SECTION 1

INTRODUCTION

1.1 Purpose of the Order

1.1.1 The Himachal Pradesh State Electricity Board (HPSEB or the Board) is a deemed licensee under the first proviso to Section 14 of the Electricity Act, 2003 for transmission, distribution, trading and supply of electricity in the State of Himachal Pradesh. The HPSEB filed applications to the Himachal Pradesh Electricity Regulatory Commission (the Commission) for determination of its Annual Revenue Requirement, Distribution & Retail Supply tariff, Transmission & Bulk Supply Tariff and Generation Tariffs for its electricity generation stations for FY 2005-06 under Sections 62, 64 and 86 of the Electricity Act, 2003 (hereinafter referred to as the Act), read with the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2004.

1.1.2 This Order relates to the determination of Annual Revenue Requirement (ARR) of the HPSEB, Generation Tariff for the HPSEB generating stations, Transmission & Bulk Supply Tariff, and Distribution & Retail Supply Tariff for FY 2005-06.

1.2 About the Commission

1.2.1 The Himachal Pradesh Electricity Regulatory Commission was established and incorporated by the Government of Himachal Pradesh through a notification dated December 30, 2000, under Section 17 of the Electricity Regulatory Commissions Act, 1998 (14 of 1998) (hereinafter referred to as the ERC Act), and now covered under the first proviso to Section 82 of the Electricity Act, 2003, with its headquarters located at Shimla.

1.3 Functions of the Commission

1.3.1 The Commission derives its powers under Section 86 of the Electricity Act, 2003 (36 of 2003) which came into force with effect from June 10, 2003. The Act repealed the Indian Electricity Act, 1910, the Electricity (Supply) Act, 1948 and the Electricity Regulatory Commissions Act, 1998. As part of the tariff related provisions of the Act, the State Electricity Regulatory Commission (SERC) has to be guided by the National Electricity.Policy. The generation, transmission and distribution tariffs have to be determined separately, and the SERC has to be guided by the principles and methodologies specified by the Central Electricity Regulatory Commission for generation and transmission tariff.

1.3.2 The functions assigned to the Commission under the Act are as follows:

(1) **"**The State Commission shall discharge the following functions, namely: -

(a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:
Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;

(b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;

(c) facilitate intra-state transmission and wheeling of electricity;

(d) issue licences to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;

(e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;

(f) adjudicate upon the disputes between the licensees and generating companies and to refer any dispute for arbitration;

(g) levy fee for the purposes of this Act;

(h) specify State Grid Code consistent with the Grid Code specified under clause (h) of sub-section (1) of section 79;

(i) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;

(j) fix the trading margin in the intra-State trading of electricity, if considered, necessary;

(k) discharge such other functions as may be assigned to it under this Act.

(2) The State Commission shall advise the State Government on all or any of the following matters, namely: -.

(i) promotion of competition, efficiency and economy in activities of the electricity industry;

(ii) promotion of investment in electricity industry;

(iii) reorganisation and restructuring of electricity industry in the State;

(iv) matters concerning generation, transmission , distribution and trading of electricity or any other matter referred to the State Commission by that Government."

1.4 Regulations/Guidelines notified by the Commission

1.4.1 The Commission has issued the following Regulations/ Directions after the issuance of Tariff Order for FY 2004-05.

(i) **Himachal Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations, 2005.** (January 1, 2005)

These regulations notified under clauses (g), (zg) and (zl) of sub--section (2) of section 181 read with clause (g) of sub-section (1) of section 86 and sub-section (1) of section 92 of the Act provide for the day to day functioning of the Commission; the general provisions concerning the proceedings before the Commission; manner for application and grant of license; the powers of the Commission in respect of investigation, inquiry, collection of information and enforcement of orders; and the arbitration of disputes.

(ii) **Himachal Pradesh Electricity Regulatory Commission (General Conditions of Distribution Licence) (First Amendment) Regulations, 2005.** (February 22, 2005)

These regulations notified under Section 16, read with clause (d) of sub-section (2) of section 181 of the Act, amend the Himachal Pradesh Electricity Regulatory Commission (General Conditions of Distribution Licence) Regulations, 2004.

(iii) **Himachal Pradesh Electricity Regulatory Commission (General Conditions of Transmission Licence) (First Amendment) Regulations, 2005.** (February 22, 2005)

These regulations notified under Section 16, read with clause (d) of sub-section (2) of section 181 of the Act, amend the Himachal Pradesh Electricity Regulatory Commission (General Conditions of Transmission Licence) Regulations, 2004.

(iv) **Himachal Pradesh Electricity Regulatory Commission (General Conditions of Trading Licence) (First Amendment) Regulations, 2005.** (February 22, 2005)

These regulations notified under Section 16, read with clause (d) of sub-section (2) of section 181 of the Act, amend the Himachal Pradesh Electricity Regulatory Commission (General Conditions of Trading Licence) Regulations, 2004.

(v) **Himachal Pradesh Electricity Regulatory Commission (Manner of Service and Publication of Notice by the State Commission) Regulations, 2005.** (March 23, 2005)

These regulations, notified under section 130 read with sub-section (1) and clause (zn) of sub-section (2) of section 181 of the Act lay down the manner for the service and publication of a notice issued by the Commission, and the manner for inviting public objections and suggestions.

(vi) **Himachal Pradesh Electricity Regulatory Commission (Electricity Ombudsman) (First Amendment) Regulations, 2005.** (January 19, 2005)

These regulations notified under Section 181, read with sub-sections (6) and (7) of section 42 of the Act, amend the Himachal Pradesh Electricity Regulatory Commission (Electricity Ombudsman) Regulations, 2004.

(vii) **Himachal Pradesh Electricity Regulatory Commission (Procedure for filing appeal before the Appellate Authority) Regulations, 2005.** (March 23, 2005)

These regulations notified under section 127 read with clause (zo) of sub-section (2) of section 181 of the Act provide for the manner in which an appeal may be filed before the Appellate Authority.

(viii) **Himachal Pradesh Electricity Regulatory Commission (Security Deposit) Regulations, 2005.** (March 30, 2005)

These regulations notified under clauses (v) and (w) of sub-section (2), of section 181 read with section 47 of the Act provide for the manner in which a distribution licensee shall charge security deposit towards the electricity to be supplied to a consumer, the interest payable by the licensee on such deposit and the refund of such deposit upon termination of supply.

(ix) **Himachal Pradesh Electricity Regulatory Commission (Recovery of Expenditure for Supply of Electricity) Regulations, 2005.** (April 1, 2005)

These regulations notified under section 46 read with 181 of the Act lay down the provisions for low tension, high tension and extra high tension supply, recovery of cost incurred by the distribution licensee for provision of such supply, and the manner of payment of the expenditure for supply of electricity by the applicant.

(x) **Himachal Pradesh Electricity Regulatory Commission (Approval of Hydro Electric Projects in the State of Himachal Pradesh) Directions, 2005.** (April 6, 2005)

These directions notified under Sub regulation (3) of Regulation 7 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2004 lay down the provisions for filing of the petition seeking approval of the Commission for setting up new Hydro Electric Projects by the Board, the Government and Generating Companies and/or Independent Power Producers who intend to sell power to the Board for its use within its area of supply.

(xi) **Himachal Pradesh Electricity Regulatory Commission (Guidelines for Establishment of Forum for Redressal of Grievances of the Consumers) (Second Amendment) Regulations, 2005.** (May 18, 2005)
These regulations notified under Section 181, read with sub-section (5) of section 42 of the Act and section 21 of the General Clauses Act,1897 amend the Himachal Pradesh Electricity Regulatory Commission (Guidelines for Establishment of Forum for Redressal of Grievances of the Consumers) Regulations, 2003.

(xii) **Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations, 2005.** (June 2, 2005)
These regulations notified under Section 181, read with sections 39, 40, 42, and clause(c) of sub-section (1) of section 86 of the Act provide for open access for use of intra-State transmission system and/or distribution system of the licensees in the State of Himachal Pradesh, including when such system is used in conjunction with the inter State transmission system.

1.5 Advice given by the Commission to the GoHP under S. 86 (2) of the EA 2003

1.5.1 The Commission has twice given its statutory advice to the GoHP under S. 86(2) of the EA 2003. The first advice was given on July 30, 2004, on ‘Physical verification of assets’, and the second on April 6, 2005 on the ‘Reorganization and restructuring of the electricity industry’.

(i) **Statutory advice to the State Government of Himachal Pradesh regarding reorganisation and restructuring of the Electricity Industry (Part 1)** (July 30, 2004)

The Commission had advised the GoHP to direct the HPSEB to carry out the physical verification of assets through an independent agency to determine the depreciated cost, revenue potential and the fair value of such assets, before initiating the Transfer Scheme process.

(ii) **Statutory advice to the State Government of Himachal Pradesh regarding reorganisation and restructuring of the Electricity Industry (Part 2)** (April 6, 2005)

The Commission has issued a concept paper for Reorganisation and Restructuring of HPSEB. Comments were invited and a Public hearing was held to consolidate the views of all stakeholders. The Commission has advised the GoHP as follows:

- Not to form a Holding Company;
- To form one Generating Company as the successor entity to undertake operation and maintenance of the existing stations and development of new assets in the State sector;
- To form a separate Transmission Company and notify as STU. Function of SLDC can be a separate business under STU.
- Not to have a separate Trading Company in HP as both Generating Company and Distribution Companies can trade in electricity.
- To form three Distribution Companies along the existing zonal entities.

1.6 Tariff concept papers/notes

1.6.1 The first step taken by the Commission in the exercise of tariff determination is the issuance of a concept paper that communicates to all the concerned stakeholders, i.e., the Government, the Utility, Investors, consumers etc. about the policies and procedures that the Commission plans to adopt with regard to determination of retail tariff to consumers. The Commission believes that such papers generate widespread debate and ideas among the stakeholders and give fairly good idea as to the mind of the Commission in this regard. Such public involvement in the process of tariff setting injects an element of transparency and mass participation in this vital exercise. The Commission feels that a tariff setting that assimilates such response, in its final order, would be acceptable to larger percentage of stakeholders.

1.6.2 The Commission has issued the following concept papers that provide integral inputs in the tariff determination process of the Commission and outline the tariff philosophy of the Commission.

(i) **Concept paper on Retail Supply Tariff** (July 31, 2001)

This concept paper discusses the objectives of tariff setting, tariff principles, methodologies, and key issues involved in determining the retail electricity tariff in Himachal Pradesh.

(ii) **Concept note on cost of supply methodology** (May 29, 2004)

This concept note attempts to explain the concept of cost of supply, discusses the approaches to determine the cost of supply and the assumptions to allocate costs to each consumer category at different voltage levels.

(iii) **Concept note on tariff determination – quality linked tariff and multi-year tariff framework** (February 19, 2005)

This concept note proposes to link the tariffs charged by the HPSEB to the different consumer categories to the quality of power supply by linking tariffs to some qualitative and quantitative attributes of power supply like number of hours of supply, voltage, Reliability Index, etc. It also examines the feasibility of implementing a multi-year tariff framework in Himachal Pradesh and the establishment of incentives linked efficiency and performance targets in order to incentivize efficient operations by the HPSEB across a multi-year period.

1.7 Electricity Ombudsman and Forum for Redressal of Grievances of Consumers

1.7.1 In accordance with sub-section (6) of section 42 of the Act and the Himachal Pradesh Electricity Regulatory Commission (Electricity Ombudsman) Regulations, 2004, the Commission has appointed Shri. N R Gupta, IAS (Retd.) as the Electricity Ombudsman for a term of three years from December 8, 2004, i.e., date of entering into the office of the Ombudsman or till he attains the age of 65, whichever is earlier. Further as per the Himachal Pradesh Electricity Regulatory Commission (Electricity Ombudsman) (First Amendment) Regulations 2005, the salary and allowances payable to the Ombudsman as well as expenses of the office of the Ombudsman will be borne by the distribution licensee, i.e., by the HPSEB. These expenses will be allowed as a pass through expense in the ARR of the distribution licensee.

1.7.2 In respect of the Forum for redressal of consumer grievances, the Board assailed the Commission's proceedings under Section 142 of the EA 2003 for not establishing the Forum before December 10, 2003, in the Hon'ble High Court of Himachal Pradesh. The Hon'ble High Court asked the Commission and the HPSEB to sort out the issue mutually. On persistent follow-up by the Commission, the HPSEB came up with a proposal that the Forum shall not be independent of the licensee and the serving officers shall be members of the Forum whose terms and conditions shall be decided by the Board. The Commission did not accept the proposed set-up and informed the HPSEB that it would prefer the matter to be decided by the Hon'ble High Court on merit within the framework of law.

1.7.3 With the Hon'ble High Court confirming its earlier order advising the Commission and the HPSEB to mutually workout the modalities, the HPSEB shortlisted the candidates for the posts and notified the terms and conditions for appointment of members of the Forum for the redressal of grievances of consumers on April 27, 2005. This Forum has now been established by the Licensee on June 21, 2005.

1.8 State Advisory Committee

1.8.1 Pursuant to the enactment of the Act, the HPERC has reconstituted the State Advisory Committee (SAC) vide notification dated June 18, 2003. The Members of the SAC represent the interests of electricity industry, commerce, labour, agriculture, academic and research bodies and non-governmental organisations in the energy sector. At present, the SAC has 17 members.

1.8.2 The fourth meeting of the SAC was held on January 20, 2005 at Shimla and the agenda, interalia, included discussion on the Electricity Act 2003 and the policies to be notified by the Government under the Act; the reform and regulatory process in the Country as well as in the State; the regulations framed by the Commission under the Act, the Tariff Order for 2004-05; services and standards of performance of HPSEB; the difficulties and problems experienced by the Commission; the petition submitted by Uttaranchal Jal Vidyut Nigam Ltd. (UJVNL) for fixation of tariffs in respect of its five HEPs in which HP holds share ranging from 20% to 25%; and the ARR of the HPSEB for FY 2005-06.

1.9 Public Interaction Programme

1.9.1 During the public hearing held on Sept 22, 2001 at Nahan as part of the processing of the first Tariff Order, the Commission had directed the Board to submit a plan by May 31, 2002 to develop and implement a comprehensive public interaction programme through consultative committees, preparation, publication and advertisement of material helpful to various consumer interest groups and general public on various activities of the Utility, dispute settlement mechanism, accidents, rights and obligation of the consumers, etc.

1.9.2 The Public Interaction Programme will involve the following:

- Holding of seminars and workshops at important locations in the State
- Banners, debates and quizzes on energy
- Posters and public notices at bill collection centers and pamphlets/ hand outs containing information relevant to various consumer categories and interest groups
- Monthly news letter covering information of interest and usefulness to the consumers to be put on the web-site.

- Dissemination of information regarding charter of rights and obligations of consumers once every three months in leading newspapers, TV, Radio, web-site, i.e., both print and electronic media.
- Introduction of concept of energy clubs by creating energy clubs among the schools, Mahila Mandals or other interest group etc., training of these energy clubs and thereby sensitizing the various consumer categories about the consumer related issues.
- Organizing Urja Melas and putting pavilions in the State level fairs/melas
- Using back of the electricity bills or Annexures to the bills for better consumer education
- A package for senior citizens above the age of 60 years

1.9.3 The Board's compliance with this directive and the development of this programme has been discussed in detail in Chapter 2. Here, the Commission is pleased to note that as a result of the persistent follow up by the Commission, the Board will be implementing a Public Interaction Programme with a budget of Rs. 2.12 Crores. The objective of this Programme is to educate consumers and increase their awareness on aspects like technical terms related to electricity, how to get connected to the supply system, complaint handling and redressal system, safety measures for avoiding electrical accidents and conservation of energy. The Programme also aims to empower consumers for greater involvement and participation in the decision making process.

1.10 Appellate Authority and Special Courts

1.10.1 Section 127 of the Act mandates the constitution of an Appellate Authority by the State Government to hear the appeal of any person aggrieved by an order made under Section 126 of the Act against persons indulging in unauthorized use of electricity. Section 126(2) read with section 180(2)(k) of the Act also requires the State Government to frame rules. Further Section 153 requires the State Government to constitute Special Courts for speedy trial of offences referred to in section 135 to 139 of the Act.

1.10.2 Non-constitution of the Appellate Authority and Special Courts may adversely affect the interests of stakeholders. Therefore, in light of the above provisions of the Act, the Commission had written to the State Government vide letter No. HPERC/Secy/MS/381/RSJ/BMG/2004-587 dated May 21, 2005 to initiate necessary actions to frame rules and constitute the Appellate Authority and the Special Courts. The GoHP has subsequently constituted the Appellate Authority.

1.11 Regulatory experience in Himachal Pradesh

1.11.1 The Commission issued the first Tariff Order for FY 2001-02 on October 29, 2001 after following the process of public interaction, and careful scrutiny and examination of the petition and subsequent information submitted by the Board. As part of this order, the Commission issued several directions with the intention to improve the database and the overall performance of the sector.

1.11.2 The Board did not submit the ARR and tariff petition for FY 2002-03 and FY 2003-04 despite the Commission's request to the Board to submit the tariff petition and provide details for the FY 2002-03 (vide letter No.HPERC/031/ /ED (TFA)/AM/MST/2001-1543 dated September 11, 2001) and FY 2003-04 (vide letter No.HPERC/031/ /ED (TFA)/031/2001-36 dated January 3, 2003). The Commission had made this request in accordance with the HPERC guidelines for Revenue and Tariff filing prevalent at that time which required the utility to furnish to the Commission at least three months before the ensuing financial year, full details of its calculations of the expected aggregate revenue from the charges for the financial year.

1.11.3 In response to the Commission's direction to the Board to immediately submit the tariff petition for FY 2004-05 vide its letter No/HPERC/ED (TFA)/031-II/AM/GA/2003-4173 dated January 2, 2004, the Board filed the petition for determination of its ARR and Distribution & Retail Supply Tariff for the FY 2004-05 on January 29, 2004 and submitted further details on March 4, 2004 before the Commission along with the application for determination of Transmission and Bulk Supply Tariff.

1.11.4 Thereafter, the Commission followed the process of inviting comments and suggestions from the consumers and other stakeholders, and conducted public hearings at Nahan and Shimla. The Commission also undertook a diligent scrutiny of the petition and the subsequent information submitted by the Board. The Commission issued the Tariff Order for FY 2004-05 on July 2, 2004. During this process, the Commission once again issued several directions and suggested many progressive steps for efficiency improvement of the Board.

1.12 Salient features of the Tariff Orders issued by the Commission

1.12.1 The existing tariff structure in the State indicates that the tariffs are below the cost of supply for some consumer categories and significantly higher than the cost of supply for other categories. The Commission recognizes this imbalance and has been taking suitable steps from its first Tariff Order to remove this cross subsidization in a phased manner keeping the interests of both the Utility and the consumers into consideration.

1.12.2 In the Tariff Order for FY 2001-02, the Commission had introduced two part kVAh based tariff for all large industrial consumers. The two part kVAh based tariff charges the consumers for the total energy consumed by them including reactive energy and induces incentives to consumers to operate their equipment at a higher power factor and load factor. It also provides benefits to the Board through lower T&D losses and better voltage profile. The Commission had restricted this concept to large industrial consumers having connected load more than 100 kW only as it was a relatively new concept at that time and there were special metering requirements. In the Tariff Order for FY 2004-05, the Commission continued with the approach of adopting a phased extension of this concept for all consumer categories except domestic category having connected load of 20 kW and above. The reason for introducing it only for consumers with connected load of 20 kW and above was that electronic meters had by and large been installed in these consumer premises. The Commission had directed that the two part kVAh based tariff structure in respect of Commercial, Non Domestic Non Commercial Supply, Water Pumping Supply, Small & Medium Supply and Bulk Supply should come into force on October 1, 2004. The Commission had also informed that it would review the position regarding this tariff after 3 months from the issue of the Order. Accordingly, the Commission conducted a review of the load factor, demand factor, power factor, Kvah, kwh, etc. and directed the Board to implement this tariff from April 1, 2005.

1.12.3 In the Tariff Order for FY 2001-02, the Commission had recognized the importance and the need of including a time of use charge in the tariff structure so as to provide correct signals to the consumers and also help the Utility in maintaining a better system profile. The Commission had rationalized the Peak Load Exemption Charge (PLEC) and the Peak Load Violation Charge (PLVC). It had also introduced a night time concessional tariff for industrial consumers.

1.12.4 In the Tariff Order for FY 2004-05, the Commission continued with the levy of PLEC and PLVC for the categories of Small and Medium Industrial Power Supply, Large Industrial Power Supply, Water Pumping Supply and Agricultural Pumping Supply. The concessional night time tariff to industrial and water pumping supply category of consumers was also continued. Further, the Commission opined that the Time of Day (ToD) charge for consumption during the peak load hours and a rebate during off peak hours should be a part of the tariff structure for all consumers. Accordingly, the Commission approved the application of concessional night time tariff for commercial consumers with connected load above 100 kW as part of their tariff structure. These consumers mainly comprise the hotel industry who can utilise this incentive by shifting their consumption for heating purposes to night time and help in flattening the load curve.

1.12.5 In the Tariff Order for FY 2004-05, the Commission moved a step further towards the reduction of cross-subsidy and attempted to align the tariffs with the cost of supply at various voltage levels. In attempting to align tariffs with the cost of supply, the Commission acknowledged the fact that though there is urgent need for ensuring recovery of the cost of supply from the consumers to ensure fiscal sustainability of the Himachal Pradesh State Electricity Board (the Board), the exercise should not send tariff shocks to any class of consumers. Moreover, a minimum level of support would be required to make electricity affordable for households in lifeline category. The Commission also recognised that the estimation of cost of supply at different voltage levels would require extensive, reliable and credible data and information at different voltage levels and is a separate detailed exercise on its own. Nevertheless, the Commission endeavoured to arrive at some estimates of cost of supply at various voltage levels by making certain assumptions.

1.13 Outsourcing of studies by HPSEB

1.13.1 In the Tariff Order of July 2, 2004, the Commission had highlighted the studies that have been outsourced by the Board. The Board outsourced these studies, which were to be conducted by it as per the directions of the Commission in the Tariff Order of October 29, 2001, to M/s. ASCI, Hyderabad in November 2003. The reports that have been received by the Board and submitted to the Commission are as follows:

1. Structural Reorganization
- Inception Report, model to rationalize tariffs
- Draft Report on Restructuring of State Power Sector

2. Preparation of Power System Master Plan
- Inception report on load forecasting, resource planning and power procurement process (including Transmission and Distribution Planning)
- Inception Report on Resource planning and power procurement process
- Report on monthly demand and category-wise energy estimates
- Draft final report for study on load forecasting, resource planning and power procurement process for period up to FY 2014-15

3. Transmission Planning Study
- Interim report 1st scenario
- Preliminary report 2nd scenario
- Draft report 1st and 2nd scenario
- Preliminary report
- Revised draft report
- Revised report

1.13.2 The Board also proposed to entrust T&D loss study to ASCI as additional work. However, the Commission was not satisfied with the high cost proposed to be paid by the Board for the study and the scope of work laid down by the Board. As a result, the Commission took it upon itself to commission this study. The Commission has appointed M/s. KLG Systel Limited, Gurgaon to carry out this study with regard to complete and accurate data of T&D losses at various voltage levels and between various consumer classes as well as the break up of technical and non-technical losses. This study will bring out the relevant information at the circle level also. The study also includes creation of database and its deployment at all Zonal/Circle/Divisional offices as part of Data Information Management System. The study will be conducted at a cost of Rs. 66 Lakh, which will be borne by the Board and allowed as pass through in the ARR.

1.13.3 In addition to the above studies, the Board is also in talk with independent agencies for conducting a study that involves physical verification and valuation of assets and working out their fair value, depreciated value and revenue potential with GPS/GIS technology. The study also involves mapping of consumers and last service line including the size, length and location of service lines, installation of necessary hardware and software, and training of personnel. The objective of this study is to have the information on the assets, revenue potential, fair value and the depreciated value of these assets. The Board has estimated that the study will cost Rs. 11 Crores.

1.14 ARR and Tariff Petition for FY 2005-06

1.14.1 Procedural Background

1.14.1.1 The HPSEB filed the application for of its Aggregate Revenue Requirement on December 8, 2004 and submitted further details on January 24, 2005 before the Commission along with the application for determination of tariffs for its own hydro generating stations and Distribution and Retail Supply Tariff.

1.14.1.2 ICRA Management Consulting Services (IMaCS) were appointed Consultants to assist the Commission in assessment of the ARR, determination of the relevant tariffs and the development of an incentives linked efficiency improvement scheme.

1.14.2 Interactions with the Petitioner

1.14.2.1 The submissions of the filings by the Board were followed by a series of interactions, both written and oral, wherein the Commission sought additional information/clarification and justifications on various issues, critical for admissibility of the petitions.

1.14.2.2 The Commission conducted Technical Validation sessions on the Petition filed by the Board from February 17 to February 19, 2005 during which additional information required and the discrepancies in the Petition were highlighted. The Commission also held Admissibility Hearing for the admission of the Petition on February 19, 2005.

1.14.2.3 The Board submitted its response on the issues raised during Technical Validation sessions and Admissibility Hearing through separate submissions and the Commission admitted the Petitions for further processing on March 3, 2005.

1.14.3 Post admission interactions

1.14.3.1 After admission of the Petition, the Commission invited comments from the consumers as well as other stakeholders on the petition filed by the Board and conducted public hearings at five locations within the State. The Commission also held further technical sessions with the concerned staff of the Board to seek additional information and clarifications such as details of actual expenses and revenue up to March 2005, details of loan drawal, status of capital expenditure including scheme wise details, time and cost over runs of its projects, and note on the Voluntary Retirement Scheme (VRS). During these sessions and the further scrutiny of the petitions, the Commission found that the information given by the Board in respect of the determination of tariffs for its own hydro generating stations was vague, inadequate and without any basis. The Commission therefore, directed the Board to file the application for determination of generation tariffs by May 31, 2005 in the manner and formats specified in HPERC (Terms and Conditions for Determination of Tariff) Regulations, 2004 and also the CERC regulations. A separate hearing was held on this petition on June 6, 2005. The details of this hearing as well as other public hearings have been covered in Section 4.

1.14.4 Public hearings

1.14.4.1 The Commission invited suggestions and objections from the public on the tariff petition filed by the Board and conducted a series of public hearings. The details of these hearings have been covered in Section 4. The Commission issued interim orders after each of the public hearings to obtain additional information and clarifications from the Board on the matter raised during the hearings.

1.14.5 Consumer representatives

1.14.5.1 The Commission appointed Sh. P.N. Bhardwaj as consumer representative to represent interests of all consumers in all the proceedings before the Commission relating to the tariff petitions. The Consumer representative was present at all but one hearing and has made invaluable contribution in the hearings. The Commission also appointed Prof. R.K. Gupta to represent the interests of unorganized domestic consumers during the public hearings.

1.14.6 Formal interaction with the Officers and Members of the Board

1.14.6.1 In continuation of the practice started during the Tariff Order for FY 2004-05, the Commission conducted formal interactive sessions with the various officers and Members of the Board as well as officers of corporations owned by the Board. The objective of these interactions was to understand the strategies, systems and the working procedures of their departments as well as the problems and difficulties being faced by them, if any in greater detail and depth. The Commission prepared and circulated questionnaires to every officer with whom the Commission interacted. The Commission received responses to these questionnaires and has benefited greatly from these responses as well as interactions. The Commission endorses that these interactions are absolutely essential to arrive at just and fair determination of tariffs. These formal interactions were held in the Commission's office after the public hearings.

1.14.7 Inconsistencies in the tariff applications

1.14.7.1 The Commission is appalled to note that inspite of having already made filings for determination of ARR and retail tariffs for the FY 2000-2001 and FY

2004-05, there were number of gaps and inconsistencies in the present tariff applications. The information provided therein was totally misleading, incomplete and half baked. The filing, to say the least, was a colourable compliance of the Regulations. To various queries of the Commission, the Board submitted different figures of the data. This further complicated the matter. The Commission was faced with the problem of arriving at the final figures particularly when the objections/ suggestions on the applications had been received based on the data/ information contained in the original applications. The Commission has preferred to consider the figures as presented by the Board during the public hearings.

1.14.8 Non-compliance with the Electricity Act, 2003

1.14.8.1 The Commission's tariff philosophy has consistently emphasized the need to gradually reduce and eliminate the cross subsidies present in the tariff structure in line with the provisions of the Act. HPERC (Terms & Conditions of Determination of Tariff) Regulations 2004 provide that the tariff shall progressively reflect the cost of electricity. Tariff Order of FY 2004-05 sent unmistaken and clear signals that the subsidizing categories should look forward to decrease and subsidizing categories increase in real terms in the future Tariff Orders. The National Electricity Policy too, articulates similar statements.

1.14.8.2 The Commission is of the view that the petition submitted by the Board does not follow the intent and spirit of the objects and purposes of the Act, the National Electricity Policy and the philosophies of the Commission as put forward by it in the concept papers issued on tariff determination since its inception. It also does not provide any concrete direction for improvement of the health of the sector.

1.14.8.3 The Board has not proposed any steps to reduce cross subsidies in the tariff petition submitted for FY 2005-06. Instead it has proposed a very high increase in tariff for the commercial, EHT & HT and industrial consumers. The later is the subsidising category where the tariff hike proposed is of the order of 22.4%, while no tariff increase has been proposed for subsidised categories such as domestic and agricultural consumers. Such a tariff structure would further increase the cross subsidies and distort the tariff structure rather than rationalize it.

1.14.8.4 In this context, the Commission would like to highlight the following provisions of Section 61 of the Act that are the guiding principles for determination of tariff.

61(c) the factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;

61(g) that the tariff progressively, reflects the cost of supply of electricity, and also, reduces and eliminates cross subsidies within the period to be specified by the Appropriate Commission;

1.14.8.5 The Commission would also like to highlight the provisions of the National Electricity Policy that, provide that the tariffs progressively approach the cost of supply.

5.5.1 There is an urgent need for ensuring recovery of cost of service from consumers to make the power sector sustainable.
5.5.2 A minimum level of support may be required to make the electricity affordable for consumers of very poor category. Consumers below poverty line who consume below a specified level, say 30 units per month, may receive special support in terms of tariff which are cross-subsidized. Tariffs for such designated group of consumers will be at least 50 % of the average (overall) cost of supply. This provision will be further re-examined after five years.
5.5.3 Over the last few decades cross-subsidies have increased to unsustainable levels. Cross-subsidies hide inefficiencies and losses in operations. There is urgent need to correct this imbalance without giving tariff shock to consumers. The existing cross-subsidies for other categories of consumers would need to be reduced progressively and gradually.

1.14.8.6 It is, thus, obvious that the tariff petition is based on the objective of increasing cross subsidy, thereby ignoring the principles set out by the Commission and the objects and purposes of the Act as well as the National Electricity Policy. The Commission's views on the tariff structure proposed by the Board are discussed in greater length in Sections 7 and 8 of this Tariff Order.

1.14.9 Misleading tariff petition and inadequate representation of domestic consumers

1.14.9.1 The Commission would like to highlight with great concern that the tariff petition filed by the Board was grossly misleading and in contravention of the provisions of the Act, the National Electricity Policy, HPERC (Terms and Conditions for Determination of Tariffs) Regulations and the clear and unmistaken signals given in Tariff Order for FY 04-05 in respect of adopting the cost of supply approach for determination of tariffs and reduction in cross subsidies as no increase has been proposed in the tariff for domestic and agricultural consumers. By not proposing any increase in domestic and agricultural supplies, the Board de facto denied an opportunity to the unorganized domestic and agricultural consumers of being heard, since they have nothing to object to. Not surprisingly, no domestic or agricultural consumers came forward with their objections during the public hearings. The Commission is, thus, conscious of the fact that there was inadequate representation of domestic and agricultural consumers in the tariff determination process.

1.14.9.2 The Commission has made every effort to keep the interests of all consumers in the tariff determination process and in doing so has been primarily guided by the principle of reducing and eliminating cross subsidies and rationalisation of the tariff structure which are imbibed in the Act.

1.14.10 Salient features of the tariff petition for FY 2005-06

1.14.10.1 The Board has proposed to meet the accumulated deficit for FY 2005-06 through a combination of options such as realization of additional revenue through tariff revision and postponing a part of the deficit recovery by creation of a Regulatory Asset. It has further proposed that the Regulatory Asset so created be amortized in the subsequent years in the manner specified by the Commission and the associated financing cost be allowed as part of the revenue requirements during the amortisation period as legitimate business expenditure.

1.14.10.2 In respect of tariffs, the Board has only proposed kWh tariff. However, in the presentation by the Board, it favoured kVAh tariffs. It has also proposed to continue the rebate structure for 33 KV supply, the Peak load Exemption Charges (PLEC) and the Peak load violation charges (PLVC). Further, the Board has also proposed to provide the night hour's concession for industries opting to shift operations from day to night (0.00 hrs – 6.00 hrs) by 20 paise/unit.

1.14.11 Credibility of HPSEB's database

1.14.11.1 In the Tariff Order of FY 2001-02, the Commission had directed the Board to take urgent steps to build a credible and accurate database with unbundled costs and expenditure between the three businesses of generation, transmission and distribution as well between the various customer classes to enable the stakeholders to focus on these costs and expenses and have rational basis for the determination of tariffs under performance based regime with some regulatory certainty. It had also directed the Board that the next tariff petition must be supported by an accurate and credible database with appropriate MIS.

1.14.11.2 In the Tariff Order for FY 2004-05, the Commission had observed that the Board has not been able to provide a reliable and adequate database and the data submitted by the Board was unreliable, inaccurate and inadequate. The Commission had, therefore, made some assumptions in its analysis to determine the cost of supply at different voltage levels, which have proved to be true in the course of time.

1.14.11.3 The Commission laments the absence of credible and accurate data in the Board. The Board has not made any efforts to build a credible and state-of-the-art MIS for database and making available the reliable data. The Board informed the Commission that slab wise information on sales and revenue for the various categories is not available with the Board since the systems and MIS existing in the Board do not capture such information.

1.14.11.4 As highlighted by the Commission in its concept paper issued on February 19, 2005, the absence of reliable and accurate information has once again constrained the Commission in its desire to move in the direction of determination of tariff based on the principles of Multi Year Tariff as envisaged under section 61(f) of the Act. Designing MYT regime on shaky foundations would be dangerous as it could increase the risks for the Board as well as the consumers. In the absence of credible information on the baseline performance levels, designing a robust and practical MYT framework would prove to be difficult.

1.14.11.5 Nevertheless, the Commission has made a start by introducing performance targets for the Board along with incentives for the achievement of these targets. Section 9 of this Order deliberates on the framework laid down by the Commission in this regard. The Commission hopes that this framework will provide the impetus for enhancing data quality within the Board as the Board will be forced to collect and monitor data on aspects related to these targets in order to improve its compliance with these targets thereby, making it eligible for the incentives.

1.14.11.6 The Commission would also like to voice its immense concern, anguish and anxiety over the extremely precarious financial health of the Board. Documents submitted by the Board reveal that the Board is already facing a debt trap, wherein it has to borrow money every year to repay its earlier loans. This is the worst kind of situation to find oneself in. This is not a one-time occurrence, and has been recurring year through year. The Commission had allowed this in the previous year, but has decided not to permit this imprudent and bad fiscal practice and management to continue, and that, too, at the expense of the consumers. The Commission urges the GoHP and the Board to take immediate steps to clean the Balance Sheet of the Board and ensure that the Board is free of this debt trap. Section 5.4.3 of the National Electricity Policy promises adequate transition financing support to the States which develop a clear road map for turnaround which shall be linked to predetermined improvements and efficiency gains aimed at attaining financial viability and also putting in place appropriate governance structures. The Board can draw support from, use and pose “Incentives linked Advisory Directives” contained in Section 9 of this Order to the GoHP and Central Government for transition financing support.

1.14.12 Subsidy from the State Government of Himachal Pradesh

1.14.12.1 The Government of Himachal Pradesh (GoHP) vide its letter No.MPP-C(3)-1/89-I-Loose dated 28-6-04 conveyed to the Commission its decision to continue with the domestic tariff as applicable prior to the Tariff Order of October 29, 2001. The subsidy also covered the consumer service charge in respect of domestic tariff. In accordance with this, the Commission had worked out the amount of subsidy of Rs.3.36 crores per month. However, the Board had not received the subsidy for the months of July, August, September and October 2004 until October 18, 2004. The letter of credit had also not been opened by the GoHP. Yet, the Board did not restore the domestic tariff to the rates approved by the Commission as directed in the Tariff Order of July 2, 2004. The Commission then ordered the Board to issue the bills to the domestic consumers for the month of October 2004 on the basis of tariff determined by the Commission. The Commission also ordered that the bills should include the arrears from July 5, 2004 or even earlier if the subsidy was not received for that period.

1.14.12.2 The Commission strongly feels that it is the responsibility of the utility to improve its financial sustainability and not incur losses due to indiscriminate adoption of policies of the State Government. Section 61(b) of the Act states that the generation, transmission and supply of electricity are to be conducted on commercial principles. Thus, the Board should not be unnecessarily burdened due to the socio-economic objectives of the State Government. The Commission is delighted to note that the State Government has now released Rs. 30 Crores to the Board on January 6, 2005 for clearing the subsidy amount due up to September 30, 2004 and Rs. 4.59 Crores on March 31, 2005 for clearing the subsidy amount due up to December 31, 2004.

