under shut down for about 4 months for R&M work. Considering outages of these units, the Commission still finds that there is a scope for increasing loading on unit No.4 (120 MW) from the proposed 65% to 70% and accordingly generation target of 1155 MW at 45.5 PLF has been fixed by the Commission for 2001-02.

Birsinghpur TPS:

PH-I (2x210 MW) of this Power Station was Commissioned in 1993/94, while PH-II (2x210 MW) was Commissioned in 1999/2000. This is a new power station. For 2001-02, Board has proposed generation target (combined for PH-I and PH-2) of 5050 MU at 68.6% PLF. The Board has informed that low PLF is due to condensor problem. The Commission is concerned about the development of problem in condensor tubes within such short period after commission. **The Commission directs the Board to rectify the condensor tube problem.** However, for 2001-02, the Commission fixes the power generation target of 5370 MU at 73% PLF for this power station.

Hydel

The Board had projected hydel generation of 2102 MU in its petition which was subsequently revised to 2427 MU (MP Share) (Bansagar Tons PH-I generation revised from 425 MU to 750 MU) for 2001-02. The proposed generation from the hydel stations is higher compared to previous years. The Commission has accordingly fixed the generation target of 2427 MU (MP Share) as proposed by Board during 2001-02. However, as 50 MU share of UP from Rajghat Hydel Station is being retained by MP, the

total availability shall become 2477 MU. Considering auxiliary consumption of 13 MU, net generation available in MP comes as 2464 MU.

Table below summaries the power station wise generation / PLF for 2001-02.

	Generation proposed by Board (MU)	Generation approved by the Commission (MU)	PLF proposed by Board (%)	PLF approved by the Commission (%)
Satpura TPS PH-I	2130	2130	78	78
Satpura PH-II&III	5500	5500	75.6	75.6
Amarkantak TPS	1120	1155	44	45.5
Birsinghpur TPS	5050	5370	68.6	73
Total Thermal	13800	14155	69.3	71.1
M.P.Share	12948	13303	-	-
Total Hydro (M.P.Share)	2427	2427 *	-	-
Total Generation (M.P.Share)	15375	15730	-	-

* 50 MUs share of UP from Rajghat Hydel Station is retained by MP, hence actual availability will be 2477 MU.

5.4.4.2 Auxiliary Consumption

Thermal

The Board has proposed Auxiliary Consumption of 9.4% for its thermal stations for 2001-02. Major generating capacity of the Board comprises units of 200 MW series, using electrical driven boiler feed pumps and operating without cooling towers. CEA norms for auxiliary consumption of such units is 9%. **The Commission has approved average auxiliary consumption of 9% for 2001-02 as against 9.4% proposed by Board.**

Hydel

The Board has proposed auxiliary consumption of 0.57% for its hydel power stations. CEA norms for auxiliary consumption for hydel stations are 0.5% of generation. **Considering aging effect, the Commission has approved auxiliary consumption of 0.53% against Board's projection of 0.57%.**

Table below gives power house wise auxiliary consumption proposed by the Board and that approved by the Commission.

Auxiliary Consumption Targets

	Auxiliary Consumption proposed by Board (%)	Auxiliary Consumption approved by Commission (%)
Satpura TPS PH-I	9.00	9.00
Satpura TPS PH-II&III	8.75	8.75
Amarkantak TPS	10.48	10.00
Birsinghpur TPS	10.00	9.00
Average Thermal	9.40	8.98 (say 9)
Average Hydel	0.57	0.53

5.4.4.3 Station Heat Rate (SHR)

There is no arrangement to measure quantity of coal actually fired in the power stations as weightometers have not been installed on the conveyor belts feeding coal to the power stations.

The Board in its letter No.07-03/04/MPERC/575 dated 31.5.2001 has informed that coal consumption in the power stations is being calculated on the basis of energy generated and designed station heat rate subject to corrections applied thereto under different working conditions by Deviation Method. The Board did not furnish the designed SHR of generating units and basis of corrections applied.

The Board has indicated average SHR of 3107 K.cal./unit for its thermal stations for 2000-01 but has not projected SHR for 2001-02. The CEA prescribed norms for SHR of coal based stations is 2500 K.cal./unit. The average SHR reported by the Board in previous years is quite high as compared to norms. As such, the deviation method adopted by the Board to work-out SHR and thereby coal consumption may not be appropriate.

Table below gives power station wise targets of SHR approved by the Commission.

Station Heat Rate Targets

	SHR indicated by Board (kCal/unit)		SHR approved by Commission (kCal/unit)	Observations of Commission
	1999-2000	2000-01	2001-02	
Satpura T.P.S.	2698	2870	2689	Based on the performance in 1999-2000, 32% efficiency is achievable. Accordingly target of 2689 has been fixed.
Amarkantak TPS	2896	3330	2869	Though the units of this power station are old, 30% thermal efficiency is achievable. Accordingly target of 2869 has been fixed.
Birsingpur TPS	4347	3120	2689	It is a new power station; two units of 210 MW each were commissioned in 1993-94 and two more units of 210 MW each were commissioned in 1999-2000. It should operate at SHR-2500 K.cal. / unit, (CEA norm). However, considering the poor performance in the previous years, the Commission has fixed SHR of 2689.
Weighted average			2704	

In the absence of arrangements to measure quantity of coal fired, the Commission has fixed average SHR of 2704 K.cal./unit for Board's thermal power stations. **The Commission directs the Board to take immediate action to install weightometers on all the belt conveyors feeding coal to generating units besides taking steps to improve SHR of generating stations.**

5.4.4.4 Specific Coal Consumption

The Board receives coal from SECL for Amarkantak and Birsingpur TPS and from WCL for Satpura TPS. The quality of coal depends upon the source of supply. The price of coal depends on the grade of the coal. The grade of the coal is determined by its Useful Heat Value (UHV). The UHV for different grades of coal are as under.

Grade	UHV. Range (K.cal./kg)
C	4951 to 5600
D	4201 to 4950
E	3361 to 4200
F	2401 to 3360

The Board in its letter No. 07-03/04MPERC/575 dated 31.5.2001 has indicated that payment to the coal companies are made according to the UHV of coal received. In this context, the Board has stated that the Calorific Value (CV) and UHV of coal are two different parameters which cannot be compared, besides CV of coal fired is lower than the CV of coal received, because coal received may remain stacked for few days in the coal yard, where coal quality deteriorates due to spontaneous combustion and weathering effect.

The data furnished by the Board in regard to CV and UHV of coal received at Satpura TPS during 1999-2000 and 2000-2001 are given below:

Year	Average C.V. of coal received (K.Cal./Kg.)	Average CV of coal fired (K.Cal./kg)	UHV. Average (K.Cal./kg.)	Difference
1	2	3	4	5=2-4
1999-2000	3704	3438	3562	142
2000-2001	3817	3459	3601	216
			Average	180

Although C.V. and UHV are two different parameters, both reflect heat content of coal. The CV of coal received is generally higher than UHV. The above data of Satpura TPS for 1999-2000 & 2000-2001 show that CV of coal received is higher by 180 kCal/kg (average of two years). Accordingly the Commission has assumed C.V. of coal for the purpose of determining specific coal consumption as 180 K.cal/kg higher than its UHV for all the Power stations of the Board as the CV of coal taken by the Board for assessment of coal consumption seems to be quite low compared to UHV.

Amarkantak TPS

The Board has indicated that coal for Amarkantak TPS is supplied by SECL. The coal supplied is of 'D' grade and its landed average cost is Rs.877.45/MT. This rate has been taken by the Board for calculating cost of coal. UHV range of 'D' grade coal is 4201 to 4950 kCal/Kg. Assuming that the Board is getting coal of minimum UHV of the grade (i.e.4201 K.cal/kg) for which the Board is making payment, the Commission has considered C.V. of coal as (4201+180) say 4380 K.cal/kg. Accordingly, specific coal consumption i.e. coal required to generate one unit of electricity will be as follows:

$$\text{Specific coal consumption} = \frac{\text{SHR}}{\text{CV}} = \frac{2869}{4380} = 0.655 \text{ Kg/Unit}$$

Satpura TPS

The Board has indicated that the coal for Satpura TPS is supplied by WCL. The coal supplied is of D and E grades in the ratio of 84:16. The average cost based on the rates of WCL comes to Rs. 1169.01 per MT. UHV range of D and E grades is 4201-4950 and 3361-4200 respectively. Assuming that the Board is getting coal of minimum UHV and taking CV higher than UHV by 180 K.cal/kg, Commission has considered average C.V. of coal for Satpura TPS as 4245 K.cal/Kg. for working out specific coal consumption.

Birsinghpur TPS

The Board has indicated that the coal for Birsinghpur TPS supplied by SECL is of 'C' grade. The average cost based on the rates of SECL comes to Rs. 1246.36 / MT. UHV range of 'C' grade coal is 4951-5600. The calorific value of the coal indicated by the Board for 2000-01 is 4192 K.cal/kg. Considering the UHV range of 'C' grade coal and based on the CV of coal received in the year 2000-01, it is obvious that the Board is getting coal of 'D' grade and not 'C' grade. Assuming that the Board is getting coal of minimum UHV corresponding to 'D' grade and taking CV higher than UHV by 180 k.Cal/kg, the Commission has considered average calorific value of coal for Birsinghpur TPS as 4380 k.cal/kg. Specific coal consumption has been worked out accordingly. The cost of coal has been taken as Rs. 1084.12/MT on the basis of the rates for 'D' grade coal indicated by the Board.

Table below summarises the results of the specific coal consumption approved by the Commission for 2001-02.

Specific Coal Consumption

	Grade indicated by the Board	Rate indicated by the Board (Rs./MT)	Specific coal consumption projected by Board (kg / unit)	Grade considered by the Commission	Rate considered by the Commission (Rs/ MT)	C.V. of coal assumed by the Commission (kCal /kg)	Specific coal consumption approved by Commission for the year 2001-02 (kg/unit)
Amarkanak TPS	D	877	0.738	D	877	4380	0.655
Satpura TPS	D(84%) E(16%)	1169.01	0.821	D(84%) E(16%)	1169.01	4245	0.633
Birsinghpur TPS	C	1246.36	0.7	D	1084.12	4380	0.614
MPSEB	-	1172.29	0.77	-	1109	4312.5	0.634

5.4.4.5 Transit and Stacking losses:

The Board has not indicated transit and stacking loss separately. The data furnished by the Board for Satpura Power Station indicates the difference of CV of coal received and fired in the range of 250-350 K.cal/Kg. The Board has stated that this difference in the CV is because of coal stacking for few days in the coal yard, during which coal quality deteriorates, due to spontaneous combustion and weathering. The heat loss in stacking is quite high. **The Commission directs the Board to take appropriate action to reduce these losses.**

The Commission has considered transit loss covering weight errors at loading and unloading points, evaporation of surface moisture, etc., apart from stacking loss and loss in the process of transport of coal by conveyor belt from coal yard to the boiler. Loss on the above account approved by the Commission is 3% for 2001-02. **The Commission also directs the Board to submit data on actual transit loss in the next petition for Tariff determination and FCA revision.**

5.4.4.6 Specific Oil Consumption

Specific Oil Consumption as per CEA norms is 5 ml/kWh. The Board has indicated an average Specific Oil Consumption of 3.09 ml/kWh. The previous years data reveal that there is a scope for improvement, particularly in the case of Satpura PH-I, and

Birsinghpur TPS where it can be brought down from 4.92 to 3.9 and from 3.13 to 3 ml./kWh respectively. Considering the above changes the overall specific oil consumption for all power stations shall work out to 2.94 ml/kWh as against 3.09 ml / kWh proposed by the Board. As such, specific oil consumption of 2.94 ml/kWh is approved by the Commission for 2001-02.

5.4.5 Total Generation

After detailed scrutiny as above with proposed improvements in operating parameters, the projected net generation available for 2001-02 has been revised as follows:

Hydel - projected net generation	2464 MkWh
Thermal - projected net generation	12108 MkWh

5.5 Power Purchase

5.5.1 Power from Central Sector Power Stations

After bifurcation of MP and creation of State of Chattisgarh, the Government of India (MoP) has allocated to the Board 1046 MW from Central Sector thermal stations of NTPC and 70 MW from Kakrapar Atomic Power Stations vide G.O. dated 31/1/2001 of the Ministry of Power. Besides 32% (i.e. 223.3 MW) of unallocated power of Central Sector stations of Western Region and 23.34 MW power out of unutilised share of Goa is available to the Board. In addition, 300 MW of power from Eastern Region Central Sector stations has been allocated to the Board bringing the total allocation from central sector power station to 1662.64 MW. Due to high cost of Kakrapar Atomic Power Station, 70 MW allocation from this station for MP has been surrendered by the Board with effect from 01.12.2000 bringing down the allocation from Central Sector to 1592.64 MW. The availability of power for the Board from Central Sector at 85% availability works out to 1354 MW only.

5.5.2 Power Purchase from Captive Plants

No proposal has been given by the Board for purchase of power from captive power plants (including deemed purchase). In case of synchronising, captive power with Board's system and wheeling it to any other point even for self use, the possibility of absorbing extra power not used by the wheeled consumer cannot be ruled out. The rates of power absorbed or purchased from captive power plants are required to be approved by the Commission.

5.5.3 Purchase of Power from Non-Conventional Sources of Energy

The Board has not given any proposal for the rate of energy purchased from non-conventional sources of energy. However, a proposal was made by a wind power company, which is being examined separately. However the Commission recognises the importance of these sources for the benefit of present generation and the generations to come. As such it would be worth spending little more for the advantages of future.

5.5.4 Peak Demand and Availability

The unrestricted peak demand projected by the Board for 2001-02 is about 5900 MW as against the peak availability of 3900 MW. Efforts should be made to reduce this gap. Efforts should also be made to reduce the peak demand through regulatory measures and to flatten the load curve and to shift loads from peak to off peak hours by giving incentives as per Time of the Day tariffs.

5.5.5 Short Terms Arrangement for Additional Power

5.5.5.1 The Board has indicated those States / Regions from where additional power is available on short term basis. **Procurement of power from any source or entering into agreement for the same shall be with the prior approval of the Commission.**

5.5.5.2 The GOI's order dated 31.1.2001 for reallocation of power between the Board and CSEB provides that to the extent Chattisgarh is unable to utilize its allocation, it would stand temporarily allocated to MP. CSEB has shown a surplus of about 200-300 MW in its petition submitted to the Commission. **The Board should utilise the unutilized share of CSEB as allowed by the Government of India.**

5.5.6 Energy Audit and DSM

5.5.6.1 Energy audit is basically meant to ensure energy conservation by way of economic use of energy in different sectors of energy use through energy efficiency and Demand Side Management (DSM). Energy audit of Board's system (reduction of T&D losses) is to be differentiated from the energy audit of consumers.

5.5.6.2 Energy auditing of Board's system, as reported by the Board, is not adequate. Commission has already directed the Board to go in for installation of energy loss meters on 33 kV /11 kV feeders followed by metering on distribution transformers so as to identify the pockets of heavy line losses and take measures to reduce them. Considerable work is required to be done for reduction of T&D losses and in order to make a time bound programme and implement it seriously, **the Commission directs the Board to ensure following actions:**

- (i) Install meters on all 132 and 33 kV feeders by December 2001, and on 11 kV feeders by March 2002. In addition, the programme be chalked out to install meters on distribution transformers, which may be on rotational basis in the initial stage.
- (ii) Complete the work of determination of actual T&D loss for all Regional H.Qs. / city circles within the next 6 months.
- (iii) Work out T&D loss for the year 2001-02 on a more realistic basis, with proper breakup of Technical loss and Commercial loss (indicating component of loss due to theft / pilferage of energy, etc.).
- (iv) No meter of any HT consumer should remain defective. All defective H.T. meters must be replaced within 7 days of coming to notice of the defect / non-recording. Defective meters of LT consumers should be replaced in a time bound manner so as to bring their number to not more than 3% (in cities not more than 1.5%) by March, 2002.
- (v) Board should take up the work of Demand Side Management on top priority basis and to make a 'DSM Cell' to ensure this work. Ample funds are available under USAID programme for carrying out DSM programme, for which Board should appoint a Consultant. DSM programme can be implemented without causing any ultimate financial burden on the Board. **Programme be finalized by the Board by December 2001.**
- (vi) **Energy Audit of Board's own power stations, offices, etc. be taken up under a specific time bound programme, which should be intimated to the Commission within one month of the date of this order.**

Implementation of the above programme should be intimated to the Commission alongwith the submission of the next tariff proposal.

5.5.6 Power Purchase Requirement for 2001-02

The Board has indicated its requirements of power purchase for the year 2001-02 as 13181 MU which has been accepted by the Commission.

5.5.7 Energy Availability for 2001-02

The total energy availability for 2001-02 works out as shown below which also accounts for the additional generation available due to improvement in performance:

		MU
Net thermal generation	-	12108
Net Hydel generation	-	2464
Power purchase including Interstate exchange	-	13181
Total	-	27,753

5.6 Estimation of T&D Losses

5.6.1 T&D Losses

5.6.1.1 The losses in Transmission and Distribution system are categorised as:

- i) Technical losses (line losses including transformation losses)
- ii) Commercial losses (theft, unauthorised hooking, tampering of metering devices and other commercial losses)

5.6.1.2 Technical losses in the system are high as the required investments have not been made on strengthening the transmission and distribution system, while there has been continuous development of load.

5.6.2 T&D Loss: DESCON Study

M/s Descon Consultants conducted a study of T&D losses in the State and estimated them as follows:

i)	Technical losses	%
	?? on 400 kV to 132 kV network	5.47
	?? on 33 kV to LT network	<u>13.76</u>
	Total Technical losses	19.23
ii)	Commercial losses	
	?? Industrial HT	5.40
	?? Industrial LT	6.50
	?? Commercial Sector	3.04
	?? Domestic Sector	<u>13.01</u>
	Total Commercial losses	27.95
	Total losses	= 47.18

5.6.3 Study for Estimation of T&D losses conducted by Consultants

5.6.3.1 A detailed study was made for Sehore Division of the Board to determine T&D losses. The results of study indicate the following losses for 2000-01:

Technical losses	%
400 kV line	0.960
400/200 kV substation	0.167
220 kV line	2.740
220/132 kV substation	0.233
132 kV	2.950
132/33 kV	0.475
33 kV line and substation	3.990
11 kV lines, LV lines and 11/0.4 kV substation	10.990
Total Technical losses	22.505
Total T&D losses	50.300
Total Commercial losses	27.795

5.6.3.2 Further, the T&D loss for 2000-01 assessed on the basis of energy fed into the system and sale of energy subject to taking agricultural consumption based on 12 percent Load Factor is as follows:

	MU
Total energy fed into the system including purchase	26512
Sale of energy taking 12% LF for agriculture	12991
Total T&D Loss	13521
	(51.0%)

The above T&D loss is in consonance with the sample study done by the Consultant. Hence, for 2000-01, the loss is taken as 51%. **The Board has proposed to reduce the loss to 42.88% in 2001-02 which has been accepted by the Commission.**

5.6.3.3 The Commission prescribes the following programme for reduction of T&D loss over next five years:

	Total Loss	Reduction
	(%)	(%)
2000-2001	51.00	-
2001-2002	42.88	8.12
2002-2003	37.00	5.88
2003-2004	32.00	5.00
2004-2005	28.00	4.00
2005-2006	25.00	3.00

5.6.3.4 The following steps be taken by Board to reduce the high commercial loss of about 27 percent assessed for 2001-02:

- (i) **Intensive checking should be done to stop theft of energy in jhuggi jhopri clusters, agriculture sector, unauthorized colonies, etc.**

- (ii) **FIRs be lodged and culprits apprehended if theft is continued inspite of persuasion and warnings, to avail regular connections. Meters must be installed on all existing unmetered connections of SLP and agricultural consumers within next three years.**
- (iii) **Close monitoring should be done of HT and LT industries to ensure that there is no theft or pilferage of energy and consumption is commensurate with actual use. Specific officers at different levels be made responsible for such monitoring.**
- (iv) **Electronic meters be installed on priority basis on all HT consumers premises and on LT industries so that theft of energy can be readily checked. No HT connection should remain with defective meters. Any defective meter coming to notice should be replaced within a week.**
- (v) **Defective meters of LT consumers should be replaced by making a monthly programme so that the defective meters are brought down to not more than 3 percent within next one year.**
- (vi) **100 percent meter reading, particularly of LT consumers should be ensured. Supervisory officers (JE/AE) must be given a programme to carry out counter checking of the meter readings done by Meter Readers. Area of meter readers should be changed after every twelve months.**

5.6.3.5 The Board furnished an investment plan for three years covering only EHT lines and substations costing Rs. 619 crores, but no plan has been submitted for strengthening sub-transmission and distribution system. Board should make a comprehensive plan for the next five years for strengthening transmission, sub-transmission and distribution system, taking into consideration the present power handling capacity of the system, power presently available and additional power required to be handled during the next five years.