1.14.12.3 The Commission wishes to re-emphasize that an even flow of subsidy payments is necessary for the HPSEB to meet its liabilities in a timely manner. If the State Government wants to subsidize any particular consumer category, it should submit a proposal for the same to the Commission. The Commission will then determine the amount to be paid as subsidy and, the terms and conditions of such payment otherwise the tariff as determined by the Commission for the categories being subsidized will be applicable. Accordingly, the Commission had written to the State Government regarding the provision of subsidy for FY 2005-06 vide its letter No. HPERC/Secy/041/MS/MST/2005-8744-47 dated February 18, 2005. However, no response was received by the Commission on the same.

1.14.12.4 During the public hearing held at Shimla on May 17, 2005, the Commission asked the GoHP to inform the Commission whether the GoHP intends granting any subsidy to any category or class of consumers in the tariff to be determined by the Commission for FY 05-06 and the quantum of subsidy that GoHP may be contemplating to provide during the FY 05-06. The Commission also asked the GoHP to clarify the manner in which it was contemplating to provide subsidy in advance to HPSEB, i.e., whether on monthly or quarterly basis, mode of payment, i.e., by Cheque or Demand Draft and provision had been kept in the budget estimates.

1.14.12.5 The Additional Secretary (Power), GoHP informed the Commission that the GoHP would be able to work out and provide the quantum of subsidy to be granted along with the mode of payment to particular class(s) of consumers only after the issuance of Tariff Order for FY 2005-06 by the Commission.

1.14.13 Vision of the Commission

1.14.13.1 Reforms in the power sector in Himachal Pradesh commenced five years ago with the establishment of the Commission. The Commission by way of its Tariff Orders, Regulations, and Directions to the Board, has made an attempt to ensure the sustainability of reforms in the State and force the Board to become efficient, financially sound and operationally viable. The Commission is deeply pained to note that even after five years of reforms in the State, the operational efficiency, productivity, and quality of service provided by the Board leave much to be desired. The consumers of the Board share the views of the Commission and have expressed concern at the Board's faulty working and inefficiency.

1.14.13.2 The Commission feels that there is an urgent need to take greater measures to promote efficiency, enhance productivity and enable the Board to better serve the public interest through least cost service and improved service quality and make the power sector in the state self-sustaining. In fact, it was with this very objective that in the Tariff Order for FY 2004-05, the Commission directed the Board to submit a proposal for introducing a Multi Year Tariff (MYT) framework. The Commission also deliberated on the introduction of MYT in its Concept paper on Tariff Determination issued in February 2005.

1.14.13.3 Despite the constraints in moving towards an MYT framework on account of the absence of a credible, accurate and exhaustive database, the Commission feels that there is a need to incentivize the Board towards better performance by providing stronger incentives for cost optimization and innovation. Therefore, in this Order, the Commission is introducing incentives linked efficiency and performance targets for the Board on a multi-year basis.

1.14.13.4 By introducing the framework of multi-year performance targets, the Commission is laying down the roadmap for MYT in the State. The Commission is also laying down performance targets in respect of the restructuring of the operation circles of the Board. The Commission is making an attempt to facilitate the Board in the development and management of Human Resources within the Board. In this regard, the Commission is heavily incentivizing the Board to implement ADVISORY directives given in Section 9 of the Order.

1.14.13.5 The framework laid down in this Order is a step towards improving the overall efficiency and productivity of the Board. It is also the start of MYT in the State. In its future Orders, the Commission hopes to move towards a full fledged MYT framework in the State. The Commission is hopeful that this framework will help the Commission realize its dream of a Board that is commercially and financially efficient, that enjoys high levels of productivity, that lays utmost importance on the quality of supply and service to consumers and is a World class utility.

1.14.14 Organization of this Tariff Order

1.14.14.1 The remaining Tariff Order is organized as below:

SECTION 2

REVIEW OF THE PERFORMANCE OF HPSEB WITH RESPECT TO COMPLIANCE OF DIRECTIONS OF THE COMMISSION

2.1 The Commission had issued 21 directions in the Tariff Order of FY 2001-02 and 26 directions in the Tariff Order of FY 2004-05. Vide direction No.9.4 in Section 9 “Direction-cum-Orders” of the Order dated July 2, 2004, the Commission had saved the directions given in Chapter 7 of the Tariff Order for FY 2001-02 issued under the Electricity Regulatory Commissions Act, 1998 together with Complaint Handling Mechanism and Procedure as notified by the Commission on February 8, 2002 and HPERC (Complaint Handling Mechanism and Procedure) Regulations, 2002 notified on February 8, 2002 until the standards of performance of the licensee are specified by the Commission under Section 57 of the Act.

2.2 In accordance with direction No. 9.4.26, the Commission had ordered that “in order to monitor and review the progress and the status of compliance of various directions of the Commission, it shall hold review hearings on the 1st Saturday of every month till the compliance is made to the satisfaction of the Commission. The Board shall submit the status report through affidavit on the date prior to the date of hearing. The first review hearing shall be held on September 4, 2004. All orders of the Commission following the review hearings shall be put on HPERC website”.

2.3 The Commission accordingly held 14 review hearings on Sep. 8 and 9, 2004, Oct. 18, 2004, Nov. 6, 8 and 10, 2004, Dec. 10, 13 and 14, 2004, Jan. 7, 2005, Feb. 19, 2005, March 23, 2005, April 19, 2005 and June 10, 2005. The interim orders of the Commission following the review hearings are available on the Commission’s website.

2.4 In its tariff petition for FY 2005-06, the Board has submitted that it lacks resources and the skill sets to implement many of the directives issued by the Commission and has to depend on consultants and outside experts for undertaking the studies. In such cases, the Board has little control on the time line for completion of studies and hence results in delay in complying with the Commission directives. The Board has, therefore, requested the Commission to take a lenient view on the delay in compliance of the directives where the Board does not have inherent expertise or skill sets.

2.5 Discussions hereinafter give the status of compliance of all such directions.

2.6 DIRECTIONS GIVEN IN THE TARIFF ORDER OF OCTOBER 29, 2001

2.6.1 **Unbundled Costs (direction 7.1 to 7.3)**Further to the status given in Section 2 of the Tariff Order of July 2, 2004 there has been no significant improvement either in regard to the accurate and credible data base with appropriate MIS or unbundled costs and expenditure between the three businesses of generation, transmission, distribution as well as between the various customer classes to enable the stake-holders to focus on these costs and expenses and have a rational basis for the determination of tariffs with some regulatory certainty. The Board entrusted this study together with 14 other studies to ASCI Hyderabad on November 5, 2003. The deliverables were to be submitted on or before May 31, 2005. Though the Commission did express its scepticism with regard to the capacities and capabilities of ASCI for carrying out such a myriad nature of assignment, it was hopeful that ASCI shall faithfully execute the contract. It has failed to do so except for the load forecasts and transmission planning.

2.6.2 **T&D Losses (Direction No.7.4)** Further to the status given in Section 2 of the Tariff Order of July 2, 2004, the status remains the same. The Commission, however, on its own has awarded the study to KLG Systel Ltd at the cost and expense of the Board. The study report should be available before the Tariff Order for 2006-07.

2.6.3 **Employee Cost (Direction Nos 7.5&7.6)** Further to the status as per Section 2 of Tariff Order of July 2, 2004, the employee cost per unit remains the highest in the country. This direction was further re-enforced in Tariff Order of 2004-05 by ordering some measures in line with the covenants of the MoU between the GoHP and Ministry of Finance, GOI on medium term Fiscal Reform Programme since the consolidated revenue deficit of the State includes the power sector deficit of the State. Though the Board has taken steps to broadly comply with this direction of the Commission, some dimensions, viz., irrational pay scales and allowances and irrational deployment of employees still remain to be addressed.

2.6.4 **Demand Forecast (Direction 7.7)** ASCI, who was assigned this study, has submitted the deliverable.

2.6.5 **Financial Restructuring (Direction No.7.8)** Further to the status given in Section 2 of the Tariff Order for FY 2004-05 there is no change. Financial Restructuring Plan has not been filed, though, now the Board has undertaken to file it in the next 2 months.

2.6.6 **Simulating Competitive Conditions (Direction No.7.9 & 7.10)** There is no further progress after the status given in section 2 of the Tariff Order for 2004-05.

2.6.7 **Public Inter-action (Direction 7.11 & 7.12)** There is a significant improvement in the status. The duly structured Public Interaction Programme at a cost of Rs.2.2 crores has been submitted by the Board to the Commission. The public interaction programme has been approved by the Commission with modifications at a total cost of Rs. 2.12 Crores.

2.6.8 **Unproductive Assets (Direction No.7.13)** The status remains the same as given in the Tariff Order of 2004-05. The Board has shown utter disregard for the direction of the Commission which was re-iterated in the Tariff Order of 2004-05 also. There is total reluctance to disinvest the unproductive, un-remunerative and idle assets. In absence of the identification of such assets, the Commission has applied its mind and used its judgement in arriving at the cost of such assets and the return, depreciation and O&M thereupon, disallowed as discussed in section 6 of this Order. .

2.6.9 **Power Sector Reforms (Direction 7.14)** The status is more or less as given in the last Tariff Order.

2.6.10 **Fixed Assets & Capital Works in Progress (DirectionNo.7.15 to 7.17)** There is no change in the status. However, the Board has veered around to the Commission's direction of carrying out the physical verification of assets based upon GIS/GPS technology through independent agencies. The statutory advice under sub section (2) of section 86 of the Act was tendered to GoHP on July 30, 2004. The Board has to award this work to the successful bidders in 2 months.

2.6.11 **Metering, Billing and Collection Efficiency (Direction No.718 and 719)** Despite the fact that the Board did not comply in entirety with the direction of the Commission to replace the defective and dead-stop meters, after March 31, 2002, with electronic meters, the spurt in collection efficiency is due mainly to the orders of the Commission, stopping payments of payables by the Board to the GoHP on account of electricity duty and energy received from GoHP by way of free power and share from other hydro-electric projects until up-to-date subsidy amount and the outstanding dues against I&PH Deptt. are released by the Government to the Board.

2.6.12 **New Connections (Direction. No.7.21)** Further to the status given in the last Tariff Order quarterly reports from the field CEs are being asked on the action taken on the key areas of concern as brought out in the consumer satisfaction survey.

2.6.13 **Marginal Cost Pricing (Direction Nos.7.22 to 7.24)** This study was also entrusted to ASCI on November 5, 2003. The report has not been filed by ASCI on or before May 31, 2005 as per the contract agreement.

2.6.14 **Wholesale Supply of Power and Malana Project (DirectionNo.7.25&7.26)** The status remains unchanged. In regard to the wholesale supply of power from the GoHP to the Board, no proposal for determination of tariff was made. The Commission issued notice to the GoHP and the matter is subjudice before the Commission.

2.6.15 **Compliance with the Guidelines issued by the Commission (Direction No.7.27)** While distribution planning and demand side management have been entrusted to ASCI, the Commission is in the process of preparation of Supply Code, which would look into the service rules and regulations also. However, the Commission has already issued the Regulations on Recovery of Expenditure reasonably incurred for providing the supply and the Security Deposit under

Sections 45, 46 and 47 of the Act. Energy audit shall be taken care of by the T&D loss study awarded to KLG Systels.

2.6.16 **Materials management (Direction No.7.28)** There has been some progress but it is not to the satisfaction of the Commission. The calendar of various actions, approvals, tendering, purchase orders, delivery schedule and payment, etc has been streamlined while the rate contracts and bench mark prices have yet to be put in place. The direction has further been reinforced with further orders on de-centralised purchases, audit thereof, orders in packages with or without labour component in the Tariff Order of 2004-05. Some directions were also given on third party inspection, development of inspection manual and updation of standard purchase order.

2.6.17 **Sales manual (Direction No.7.29)** This direction was complied with.

2.6.18 **Voltage-wise Data** (DirectionNo.7.29) After great persuasion, ASCI have now agreed to provide information in regard to voltage-wise, category-wise, time of the day-wise sales projections also.

2.6.19 **Complaint Handling Mechanism (DirectionNo.7.30)** There was contravention of the provision of the Complaint Handling Mechanism by the Board of which the Commission took suo motu notice and initiated proceedings under Section 142 of the Act. The Board filed an appeal in the Hon'ble High Court of Himachal Pradesh and obtained stay on the further proceedings. The Commission filed SLP in the Hon'ble Supreme Court which was disposed of with request to the Hon'ble High Court to decide the matter in outer limit of 3 months which expires by middle of August 2005.

2.7 DIRECTIONS GIVEN IN THE TARIFF ORDER OF JULY 2, 2004

2.7.1 DIRECTION 9.1

2.7.1.1 The Commission has given a number of directions to the licensee both during the public hearings and in the preceding sections of this Order. These have been compiled with and reproduced in this section for easy reference. The tariff determined by the Commission and the directions given in the Tariff Order shall be quid-pro-quo and mutually inclusive. The tariff determined shall, within the period specified by it, be subject to the compliance of the directions to the satisfaction of the Commission and the non-compliance shall lead to such amendments, revocation, variations and alterations as may be ordered by the Commission.

Board's Response:

2.7.1.2 The Board submits that Commission in Tariff Order for 2004-05 had issued 26 directions, out of which, the HPSEB has complied with 21 directions, while one direction is subjudice. The Board has also initiated action for remaining directions.

2.7.1.3 Further the Board submits that it had filed an affidavit dated April 26, 2005 in MA No. 172/05 (compliance case No.15/04) showing compliance of direction as stipulated in the interim order dated March 28, 2004. The Commission in its interim order dated May 2, 2005 had also stated that the compliance shown by the Board is by and large satisfactory and is pleased to extend the tariff for a further period of two months or the date of coming into force of the next Tariff Order whichever is earlier.

Commission's View:

2.7.1.4 The Commission clarifies that the above has been quoted out of context. The Commission's comments were in respect to the interim order of March 28, 2005 in MA No.75/05 in Compliance Case No.15/04 for extension of the Tariff Order till the Commission determines the new tariff for FY 2005-06 in which further extension beyond April 30, 2005 was subject to the compliance of directions particularly 9.4.23 – Larji HEP, 9.4.21 – HP JVVNL, 9.4(a) – Public Inter-action Programme, 9.4(b) – Establishment of Forum for Redressal of Grievances of consumers, 9.4.13 – Outstanding Dues from Government Departments, 9.4.15 – Material Management and Miscellaneous - GPF of Employees.

2.7.2 DIRECTION 9.2

2.7.2.1 The licensee shall not charge the tariff in excess or short of the tariff determined by the Commission in this Tariff Order and if the licensee recovers the price or charge exceeding or lower than the tariff determined by the Commission, without prejudice to any other liability incurred by the licensee –

- the excess amount shall be recoverable from the person who had paid such price or charge along with the interest at 11.5% compounded half yearly;
- the person who has paid less price or charge shall pay the difference along with interest at 11.5% compounded half yearly, and
- the licensee shall be liable to penalties as provided under Sections 142 and 146 of the Act.

Board's Response:

2.7.2.2 The Board regrets that it could not submit the copies of the electricity bills as desired by the Commission on the stipulated date, i.e., May 28, 2005. However, the electricity bills of the three wings for different categories are enclosed.

Commission's view

2.7.2.3 Stabilisation surcharge of 3% ceased to exist on March 31, 2005. No complaint of excess charges or less price has come to the notice of the Commission.

2.7.3 DIRECTION 9.3

2.7.3.1 The State Government of Himachal Pradesh shall pay, in advance to HPSEB, by way of subsidy, a sum of Rs.3.36 crores per month. The Government should open a revolving irrevocable Letter of Credit (LOC) for Rs 3.36 crores in favour of the HPSEB within one month of the date of issue of this Order. If no LOC is opened, and the subsidy amount not received, the Board shall, immediately, restore the domestic tariff to the rates approved by the Commission.

Board's Response:

2.7.3.2 Tariff roll back subsidy amounting to Rs.48.74 crores has been received upto March 31, 2005 and balance subsidy amounting to Rs.5.15 crores is being released shortly as per the decision taken in the meeting with the Finance Department of GoHP.

Commission's view:

2.7.3.3 For nearly 4 months the GoHP did not open Letter of Credit as directed in the Tariff Order July 2, 2004. When it failed to persuade the HPSEB to issue bills in respect of domestic consumption as per tariff determined by the Commission, vide order of November 10, 2004, it directed the HPSEB to approach the State Government to clarify its stand in the matter of opening of Letter of Credit to cover the amount of subsidy committed to be given by it as directed in the Tariff Order of July 2, 2004. The matter was considered by the GoHP and it was conveyed to the Commission that the State Government will not open Letter of Credit for payment of subsidy of roll back of tariff. However, the amounts outstanding shall be settled between the State Government and the HPSEB in every quarter. The Commission considered the response of the GoHP and accepted its prayer to allow it to release the payment of Rs.30 crores through demand draft/pay order to cover outstanding tariff subsidy as on September 30, 2004 within one month in relaxation of direction No.93 of the Tariff Order of July 2, 2004. The Commission also ordered that in the meantime there shall be complete stay on further payments by the Board to the GoHP in respect of any payables by it until accounts have been reconciled and finally settled. This amount was eventually received on January 1, 2005 by the Board.

2.7.4 DIRECTION 9.4

2.7.4.1 Sub-regulation (3) of Regulation 32 of HPERC (General Conditions of Distribution License) Regulations 2004 which have come into force on June 10, 2004 saves the directions given both at the public hearings and in the Tariff Order in Chapter 7 of the Tariff Order for FY 2001-02 issued under Electricity Regulatory Commissions Act, 1998 which shall, therefore, remain alive until complied with to the satisfaction of the Commission.

2.7.4.2 Sub-regulation (2) of Regulation 14 of HPERC (Guidelines for Establishment of Forum for Redressal of Grievances of the Consumers) Regulations 2003 saves the Complaint Handling Mechanism and Procedure as notified by the

Commission on February 8, 2002 and HPERC's Complaint Handling Procedure, 2002 notified on February 8, 2002 which shall, therefore, remain alive until the standards of performance of licensee are specified by the Commission under Section 57 of the Act.

Board's Response:

2.7.4.3 The Board submits that it had filed the suggestions/views on the Public Interaction Programme through an affidavit dated June 2, 2005**.** The financial implication of Public Interaction Programme for 1st year which comes to Rs.2.2 crores has been included in the ARR and same has been submitted to the Commission vide letter dated May 30, 2005.

2.7.4.4 In regard to the establishment of Grievance Redressal Forum, the Board submits that the orders of Hon. High Court of H.P. in this case had already been submitted to Commission vide letter dated May 19, 2005. Further, the Board had filed an affidavit on dated April 29, 2005 to the Commission vide which it was confirmed that terms and conditions for the Members of the Forum have been finalized and short listing of candidates for the posts of Members had been done. The forum has been constituted by the Board vide its notification dated 21 June 2005 and the Chairman and Members of the Forum have been appointed.

Commission's view:

– **Public Interaction Programme**:

2.7.4.5 The expenditure and the progress on Public Interaction Programme shall be monitored in the review hearings and prudent expenditure shall be allowed as pass through. Any under-expenditure or over-expenditure shall be duly accounted for while truing up the ARR for FY 2006-07. The Commission examined the programme and approved it at Rs. 2.12 crores with some modifications.

– **Establishment of Forum for redressal of grievances of consumers**:

2.7.4.6 The 3-Member Forum has been established by the licensee vide its notification dated 21 June 2005.

2.7.5 Debt Restructuring 9.4.1:

2.7.5.1 The Commission in its interim order dated June 7, 2004 directed the Board to furnish a time frame for re-structuring the high cost debts. In the affidavit dated June 9, 2004, the Board informed that it had approved the time frame upto March 31, 2005 for re-structuring the high cost debts with current lending rates of interest. In Commission's subsequent formal interaction with the Members of the Board on June 21, 2004, a time frame of four months was agreed to for bringing down the rate of interest to 10.5%.

2.7.5.2 The Commission, therefore, directs the Board to make efforts to reduce the cost of outstanding loans to 10.5% in four months but not later than October 31, 2004. Efforts shall continue to be made after October 31, 29004 for further reduction in the interest rates.

Board's Response:

2.7.5.3 It is submitted that debt restructuring of Rs.452.00 crores has already been reported to the Commission. Besides, the Board has taken up the matter for debt restructuring of Bonds worth Rs.58.44 crores with H.P. State Co-op. Bank and KCC Bank, but their reply is still awaited. Further, the matter for restructuring of Non-SLR Bonds guaranteed by the State Govt. has also been taken up with M/s Trust Capital Services Ltd, Mumbai and their response is awaited.

Commission's view:

2.7.5.4 Figures of debt restructuring of Rs.452.00 crores and net benefit to the Board of Rs.40.98 crores are being repeated month through month in the last 5 review hearings. There is nothing new in the status which would allude to any sincere efforts having been made in the last about 5 months for further restructuring of the debt.

2.7.5.5 The Board took initiative of debt restructuring only after the directions of the Commission and the efforts are being made for debt restructuring of Bonds worth Rs.58.44 crores with HPSCB and KCCB, restructuring of non-SLR Bonds aggregating Rs.700 – 800 crores with M/s. Trust Capital Services Ltd Mumbai but the response from all is still awaited. The legal advice in regard to loans from the consumers and the IPOs is also awaited while ASCI's report on capital restructuring has also not been received so far.

2.7.5.6 Commission directs the capping of the interest rate at 10.5% in accordance with the direction in which time frame was agreed for bringing down the rate of interest to 10.5% in four months but not later than October 31, 2004. No efforts have been made for further reduction in the interest rates. Commission remains highly sceptical of the Board's total reliance upon ASCI's reports in as many as 15 matters. Commission had expressed doubts in regard to the capabilities of ASCI in undertaking the assignments of such myriad nature ranging from human resources, technical, financial, commercial and consumer services, etc. In regard to ASCI's report on restructuring and reorganisation of the electricity industry and the load forecasts, the Commission had made some cryptic remarks about the capabilities and capacities of ASCI. The Commission notes that its fears and doubts are proving true. There being no liquidated damages or penal provisions in the contract signed with ASCI for delays in submitting the deliverables, it can upset the apple cart of the Board.

2.7.5.7 It is such a pity that after waiting for 18 months, there is no tangible output and the consumers of Himachal have been deprived of the benefit of such studies in the forthcoming Tariff Order. There is no question of taking legal advice in the matter of loans from consumers, such a provision existing in the HPERC (Terms and Conditions of Determination of Tariff) Regulations, 2004 as it is, and has become the law. The option before the Board is either to challenge in the appropriate competent court or obey. This has been reiterated upteenth times, but with no effect on the Board. The legal advice on IPO cannot take more than two months. The Commission expresses its total dismay on the status of compliance of this direction on debt restructuring.

2.7.6 DIRECTION 9.4.1.4

2.7.6.1 Clear identification of the remaining assets to be disinvested must be completed by August 31, 2004 and the valuation of assets to be completed in the next round by December 31, 2004. Assistance of the Government of India will be taken through Government of H.P. in swapping high cost debts from LIC, REC, PFC and other Financial Institutions.

Board's Response:

2.7.6.2 The Board submits that it had already identified the abandoned generation micro/mini hydro projects viz. Billing (200 kW), Shansha (200 kW) and Shishu (100 kw) located in Lahaul Valley and Jubbal (150kW) located in district Shimla. These projects have already been handed over to Himurja free of cost for refurbishment and running. Further, the Board has also handed over the Chhaki Nallah Project (200 kW) to Gram Panchayat Naggar on April 25, 2005 at net present value of Rs.23.36 lacs. As regards the vacant land/rest houses, these cannot be considered as idle, unproductive and un-remunerative as the land/rest houses keeps on appreciating. Moreover, no rest house can be considered as un-remunerative as it provides facility to the touring officers, which adds to the efficiency in the working of the organization. The Board has also identified surplus stores of Rs.265 lacs and the necessary action to dispose off the same is being taken by the field units as per the codal provisions.

2.7.6.3 The Chairman, HPSEB submits that the dis-investment of assets is a debatable issue. The vacant lands and Rest Houses should not be considered as idle, unproductive and un-remunerative as the value of these assets keeps on appreciating. Rest Houses also provide facilities to the touring officers.

Commission's view:

2.7.6.4 The Commission is highly critical of the subterfuge played by the Board in identifying the already abandoned projects of Billing, Shansha, Shishu, Jubbal and Chhaki Nallah. They were abandoned long time back. The stores worth Rs.265 lakh are also well known and is a part of the regular disposal. The Board keeps on flouting the orders of the Commission on one or the other pretext. The latest status is an attempt to mislead and play subterfuge on the Commission.

2.7.6.5 The Commission remains highly unconvinced. There are assets which are lying idle right from the beginning. The lands and such assets are not useful if they cannot be utilized to bail the Board out of distress. The land and rest houses can be purchased or built again provided the Board is in the pink of financial health. It is a pity that in spite of assurance of Member (O) that this exercise shall be completed and the list of such assets filed with the status affidavit to be filed before the last hearing, on June 10, 2005,this has not been done. The Commission has applied its own prudency check and made assumptions in regard to such assets and disallowed return, O&M expense and the depreciation thereupon in this Order for FY 2005-06.

2.7.7 DIRECTION 9.4.1.8: Valuation of Assets

2.7.7.1 The licensee shall get the physical verification of the assets carried out together with the revenue potential, fair value and the depreciated value of such assets through an independent agency. The licensee shall ensure the involvement of appropriate and expert counter-parting with the independent agency in successful completion of the above task.

Board's Response:

2.7.7.2 It is submitted that two firms considered capable for physical verification and valuation of assets were invited for conference on April 29, 2005. Both the firms i.e. M/s S.R. Batliboi & Co. & M/s Susheel Jeetpuria & Co. submitted their bids containing their detailed terms and conditions of payment, etc. for carrying out the assignment regarding physical verification and valuation of assets etc. and to work out the fair value and revenue potential with and without GPS/GIS technology. After obtaining detailed clarifications from both these firms, it was observed that they do not have experience in physical verification and valuation of assets through GPS/GIS technology and as such, they will have to outsource the task to some other agency with adequate experience in the field of GPS/GIS technology. It was, therefore, decided to float fresh E.O.I for the purpose. The expenditure on GIS technology for physical verification of assets has already been added in the ARR for 2005-06 and submitted to the Commission on May 30, 2005.

Commission's view:

2.7.7.3 Commission re-iterates its earlier orders that the expenditure on this account shall be allowed as pass though. The Commission also observes that the GIS/GPS technology based physical verification of assets updated from time to time is the only reliable basis for fixed assets. Fixed Asset Register can further be integrated with the computer aided design and planning of the power system and the appropriate computerized customer suite. This integrated package is a fundamental requirement of any scientific engineering utility. The Commission ordered the Board as follows:

a) Issue of notices inviting expression of interest in newspaper	One week
b) Time to be given for receiving the tenders or offers	4 weeks
c) Time for finalization and issue LOI	3 weeks

2.7.7.4 In order to complete the exercise at the earliest, the job may be divided between two/three parties.

2.7.8 DIRECTION 9.4.2 T&D Losses:

2.7.8.1 The Commission on June 7, 2004 directed the Board to submit the present level of T&D losses at each voltage level with reasonable and plausible assumptions. The Board in its affidavit of June 9, 2004 submitted the information but the complete break up at various voltage levels was not provided. The Commission as per Clause (g) of Section 61 of Electricity Act, 2003 is to ensure that the tariffs progressively reflect the cost of supply of electricity and the Commission is to reduce and eliminate the cross subsidies within the period to be specified by the Commission.

2.7.8.2 The Board, therefore, is directed to appoint consultants if not already done to carry out a study with regard to complete and accurate data on T&D losses at various voltage levels and between various consumer classes as well as the break up of technical and non-technical losses highlighting the assumptions made, if any. The study must be completed and report submitted to the

Commission by November 30, 2004 with the next tariff filing. The study shall also include the quantum of reduction in T&D losses as a result of introduction of kVAh tariff in 2001-02.

Board's Response:

2.7.8.3 Director (Enf. & EA) O/O Chief Engineer(Comm.) has been nominated as Nodal Officer for T&D loss study which has been entrusted by the Commission to M/s KLG Systel Limited, Gurgaon (India). The information required by the Hon. Commission vide letter No.687 dated June 4, 2005 shall be submitted by the stipulated date, i.e., July 5, 2005.

Commission's view:

2.7.8.4 T&D loss has been a subject of raging debate in the public hearings, in the perception of the Board as well as the Commission. The losses range from 13.08% in Solan to 52.14% in Rohru across the 12 Operation Circles. The breakup of loss on account of technical, commercial, billing or realisation at different voltage levels is not available. The Board has been complaining in regard to the loss level allowed by the Commission in the previous Tariff Orders. The direction was given as far back as October, 2001 in the Tariff Order for FY 2001-02 to carry out the study. ASCI were asked to give the terms of reference and the terms and conditions of the offer for undertaking T&D loss study and the Commission in its interim order dated February 19, 2005 against this direction had observed that the methodology proposed by ASCI being vague and unclear, it cannot be relied upon to undertake such an important study and for independent and credible study, the Commission should initiate it at the expense of the Board.

2.7.8.5 The Commission notes that the Director (Enforcement) has been nominated as Nodal officer for T&D loss study and the information required by the Commission in its letter of June 4, 2005 shall be submitted by the stipulated date i.e. July 5, 2005. The Commission orders that the entire expense on this study shall be borne by the Board and will be a pass through in the ARR for FY 2005-06.

2.7.9 DIRECTION 9.4.3 Capital Works In Progress (CWIP)

2.7.9.1 The Commission in its interim order dated June 7, 2004 directed the Board to supply the details of capital works in progress as on date including the proportion of employee cost capitalized and also inform on further scope of capitalization of employee cost. The Board submitted an affidavit on June 9, 2004 and from this information, the Commission observes that the CWIP of Rs. 1654 crores is unbelievably high considering that gross fixed assets of the Board aggregated to Rs.1770 crores only. The Commission directs the Board to immediately transfer the completed works to the fixed assets but not later than October 31, 2004 so as to include the same in ARR filing for 2005-06.

Board's response:

2.7.9.2 Board is capitalizing Fixed Assets as per commercial accounting policy of the Govt. of India which provided that an asset is capitalized when it is put to use. During 2004-05, the Board has capitalized CWIP to the tune of Rs. 320.41 crores upto March, 2005 (excluding March Supplementary Account).

Commission's view:

2.7.9.3 The Commission urges the Board to show more interest and carry on the efforts more vigorously. The Commission would like to see CWIP brought down to the minimum by the end of May 2006 with the commissioning of the two projects of Larji and Khauli, as made out by the Board.

2.7.10 DIRECTION 9. 4. 4 Capital Projects

2.7.10.1 The Commission in its interim order dated June 7, 2004 directed the Board to submit information on all on-going capital projects exceeding Rs. 5.00 lacs and above including the T&D projects showing cost and time over-runs and the interest liability arising on account of these over-runs. The Board in its affidavit dated June 9, 2004 prayed for a period of 10 days for submission of this information. The information has still not been furnished at the time of issuing the Tariff Order.

2.7.10.2 The Commission directs the Board to prepare a comprehensive plan to curtail time and cost over-runs and submit the same by November 15, 2004. The interest liability on account of such over-runs shall not be allowed to be pass through to the consumers.

Board's response;

2.7.10.3 Threshold was increased from Rs.5 lacs to Rs.50 lacs by the Commission. Cost over-runs aggregated over Rs.465.34 crores in respect of projects, the information on which was filed through affidavits by the Board. There are many reasons for the same. The Board has complied with the direction of the Commission to constitute a Committee for the overall control, monitoring and coordination in respect of major projects.

Commission's view:

2.7.10.4 The Commission has reviewed the constitution of the Committee and ordered that the Board Secretary, CE (MM), Additional Secy. (Law) as well as the Chief Auditor shall also be the Members of the Committee. There shall be pre and post perpetual resident audit of all major projects and meetings of the aforesaid Committee shall be held once every month and the copies of the Minutes furnished to the Commission as well.

2.7.11 DIRECTION 9.4.6: Multi Year Tariff

2.7.11.1 The Commission directs the Board to submit a proposal for introducing a Multi Year Tariff framework that would allow it to better serve the public interest through economic efficiency, least cost service and improved service quality.

Board's response:

2.7.11.2 The job with regard to the credible, reliable and accurate data base has been entrusted to ASCI while the MYT frame work is being assigned to M/s.

Price Water House Cooper, New Delhi. ASCI shall be retained for implementation and up-dation of the data base.

Commission's view:

2.7.11.3 No status has been given in regard to the data base and the report of ASCI which was to be delivered by May 31, 2005.

2.7.11.4 The Commission orders the matter to be taken up with ASCI at the highest level to submit the report on data base. As per the interim order dated May 2, 2005 in Case No.181/04 the Commission would lay down road map for multi year efficiency milestones which would be the first step towards the multi year tariff.

2.7.12 Direction 9.4.7: Date of Applicability of kVAh based tariff

2.7.12.1 The Commission directs that the 'two part' tariff structure in respect of Commercial, Non Domestic Non Commercial Supply, Water Pumping Supply, Small & Medium Supply and Bulk Supply shall come into force on October 1, 2004. Till then, the single part kWh tariff and the corresponding consumer service charge shall be levied. The Board shall enter into fresh agreements with the consumers in respect of their contract demand within three months but not later than September 30, 2004. The Commission would review the position regarding this tariff after three months from the issue of this Order. The Commission also directs the Board to submit data regarding the load factor, demand factor power factor, kVAh, kWh in respect of the Commercial, Non Domestic Non Commercial Supply, Water Pumping Supply, Small & Medium Supply and Bulk Supply categories with connected load above 20 KW by September 30, 2004.

Board's response:

2.7.12.2 The Board wanted to defer the applicability of these tariffs to the next Tariff Order effective from July 1, 2005 instead of April 1, 2005.

Commission's view:

2.7.12.3 Two-part tariff structure in respect of commercial, NDNC, water pumping supply, small and medium supply and bulk supply became effective from April 1, 2005 following review by the Commission as per the direction.

2.7.13 DIRECTION 9.4.8 Category-wise detail of Sales etc.

2.7.13.1 The Commission directs the Board that in the next tariff petition, it should provide details on sale, number of consumers, connected load and demand differentiated for time-of-day tariff slabs and at different voltage levels for each consumer category. ASCI should be requested to include these details in their load forecast studies for 10 years as already ordered by the Commission.

Board's response:

2.7.13.2 ASCI has furnished the confirmation that they shall include category-wise , month-wise, time of the day-wise and the voltage-wise demand and energy forecast as per their letter dated May 3, 2005.

Commission's view:

2.7.13.3 The Commission has accepted the status and shall await the compliance.

2.7.14 DIRECTION 9.4.9: Billing Details

2.7.14.1 The Commission refers to sub regulation (2) of regulation 34 of Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2004 and directs the Board that the bills to the consumers shall distinctively display the per unit cost of supply of electricity to the class of consumer as determined by the Commission, direct and indirect subsidy, if any, given by the State Government applicable to such class of consumers and per unit amount of such subsidy, the bill amount payable by the consumer and the cross subsidization of the class of the consumer in the tariff, made applicable without taking into account the subsidy from the Sate Government. The bill shall be prepared on the basis of tariff approved by the

Commission, stabilization surcharge added to the amount of the bill and then the direct subsidy subtracted showing the net amount payable by the consumers.

Board's response:

2.7.14.2 This has been complied with by the Board.

Commission's view:

2.7.14.3 The Commission is satisfied with the response.

2.7.15 Night Time Concession 9.4.10

2.7.15.1 The 'night time' concession shall be made available to the consumers who have tri-vector meters capable of recording consumption during the specified night hours. This option shall be available only till March 31, 2005 after which all consumers in this category should necessarily have tri-vector meters installed in the premises.

Board's response:

2.7.15.2 As directed, the report of Chief Engineer (SP) has been submitted vide letter No. 5190 dated May 10, 2005 for kind information of Commission.

Commission's view:

2.7.15.3 The report of the CE (SP) was received. The Commission has taken an appropriate view in the matter and factored this in the Tariff Order for FY 2005-06, for reasons elaborated in the Tariff Philosophy in Section 8 of this Order.

2.7.16 DIRECTION 9.4.14 Employee Cost

2.7.16.1 The Commission in its formal interaction with the Members of the Board expressed its anxiety and concern for the burgeoning employee cost which had touched Rs. 1.33 per unit of sale of electricity. Given the precarious state of Board's finances, such prohibitive employee cost is wholly unjustified and shall do incalculable harm to the long-term fiscal health of the Board. Borrowing to finance the current expenditure is a sure invitation to disaster when corresponding assets are not being created to service the loans. This prevented the Board from attaining the fiscal sustainability in the medium term. If the Board is to begin approaching fiscal sustainability in the medium term, it would be essential to reduce the burden of employee cost.

2.7.16.2 The Government of H.P and Government of India have signed an MOU in which it has been agreed that the parameter of consolidated revenue deficit, as percentage of revenue receipts would be used as the benchmark for the reforms programme. The consolidated revenue deficit would be inclusive of power sector deficit of the State. The Government of H.P. has agreed to undertake certain measures in line with the targets specified against each, in order to compress revenue expenditure as well as enhance revenue and non-debt capital receipts and thereby contain debt levels. In order to reduce the burden of the salaries GoHP has to endeavour to bring down the number of Government and parastatal employees by 2% annually and to that end has to take some measures.

2.7.16.3 The Commission, therefore, directs that the licensee HPSEB shall also take steps in this direction, since the power sector deficit shall contribute to the consolidated revenue deficit of the State. These steps are enumerated as under:-

- to bring down the number of employees by 2% annually, and, to this end the Board:

- -shall create no new posts leading to fresh recruitments.