5.7 Accounting of Additional Availability of Energy during 2001-02

Due to improvement in performance in generation and keeping the power purchase as indicated by the Board, the total energy generation available during 2001-02 works out as 27753 MU as against 27000 MU indicated by the Board. Maintaining the T&D loss of 42.88 percent as indicated by the Board and keeping the same breakup of losses at EHT, HT and LT levels, the units available for sale in the above categories is shown in table below. The total energy available for sale works out to 15852 MU as against 15390 MU proposed by the Board in its petition.

Units Available for Sale at EHT, HT and LT in 2001-02

S.No.	Particulars	Units	Loss
		(MU)	(%)
1	Net Thermal Generation	12108	
2	Net Hydel Generation	2464	
3	Net Total Generation	14572	
4	Power purchase including Inter State Exchange	13181	
5	Total Units Available (for sale)	27753	
6	Transmission and Transformation - EHT loss	1943	7.00
7	Units Available for sale at EHT	25810	
8	Units Sold at EHT	2504	
9	Units transmitted on HT	23306	
10	HT Distribution Losses	2739	9.87
11	Units available for sale at HT	20567	
12	Units Sold at HT (33 kV and 11 kV)	3198	

S.No.	Particulars	Units	Loss
		(MU)	(%)
13	Units transmitted on LT	17369	
14	LT Distribution Losses	7219	26.01
15	Net units available for sale at LT	10150	
16	Total units	15852	42.88

5.8 Board's Revenue Expenditure

5.8.1 In the petition, the Board estimated its total revenue expenditure for 2001-02 at Rs. 6061.52 crores which was subsequently revised in the course of hearings on 11th June, 2001 to Rs. 6018.01 crores. This has been further revised by the Board to Rs. 5929.74 crores vide its Lr. No. 05-01/3978 dated 3rd August, 2001 by showing increase in other Non-tariff income from Rs. 289.08 crores to Rs. 377.34 crores, after accounting for additional revenue of Rs. 88.26 crores to be received under the Head – "Miscellaneous charges" from consumers.

5.8.2 The Commission analysed in detail each item of expenditure and its decisions thereon are given below:

1. Generation Expenses

(a) Own Generation

The total net consumption of coal, based on gross generation and the total cost of coal for all the thermal power stations of the Board as discussed in foregoing paragraphs works out as under:

	As proposed by Board	As approved by Commission
(i) Net consumption based on gross generation (LMT)	99.08	85.97
(ii) Rate (Rs. / MT)	1172.29	1109.13
(iii) Amount (Rs. crores)	1161.50	953.52

The oil consumption and the total cost thereof has been worked out as under:

(i) Net consumption (kL)	39968	39121
(ii) Rate (Rs. / kL)	11101	11101
(ii) Amount (Rs. crores)	44.37	43.43

Thus the total fuel cost works out to Rs. 996.95 crores as against Rs. 1205.82 crores proposed by Board. This has resulted in reduction of Rs. 208.88 crores. The total fuel cost per kWh (unit) stands reduced from 93.13 paise / unit proposed by Board to 74.94 paise / unit. The Board has also included in the Generation Expenses an expenditure of Rs. 18.30 crores for operating expenses of thermal and hydel power stations and Rs. 16.01 crores for Electricity Duty and cess on auxiliary consumption levied by the State Government. Expenses on these two items appear to be in order. **The total Generation Expenses proposed by the Board and approved by the Commission are as under:**

	As proposed by Board	As approved by Commission
Generation Expenses (Rs. crores)	1240.13	1031.26

(b) Partnership Projects

(i) Chambal Complex

The Board has taken account of its share of assets for Ranapratap Sagar (RPS) and Jawahar Sagar (JS) HPS but has not shown its share of expenditure for these projects in the Annual Revenue Requirement (ARR).

(ii) Uttar Pradesh

The Board is holding a share of 15% (37.5 MW) in Rihand HPS, 1/3rd (10 MW) in Matatila HPS (both situated in UP) and 50% (22.5 MW) in Rajghat HPS (situated in MP). The Board has not shown in its books of accounts the assets equivalent of its above shares in the power stations in Uttar Pradesh. The method of meeting expenditure of its share has not been stated.

The Commission directs the Board to show distinctly its share of expenditure in all the above partnership projects in the Generation Expenses and to account for the assets of the same in its books of accounts in future.

2. Power Purchase

In the petition the Board has proposed an expenditure of Rs. 2270.92 crores for purchase of 13181.42 MU of energy from the central sector power stations and other agencies. This was subsequently revised upto Rs. 2297.10 crores in June 2001 for the same quantum of power purchase without giving reasons. Similarly, as regards wheeling charges of Power Grid Corporation of India (PGCIL) and Grid Corporation of Orissa (GRIDCO), the Board has shown an expenditure of Rs. 242.72 crores in the petition which was subsequently reduced to 196.94 crores without giving any reasons. **The Commission approves power purchase expenditure of Rs. 2297.10 crores and wheeling charges of Rs. 196.94 crores, the source wise details of which are given below:**

Source wise details of Power Purchase

S.No.	Power Station	Units (MU)	Rate (P/kWh)	Amount (Rs/Cr)
1.	Korba	4416.67	91.37	403.53
2.	Vindhyachal	2498.08	138.13	345.05
3.	Vindhyachal Extension	1094.70	152.62	167.07
4.	Kawas	1521.22	338.59	515.07
5.	Gandhar	961.55	339.25	326.20
6.	Eastern region	2134.19	191.75	409.24
7.	RSEB	555.00	188.74	104.75
8.	Others	-	-	-
	Sub-total	13181.42	172.28	2270.92
	Unexplained difference in expenditure			(+) 26.18
9.	PGCIL	12626.42	12.71	160.42
10.	GRIDCO	2080.84	39.55	82.30
	Sub-total	14707.26	16.50	242.72
	Unexplained difference in expenditure			(-) 45.78
	Grand-total	13181.42	190.70	2513.64
	Unexplained difference in expenditure (Net)			(-) 19.60

3. Employee Expenses

The Board has proposed employee expenditure of Rs. 836.82 crores for the year 2001-02 as against Rs. 830.94 crores (estimated) for the year 2000-01 and Rs. 822.07 crores for 1999-2000.

The Board in its Lr. No. 05 - 01 / 3883 dated 27th July, 2001 has explained that for 2001-02, the expenditure on account of DA is projected at Rs. 232.69 crores. This covers DA increase upto 1.1.2001 and further expected increase on 1.7.2001 and 1.1.2002. The Commission, however, feels that the financial burden of DA rise expected from 1.1.2002 will not come in the year 2001-02 because of delay in declaring this DA rise and its adoption by the Board. The Commission, therefore, disallows the burden on account of DA rise from 1.1.2002 to the extent of 3 percent (Rs. 14.54 crores). **The Commission, has allowed employee expenditure of Rs. 822.28 crores in place of Rs. 836.82 crores as claimed by the Board.**

4. Administrative and General Expenses

The Board has proposed A&G expenses of Rs. 92.99 crores for 2001-02 against Rs. 84.51 crores in 2000-01 and Rs. 73.67 crores in 1999-2000. The year 1999-2000 is taken as base year, which is the year preceding the bifurcation of the State. In the petition (Form A-3.5 - working) the bifurcation of expenditure for the Head Quarters is done for M.P. as 73.38% of the undivided Head Quarters expenditure and R.A.O.s expenditure as per area. Accordingly in the petition, A&G expenses for 1999-2000 allocated for the Board (excluding CSEB) is shown as Rs. 73.67 crores. But in

the finalized Statement of Accounts for 1999-2000 (provisional) the total expenses for undivided MP is shown as Rs. 68.87 crores (Schedule-10) only. A&G expenses for the Board (excluding CSEB) cannot be more than the total expenses of undivided MP as per Statement of Accounts. The Commission has relied upon the Statement of Accounts of 1999-2000 (provisional). In the absence of authentic figures in the petition, the Commission has assumed 80% of overall expenses (RAOs & H.Q) for the Board after bifurcation and accordingly allocated expenses of the Board for 1999-2000 are assumed as Rs. 68.87 x 0.8 = Rs. 55.10 crores. **Allowing a reasonable escalation of 10 percent annually, the Administrative and General Expenses for the year 2001-02 are determined as Rs. 66.67 crores instead of Rs. 92.99 crores as proposed by the Board.**

5. Repair and Maintenance

The Board has proposed Repair and Maintenance expenditure of Rs. 197.99 crores for the year 2001-02, assuming 5% increase per year each over 1999-2000 and 2000-01. The expenditure for the year 1999-2000 is taken as Rs. 170.25 crores based on the accounts of the Regional Accounts Offices continuing in MP after bifurcation. Analysis of R&M expenditure during the period 1996-97 to 1999-2000 shows an average annual increase of 4.43%. The 5% increase assumed by the Board is considered reasonable. **On this basis, R&M expenditure for 2001-02 at Rs. 197.99 crores proposed by the Board is accepted.**

6. Depreciation

Bifurcation of Fixed Assets as done by Board on the basis of the Statement of Accounts of MPEB (undivided) for the year 1999-2000, has been analysed in detail. It was pointed out during the Technical Sessions on 28th and 29th May, 2001 that the "Additions during the year 1999-2000" shown by the Board as per the bifurcated figures was Rs. 1620.45 crores, whereas the same was Rs. 1354.11 crores for undivided MPEB. The Board was, therefore, directed to reconcile the figures and in particular, explain the above discrepancy. The Board subsequently submitted Form A-36 (PY) incorporating revised figures of Rs. 1313.38 crores.

Provision for depreciation on the Gross Fixed Assets as projected by the Board for 2001-02 on the basis of the provisional figures of 1999-2000 and estimated figures of 2000-01 has been examined with reference to the guidelines laid down by the GOI (MOP) in its notification No. 151 dated 29th March 1994:

- | | | |
|-----------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1999-2000 | : | The provision of Rs. 388.13 crores for depreciation made for the year is considered to be in order. The average rate of depreciation works out to 5.12%. |
| 2000-01 | : | Except in the case of Plant and Machinery, the provision made for depreciation for other assets is within rates laid in the GOI guidelines. As regards plant and machinery, the provision of Rs. 416.73 crores made by the Board works out to 11.54% as against 7.84% permissible under the GOI guidelines. The provision for depreciation in respect of plant and machinery accordingly works out to Rs. 283.13 crores. Excess provision of Rs 133.60 crores (Rs. 416.73 -283.13 crores) is not admissible. The average rate of depreciation is 5.12% as against 6.75% which was mainly on account of excess provision for plant and machinery. The consequential effects have been made in the cumulative depreciation and the Net Fixed Assets as at the end of the year. |
| 2001-02 | : | Except in the case of plant and machinery, the provision made for depreciation for other assets is within the rates laid down under the GOI guidelines . In regard to Plant and Machinery, the provision of Rs. 450.24 crores made by the Board works out to 11.96% as against 7.84% permissible under the GOI guidelines. The provision for depreciation in respect of Plant and Machinery accordingly works out to Rs. 295.07 crores. Excess provision of Rs 155.17 crores (Rs. 450.24-295.07 crores) is not admissible. The average rate of depreciation is 5.18% as against 7.00% which was mainly on account of excess provision for plant and machinery. The consequential effects have been made in depreciation and Net Fixed assets as at the end of the year. |

The Board has stated in the footnote to Form A - 3.6 (CY) and Form A-36 (EY) that provision for depreciation during the year has been worked out in the ratio as prevalent in 1999-2000. The ratio followed by Board in respect Plant and Machinery for 2000-01 and 2001-02 is higher than what is followed for 1999-2000. Hence the adjustment has been made as per GOI guidelines and accordingly uniform ratios are maintained for all the three years. The average rate of depreciation also works out to be same for all three years.

The effects of changes made in the provision for depreciation are shown below:

**Effects of changes made in provision for depreciation
in respect of Plant and Machinery**

Year	Cumulative depreciation at the beginning of the year		Additions of depreciation during the year		Cumulative depreciation at the end of the year		Net assets at the beginning of the year		Net Fixed assets at the end of year	
	MPSEB	MPERC	MPSEB	MPERC	MPSEB	MPERC	MPSEB	MPERC	MPSEB	MPERC
1999-2000	2786.60	2786.60	388.13	388.13	3173.25	3173.25	3333.32	3333.32	4399.59	4399.59
2000-01	3173.25	3173.25	416.73	283.13	3725.10	3591.50	4399.57	4399.57	4447.73	4581.32
2001-02	3725.10	3591.50	595.96	440.79	4321.06	4032.29	4447.73	4581.32	4191.77	4480.55

The Commission has accordingly restricted the expenditure on account of depreciation to Rs. 440.79 crores against Rs. 595.96 crores claimed by the Board.

7. Interest and Finance Charges

The Board has furnished figures of bifurcated Capital Liabilities and the Interest and Finance charges as on 31st March, 2000 as contained in the Statement of Accounts for undivided MPEB for 1999-2000 on the basis of its population ratio (i.e. 73.38%). The Board has indicated Rs. 647.42 crores as interest on capital liabilities. The average rate of interest shown by the Board against IDBI loan is 27.11% and against debentures 35.87%. The Board has not given any explanation for such high rate of interests compared to prevailing market rates of IDBI loans and debentures, which vary in the range of 15% - 20%. The Board itself has shown range of interest rates of IDBI loans as 15.12% - 19.10%. As such, the upper band for interest rate of IDBI loans should be 19.10%. The interest rate of debentures is assumed as 15% against 12.84% shown against Market Borrowings. The interest amount due / paid during the year for IDBI loans and Debentures accordingly works out as under:

Source	Balance Outstanding at the end of the year (Rs. Crores)	ROI (%)		Amount (Rs. Crore)	
		As estimated by Board	As allowed by MPERC	As estimated by Board	As allowed by MPERC
IDBI	69.92	27.11	19.10	23.31	13.35
Debentures	215.80	35.87	15.00	77.42	32.37
				100.73	45.72

The Board submitted its figures for borrowing and capital expenditure during 1999-2000 (Provisional), 2000-01 (Estimated) and 2001-02 (Projected) as shown below:

		1999-2000 (Provisional)	2000-01 (Estimated)	2001-02 (Projected)	Total
1.	Loan Receipts (Rs. Crores)	835.59	218.17	226.71	1280.47
2.	Capital expenditure (Rs. Crores)	413.38	342.58	208.22	964.18
3.	Excess (+) or short fall (-) of loans over capital expenditure (Rs. Crores)	(+) 422.21	(-)124.41	(+)18.49	316.29
Interest on excess amount (Rs. Crores) = 316.29 x 14.81% =					46.84

Since loan amount to the extent of Rs. 316.29 crores has not been utilized for capital works, interest on this amount calculated at the average rate of 14.81% amounting to Rs. 46.84 crores is disallowed.

8. Provision for Bad Debts, Other Debits and Write Offs:

a) Provision for Bad Debts

The Board has proposed provision amounting to Rs. 163.87 crores for bad debts for each of the years 1999-2000, 2000-01 and 2001-02.

The provision of Rs. 163.87 crores proposed in the petition works out to 4.5% of the sale of revenue. The provision made by the Board till 1996-97 was 1% of sale of revenue. The Board has provided Rs. 163.87 crores but the basis for arriving at that amount has not been explained. The information submitted by the Board regarding the basis for provisioning of bad and doubtful debts for the 1997-98 and onwards is not clear particularly in respect of inclusion of HT consumers therein. **The utilities have between 1% and 3% of their revenues uncollected. Pending complete review of the existing method and its approval by the Commission, 2% of total expected revenues in 2001-02 is considered reasonable towards provision for bad debts. This works out to Rs. 74.01 crores. The Board should furnish details of written off bad debts during the year 2000-01 and cumulative of written off bad debts pending adjustment during 2000-01.**

(b) Other debits:

The Board has also claimed an expenditure of Rs. 24.61 crores for 2001-02 as net prior period credit / charges but the details thereof required to be given have not been furnished. In the absence of any details, the reasonableness of the expenditure cannot be established. **The expenditure of Rs. 24.61 crores included among other debits is, therefore, not allowed.**

9. Surplus on the value of Net Fixed Assets

The Board has shown Net Fixed Assets at the beginning of the year as Rs. 4447.73 crores (Revised). The surplus @ 3% on the Net Fixed Assets has been shown as Rs. 133.43 crores. Due to adjustments made in the amount of depreciation on the basis of applicable rate, the value of Net Fixed Assets at the beginning of the year stands revised to Rs. 4581.32 crores. According to Section 59(1) of the Electricity (Supply) Act, 1948, the consumers contributions for service lines is to be reduced in the net value of fixed assets at the beginning of the year for computation of 3% surplus. In Form A-3.9, the Board has shown total contribution as Rs. 29.56 crores for 1999-2000 of MPEB (undivided) and bifurcated the same @ 73.38% (MPSEB share) i.e. Rs. 21.69 crores for the Board for 1999-2000. The same amount is shown for 2000-01 and 2001-02. In schedule 34 of the Statement of Accounts 1999-2000 of MPEB (undivided), the total consumers contribution shown is Rs. 295.72 crores (against Rs. 29.56 crores shown by the Board) for 1999-2000. 73.38% of this amount works out to Rs. 217.00 crores (against Rs. 21.69 crores shown by MPSEB) for 1999-2000. There has been an increase of 10% in 1999-2000 over 1998-99. The consumers contribution accordingly works out to Rs. 238.70 crores for 2000-01 and Rs. 262.57 crores for 2001-02.

On the above basis, the position regarding consumers contribution is as follows:

Year	As shown by MPSEB		As approved by the MPERC	
	MPEB	MPSEB	MPEB	MPSEB
1999-2000	29.56	21.69	295.72	217.00
2000-2001	29.56	21.69	325.29	238.70
2001-2001	29.56	21.69	357.82	262.57

Net Fixed Assets at the beginning of the year (April 2001)	-	Rs. 4581.32 crores
Less consumers contribution	-	Rs. 262.57 crores
Net Fixed Assets for the purpose of calculating 3% surplus	-	Rs. 4318.75 crores

The surplus on Net Fixed Assets accordingly works out to Rs. 129.56 crores against Rs. 133.43 crores shown by the Board.

5.9 Total Revenue Requirement of Board

5.9.1 The Commission, on the basis of the analysis of each item of expenditure, has approved the total revenue requirement of the Board at Rs. 5320.75 crores against Rs. 5929.74 crores proposed by the Board. The resultant reduction in the total revenue requirement is Rs. 608.99 crores. Item wise details are given below:

(Rs. In crores)				
S.No	Particulars	MPSEB (Revised)	As approved by MPERC	Increase (+) / Decrease (-)
1	2	3	4	5 = (3 - 4)
1	Generation Expenses			
a)	Own generation	1240.13	1031.25	(-) 208.88
b)	Partnership Projects	0.00	0.00	-
2 a)	Power Purchase Expenses	2297.10	2297.10	-
b)	Wheeling charges of PGCIL / GRIDCO	196.94	196.94	-
3.	Employee Expenses	836.82	822.28	(-) 14.54
4.	Administration and General Expenses	92.99	66.67	(-) 26.32
5.	Repair and maintenance	197.99	197.99	-
6.	Depreciation	595.96	440.79	(-) 155.17
7&8	Interest and finance charges and lease rentals	686.90	585.05	(-) 101.85
	Less capitalised	161.15	161.15	0.00
	Net interest and finance charges	525.75	423.90	(-) 101.85
9.	Bad debts	189.97	74.01	(-) 115.96
10.	Other expenses			
11.	Taxes on income and profits	0.00	0.00	0.00
	(Total (1 to 11))	6173.65	5550.93	622.72
12.	Assets at the beginning of year (revised)	4447.73	4581.32	
	Less consumers contribution	-	262.57	
		4447.73	4318.75	
	3% Rate of return	133.43	129.56	(-) 3.87
13.	Total (1 to 12)	6307.08	5680.49	(-) 626.59
14.	Less other non-tariff income	377.34	359.74	(-) 17.60
15.	Total revenue requirement (13-14)	5929.74	5320.75	(-) 608.99

5.10 Board's Revenue Income

5.10.1 Expected Revenue according to the Existing Tariff

Taking into account the additional energy available due to improved performance and realistic agriculture consumption at 15 percent load factor, the sale of energy and revenue demand as projected by Board and as accepted by the Commission for 2001-02 is as below:

S. No.	Particulars	As estimated by MPSEB (MU)	As approved by MPERC (MU)
1	Units sold (MU)	15507.11	15852.00
2.	Revenue Demand (Rs. Crores) (on existing tariff)	3348.48	3700.50

5.10.2 Other Non - Tariff Income and Suppression of income.

The non-tariff income as proposed by Board in the petition for 2001-02 was Rs. 289.08 crores. Subsequently in its letter no. 05.01/3978 dated 3.8.2001, Board has proposed to include additional revenue of Rs. 88.26 crores on account of fuse off call and computer charges stating that it was inadvertently not accounted for in the petition but the Commission takes it as suppression of income and views it seriously and warns the Board against use of such malpractices. This includes Rs. 13.2 crores to be recovered additionally from SLP connections now treated as normal domestic connections and also agricultural consumers. Computer charges included in the balance amount of Rs. 75.06 crores have not been specified but may amount to about Rs. 22.00 crores **As Commission is not allowing levy of computer charges, the revenue on this account for the remaining period of the year which may be about Rs. 17.60 crores is disallowed.** The non tariff income would thus be Rs. (289.08 + 88.26 - 17.60) = Rs. 359.74 crores.