- -all new recruitments, at any level and however, essential shall be made through re-deployment of existing personnel. Blanket ban on the recruitments shall not be applicable on certain functional posts.

- -the Board shall abolish all those posts, which have been lying vacant for the last three years.

- -shall not fill any vacancy falling vacant at Class III or IV level.

- -all vacancies shall be filled either by way of re-deployment or where essential preferably on contract.

- -the policy of compassionate employment of kith & kin shall be amended to provide for one time compensation and enhanced family pension.

- -policy to regularize all daily rated workmen shall be strictly in conformity with judicial orders and whenever these persons retire, the posts will be deemed to have been abolished forthwith.

- -a comprehensive review of all the existing allowances shall be carried out in the next financial year and the report on existing allowances shall be prepared by 31st August, 2004.

- -an appropriate VRS scheme for the Board's employees on the analogy of Government of India scheme shall be evolved for posing to Government of India through Government of H.P. for assistance from the Centre and possible external donors.

Board's response:

2.7.16.4 It is submitted that posts falling vacant as a result of VRS on induction level shall not be filled up and no appointment shall be made against such posts in future. The vacancies arising out of VRS (on induction posts) shall be abolished at their induction level. The matter to fill up the vacant posts of Asstt. Engineers and Junior Engineers by direct recruitment as detailed below has been taken up with H.P. Govt. vide letter dated April 20, 2005**.**

1.	AE(E)	= 60 Posts
2.	AE(C/M)	= 30 posts
3.	JE(E)	=153 posts
4.	JE(C/M)	= 80 posts

2.7.16.5 The action to fill up the posts of Asstt. Engineers and Junior Engineers falling to the share of direct recruitment shall be taken as and when the approval is received from the GoHP and the matter is being pursued with the GoHP.

Commission's view:

2.7.16.6 From the perusal of the status filed after the review hearing held on February 19, 2005 and subsequent status affidavits, the Commission notes that the VRS has been approved by the GoHP, 732 posts of various categories have been abolished, no fresh recruitment is being made at class III and IV levels, some posts have been filled up by re-deployment over the last one year; the Board has reviewed the existing compassionate scheme to provide for one time compensation and enhanced family pension. The regularisation of daily rated workmen will be ordered as per judicial orders in future; all the existing allowances will be reviewed by the Board shortly and there shall be automatic reduction of 2% in number of employees due to natural attrition. The Board has broadly complied with this direction.

2.7.16.7 The Chairman, HPSEB submits that he would like to defer filling up the posts of AEs and JEs in view of the impending and imminent unbundling of the Board between Generation, Transmission and Distribution under Section 131 of the Act.

2.7.16.8 Commission is inclined to agree with the Chairman, HPSEB in deferring the filling up of the posts of AEs and JEs pending reorganization of the Board firstly because the Commission may issue ADVISORY on reorganization and restructuring of 12 Operation Circles coupled with engineering resources management and Training Academy to be effective co-terminus with the unbundling to start the successor distribution companies with clean slate or December 10, 2005 whichever is earlier. This may throw up a huge surplus of employees including the AEs and JEs who can be redeployed, retrained and re-tooled in the new emerging dispensations. Succession plan at this stage shall also not serve any useful purpose. The Commission, however, does not agree with Board's contention that posts falling vacant as a result of VRS on induction level shall not be filled up. The Commission orders that no promotion shall be made either to the posts falling vacant as a result of VRS except that of Head of Department or any level which is totally emptied as a result of VRS taken by all the people at that level.

2.7.17 DIRECTION: 9.4.15 Material Management

2.7.17.1 In order to enhance the employee productivity on capital works, the Board may consider ordering the packages of all materials required for the project in a judicious mix of "with and without" labour component. This shall ensure coordinated supply of materials.

2.7.17.2 The Commission would advise the Board that the minimum order quantities for the next financial year should be ordered without waiting for the requirement of materials from the field units to ensure the deliveries commencing from the April 1, 2005. The quantities to be ordered should be so phased as to ensure regular flow of materials throughout the year to keep the employees gainfully employed throughout the year and ensure high inventory turn over ratio. The calendar of actions such as approvals, tendering, purchase order, delivery schedule and payments etc. must therefore, be aligned to ensure the above. The benchmark prices and rate contracts should be put in position for decentralized purchases, which should not exceed 15% of the total capital budget. Any materials ordered in excess of the requirement and lying unused for six months should be automatically recoverable from the person ordering such materials.

2.7.17.3 An Inspection Manual should be developed and the standard purchase order should be modified and up-dated to make the same legally sound, tenable, equitable, fair and just.

Board's response:

2.7.17.4 The Board has revised the calendar of actions such as approval, tendering, purchase orders, delivery schedule and payments etc. The bench mark prices and the rate contracts could not be put in position for decentralised purchases. Action is being taken to recover the cost of materials ordered in excess of the requirement and lying unused for 6 months. Inspection manual for inspection by third party inspection and modified updated purchase order shall come into force w.e.f. August 1, 2005.

Commission's view

2.7.17.5 The Board filed a writ petition under Articles 226 and 227 of the Constitution of India against the interim order of the Commission and the Hon'ble High Court in its order dated April 19, 205 in CWP No.322/05 has stayed Commission's directions on stay on purchases of de-centralized items till the next date of hearing; in the meantime the Commission filed SLP in the Hon'ble Supreme Court of India and the Apex court in its order dated May 13, 2005 SLP(C) No.11116/05 has disposed of the writ petition with the following orders:

2.7.17.6 "After examining the nature of the case and considering the contentions advanced, in our opinion, the subject matter is of such an importance that the High Court should take up the writ petitions for final disposal at an early date in larger public interest of consumers of electricity.

2.7.17.7 With these directions, we decline to entertain these petitions because they have been filed against interlocutory orders. We request the High Court to set down the cases for hearing and decide them within an outer limit of three months.

2.7.17.8 The Special Leave petitions are disposed of accordingly."

2.7.17.9 The other SLP disposed of by the Hon'ble Supreme Court of India vide the above order is against the order of H.P. High Court in CWP No. 61/04 vide which it had stayed the further proceedings in case No.34/03 regarding computerized complaint centres.

2.7.17.10 The Commission has now moved an application in the Hon'ble High Court of HP to transfer the above cases to the Appellate Tribunal for Electricity at Delhi, which has become functional w e f 13-5-2005.

2.7.17.11 Notwithstanding the legal wrangles, the Commission remains highly dis-satisfied with the conduct of the Board. Materials worth Rs.4.31 crores ordered through de-centralized purchases by the field officers in some 65 Divisions were lying un-utilized for more than 6 months in various stores as per the report filed by the Board vide MA No.172/05. In respect of materials in packages with or without labour, the Board has still not come to terms with the Commission's directions of ordering the materials only in packages at the central level. The bench-mark prices and the rate contracts have still not been put in place. No status has been filed with regard to the third party inspection of materials and the report of the Committee on development of inspection manual and the standard purchase order.

2.7.17.12 The Board's Chairman stated that action is being taken to recover the amount of purchases lying un-utilized for more than 6 months from the persons having ordered the same besides taking disciplinary action and ensuring that the same does not recur in future. He assured that the third party inspection of material would become reality and shall be put in place by July 31, 2005.

2.7.17.13 The Commission, vide its interim Order dated June 10, 2005, ordered the following time table to be followed meticulously:

All requisitions for materials should be sent by the field Chief Engineers in packages; per Km; per sub-station or as the case may	As per the calendar
All rate contracts and bench mark prices should be put in place	15 weeks
Third party inspection to come into force w.e.f.	August 1, 2005
Date of coming into force of standard purchase order and manual	August 1, 2005
Action to recover the amount and disciplinary proceedings against the defaulting officers having ordered material in excess of 15% of capital budget and materials lying unutilized for more than 6 months	10 weeks
Audit reports of remaining Divisions and reports of special audit of purchases and action taken thereupon	8 weeks

2.7.18 DIRECTION 9.4.16 Metering, Billing and Collection efficiency

2.7.18.1 The Commission suggests to the Board to make efforts to find a sponsor for a pilot/demonstration project for pre-paid metering as well as bill payment machine by November 15, 2004. The Commission further directs the Board to improve its collection efficiency from the current 92% to atleast 99% during FY 2004-05.

Board's response:

2.7.18.2 Board submits that the proposal with regard to bill payment machine is under consideration of the Board. However, M/s Tata Infotech Ltd. Vide their fax message dated June 7, 2005 have intimated that they will be in a position to do a pilot of one location for a period of 3 months on the plea that conducting a pilot of 5 machines at five different locations will be difficult for them as it will involve too much logistics and expenses.

2.7.18.3 The revised proposal of M/s Secure Meters Ltd. for pilot projects of 250 pre-paid meters has been received on June 7, 2005 in accordance with the Commission directives after the public hearing at Baddi dated May 5, 2005. The proposal is under consideration of the Board.

2.7.18.4 The Board requests the Commission to allow pass through in the ARR for FY-2005-06 for a total amount of Rs.15.00 lacs, which includes cost of the meters after six months subject to successful running of pilot project besides installation charges @ Rs.400/- for the 250 Nos. pre-paid meters of the pilot project plus service tax @ 10.2% on the installation charges and other misc. expenses etc.

Commission's view:

2.7.18.5 Performance of the bill payment machine having already been established as per the report received from PSEB, Mohali, pilot on one location for a period of 3 months, should be accepted. Further M/s. Secure Meters in their proposal have intimated that these meters shall be connected in series with the present meter arrangement. The consumer shall pay the normal bill as per the present system of meter reading but along with that the consumer will have to get the numeric codes from the vending staff. The consumer shall call up the vendor operator or visit the vending staff and shall get the code on telephone or in person from him. Since it is a non-commercial trial, no money transfer will take place. The code will be generated for a fixed amount or whatever amount decided by the HPSEB so as to give a feel of the actual system.

2.7.18.6 Board has received two more offers for pilot projects of 250 pre-paid meters each and would like to try at Dharamshala and Mandi too. The three pre-paid pilots together with pilot of bill payment machine followed by purchase of meters and ten bill payment machines shall cost Rs.1.00 crore.

2.7.18.7 The Commission orders amount of Rs.1.00 crores to be a pass through in FY 2005-06 for the simple reason that pilot project is intended to establish the usefulness and the benefits of the pre paid meters and bill payment machines. The consumer shall not be in a position to pay the rental which may be as high as about Rs.70 – 80 per month and the Board does not have internal accruals to buy these meters. The Commission has already ordered that it would go for phased replacement of conventional meters with the pre paid meters to match with the natural attrition of meter reading and billing staff. The prices are likely to go down with the increased volume and since the pre paid meter's pay back period may not be more than 2 – 3 years in view of the attractive tariff, the consumers shall have the option to buy the pre paid meters out of the refunded security deposit alone.

2.7.19 DIRECTION 9.4.17: CONSUMER SATISFACTION SURVEY

2.7.19.1 The Board should critically evaluate the results of the study on Consumer Satisfaction Survey conducted by A.C.Nielsen – ORG MARG and focus on the key issues and concerns perceived by the consumers not only in respect of six Districts so surveyed but also contiguous Districts for similar concerns.

Board's response:

2.7.19.2 Necessary instructions have been issued to the field officers to submit the quarterly report ending June 30, 2005 by July 15, 2005 and the same will be submitted to the Commission on or before July 31, 2005.

Commission's view:

2.7.19.3 The Commission shall review the status after the report is received. The Commission orders the consumer satisfaction survey reports to be included in the Public Interaction Programme submitted by the Board.

2.7.20 DIRECTION 9.4.18 MOBILITY OF FIELD STAFF

2.7.20.1 The Commission requires the Board to submit a plan for the phased replacement of old and low fuel efficiency vehicles with high repair & maintenance costs by November 15, 2004 as well as use of private vehicles on official business. This is to ensure that the R&M cost of vehicles is contained within the efficiency levels.

Board's response:

2.7.20.2 The Board submits that it has decided to replace the uneconomical vehicles with fuel efficient vehicles. 42 Maruti cars and 3 Gypsy vehicles have so far been purchased under this policy. Regarding 149 old utility vehicles/trucks requiring replacement, all these would be replaced in three years, i.e., 50 in 2005-06, 50 in 2006-07 and balance 49 in 2007-08 subject to ways and means replacement which could be completed even earlier. The purchase of 50 trucks during current FY 2005-06 is in process with the Banks/concerned agencies. The deal is likely to be finalized soon.

Commission's view:

2.7.20.3 World over, the utility vehicles by virtue of their special requirement are invariably owned by the utility while the inspection vehicles are private vehicles owned by the staff except for the Chairman and Members who alone are provided with chauffeur driver official cars. The Chairman, HPSEB, undertakes that notwithstanding the reply, 50 trucks shall be replaced in 2005-06, 50 in 2006-07 and balance 49 in 2007-08 or even earlier. The exact status shall be filed in 2 weeks. The Board should also introduce private vehicles belonging to its officers for use on Board's business.

2.7.21 DIRECTION 9.4.19: 400 KV LINE FROM NALAGARH TO KUNIHAR AND 400 KV SUB STATION AT KUNIHAR

2.7.21.1 The Commission directs the Board to review the justification for 400 KV transmission line from Nalagarh to Kunihar and 400 KV Sub-Station at Kunihar in view of the fact that the 25% share of power under NJPC together with some proportion of free power shall be exported out of the State and does not belong to the licensee. Besides PGCIL has established 400 KV sub-station at Nalagarh which could be used for meeting additional load on the existing 220 KV sub-station at Kunihar in future. The Board is entitled to only the State of the Region Share of 2.47%, which does not justify the established of a 400 KV sub-station at Kunihar. The justification should be got examined in collaboration with the CEA and the Power Grid Corporation of India Ltd. and, submitted to the Commission for its approval by November 30, 2004. In the meantime, there shall be a stay on further actions in regard to tendering, award of the work etc. in respect of these works.

Board's response:

2.7.21.2 Central Electricity Authority in its Standing Committee meeting held at Dalhousie last month has agreed to depute some officers in the next month. The report and views of CEA as and when received together with comments/proposal based on the recommendations of ASCI and discussions in EHV Committee shall be filed as and when received.

Commission's view:

2.7.21.3 Commission orders the stay to continue.

2.7.22 DIRECTION 9.4.20 JUSTIFICATION OF REC FUNDED SCHEMES

2.7.22.1 Since all the 12 districts of Himachal Pradesh are covered under APDRP Schemes, there does not appear much justification for carrying out the REC funded schemes in view of 100% high cost loan from REC in comparison with 90% grant in respect of the APDRP Schemes. Justification, if any, to the Commission be submitted by September 30, 2004.

Board's response:

2.7.22.2 The Board submits that a new scheme namely "Rajiv Gandhi Gramin Vidyutikaran Yojana" has come in place. The office of Director(Design), REC, Dalhousie has been entrusted with the job of implementing the above scheme for H.P. It is, therefore, again prayed that the expenditure on the office of Director(Design), REC, Dalhousie may be allowed as pass through in the ARR for FY 2005-06

Commission's view:

2.7.22.3 The Chairman, HPSEB assures the Commission that the headquarter of the office of the Director (Design) REC Dalhousie shall be shifted latest by July 31, 2005, even though this Directorate is also being entrusted with the job of implementing the Scheme under the newly launched "Rajiv Gandhi Grameen Vidyut Yojna". He pleads for allowing the expenditure on the office of Director (P&D) REC as pass through in ARR for FY 2005-06. The Commission shall allow the pass through as it deems appropriate after applying the prudency check.

2.7.23 DIRECTION 9.4.21 HIMACHAL PRADESH JAL VIDYUT VITRAN NIGAM LTD (HPJVVNL)

2.7.23.1 HPJVVNL shall be made fully functional with clear rules of business and delegation of financial power to make it truly independent in respect of its day-to-day matters. The staffing of this Corporation shall be on dynamic need-based basis.

Board's response:

2.7.23.2 It is submitted that two instalments amounting to Rs.10.00 crores each has been released to HPJVVNL on April 26, 2005 and May 26, 2005, respectively, and balance amount will also be released within the stipulated dates.

Commission's view:

2.7.23.3 The Commission notes the status and reiterates its direction for meticulous compliance of the approved instalment plan. The Board shall pay the interest on loan for the period it uses the loan money as per the interim order of April 16, 2005 in MA No.154/05. This is without prejudice to the proceedings initiated under Section 142 and the interim order dated April 16, 2005.

2.7.24 DIRECTION 9.4.22: DEPARTMENTAL CHARGES:

2.7.24.1 The Commission directs the Board to rationalize the departmental charges, which vary from one set of scheme to the other and submit the report by September 30, 2004.

Board's response:

2.7.24.2 The Commission has issued the Regulations on "recovery of expenditure" under Sections 45 and 46 of the Act on April 4, 2005. The Board intends to file review petition before the Commission for allowing first 30 Metres service cable free as per the old practice and the Board shall obey the orders of the Commission on such review petition.

Commission's view:

2.7.24.3 Commission observes that no review lies against the Regulations, which have become law. Further, there being no provision for any free supply of material including 30 mtrs. service cable in the Electricity Act, 2003, there is no question of any review on merit. Further, the provision of 30 mtrs in the repealed laws has been grossly abused and even while there is a provision in the Board's own Sales Manual that the works beyond 30 mtrs shall either be paid in full or rental in lieu thereof levied, these have been observed more in breach. The Commission insists upon the total and faithful compliance. The Board shall also carry out audit of any connections having been given in contravention of the said Regulations after their coming into force from April 4, 2005. The Commission remains highly critical of the Board's contravention of these Regulations since the time of their publication.

2.7.24.4 Earlier in November 2004, the Board revised the rates of Security Deposit and the capital contribution without approval from the Commission. Taking suo motu notice of the contravention of sections 45, 46 and 47 of the Act, and after giving opportunity to the Board of being heard, the Commission imposed a penalty of Rs.1.00 lac plus additional Rs.6000/- per day for each day of contravention. The Board appealed in the High Court which stayed the penalty.

2.7.25 DIRECTION 9.4.23 LARJI PROJECT:

2.7.25.1 The Commission directs the Board to carry out investigation into the very high per MW cost in respect of the Larji Project and submit the report by September 30, 2004.

Board's response:

2.7.25.2 The reports of two Committees were submitted to the Commission but the Commission rejected both of them and ordered the enquiry by independent Committee against which the Board has filed CWP in the Hon'ble High Court of HP. Since the matter is subjudice, the Board has no comments to make.

Commission's view:

2.7.25.3 Since the Commission was not satisfied with the reports of the two Committees, it ordered an enquiry by a Committee comprising Shri R.N.Agarwal, former Chairman, BBMB and Shri C L Aggarwal, former General manager, Thein Dam Project. The Committee has since submitted the report. The Board assailed the inquiry in the Hon'ble High Court and the matter is before it.

2.7.26 DIRECTION 9.4.24: GENERATION COST OF BOARD'S OWN PROJECTS:

2.7.26.1 The applications for fixing the cost of generation in respect of Board's own projects shall be submitted to the Commission for the FY 05-06 by October 31, 2004.

Board's response:

2.7.26.2 No action is required as this matter is being dealt separately by the Commission. The Commission in its interim order dated June 6, 2005 had directed the Board to submit additional information on generation tariff by June 13, 2005. The information is under preparation and will be submitted to the Commission by June 13, 2005.

Commission's view:

2.7.26.3 Neither have the applications been filed as per the CERC and Commission's own Regulations nor has the additional information on generation tariff been filed by the Board by June 13, 2005 as stated. In absence of the requisite information, the Commission has applied due diligence and its own prudency check to arrive at the generation cost and tariff of each project.

2.7.27 DIRECTION 9.4.25 HARMONIC DISTORTIONS

2.7.27.1 The Commission observes that severe harmonics, induced by non-linear loads, are effecting system operation and life of the equipments connected to the system. Commission, therefore, directs the Board to ensure that the loads connected at the inter-connection points do not induce any harmonic voltage and distort the supply waveform beyond the specified limits. Further, the Board shall monitor the harmonic levels at the supply points to the users and other strategic locations on the transmission system, which it considers as harmonic prone, at regular intervals of six months, to ensure proper quality of power supply. These measurements shall conform to IEEE Standard. 519.

Board's response:

2.7.27.2 It is submitted that report of M/s ABB on this direction has been submitted by Chief Engineer(Transmission) during interaction with the Commission.

Commission's view:

2.7.27.3 Board assures that the notices shall be issued by June 14, 2005, giving 2 months time for installing the necessary equipment and the apparatus as recommended by ABB and subsequent measurements in the next one month to the existing consumers mentioned in the report failing which the connections shall be disconnected without any further notice. The Commission orders measurements to be taken in Baddi, Una and other areas also where the induction/arc furnaces are already operating and report submitted to the Commission in 3 months from the date of this order. As per condition (d) of interim order of May 18, 2005, the Commission has to supervise the connections and monitor the harmonic levels and the Board has to submit reports to this effect on quarterly basis. The first report should be submitted on or before July 12, 2005.

2.7.28 MISCELLANEOUS:

(a) e-Governance

2.7.28.1 From the face of the status given by the Board, it would seem that the e-governance project has not been entrusted so far to NIC which conflicts with the status report in the hearing of December 14, 2004 when the Chairman and members were present. This item shall also be taken up in the hearing scheduled with WTMs of the Board.

Board's response:

2.7.28.2 The Board submits the following progress in this regard:-

i) Letter of intent for 1 No. server and 66 PCs has been placed on HPSEDC, Khalini, Shimla-2 on April 12, 2005. Confirmation to LoI from HPSEDC is still awaited.

ii) For rest of the material, tenders have been opened on April 30, 2005 and the same are under process.

iii) REFNIC software has been installed in the main server on April 12, 2005. Some customization as per HPSEB requirement has already been done on April 12, 2005 and rest of customization and loading in client version of software shall be completed after hiring of manpower on contract basis from M/s Shoghi Communication as well as receipt of computers and extension of LAN in Kumar House Complex.

Commission's view:

2.7.28.3 The Commission hopes that the computerisation in the Board shall proceed as per milestones given in the status filed earlier.

(b) Phased un-manning of Sub-stations:

2.7.28.4 The Commission would also be interested in knowing the Board's plan for phased unmanning of existing sub-stations right upto 220 KV and establishing all sub-stations in future in unmanned mode.

Board's response:

2.7.28.5 It is submitted that the authorization for filling up vacant post of SSA/Helper (sub-Stn) from eligible employees already on the rolls, was a one time measure to fill up the existing vacant posts falling to the share of direct recruitment. Instructions, however, have been issued to the concerned Chief Engineers not to make any further appointments to the category of SSA/Helper(S/Stn) without obtaining specific approval of the Board.

Commission's view:

2.7.28.6 This being the provision of 'National Electricity Policy', there is no option but to go for unmanning of sub-stations.

2.7.28.7 The Commission notes the status but feels that the damage has already been done by compounding the difficulties in the phased unmanning of the sub stations. The Commission has laid down the time frame for the phased unmanning of the sub stations in this Tariff Order.

(c) Energy Conservation

2.7.28.8 The Commission's staff shall prepare terms of reference for inviting expression of interest to develop suitable model for energy conservation.

Board's response:

2.7.28.9 The Commission may prescribe necessary guidelines in this matter.

Commission's view:

2.7.28.10 The terms of reference for inviting expression of interest shall be issued in 4 weeks.

(d) GPF, CPF etc. of Employees

2.7.28.11 Commission would like to know from WTMs as to the book and actual balances of the GPF, EPF and CPF of the employees and the manner of treating the same as per Commission's letter of January 12, 2005.

Board's response:

2.7.28.12 It is submitted that position of GPF accumulation investment there-against and balance yet to be invested is indicated hereunder:-

GPF balance at the end of2004-2005.	Rs.5,27,27,00,495.00
GPF credit during The year 2004-05 (excluding 3/05 supplementary)	Rs.1,02,48,64,223.00
Total:-	Rs.6,29,75,64,718.00
Less- debit during the year 2004-05 (excluding 3/05 supplementary)	Rs.1,07,71,56,963.00
Balance	Rs.5,22,04,07,755.00
Investment During 3/05	Rs.3,86,89,86,499.00

Net balance after investment	Rs.1,35,14,21,256.00

Commission's view;

2.7.28.13 Commission orders that the balance after investment must be brought down ending March 2006 to Rs.106 crores.

(e) Scheduling of Baspa-II:

2.7.28.14 The Board is unable to answer the query from the Commission whether additional equipment for transmission of online data alongwith speech channel to SLDC control center at Shimla, is linked with the technical feasibility of the system to integrate with ULDC scheme for which the proposal is to be submitted to Power Grid by March 2005. It would also like to know whether any time frame has been given to Baspa authorities to install the additional equipment.

Board's response:

2.7.28.15 The matter is being pursued with PGCIL.

Commission's view;

2.7.28.16 No time schedule for completion of this job has been intimated by the Board. The Commission orders the Board to implement the job of transmission of on line data along with the speech channel to SLDC Control Centre at Shimla in 12 weeks from the date of this order.

(f) 3rd Party Meter Testing:

2.7.28.17 Section 5.4.9 of the National Electricity Policy envisages independent 3rd party meter testing arrangements. The Board shall submit a plan within 4 weeks for putting the 3rd party meter testing arrangement in place within 6 months.

Board's response:

2.7.28.18 Commission may give appropriate directions.

Commission's view:

2.7.28.19 The matter requires deeper study since the metering is revenue back-bone of the utility and to ensure balance between the interest of the consumers and the utility, 3rd party meter testing arrangement may have to go concurrently with the in-house testing arrangement.

(g) Commission's overview on compliance by Board:

2.7.28.20 Directions of the Commission issued in Tariff Order for FY 2001-02 and FY 2004-05, per se, were in the best interest of the Board and if implemented faithfully, could have not only turned around the Board but placed it on top of the power utilities in the country but this was not to be because of; firstly, the mindset – the change of which is perhaps the most formidable challenge, secondly, the lack of maturity, dignity and the wisdom on the part of all the arms of governance to accept the neo-paradigm of regulation and last but not the least, the absence of proper ground for undertaking reforms. This last factor is the most critical and vital for ushering in any semblance of change.

2.7.28.21 It is a matter of common sense that the playing field cannot be levelled without razing the structures already built upon and entrenched in it. Political compulsions and employees' unions would just not permit it. Nevertheless, the reformist knows that reform consists of overturning the entire structures. As the policies, the conduct of officials and ordinary folk all act on each other, reforms entails working on all these fronts simultaneously. Thus, the effort has to be focused, the reforms have to be across the Board, their sustainability has to be assured and the reforms must be relentless. The transition has to be intimately overseen and controlled, otherwise the changes can go haywire and out of control.

2.7.28.22 It was perhaps because of this reason that the directions of the Commission did not find wide and general acceptance as they were infeasible to comply with in the given time and set-up. Perhaps the Commission erred in making an extremely bold presumption that the HPSEB's organisation was a scientifically architectured organisation with all the seven –S elements viz super-ordinate goal, strategies, systems, structure, staff, skills and styles in perfect equilibrium and harmony capable of responding to and complying with the directions of the Commission, to its satisfaction within the time allowed to it. Knee jerk, incremental and patch-up dressings, reluctantly made by the Board only helped in tinkering with the organisation already in shambles. It required a holistic approach, comprising,

i) a completely scientific organisation with properly designed mission statement (superordinate goal) and not the mix of 3 or 4 different and not too complementary and compatible statements of generation, transmission, distribution and trading;

ii) modern and simple systems and procedures based upon commercial principles;

iii) scientifically architectured structure with appropriate differentiation (specialization) and integration (linkages, centres of responsibility, accountability);

iv) staff not on normative but dynamically need basis with engineering and non-engineering resource management aimed at full loading of the workforce and near 100% productivity level ;

v) (v) skills with inventories and succession planning together with appropriate reward and punishment scheme, development and management to keep pace with the changes in the substantive internal and external environment in the overall hierarchy of skills;

vi) (vi) styles and work-culture to be provided by effective leadership to be led from front, 97% of which comes from character, integrity, truthfulness, courage and determination and only 3% from knowledge of the sector.

2.7.28.23 Instead of realising that the present unscientific organisation was ill-equipped and ill-prepared for regulation along scientific lines and requesting the Commission to facilitate the necessary changes, the Board thought fit to assail the directions per se and the orders of the Commission pursuant to contraventions. 29 Civil Writ Petition/FAOs are pending before the Hon'ble High Court of Himachal Pradesh and the High Court has ordered stay on further proceedings in some cases.

2.7.28.24 The Board has ultimately veered around to the Commission's direction notwithstanding the legal wrangling and established the Consumer Grievances Redressal Forum now. Needless to emphasise, the Board could have used the Commission in facilitating the changes in its role of a facilitator and a friend. The Commission hopes, prays and trusts that the advisories and directions-cum-orders being given in this Tariff Order are taken in the right spirit and implemented in letter and spirit. Difficulties, if any, in implementing the same can be discussed with the Commission and the Commission shall be available at all reasonable times for such a role.

SECTION 3

SUMMARY OF PETITION

3.1 Introduction

3.1.1 This Section summarizes highlights of the petition filed by the Himachal Pradesh State Electricity Board (HPSEB "or" The Board) for determination of the Annual Revenue Requirement (ARR) as well as Generation, Transmission & Bulk Supply Tariff and the Distribution & Retail Supply Tariff. The figures given in this Section are the submissions of the HPSEB during the presentation made by them before the Commission on May 2, 2005.

3.1.2 It would be appropriate to point out here that the submissions made by HPSEB have been inconsistent during the entire tariff process with different sets of data being submitted in different submissions. Further, the calculations done by HPSEB had errors of summation and multiplication, which led to confusion during the analysis process.

3.1.3 In view of the above, the Commission has taken a view regarding the ARR of the Board based on the analysis of the data available to it in totality and has had to ignore various inconsistencies in HPSEB's submissions. Further, in this section, some of the figures do not match with any of the submissions of the Board because of the following reasons:

a. The Commission has apportioned certain costs to different businesses of the Board wherever required due to lack of such information from the Board.

b. At many places, the figures indicated by the Board are not correct arithmetically. The Commission has undertaken all such corrections and has taken the correct figures into consideration. The Commission has viewed the different sets of information filed by the Board in totality to apply the prudency check and has not been guided by various misleading calculations and assumptions made by the Board.

3.2 Sales projections

3.2.1 The HPSEB has projected 39645 MU of energy sales for FY 2005-06, which includes 3161 MU of sales within the state and 803 MU outside the state. The projections have been made on the basis of past trends and anticipated growth in the future.

3.2.2 The HPSEB seems to be quite careless in its calculations regarding the submissions to the Board. During the tariff process, the Board revised the sales figures regarding the LS category from 1459.9 MU to 1700 MU based on the applications for new connections submitted to them. However, the Board did not reduce the quantum of sales outside the state on account of this change in sales within the State. Similarly, the values of T&D loss for sale outside the State have also undergone changes. The Commission in its view feels that due to such anomalies, the figures submitted by the Board at different instances do not tally with each other.

3.3 Sales within the state

3.3.1 The Board has projected sales (within the State) amongst different consumer categories based on last two years Compounded Annual Growth Rate (CAGR) methodology. The details are given below:

Table 3.1: Consumer category wise sales in MU

Category	FY 2003-04 (Actual)	FY 2004-05 (Actual)	FY 2005-06 (Proposed)
Domestic Supply (DS)	769.50	809.79	853.22
Non-domestic Non-commercial Supply (NDNCS)	15.08	20.36	24.87
Commercial Supply (CS)	206.70	224.01	237.94
Small and Medium Industrial Power Supply	127.03	144.36	157.55

(SMS)			
Large Industrial Power Supply (LS)	1210.97	1347.49	1459.90
Water Pumping Supply (WPS)	249.71	270.51	297.95
Street Lighting Supply (SLS)	10.00	10.87	11.81
Agriculture Pumping Supply (APS)	19.00	25.77	30.72
Bulk Supply (BS)	116.45	98.47	83.30
Temporary Metered Supply (TS)	1.60	3.22	3.81
TOTAL	**2725**	**2954**	**3161**

3.4 Sales outside the State

3.4.1 As regards the sales outside the State, the Board has proposed export of 803 MU (after accounting for the transmission loss @ 3.45% on the energy available for outside sales at 828 MU) during the FY 2005-06 based on the availability of energy. The data for export of energy for FY 2002-03, FY 2003-04 and FY 2004-05 and projections for FY 2005-06, are given in the table below: -

Table 3.2: Sales outside the State for FY 2002-03 to FY 2005-06

Financial Year	Sale of Power (MU)
2002-03	**688**
2003-04	**1669**
2004-05	**1333**
2005-06	**803**

The reduction in the projected sales outside the State has been mainly on account of withdrawal of free power by the State Government.

3.5 Total sales

3.5.1 The total sales of the Board within and outside the State are given as below:

Table 3.3: Total Sales for FY 2004-05 and FY 2005-06

Description	2004-05 (MU)	2005-06 (MU)
Within the State	2954	3161
Outside the State	1333	803
Total	**4287**	**3964**

3.6 Transmission and Distribution (T&D) loss

3.6.1 The Commission had, while setting a target T&D loss level of 17.96% for the FY 2001-02, stated that a loss higher than this would represent unjustifiable levels of inefficiency. Also, the Government of Himachal Pradesh (GoHP) has in agreement with the Government of India (GoI) consented to reduce the T&D loss by one percentage point every year from FY 2002-03 onwards subject to reduction of 5% in five years.

3.6.2 For the FY 2005-06, the Board has proposed an overall T&D loss of 20.08% bifurcated as 23.50% and 3.45% for sales within the State and outside the State, respectively.

3.6.3 The quantum of energy available, energy sold and corresponding loss for the FY 2005-06 is accordingly estimated as under: -

Table 3.4: Estimation of overall T&D loss for FY 2004-05 and FY 2005-06

Description	FY 2004-05	FY 2005-06
Total energy available for sale (MU)	5218	4960
Total energy sold		
(i) Within State (MU)	2954	3161
(ii) Outside the State (MU)	1333	803
Total (MU)	**4287**	**3964**
Overall T&D losses (MU)	931	996
Overall T&D loss (%)	17.85%	20.08%

3.7 Total generation and power cost

3.7.1 Own generation

3.7.1.1 The Board has filed plant-wise generation tariff petition in respect of its own power generating projects. The generation from each station during FY 2004-05 and FY 2005-06 are given in the table below.

Table 3.5: Generation data for FY 2004-05 and 2005-06

Power station	Installed capacity (MW)	Generation FY 2004-05 (MU)	Generation 2005-06 (MU)
Bhaba	120	577	580
Bassi	60	250	270
Giri	60	148	170
Andhra	16.95	50	60
Baner	12	35	40
Gaj	10.5	41	42
Binwa	6	27	30
Thirot	4.5	7	8
Ghanvi	22.5	50	60
Gumma	3	6	9
Holi	3	4	13
Larji (*)	126		166
Khauli (*)	12		50
Micro’s	10.75	17	17
Gross Generation	467	1212	1515
Auxiliary Consumption (@0.528%		6	7
Net Generation		1206	1507

(*) The Board has confirmed during the generation petition hearing held on June 6, 2005 that no generation would be possible in the current financial year from Larji Project; and that, the Khauli project shall be commissioned by January 1, 2006. The Board further informed on June 15, 2005 that the shortfall on account of Larji and Khauli generation project (which shall be approximately 206 MU) shall be met by arranging power from the sources, viz. NJHPS FP (180MW), NJHPS EP (330 MW), GOI Spl. Alloe (80MW), PSEB (Bkg) (upto 100 MW) and HVPNL/DTL (40 MW).

3.7.1.2 The plant-wise cost of power generation submitted by the Board is given below:

Table 3.6: Generation Cost in FY 2004-05 and 2005-06

	Cost of Power FY 2004-05	**Cost of Power FY 2005-06**
Power station	**Ps/unit**	**Ps/unit**
Bhaba	76	42
Bassi	19	30
Giri	48	92
Andhra	210	119
Baner	367	192
Gaj	344	178
Binwa	117	253
Thirot	1607	638
Ghanvi	631	219
Gumma	1158	474
Chaba	51	47
Rukti	190	177
Rong-Tong	1995	1851
Chamba	80	75
Sal-II	886	821
Killar	2021	1874
Nogli		480
Larji		379
Khauli		124
Total	**128**	**120**

3.7.2 Power purchase

3.7.2.1 The Board has submitted that the procurement from the Central Generating Stations (CGS) is as per the station-wise allocation made by the Government of India to the State. The projections for 2005-06 have been made based on the trends during the past few years and the availability for full fixed cost recovery of the plants as specified under the CERC regulations and orders. In case of private sector and inter-State projects, such procurement is based on the provisions made in the bilateral agreements or the power purchase agreements.