5.10.3 Revenue Subsidy

For the year 2001-02, the State Government has made a Budget provision of Rs.315.27 crores towards payment of subsidy to the Board, which includes payment of free supply to eligible agriculture / SLP connections and tariff subsidy to agriculture consumers. Commission had sought a meeting with the State Government on 3.8.2001 on the quantum of required Government

subsidy. However, State Government had requested for the postponement of the meeting which could take place only on 10.9.2001 which delayed the passing of this tariff order. In this meeting it was categorically confirmed by the State Government that apart from the above budgeted subsidy of Rs.315.27 crores, the Board can retain the electricity duty collected (estimated at Rs.245 crore) and which shall be treated as additional subsidy in 2001-02.

Out of the grant of above total subsidy (Rs.560.27 crore), excluding the actual claim against free supply, the remaining amount of overall subsidy, is allocated as subsidy to agriculture tariff.

The Board shall prefer monthly claim of the above subsidy against free supply to eligible SLP and agriculture consumers and also the subsidy against agriculture tariff. In the event of failure on the part of State Government to pay the demanded subsidy within 30 days (of claim by the Board), the Board shall adjust the amount of claim from the dues payable by the Board to the Government and report the same to the Commission.

The average cost of supply to LT consumers including agriculture sector is Rs. 4.32 per unit and the over-all average cost is Rs. 3.50 per unit. However, the tariff to agriculture category has been fixed at much lower level taking into consideration the subsidy in the tariff to be paid by the Government and also in order to avoid tariff shock to the consumers.

5.10.4 The total tariff and non tariff income of the Board for the year 2001-02 will be Rs. 4060.24 crores (not accounting for government subsidy):

		(Rs. in crores)
(i)	Expected Revenue from sale of power according to existing tariff	3700.50
(ii)	Other Non-tariff Income (Deducted from the total revenue expenditure)	359.74
	Total	4060.24

5.11 Revenue Gap

5.11.1 On the basis of the revenue expenditure and the revenue income as allowed, the uncovered revenue gap of the Board for the year 2001-02 works out to Rs. 756.98 crores as per the details given below:

(Rs. in crores)			
S.No.	Particulars	MPEB	MPERC
1.	Total Revenue Expenditure	6307.08	5680.49
2.	Less other Non-Tariff Income	377.34	359.74
3.	Total Revenue Requirement (1-2)	5929.74	5320.75
4.	Less Expected Revenue from Sale of Power according to existing tariff	3348.48	3700.50
5.	Less estimated additional revenue from savings	2.74	2.74
6.	Less estimated additional revenue from proposed tariff	1545.68	545.26
7.	Less Government Subsidy	145.11	315.27
	Uncovered Revenue Gap (3 - 4 - 5 - 6 - 7)	887.73	756.98

5.11.2 On account of improvement in performance norms fixed by the Commission for PLF and auxiliary consumption, additional generation of 379 MU will be available (saleable units - 216 MU) which will generate additional revenue of Rs. 46 crores at the existing average tariff rate of 213 paise / unit. In addition, the norms fixed for station heat rate, calorific value of coal and specific oil consumption will result in reduction in expenditure on fuel by Rs. 208.88 crores. With reduction in other expenses such as employee cost, depreciation etc., total savings of Rs. 417.71 cores will be available. All these measures have helped in bridging the revenue gap to the extent of Rs. 672.59 crores.

5.12 Additional Revenue

The details of additional revenue from sale of power according to tariff determined by the Commission are as follows:

S. No.	Consumer Category	Total Revenue as per Existing Tariff (Rs. Crores)	Total Revenue as per Approved Tariff (Rs. Crores)	Net Additional Revenue (Rs. Crores)	Percentage Increase (%)
1	2	3	4	5= 4-5	6=5/3x100
1.	LT Consumers	1571.32	1855.20	283.88	18.07
2.	HT Consumers	2129.18	2390.56	261.38	12.28
3.	Total LT + HT	3700.50	4245.76	545.26	14.73

The additional revenue as per tariffs determined is Rs. 545.26 crores for the whole year 2001-02. However, from September 2001 (billed in October 2001) only 6 months are left in the Current Year, as such only half of the additional revenue may be available to the Board, whereas the expenditure may remain the same. This shall also mean that the gap of Rs. 757 crores may further increase.

5.13 Board's Capital Expenditure

5.13.1 The Board has proposed an outlay of Rs. 208.22 crores for 2001-02 as against Rs. 342.58 crores (Tentative) for 2000-01 as indicated below:

(Rs. in Crores)			
S. No.	Name of the Scheme	Expenditure for 2000-01 (Tentative)	Outlay for 2001-02
1.	Generation	107.05	78.04
2.	T&D	221.40	109.98
3.	Rural Elect.	13.65	19.22
4.	Others	0.48	0.98
	Total	342.58	208.22

5.13.2 The Board has stated that Annual Plan expenditure was of the order of about Rs. 600 crores during 1995 to 1998 but over the years, the same has been reduced to Rs. 342 crores in 2000-01 and Rs. 208 crores in 2001-02. This is due to gradual depletion of resources of Plan Finance. Due to negative internal resources and huge unpaid liabilities of Financial Institutions, it is now becoming difficult for Board to get loans from them. To have adequate financial resources for Board's annual plan, it is necessary that its Debt Service capacity improves fast and till then State Government should consider to give budgetary support for annual plan.

5.14 Board's Capital Receipts

5.14.1 The Board has projected Capital receipts of Rs. 268.75 crores during 2001-02 against Rs. 218.16 crores during 2000-01. Source wise details are given below:

(Rs. Crores)			
S.No.	Particulars	2000-01 (Provisional)	2001-02 (Projected)
1.	Loans from the State Government	10.93	10.00
2.	Market Borrowings	147.79	147.95
3.	PFC	59.44	110.07
4.	Others	-	0.73
	Total	218.16	268.75

5.14.2 Projected capital receipt for 2001-02 is higher than the projected capital expenditure. The Board has not given any suitable explanation in this regard.

6. TARIFF DETERMINATION

6.1 Cost of Supply

6.1.1 Fixing the tariff with sustainable cross-subsidisation still leaves a gap of Rs. 1072.25 crores. This gap is noticed even after fixing improved targets of performances and reduction of T&D loss. This gap will be filled in only partially through Government subsidy to those categories for which concessional tariffs have been fixed.

6.1.2 MP Vidyut Sudhar Adhinyam, 2000 provides that the tariff should be determined in a manner that the existing cross- subsidy is progressively reduced so that within a period of five years, tariff to any class of consumer shall reflect a minimum of seventy-five percent of the average cost of supply to that class. Considering the existing level of tariffs for different categories of consumers and the prevalent cross-subsidy, the target of ensuring supply at 75 percent of the cost of supply can be achieved only with Government support in the next five years.

6.1.3 The Commission analysed from the available data, the average cost of supply, the average tariff of the Board and the difference between them during the last two years and the current year at different voltage levels:

(Paise / Unit)									
Voltage Level (kV)	1999-2000			2000-01			2001-02		
	Cost of Supply	Average Tariff	Diff.	Cost of Supply	Average Tariff	Diff.	Cost of Supply	Average Tariff	Diff.
1	2	3	4	5	6	7	8	9	10
Transmission (400/220/132 - EHT)	180	466	286	201	467	266	180	500	320
Distribution (33/11) - HT	224	430	206	248	433	185	224	356	132
Distribution (440V) - LT	358	89	-269	389	89	-300	432	183	-249
Total	303	197	-106	337	205	-132	350	268	-82

6.1.4 This shows that the higher voltage consumers are heavily subsidising the consumers at the lower voltage levels.

7. REVENUE COLLECTION

7.1 The Board has stated in the petition that its present revenue collection efficiency is approximately 94% which is proposed to be increased to 95%. For the years 1999-2000, 2000-01 and 2001-02, the collection efficiency of the Board works out as under:

Year	Billed during the year (Rs. Crores)	Realised during the year (Rs. Crores)	Percentage of realised to billed
1999-2000 (Provisional)	3699.48	3394.39	91.75 (or say 92)
2000-01 (Estimated)	3795.50	3528.05	92.95 (or say 93)
2001-02 (Projected)	3265.85	2909.85	89.10 (or say 89)

7.2 The statement of the Board regarding present collection efficiency of 94% and improved collection efficiency of 95% in 2001-02 has not been substantiated. **Considering that collection efficiency is very important for cash flow, the Commission directs the Board to achieve collection efficiency of not less than 96 percent in 2001-02.**

7.3 Revenue arrears of the Board stood at Rs. 1706.77 crores as on 31st December 2000, of which Rs. 229.13 crores is stated to be under litigation. The breakup is as follows:

(Rs. in crores)					
S. No.	Particulars	Total Amount	Amount under litigation	Percentage to total	
				Not under litigation	Under litigation
A.	HT Consumers				
1.	Central Government				
(i)	Undertakings/Departments	212.77	22.34	11.16	1.31
2.	State Government				
(i)	Undertakings/Departments	715.88	70.67	37.80	4.14
(ii)	RE Cooperative Societies	18.90	-	1.11	-
	Total (1 + 2)	947.55	93.01	50.07	5.45
3.	Private Consumers				

(i)	More than Rs. 10 lakh				
a.	Permanent disconnected	309.07	118.07	11.19	6.92
b.	Temporary disconnected	100.20	5.86	5.53	0.34
c.	Connected	32.15	12.19	1.17	0.71
(ii)	Less than Rs. 10 lakh	10.58	-	0.62	-
	Total (3)	452.00	136.12	18.51	7.97
B.	LT Consumers (Nov. 2000)	307.22	-	18.00	-
	Total (A + B)	1706.77	229.13	86.58	13.42

7.4 The Board has subsequently informed that the arrears as on 31.3.2001 were Rs. 1774 crores. The arrears as on 31.3.2001 are about 5.6 times the average monthly demand of the year. Normally, the arrears should not be more than 1.5 to 2 times of the average monthly demand. There is vast scope of recovery against the outstanding arrears. **Board is directed to ensure recovery of at least 15% from the arrears outstanding as on 31.3.2001.**

7.5 There should be no excuse for the Board for not disconnecting any defaulting consumer irrespective of whether they are general consumers or Central Government / State Government or their undertakings. Ordinarily there should be no arrears against connected categories of consumers. Secondly, even for the cases under litigation, nothing should prevent the Board to disconnect the defaulting consumers unless there is any stay / interim order in this regard. **The Commission directs that apart from disconnecting 100 percent defaulting consumer of general categories, the connections of Central / State Government or their undertakings be also disconnected in case of default in payments but after proper notice to all concerned. In case of water supply and street light connections of local bodies if the current bill is not paid within due date, separate notice shall be issued giving one month time to local body and to the government to arrange payment. If the local body fails to make the payment or government also does not make the payment from the grants to the local bodies within notice period the connection shall be disconnected.**

8. RATIONALISATION OF TARIFFS

8.1 Basis of Rationalisation

The Commission has tried to rationalise the existing tariff structure keeping in view the interests of the consumer and the Board and striking a balance between consumer categories as well. The consumer will like the tariff to be simple and unambiguous. For the Board, the tariff should be convenient for billing and accounting and designed to minimise possibilities of loss to the Board through pilferage, and tampering of meters. The tariff for the presently subsidized categories needs to be revised to bridge the gap progressively between the cost of supply and the tariff. The cross-subsidy provided by certain consumer classes also, needs to be brought down progressively.

8.2 FCA Charges

The Board has proposed merger of FCA charges in the tariff. All the LT and HT consumers have represented against such merger. In the petition, the Board has admitted that present FCA formula is not based on scientific principles and it has been proposed by Board to redesign the FCA formula and submit the same to the Commission. **Considering the above, the Commission has not allowed the merger of FCA with tariff. It further directs the Board to bring up the new formula based on scientific principles at the earliest and in any case before filing the next tariff petition.**

8.3 LT Tariffs

8.3.1 Domestic Consumers

8.3.1.1 The existing tariff has three slabs. It is to increase the slabs to five in order to have the initial slab for life line consumers upto 50 units/month at cheaper rate and a higher rate for high end consumers consuming more than 400 units/month.

8.3.1.2 The cost of supply for LT consumers for the year 2001-02 works out to 432 paise / unit. The domestic tariff has been structured so as to protect the interest of the weaker sections. However, this is subject to minimum charge of Rs. 50 per month for single phase connections and Rs. 150 per month for three phase connections.

8.3.2 Single Light Point (SLP) Connections

The State Government has agreed to pay the bills of SLP consumers of SC/ST category below poverty line upto 20 units per month. The billing will, however, be subject to monthly minimum charges. **Those SLP consumers who are no more eligible for free supply be provided with meters as early as possible. Till then, monthly billing should be done for 60 units per connection per month or as per assessed consumption on the basis of actual connected load or 21 percent load factor whichever is higher. Also in case of SLP SC/ST consumers below poverty line, if the assessed consumption based on actual connected load or 21% LF, is found more than 20 units per month, then the extra amount, shall be recovered from the consumers.**

8.3.3 Non-Domestic Tariff

The existing tariff has two slabs namely upto 200 units/month and above 200 units / month. It is proposed to retain two slabs but lower the limit of the first slab to 100 units per month so as to limit the benefit of lower tariff to the small non-domestic commercial consumers only. The minimum charges are also decided to be rationalised making distinction between single phase consumers (essentially small commercial consumers) and three phase consumers (larger commercial establishments).

8.3.4 X-Ray Plants

This tariff category is applicable to stand-alone X-ray plants only. The number of such plants is small as, in general, X-ray plants are installed in establishments having other equipments such as Cat-scan and MRI machines. Such larger establishments come in the category of hospitals or commercial establishments. The energy charge for X-ray plants is decided to be raised nominally. The minimum charges for single phase and three phase supply are also proposed to be increased.

8.3.5 Water - Works (LT Supply)

The energy charges are taken to be increased, keeping minimum charges unaltered.

8.3.6 Public Street Lighting

The existing energy charge is to be increased to bring it closer to the cost of supply. The minimum charges, at present, are based on assessment of actual consumption from total wattage of lamps and minimum burning hours. This assessment is not practical and leads to disputes. Therefore, Commission has taken to change the minimum charge based on units per kilowatt of connected load separately for village panchayats and others.

8.3.7 Electric Crematorium

The Commission maintains the existing energy charge and the tariff minimum charge.

8.3.8 Agricultural Consumers

Agricultural consumers on flat rate basis are to continue till meters are installed. Considering the importance of agricultural sector in developing the economy of the State, the existing tariff of 100 P/Unit for metered connections has been increased nominally. For flat rate tariff, four slabs have been retained with nominal increase in tariff. The present minimum charges of 360 units / HP / annum have been maintained for metered category. **All un-metered agricultural connections be provided with meters within the next three years.**

8.3.9 LT Industries

8.3.9.1 Considering the interest of small flour mills / huller upto 15 HP. The tariff for this category has been increased only nominally. The tariff of other LT industries upto 25 HP affecting small entrepreneurs has also been kept lower than the cost of supply.

8.3.9.2 Considering the problems of small power looms upto 25 HP, their tariff has been kept comparable to that of lower slabs of domestic tariff. No change in minimum charge has been made.

8.3.9.3 Application of different tariffs to different consumer classes has been detailed in Annexure V.

8.4 HT Tariffs

8.4.1 Railway Traction

8.4.1.1 The Central and Western Railways submitted their written objections to the tariff revision proposed by Board. They were also given opportunity to present their views in the public hearing by the Commission. They emphasised that electricity tariff for the Railway Traction will be the highest in the country if Board's proposals are accepted. Madhya Pradesh has a vast railway traction network depending on electricity and any increase in electricity tariff will imply substantial additional expenditure for the Railways. The tariff should not be higher than the cost of alternative sources of power. They also wanted relaxation in the terms and conditions of supply, such as minimum load factor, payment of supply affording charges for enhancement of contract demand, etc.

8.4.1.2 The Board has submitted that Railway tariff has not been revised since July 1996 while there has been general inflation of the order of 10% per year during this period. The Railways have also increased their freight charges a number of times during this period. The Board is not in a position to absorb additional expenditure on account of inflation.

8.4.1.3 Taking into consideration the interest of the Board as well as the Railways, only a modest increase in tariff has been allowed. **The condition of minimum 30 percent load factor will be applicable only on contract demand and not on exceeded maximum demand.**

8.4.2 Coal Mines

8.4.2.1 Western Coal Fields (WCL) and South Eastern Coal Fields (SECL) have represented that the electricity tariff proposed by Board for coal mines is the highest in the country. The tariff proposed for coal mines is also higher than that for cement or steel. It is also, much higher than that charged by NTPC from the Board.

8.4.2.2 The Board has submitted that tariff for coal mines has not been revised since July 1996 and an increase of 50% on account of inflation is justified. The Board has, also, stated that during this period WCL and SECL have increased the prices of coal by 45% and 53% respectively. With the formation of Chattisgarh, the bulk of coal supplies to the Board have to be sourced from WCL whose prices are higher and quality inferior to that available from SECL. These factors have pushed up cost of generation for which Board is to be compensated.

8.4.2.3 The Commission has tried to strike a balance between the interests of coal companies and the Board in fixing the tariff. No change is proposed in the terms and conditions of supply.

8.4.3 Cement Factories

8.4.3.1 MP Cement Manufacturer's Association has represented that all the cement factories in Madhya Pradesh have incurred losses during the year 1999-2000 and during the quarter ending September 2000. They have specifically objected to determination of fuel cost adjustment (FCA) charges and their clubbing with the tariff, which would result in substantial increase in electricity duty. They have also objected to captive power policy under which an industry installing captive power plant is compelled to draw at least 50% of electrical energy from the Board. They have requested withdrawal of tariff minimum charges and not to allow proposed parallel operation charges.

8.4.3.2 The Commission is aware of the serious problems faced by industries in Madhya Pradesh as a result of general slow down in the nation's economy, and international competition due to lowering of tariff barriers and cheaper imports. The Commission has also noted the specific problems being faced by the cement industry and has made only a nominal increase in the existing tariff. The Commission has, also, agreed that FCA charges should be shown separately and should not be merged with the tariff. As the Board has created and is also maintaining generation and T&D facilities for supply of power to cement factories according to their contract demand, it is entitled to levy tariff minimum charges to take care of its fixed cost. There will be no change in tariff minimum charges.

8.4.4 Mini Steel Plants

Mini Steel Plants or Mini Steel Plants with Rolling Mills/ Sponge Iron plants in the same premises have been considered under the same tariff category. A nominal increase has been made in energy charges while other conditions of supply including minimum charges will remain unaltered.

8.4.5 Electro Chemical / Electro Thermal Plants and Ferro Alloy Plants

Some nominal increase in demand and energy charges is allowed, but not in other terms and conditions.

8.4.6 Two Part Tariff

Keeping in view the interest of the Board, as well as the industry, only minimum increase has been allowed in the tariff. In case of 132 kV supply, the condition of 40 percent load was resulting in an overall higher tariff as compared to that of 33 kV. **The condition of load factor has been reduced to 30 percent by us.**

8.4.7 General Purpose / Grid Tariff

Although the Board, in its proposal, has clubbed the tariff for the above categories under “other HT consumers”, **but on considerations of nature of use, separate grid / general purpose tariff has been retained, which will also be applicable to hospitals.**

8.4.8 Slab Tariff

The Board in its proposal has also clubbed slab tariff under “other HT consumers”. This tariff is practically required for seasonal consumers where facility of annual minimum charges had been available. **Considering the representations and problems of seasonal consumers, separate slab tariff has been retained.**

8.4.9 Irrigation (at 33 and 11 kV supply)

The existing tariff is the same for 33 kV and 11 kV supply. As the cost of supply is higher at 11 kV, a slightly higher tariff is fixed for 11 kV.