3.7.2.2 The details of the power purchased/to be purchased from identified sources and the corresponding costs involved for FY 04-05 and FY 05-06 respectively are summarised in the tables below:

Table 3.7: Power purchase details for FY 2004-05

S. No	Particulars	Quantum (MU)	Cost (Rs Cr)	Rate (Ps/Unit)
1	Bhakra Beas Management Board	200	6	30
2	NHPC	588	62	105
3	PSEB	95	4	47
4	UPSEB	288	9	32
5	NTPC	1016	190	187
6	Narora	90	21	229
7	Private Sector	1158	259	224
8	Nathpa Jhakri	474	86	182
9	Under UI	51	14	282
10	GRID Power (Khara)	53	2	36
	Total Power Purchase	**4012**	**654**	**163**
	PGCIL Wheeling Charges		74.5	
	Cost of Power incl. Wheeling	**4012**	**728**	**182**

Table 3.8: Power purchase details for FY 2005-06

S. No	Particulars	Quantum (MU)	Cost (Rs Cr.)	Rate (Ps/Unit)
1	Bhakra Beas Management Board	245	7.3	30
2	NHPC	223	46.6	209
3	PSEB	50	1.3	25
4	UPSEB	359	11.5	32

5	NTPC	926	178.9	193
6	Narora	95	22.8	239
7	Private Sector	1044	256.8	246
8	Nathpa Jhakri	446	108.0	242
9	Under UI			
10	Grid Power (Khara)	64	2.3	36
	Total Power Purchase	**3453**	**635.60**	**184**
	PGCIL Wheeling Charges		69.2	
	Cost of Power incl. Wheeling	**3453**	**705**	**205**

3.8 Bulk supply cost

3.8.1 The per unit bulk supply cost as submitted by HPSEB is summarised in the table below.

Table 3.9: Bulk Supply Cost for FY 2004-05 and 2005-06

	Description	**FY 2004-05**	**FY 2005-06**
1.	Total Power Available for Sale (MU)		
(i)	Own Generation	1206	1507
(ii)	Power Purchase	4012	3453
	Total	5218	4960
2.	Cost of Generation and Power Purchase (Cr)		
(i)	Own Generation	154.8	180.9
(ii)	Power Purchase	728.0	705.0
	Total Cost	882.8	885.9
3.	Per unit Bulk Supply Cost (paise/unit)	169	178

3.9 Annual Revenue Requirement

3.9.1 The Annual Revenue Requirement as projected for FY 2004-05 and FY 2005-06 are given in the tables below.

Table 3.10: Annual revenue requirement for FY 2004-05 and average per unit cost of energy

S. No	Description of item		Amount (Rs. Crore)
1	**Revenue Expenditure**		
	A. Cost of Power		**728.42**
	Power Purchase (4012 MU @ 182 paise per unit)		
	B. R&M Expenditure:		**20.56**
	C. Establishment &Administrative Expenditure:		
	1. Employees Cost	436.13	
	Less Capitalisation Cost	-79.02	
	Net Employees Cost		357.11
	2. Admn. & General Expenditure	25.16	
	Less Capitalisation Cost	-4.50	
	Net Admn. & General Exp.		20.66
	Total - (C) (1+2)		377.77
2	**TOTAL (A+B+C)**		**1126.75**
3	D: Interest due		
	Total Interest Due		236.96
	Less Interest during construction to be capitalised		109.00
	Net Interest to be charged to Revenue		**127.96**
	E. Depreciation		**44.85**
	F. 3% ROR (on fixed assets at the beginning of the year i.e. on Rs. 1500 Crore)		**35.25**
	Total: D+E+F		**208.06**
4	**G. Interest on Security Deposit**		3.08
	H. Regulatory Expenses		0.65
	Total 3 (G+H)		**3.73**
5	**Grand Total (1+2+3)** **(i.e. Total Revenue Requirement for the Year)**		**1338.50**
6	Total Energy Sale (MU)		
	(i) Within State		**2923**
	(ii) Outside the State		1333
	Total		4256
7	**Average Cost of Energy** (in paise per unit) (4/5)		**314**

Table 3.11: Annual revenue requirement for FY 2005-06 and average per unit cost of energy

S. No	Description of item	Amount (Rs. Crore)
1	**Revenue Expenditure** A. Cost of Power Power Purchase (3453 MU @ 204 paise per unit)	**705.00**
	B. R&M Expenditure:	**24.17**
	C. Establishment &Administrative Expenditure: 1. Employees Cost 458.53 Less Capitalisation Cost -80.00 Net Employees Cost 2. Admn. & Gen. Expenditure 27.05 Less Capitalisation Cost -4.83 Net Admn. & General Exp. **Total - (C) (1+2)**	 378.53 22.22 **400.75**
2	**TOTAL (A+B+C)**	**1129.76**
3	D. Interest Due Total Interest Due Less Interest during construction to be capitalised **Net Interest to be charged to Revenue**	 290.23 133.51 **156.72**
	E. Depreciation	**56.12**
	F. 3% ROR (on fixed assets at the beginning of the year i.e. on Rs. 1500 Crore) Total (D+E+F)	**45.00** **257.84**
	G. Interest on Security Deposit **H. Regulatory Expenses** **Total 3 (G+H)**	3.08 1.68 **4.76**
4	**Grand Total (1+2+3)** **(i.e. Total Revenue Requirement for the Year)**	**1392.30**
5	Total Energy Sale (MU) (i) Within State (ii) Outside the State **Total**	 **3161** 803 3964
6	**Average Cost of Energy** (in paise per unit) (4/5)	**351**

3.9.2 Employee Cost

3.9.2.1 The Board has estimated the employee cost for 2004-05 as Rs. 436.13 crore against the Commission's approval of Rs. 420.12 crore. The Board has proposed an employee cost of Rs. 458.53 crore for the FY 2005-06. The Board has justified the increase to be on account of increase in projected salaries based on the three year CAGR of 2.6% for the period FY 2001-02 to FY 2003-04. DA, other allowances, Medical Expense reimbursement, earned leave, staff welfare expenses and terminal benefits for FY 2005-06 have been projected to increase by 7.5% to cover the cost of inflation. The overtime, bonus, fee & honorarium, LTA, group insurance, pension contribution and leave salary contribution for FY 2005-06 have been maintained at FY 2003-04 levels by the Board. The Board has stated that with stringent labour laws, high number of vacancies, and increasing number of connections, it is difficult to cut down on the number of employees as desired by the Commission.

3.9.2.2 The Board has proposed capitalisation of Rs. 79.02 and Rs. 80 crore of employee cost during the FY 2004-05 and FY 2005-06 respectively. The net employee cost for the FY 2004-05 and FY 2005-06 is shown in the table below:

Table 3.12: Net Employee Cost for FY 2004-05 and 2005-06 (Rs. Cr)

Description	**FY 2004-05**	**FY 2005-06**
Gross Employee Cost	436.13	458.53
Less Capitalisation	79.02	80.00
Net employee cost	**357.11**	**378.53**

3.9.3 Repair and Maintenance (R & M) expenses

3.9.3.1 The Board has projected an expenditure of Rs. 24.67 crore towards R&M expense for FY 2005-06, which represents an increase of almost 20% over the estimates of Rs. 20.56 crore for FY 2004-05. The expenses includes R&M of Plant & Machinery, Transformers, Buildings, Other Civil Works, Hydraulic works, Lines Cable Net works, Vehicles, Furniture & Fixtures, Office Equipments, etc. The Board has justified the hike as essential to cover the increase in cost on account of inflation, increase in asset base and to increase the operational efficiency of the existing assets. The additional amount of Rs. 15.8 crore proposed by the Board during tariff process for maintaining transmission system redundancy is required to maintain the robustness of the system and avoid system failures.

3.9.4 Administrative and General (A&G) Expenses

3.9.4.1 The Board has projected an expenditure of Rs. 27.05 crore for the FY 2005-06 out of which a sum of Rs. 4.83 crore is proposed to be capitalized. This net A&G expenditure of Rs. 22.22 crore represents an increase of 7.5% over the last year's estimates of Rs. 20.66 crore, being an increase to cover the cost of inflation as well as additional expenditure. The Board has stated that the additional amount of Rs. 14.2 crore proposed by the Board during tariff process on account of study for valuation of assets, public interaction programme and consultancy charges are justified on account of usefulness to the Board.

3.9.5 Interest due

3.9.5.1 The Board has projected the total interest liability as Rs. 290.23 crore of which Rs. 133.51 crore is proposed to be capitalised. Thus, the net interest liability works out to be Rs. 156.72 crore for FY 2005-06. The Board has stated that it has been consciously and continuously making debt restructuring and has restructured the loan amount of Rs. 451.85 crore, which has led to the benefit to the tune of Rs. 40.98 crore in FY 2004-05. The Board has indicated that it is also trying to restructure Bonds worth Rs. 58.44 crore for which the matter has already taken up with the KCC Bank Dharamshala and HP State Cooperative Bank, Shimla.

Table 3.13: Net Interest due for FY 2004-05 and FY 2005-06 (Rs Crore)

Description	FY 2004-05	FY 2005-06
Interest due to Financial Institutions	205.76	252.08
Interest on Working Capital borrowings & Other Charges	31.20	38.15
Total	236.96	290.23

Less interest proposed to be capitalized	109.00	133.51
Net Interest	**127.96**	**156.72**
Interest on Security Deposit	3.08	3.08
Total		**159.80**

3.9.6 Investment Plan and Debt Plan

3.9.6.1 After much persuasion by the Commission, the Board has submitted an investment plan for approval before the Commission. The budget estimates for investment for FY 2005-06 as proposed by the Board is Rs. 730.98 crore. The Board has submitted project wise details of envisaged investment under plan schemes as well as non-plan schemes. The investment plan includes Rs. 238.54 crore on account of repayment of loans.

3.9.6.2 The Board has also submitted a corresponding debt plan along with investment plan. The plan indicates that the Board plans to take loans from REC, PFC, Commercial Banks as well as raise finance through Non-SLR bonds. The Board will also be utilising grants to the extent of Rs. 158.23 crore from APDRP Fund, PMGY and Kutir Jyoti Scheme.

3.9.7 Depreciation

3.9.7.1 The Board has proposed depreciation of Rs. 44.85 crore and Rs. 56.12 crore for FY 2004-05 and 2005-06 respectively at the rates prescribed by the Ministry of Power, GOI 1994 notification. The Commission had approved an amount of Rs. 46.05 crore for FY 2004-05.

3.9.8 Rate of return

3.9.8.1 The Board has projected a return of Rs. 35.30 crore and Rs. 45.00 crore calculated @ 3% on the Fixed Assets (arrived at after deducting the Depreciation and subventions from the Govt.) of Rs. 1175.00 crore and 1500.00 crore for FY 2004-05 and FY 2005-06, respectively.

3.9.9 Capitalisation of expenses

3.9.9.1 The Board has proposed to capitalise a total amount of Rs. 218.34 crore as per the break-up given below:

Table 3.14: Capitalisation of Expenses for FY 2004-05 and 2005-06 (Rs. Crore)

Description	FY 2004-05	FY 2005-06
Employee Cost	79.02	80.00
Administrative & General expenditure	4.50	4.83
Interest during construction	109.00	133.51
Total	**192.52**	**218.34**

3.9.10 Cost of supply

Table 3.15: Average Cost of Supply estimated by the Board for FY 2005-06 (Rs. Cr)

Description	FY 2005-06
Net revenue requirement (Net of NTI)	1322
Estimated Energy Sale	
Within State	3161
Outside the State	803
Total	3964
Average per unit cost of energy (paise/unit)	**333**

3.9.11 Unbundled revenue requirement

3.9.11.1 The HPSEB has submitted the revenue requirement separately for Generation, Transmission & Distribution. This is given in the table below:

Table 3.16: Unbundled Revenue Requirement (in Rs. Crore) for 2005-06

Head	Generation	Transmission	Distribution	Total
Repair & Maintenance	8.40	2.40	13.87	24.67
Employee Cost	67.44	24.25	366.84	458.53
Adm. & Gen. Expenses	6.12	2.58	18.36	27.05
Depreciation	21.78	12.48	21.86	56.12

Interest & Finance Charges	131.75	44.94	113.54	290.23
Interest on SD	0.00	0.00	3.08	3.08
Regulatory Expenses	0.40	0.17	1.20	1.76
Return on the Fixed Assets	18.81	8.28	16.66	45.18
Less: Expenses to be Capitalised	73.46	25.37	119.51	218.34
Other income and non-tariff income	13.28	5.59	52.40	71.27
Aggregate Revenue Requirement	**167.96**	**64.15**	**383.5**	**615.58**

3.9.12 Transmission cost

3.9.12.1 The tables below give the quantity of power available for sale at transmission level, the revenue requirement, per unit cost of transmission and the cost of supply at the transmission level proposed by the Board.

3.9.13 Power availability

Table 3.17: Power available for the sale at transmission level

Description	MU
Power availability from generation and purchase	4960
Transmission losses	178
Net available for sale at transmission level	4782

3.9.13.1 The transmission losses have been projected @ 3.45% on the units proposed to be wheeled through PGCIL and @ 3.71% on the balance units)

3.9.13.2 The revenue requirement at transmission level is given in the table below.

Table 3.18: Revenue requirement at the transmission level

Description	Rs Crore
Repair and Maintenance	2.40
Employee Cost	24.25
Admn. & Gen. Expenses	2.58
Depreciation	12.48

Interest and Finance Charges	44.94
Less expenses to be Capitalised	(-)25.37
Sub-Total	**61.31**
Return on the Fixed Assets (3% ROR on fixed asset at the beginning of the year)	8.28
Total	**69.59**

3.9.14 Per Unit Transmission cost

3.9.14.1 The average transmission cost as computed by the HPSEB is shown in table:

Table 3.19: Per unit Transmission cost

Particulars	**Amount**
Transmission Cost	Rs. 69.59 Crore
Energy available for transmission (Total-Losses)	4782 MU
Per Unit Transmission Cost	14 paise

3.9.15 Cost of Supply at Transmission Level

3.9.15.1 The per unit cost of supply at Transmission level is computed as shown below:

Table 3.20: Cost of Supply at the transmission level

Description	**Paise per unit**
Bulk Supply	179
Transmission	14
Total	**193**

3.9.16 Distribution cost

3.9.16.1 The tables below indicate the quantity of power available for distribution, revenue requirement, per unit distribution cost and cost of supply at the distribution level.

3.9.17 Power Availability

Table 3.21: Power available at distribution level

Description	**MU**
Power available at transmission level	4782
Distribution losses	793
Net energy available for distribution system	3964
Sale of energy outside the state	828
Net available for sale at distribution level	**3161**

3.9.17.1 The revenue requirement at distribution level is shown in following table

Table 3.22: Revenue Requirement at the distribution level

Description	**Rs Crore**
Repair and Maintenance	13.87
Employee Cost	366.84
Admn. & Gen. Expenses	18.36
Depreciation	21.86
Interest and Finance Charges	113.54
Interest on SD	3.08
Regulatory Expenses	1.20
Less: Expenses to be capitalised	119.51
Sub-Total	**419.24**
Return on the Fixed Assets (3% ROR on fixed asset at the beginning of the year)	16.66
Total	**435.90**

3.9.18 Per Unit Distribution cost

3.9.18.1 The average distribution cost as estimated by the Board is the table below.

Table 3.23: Per Unit Distribution Cost

Particulars	**Amount**
Distribution Cost	Rs 435.90 Crore
Energy available for distribution	3964 MU
Per Unit Distribution Cost	110 paise

3.9.19 Cost of Supply at Distribution Level

3.9.19.1 The per unit cost of supply at the distribution level is computed as shown below:

Table 3.24: Cost of supply at the Distribution level

Description	**Paise per unit**
Bulk Supply	179
Transmission	14
Distribution	110
Total	**303**

3.9.20 Existing and Proposed Tariff

3.9.20.1 The table below provides a summary of comparison of the existing and tariff proposed by the Board.

Table 3.25: Comparison of Existing and Proposed Tariff

Category	**Existing Tariff**			**Proposed Tariff**		
	Energy Charges (Rs/kWh)	**Consumer Service Charges (Rs. /Con./Month)**	**Demand Charges (Rs./KVA/ month)**	**Energy Charges (Rs./kWh)**	**Consumer Service Charges (Rs./Con./ Month)**	**Demand Charges (Rs./KVA/ month)**
Domestic Supply (DS)						
1. Antodaya Ann Yojna Beneficiaries (upto 45 units /months)	0.70	Nil	Nil	0.70	Nil	Nil
2. Others:						
(a) 1-45 units/month	0.85	11.0		0.85	11.0	
(b) 46-150 units/month	1.30	11.0		1.30	11.0	
(c) above 150 units/month	2.40	11.0		2.40	11.0	
(NDNCS)						
0-20 kW	3.50	50.0	Nil	3.70	50.0	Nil
20-100 kW	3.50	100.0	Nil	3.70	100.0	Nil

Commercial Supply (CS) 0-20 kW 20-100 kW Above 100 kW	 3.50 3.50 3.50	 50.0 100.0 100.0	 Nil Nil Nil	 4.00 4.00 4.00	 50.0 100.0 200.0	 Nil Nil Nil
SMS 0-20 kW Above 20 kW	 3.10 3.10	 50.0 100.0	 Nil 6.20 (PLEC) 9.30 (PLVC)	 3.25 3.50	 50.0 100.0	 Nil 6.20 (PLEC) 9.30 (PVC)
LS EHT HT	 2.15 (Normal) 1.95 (Night) 2.22 (Normal) 2.02 (Night)	 300.0 200.0	 150.0 (Normal) 4.30 (PLEC) 6.45 (PLVC) 150.0 (Normal) 4.45 (PLEC) 6.70 (PLVC)	 2.60 (Normal) 3.30(Peak) 2.80 (Normal) 3.35 (Peak)	 300.0 200.0	 170.0 (Normal) 180.0 (PLEC) 6.45 (PLVC) 170.0 (Normal) 180.0 (PLEC) 6.70 (PLVC)
Agri Agri Total	 0.50	 20.0	 1.0 (PLEC) 1.50 (PLVC)	 0.50	 20.0	 1.0 (PLEC) 1.50 (PLVC)
Water Pumping Supply (WPS) Supply < 11 kV Supply at 11 kV & Above	 3.10 2.70	 100.0 100.0	 6.20 (PLEC) 9.30 (PLVC) 5.40 (PLEC) 8.10 (PLVC)	 3.25 3.00	 100.0 100.0	 6.20 (PLEC) 9.30 (PLVC) 5.40 (PLEC) 8.10 (PLVC)
SLS	2.85	50.0		3.00	50.0	
Bulk Supply Supply at less	 3.50	 100.0		 3.70	 100.0	

than 11 kV Supply at 11 kV & Above	3.15	100.0		3.40	100.0	
TM	6.00	100.0		7.00	100.0	

The Board has not detailed the existing kVAh tariff in its petition

3.9.21 Additional revenue mobilization

3.9.21.1 The Board proposes increase ranging from 5.3% for NDNCS category to 22.4% in LS category in the tariff to recover Rs. 933 crore from sale of power within the State. The Board has not proposed any tariff increase for domestic and agriculture categories. The revenue from sale of power from outside the State and non-tariff income has been estimated to be Rs. 233 crore and Rs. 71 crore respectively. HPSEB has estimated to generate total revenue of Rs. 1237 Crore in FY 2005-06 as per details given below:

Table 3.26: Revenue Assessment with Existing and Proposed Tariff

Description	**Energy Sold (MU)**	**Amount (Rs. Crore)**
Total Revenue Requirement for the year 2005-06		**1393**
Revenue Receipts		
(a) At existing Tariff		
(i) Sale of power with in State	3161	815
(ii) Sale of power outside the State (Net)	803	233
(iii) Non Tariff income		71
Revenue receipt with existing Tariff	**3964**	**1119**
(b) At Proposed Tariff		
(i) Sale of power within State	3161	933
(ii) Sale of power outside the State	803	233
(iii) Non Tariff income		71
Revenue receipt with proposed Tariff	**3964**	**1237**

3.9.22 Revenue deficit

3.9.22.1 At the present tariff, the revenue generated on the projected sale within the State is Rs. 886 Crore including non-tariff income and Rs. 233 Crore from outside State sale. This implies a shortfall in revenue requirement of Rs. 274 Crore as given in the table below.

Table 3.27: Revenue Deficit

Description	**Amount (Rs. Crore)**
Revenue Requirement for the FY-2005-06	1393
Revenue expected at Existing Tariff (with sale of Power with in & outside the State)	1119
Revenue Deficit	**274**

3.9.23 Net Revenue Gap

3.9.23.1 The Board had proposed an additional amount of Rs.118 Crore from the proposed revision of tariff. This leaves an uncovered revenue gap of Rs. 156 Crore for FY 2005-06..

Table 3.28: Net revenue gap for FY 2005-06

Description	**Amount (Rs. Crore)**
Revenue requirement for the FY 2005-06	1393
Revenue expected from the proposed tariff	1237
Net revenue gap	**156**

3.10 Prayer By The Board

3.10.1 The Board has made the following prayers in the petition: -

(a) To approve the ARR

(b) To approve the revenue deficit and the proposed increase in tariff.

(c) Approve creation of regulatory asset for the balance revenue gap to be recovered over subsequent years after discussing the methodology with the Commission.

3.11 Commission's Overview

3.11.1 The above summary of the Petition clearly highlights the following lacunae in the Board's efforts in preparing and submitting the ARR and tariff petition:

- Data compilation practices of HPSEB are not up to the mark, as HPSEB has been unable to submit data on many parameters essential for tariff determination. Also, data submitted by HPSEB had many inconsistencies. HPSEB has changed its submission on different occasions with major changes in values, and has not reconciled the overall numbers of sales, revenue and expenses leading to major confusion.
- The Commission took more than four months to extract some semblance of data from HPSEB, which is incomplete in many respects even now.
- The Commission is of the view that the HPSEB submitted the Petition on December 8, 2004, to merely comply with various Regulations and to circumvent the penal provisions of the Tariff Order for non-compliance. There was lack of seriousness and the submission was a coloured compliance of the Regulations.
- The Commission is surprised that though this is the third ARR and tariff petition filed by the HPSEB, and the Commission has given many directions in the past, HPSEB does not seem to have learnt anything from the process. The base line data has also not improved over the period of time. It is obvious that HPSEB is required to improve on various fronts.
- Due to the above problems in the filing made by the HPSEB, the issuance of Tariff Order has been delayed by three months, as ideally the revised tariff should have been applicable from April 1, 2005.

3.11.2 The Commission has hence analysed the revenue and expenses of HPSEB on the basis of data available with the Commission from various sources and applied its prudency check, and has considered all data in totality to ensure consistency of the numbers.

SECTION 4

OBJECTIONS FILED AND ISSUES RAISED BY CONSUMERS DURING PUBLIC HEARINGS

4.1 INTRODUCTION

4.1.1 The Commission invited suggestions and objections from the public on the tariff petition filed by the Board in accordance with Section 64 (3) of the Act, The public notice in respect of this was published on March 4, 2005 in the following newspapers:

1. The Tribune (Chandigarh edition).

2. Punjab Kesri (Ambala edition).
3. Punjab Kesri (Jalandhar edition).

4.1.2 The last date for submission of the suggestions and objections was April 1, 2005 which was further extended till April 6, 2005. The salient features/disclosure of the petition were published by the HPSEB on March 2, 2005 in the following newspapers:

1. The Tribune (Chandigarh edition)
2. Punjab Kesri (Ambala edition)
3. Punjab Kesri (Jalandhar edition)

4.1.3 The Commission was not satisfied with the contents of the public disclosure and directed the Board to publish additional information. The Board complied with the direction of the Commission by publishing additional disclosures on March 12, 2005. However, since the disclosures were again silent on the increase proposed for Domestic Supply/Agriculture categories, the Commission on its own published additional information on March 14, 2005 informing the public about the provisions of National Electricity Policy (NEP) and the likely increase in domestic tariffs in line with the NEP and the directions of the Tariff Order for FY 2004-05.

4.1.4 The Commission received 37 objections by the stipulated date of April 6, 2005. The Board filed its replies to the objections by April 20, 2005. A copy each of the replies prepared by the Board to the suggestions and objections received was sent to the individual objectors. The objectors could submit their rejoinder, if any, to the Commission with a copy to the petitioner by April 30, 2005. Subsequently, the Commission proposed a series of public hearings as per the following schedule:

Table 4.1: Schedule of Public Hearing

Date	**Venue**
May 4, 2005	Kala-Amb
May 5, 2005	Baddi

May 7, 2005	Manali
May 10, 2005	Dharamshala
May 11, 2005	Dalhousie
16th, 17th & 18th May, 2005	Shimla

4.1.5 The Commission issued a public notice informing the public about the above mentioned schedule of public hearings. All the parties who had filed their objections /suggestions were also informed about the date, time and venue for presenting their case in the public hearings.

4.1.6 The Commission had appointed Sh. P.N.Bhardwaj as consumer representative vide order dated September 28, 2004, in pursuance to the provisions of Section 94(3) of the Electricity Act 2003, to represent the interest of the consumers in all proceedings before the Commission.

4.1.7 The issues and concerns voiced by various objectors have been carefully examined by the Commission. The major objections raised in the public hearings, have been summarized in this section. The list of objectors is enclosed as Annexure 4 A.

4.2 <u>First Hearing At Kala Amb</u>

4.2.1 The first hearing was held at Kala Amb on May 4, 2005 where thirteen (13) parties, as per list at Annexure 4A, had submitted their objections to the petition filed by the Board.

4.2.2 **Brief descriptions of the written objections**: The objectors raised several common issues. These included increase in night time concession, increase in period of night time concession, reduction in peak load charges, more concession for consumers connected at higher voltages, reduction in tariff for LS categories, etc. They also suggested that the Board should increase the efficiency of its operations, reduce manpower cost, minimize T&D loss and reduce interest cost.

4.2.3 **Issues raised during the hearing**: The following objectors made submissions during the hearing:

- Sh. Rajeshwar Sood for M/s Amba Metals
- Sh. Rajesh Gupta for M/s Pashupati Spinning Mills Ltd.
- Sh. C.S.Gupta, for Kala Amb Chamber of Commerce & Industry
- Sh. J.N Singh for M/s Ruchira Papers

4.2.4 The above objectors, while reiterating their written submission stated that the Board needs to update and upgrade its delivery systems to match with the present technological era. They suggested electronic transfer and payment of consumer bills through Banks, adoption of prepaid metering, etc. The objectors also highlighted that the Board had been obtaining stay from the Courts on the directions issued by the Commission, which were aimed at improving the overall efficiency of the Board and better consumer services. The interveners contended that since the Board is handling only hydropower, the average cost of power should not be more than Rs. 2/- per unit and any amount higher than this reflects inefficient and imprudent costs and high overheads. They also requested that occasional peak load violators, who do not violate for more than few hours in a month, should not be treated at par with chronic peak load violators and the tariff should be amended accordingly.

4.2.5 The consumer representative could not be present for the hearing at Kala Amb.

4.2.6 **Reply of HPSEB**: The HPSEB had submitted written replies to the objections filed by the various objectors. To the written objections as well as the issues raised by the objectors during the hearing, the Board responded as follows:-

4.2.6.1 Regarding night time concession the Board has mentioned that in view of the fact that there is limited availability of power during night hours, as per the load curves of the system, further shifting of loads to night time could create problems. Therefore, the Board requested that this demand may not be accepted. Regarding peak load charges, the Board stated that the systems of the Board are overloaded during peak hours, therefore, a reduction of peak load violation charges would further aggravate the situation. Hence, such a demand cannot be accepted. Regarding further reduction of tariff of LS category, the Board mentioned that the present tariff in Himachal Pradesh is much lower in comparison to the other States and submitted the following table to corroborate this fact:-

Table 4.2: Comparison of present tariff of LS category for different states

States	Energy Charges	Demand Charges	Remarks
Himachal Pradesh	Rs 2.80/ KVAH	Rs 170/KVA	Proposed Tariff
Punjab	Rs 3.55/KWh	Rs 135/kW	Existing tariff
Rajasthan	Rs 4.01/KWh	Rs 90/kVA	Existing tariff
Uttar Pradesh	Rs 3.20/ KVAH	Rs 155/kVA	Existing tariff
Andhra Pradesh	Rs 3.71/KWh	Rs 170/kVA	Existing tariff
Orissa	Rs 3.00/KWh	Rs 200/kVA	Existing tariff
Delhi	Rs 3.40/KWh	Rs 150/kVA	Existing tariff
Haryana	Rs 4.09/KWh		Rs 250/KVA of CD. Existing tariff

4.2.6.2 Regarding the high employee cost, various steps taken by the Board to reduce the man power cost are:-

- Abolition of 732 posts of various categories.
- No new posts are being created and no fresh recruitment in Class III and Class IV employees..
- No compassionate employment has been given by the Board since June 2004.
- No daily wages staff has been regularized since June 2004 on completion of 8 years and regularization will be strictly as per judicial order in future.
- The normal reduction in employees by retirement in the coming years would result in 2% reduction annually.
- VRS scheme has been adopted by the Board with effect from April 12, 2005.

– The existing vacancies are being filled up by deployment from qualified staff working in lower posts

4.2.6.3 Regarding the T&D loss, the Board mentioned that system improvement under APDRP programme is under way and the losses would reduce further once the schemes are fully implemented. On the high interest cost, the Board submitted that it has undertaken debt restructuring as follows:-

Table 4.3: Loan restructuring by the Board

Sl. No.	**Name of FIs**	**Amount of loan restructured (Rs Cr)**	**Benefit to Board (Rs Cr)**
1	LIC (Term Loans)	29.66	0.78
2	LIC (NSLR Bonds)	71.00	2.02
3	PFC (Term Loans)	81.67	4.49
4	REC (Term Loans)	58.57	1.69
5	KCC Bank (Term Loans)	210.00	31.87
6	NSLR Bonds	0.95	0.13
Total		**451.85**	**40.98**

4.2.7 **Interim order of the Commission:** At the end of the hearing, the Commission issued interim order directing the Board to submit the following information:

- Firm investment plan for FY 2005-06 along with firm debt plan.
- Revised projections for LS category keeping in mind the large number of new industries coming up in the State including induction furnaces.
- Actual sundry charges for FY 2004-05 and proposed sundry charges for FY 2005-06.
- Single phase, two phase to three phase LT line ratio.
- Views on extending the night time duration.
- Views on competitive bidding instead of banking arrangement

4.3 Second Hearing at Baddi

4.3.1 The second hearing was held at Baddi on May 5, 2005 where seven (7) objectors, as per the list at Annexure 4 A, had submitted their objections to the petition filed by the Board. The Commission also impleaded M/s Secure Meters Ltd., Baddi as a party to clarify on the status regarding the free pilot project at Shimla for pre-paid meters and the issues involved in preparing a tariff for pre-paid meters.

4.3.2 **Brief descriptions of the written objections**: The objectors raised several common issues. The objections raised with respect to the ARR are as follows:

- Lower revenue realization due to reasons not explained by the Board.
- Excess power was supplied to subsidized categories while power cuts were imposed on LS category during winter months.
- Higher T&D loss has resulted in higher purchases by the Board.
- Own generation has been under estimated and the cost of generation is very high for many projects
- Excess power purchase cost estimates
- Very high employee cost
- Excess interest cost estimates
- High outstanding dues against Govt. departments
- Regulatory asset not to be allowed
- Lack of sincerity in implementing the directions of the Commission

4.3.3 The objectors pleaded that the Commission may consider the following requests:

- Rationalize the tariff further to reduce the cross subsidy

- Board be directed to follow merit order dispatch and least cost option for power purchase

- The night time concession period be extended.

- Night time rebate be enhanced

- Peak load restriction should not be levied at least during summer months in view of increased power availability due to new projects being commissioned.

- Increase in rebate for connection at higher voltages

- Lower tariffs for industries is essential considering the locational disadvantages

- Tariff freeze for LS category to enable industries to plan and expand under some degree of regulatory certainty.

4.3.4 **Issues raised during the hearing**: The objectors at Baddi were primarily the Associations of Industries who broadly represented the LS and SMS categories.

4.3.5 **Submissions of the consumer representative** The consumer representative while congratulating the Board for improving its ranking in the Ministry of Power SEB Rating Report stated that sustained efforts are still needed to make the Board an economical and viable entity. He regretted that even after four years of power sector reforms, the consumers are not seeing any benefit being passed on to them on account of efficiency gains, etc. He lamented that the consumer friendly directions of the Commission are being got stayed through courts. He also highlighted some of the information gaps in the petition. He mentioned that there has been a large decrease in generation of power from the Board's own projects and the per unit generation costs of some of the small projects was very high. He emphasized that since the Commission has fixed the generation cost for the private sector companies, then the same yardstick should be applied to the Board's own projects and the consumers should not be burdened with the exorbitantly high generation costs of some of the projects. He mentioned about the transmission constraints in Baddi area and the need for building redundancy in the system. He stated that the high T&D losses are also on account of large-scale theft, which needs to be checked. He stressed the need for speedy redressal of grievances of the consumers and regretted that the Board is still to set up the Consumer Redressal Forum despite the directives of the Commission. He contended that the Board has taken a step backwards by not proposing any increase in tariff for domestic category whereas the Board in its tariff petition of 2001-02 had proposed almost 50% increase in the domestic category and attributed this to the political interference in the working of the Board.

4.3.6 The following objectors also made submissions during the hearing:

Sh. Sachit Jain for BBN Industries Association

Sh. Satish Mehta for M/s Auro Spinning Mills Ltd.

Sh. Rakesh Bansal, for PIA

Sh. S.K.Chawla for M/s Secure Meters

4.3.6.1 The above representatives of the various associations while reiterating their written submission stated that commercial viability of the Board is critical for all the consumers and stakeholders. They highlighted that the Board is financing all its projects through debt only and there is a need to pump in equity to reduce the debt burden as well as the interest cost. The objectors mentioned that there has been an improvement in quality of power except during the winter months when the Board resorted to power cuts. It was suggested that since the high employee cost is a historical legacy of the Govt. it should provide subsidy on this account. The objectors submitted that the contract demand should be reduced in proportion to the power cuts imposed in a particular month. They also pleaded that the PLEC and PLVC should be reduced. It was stated that the Board had imposed power cuts only on those industries which had back up DG sets, which was unfair and discriminatory on the part of the Board as the cost of generation from DG sets was very high.

4.3.6.2 Representative of M/s Secure Meters informed about the issues relating to pre-paid meters. He mentioned that incentives have to be provided to the consumers to adopt the new technology. No security is required for pre-paid meters and the meters manufactured by them have Time of Use features. He suggested a single slab tariff and no disconnection charges. The company proposed to install 50 pre-paid meters for the pilot project for two months at Shimla. The Commission observed that this was not enough and enquired if the company was willing to install 250-500 meters for the pilot project for six months. The company representative agreed to this and thereafter the Commission directed that the arrangements for the pilot project be finalized with the Board and necessary hardware/software put in place for the pilot project.

4.3.7 **Reply of HPSEB**: The HPSEB had submitted written replies to the objections filed by the various objectors. To the written objections as well as the issues raised during the hearing, the Board responded as follows:

4.3.7.1 The lower revenue is due to the actual consumption being lower than projected consumption by various consumer categories. Regarding T&D loss, the Board mentioned that the T&D loss in the Board is among the lowest in the country and that the loss would come down further once the implementation of APDRP schemes is completed. Regarding the high employee cost, the Board reiterated the stand taken in the Kala Amb hearing as brought out above at 4.2.6.2. The Board has made efforts to recover its dues from the Govt. departments and a substantial recovery has been effected. The Board understands the need for tariff rationalization but would like to avoid tariff shocks to the consumers. Regarding the night time concession, PLEC and PLVC the Board reiterated the stand taken earlier that due to system constraints, the demand of the objectors cannot be accepted. The Board contended that the generation figures of its own projects were based on the data of last three years and the reason for the decline in generation was due to climatic changes resulting in very low discharge in the rivers. The Board also clarified that during the winter of 2004, there was acute shortage of power and the Board had decided to impose cuts only on those industries, which had captive DG sets.

4.3.8 **Interim order of the Commission**

4.3.8.1 At the end of the hearing, the Commission issued two interim orders, directing the Board to submit the following information:

- Board's views on merging meter rent with tariff.

- Details of dues outstanding with local bodies and action plan to recover the same.

4.3.8.2 Regarding the pre-paid pilot project, the Commission directed M/s Secure Meters to undertake free pilot project in Shimla totaling 250-500 pre-paid meters for a period of six months. The area and other details to be worked out with the Board and the requisite vending arrangement, etc. to be put in place latest by June 30, 2005. The company was asked to discuss post pilot project commercial arrangement with the Board.

4.4 Third Hearing At Manali

4.4.1 The third hearing was held at Manali on May 7, 2005 where seven (7) objectors, as per list at Annexure 4A, had submitted their objections to the petition filed by the Board. All the objectors except one were from the hotel industry.

4.4.2 **Brief descriptions of the written objections**: The objectors raised several common issues. The objections raised are as follows:

- The power purchase cost, the employee cost and the interest cost are very high and the Board needs to improve its efficiency and productivity to curtail these costs.
- The Board has spent much more than what was allowed in the Tariff Order for FY 2004-05 and should not pass this excess expenditure to the consumers.

- The proposed hike in respect of CS category was too high and unjustified while some other categories have been spared.

- The two part kVAh tariff suits large hotels only and, therefore, the tariff should be applied for consumers above 50 KW only.

- Different tariffs should be fixed for hotels on the basis of their geographical location to compensate for poor revenues due to low occupancy.

- The tariff for hotels be fixed on peak season and off-season basis considering the seasonality of the business.

- Night time concession and period should be increased and trivector meters be installed at all hotels.

- The per unit employee cost of the Board is the highest and the gross inefficiency of the Board is being borne by the consumers.

- The Industrial tariff for units located in the backward areas of the State should be lower as compared to Industries in the Border areas of the State.

4.4.3 **Issues raised during the hearing**: The objectors at Manali were primarily the Hotel Associations who broadly represented the CS category.

4.4.4 **Submissions of the consumer representative** The consumer representative submitted that the consumers of the **State** are still awaiting the gains arising out of improvement in efficiency resulting from power sector reforms. The Board requires immediate financial restructuring. There have been excessive time and cost overruns on the various projects being executed by the Board and the interest on the increased cost should not be allowed as a pass through. The generation tariff petition filed by the Board does not follow the CERC norms and yardsticks and needs to be rejected out rightly. In the generation petition of Bassi Power House, interest component has been shown which is not understood since the project was commissioned in 1969. He mentioned that Government had withdrawn free power, which was subsidizing the weaker section and is now trading the same while social obligations are being left to be met by the Board.

4.4.5 The following objectors made submissions during the hearing:
Sh. C.R. Premi for Manali Hoteliers Association
Sh. Jagarnath Sharma for The Kullu Hotels and Guest House Association, Kullu

4.4.5.1 The above objectors contended that the rates for CS category are already too high and the Board should meet the expenses by reducing costs and improving productivity. They also submitted that the consumers be given a choice between KVAh tariff and KWh tariff and pleaded that the nature of consumption of hotel industry is similar to domestic and, therefore, domestic tariff should be made applicable to hotels.

4.4.6 **Reply of HPSEB**: The HPSEB had submitted written replies to the objections filed by the various objectors. To the written objections as well as the issues raised during the hearing, the Board responded as follows

4.4.6.1 The two part tariff was introduced on the directions of the Commission and the Board proposes the same for the FY 2005-06. The Board is taking various measures to reduce the employee cost, which has been brought out at 4.2.6.2 above. Trivector meters have been installed for all consumers above 20 KW and, therefore, nighttime concession can be put in place. The Board is not amenable to the idea that hotels located in the different parts of the State be charged differently. The Board stressed the fact that Himachal is the only hilly State which is 100% electrified and to maintain the system, considering the very harsh and inaccessible terrain, a very large manpower is required which leads to high employee cost.

4.4.7 **Interim order of the Commission** At the end of the hearing, the Commission issued an interim order, directing the Board to submit the following information:

- Revised petitions for generation tariffs in line with the Commission's terms and conditions for determination of tariff regulations and also the CERC regulations.

- Details of Other Allowances in Employee Cost.

- The Board shall recheck the figures of time and cost overruns for all projects.

- The Board shall re-examine the interest cost resulting from time overruns of all its projects.

- The Board shall clarify the sanctity of generation in 90% dependable year or 75% dependable year as laid down in the approved DPRs.

- Details of the provision made with respect to working capital and corresponding interest charges, on account of tariff differentials in respect of Baspa II and UJVNL projects.

- Details of daily wagers and employee cost incurred on this account.

- All reports prepared by M/s ASCI to be submitted.

4.5 Fourth Hearing At Dharamshala:

4.5.1 The fourth hearing was held at Dharamshala on May 10, 2005 where two (2) objectors, as per list at Annexure 4A, had submitted their objections to the petition filed by the Board.

4.5.2 Brief descriptions of the written objections**: The objectors raised several common issues. The objections raised are as follows:**

- The Board has not taken any step in the last 3-4 years to reduce the various costs such as employee cost, interest and T&D loss etc. The Board has also not complied with the directions of the Commission given from time to time.

- The ARR petition submitted by the Board contains many errors.
- The Commission is requested to intervene to check the very high generation cost of most of the projects of the Board. Further, no future project be taken up without the prior consent of the Commission.

- Though the employee cost is high, there is an acute shortage of engineers and technical manpower and the Board should take immediate steps to recruit the technical manpower.

- The two part KVAh tariff should be introduced for SMS category since it is more progressive and easy to understand as compared to the KWh tariff with its problems and disputes regarding power factor etc.

- PLVC and PLEC should be removed since the Board has surplus power.

- Factory lighting should not be covered under PLVC or PLEC.

- The tariff for agriculture consumers should be simple so that the rural consumers can understand it and are not harassed by the Board.

- The CAGR projections for SMS category seems to be on the lower side since 381 consumers were added in the last six months in Mehatpur area alone.

- A new category for rural consumers should be created and the subsidy of the State Government should be targeted to this category.

- There is total lack of awareness about the sales manual, Tariff Order, Regulations issued by the Commission etc. at the Sub Division level and there is an urgent need to educate the officials who interact with the consumers.

4.5.3 **Issues raised during the hearing**: The objectors at Dharamshala were primarily the Industry Associations who broadly represented the SMS category.

4.5.4 **Submissions of the consumer representative:** The consumer representative reiterated most of the submissions earlier made at Baddi and Manali. He further mentioned that the tariffs in Himachal should be low since H.P. is primarily a hydro State and tariffs of hydro stations are lower as compared to thermal power plants. In his opinion, the progress on APDRP schemes was slow because the State Govt. had not passed on the funds received from the Central Govt. under the scheme. He emphasized the need for an integrated grid system in Himachal. According to him, the Board is presently operating in three islanded modes.

4.5.5 The following objectors made submissions during the hearing:

Sh. C.S. Kapur for M/s Mehatpur Industries Association

Sh. R.P. Kapur for M/s Mandav Industries.

Sh. Surinder Arora, for Dharamshala Hoteliers Association

Sh. M.P. Singh for unorganized domestic consumers

4.5.5.1 The above objectors submitted that ACD was being charged at 1.5 times which was contrary to the directions of the Commission and the regulations. The residential areas within the factory premises should be provided with separate domestic connections as per the practice followed earlier. Other consumers present at the hearing raised the issues of poor repair and maintenance, voltage problems in the rural areas, complex formalities and multiple NOCs needed to get electricity connection. The consumers also complained that the staff in rural areas does not attend to the complaints in time.

4.5.6 **Reply of HPSEB**: The HPSEB had submitted written replies to the objections filed by the various objectors. The Board responded to the written objections as well as the issues raised during the hearing, as follows:-

4.5.6.1 The Board is taking all the necessary steps to reduce the employee cost as already mentioned at 4.2.6.2. The high interest cost is being reduced through debt restructuring. The T&D losses are among the lowest in the Country. The two part tariff has been implemented from April 1, 2005. The Board further clarified that the suggestion regarding reduction in PLEC and PLVC cannot be considered in view of system constraints. The Board allows domestic tariff for power supply to residential quarters of the industries if the LT connections is taken separately for the domestic users.

4.5.7 **Interim order of the Commission** At the end of the hearing, the Commission issued an interim order, directing the Board to submit the following information:

- The scheme on transfer and posting of staff in revenue sensitive areas.
- System of performance appraisal of officers and staff with special emphasis on reputation and integrity.

- Circle-wise number of defective and dead stop meters ending March 31, 2005 and the replacement plan.

- Succession planning in respect of graduate engineers, diploma holders and technical staff and policy of training of officers and employees.

- Recheck CAGR figures for NDNCS, SMS and LS categories.

4.6 Fifth Hearing At Dalhousie:

4.6.1 The fifth hearing was held at Dalhousie on May 11, 2005 where three (3) objectors, as per list at Annexure 4A, had submitted their objections to the petition filed by the Board.

4.6.2 **Brief descriptions of the written objections**: The various objectors raised several common issues. The objections raised are as follows:

- Residential Educational Institutions, which were earlier covered under domestic category, have been brought under NDNCS category and the tariff is very high. The educational institutions are providing service to the society and, therefore, should be levied minimum tariff.

- The Hostels and residential areas inside the school premises be allowed domestic tariff.

- The hotel industry in smaller towns like Dalhousie should be given a lower tariff as compared to more popular tourist destinations like Shimla, Manali etc.

4.6.3 **Issues raised during the hearing**: The objectors at Dalhousie were mainly from the Hotel Associations and Schools.

4.6.4 **Submissions of the consumer representative:** The consumer representative reiterated most of the submissions earlier made at Baddi and Manali. He further mentioned that the replies submitted by the Board to the objections raised by the consumers were vague and non-committal. He specifically pointed out that the details of the interest capitalized have not been given by the Board in its submission.

4.6.5 The following objectors made submissions during the hearing:
Sh. Manohar Chaddha for Dalhousie Hoteliers Association
Capt. G.S. Dhillon for Dalhousie Public School, Dalhousie.
Sh. Roshan Negi, for Yog Manav Trust, Banikhet

4.6.5.1 The above objectors contended that the Hotel Industry is very seasonal in nature and, therefore, seasonal tariff should be given. Separate meters be provided in the School premises for hostels and residential quarters and domestic tariff be levied on them. An NGO present in the hearing requested that social and spiritual organizations should be charged domestic tariff as these are performing social welfare activities.

4.6.6 **Reply of HPSEB**: The HPSEB had submitted written replies to the objections filed by the various objectors. To the written objections as well as the issues raised during the hearing, the Board submitted as follows:-

4.6.6.1 The Commission has done the categorization and, therefore, the Commission may take a view on this. Further, no distinction should be made among similar consumers located in different parts of the State. The consumers especially schools are at liberty to take separate connections for the residential and hostel premises and would be charged accordingly. The Board highlighted that it had become the favorite whipping boy of the consumers, the Commission and the Govt., despite many steps being taken to improve the efficiency and reduce costs

4.6.7 **Interim order of the Commission** At the end of the hearing, the Commission issued an interim order, directing the Board to submit the following information:

- Actual revenue assessed for the months of April & May 2005 in comparison to corresponding months of 2004 in respect of categories where KVAh tariff has been introduced.

- Whether any study has been undertaken to determine the employee productivity and the report of the same be submitted.

- Final report of restructuring of HPSEB if submitted by ASCI.

- Whether the Board has any scheme for reward and punishment for good and bad performance.

- Views of the Board in handing over high generation cost projects in tribal areas to Himurja or Panchayats or Co-operative Societies.

- Details of working capital to be submitted.

4.7 Sixth Hearing at Shimla

4.7.1 The sixth hearing was held at Shimla on May 16, 2005 where five (5) objectors, as per list at Annexure 4A, had submitted their objections to the petition filed by the Board.

4.7.2 **Brief descriptions of the written objections**: The various objectors raised several common issues. The objections raised are as follows:

4.7.2.1 The CII and PHD Chambers of Commerce and Industry raised the similar issues, which were raised by various Industrial Associations at Baddi, as detailed above at 4.3.2.

4.7.3 **Submissions of M/s ACC, Barmana/GACL Darlaghat**: The representative of these two companies submitted the following:

- The petition of the Board does not provide details and rationale for the expenditure head and revenue projections.
- The request for Regulatory Asset should be allowed only in exceptional circumstances, which is not warranted at this stage. The petition proposes to increase the cross subsidy which is against the provisions of the Act as well as the directions given by the Commission in its previous Tariff Orders. Therefore, the Commission should move on the same path and reduce cross subsidy.

- The proposal of the Board violates the Regulations of the Commission, the National Electricity Policy and the orders of the Commission contained in the Tariff Orders issued, since the Board has proposed an increase in cross subsidy, postponing recoveries of cost and discouraging efficiency
- There has been continued non compliance of the various directives of the Commission especially regarding the various studies to be undertaken by the Board with regard to unbundled cost, employee cost, financial restructuring, fixed asset register, material management, marginal cost pricing, voltage wise data, physical verification of assets, etc. Since these studies are still not completed, the likely benefit has not accrued to the Board.
- The power purchase cost has been over estimated by the Board.
- The employee cost, interest and A&G expenses have been over estimated.
- The revenue has been under estimated.
- The LS tariff should be reduced to retain the high value industrial consumers failing which the industries may opt for open access or captive generation.

4.7.4 **Issues raised during the hearing**: The objectors at Shimla were from the Industries Associations, Major Industries of H.P., State Govt. and the General Public.

4.7.5 **Submissions of the consumer representative:** The consumer representative reiterated most of the submissions earlier made at Baddi and Manali. He mentioned that the employee cost for generation projects had been allocated arbitrarily and requested that ROI based returns be allowed for generation projects. He stated that the deprecation fund has not been created and enquired about the utilization of the depreciation amount. He suggested that the State Govt. should provide subsidy beyond the prudent generation cost of Rs. 2.50 and Rs.2.25 per unit, which has been allowed by the Commission to all Small and large Hydro Projects being executed by the IPPs. He stated that ASCI's report on Load Flow studies indicates serious transmission constraints in some segments, therefore, the investment plan of the Board should address this issue. He further highlighted that there is difference in the ARR projections and the budget estimates submitted to the Vidhan Sabha.

4.7.6 The following objectors made submissions during the hearing:

Sh. Vivek Sharma for M/s ACC and M/s GACL

Capt. J.S. Thakur for Indus Hospital.

Sh. Asad Wasi for PHD Chamber of Commerce & Industry

Sh. Ashok Tandon and Sh. Guleria for CII

Sh. Ashok Kumar Sood for M/s HM Steels and M/s Rama Steels.

4.7.6.1 The representative of M/s ACC and M/s GACL reiterated the issues raised in the written submissions as already mentioned at 4.7.3. The representative of Indus Hospital requested for creation of separate category for charitable institutions like hospital, etc. The representative of CII while complimenting the Commission for its role in boosting the investor confidence in the State emphasized the need for all the stakeholders to work together for speedier power sector reforms. He contended that the generation from the Board's own projects was declining and an investigation to identify the reasons needed to be carried out immediately. He suggested that the WPS supply being essential in nature should be exempted from PLVC and PLEC charges. Other objectors submitted that EHV consumers should be treated as special category and COS tariff should be levied on such consumers.

4.7.7 **Reply of HPSEB**: The HPSEB had submitted written replies to the objections filed by the various objectors. The Board responded to the written objections as well as the issues raised during the public hearing as follows:-

4.7.7.1 There is lower revenue realisation on account of reduced consumption by the consumers. The actual sales and revenue figures for FY 2004-05 have been compiled and submitted to the Commission. The T&D losses are amongst the lowest in the Country and efforts to further reduce them are under way. Regarding high employee cost, the submission of the Board is the same as brought out above at 4.2.6.2. The increased A&G charges are on account of inflation and requirement of specialized skills. The interest charges have been reduced by debt restructuring as brought out above at 4.2.6.3 and steps to further restructure the loans are in process. The rationalization of tariff and reduction of cross subsidy would be considered after the COS study has been conducted. Till such time, tariff shocks to the consumers are proposed to be avoided. The night time concession period and amount should not be increased as the load curves of the total system of the Board indicate that there is very limited scope for shifting industries to the night time. The peak load charges are essential to curtail the system peak and the over all stability of the grid.

4.7.7.2 The tariff of LS consumers is low in comparison to the other States in the Country and, therefore, the proposal for increasing the same is justified. The effective cross subsidy from the LS category is only marginal. The Board has submitted the details of sales, number of consumers, connected load etc. to the Commission and would furnish any other information sought by the Commission. The Board is taking all necessary measures to comply with the directions of the Commission and regular review hearings are being held by the Commission to monitor the same. The Board does not agree with the calculations provided by M/s ACC and M/s GACL in respect of power purchase quantum and cost, T&D loss, employee cost, A&G expenses, interest charges, depreciation and revenue estimations

4.7.8 **Interim order of the Commission:** On completion of the hearing, the Commission issued an interim order, directing the Board to submit the following information:

- Details of APDRP funds sanctioned and released to the Board till date.
- Year wise details of refunds in inter state purchase of power from Central Generating Stations.
- Details relating to depreciation fund, depreciation reserve built up, accumulated depreciation and utilization of the amount.
- Scheme for incentivising the employee of generating stations for improving the PLF.
- Plan for integrated operation of the grid in the State.
- Copies of DPRs of all its generating projects.

4.8 <u>Seventh Hearing At Shimla</u>

4.8.1 The seventh hearing was held at Shimla on May 17, 2005 where one (1) objector i.e. the Govt. of Himachal Pradesh, had submitted its objections to the petition filed by the Board. In exercise of the powers conferred by Section 94 of the Act, the HPERC appointed Sh.R.K.Gupta, Seva Niwas, Engine Ghar, Sanjauli, Shimla, to represent the interests of un-organised domestic and LT consumers during the public hearings.

4.8.2 **Brief descriptions of the written objections**: The State Govt. through Additional Secretary (Power) to the Govt. of H.P. had raised several issues. The written objections are as follows:

- The State Govt. would not be able to open a revolving letter of credit for payment of subsidy and instead the subsidy amount would be settled with the Board on quarterly basis.
- The subsidy amounting to Rs. 34.59 crore has been released to the Board, which was due up to December 31, 2004.
- The Govt. Health Institutions, Educational Institutions, Panchayat Ghars, Patwarkhanas and water pumping supply should be charged tariff of the domestic category. The above categories should also be treated as per policy directions under section 108 of the Electricity Act 2003.
- No service charge should be levied on domestic consumers who consume up to 150 units per month.
- The free power available to the State Govt. would be disposed off at competitive rates in the market instead of disposing it through the Board. The free power of about 600 MU would be available to the Board @ Rs. 2.44 per unit from April 1, 2005 to October 31, 2005. The rate of free power for the winter months shall be equal to the average price of HPSEB’s long-term procurement from other sources.
- The State govt. shall charge royalty in the shape of free power with effect from April 1, 2005 from HPSEB’s generation projects constructed after September 1990.

4.8.3 **Issues raised during the hearing**: Sh. H.R. Sharma, Additional Secretary (Power) to the Govt. of H.P. reiterated the written submission made by the State Govt. He clarified that the State Govt. had to resort to selling its free power share to other States because of acute shortage of financial resources and to meet the social service goals of the Govt. He stated that the State Govt. would convey its decision regarding the categories to be subsidized and the quantum of subsidy after the Tariff Order is issued and the subsidy amount is quantified.

4.8.3.1 Prof. R.K. Gupta emphasized the need for bringing about drastic changes in the Board to make it sustainable and responsive to the aspiration of the consumers. He suggested that spot billing and collection should be implemented by the Board. He requested that the Board must develop a special plan to facilitate the senior citizens. There should be billing collection centers, which should be located at more accessible area so that aged, infirm and handicapped consumers are able to pay their bills in time. He mentioned that the quality of the power is not very good and immediate steps should be taken to improve it. He further mentioned that there was negligible or no awareness among the consumers about their rights and obligations and a special programme needs to be implemented for educating and informing the consumers.

4.8.3.2 Sh.R.L.Justa on behalf of an NGO forum submitted that the Board should not have taken up the work of Larji Project as it was an unviable project abinitio. He suggested that such projects should be monitored by an independent group of experts. He proposed that the recommendations of the enquiry committee constituted by the Commission to look into the high time and cost over run of Larji Project should be implemented in toto by the Board. He suggested that the State Govt. should review its policy regarding allotment of hydro projects so that the Board is not saddled with high cost projects while the low cost projects are allotted to private sector companies. He stressed the need for autonomy to the new generation companies created by the Board i.e. HPJVVNL and Pabbar Valley Corporation. He also suggested that the unallotted small hydro projects are not feasible, therefore, the tariff for such projects should be atleast Rs.3/- per unit.

4.8.4 **Reply of HPSEB**: The HPSEB had submitted written replies to the objections filed by the various objectors. To the written objections as well as the issues raised during the hearing, the Board responded as follows:-

4.8.4.1 To the objections of the State Govt., the Board mentioned that the decision on the issues rests with the Commission. Further, the free power has not been taken into account in the revised figures submitted to the Commission and the free power would be availed as per the merit order. The Board submitted that it is making all efforts to provide better services to the Consumers and informed that a public interaction programme has

been prepared in consultation with the Commission, to bring awareness among the consumers about their rights and obligations and other related issues. The Board has also introduced spot billing machine and would also take suitable steps to provide more bill collection centers at accessible points. The Board will also consider bill collection through banks.

4.8.5 **Interim order of the Commission:** At the end of the hearing the Commission issued an interim order, directing the Board to submit the following information:

- **Copy of the approved pilot project for re-organization of Shimla Circle.**
- **Actual revenue and expenditure figures for the FY 2004-05.**
- **Plan for rehabilitation of Thirot Project in Lahaul Valley.**
- **To re-check the CAGR for temporary supply.**
- **Plan for collection of bills through local bank in rural areas.**
- **Plan for facilitating senior citizens, disabled, infirm and destitutes**
- **Plan for giving financial and administrative autonomy to PVCL and HPJVVNL.**

4.8.6 The Commission directed the State Govt. to provide the following details:-

- **Whether the State Govt. intends to provide subsidy to any category. In case the Govt. intends to provide subsidy, the quantum of subsidy to be provided be specified.**
- **The manner in which the State Govt. proposes to provide the subsidy amount, whether on monthly or quarterly basis as well as the mode of the payment.**

4.6 The Commission's view point on the issues raised:-

4.6.1 **ARR filed for FY 2005-06**. The Commission is of the view that the petition filed by the Board was prima facie not in conformity with the provisions of the Electricity Act 2003, the National Electricity Policy as well as the signals given in the previous Tariff Orders issued by the Commission. No increase was proposed for domestic and agriculture categories by the Board. Instead, an increase in the tariffs of the subsidizing categories and reduction in the tariffs of the subsidized categories had been proposed. The tariff petition was grossly misleading especially for the domestic consumers as no increase had been proposed in their tariff proposal. Thus, not many domestic consumers came forward with their objections. It is tantamount to denying them an opportunity of being heard, which could become the sole ground for assailing the Tariff Order. Therefore, the Commission had to appoint a Consumer Representative for the un-organized domestic consumers.

4.6.2 **Petitions for generation tariffs**: The Commission was not happy with the quality and contents of the tariff petitions for generation tariffs of the Board's own projects, as these were neither in line with the CERC formats nor did they comply with the Regulations and guidelines issued by the Commission. The project wise data was based on assumptions though the Board had emphasized that the gross figures were correct. It seems to be a contradictory statement because the gross figure should match with the summation of the project wise costs.

4.6.3 **Gaps in the information submitted in the petition**: The Board has not been able to supply complete and credible information on many aspects and the Commission has been left with no option but to exercise prudency check to fill the gaps for finalising the ARR.

4.6.4 **Regulatory asset:** The Commission is not in favour of allowing the creation of a Regulatory Asset as it feels that this should be resorted to in critical situations, which have not arisen. The Board should curtail its expenditure and attempt to cover the gap by proposing increase in tariffs especially of the domestic category, which it has conveniently chosen to ignore.

4.6.5 **Lower revenue realization and higher expenditure**: The Commission is concerned about the excess expenditure incurred by the Board beyond what was approved in the last Tariff Order. This reflects lack of financial discipline, indifferent and contemptuous attitude of the Board aimed at undermining the sanctity of the Tariff Order.

4.6.6 **Excess power purchase cost**: There has been a substantial increase in the power purchase cost. The Commission understands that one main factor was perhaps the increase in coal prices which has increased the tariffs of CGS. However, the Commission would exercise prudency check.

4.6.7 **Very high employee cost**: The Commission is seized of the matter and several directions have been issued in the previous Tariff Orders to curtail and reduce the high employee cost. In fact some of the achievements cited by the Board in reducing the employee cost have been due to the constant prodding and pressure from the Commission.

4.6.8 **High T&D loss**: The Commission does not agree with the figure submitted by the Board and has reasons to believe that the T&D loss should be within the range approved in the last Tariff Order and the Commission would expect further reduction once the APDRP schemes are completed. However, to settle the issue once for all, the Commission has assigned the T&D loss study to consultants and would take a final view once the study is completed.

4.6.9 **Excess interest costs**: The Commission had in its previous Tariff Orders directed the Board to restructure high interest loans and the progress mentioned by the Board is a result of the constant review and monitoring by the Commission.

4.6.10 **Depreciation** The Commission's approach in approving the depreciation amount for the FY 2005-06 has been detailed in Section 6 of this Tariff Order. However, since the Commission has already directed the Board to prepare fixed asset register based upon physical verification of assets by an independent agency, the issue would be re-examined in details after the study is complete

4.6.11 **Financial restructuring and the need for increasing equity:** The Commission is aware of the need for financial restructuring since all new projects are being financed through debt and there is an acute need for pumping in more equity to reduce the interest burden and also to claim higher ROE. The present level of equity is only of the order of 13.5% of the total GFA of the Board.

4.6.12 **Outstanding dues of the Govt., local bodies**: The Commission is not satisfied with the efforts made in recovering the legitimate dues from the Govt. departments and local bodies. The Commission in its Tariff Order for 2004-05 had directed the Board to increase its collection efficiency from 92% to 99% and the Commission reiterates this stand. Whatever increase had taken place is almost entirely on account of tough stand taken by the Commission.

4.6.13 **Elimination of cross subsidy:** The Commission is guided by the Act and the National Electricity Policy, that cross subsidies shall be reduced and eliminated over a period of time, as may be specified by the Commission. It is not open to the Commission to increase the cross subsidy and then reduce and eliminate it. The Board's proposal to hike the cross subsidy, goes against the very objects and purposes of the Act, the NEP and the regulatory approach, as outlined by the Commission in its previous Tariff Orders.

4.6.14 **Lower tariffs for industries considering the locational disadvantages:** The Commission reiterates that the tariffs would have to eventually reflect the cost to supply for each category of consumer. Sooner the voltage-wise, category-wise, month-wise, TOU-wise data is ready, earlier would the Commission be able to realign the tariffs in line with the category wise costs. This, in the Commission's viewpoint, should incentivise industry to continue and grow their operations in the State.

4.6.15 **Declining generation of Board's projects**: The Commission is concerned with the sharp decline in generation from the various projects especially Giri and Bassi and feels that a detailed investigation into the reasons for the decline needs to be carried out since all generation projects of the Board need to be run optimally to enhance the revenues of the Board.

4.6.16 **High Generation cost:** The Commission is aware of many projects which have very high generation costs and the Board has defended it on the grounds of social responsibility, especially in tribal areas. The Commission, while fixing the tariffs for these projects has taken a considered view after accounting for the prudency.

4.6.17 **Excessive time and cost overruns**: The Commission has already made its stand known to the Board that it would not allow interest costs beyond the prudent limit in the ARR and has exercised the same in this Tariff Order

4.6.18 **Compliance of directions of the Commission**: The Commission had issued several directions in the previous two Tariff Orders and many sets of information were supposed to flow from these directives, but the Board had constantly put forward the defence of pending deliverables from ASCI. The Commission expresses its anguish that the various reports, which were due by May 31, 2005, are still not received which puts a question mark on the stand of the Board as also the credibility of ASCI to produce the required deliverables. The issue has already been discussed in details in Section 2 of the Order.

4.6.19 **Peak load charges**. The situation has to be viewed in the overall context of peak deficit in the country and the pricing of such energy. The price to the consumers must signal the cost to the Board in supplying power during the peak load hours. However, efforts have been made in this Tariff Order to rationalize these charges.

4.6.20 **Rebate for supply at high voltage** The Commission has already taken steps in the last Tariff Order to rationalize the rebates provided for supply at high voltages and shall further carry on the exercise.

4.6.21 **The night time concession**. The Board has consistently taken a stand that the system load and frequency profile over the whole year does not indicate any significant margin for shifting the loads to night time. The Commission does not subscribe to such a view point and logic, since it does not anticipate any major or sudden shift of load to night time now, since the concession has been in place for last four years and the Commission would rationalise night hour incentive further in this Order.

4.6.22 **Bill collection centers and collection through banks:** The Commission is seized of the problems of the senior citizens, infirm and handicapped consumers in making timely payments of the bills and would issue suitable direction in this order to this effect.

4.6.23 **Consumer awareness:** The Commission, in its first Tariff Order, had directed the Board to prepare a public interaction programme aimed at greater consumer awareness. The Board had torpedoed the well meaning direction then but now the Board has agreed to implement public interaction programme, on the guidelines of the Commission, which would be implemented from July 1, 2005.

4.6.24 **Rationalisation of categories**: There has been demand for transferring certain classes of consumers from one category to another. The Commission has examined the matter and has decided not to make any change in this Tariff Order.

4.6.25 **Contract demand be reduced in proportion to the power cuts imposed in a particular month**: The Commission has considered this request and has decided to deal with this subject in the Standards of Performance Regulations to be issued by the Commission.

4.6.26 **Seasonal tariffs for hotels**: The Commission is unable to accept this demand of the consumers of the hotel industry as it apprehends problems in implementing a seasonal tariff. However, the consumers can re-submit revised contract demands whenever there is anticipated seasonal change in demand.

4.6.27 **Factory lighting not be covered under PLVC or PLEC**: The Commission agrees with this suggestion and this has been incorporated in the section 8 relating to tariff philosophy.

4.6.28 **Complex formalities and multiple NOCs needed for getting electricity connection**: The Commission understands the plight of the consumers in obtaining the electricity connection. The Commission had in the case “Mohit Chaudhary v/s HPSEB” passed an order that no NOCs are required to be taken for getting a connection. However, the Board went in appeal against the order of the Commission and obtained a stay from the Hon’ble High Court of HP.

4.6.29 **Integrated grid system in Himachal**: The Commission has already impressed upon the Board that they need to carry out a study for integrating various islanded modes so that the power available from various sources can be transferred to any part of the state thereby providing flexibility in system operations and to attain optimality. This is all the more important keeping in view the requirement for providing open access.

4.6.30 **WPS supply being primarily essential be exempted from PLVC and PLEC**: The Commission does not agree with this since in its view, the State Govt. may provide subsidy under section 65 of the Electricity Act 2003 to the Board to the extent the reduction is required.

4.6.31 **GoHP Objection**: No direction of the State Govt. under section 108 of the Electricity Act 2003 is operative in any matter related to tariff in accordance with Section 65 of the Act.

SECTION 5

INTERACTION WITH OFFICERS AND MEMBERS OF HIMACHAL PRADESH STATE ELECTRICITY BOARD (HPSEB)

5.1 Introduction

5.1.1 The Commission vide letter dated April 16, 2005 to the Chairman, HPSEB requested the Board to direct its various heads of departments to attend the interactions with the Commission as per schedule given in **Annexure-5A** for formal interaction to enable the Commission to understand the strategies, systems and the working procedures of their departments as well as the problems and difficulties being faced by them and the suggestions proposed by them to bring about efficiency and improvement in the working. The Commission also wrote to the Principal Secretary (MPP & Power) to the Govt. of H.P. for similar interaction to understand the policy and programmes of H.P.Govt. with regard to Power Sector and provisions of subsidy by the State Government to any consumer or class of consumers as per section 65 of the Electricity Act 2003.

5.1.2 The Commission also interacted with the Managing Directors of Himachal Jal Vidyut Vikas Nigam Ltd. and Pabbar Valley Power Corporation Ltd. to understand their working and financial and administrative autonomy available to these Corporations.

5.1.3 The interactive meeting with the various officers of Board concluded with the final meeting with all the Members of the Board including the Chairman on May 30, 2005.

5.1.4 Separate detailed questionnaires were issued for the interactive meetings with each officer in advance while for the Whole Time Members of the Board, a list of issues numbering 67 arising out of interaction with officers of the Board, Managing Directors of H.P. Jal Vidyut Vikas Nigam Ltd. and Pabbar Valley Corporation Ltd., was issued.

5.1.5 Responses to various questionnaires, were submitted by the respective officers in writing on the dates of interaction, while left out and additional information were supplied by them subsequently on the dates promised by them. Their responses to the questionnaires as well as the additional information supplied by them and internal notes following the interactions are on record of the Commission.

5.1.6 Principal Secretary (MPP & Power) to the Govt. of H.P. did not attend the meeting either on scheduled dates i.e. May 31, 2005 or subsequently, thus not availing of the opportunity accorded by the Commission to represent the Government's viewpoint on various policy matters relating to Power Sector.

5.1.7 The highlights of such formal meetings and issues raised during these interactions are given below:

5.2 Chief Engineer (Operation), Central Zone, Mandi & SE(M&T), Bilaspur

a) In the APDRP schemes, deviations have been made in respect of 100 number single phase transformers and 3 phase transformers have been provided instead of single phase transformers.

b) Against the spirit of directions of Commission for phased unmanning of even the existing substations, keeping in view the attrition of existing substations staff, new substations have been proposed in manned mode.

c) 33 KV substations under APDRP are being executed on turnkey basis, while other works scattered at different places are being executed departmentally.

d) Keeping in view the low generation and high cost of generation/unit of Thirot Project, possibility of handing over this Project to private entrepreneur may be examined.

e) Due to fatal and non-fatal accidents of Board's employees and others, huge claims are required to be paid by the Board. To meet such liabilities legal liability insurance scheme should be introduced.

f) There is general shortage of qualified manpower and engineers and lack of skills in the field.

g) There is urgent need for establishing the Power transformer repair workshop in the Board.

h) There is necessity for creating a separate protection cell to look after this specialized job for which postgraduate engineers with electronics or computer background should preferably be posted.

i) It was suggested by the Chief Engineer that there should be review of the engineering cadre by some independent Consultant.

j) Outturn of vehicles is very high, on account of being old and due to restrictions on plying the vehicles. One jeep in M&T Division, Solan yields outturn rate of Rs.34/KM.

5.3 Chief Engineer (Operation) North Zone, Dharamshala & SE(Op)Circle, Dalhousie:

a) New 33 KV substations are being constructed in unmanned mode.

b) It was informed by C.E. that the generation cost of Killar Micro Hydel Project has come down to Rs.16/- per unit. This high cost of generation however, is on account of natural calamities and restoration and rehabilitation costs.

c) T & D losses in North Zone are showing decreasing trend from 31.6% in 1999 to 27.62 in March 2005.

d) There is problem of trained, skilled staff including qualified engineering cadres. Cadre review is required to be done.

e) There is shortage of fuel-efficient vehicles for inspection, maintenance and transport.

f) Latest position of material purchased locally and lying unutilized was sought from the C.E.

5.4 Chief Engineer (Operation) South Zone, Shimla:

a) Under APDRP scheme, neither was any requisition sent by the C.E. nor any single phase transformer purchased by the Board.

b) There is problem of vehicles as no new vehicle has been provided to this Wing by the Board. The fixed limit of Petrol is also hampering the inspections required to be carried out and maintenance of supply system.

c) There is shortage of 17 AEs and 91 JEs, which is affecting the works of this Wing.

d) There are 16295 dead stop meters in this Wing which would be replaced by June 30, 2005.

e) 100% Kvah metering above 20 KW has not been completed and the same was promised to be completed before the end of the month.

f) No legal liability insurance in case of accident has been introduced in the Wing.

g) There is shortage of qualified, skilled manpower. There is need for training and succession planning.

h) Net sundries debit has been converted into energy and deducted from losses.

i) Generation cost of Rongtong Power house being high, it may be considered for handing over to private party.

5.5 C.E. (System Planning), Director (PSP), Director (Inter State) and SE,SLDC:

a) During FY 2004-05, energy sold under UI charges amounted to Rs.87.77 Crore and energy purchased amounted to Rs.19.35 Crore.

b) Average price of power purchased including wheeling charges during summer is Rs.1.69 /Unit and during winter it is Rs.1.93/Unit.

c) There is shortage of qualified staff. In the R&P rules, educational qualification should be upgraded to post graduation level to cater to latest advancement in technology and complexities of power sector.

d) It was suggested that best persons should be posted in generating stations by giving them more and more incentives.

e) It was stated by CE (SP) that REC schemes have been discontinued since April 2005 and now schemes are being prepared under Rajiv Gandhi Vidyutikaran Yojna.

f) It was given to understand that the computerization of various activities is in progress.

g) Commission asked CE (SP) to explore the possibility of PFC grant of Rs.66 lacs for T&D study, Rs.2.2 Crore for Public Interaction Programme and Rs.11 Crore for verification of assets based upon GIS/GPS technology.

5.6 Chief Engineer (Material Management)

a) No single-phase transformers were purchased by CE (MM) since no requisition was received from CE (Op). It would however, be ensured that purchases are made strictly as per the scheme provisions.

b) There should be procedures for automatic recovery of cost of material ordered by local offices which remains unutilized for long time.

c) It was given to understand that rate contracts and benchmark prices for decentralized items shall be put in place within four months.

d) It was found that tenders for third party inspection have been received and are under process.

e) It was stressed by the Commission that material for various works should be ordered in packages with or without labour components. Packages with labour components should be in respect of lines and distribution transformers and without labour components for 33 KV susbstations.

5.7 Chief Engineer (P&M)

a) Year-wise Plan Projections for ten years 2004-05 to 2013-14 were given by Chief Engineer (P&M).

b) It was intimated that computerization of stores has been implemented in CE (MM)'s office. Shimla Circle store will be done within a month and for remaining Circle stores it shall be implemented within six months depending upon availability of funds. CE (P&M) was asked to explore the possibility of grants relating to various reform studies.

c) Inspection Manual Committee shall submit its report by the end of the month, as already committed by the Board.

d) No training is being given to officers sent for inspection.

e) Member (F&A) is heading the control, coordination and monitoring Committee which will also look into computerized MIS based monitoring of projects.

f) It was given to understand that completion of Larji Project by 2005-06 is highly unlikely.

5.8 Chief Engineer (PSP)

a) CE (PSP) was asked to submit the detailed status of PPAs approved and pending with the Board which was supplied. He was also asked to supply the details of application fees, processing fee, etc. collected during last 4 years through the tenders for allocation of hydro projects to private parties. It was informed that from April 1999 to Dec. 2004, the amount received from sale of DPR is Rs.5,40,000/-, sale of bid documents Rs.1,01,27,500/- and on account of processing fee is Rs.1,48,00,000/-, aggregating Rs.2,54,67,500/-.

b) It was suggested that Government of H.P. should be given statutory advice to consider tariff based allocations of the projects to private parties.