8.4.10 Border Villages

This is basically an interstate transaction. The existing tariff of 31.37 paise/unit is unrealistically low. The tariff of 250 paise / unit proposed by the Board to cover cost of transmission and distribution, is allowed.

8.4.11 Rural Electric Cooperative Societies

8.4.11.1 There are 14 RE Cooperative Societies in Madhya Pradesh at present getting power from Board at rates ranging from 3 paise to 12 paise per unit. The Societies sell power to their consumers at the same rate as prevalent in the Board’s area. The tariff for these Societies has not been revised for the past ten years.

Having regard to the cost of supply and the inability of the Board to sustain the loss due to the abnormally low tariff, the tariff proposed by the Board is accepted.

9. TARIFF DETERMINED BY THE COMMISSION

Having regard to all aspects of the proposal of the Madhya Pradesh State Electricity Board, the submissions made by the objectors and the public in general, the analysis of the proposal and the findings thereon, the Commission, in exercise of the powers conferred under section 26 of the Madhya Pradesh Vidyut Sudhar Abhiniyam, 2000, hereby determines the electricity tariffs of the Board for the year 2001-02 as specified in Schedule ‘A’ subject to the Board supplying continuous good power with other terms and conditions related to tariff as set out in Schedule ‘B’ hereunder:

SCHEDULE ‘A’

PART-I: TARIFF FOR SUPPLY OF ELECTRICITY AT LOW AND MEDIUM VOLTAGE

1.0 DOMESTIC

1.1 Energy Charge

(a)	0-50 units	110 Paise per unit
(b)	51-150 units	145 Paise per unit
(c)	151-300 units	230 Paise per unit
(d)	301-400 units	255 Paise per unit
(e)	Above 400 units	285 Paise per unit

1.2 Minimum Charge

(a)	For single phase installation	Rs. 50 per month
(b)	For three phase installation	Rs. 150 per month

Note:

- (i) For SC/ST SLP consumers below poverty line who are eligible for free supply upto 20 units per month, the bills (subject to levy of monthly minimum charge) shall be paid by the State Government. However, if on installation of meter, the recorded consumption or the assessed consumption on the basis of connected load checked and 21% Load Factor is found more than payable by Government, then the extra amount shall be recovered from the consumer.
- (ii) Those old unmetered SLP connections, which are no more eligible for free supply, shall be treated as normal domestic connections. But until the meters are provided, their billing shall be done on minimum 60 units / month (as assessed by the Board). If on checking, assessed consumption based on connected load and 21% Load Factor is found more, then billing shall be done on higher assessed consumption per month.

2.0 NON-DOMESTIC

2.1 Energy Charge

(a)	First 100 units per month	364 Paise per unit
(b)	Above 100 units per month	434 Paise per unit

2.2 Minimum Charge

(a)	For single phase installation	Rs. 90 per month / kW or part thereof.
(b)	For three phase installation	45 units per month / kW or part thereof

3.0 X-RAY PLANTS (X-Ray Plants excluding composite installations)

3.1 Energy Charge

434 Paise per unit

3.2 Minimum Charge

(a)	For single phase installation	Rs. 400 per machine per month
(b)	For three phase installation	Rs. 600 per machine per month

4.0 WATER WORKS

4.1 Energy Charge

149 Paise per unit

4.2 Minimum Charge

30 units / month / HP or part thereof of connected load

5.0 LT INDUSTRIAL CONSUMERS INCLUDING LIGHT AND FAN THEREIN

5.1 Flour Mill / Huller upto 15 HP

5.1.1 Energy Charge

(a)	Alternative-I	189 Paise per unit
(b)	Alternative-II	194 Paise per unit

5.1.2 Minimum Charge

(a)	Alternative-I	45 units / month / HP or part thereof of connected load.
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(b)	Alternative-II	540 units / annum / HP or part thereof of connected load.
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5.2 Power Looms upto 25 HP

5.2.1 Energy Charge

135 Paise per unit

5.2.2 Minimum Charge

45 units / month / HP or part thereof of connected load

5.3 Other Industries upto 25 HP

5.3.1 Demand Charge

(a)	Alternative-II	Rs. 110 per kW/month of maximum demand
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5.3.2 Energy Charge

(a)	Alternative-I	249 Paise per unit
(b)	Alternative-II	202 Paise per unit
(c)	Alternative-III	265 Paise per unit

5.3.3 Minimum Charge

(a)	Alternative-I	45 unit / month / HP or part thereof of the connected load
(b)	Alternative-II	1.5 times the demand charge on contract demand
(c)	Alternative-III	540 units / annum / HP or part thereof of connected load.

5.4 Industries above 25 HP upto 75 HP

5.4.1 Demand Charge

(a)	Alternative-II	Rs. 145 per kW/month of maximum demand
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5.4.2 Energy Charge

(a)	Alternative-I	354 Paise per unit
(b)	Alternative-II	294 Paise per unit
(c)	Alternative-III	374 Paise per unit

5.4.3 Minimum Charge

(a)	Alternative-I	45 unit / month / HP or part thereof of the connected load
(b)	Alternative-II	1.5 times the demand charge on contract demand
(c)	Alternative-III	540 units / annum / HP or part thereof of connected load.

5.5 Industries above 75 HP upto 100 HP

5.5.1 Demand Charge

(a)	Alternative-II	Rs. 145 per kW/month of maximum demand.
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5.5.2 Energy Charge

(a)	Alternative-I	374 Paise per unit
(b)	Alternative-II	319 Paise per unit
	Alternative-III	394 Paise per unit

5.5.3 Minimum Charge

(a)	Alternative-I	45 unit / month / HP or part thereof of the connected load
(a)	Alternative-II	1.5 times the demand charge on contract demand
(c)	Alternative-III	540 unit / annum / HP or part thereof of the connected load

5.6 Industries above 100 HP upto 150 HP

5.6.1 Demand Charge

(a)	Alternative-II	Rs. 160 per kW/month of maximum demand.
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5.6.2 Energy Charge

(a)	Alternative-I	439 Paise per unit
(b)	Alternative-II	369 Paise per unit
(c)	Alternative-III	454 Paise per unit

5.6.3 Minimum Charge

(a)	Alternative-I	60 unit / month / HP or part thereof of the connected load
(a)	Alternative-II	2 times the demand charge on contract demand
(c)	Alternative-III	720 unit / annum / HP or part thereof of the connected load

6.0 AGRICULTURAL CONSUMERS

Agricultural consumption, at present is only partially metered while most of the consumers are charged on flat rate tariff. The Board is required to install meters for all agricultural consumers and the flat rate tariff will continue until the meters are installed.

6.1 Metered Consumption**6.1.1 Maintenance Charge**

Rs. 5 per month per HP or part thereof

Maintenance charge will not be levied after expiry of initial agreement period.

6.1.2 Energy Charge

120 Paise per unit

6.1.3 Minimum Charge

360 units / annum / HP or part thereof of the connected load.

Note: One bulb of 40 W for lighting at or near the pump will be permitted.

6.2 Flat Rate**6.2.1 Energy Charge**

(a)	Upto 3 HP	Rs. 57 per month per HP or part thereof
(b)	Above 3 upto 5 HP	Rs. 67 per month per HP or part thereof
(c)	Above 5 upto 10 HP	Rs. 69 per month per HP or part thereof
(d)	Above 10 upto 20 HP	Rs. 80 per month per HP or part thereof

Note: One bulb of 40 W for lighting at or near the pump will be permitted and charged at the rate of Rs. 15 per month.

7.0 PUBLIC STREET LIGHTING**7.1 Energy Charge**

199 Paise per unit

7.2 Minimum Charge

(a)	For village panchayat	75 unit / month / kW or part thereof
(b)	For others	125 unit / month / kW or part thereof

Note: Minimum wattage of lamp permitted is 40 watts

8.0 ELECTRIC CREMATORIUM**8.1 Energy Charge**

60 Paise per unit

8.2 Minimum Charge

60 units / month / kW or part thereof the connected load

PART-II: TARIFF FOR SUPPLY OF ELECTRICITY AT HIGH TENSION (HT) AND EXTRA HIGH TENSION (EHT)

1.0 RAILWAY TRACTION

1.1 Demand Charge on billing demand

Rs. 150 per kVA per month

1.2 Energy Charge

314 Paise per unit

1.3 Minimum Charge

Amount equivalent to units at 30% load factor plus demand charge on billing demand

2.0 COAL MINES

2.1 Demand Charge on billing demand

(a)	132 kV supply	Rs. 146 per kVA / month
(b)	33 kV supply	Rs. 150 per kVA / month
(c)	11 kV supply	Rs. 155 per kVA / month

2.2 Energy Charge

(a)	132 kV supply	334 Paise per unit
(b)	33 kV supply	344 Paise per unit
(c)	11 kV supply	357 Paise per unit

2.3 Minimum Charge

(a)	132 kV supply	Amount equivalent to units at 40% load factor plus demand charge on billing demand
(b)	33 kV supply	Demand charge on contract demand
(c)	11 kV supply	Demand charge on contract demand

3.0 CEMENT FACTORIES

3.1 Demand Charge on billing demand

(a)	132 kV supply	Rs. 137 per kVA / month
(b)	33 kV supply	Rs. 140 per kVA / month
(c)	11 kV supply	Rs. 144 per kVA / month

3.2 Energy Charge

(a)	132 kV supply	312 Paise per unit
(b)	33 kV supply	322 Paise per unit
(c)	11 kV supply	334 Paise per unit

3.3 Minimum Charge

(a)	132 kV supply	Amount equivalent to units at 40% load factor plus demand charge on billing demand
(b)	33 kV supply	Demand charge on contract demand
(c)	11 kV supply	Demand charge on contract demand

4.0 MINI STEEL PLANTS OR MINI STEEL PLANTS WITH ROLLING MILLS/SPONGE IRON PLANTS IN SAME PREMISES

4.1 Energy Charge

(a)	132 kV supply	292 Paise per unit
(b)	33 kV supply	301 Paise per unit

4.2 Minimum Charge

(a)	Arc Furnace	100 units / kVA of contract demand
(b)	For others	
	(i) April to October	150 unit / kVA of contract demand
	(ii) November to March	100 unit / kVA of contract demand

5.0 ELECTRO CHEMICAL / THERMAL AND 132 KV FERRO ALLOY

5.1 Demand Charge on billing demand

(a)	132 kV supply	Rs. 137 per kVA / month
(b)	33 kV supply	Rs. 140 per kVA / month
(c)	11 kV supply	Rs. 144 per kVA / month

5.2 Energy Charge

(a)	132 kV supply	288 Paise per unit
(b)	33 kV supply	297 Paise per unit
(c)	11 kV supply	308 Paise per unit

5.3 Minimum Charge

(a)	132 kV supply	Amount equivalent to 395 units per kVA of contract demand + demand charge on billing demand
(b)	33 kV supply	Demand charge on contract demand
(c)	11 kV supply	Demand charge on contract demand

6.0 FERRO ALLOY (33 kV)

6.1 Demand Charge on billing demand

Rs. 130 per KVA per month

6.2 Energy Charge

269 Paise per unit

6.3 Minimum Charge

Demand charge on contract demand.