5.9 Chief Engineer (Transmission) & Director (Design), Substation Hamirpur:

a) CE (Transmission) was asked to confirm if the interface metering is complete on all substations.

b) He was also asked to submit the status regarding capacity and operational constraints for inter-State and intra-State open access and views on synchronizing the islanded modes.

c) Proposal for reorganization etc. of transmission wing was asked to be submitted by May 29, 2005. This has not been received.

d) He was also asked to intimate the commissioning date of Andhra, Nogli, Jeori & Kunihar, PLCC Link.

e) CE(T) handed over ABB report dated April 25, 2005 on harmonics which is very damaging.

f) Commission suggested to maintain circle- wise stores for transmission wing and transfer of inventories of spares and equipment relating to Transmission wing lying in stores of operation wings. It was also suggested to procure the material in packages.

g) Following difficulties were pointed out by CE(Transmission):-

i) Cumbersome procedures in the Board resulting in time and cost overrun.

ii) Maruti cars not suitable for tough terrains.

iii) Non-availability of qualified and trained staff and non-recruitment of fresh graduate engineers.

iv) Average age of technical staff is very high.

v) R&P rules needs review in the light of changed environment.

5.10 CE (Generation) Sundernagar:

a) A report on incentives on PSEB/BBMB pattern proposed for power house staff to be sent by CE (Gen).

b) There is declining generation from Bassi and Giri Power houses which should be investigated.

c) The matter regarding taking over the schools and hospitals run by Generation Wing which is under correspondence with the State Govt. requires to be pursued for final decision.

d) It was suggested by CE (Gen) that automatic and remote metering can help in improving the efficiency.

e) He also suggested spot purchase Committee for emergency purchases.

f) Following difficulties were felt:

i) Non-recruitment of graduate engineers and qualified staff. Separate cadre for AE/XEN of generation wing

ii) Lack of training, qualified staff and average high age of technical staff.

iii) Inadequate delegation of financial and administrative powers, inadequate essential spares, shortage of vehicles, cumbersome procedures

5.11 CE (Commercial):

a) Commission feels that there is an availability of 15 to 50 MW during night time and therefore, does not agree with the Board's view on night time concessions. Commission has extended the night time concession as per the available settings in electronic meters.

b) It was decided to call M/s Secure Meters for honouring their commitment on pre-paid metering pilot project.

c) Comprehensive instructions regarding section 56(2) of Electricity Act shall have to be issued to all SDOs and to audit and accounts personnel that any arrear to be recovered from a consumer has to be continuously shown in the bills of such consumers or else such amount may be recovered from erring officers/officials.

d) CE (Comm) to send the copies of Regulations upto lowest officials concerned for implementation as the law has to be abided. Soft and hard copies of the Regulations can be provided by Commission to the Board.

e) CE(Comm) wanted 5 days time for publication of notification after issue of Tariff Order.

f) It was agreed by the Commission that a copy of communication addressed to the Secretary, HPSEB be also faxed to CE (Comm) who is nodal officer for regulatory affairs.

g) Regulatory cell of the Board needs strengthening. It has to be under some officer of the rank of CE or above and staffed with able and competent people in Law, Economics, Business Administration, Chartered or Cost and Works accountant, besides engineers.

h) Commission does not agree to the suggestion for quarterly review hearings.

i) Commission agrees to monthly and bimonthly interaction meetings between the officers of Board and Commission, Commission and WTMs respectively for sorting out various issues.

j) ABB report on harmonics dated April 12, 2005 as shown by CE(Comm) and dated April 24, 2005 as submitted by CE(Trans) are different. The

Commission may like to list the case to understand as to why the report was not submitted to the High Court or the Commission.

k) The Commission may insert a clause to impose penalty on the industries where the filters are not installed and measurements are not as per IEEE-519 to the satisfaction of the Commission and for default, the connection shall be liable for disconnection without prejudice to the right of the licensee to recover the penalty.

l) It was pointed out by the Commission that non-creation of Regulatory head of account by June 1, 2005 shall lead to action by the Commission u/s 142 of E.A. The compliance has been done by the due date.

m) CE (Comm.) was asked to submit the plan for recovery from local bodies for which necessary directions shall be given in the Tariff Order.

n) Bulk supply tariff applicability shall be only for self-use and not for further sale.

5.12 CE (Larji HE Project)

a) The following revised schedule of commissioning is possible, if there are no constraints and reasonable autonomy is available to CE (Larji)

Ist unit April 05, 2006 Mechanical run and April 20, 2006 commercial operation

2nd Unit March 31, 2006 Mechanical run and April 15, 2006 commercial operation

3rd Unit March 25, 2006 Mechanical run and April 10, 2006 commercial operation

b) The possible constraints can be M/s Continental Construction Company which has gone under liquidation and their workers who go on strikes due to non-payment. This company requires additional cash advance of Rs.3 Crore. Also stone crusher connection has been disconnected under order of High Court. Critical works include surge shaft, TRT and penstock gates.

It was felt that quality control at Project site is of average standard.

c) It was suggested that HPSEB may introduce toll tax on traffic tunnel to recover some capital and O&M cost.

d) New Projects should be considered on turn key allocation.

e) Panel of Experts (POE) should also be associated with control, coordination and monitoring Committee during construction.

5.13 CE (Design), Sundernagar:

a) Quality of officers and staff is very poor and not suitable for taking up design jobs. Qualified graduate and postgraduate engineers having background of construction, planning and design are required.

b) Investigation, discharge data and observatories desire much to be done.

c) Only 25% of design drawings are being done on Autocad.

d) The panel of experts has been appointed only for Larji Project. For other projects like Uhl Stage-III (100 MW), Sawra Kuddu (110 MW) & Sainj (110 MW), POE is under consideration.

e) It was felt that mix of turnkey and departmental execution of projects can stimulate competition.

f) Copy of directions issued regarding approval of hydel projects was handed over to CE(Design).

5.14 CE (I&P) Sundernagar:

a) 7 to 8 years data is being considered for preparing DPRs. The data is also being collected from BBMB, NTPC & NJPC etc. Modern equipment, techniques, computers are not available for investigation and analysis of data.

b) CE(I&P) has got one investigation Circle for investigation of projects at Chamba and one planning Circle at Sundernagar for preparation of DPRs. It is responsible for investigation of all basins except Satluj basin which is being done by CE(Project). It is also associated with Renuka Dam, Sal II & Holi projects. No grants are being received under APGP for investigation

c) CE (I&P) suggests turnkey, build, operate and maintain model for projects.

d) There is lack of qualified and trained staff and limited mobility due to fuel limits.

e) Copy of directions issued regarding approval of hydel projects was handed over to CE (P) for taking further necessary action accordingly.

5.15 CE (Projects):

a) Chief Engineer(Projects) has got only two construction circles, one at Bhaba and other at Dharamshala. Bhaba circle is looking after 4.5 MW Bhaba Augmentation Project and investigation of Satluj Basin Projects and Project Construction Circle at Dharamshala is looking after execution of civil works of 12 MW Khauli hydel project. Apart from these two circles, one civil maintenance Division, Contract cell headed by SE(Contract), Consultancy/TEC cell headed by Sr. XEN and one Architecture cell are working under CE(P).

b) MNES has sanctioned Rs.6 Crores as grant for Khauli Project, out of which Rs.2 Crore has been released and balance Rs.4 Crore is yet to be released.

c) Annual expenditure of Architecture cell on account of Pay & allowances is approximately Rs.1.24 Crore, while the output given by the Cell is much less.

d) Copy of directions issued regarding approval of hydel projects was handed over to CE(P) for taking further necessary action accordingly.

5.16 Chief Accounts Officer, Shimla:

a) It was intimated by CAO that ASCI's report on Capital restructuring shall be received in June 2005 and submitted immediately to the Commission.

b) Regulatory account head shall be opened before May 31, 2005, which has been done.

c) Regarding debt restructuring it was intimated that talks are in progress with Trust Capital for Rs.800-900 Crores and PFC for Rs.700-800 Crores.

d) CAO was advised to reorient the audit calendar to focus on high revenue units.

e) All commercial auditors in the field must be conveyed the detailed instructions under Section 56(2) of EA 2003 regarding showing the arrears which are to be continuously shown as recoverable in the electricity bills of consumers. Any loss due to this lapse should be shared by auditors and field officials responsible for the same.

f) Details of idle and unproductive assets was not supplied.

g) CAO was advised to file additional application for making provisions in the ARR for physical verification of assets, public interaction programme and additional interest on security, which has been done.

h) CAO confirmed that action has been initiated for placing the amount in PLA on decentralized purchases lying unutilized.

5.17 Secretary, HPSEB Shimla:

a) Secretary intimated that Board has approved public interaction programme mainly on the lines as structured by the Commission. Approved expenditure in this regard for 1st, 2nd & 3rd year is Rs.2.12 Crores, 4.193 Crores and 3.114 Crores respectively.

b) It was intimated by the Commission that the proposed statutory advice on internal reorganization of the distribution wing including engineering resource management shall be made by the Commission to Govt. of H.P. with a copy to the Board.

c) Copy of ASCI's report on internal reorganization of the Board due in June 2005 to be submitted to the Commission.

d) It was suggested to the Board to set up a training academy for officers and staff of the Board.

e) Secretary intimated that report on reorganization of Transmission Wing is not traceable.

f) It was intimated by Secretary that Consumer Redressal Forum shall be put in place.

g) It was suggested by the Commission that post graduate engineers should be redeployed on suitable jobs to make best utilization of their qualifications.

h) Commission suggested that regulatory cell of the Board be strengthened with right people.

5.18 M.D., H.P.Jal Vidyut Nigam Ltd., Shimla:

a) It was intimated by the M.D. that posting and transfer of officers and staff in the Corporation is being done by the Board.

b) Quality of staff is very poor since there is no induction of fresh qualified engineers.

c) Testing Laboratory of Bhaba has been shifted from Board to the Corporation. Quality of designs is good, but these are not being given in time.

d) MD suggests separate control and coordination Committee for each project.He also favours turnkey arrangement for execution of Kashang and Kirang projects.

e) Copy of directions issued by Commission regarding approval of HEP was given to MD.

5.19 M.D., Pabbar Valley Corporation:

a) Petitions should be filed for approval of the Commission in respect of projects.

b) Sawra Kundu project be considered for turn-key execution.

c) Copy of directions issued regarding approval of HEPs was given to MD.

5.20 Whole Time Members of Board:

5.20.1 Human Resource Development and Management:

5.20.1.1 Commission pointed out to the Members of Board that all the ills and problems of the Board are on account of faulty and non-existent human resource development and management. Following issues arising out of the interaction with the officers of the Board in relation to HRD were brought up in the interaction with WTMs:

a) High employee cost and low productivity

b) Internal restructuring of the Board's distribution organization together with engineering resource management, reorganization of transmission wing, M&T Wing, planning and design units and other units of the Board including head office units, need based deployment of staff, succession planning, training and cadre review.

c) Policy for reward and punishment, incentives for increasing generation, performance appraisal reports.

d) Transfer policy, politicisation of postings and transfers, posting in revenue sensitive areas

e) Deterioration in quality of manpower, review of R&P rules to prevent dilution of cadre and to keep pace with the latest techniques and state of art technologies.

f) Irrational centralization and decentralization of powers

g) Slow internal communication system, mobility of staff and material

h) Computerized database of HRD

i) Inadequate regulatory cell at the Board headquarters

5.20.1.2 All the above issues were discussed in detail by the Commission with Whole Time Members of the Board. The WTMs including the Chairman were not averse to the diagnosis, views and vision of the Commission, but felt that the appropriate staging should be at the time of unbundling to start the successor companies with a clean slate.

5.20.2 Financial Matters:

a) Capital & Debt restructuring- Commission stressed the need for further debt restructuring of existing debt including non SLR Bonds worth Rs.800-900 crores. Also the importance of increasing the equity debt ratio upto 30:70 was emphasized by the Commission for sound financial health of the Board. Board agreed with these suggestions and indicated its intention to take up the restructuring of loan worth Rs.700-800 Crores with PFC after commissioning of Larji HEP.

b) Recovery of outstanding dues- Various government/semi-government/local self-government organizations are not paying their electricity dues to the

Board in time and heavy outstanding dues remain recoverable at the end of financial year. On the other hand, HPSEB is raising loans at high interest to meet its financial requirement. This is creating unnecessary burden upon the general consumers of the State, apart from disparity in following the rules and procedures for disconnection of supply. Commission may issue appropriate directions in this regard.

c) Consumer audit- Internal commercial audit should be reoriented to have focus on revenue sensitive sub divisions. Also the audit has to be serious about Section 56(2) of Electricity Act regarding recovery of arrears.

d) FRP- Financial Restructuring Plan shall be prepared by the Board within two months of the issue of this Order, for unbundled entities.

e) Pension and GPF- Board is in favour of reduction of unfunded amount of GPF every year at the rate already committed by it i.e. approximately Rs.40 Crores per year to bring it to minimum within three years.

f) Deprecation reserve- Board has not built up depreciation reserve. As per annual account of the Board, accumulated deprecation reserve upto March 31, 2004 was Rs.311.41 crores. The depreciation is being taken into account as internal revenue resource of the Board. Depreciation on assets other than vehicles is being charged at the head office level @ 2% of the value of fixed assets in service at the beginning of the year.

5.20.3 Material Management:

a) Benchmark Prices & Rate contracts-Inspite of repeated commitments made by the Board benchmark prices and rate contracts of various decentralized purchased items have not been finalized so far. WTMs realize the importance and intimated that action is being taken.

b) It was intimated by the Board that action has been initiated to recover the cost of unutilized decentralized/purchased items.

c) Purchases in packages- Board agreed for purchase of material in packages with or without labour component.

d) Third party testing of Meter- Board has some reservations on third party testing of meters.

e) Single-phase transformers- Board agrees to look into the purchase of single-phase transformers under APDRP scheme. Installation of these is necessary for introducing the concept of high voltage distribution in line with the provision of National Electricity Policy.

f) Unmanned substations-In line with National Electricity Policy the Board is in favour of unmanned substations and shall review the provision of manned substations under APDRP schemes.

g) Third party inspection of materials- Board assured to revert back on third party inspection of material.

5.21 Generation:

a) Following issues arising out of interaction with CE(G), CE(Project), CE(I&P), CE(Larji HEP), CE(Design), MD(HPJVNL) & MD(PVC) were discussed with WTMs:

b) High cost generation projects-Board was asked to approach the government for subsidy on high cost generation projects, particularly in tribal areas. It was also suggested to provide incentives for increase in generation from the existing projects.

c) Declining Generation- Board will carry out the detailed investigation for declining generation from various projects.

d) Time and Cost overrun- It was intimated by the Board that so far two meetings of Control Coordination and Monitoring Committee had been held. They agreed to diagnose the time and cost overrun of various projects, so that remedial measures could be taken in future. Also, the Board is not averse to allocating projects on turnkey basis.

e) The Board agreed for carrying out studies for integrated grid system instead of operation in Islanded modes of the grid.

f) It was informed to the Board that the generation tariff petitions for its projects have not been filed as per CERC guidelines and Commission's Regulations. Commission, therefore, will have to apply its prudency check.

5.21.1 Commercial Matters:

a) Pre-paid metering – M/s Secure Meters has agreed for launching a pilot project of 250 meters in Shimla town. Necessary contractual and commercial formalities shall be completed by the Board. After discussion with M/S Secure Meters it was agreed by them that they will complete the project and make it functional by August 31, 2005.

b) Public interaction programme (PIP)- It was confirmed by the Board that PIP shall come into force w.e.f. 1st July,2005. Expected expenditure for first year was indicated as Rs.2.2 Crore.

c) Regulatory Cell- It was pointed out to the Board that regulatory cell of the Board is not equipped properly to handle the job of regulatory affairs. It should be headed independently by an intellectual type CE level officer and should have economists and legal person, MBAs, FAs, C&WA also apart from engineers.

d) Sale and purchase of power through competitive bidding- Board intimated that it is not feasible to go for bidding at short notice. However, the Commission suggested that bidding process be adopted for long term agreements for purchase and sale of power as per the guidelines issued by the Central Government.

e) T&D loss study- Commission informed the Board that assignment of T&D loss study has been awarded by the Commission.

f) TOU Meters- Board was not in favour of introduction of TOU meters in domestic category due to non-availability of load at night hours. This plea is in contradiction to their statement that 100 MW of industrial load has been sanctioned recently by the Board on night load basis.

g) Sundries- Commission informed the Board that sundries and allowances on account of audit and inspection of consumers and flying squads, etc. are contributing to revenue of the Board, but the same is not being reflected through energy equivalent in reduction for losses. As per the figures of sundries supplied by the Board for 2004-05; the analysis indicates that it will reduce the T&D loss by approximately 2 %.

h) Revenue realized- It was pointed out to the Board that revenue realized for 9 months through tariff is 1% more for sale within State and 7.5% overall than what was approved in Tariff Order dated July 2, 2004. The Board did not contest this.

i) Recovery of arrears- Attention of the Board was drawn to sub section (2) of section 56 of the Electricity Act 2003 and advised to issue suitable instructions to field officers and auditors for detecting the arrears under/over charges immediately and reflect the same in energy bills.

j) ABB Report- Board explained that ABB Report on harmonics was received on May 21, 2005 even though it was dated April 24, 2005.

k) Consumer Redressal Forum- It was confirmed by the Board that Consumer Redressal Forum shall be put in place and made fully functional before June 23, 2005.

5.21.2 Miscellaneous Matters:

a) Other Businesses- It was suggested to the Board that to utilize the surplus manpower of the Board, it may consider spinning off into some other businesses also viz. internal wiring, plumbing, manufacture of line fittings and poles, consultancy, structural design, architectural design, etc.

b) Legal liability insurance- Board agreed to buy legal liability insurance against accidents to third parties.

c) Schools and hospitals- Board informed that talks are on with the GoHP for transfer of schools and hospitals being operated and managed by the Board.

SECTION 6

Analysis of the Annual Revenue Requirement (ARR) Of HPSEB

6.1 Sales Projection

6.1.1 In the Petition filed by the Board, the Board submitted the estimated sales to the different consumer categories for FY 2004-05. For FY 2005-06, the Board has used the Compounded Annual Growth Rate (CAGR) methodology to arrive at the projection of sale of power to the different consumer categories on the basis of data for the last two years. The estimated category-wise sales for FY 2004-05 and the sales projected by the Board for FY 2005-06 are shown in table 6.1.

Table 6.1: Consumer Category wise Energy Sales estimated by the Board for FY 2004-05 and FY 2005-06 (MU)

S. No	**Category**	**FY 2002-03**	**FY 2003-04**	**FY 2004-05** (Estimated)	**FY 2005-06** (Estimated)	**CAGR (%)**
1	Domestic Supply	704.00	769.00	822.70	889.3	8.10
2	Non Domestic Non Commercial Supply (NDNCS)	11.00	15.00	15.60	18.70	19.25
3	Commercial Supply	187.00	206.00	231.10	256.80	11.16
4	Small & Medium Industrial Power Supply (SMS)	122.00	127.00	148.40	163.70	10.30
5	Large Industrial Power Supply (LS)	1108.00	1211.0	1295.80	1401.40*	8.14
6	Agriculture Pumping Supply (APS)	20.00	19.00	27.40	32.10	17.11
7	Water (& Irrigation) Pumping Supply (WPS)	224.00	250.00	280.70	314.20	11.94
8	Street Lighting Supply (SLS)	9.00	10.00	10.60	11.50	8.63
9	Bulk Supply (BS)	132.00	116.00	88.70	72.70	18.04
10	Temporary Metered Supply	1.00	1.60	1.90	2.50	36.46

		TOTAL	**2518.00**	**2724.6**	**2922.90**	**3162.90***	**7.74**

* During Tariff process, the Board added 240 MU on account of pending applications for new connections, on account of which the projected sales to LS category increased to 1700 MU and the projected total sales increased to 3402 MU

Commission's Analysis - Sales within the State

6.1.2 During the course of technical validation sessions with the Board, the Commission discussed the trends in growth in sales over the years and the basis for sales projection for FY 2005-06. The Commission also directed the Board to submit the category-wise actual sales for FY 2004-05, which was complied with by the Board.

6.1.3 Following a careful scrutiny of the sales projected by the Board, the Commission asked the Board to clarify whether it had taken into account the proposed growth and pending applications of induction furnaces and other major industries while projecting the increase in demand for the 'Large Industrial Power Supply' category. The Commission also asked the Board to provide the following details to enable the Commission to better examine and assess the growth in sales to this consumer category:

- Applications of induction furnaces pending with HPSEB and corresponding loads of these furnaces
- Applications of major industries pending with HPSEB and corresponding loads of these industries
- Applications of induction furnaces and major industries sanctioned by the HPSEB and corresponding loads of these industries

6.1.4 The Board, while providing the above details, revised its projections for sales to the Large Industrial Power Consumers for FY 2005-06 after taking into account the pending applications of induction furnaces and other major industries. The Board highlighted that it expected that the normal growth in large power supply would be at the CAGR of 9.6%. However, considering the pending applications, an additional load of 90 MW would be connected to the grid on account of release of connections to induction furnaces and other major industries. This would create a contract demand of about 60 MW in the system. Thus, the Board expects to sell additional energy of about 240 MU to this category during FY 2005-06. Accordingly, the Board revised the estimates of sale of power to large industrial power supply for FY 2005-06 to 1700 MU. This represents annual growth of 26 % over FY05 sales.

6.1.5 The Commission also asked the Board to provide the basis of estimates for sale of power to temporary consumers. The Board clarified that due to the revised industrial policy of the GoHP, a large number of industrial units are setting up plants in the industrial areas in the State. These industrial units are taking temporary supply for the preliminary construction work to establish these plants. In view of this, the Board stated that it is now expecting a growth of 56% in the sale of electricity to temporary consumers as against the past trends of increase in sales by only 2-3% and against the projected sales growth of 36% earlier.

6.1.6 The Commission has undertaken a detailed analysis of the sales projected by the Board. The Commission has examined the year-on-year variations in sales as well as the short term and long term trends in sales and has computed the CAGR over the short term, i.e., 3 years and long term, i.e., 9 years. The Commission has also taken into account the submissions made by the Board in respect of the sales projected for the different categories. The Commission has approved the sales to each category of consumers following this extensive analysis, as follows:

6.1.7 Domestic *Supply*: An analysis of the trend in sales to this category shows that the year-on-year variation in sales ranges between 4.4% to 13.5%. The 9 years' CAGR for sales is 8.52% while the 5 years' CAGR is 6.39%. Considering the actual sales during FY 2004-05, the annual growth rate in sales works out to 5.21% for FY 2004-05. Considering all this, for FY 2005-06, the Commission has projected an increase in sales to this category at 6.39% over the sales during FY 2004-05, in line with the 5 years' CAGR for sales to this category. In the domestic category, HPSEB has been grossly underestimating the consumption of the Antodaya Yojana category, which has been estimated as 0.2 MU. The Commission has reclassified this sub-category into BPL category, by considering 1,75,000 families which consume 45 units per day. The consumption of BPL category works out to 92 MU. The balance consumption has been considered under domestic category.

6.1.8 NDNCS: This category was created in the Tariff Order for FY 2001-02. In the absence of segregated data for sales in this category prior to FY 2001-02, the Commission has assessed the trend in sales for the NDNCS and commercial category together. An analysis of the trend in sales to the NDNCS and commercial category together shows that the year on year variation in sales ranges between 3.7% to 13.3%. The long term (9 years) CAGR for sales is 9.06% while the short term (3 years) CAGR is 11.77%. Considering the actual sales during FY 2004-05, the annual growth rate in sales works out to 10.18% for FY 2004-05. Considering all this, for FY 2005-06, the Commission has projected an increase in sales to this category at 11.77% over the sales during FY 2004-05, in line with the 3 years' CAGR for sales to the NDNCS and Commercial Supply categories considered together.

6.1.9 Commercial *Supply:* As explained above, the Commission has assessed the trend in sales for the NDNCS and commercial category together, and has projected the sales to commercial supply on the same basis as applied for NDNCS.

6.1.10 Small *& Medium Industrial Power Supply*: An assessment of the growth in sales to this category indicates large variations in growth on a year-to-year basis with variation in sales ranging between -36.5% to 13%. Further, use of the CAGR methodology indicates a negative long term (9 years) CAGR of -2.18% and a very high growth in the short term. The short term (3 years) CAGR is 10.16%. Considering the actual sales for FY 2004-05, annual growth rate in sales works out to 8.37% for FY 2004-05. After detailed analysis of the trend in sales and the economic conditions in the State, the Commission has projected an increase in sales to this category at 8.74% over the sales during FY 2004-05, which is the average yearly growth rate in sales to this category over the last three years.

6.1.11 Large *Industrial Power Supply*: While taking into account the pending applications of induction furnaces and other major industries, the Board has not considered the implications of open access. Several large industrial consumers have indicated their intentions to avail off open access to procure power from their captive generating plants or from IPPs. The Commission has observed that Gujarat Ambuja Cements Ltd. has made an application to PGCIL for open access for wheeling 8-10 MW of power from its captive generating unit in Ropar to its plant in Himachal Pradesh. Similarly, ACC Gaggal has indicated its intentions to procure power from Malana Hydro Power Project or any other IPP. In case these large industrial consumers avail of open access, the additional demand as projected by the Board and the contract demand estimated by it would be neutralized to some extent. Therefore, the Commission feels that the additional contract demand to the system considering the pending applications and the impact of open access would be of the order of 30 MW. The Commission has approved the sales for the large industrial consumers keeping in mind such trends in the sector and has estimated sales of 1558 MU to this category representing annual growth of 15.6% over FY05 sales.

6.1.12 *Agriculture Pumping Supply:* For FY 2005-06, the Commission has approved the sales to this category at 8.62% over the sales during FY 2004-05. This is in line with the long term (9 years) CAGR for sales to this category.

6.1.13 *Water (& Irrigation) Pumping Supply*: An analysis of the trend in sales to this category shows that the year on year variation in sales ranges between -2.88% to 13%. The long term (9 years) CAGR for sales is 6.85% while the short term (3 years) CAGR is 10.22%. Considering the actual sales during FY 2004-05, the annual growth rate in sales works out to 13.64% for FY 2004-05. The Commission has approved the sales to this category at 10.22% over the sales during FY 2004-05. This is in line with the short term CAGR for sales to this category.

6.1.14 Street *Lighting Supply*: The Commission has approved the sales to this category at 6.49% over the sales during FY 2004-05. This is in line with the short term CAGR for sales to this category.

6.1.15 *Bulk Supply*: The Board has projected a decline in sales during FY 2005-06. The Commission has approved sales to this category at the same level as that of FY 2004-05.

6.1.16 *Temporary Supply*: The Commission agrees with the justification presented by the Board in support of its estimates of sales to this category and has approved the revised sales projected by the Board to this category representing CAGR of 56%.

6.1.17 Table 7.2.1 shows the actual sales for FY 2004-05, the revised sales projected by the Board for FY 2005-06 and the sales approved by the Commission for each consumer category.

Table 6.2: Sales within the State for FY 2004-05 and FY 2005-06 (MU)

S. No	Category	FY 2004-05	FY 2005-06	
		Actual	Proposed	Approved
1	Antodaya/BPL	0.2	0.20	92
2	Domestic Supply	810	853	770
3	NDNCS	20	25	23
4	Commercial Supply	224	238	250
5	Small & Medium Industrial Power Supply	144	157	157
6	Large Industrial Power Supply	1347	1700	1558
7	Agriculture Pumping Supply	25	31	27
8	Water (& Irrigation) Pumping Supply	271	298	298
9	Street Lighting Supply	11	12	12
10	Bulk Supply	98	83	98
11	Temporary Metered Supply	3	4	4
	TOTAL	**2954**	**3402**	**3289**

Commission's Analysis - Sales outside the State

6.1.18 Subsequent to the withdrawal of free power by the GoHP, the Board revised its projections for sale of power outside the State during FY 2005-06 to 828 MU. The Board also submitted that the actual sale of power outside the State during FY 2004-05 was 1333 MU.

6.1.19 The Commission has analysed the quantum of power that would be available for sale outside the State after meeting the energy requirement for sale within the State, i.e., after taking into account the sales and T&D losses within the State. Based on the energy balance as discussed subsequently, the Commission has assessed the sales outside the State as 706 MU.

Total sales

6.1.20 The total approved sales considering sales within and outside the State is given in the table below.

Table 6.3 : Total Sales for the FY 2005-06

Sales	MU
Within the State	3288.80
Outside the State	705.60
Total	**3994.40**

6.2 Transmission & Distribution Loss

6.2.1 The Board has proposed T&D loss levels of 23.5% for sales within the State, and 19.49% on an overall basis, after considering the sales outside the State, which is subject to lower losses of 3.45%. This is much higher than the loss levels approved by the Commission for FY 2004-05 at 20.5% for sales within the State, leave alone the expected improvement in FY 2005-06.

6.2.2 The Government of Himachal Pradesh has signed a Memorandum of Understanding (MoU) with the Government of India under which it has agreed to reduce the T&D loss by one percentage point every year from FY 2002-03 onwards subject to a reduction of 5% in five years. It should be pointed out that the milestones of loss reduction in this MoU were set by the GOHP and the Board themselves. Further, during the process of approval of ARR and determination of tariff for FY 2001-02, the Board had relied very heavily upon this MoU and made it the raison-d'-etre of its commitment towards the reforms in the power sector. However, the Board has not made any efforts towards the attainment of the milestones of loss reduction laid down in this MoU thereby, showing the nonchalance of the Board and negating its claims of pursuance of reforms.

6.2.3 The Commission would like to highlight the shortcomings in the HPSEB's submission that the T&D loss level in the State is 23.5%. The Commission has undertaken a detailed analysis of the T&D losses as projected by the Board. While computing the energy sold, the Board is not including the energy equivalent of the additional revenue billed through sundry debits as well as the energy supplied to its employees as an allowance as a part of their compensation package. If the equivalent energy on these two counts is added to the total energy sold, then there is a reduction of over 2% in T&D losses, resulting in a loss level of 21.5%. If the impact of the kVAh tariff is added, then there will be a further reduction of around 1% in the loss level. There are about 82000 deadstop and defective meters ending ending March 31, 2005 in the Board, the replacement of which within one month of their becoming defective should further bring down the loss by atleast 1%. Lastly, if the increase in sales due to the improved metering of the energy consumed through electronic meters is considered, then there will be a further reduction of atleast 1% in the loss levels. Thus, the actual T&D loss levels that should be allowed for FY 2005-06 is 19.5%, and the Board can easily achieve the target of further reduction in loss levels and earn the applicable incentives.

6.2.4 Losses continue to remain considerably high in some circles. In case of Rohroo, the T&D loss level is as high as 52%, whereas in the circles of Mandi, Kullu, Hamirpur, Kangra and Dalhousie, the loss levels are more than 28%, as compared to the overall loss level of 23.5% projected by HPSEB. The status of distribution losses in the different circles is shown below. Such high levels of losses also have a direct bearing on the revenue of the Board and are not sustainable. This clearly highlights an area where there is huge scope of improvement.

Table 6.4: Circle-wise T&D losses

Sl	Circle	FY 2002-03	FY 2003-04	FY 2004-05
1	Shimla		23.59%	24.67%
2	Rampur	33.37%	17.52%	20.56%
3	Rohroo		57.61%	52.14%
4	Solan	14.69%	10.55%	13.08%
5	Nahan	16.72%	14.50%	15.41%

	Total C.E. (Op) South Zone	**20.16%**	**15.10%**	**16.85%**
6	Mandi		30.69%	28.93%
7	Kullu		33.87%	30.74%
8	Bilaspur (w/o ACC)		28.15%	29.82%
	(With ACC)			11.87%
9	Hamirpur		30.59%	27.97%
	Total C.E. (Op) Central Zone (w/o ACC)			**29.3%**
	(with ACC)			**22.24%**
10	Kangra	30.67%	29.90%	29.70%
11	Dalhousie	34.95%	31.24%	29.45%
12	Una	28.85%	27.92%	24.42%
	Total C.E. (Op) North Zone	**31.13%**	**28.83%**	**27.77%**

Note: Circle-wise losses have not been adjusted for sundries and other adjustments made by the Commission while determining the overall T&D loss

6.2.5 As discussed earlier, the high T&D loss remains a cause of major concern for the Commission as well as consumers as it reflects a severe lack of commitment and commercial orientation on the part of the Board. Member (Operations) of the Board during one of the public hearings conceded that the incidence of theft of energy was also showing upward trend. Such unjustifiable levels of inefficiency clearly violate the spirit enunciated in the MoU signed by the owners of the utility, i.e. the Government and the management i.e. the Board. Moreover, the consumers should not be made to bear the brunt of such high inefficiency levels of the Board. Board is advised to step up its surveillance over the theft of energy and take effective and urgent steps to bring down the commercial loss.

6.2.6 In the absence of complete and accurate division of total loss into technical and non-technical components, the Commission has to accept the said MoU and the milestones set out therein as gospel. Therefore, the Commission has approved overall T&D loss of 19.5% for FY 2005-06. After considering the sales outside the

State, the overall losses approved by the Commission is 17.8%. It should be noted that the overall loss levels are affected greatly by the quantum and proportion of sales outside the State, which incurs lower losses. In FY 2005-06, since the quantum of outside State sales is significantly lower due to lower availability of power from GoHP share, the weighted average loss levels in the State are higher than the levels approved for FY 2004-05.

6.2.7 The break-up of losses into technical and non-technical has been considered as 15% and 4.5% respectively. The current level of commercial loss of 4.5% is on the higher side. The Commission directs the Board to reduce commercial loss by 1% every year in the next 4 years. The Board should target aspects like surveillance, HV distribution, billing inefficiencies and collection mechanism to bring about a reduction in commercial loss. The base level for commercial loss shall be taken as 4.5% for FY 2005-06.

6.2.8 The Commission would like to mention here that the Commission has appointed a consultant to carry out study with regard to complete and accurate data of T&D losses at various voltage levels and between various consumer classes as well as the break up of technical and non-technical losses. This study will bring out the relevant information at the circle level also. The base level of commercial loss will be revised as per the findings of this study. However, the reduction in commercial loss mandated for each year will continue to remain same. There are many service providers who are prepared to undertake surveillance in the matter of theft of electricity on profit sharing basis. They can be tried in high loss level circles.

6.2.9 In respect of losses at the circle level, the Commission prescribes that in case of circles with loss levels below 20%, losses should be brought down to 6% at the end of five years starting from FY 2005-06. Further, in case of circles with losses in excess of 20%, losses should be brought down to 6% at the end of ten years starting from FY 2005-06. The base level of losses for FY 2005-06 at the circle level shall be specified after the findings of the T&D loss study are available. In addition to this, the trajectory for reduction in T&D losses for each circle shall also be after the findings of this study are available. The Board should target areas like technical losses, billing, realisation, theft, etc. for bringing about the mandated reduction in T&D losses.

6.3 Energy Requirement

6.3.1 The total energy requirement has been computed based on the projected sales for FY 2005-06 and the approved T&D losses for sales within the State and outside the State, as follows:

Table 6.5: Energy Balance (MU)

	FY 2004-05		FY 2005-06	
	HPSEB	**Actual**	**HPSEB**	**Approved**
Own Generation	1291	1291	1507	1309
Power Purchase	4014	4250	3452	3508*
Total Availability	5309	5542	4959	4816
Reduction in Power Purchase (T&D Loss in excess of 20.5%)		445		
Power Availability	**5309**	**5096**	**4959**	**4816**
Sales within State	2923	2954	3402	3289
T&D Losses within State	23.85%	20.50%	23.50%	19.50%
Power requirement for Sale within State	3838	3716	4447	4086
Power Available for Inter State Sale	1471	1381	512	731
Transmission losses (outside state)	3.71%	3.45%	3.45%	3.45%
Net Inter State Sales	1416	1333	495	706
Total Sales	4339	4287	3897	3994
Overall Losses	970	809	1063	822
Overall T&D Losses	**18.27%**	**15.88%**	**21.43%**	**17.06%**

Note: * - Energy purchased at generation station busbar is 3624 MU, however, net energy available at State's periphery is 3508 MU

6.3.2 The above energy requirement has to be met through own generation and power purchase as discussed in subsequent paragraphs.

6.4 Energy Generation by Board's own Stations

6.4.1 The total present installed capacity of Board's own generating stations is about 341 MW comprising Hydel and Mini-hydel stations. Considering the dependence of generation availability from hydel generating stations on the hydrological conditions, the Board in its submission had estimated net generation availability of 1291 MU (considering 7 MU as Auxiliary consumption) in FY 2004-05 and 1515 MU (considering 8 MU as Auxiliary consumption) in FY 2005-06. The following table details the past generation and estimated generation availability from the Board's own Stations.

Table 6.6: Generation availability from Board's own generating stations

Generating Stations	Installed Capacity	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06
Bhaba	120	689	570	496	481	553	580	582	**580**
Bassi	60	333	260	262	259	272	316	270	**270**
Giri	60	280	203	201	190	168	168	152	**170**
Andhra	16.95	28	41	38	59	69	69	53	**60**
Baner	12	47	33	35	31	33	40	43	**40**
Gaj	10.5	43	41	47	37	40	48	51	**42**
Binwa	6	37	26	30	21	24	32	33	**30**
Thirot	4.5	3	9	9	7	7	5	7	**8**
Ghanvi	22.5	0	0	11	37	83	71	74	**60**
Gumma	3	0	0	4	9	11	10	7	**9**
Holi	3							4	**13**
Khauli	12								**50**
Nogli								9	**-**
Micro's	10.75	15	18	18	18	18	17	14	**17**
Larji	126								**166**
Gross Generation		1475	1201	1151	1149	1278	1356	1298	**1515**
Auxiliary Consumption		1	3	3	3	6	5	7	**8**
Net Generation		1474	1198	1148	1146	1272	1351	1291	**1507**

Commission's Analysis

6.4.2 During the technical validation sessions, the Commission directed the HPSEB to provide the station wise actual generation achieved during FY 2004-05, which was complied with by the Board, and considered by the Commission. After the direction given by the Commission, the HPSEB has made a half-hearted attempt to submit station wise generation cost details. The total cost was apportioned to each station on proportionate basis, without any attempt at identifying the station-wise costs. Not only is the approach itself incorrect, but also, even if HPSEB's rationale of apportioning costs is applied, the numbers do not match, as the sum of the parts does not add up to the whole. The Commission is very distressed with the quality of data being furnished by the HPSEB. The Commission has had to perforce adopt the approach of relying on the data which has occurred with the highest frequency, on the presumption that the data that appears more regularly is likely to be more reliable. Hence, the Commission has decided not to consider the submission by the Board with respect to generation tariff petition made on May 30, 2005 in further analysis, and has adopted its judgement and prudence while analyzing the expenses and revenue.

6.4.3 In order to estimate the energy availability for FY 2005-06 from Board's generating stations, the Commission has considered the targets set by the Central Electricity Authority (CEA) and the present status of plants under construction and their expected date of commissioning. The Board in its submission has considered energy availability of 166 MU from Larji generating station. The Commission held discussions with the officers of the Board and the Public Hearing in the matter of Generation Tariff on June 6, 2005 to assess the current status of various stations, and it has been informed by the Board that the Larji Station is likely to be commissioned only by the end of FY 2005-06. The Board has informed in its submission of June 13, 2005 that no generation will be possible from Larji HEP during FY 2005-06. Hence, the Commission has not considered the energy availability from Larji power station. Similarly due to delay expected by HPSEB in the commissioning of Khauli generating station, which is expected to achieve commercial operation by January 1, 2006, the energy availability from the same has been considered as 10 MU by the Commission. The Commission has considered the generation from Nogli station during FY 2005-06 at the same level actually achieved in FY 2004-05. Considering the above aspects, the Commission has estimated the net energy availability from Board's generating stations at 1332 MU and total auxiliary consumption at 7 MU for FY 2005-06. The remaining energy requirement of the Board shall be met by power purchase. The following table details the energy availability approved by the Commission from Board's own generating stations.

Table 6.7: Commission's analysis of generation availability from Board's own stations (MU)

		HPSEB Submission		Approved[1]
Generating Stations	**Installed Capacity (MW)**	**FY 04-05 (Actual)**	**FY 05-06**	**FY 05-06**
Bhaba	120	582	580	580
Bassi	60	270	270	270
Giri	60	152	170	175
Andhra	16.95	53	60	60
Baner	12	43	40	40
Gaj	10.5	51	42	41
Binwa	6	33	30	30
Thirot	4.5	7	8	4
Ghanvi	22.5	74	60	81
Gumma	3	7	9	9
Holi	3	4	13	13
Khauli	12		50	10
Nogli		9	0	9
Micro's	10.75	14	17	17
Larji	126	0	166	0
Gross Generation		**1298**	**1515**	**1339**
Auxiliary Consumption		7	8	7
Net Generation		1291	1507	1332
Share of GoHP				24
Generation available to the Board		-	-	**1309**

[1] This includes 12% share of GoHP in generation stations of HPSEB commissioned after September 1990

6.4.4 As explained subsequently in the paragraphs on power purchase and GoHP share of free power, the effective generation available to the Board will reduce by 24 MU, of which 7 MU will be sold by GoHP to HPSEB during the winter season.

6.5 Generation Cost of Board's own generating stations

6.5.1 The petitioner has submitted the plant wise generation rates and expenses for FY 04-05 and for FY 05-06. In its submission, the Board has estimated the total generation cost, including reasonable return, as Rs 155 Crore and Rs 181 Crore for FY 2004-05 and FY 2005-06, respectively.

Commission's analysis

6.5.2 The Commission has analysed the data submitted by the petitioner for plant wise generation expenses and rates. In case of some of the generating stations the Commission has found that the generation rates estimated by the petitioner are exorbitantly high.

6.5.3 This Commission held a separate hearing on June 6, 2005, on the Board's Generation tariff Petition to address this issue and other issues related to submission of separate Petitions for each generating station as directed by the Commission. During the hearing, the Board submitted that it was not in a position to submit separate petitions for each of its generation stations, as it was not maintaining data in that fashion. As for the extremely high cost of generation of some stations, the Board submitted that the high cost of selected stations was on account of allocation of the costs, and that the consumers are not adversely affected as the overall cost of generation is within limits. The Commission was not convinced with this argument of the Board as, when the individual generating stations are not generating efficiently, then the overall generation will also be inefficient. The Commission informed the Board that as it had not complied with the Commission's direction on submission of separate tariff petitions for each generating station, the Commission would use its prudency while approving the generation costs.

6.5.4 The Commission also informed the Board that the high cost generation projects of the Board in far flung tribal areas, which may have been taken up to fulfil social objectives, threaten the commercial viability of the Board. The Commission advised the Board to consider hiving off high cost generation projects, especially those located in tribal areas to Himurja, Panchayats, Co-operative societies and other local bodies in the respective areas, or atleast transfer the O&M of such projects to such bodies, as this would enhance the economic viability of the Board's operations which are severely affected by the high capital cost and high operational cost of these generation stations.

6.5.5 In case the Board is not able to disinvest these projects, the Board should explore the option of obtaining funds from the Tribal Development Fund for the O&M of such projects. The Commission also directed the Board to approach the GoHP for meeting the difference in generation cost and the benchmark generation cost of Rs. 2.50 per kWh for projects upto 5 MW and Rs. 2.25 per kWh for projects above 5 MW as allowed by the Commission in respect of IPPs.

6.5.6 The Board in its reply dated June 15, 2005 has stated that it is taking up the matter separately with the GoHP for meeting the difference in generation cost and benchmark cost of Rs. 2.50 per kWh upto 5 MW and Rs. 2.25 per kWh above 5 MW located in the tribal area. The Board has submitted that the GoHP's decision was likely to be available only after the Commission issues the Tariff Order, and has hence requested the Commission to allow cost of generation based upon the tariff petition filed by the Board for FY 2005-06. The Board has added that for FY 2006-07, it will file the petition based on the decision of the GoHP.

6.5.7 Having considered the Board's submissions in this regard, the Commission is of the view that it has to apply its prudency check while approving the generation cost of the Board in light of the Board's non-compliance of the Commission's directives, and the prima facie inefficiency of some of the Board's generation stations. The Commission would also not like to discriminate between IPPs and the Board, and has hence decided to allow the generation costs as per the benchmark tariffs.

6.5.8 The Commission has estimated the generation expenses of the Board based on the norms specified for the Hydel stations (below and above 5 MW) as follows:

1. Benchmark tariff of Rs 2.50 per unit upto 5 MW and Rs 2.25 per unit for plants exceeding 5 MW.

2. Generation rates submitted by the petitioner have been considered in case it is less than the benchmark tariff for a given plant otherwise benchmark cost for the plant has been considered for computing the generation expenses of the Board's own generating stations.
3. As HPSEB has not complied with the repeated directives of the Commission to submit separate station-wise petitions for generation tariff, the Commission decided to further reduce the generation tariff (arrived at on the basis of above approach) at the rate of 2 paise per unit for each station (excluding the plants where benchmark tariff has been considered and for Ghanvi generating station, where the rate has been reduced by 4 paise per unit).

6.5.9 The Commission has observed that the Board in its submission has considered the expenses for Larji and Khauli generating stations. However, Larji power station will start its commercial operation only after the financial year FY 05-06. Similarly it is expected that the Khauli generating station will be commissioned by January 2006, and energy will be available from this plant during the period January 2006 to March 2006. The Commission is of the view that Board should not have considered the expenses of Larji generating station; and that the expenses of Khauli generating station should have been proportionately reduced. After deducting the proportionate expenses of Khauli and expenses of Larji generating station, the revised estimate of expenses work out to Rs 114 Crore. The expenses of Larji generating station and proportionate cost of Khauli generating station so deducted have been considered by the Commission under CWIP. Based on the approach indicated in para 6.5.8 (1) & (2), the Commission has estimated the generation expenses at Rs 108.2 Crore.

6.5.10 After reducing the proportionate expenses attributable to GoHP share of 24 MU, the generation expenses work out to Rs. 103.5 crores. Further, on reduction of Rs 2.64 Crore from the generation expenses on account of reduction of 2 p/kWh and 4 p/kWh as stated above at para 6.5.8 (3), the net generation expenses come to Rs. 100.83 crores, which are approved by the Commission.

6.5.11 Based on the available data and the approach adopted by the Commission the following table details the rate considered and the generation expenses of the Board's own generating expenses.

Table 6.8: Commission's approval of generation expenses for FY 05-06

Generating Stations	Installed Capacity (MW)	Generation Rates Submitted by the Board (Rs/kWh)	Rates considered by the Commission (Rs/kWh)	Generation Expenses (RsCr) including GoHP Share	Generation Expenses (Rs Cr)– excluding share of GoHP
Bhaba	120	0.42	0.42	24.21	24.21
Bassi	60	0.30	0.30	8.11	8.11
Giri	60	0.92	0.92	16.04	16.04
Andhra	16.95	1.19	1.19	7.17	7.17
Baner	12	1.92	1.92	7.66	6.74
Gaj	10.5	1.78	1.78	7.29	6.41
Binwa	6	2.53	2.25	6.75	6.75
Thirot	4.5	6.38	2.50	1.00	0.88
Ghanvi	22.5	2.19	2.19	17.78	15.64
Gumma	3	4.74	2.50	2.25	1.98
Holi	3	1.72	1.72	2.24	1.97
Khauli	12	1.24	1.24	1.24	1.09
Nogli		4.80	2.50	2.22	2.22
Micro's	10.75		2.50	4.25	4.25
Larji	126	3.79	2.25	0.00	0.00
Total				**108.2**	**103.4**
Reduction due to non compliance	-	-	-	-	**2.64**
Net allowable expenses	-	-	-	-	**100.83**

6.6 Power Purchase Quantum and Costs

6.6.1 The quantum of power purchase by the Board comprises more than 70% of the total energy requirement. Hence, it is imperative that this element of cost is estimated with utmost care based on the most efficient way of procuring power from various sources.

6.6.2 The Commission, during the technical validation session and subsequent discussions with the Board, has asked for detailed data pertaining to power purchase for FY 04-05 and FY 05-06. The Commission while approving the power purchase and power purchase cost has duly considered the details submitted by the Board.

6.6.3 Sources of Power

6.6.3.1 The HPSEB purchases power from the following sources:

- Bhakra Beas Management Board (BBMB)
- Central Generating Stations of NTPC, NHPC, NJPC and NPC
- Independent Power producers (IPP)
- Power Trading Corporation
- Bilateral Purchases from Other States

6.6.3.2 In its first submissions, the Board has estimated the power purchase expenses for FY 2004-05 based on six month actual data, i.e., till September 04, and in its subsequent submission, the Boards had re-estimated the power purchase expenses based on nine months actual data, i.e., till December 2004. However, as directed by the Commission the Board has submitted the actual power purchase from various sources for FY 04-05. The actual energy purchased from various sources during FY 2004-05 and availability of energy for FY 2005-06 is discussed in the following paragraphs.

6.6.4 Power Purchase from Bhakra Beas Management Board (BBMB)

6.6.4.1 The Board had estimated power purchase of 200 MU from BBMB for FY 2004-05 at Rs 6 Cr (30 paise per unit). Payment by the Board to BBMB is made at the common pooled tariff as worked out by BBMB for each calendar year. Considering the actual energy purchased in the past and its share, the Board estimated 245 MU of power purchase in FY 05-06 from BBMB stations at the cost of Rs 7.3 Cr.

Commission's Analysis

6.6.4.2 The HPSEB receives power from three generating stations operating under BBMB. The Commission has examined the submissions made by the Board for FY 2004-05 and FY 05-06 along with the actual data received at a later stage. The Commission has considered the actual power purchase of 203 MU at a cost of Rs 6.7 Cr (33 paise per unit) for FY 04-05. The Commission has accepted

HPSEB's projections to arrive at power purchase from BBMB plants for FY 2005-06. The following table details the submitted and approved level of power purchase (quantum and cost) from BBMB sources.

Table 6.9: Power Purchase from BBMB stations

Description	**FY 2004-05**		**FY 2005-06**	
	HPSEB Petition	**Actual**	**HPSEB Petition**	**Approved**
Units Purchased (MU)	200	203	245	245
Total Cost (Rs. Crore)	6.00	6.70	7.30	7.30
Cost per unit (Paise/kWh)	**30**	**33**	**30**	**30**

6.6.5 Power Purchase from Central Generating Stations

6.6.5.1 HPSEB has a share in Central Generating Stations like NTPC, NHPC, NPC and NJPC, which is decided by CEA from time to time. The Board pays the fixed cost of the generating stations in proportion to its share of the installed capacity. In addition to the firm allocated share, most of the NTPC stations have 15% unallocated power. The distribution of this unallocated power among the constituents of Northern Region is decided by the Central Electricity Authority (CEA) from time to time based on power requirement and power shortage in different States. The Board also gets a substantial portion of the unallocated share during the winter months.

Energy Purchased during FY 2004-05

6.6.5.2 In the earlier Petition, the Board had estimated the power purchase from the Central Generating Stations considering the actual energy purchased from April to December 2004 and by estimating the energy purchase from January 2004 to March 2005 based on past trends. However, at a later date, the Board submitted the actual data for power purchase for FY 2004-05.

Commission's Analysis

6.6.5.3 During the technical validation sessions and subsequent discussions with the Board, the Commission asked for detailed data relating to power purchase. Subsequently, the Board submitted these details to the Commission. The actual energy purchased from CGS during FY 2004-05 by the Board has been considered by the Commission.

6.6.5.4 The revised estimates as well as the actuals for FY 05 of the energy purchases from the Central Generating Stations given by the Board are as follows:

Table 6.10: Energy Purchase from Central Generating Stations FY 2004-05 (in MU)

Sl. No.	Station	Revised Estimates	Actuals
I	**NTPC**	1016[2]	953
1	Rihand-I	-	294.40
2	Unchahar -I	-	54.34
3	Unchahar -II	-	104.73
4	Anta -I	-	107.00
5	Auria-I	-	143.84
6	Dadri(Gas)-	-	165.73
7	Singrauli	-	83.24
II	**NHPC[3]**	588	183
1	Chamera - I	-	60.77
2	Chamera II	-	12.28
3	Salal	-	33.42
4	Uri	-	58.95
5	Tanakpur	-	17.10
III	**NPC**		
1	Napp	90	92.90
IV	**NJPC**	474	148.56
	Total	**2168**	**1377.26**

[2] HPSEB has not given the source-wise break-up for the power purchase in its revised estimates.
[3] Submission made by the Petitioner includes the share of GoHP with which the Commission has dealt separately

Energy Availability for FY 2005-06

6.6.5.5 The energy available to the Board from Central Generating stations mainly depends on its share, projected gross generation and estimated auxiliary consumption of each Station. The Petitioner has estimated the energy availability for FY 2005-06 based on the trend during past few years.

Commission's Analysis

Effective share

6.6.5.6 For estimating the energy availability from Central Generating Stations (CGS), the Commission has first estimated the effective share of HPSEB in CGS. As described in the earlier paragraphs, energy available to HPSEB from Central Generating Stations depends upon the allocated share of the State in each of the sources of power and the unallocated share in each of the stations, which keeps varying from time to time.

6.6.5.7 The Commission has considered the firm share as applicable in each of the Stations as notified by CEA for estimating the HPSEB's effective share. The Commission has noticed that the share of various States in unallocated quota of CGS has been revised during April 2005 and May 2005. The Commission has considered the share of HPSEB in unallocated quota of CGS as applicable during various time slots from 1 May 2005 onwards till September 2005. For estimating the HPSEB's share in unallocated quota for the period of October 2005 to March 2006, the Commission has considered the month-wise actual share of HPSEB in unallocated quota for the respective period during the previous year, i.e., during October 2004 to March 2005. The effective share in various Central Generating Stations for FY 2005-06 as considered by the Commission is shown in the table given below:

Table 6.11: Effective Share of Petitioner in Central Generating Stations during FY 2005-06

Sl. No.	Station	Capacity (MW)	Effective Share for the Year	Share of HPSEB (MW)
I	**NTPC**			
1	Rihand I	1000	4.03%	40
2	Unchahar –I	420	1.84%	8
3	Unchahar –II	420	3.39%	14
4	Anta	419	4.11%	17
5	Aurya	663	3.69%	24
6	Dadri-Gas	830	3.26%	27
7	Singrauli	2000	0.53%	11
II	**NHPC**			
1	Chamera I	540	2.90%	16
2	Chamera II	300	3.67%	11
3	Salal	690	0.99%	7
4	Uri	480	2.71%	13
5	Tanakpur	94	3.84%	4
III	**NPC**			
1	NAPP	440	3.69%	16
IV	**NJPC**	1500	2.47%	37
	Total			**245**

Plant Load Factor and Auxiliary Consumption

6.6.5.8 The Board has estimated the energy availability based on the trend in the past, and has not analysed the energy availability based on PLF and Auxiliary consumption of each plant.

Commission's Analysis

6.6.5.9 The Commission has analysed the PLF and Auxiliary consumption of each plant of NTPC, NHPC and NPC. Auxiliary consumption for each of the NTPC, NHPC and NPC stations has been considered based on the norms approved in the CERC guidelines. In case of NTPC thermal stations, the norms for auxiliary consumption have been considered at 9.5%, for NHPC and NJPC hydel stations, the normative auxiliary consumption has been considered at 1%, and for gas based station, the normative auxiliary consumption is 3%. Generation availability targets specified by CEA have been considered to estimate the energy availability for FY 2005-06.

6.6.5.10 The effective share of the Board is applied on the Energy Sent Out (ESO) to estimate the energy purchases from the respective Stations. The following table details the approach adopted to project the energy available from the Central Generating Stations during FY 2005-06.

Table 6.12: Availability of Energy from Central Generating Stations for FY 2005-06

Station	**Capacity (MW)**	**Gross Gen (MU)**	**ESO (MU)**	**HPSEB Share %**	**HPSEB share in ESO (MU)**
					Approved
NTPC					
Rihand I	1000	7577	6858	4.03%	276.40
Rihand – II	1000	3291	2978	3.30%	98.30
Unchahar –I	420	3150	2851	1.84%	52.50
Unchahar –II	420	3150	2851	3.39%	96.70
Anta	419	2739	2657	4.11%	109.30
Aurya	663	4210	4084	3.69%	150.60
Dadri-Gas	830	5112	4959	3.26%	161.70
Singrauli	2000	14655	13263	0.53%	70.50
NHPC					
Chamera I	540	1665	1648	2.90%	47.80
Chamera II	300	1500	1485	3.67%	54.50
Salal	690	3082	3051	0.99%	30.20
Uri	480	2587	2561	2.71%	69.40
Tanakpur	94	452	447	3.84%	17.2
NPC					
Napp	440	1527	1381.94	3.69%	51.10
NJPC	1500	6900	6831	2.5%	168.70
TOTAL					1454.90

6.6.6 Cost of Power Purchase from Central Generating Stations

6.6.6.1 The cost of power purchase from central generating stations is governed by CERC's Orders and Regulations.

Cost of Power Purchase for CGS Stations for FY 2004-05

6.6.6.2 In its Petition, the Board had estimated the power purchase cost for FY 2004-05 based on actual power purchase cost for the period April to December 2004 and by estimating the power purchase cost for January 2005 to March 2005.

Commission's Analysis

6.6.6.3 During the technical validation sessions and subsequent discussions/communication, the Commission directed the Board to submit the details of actual power purchase and power purchase cost from all the sources for FY 2004-05. Subsequently, the Board submitted these details to the Commission. The Commission has considered the actual capacity charge, energy charge and other charges for estimating the total power purchase cost of central generating stations for FY 2004-05. The summary of capacity and variable charge as considered by the Commission for FY 2004-05 is given in Table below:

Table 6.13: Fixed and Variable Cost of CGS Stations for FY 2004-05

Station	Power Purchase	Fixed Charge/Capacity Charge	Energy Charge	Energy Charge
	MU	**Rs. Crore**	**Rs. Crore**	**Rs/kWh**
NTPC				
Rihand I	294.40	20.24	22.29	0.76
Unchahar -I	54.34	3.62	6.04	1.11
Unchahar -II	104.73	7.28	11.54	1.10
Anta	107.00	3.44	15.41	1.44
Aurya	143.84	5.49	23.31	1.62
Dadri-Gas	165.73	6.90	30.21	1.82
Singrauli	83.24	2.04	6.90	0.83
NHPC				
Chamera I	60.77	6.98	0.00	-
Chamera II	12.28	2.80	0.00	-
Salal	33.42	1.99	0.00	-
Uri	58.95	15.90	0.00	-
Tanakpur	17.10	1.75	0.00	-
NPC				
Napp	92.90	20.56	-	-
NJPC	148.56	34.26	-	-
Total CGS	**1377.26**	**133.25**	**115.7**	-

Cost of Power Purchase for CGS Stations for FY 2005-06

6.6.6.4 In its Petition, the Petitioner has submitted the power purchase expenses for each plant for FY 05-06 after applying an escalation of 4% over average rate of power purchase (plant wise) for FY 2004-05.

Commission's Analysis

6.6.6.5 CERC has issued the "Terms and Conditions of Tariff Regulations" in March 2004 to be applicable from April 2004 onwards. In accordance with the Terms and Conditions of Tariff, NTPC and NHPC have submitted their Petitions for approval of station wise tariff to the CERC. The Commission has estimated the fixed cost for the various Stations for FY 2005-06 considering the annual fixed charges estimated by NTPC and NHPC in the Tariff Petitions submitted to CERC and in proportion to the share allocation of HPSEB in the respective Stations. The following table details the fixed cost of NTPC stations, HPSEB effective share allocation and fixed cost considered for FY 2005-06:

Table 6.14: Fixed Cost for NTPC Stations for FY 2005-06 (Rs. Crore)

Station	Annual Fixed Charges	Effective Share	Fixed Charges for HPSEB
	Rs. Crore	%	Rs. Crore
NTPC			
Rihand I	380	4.03%	15.30
Unchahar -I	161	1.84%	3.00
Unchahar -II	178	3.39%	6.00
Anta	103	4.11%	4.20
Aurya	189	3.69%	7.00
Dadri-Gas	233	3.26%	7.60
Singrauli	382	0.53%	2.00

6.6.6.6 The Commission has estimated the power purchase cost for NHPC Stations based on the two-part tariff basis (capacity charge and energy charge) in accordance with the CERC Regulations on Terms and Conditions of Tariff. The Commission has considered the Annual Fixed Charges based on the Petitions filed by NHPC except for Uri Hydel Station, for which the Petition is yet to be filed by NHPC. In line with the CERC Orders, the energy charges for hydel stations have been estimated at 75 paise/kWh (100% of the lowest variable cost of thermal stations in the region). The Capacity Charge for each station has been estimated by deducting the total energy charges from the Annual Fixed Charges. In case of Uri, the annual fixed charges previously approved by the CERC, have been considered. .The annual fixed charges of NHPC stations, Capacity Charges, HPSEB's effective share allocation and estimated fixed cost for HPSEB for FY 2005-06 is summarised below.

Table 6.15 : Annual Capacity Charges for NHPC Stations:

Station	Annual Fixed Charge (Rs. Crore)	Energy Charge (Rs Crore)	Total Capacity Charge (Rs. Crore)	Effective Allocation of HPSEB	Capacity Charges (Rs. Crore)
Salal	178	201	0.00	0.99%	0.00
Tanakpur	51	30	21.01	3.84%	0.81
Chamera-I	212	109	103.28	2.90%	3.00
Chamera-II	297	98	198.59	3.67%	7.29
Uri	514	169	344.56	2.71%	9.34

Variable cost for CGS stations during FY 2005-06

Commission's Analysis

6.6.6.7 The Commission has analysed the variation in monthly variable costs of NTPC stations for FY 2004-05. The variable costs have changed from month to month and no direct trend could be established. The variation on monthly basis may be mainly because of the Fuel Cost Adjustment component in the variable costs. The Commission has, therefore, projected the variable cost of coal based stations after considering an increase of 3% in the fuel costs and an increase of 3.5% over the average variable cost for gas based stations, in FY 2004-05. The variable cost of NTPC stations for FY 2004-05 and FY 2005-06 is summarised in the following Table.

Table 6.16 Variable Costs for 2004-05 and for FY 05-06 (Rs/kWh)

Station	FY 05	FY 06
Singrauli	0.83	0.85
Rihand	0.76	0.78
Unchahar I	1.11	1.14
Unchahar II	1.10	1.13
Dadri (Gas)	1.82	1.89
Anta	1.44	1.49
Auraiya	1.62	1.68

6.6.6.8 As elaborated in the earlier paragraphs, the energy charge for NHPC stations for FY 2005-06 has been estimated at 75 paise/kWh. For NPC Stations, the Commission has estimated the power purchase cost considering the rates based on the actual per unit cost for FY 2004-05.

Other Costs of CGS – Income Tax and Incentives

Commission's Analysis

6.6.6.9 The Commission has estimated the incentives for NTPC stations based on the revised norms of performance as per the CERC regulations dated March 26, 2004. As per the revised performance norms, the incentive for NTPC stations is applicable @25 paise/unit for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to target PLF.

6.6.6.10 Considering the generation levels of NTPC stations as discussed in above sections and by applying the incentive rate as per the CERC Regulations, the total incentive for NTPC stations for FY 2005-06 is estimated at Rs. 0.93 Crore. The income tax for NTPC stations is estimated at Rs 13.21 Crore. For NHPC stations, the total other cost works out to Rs 2.3 Crore.

6.6.6.11 The detailed computation of the cost of power purchase from NTPC and NHPC is given below:

Table 6.17 (A): Power Purchase and Power Purchase Cost from CGS for FY 2005-06

Station	Quantum (MU)	Cap. Ch (Rs Crore)	Var. Ch. (Rs Crore)	Incentive (Rs Crore)	Income Tax (Rs Cr)	Total (Rs Crore)
NTPC						
Rihand I	276.4	15.3	21.6	0.57	3.59	41.0
Rihand II	98.3				1.28	14.6
Unchahar - I	52.5	3.0	6.0	0.10	0.68	9.7
Unchahar - II	96.7	6.0	11.0	0.18	1.26	18.4
Anta	109.3	4.2	16.3		1.42	21.9
Aurya	150.6	7.0	25.3		1.96	34.2
Dadri-Gas	161.7	7.6	30.5		2.10	40.2
Singrauli	70.5	2.0	6.0	0.08	0.92	9.1
Total	**1015.9**	**45.2**	**116.6**	**0.93**	**13.21**	**189.2**
NHPC						
Chamera I	47.8	3.00	3.59	0.91		7.49
Chamera II	54.5	7.29	4.09			11.38
Salal	30.2	0.00	2.27	0.15		2.42
Uri	69.4	9.34	5.21	1.24		15.78
Tanakpur	17.2	0.81	1.29			2.10
Total	**219.1**	**20.4**	**16.4**	**2.3**		**39.16**
NAPP	**51.1**		**12.9**			**12.9**
NJPC	**169.0**		**39.7**			**39.7**

6.6.6.12 The summary of power purchase from Central Generating Stations and the total cost as approved by the Commission is given in the Table below:

Table 6.17 (B): Power Purchase and Power Purchase Cost from CGS for FY 2005-06

Station	Energy Purchase (MU	Total Cost (Rs. Crore)	Total Cost (Rs./kWh)
	Commission	**Commission**	**Commission**
NTPC			
Rihand I	276.40	41.10	1.49
Rihand II	98.30	14.60	1.49
Unchahar -I	52.50	9.70	1.85
Unchahar -II	96.70	18.40	1.90
Anta	109.30	21.90	2.23
Aurya	150.60	34.20	2.52
Dadri-Gas	161.70	40.20	2.13
Singrauli	70.50	9.10	1.26
TOTAL	**1015.90**	**189.20**	
NHPC			
Chamera I	47.80	7.49	1.57
Chamera II	54.50	11.38	2.09
Salal	30.20	2.42	0.80
Uri	69.40	15.78	2.27
Tanakpur	17.20	2.10	1.22
TOTAL	**219.10**	**39.16**	
NPC			
Napp	51.10	12.9	2.53
NJPC	169.00	39.7	2.35
Total CGS	**1455**	**281.17**	**1.93**

6.6.7 Power Purchase from Other Sources

6.6.7.1 In case of power purchase from inter State projects and private entities, the provisions of bilateral agreements/ power purchase agreements are applicable. The Board has following sources of power purchase to meet its requirement.

1. Independent power producers like Baspa –II and Mini Hydel stations
2. Banking arrangement with PSEB
3. Bilateral arrangements with UPSEB (Yamuna Share)
4. Grid Power i.e. power from Khara (UJVVNL)

Power Purchase from Other Sources for FY 2004-05

6.6.7.2 In its Petition, the Board has submitted that power purchase from private sector and inter -State projects is based on bilateral arrangements and power purchase agreements. The Board has banking arrangements with the PSEB, where the Board banks power during summer time and draws the power during the winter when demand is more in the State. Power purchase from other sources along with its cost as estimated by the Petitioner has been summarised in the table given below.

Table 6.18: Power Purchase and Power Purchase Cost from other sources for FY 2004-05

Particulars	Energy Purchase (MU)	Total Cost (Rs. Crore)	Total Cost (Rs./kWh)
PSEB	95	4	0.47
Uttaranchal	288	9	0.32
IPP	1159	258	2.24[4]
Grid Power	53	2	0.36
Total	**1595**	**273**	**1.71**

Commission's Analysis

6.6.7.3 The Commission has analysed the banking arrangements and bilateral arrangements of the Board. During the technical sessions, the Commission directed the HPSEB to submit the details of actual energy purchased from other sources alongwith the total cost for FY 2004-05. The Board provided the details of actual energy purchased and power purchase cost for FY 2004-05, and the same has been considered by the Commission. The quantum and power purchase cost for other sources as considered by the Commission for FY 2004-05 is summarised in the following table:

[4] The rate has been considered on ad-hoc basis and is subject to revision. The Commission will consider the actual expenses during the truing up process of FY 2006-07

Table 6.19: Power Purchase and Power Purchase Cost from other sources for FY 2004-05

Particulars	Energy Purchase (MU)	Total Cost (Rs. Crore)	Total Cost (Rs./kWh)
PSEB	124.00	20.00	1.58
Uttaranchal	380.00	11.00	0.30
IPP	1248.00	297.00	2.38[5]
Bilateral	11.16	2.66	2.38[6]
Total	**1763.16**	**330.66**	**1.88**

Power Purchase from other sources during FY 2005-06

6.6.7.4 Quantum of power purchase and cost for FY 05-06 has been submitted in line with the bilateral arrangements and the power purchase agreements. Also, due to reduction in anticipated generation availability from Larji and Khauli power stations, the Board has planned to meet the requirement from the following sources.

1. NJHPS FP (180 MW)
2. NJHPS EP (330 MW)
3. GoI special allowance (80 MW)
4. PSEB Banking (up to 100 MW)
5. HVPNL / DTL (40 MW)

6.6.7.5 The Board has not given the details of the actual quantum of power purchase in MU as well as the cost of this power purchase.

6.6.7.6 The below mentioned table details the power purchase from other sources for FY 05-06 as estimated by the Board.

[5] Same as footnote 4
[6] Same as footnote 4

Table 6.20: Power Purchase and Power Purchase Cost from other sources for FY 2005-06

Particulars	Energy Purchase (MU)	Total Cost (Rs. Crore)	Total Cost (Rs./kWh)
PSEB	50	1.30	0.26
Uttaranchal	359	11.50	0.32
IPP	1044	256.80	2.46
Grid Power	64	2.30	0.36
Total	**1517**	**271.90**	**1.79**

Commission's Analysis

6.6.7.7 Based on the data submitted by the HPSEB during the technical validation sessions and subsequent submissions made by it, the Commission has analysed the bilateral arrangements and power purchase agreements. The Commission has also considered the net availability of 53 MU from IPPs (Mini Hydel stations) after accounting for free power at 12% on the total generation of 60 MW. The Commission has not considered the additional power proposed to be purchased by the Board to offset the reduction in availability from Larji and Khauli, as sufficient power is available for sale inside and outside the State. The Commission on the basis of above-mentioned information and its analysis has approved the quantum of power purchase and cost for purchase of power as detailed in the table below.

Table 6.21: Power Purchase and Power Purchase Cost from other sources for FY 2005-06

S.No.	Source	Units Purchased (MU)		Total Cost (Rs. Cr)		Rate (Rs/kwh)	
		Petition	Commission	Petition	Commission	Petition	Commission
1	PSEB	50	50	1.30	1.30	0.26	0.26
2	Uttaranchal	359	359	11.50	13.30	0.32	0.37[7]
3	IPP	1044	1110	256.80	260.70	2.46	2.35[8]
4	Grid Power	64	64	2.30	2.30	0.36	**0.36**
	Total	**1517**	**1583**	**271.90**	**277.60**	**1.79**	**1.75**

[7] Same as footnote 4
[8] Same as footnote 4

6.6.8 Share of GoHP

6.6.8.1 GoHP has share in some of the Board's own generating stations, NHPC and IPP stations in lieu of State resources being used by these stations. GoHP has 12% share in these plants except for Malana station in which it has 15% share as per the agreement. Earlier, this share of GoHP was available to the Board at the rate equal to tariff rates of lowest slab of Domestic consumers, i.e., 70 paise/ per unit. Availability of cheaper power helped the Board in subsidising the consumers of domestic category. For FY 2004-05, the Commission had considered the actual power and actual power purchase cost for GoHP's share of power.

6.6.8.2 However, in its recent notification, the GoHP has withdrawn this privilege from the Board, and power would now be available to the Board only during winter months at the price equal to the average cost of power purchase of the Board from various sources. The GoHP has also submitted that it shall charge royalty in the shape of free power with effect from April 1, 2005 from HPSEB's generation projects constructed after September 1990.

6.6.8.3 This will have major impact on the subsidised categories of consumers. The following table details the Commission's estimation about the share of GoHP and cost implication to the Board for FY 2005-06.

Table 6.22: Share of GoHP and cost implication on the Board

S. No.	Stations	GoHP Share (MU)	Energy available during winter (MU)	Rates (Rs per unit)	Cost of power purchase (Rs Cr)
	Baira Suil	87	32.63	1.93	6
	Chamera - I	198	54.65	1.93	11
	Chamera -II	158	32.98	1.93	6
	Malana	41	6.26	1.93	1
	Baspa -	144	48.60	1.93	9
	NJPC	475	140.83	1.93	27
	PSEB	51	16.11	1.93	3
	Small Hydel	7	2.16	1.93	0.4
	HPSEB Stations	24	7.00	1.93	1
	Total	**1185**	**341**	**1.93**	**66**

6.7 Transmission Charges and other Wheeling Charges

6.7.1 In its Petition, the Board has submitted that it has to pay wheeling charges to PGCIL for power purchased from CGS/plants outside the State. The Board has further submitted that the cost of wheeling has been estimated on the basis of Rs 2600/MW/month based on the recent billing rates. On the basis of the same and based on actual bills available, the Board has estimated the total wheeling charges for FY 2004-05 as Rs 74.5 Cr and similarly it has projected the wheeling charges at Rs 69.2 Cr for FY 2005-06.

6.7.2 Based on actual details submitted by the Petitioner, the transmission charges for FY 2004-05 are Rs. 61 Crore and the Commission has considered the average rate of FY 04-05 to estimate the wheeling charges for year 2005-06. The total transmission charges for FY 2004-05 and FY 2005-06 as considered by the Commission are Rs 61 and Rs 60 Crore, respectively.

6.8 Transmission Losses outside the State

6.8.1 The Board has submitted that the average pooled transmission losses in PGCIL's network are 3.71 % and 3.45% for FY 2004-05 and FY 2005-06, respectively.

6.8.2 Based on the data submitted by the Board during various discussions, the Commission has approved the transmission losses proposed by the petitioner.

6.9 Sale to Other States and Underdrawals

6.9.1 For FY 2004-05, the Board has proposed 51 MU as UI drawal at an average rate of Rs. 2.28/kWh. However, the Board has not proposed any UI drawal in FY 2005-06. The Board has estimated energy available for inter–State sale in FY 2005-06 as 828 MU.

6.9.2 During the technical sessions, the Commission directed the HPSEB to submit the details of actual UI drawals and energy sold to other States alongwith the total revenue from such sale of power for FY 2004-05. The Board provided the details of actual UI and sale to other States for FY 2004-05 and the same has been considered by the Commission.

6.9.3 For FY 2005-06, considering the total energy available from various sources, and estimated energy required to cater to the projected sales within the State, the Commission has considered 706 MU of power for Inter-State sale in FY 2005-06. The HPSEB should procure power from all sources, strictly on the basis of merit order despatch, and ensure that the cost of power purchase is optimized.

6.9.4 The Commission, however, notices that the Board has been selling this energy without the approval of the appropriate State Commission having jurisdiction in respect of the licensee who intends to buy such energy. This is tantamount to unlawful trading in electricity. This should be avoided.