7.0 GRID TARIFF / GENERAL PURPOSE

7.1 Demand Charge on billing demand

(a)	33 kV supply	Rs. 130 per kVA / month
(b)	11 kV supply	Rs. 134 per kVA / month

7.2 Energy Charge

(a)	33 kV supply	
	(i) First 25000 units / month	334 Paise per unit
	(ii) Next 50000 units / month	314 Paise per unit
	(iii) Over 75000 units / month	302 Paise per unit
(b)	11 kV supply	
	(i) First 25000 units / month	346 Paise per unit
	(ii) Next 50000 units / month	326 Paise per unit
	(iii) Over 75000 units / month	313 Paise per unit

7.3 Minimum Charge

Demand charge on contract demand.

8.0 TWO PART TARIFF**8.1 Demand Charge on billing demand**

(a)	132 kV supply	Rs. 137 per kVA / month
(b)	33 kV supply	Rs. 140 per kVA / month
(c)	11 kV supply	Rs. 144 per kVA / month

8.2 Energy Charge

(a)	132 kV supply	290 Paise per unit
(b)	33 kV supply	299 Paise per unit
(c)	11 kV supply	310 Paise per unit

8.3 Minimum Charge

(a)	132 kV supply	Amount equivalent to units at 30% load factor plus demand charge on billing demand
(b)	33 kV supply	Demand charge on contract demand
(c)	11 kV supply	Demand charge on contract demand

9.0 SLAB TARIFF**9.1 Energy Charge**

(a)	33 kV supply	
	(i) First 25000 units / month	374 Paise per unit
	(ii) Next 75000 units / month	364 Paise per unit
	(iii) Over 100000 units / month	347 Paise per unit
(b)	11 kV supply	
	(i) First 25000 units / month	387 Paise per unit
	(ii) Next 75000 units / month	377 Paise per unit
	(iii) Over 100000 units / month	360 Paise per unit

9.3 Minimum Charge

(a)	33 kV supply	900 units / annum / KVA of contract demand.
(b)	11 kV supply	900 units / annum / KVA of contract demand.

In case actual consumption is less than minimum prescribed, the difference between minimum and actual will be charged at the rate of corresponding lowest Slab of energy charge.

10.0 IRRIGATION**10.1 Energy Charge**

(a)	33 kV supply	169 Paise per unit
(b)	11 kV supply	176 Paise per unit

10.2 Minimum Charge

900 units / annum / KVA of contract demand or highest maximum demand recorded during the year whichever is higher.

11.0 WATER WORKS**11.1 Energy Charge**

(a)	33 kV supply	174 Paise per unit
(b)	11 kV supply	182 Paise per unit

11.2 Minimum Charge

900 units / annum / KVA of contract demand or highest maximum demand recorded during the year whichever is higher.

12.0 BORDER VILLAGE

12.1 Energy Charge

250 Paise per unit

13.0 RE COOPERATIVE SOCIETIES

13.1 Energy Charge

150 Paise per unit

14.0 TIME OF THE DAY (ToD) TARIFF

ToD Tariff will be applicable to HT Industrial Consumers for demand charge and energy charge, as below:

- | | | | |
|------|------------------------------------------|---|-------------------------------------|
| (i) | Demand charge | - | Normal charge |
| (ii) | Energy charge: | | |
| | Period of Consumption | | Rate |
| (a) | Normal hours
(0600 – 1700 hrs.) | - | Normal energy charge |
| (b) | Evening peak hours
(1700 – 2200 hrs.) | - | 130 percent of normal energy charge |
| (c) | Off-peak hours
(2200 – 0600 hrs.) | - | 70 percent of normal energy charge |

15.0 TEMPORARY SUPPLY TO HT AND LT CONSUMERS

Temporary Tariff (HT and LT) - 1.5 times the normal tariff applicable to that category for demand and energy charges.

16.0 FUEL CHARGE / FCA CHARGE

- (i) Existing fuel charge of 65 paise per unit will continue to be levied as hitherto until further orders on category 1.0 – Domestic and Category 5.2 – Power Looms upto 25 HP.
- (ii) No fuel charge / FCA charge shall be applicable for the following categories:
- | | | |
|----------------------------|---|--------------------------|
| Part-I (LT Tariff) | | |
| Category 6.1 and 6.2 | - | LT Agriculture |
| Category 8.0 | - | Electric Crematorium |
| Part-II (HT Tariff) | | |
| Category 12.0 | - | Border Village |
| Category 13.0 | - | RE Cooperative Societies |
- (iii) For all other LT and HT categories, existing FCA charge @ 76.59 paise / unit shall be continued to be levied as hitherto until further orders.

SCHEDULE 'B'

TERMS AND CONDITIONS RELATED TO TARIFF AS PER TARIFF PROPOSAL

1.0 GENERAL

1.1 The tariffs are exclusive of electricity duty, cess on electricity, taxes and other charges levied by the Government or other competent authorities from time to time which are payable by the consumers.

2.0 SUPPLY OF POWER OVER THE CONTRACT DEMAND AND BILLING THEREOF

2.1 Normally HT and LT consumers are required to draw power from the Board upto their contract demand / connected load as per the agreement subsisting between the Board and the consumer and pay the charges as per tariff applicable to them. However, in case the consumer's maximum demand / connected load is found in excess of MD / CD provided in the agreement, the excess demand / connected load shall be billed on the basis of excess charges prescribed separately excluding duty and cess. In case of

L.T. consumers, the billing of excess charges shall be done until the unauthorized excess connected load is removed or got regularised by completing required formalities with the Board.

- 2.2 In case the consumer avails the supply under ToD tariff and exceeds the contract demand, the demand in excess of contract demand and corresponding energy shall be billed at twice the normal tariff applicable for day time i.e. 6 AM to 5 PM irrespective of the time of use.

3.0 SURCHARGE ON DELAYED PAYMENT

- 3.1 HT Consumers 2% per month on the unpaid amount for a delay of 30 days; and
2.5% per month on the unpaid amount beyond 30 days.
- 3.2 LT Consumers 2% per month on current month's bill amount in case it is not paid within the
(all categories) due date.
2.5% per month on unpaid amount of arrears.

4.0 POWER FACTOR INCENTIVE FOR HT CONSUMERS

For every 1% (one percent) rise or part thereof in the actual average monthly power factor during the month above 95%

Incentive

1% (one percent) on total amount of bill under the heads of "Demand charge" and "Energy charge".

5.0 POWER FACTOR PENALTY FOR HT CONSUMERS

- 5.1 For every 1% (one percent) drop or part thereof in the actual average monthly power factor below 90% and upto 85%

Penalty

1% (one percent) on total amount of bill under the heads of "Demand charge" and "Energy charge".

- 5.2 For every 1% (one percent) drop or part thereof in the actual average monthly power factor below 85%

2% (two percent) on total amount of bill under the heads of "Demand charge" and "Energy charge".

6.0 LT CAPACITOR SURCHARGE

Existing
Approved

23 Paise / unit
26 Paise / unit

- 6.1 No new LT Industrial / Commercial Power Connection having induction motor of 3 HP and above, including that of agriculture shall be released without installation of capacitor of appropriate rating and specifications. In the absence of capacitor of prescribed capacity in any existing connection (other than agriculture), the capacitor charge as specified shall be charged.

Note: The Board to bring up a programme for installation of LT capacitors to the agricultural pump connection in the next tariff proposal.

7.0 WELDING SURCHARGE

Existing
Approved

66 Paise / unit
75 Paise / unit

8.0 PARALLEL OPERATION CHARGES

This is not being considered at present since it is being examined separately.

9.0 WHEELING CHARGE

Existing wheeling charge is not being changed at present since it is being examined separately.

10.0 ABOLITION OF KW METERING

The Board has committed to abolish kW metering of remaining 17 HT connections. This is agreed to by the Commission.

11.0 CONCESSION IN ENERGY CHARGES TO CERTAIN CATEGORIES OF HT/EHT CONSUMERS

The Commission considered the proposal of the Board and approves the following concessions in energy charge:

S. No.	Category	Load Factor	Concession
1.	Cement factories at 132/33 kV and Electro Chemical / Thermal and Ferro Alloy units at 33 kV	(a) Consumption above 50% load factor but upto 60% load factor on contract demand	5% concession in energy charge (paise per unit)
		(b) Consumption over 60% load factor on contract demand.	10% concession in energy charge.
2.	Electro Chemical / Thermal units at 132 kV	(a) Consumption over 60% but upto 70% load factor on contract demand.	5% concession in energy charge.
		(b) Consumption above 70% load factor on contract demand.	10% concession in energy charge.
3.	Mini-Steel Plants, Re-Rolling Mills and Sponge Iron plants	(a) Consumption over 40% but upto 50% load factor on contract demand.	5% concession in energy charge.
		(b) Consumption above 50% load factor on contract demand.	10% concession in energy charge.

12.0 TERMS AND CONDITIONS PRESCRIBED FOR APPLICABILITY OF TARIFF

The other terms and conditions in regard to applicability of HT / LT tariffs submitted by the Board to the Commission under letter no. 4156 dated 17.08.2001 are approved by the Commission as per Annexure –VI.

The tariff as per this order, shall be got published by the Board in daily newspapers of the State, which shall take effect after seven days from the date of such publication and shall also be made available to the public on request.

Rabindra Tripathy
Member (E)

S.Iqbal Husain
Member (P)

Justice Shacheendra Dwivedi
Chairman

Place: Bhopal

Dated: _____