6.10 Energy Balancing

6.10.1 Based on the net energy purchased from each source, transmission losses, sale to other States and Underdrawals, the Energy Balance for FY 2004-05 and FY 2005-06 as estimated in the Petition and as considered by the Commission is provided in Table below:

Table 6.23: Energy Balance (MU)

Particulars	***FY 2004-05***		***FY 2005-06***	
	HPSEB Petition	**Actuals**	**HPSEB Petition**	**Approved**
Power Availability				
Own Generation	1291	1291	1507	1309
Power Purchase	4014	4250	3452	3508*
Total Availability	5309	5542	4959	4816
Reduction in Power purchase (Excess T&D)		445		
Net Availability	5309	**5096**	4959	4816
Sales within State	2923	2954	3402	3289
T&D Losses within State	23.85%	20.50%	23.50%	19.50%
Power Reqmt for Sale within State	3838	3716	4447	4086
Power Avble for Inter State Sale	1471	1381	512	731

Transmission losses (outside state)	3.71%	3.45%	3.45%	3.45%
Net Inter State Sales	1416	1333	495	706
Total Sales	4339	4287	3897	3994
Overall Losses	970	809	1063	822
Overall T&D Losses	**18.27%**	**15.88%**	**21.43%**	**17.06%**

Note: * - Energy purchased at generation station busbar is 3624 MU, however, net energy available at State's periphery is 3508 MU

6.11 Summary of Power Purchase and Power Purchase Costs

6.11.1 The total power purchase from various sources and power purchase cost as estimated in the Petition and as considered by the Commission for FY 2004-05 and FY 2005-06 is summarised in the Tables below:

Table 6.24: Summary of Power Purchase and Power Purchase Cost for FY 2004-05

Source	Units Purchased (MU)		Total Price (Rs. Cr)		Price/unit (Rs /kWh)	
	Petition	**Actual**	**Petition**	**Actual**	**Petition**	**Actual**
BBMB	200	203	6	6.70	0.30	0.33
NHPC	588	183	62	29.00	1.05	1.60
NTPC	1016	953	190	165.00	1.87	1.73
NJPC	474	148.56	86	34.00	1.82	3.06
Narora	90	93	21	24.00	2.29	2.53
PSEB	95	124	4	20.00	0.47	1.58
Uttaranchal	288	380	9	11.00	0.32	0.30
Bilateral						
IPP	1159	1248	258	297.00	2.24	2.38[9]
Grid	53		2		0.36	
Bilateral		11.16		2.66		2.38[10]
UI	51	64.31	14	19.36	2.82	3.01
Free Power		843		67.00		0.79
Total	**4014**	**4250**	**653**	**675**	**1.63**	1.60
PGCIL	-	-	74.5	61	-	-
Total	-	-	**727**	**736**	-	-

[9] Same as footnote 4
[10] Same as footnote 4

Table 6.25 Summary of Power Purchase and Power Purchase Cost for FY 2005-06

Source	**Units Purchased (MU)**		**Total Price (Rs. Cr)**		**Price/unit (Rs /kWh)**	
	Petition	**Commission**	**Petition**	**Commission**	**Petition**	**Commission**
BBMB	245	245	7.30	7.30	0.30	0.30
NHPC	223	219	46.60	39.20	2.09	1.79
NTPC	926	1016	178.90	189.20	1.93	1.86
NJPC	446	169	108	39.70	2.42	2.35
Narora	95	51	22.80	12.90	2.40	2.53
PSEB	50	50	1.30	1.30	0.26	0.26
Uttaranchal	359	359	11.50	13.30	0.32	0.37
IPP	1044	1110	256.80	260.70	2.46	2.35
Grid Power	64	64	2.30	2.30	0.36	0.36
Share of GoHP		341		66.00	0.00	1.93
Total	**3452**	**3624***	**635.50**	**632.00**	1.84	1.74
PGCIL Charges	-	-	**69.20**	**60.00**	-	-
Total	-	-	**704.7**	**692**		

Note: * - Energy purchased at generation station busbar is 3624 MU, however, net energy available at State's periphery is 3508 MU

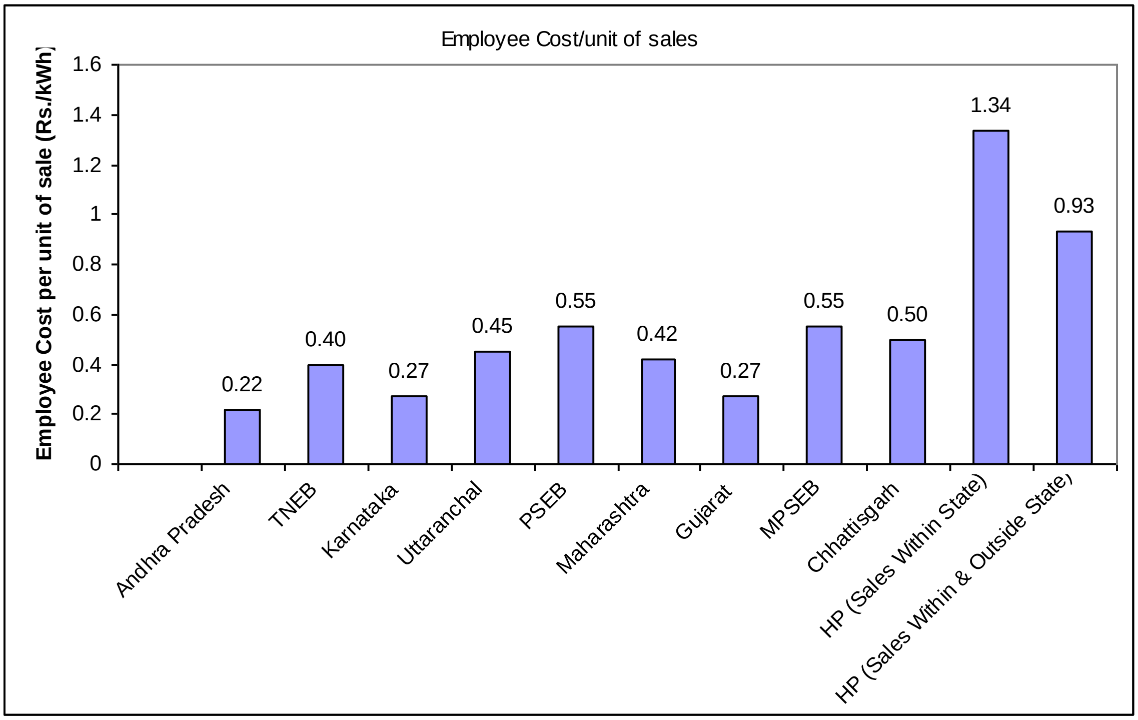
6.12 Employee Expenses

6.12.1 In its Petition, the HPSEB has projected employee expenses as Rs. 458.53 crore for FY 2005-06. Further, the Board has proposed capitalization of Rs. 80 crore @ 17.44% of the gross employee cost, thereby resulting in a net employee cost of Rs 378.53 crore. The Board has justified the increase in basic salary on the basis of three year CAGR whereas other components have been increased by 7.5% over FY 2004-05 figures to cover the cost of inflation.

Commission's Analysis

6.12.2 The Commission has analysed the employee cost of the Board and is of the view that the Board's employee cost is very high as compared to that of other Utilities in the Country. In the objections submitted by the stakeholders during the public hearings, majority of the consumers highlighted the issue of high employee cost of the Board. Objections have been raised regarding the high employee cost being passed on to the consumers.

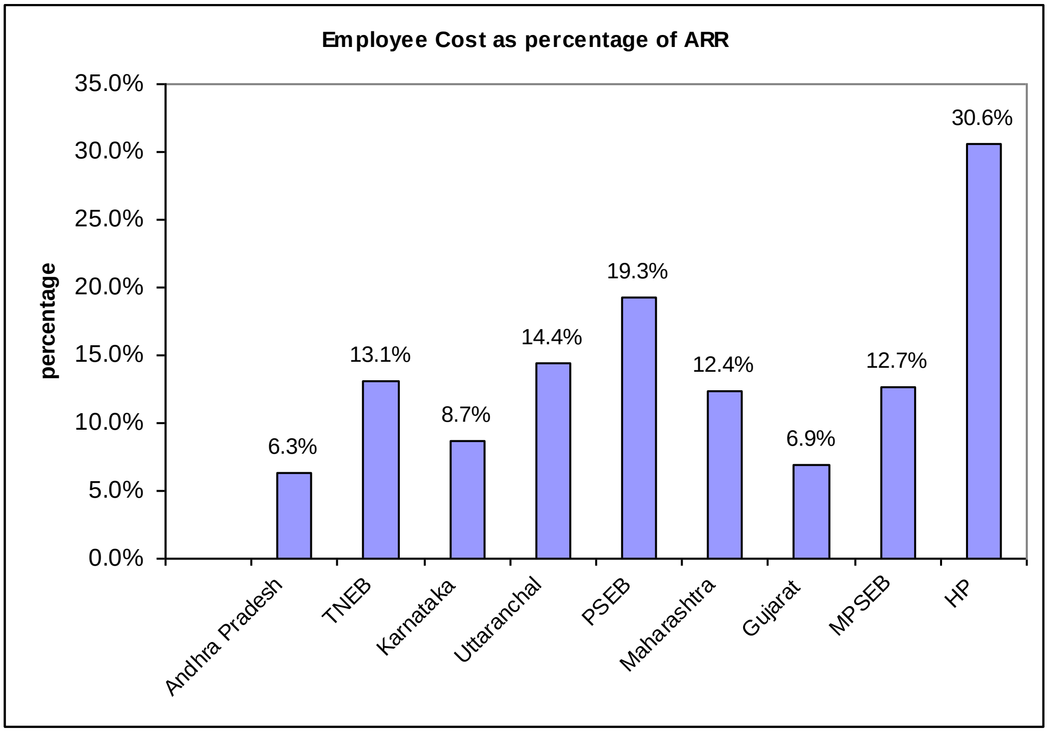
6.12.3 The Commission's analysis of the comparative employee cost across Utilities in the country shows that the employee cost of HPSEB is the highest in the Country, in terms of employee cost/unit of energy. The result of the analysis is given below in graphical form.



Source: Latest Tariff Orders issued by the respective SERCs

6.12.4 The comparison across different States shows that the employee cost in Himachal Pradesh is extremely high as compared to the rest of the country. Some of the efficient states like Andhra Pradesh and Karnataka are in the range of Rs. 0.20 to Rs. 0.30 per unit of sales whereas others are in the range of Rs. 0.40 to Rs. 0.60 per unit of sales. Himachal Pradesh on the other hand, stands out with employee cost as high as Rs. 1.34 per unit if only the sales within the State are considered. On adding the sales outside the State to the total sales, the employee cost per unit comes down to Rs. 0.93 per unit of sales, which is still very high as compared to other States.

6.12.5 The graph below compares the employee expense as a percentage of ARR.



Source: Latest Tariff Orders issued by the respective SERCs

6.12.6 The analysis clearly shows that Himachal Pradesh tops the list with employee expenses comprising 30.6% of the ARR. The PSEB's employee expenses is a distant second in the list at 19.3%. In comparison, employee cost comprises only 6% to 9% of the ARR in more efficient utilities in Andhra Pradesh, Karnataka and Gujarat. .

6.12.7 The above analysis clearly reflects the need to cut down employee expenses and improve productivity of employees. The Commission has been pressurizing the Board to reduce its employee cost, essential to achieve long term sustainability.

6.12.8 The Commission has analysed the different heads of employee expenses proposed by the Board. The Commission has considered the effect of 2% reduction in the number of employees due to natural attrition through retirement. The Commission calculated the average monthly salary per employee and has computed the salary cost for FY 2005-06 after taking into account the natural attrition.

6.12.9 Though the Board has not asked for specific approval for the increase in employee expenses due to impact of merger of 50% DA with the basic salary with retrospective effect from April 1, 2004, in line with the GoHP notification, the Commission has taken into account the impact of this notification of the State Government. The HPSEB, because of its poor financial health cannot afford this additional burden of employee cost as per GoHP's stipulation to the effect that the PSUs/Autonomous Bodies/Board, etc., will decide upon 50% merger after taking into consideration their resource scenario. Unfortunately, the resource scenario of the Board does not permit the 50% of DA merger into the basic salary. Nevertheless, the Commission is acutely conscious of the need to maintain healthy industrial climate for launching a major reform initiative as given in Section 9 of this Order. It, however, does not imply that the DA merger shall be allowed without linking it with the productivity levels and the overall compliance with the advisory directives as well as the Directions-cum-Orders. The Commission would, therefore, monitor the performance of the Board in terms of efficiency improvement and may review its decision regarding allowing merger of DA with basic salary at a later stage in case there is no improvement in the functioning of the Board.

6.12.10 During the tariff process, the Board indicated that due to high employee cost, the Board is planning to offer a Voluntary Retirement Scheme (VRS) for its employees. Documents submitted by the Board to the Commission indicated that about 160 employees have so far shown interest in the scheme. The Board, on the other hand, claimed that it is targeting at least 1000 employees under the scheme. Further, the Board failed to provide details regarding the sharing arrangement of the VRS cost between the Board and the GoHP. Despite repeated queries, the Board has not submitted any cost benefit analysis or the potential savings to the Board on account of VRS. The Commission, therefore, has not incorporated any financial implication of VRS in the current analysis. However, the Commission would take up the actual expenditure and cost savings on account of VRS in the truing up exercise in FY 2006-07.

6.12.11 The Commission has accounted for the natural attrition of the employees by calculating the average salary per employee per month and projecting the same over the number of employees for FY 2005-06. Further, after accounting for the merger of DA with basic, the total salary cost increases by 0.84% over the FY 2004-05 (post merger) salary cost. The other components of the employee cost have been escalated by the same percentage of 0.84% to arrive at the FY 2005-06 employee cost. The Commission has calculated the balance DA amount after taking the DA merger into account. The approved employee expenditure is given in the Table below:

Table 6.26: Approved employee expenses for FY 2005-06 (Rs. Crore)

Particulars	FY2002-03 Actual	FY2003-04 Actual	FY2004-05 Approved	FY 2004-05 Actual	FY2005-06 Proposed	FY 2005-06 Approved
Salaries	193.90	196.67	199.48	204.90	206.63	309.95
Overtime	0.86	0.96	0.00	0.98	0.96	0.00
DA	97.99	108.98	112.79	119.08	125.94	28.74
Other Allowances	30.53	32.16	32.16	35.14	37.16	32.43
Bonus	0.01	0.11	0.00	0.11	0.11	0.00
Sub-Total	**323.29**	**338.88**	**344.43**	**360.21**	**370.8**	**371.12**
Fee & Honorarium	0.01	0.06	0.06	0.06	0.06	0.06
Medical expense Reimbursement	5.12	6.28	6.28	6.86	7.25	6.33
LTA	0.04	0.48	0.00	0.49	0.48	0.00
Earned Leave	5.48	7.14	7.14	7.81	8.26	7.20
Payment under workmen's compensation	0.68	0.72	0.72	0.73	0.72	0.73
Leave Salary Contribution	0.60	0.63	0.63	0.64	0.63	0.64
Total other Staff Costs	**11.93**	**15.31**	**14.83**	**16.59**	**17.4**	**14.95**
Staff Welfare expenses	1.65	1.41	1.41	1.54	1.63	1.42
Terminal Benefits	45.99	59.45	59.45	64.96	68.7	68.7
Grand Total	**382.86**	**415.05**	**420.12**	**443.30**	**458.53**	**456.20**
Regularised Amount not allowed	0.00	0.00	25.36	0.00	0.00	0.00
Total Employee costs	**382.86**	**415.05**	**394.76**	**443.30**	**458.53**	**456.20**
Less:						

Amount to be transferred to R&M	-	-	-	-	-	19.35
Disallowance due to deviation from PSEB Pattern	-	-	-	-	-	3.75
Capitalization	73.00	71.84	75.38	47.46	80.00	71.01
Tfd to CWIP - Larji & Khauli	-	-	-	-	-	11.45
Net Employee Cost	**309.86**	**343.21**	**319.38**	**395.84**	**378.53**	**350.64**

6.12.12 The Commission has allowed the regularization amount for FY 2005-06. However, as per the CAG report for 2001-02, there has been a deviation from the PSEB pattern of salaries and allowances which has led to extra outgo of Rs. 3.75 crore. The Commission has hence, deducted this amount from the ARR of FY 2005-06. As explained in subsequent sections, the Commission feels that a portion of the R&M expense is getting classified as employee cost in the books of the Board, which leads to reporting of higher employee cost and lower R&M expense. The Commission, therefore, has transferred some amount to R&M expense such that the R&M expense equals 2% of GFA. The other allowances as proposed by the Board have been escalated in the same ratio of 0.84% as the average increase in basic salary of FY 2005-06 (post merger of DA) over FY 2004-05. Recognizing the large number of retirements, the Commission approves the terminal benefits amount as proposed by the Board.

6.12.13 During interactions with the Board, the Commission was informed that the Larji Hydel Project will not be able to achieve commissioning in FY 2005-06. Similarly, Khauli project would be commencing generation only in the last quarter of the financial year. The Commission therefore feels it appropriate to transfer the corresponding employee cost pertaining to these plants to CWIP.

6.12.14 The Commission has taken average capitalisation of last three years i.e. FY 2002-03, FY 2003-04 and FY 2004-05 and arrived at the capitalisation %age for FY 2005-06.

6.12.15 The Commission approves total net employee cost of Rs. 350.64 crore after capitalisation of Rs. 71.01 crore.

6.13 Administrative & General Expenses

6.13.1 In its Petition, the Board has projected A&G expenses of Rs 42.93 crores in FY 2005-06 which includes expenses on insurance, communication, professional charges, advertisement expenses, conveyance and traveling, etc. The Board's petition has given a summary of most of the components of A&G expenses. In subsequent interactions with the Commission, the Board requested for additional amount of A&G expenses on account of study on valuation of assets, Public interaction programme, pilot project for prepaid meters, and payments to consultants.

6.13.2 The Board has stated that the A&G expenses have been projected at a growth rate of 7.5% over the FY 2004-05 figures to cover the cost of inflation.

Commission's Analysis

6.13.3 During the technical validation session and subsequent interactions, the Commission directed the Board to submit the actual A&G expenditure incurred during FY 2004-05. The Board submitted the actual A&G expenses incurred during FY 2004-05 at Rs 18.26 crore. The Commission during its analysis found that Board has also considered increase in expenditure on items on which the Commission has put a freeze in the Tariff Order of FY 2004-05.

6.13.4 The Commission is surprised to note that the Board has projected an amount of Rs. 13.64 crore against the Conveyance & traveling expense despite the Commission putting a cap on the expenditure on this head at FY 2002-03 at actual level of Rs. 10.03 crore. Due to constant pressure from the Commission, the Board has replaced more than 50 vehicles which have high fuel consumption. Apart from this, all the new vehicles which are being bought are much more fuel efficient as compared to the performance in the past. In the Commission's opinion, the fuel consumption of the Board should go down by at least 20%. However, owing to increase in fuel cost, the Commission approves an amount of Rs. 9.03 crore after deducting 10% of the amount from the capped figure of Rs. 10.03 crore.

6.13.5 The Commission finds no basis for the 7.5% increase in the A&G expenses proposed by the Board on account of inflation. The actual A&G expense of the Board in FY 2004-05 has been lower at Rs. 18.26 crore against the approved figure of Rs. 20.08 crore. Keeping this in mind, the Commission approves the other heads of A&G expenses for FY 2005-06 by taking into account a 4% increase over the actual expenditure in FY 2004-05.

6.13.6 The Board has also proposed an expense of Rs 11 crore for GIS/GPS technology based mapping and valuation of assets. The Commission feels that the study is critical to establish the asset base of the Board and is a prerequisite to the unbundling of the Board. Further, the Board has also proposed an expenditure of Rs. 2.2 crore for public interaction programmes. After constant persistence by the Commission, the Board has agreed to conduct an ambitious public interaction programme for better consumer awareness and education of their rights and obligations as well as to activise the consumer interest groups. The Programme also aims to empower consumers for greater involvement and participation in the decision making process. The Commission feels that the Board should approach PFC or other similar Institutions for obtaining grants to fund such studies and programmes. The Commission has approved the expenditure of Rs. 2.12 crore based on the study of the detailed expenditure estimates. The Board has also asked for an additional Rs. 1 crore as consultancy charges to be payable to the consultants for the different studies being conducted by the Commission at the expense of Board. The Board has further asked for additional expenditure of Rs. 1 crore towards three pilot projects for prepaid meters and one for billing machines. Commission feels that the above mentioned expenditure are essential for the Board to be able to gear itself up to meet the challenges of the changing business scenario. Hence, the Commission allows the proposed expenditure on these heads for FY 2005-06. The Commission has also approved Regulatory expense of Rs 1.68 crore as proposed by the Board. Regarding expenses for Ombudsman, the Commission has accounted for the amount left over from FY 2004-05 approval and allowed the rest of the amount to the tune of Rs. 17 Lakh.

6.13.7 However, the Commission has come across certain deviations in the operations of the Board despite the repeated directions issued by it. The Board has been running hospitals & schools, which in the Commission’s opinion are not in line with the business of the Board. Hence, the A&G expenses for these schools and hospitals have not been approved by the Commission. Despite numerous attempts by the Commission to convince the Board to shift the office of Director (Design), REC, Dalhousie to Shimla, the Board has not been able to shift the same. In the latest submission of the Board, it has indicated that the said office would be shifted to Shimla by July 31, 2005. Keeping this in mind, the Commission disallows the four month expenditure of the office from April 1, 2005 to July 31, 2005, i.e., the time till the office gets shifted from Dalhousie to Shimla.

6.13.8 The capitalization of A&G expenses has been computed based on the average capitalization rate for last 3 years, i.e., FY 2002-03, FY 2003-04 and FY 2004-05.

6.13.9 The approved A&G expenses for FY 2005-06 is summarized in the table below:

Table 6.27: Administration & General Expenses (Proposed/Approved) (Rs. Crore)

Particulars	FY 2002-03 (Actual)	FY2003-04 (Actual)	FY 2004-05 (Approved)	FY 2004-05 (Actual)	FY2005-06 (Proposed)	FY 2005-06 (Approved)
Insurance of Employees, Assets	0.01	0.01	0.01	0.01	0.01	0.01
Telephone, postage, telegram, internet charges	1.80	2.15	2.18	2.08	2.48	2.17
Consultancy charges	0.03	0.05	0.08	0.03	0.06	0.03
Conveyance and Traveling (vehicle running, hiring)	10.03	11.8	10.03	10.36	13.64	9.03
Printing and stationary	0.87	1.18	1.16	0.76	1.36	0.79
Advertising	0.17	0.16	0.16	0.10	0.18	0.10
Electricity and water charges	1.55	1.70	1.86	1.09	1.96	1.13
Freight	0.16	0.17	0.00	0.08	0.20	0.08
Legal charges	0.25	0.25	0.00	0.22	0.29	0.23
Auditor's fees	1.18	1.20	-	0.00	1.39	0.00
Rents, rates & taxes, other than all taxes on income and profit.	0.91	0.83	-	0.66	0.96	0.68

Miscellaneous	3.15	3.91	4.6	2.22	4.52	2.30
Study for valuation of assets	-	-	-	-	11.00	11.00
Public interaction programme	-	-	-	-	2.20	2.12
Expenses for Consultants	-	-	-	-	1.00	1.00
Pilot project for prepaid meters & billing machines	-	-	-	-	-	1.00
Regulatory Expenses	-	-	-	0.65	1.68	1.68
Ombudsman Expenses	-	-	-	-	-	0.17
Less:	-	-	-	-	-	
Expenses for Hospitals	-	-	-	-	-	0.05
Expenses for Schools	-	-	-	-	-	0.03
Expense on REC Dalhousie	-	-	-	-	-	0.28
A&G Expenses - Total	**20.11**	**23.41**	**20.08**	**18.26**	**42.93**	**33.17**
Less capitalized	4.05	4.18	3.35	4.46	4.83	6.90
A&G Expenses after capitalization	**16.06**	**19.23**	**16.73**	**13.80**	**38.10**	**26.27**

6.14 Interest and Financial Charges

6.14.1 The Board in its petition for FY 2005-06 has proposed total interest and financial charges of Rs. 294.87 crore. The proposed amount includes the interest on working capital. The details of the loans and the proposed rates of interest are tabulated below:

Table 6.28: Outstanding Loans and rate of Interest (Rs. Crore)

Institution	Balance at beginning of the yr	Amount received during the yr	Amount redeemed during the yr	Balance outstanding at the end of yr	Rate of interest (range)	Interest to be paid
LIC	279.17	0.00	4.39	274.78	8% to 9%	22.50
REC	129.65	25.86	32.00	123.50	7.25% to 13%	20.00
PFC	809.60	196.26	85.40	920.50	9.5% to	85.48

					11.5%	
Bonds	1,091.50	300.00	83.98	1,307.50	10.22% to 14.48%	94.10
Bank	225.00	20.00	4.00	241.00	10.5 to 16%	30.00
Interest on Security Deposit	-	-	-	-	-	4.64
Total Interest on Loan from FIs/Banks	**2,534.90**	**542.12**	**209.80**	**2,867.3**		**256.72**
Interest on WC & other charges	-	-	-	-	-	38.15
Total	-	-	-	-	-	**294.87**

6.14.2 The Board has submitted during the subsequent interactions with the Commission that it is trying to reduce the interest cost further by renegotiating the loans with different Financial Institutions and subscribers to Bonds.

Commission's Analysis

6.14.3 On analysis of the interest & financing charges as proposed by the Board, it is seen that the Board has not been adhering to the Commission's direction in the Tariff Order of FY 2004-05 regarding the interest rates to be achieved for the loans. The average interest rate proposed by the Board for REC and Banks works out to be more than the capped interest rate of 10.5% p.a. The Commission notes with displeasure that such lethargy on the part of the Board to restructure the different loans is adding to the costs which have to be paid by the consumers ultimately. Further, with falling interest rates, Commission feels that the loans from PFC are available at a rate much less than 10.5% p.a., and some tranches of PFC loan are already being availed at 9.5%. Hence, the Commission allows interest on all old loans except PFC @ 10.5% p.a. or lower whichever is applicable. For old PFC loans, however, the interest rate has been capped at 9.5% p.a.

6.14.4 The Commission feels that Board should take advantage of the low interest rate regime prevailing in the market and swap its high interest loans with the lower interest rate loans. This will help the Board in maintaining its financial viability over the long term.

6.14.5 During the interaction with the Commission in the Tariff process, the Board was asked to submit the investment plan and the debt plan. After much persuasion, the Board finally submitted a sketchy plan outlining the investments and their source of funding. The Commission was shocked to come across an entirely new set of projections compared to the details filed by the Board in their early submissions.

6.14.6 As per the investment plan, the Board has proposed an investment of Rs. 730.98 crore during FY 05-06. Accordingly, a debt plan of similar amount has also been proposed by the Board. The Commission is horrified to note that the plan includes repayment of Rs. 313.09 crore of loan in FY 05-06 out of which the Board proposes to fund Rs. 238.54 crore from fresh loans. Nowhere else in the management of such big organizations would it happen that loans are being taken to repay the old debts. Such proposals by the Board are suicidal in nature and would only accelerate its downfall, plunging the entire State of Himachal Pradesh into darkness.

6.14.7 The Commission in order to put the picture into right perspective painstakingly, reviewed each loan proposed by the Board and came across many surprising facts. The Board has proposed an investment of Rs. 95.02 crore on Larji project though the matter is subjudice. The Commission does not allow such investment on Larji project till the time the matter is resolved by the Honourable High Court. Investments to the tune of 39.63 crore and Rs 22.60 crore have been proposed for HPJVVNL and Pabbar Valley Corporation respectively without submission of any detailed plan for approval. The Commission disallows such expenditure by the Board.

6.14.8 The Board has proposed loans from REC under different schemes despite repeated advice from the Commission to refrain from doing so and instead avail off grants. The Commission therefore disallows all the loans proposed to be raised from REC by the Board. Overall, the Commission does not approve Rs 177 crore worth of investments by the Board which included planned funds from PFC, REC and NSLR bonds.

6.14.9 As stated earlier, the Board has proposed repayment of Rs. 313.09 crore of loans in FY 2005-06. It is expecting Govt. subvention of Rs 75 crore to repay Non-SLR bonds. The remaining Rs 238.54 crore has been proposed to be repaid from fresh loans. The Commission does not approve of such gross financial indiscipline on the part of the Board. Normally, the debt repayment has to be met out of the depreciation fund of the organizations. The Commission's Regulations on Terms and Conditions of Tariff do allow for Advance Against Depreciation (AAD) in emergency situations. However, the Commission feels that providing AAD of Rs 238 crore for repayment when the approved Depreciation amount is only about Rs 41 crore would lead nowhere. The Commission does not wish to become a party to the financial mismanagement by the Board. The Commission, has, therefore, not considered any new fund requirement for repayment of loans in FY 05-06.

6.14.10 The Commission advises the Board to approach the Central Government and request for special assistance to tide over this situation as per the provision of National Electricity Policy. The Board can make use of the roadmap advised to it by the Commission in Section 9 which forms a part of this Order to get funds from Central Government for financing such transition phases. The Commission would again like to point out here that allowing such debt repayments from new loans would only plunge it deeper into the worst debt trap it is already in, to never come out of it.

6.14.11 The Commission also notes with great concern that the ratio of outstanding debt to gross fixed assets is very high at about 67%. If the ratio is calculated on the basis of net fixed assets, the ratio will work out to be much higher. All this highlights the fact that the Board has been borrowing in the past to fund revenue expenditure as well as to repay the loans also. This cannot be permitted any longer. It is suicidal.

6.14.12 As per the above analysis and taking into account the APDRP, PMGY and other grants of Rs. 158.98 crore, the Commission approves new loans of Rs. 156.46 crore adding up to Rs 315 crore of investments in FY 2005-06. The approved investments and the corresponding sources of funds for FY 2005-06 have been summarized in the approved Investment and Debt Plan (Annexure 6A).

6.14.13 Regarding the Working Capital, the Commission has worked out the requirement as per the norms of one month O&M expenses and two months receivables to arrive at the requirement and has allowed the same at market rate of interest of 8.5% per annum. The financing charges have been calculated at the existing rates being incurred by the Board on long term loans as well as short term requirements. The Working Capital and finance charges have been approved as Rs. 18.34 crore.

6.14.14 The Board, during interactions with the Commission also submitted an application that it will require an investment of Rs. 15.8 crore to comply with the direction of the Commission regarding maintaining system redundancy in transmission. The Commission has approved the amount as proposed by the Board as a loan @ 8.5% p.a. Hence, interest cost to the tune of Rs. 1.26 crore has been added to the interest expenditure. Further, the Board has also submitted that it would be paying an additional amount of Rs. 1.56 crore as interest on security deposit, taking the total interest on security deposit to Rs. 4.64 crore. The Commission allows the proposed amount.

6.14.15 The Commission also took note of the fact that contrary to the claims of the Board, Larji project is not getting commissioned in FY 2005-06. Similarly, Khauli project is also estimated to be commissioned by January 2006. Hence, the Commission has not allowed the corresponding interest & finance charges on account of these projects in the revenue expenditure and has transferred the same to CWIP. Further, as stated earlier, the Commission has approved the generation costs at the lower of the actual costs after prudency check or the benchmark tariff rates approved by the Commission. The balance expenditure has been disallowed in interest expenditure and depreciation, as these capital related expenses have been increased on account of the time and cost overrun in hydel generation projects. Thus, an additional amount of Rs. 7.65 crore has been disallowed against interest expenditure on account of the time and cost overrun in the commissioning of these two projects.

6.14.16 The analysis done by the Commission regarding interest and financing charges is given below:

Table 6.29: Approved interest & finance charges for FY 2005-06 (Rs. Crore)

Particulars	**FY 2002-03 Actual**	**FY 2003-04 Actual**	**FY 2004-05 Approved**	**FY 2005-06 Proposed**	**FY 2005-06 Approved)**
LIC	5.57	4.95	4.13	22.50	22.16
REC	23.62	18.22	14.38	20.00	6.81
PFC	44.51	58.84	88.94	85.48	73.08
Bonds	42.03	64.78	69.69	94.10	87.48
Bank	24.08	27.13	53.81	30.00	25.01
APDRP	-	-	-	-	0.91
Interest on transmission System Redundancy expenditure	-	-	-	-	1.26
Interest on SD	-	-	-	4.64	4.64
Interest on Loan from FIs/Banks	**139.81**	**173.92**	**230.95**	**256.72**	**221.34**
Interest on WC borrowing & Other Charges	39.9	32.03	16.62	38.15	18.34
Interest & Finance Charges – Total	**179.71**	**205.95**	**257.00**	**294.87**	**239.68**
Interest Capitalised	83.85	115.01	120.00	110.00	118.17
Tfd to CWIP on a/c of Larji & Khauli	-	-	-	-	34.15
Disallowed due to cost overrun on generation projects	-	-	-	-	7.65
Interest & Finance Charges after Capitalisation	**95.86**	**90.94**	**137.00**	**184.87**	**79.71**

6.14.17 From the above table, it is clear that some restructuring of loans can bring down the cost of the loans to the Board substantially and will be a step in the direction of improved financial viability of the Board. The live example of Baspa Hydel Power Project in the State is before the Board wherein the restructuring of debt has led to huge reduction in interest cost thereby reducing the overall burden on the consumers by way of lower tariff. Jaiprakash Hydro-Power Limited, which is the promoter of the Baspa Project, has submitted that the net savings to the project on account of debt restructuring, on NPV basis, discounted at 9%, works out to Rs. 206.8 crore. If the discounting is done at 10.55%, the net saving works out to Rs. 190.92 crore.

6.14.18 Thus, the Commission approves Rs 79.71 crore as interest & financing charges of the Board net of capitalisation after accounting for the transfer to CWIP on account of Larji and Khauli and disallowance due to cost overrun on generation projects.

6.14.19 Regarding the capitalization of interest charges, the Commission analysed the past trend and realized that the capitalization of interest is of the order of 45% - 55% of the total interest in last three years. The Commission has considered the average actual capitalization of the last three years to compute the capitalisation for FY 2005-06.

6.15 Repair & Maintenance (R&M) Cost

6.15.1 The Board has proposed expenses on repair and maintenance of plant & machinery, transformers, building, other civil works, vehicles and furniture & fixtures etc. at 24.67 crore in its first submission. As per the submission of the Board, the R&M expenses have been increased by 20% over the FY 2004-05 estimates on account of inflation, increase in asset base and to increase the operational efficiency of the existing assets.

6.15.2 As detailed in the write-up on Interest & Financing charges, the Board has proposed an additional expenditure of Rs. 15.8 Crore on account of investment in maintaining system redundancy in transmission.

Commission's Analysis

6.15.3 The Commission's analysis of the R&M expenditure proposed by the Board has shown that the R&M expenditure on account of Larji and Khauli plants has also been included by the Board in its projections. Since the Larji plant is not being commissioned this year and Khauli shall commence operations in the last quarter of the current financial year, the Commission feels that the corresponding R&M expenditure on account of these plants should not be passed on to the consumer. However, on account of 3 month operation of Khauli plant as envisaged, it is entitled for R&M expenses in the same proportion. Hence Rs.

4.14 crore estimated on account of R&M expense towards Larji and Khauli has been transferred to CWIP.

6.15.4 The Board in its subsequent submissions also proposed an additional expenditure of Rs. 15.8 crore on account of maintaining redundancy in the transmission system. The Commission, too, feels that the amount spent would benefit the Board in the long run. Hence, the Commission has treated the proposed amount as a loan to the Board and allowed interest thereon as detailed in the previous paragraphs on Interest & Finance charges. Further, the Commission strongly feels that as compared to other States, there is under reporting of R&M expenses and that some of the expenses of account of R&M are getting classified as employee expenses due to accounting norms. The Commission has computed the R&M expense as a percentage of GFA which works out to be in the range of 1%-1.1% of GFA. The Commission therefore, feels it prudent to transfer the amount from employee expense to R&M expenses such that the R&M expense is equal to 2% of GFA. Further, the Commission has been repeatedly advising the Board to hand over the hospitals and schools run by it to the Government. In the absence of compliance, the Commission feels it prudent to deduct the R&M expenditure of such structures @ 2% of the value of such assets which has been reported by the Board to be Rs. 55.75 Lakh.

6.15.5 The analysis of the Commission is summarized in the table below:

Table 6.30: R&M Expenses approved by the Commission (Rs. Crore)

	FY 2002-03 Actual	FY 2003-04 Actual	FY 2004-05 Approved	FY 2004-05 Actual	FY 2005-06 Proposed	FY 2005-06 Approved
Plant & Machinery	3.06	5.24	-	-	5.13	5.13
Transformers	0.00	0.00	-	-	0.00	0.00
Building	1.65	1.54	-	-	2.30	2.30
Other civil works	1.33	1.54	-	-	1.86	1.86
Hydraulic Works	1.02	0.80	-	-	1.42	1.42
Lines, Cable Network etc.	12.03	12.23	-	-	16.78	16.78
Sub station maintenance by	0.00	0.00	-	-	0.00	0.00

private agencies						
Vehicles	-0.47	-0.52	-	-	-0.66	-0.66
Furnitures & Fixtures	0.05	0.04	-	-	0.12	0.12
Office Equipment	0.08	0.13	-	-	0.11	0.11
Spare inventory for maintaining Tr. redundancy			-	-	15.80	0.00
Transfer of amount from employee expenses			-	-		19.35
Others	-3.63	-3.87		-	-2.39	-2.39
Total Expenses	**15.12**	**17.13**			**40.47**	**44.01**
Less						
R&M of schools & Hospitals	-	-	-	-	-	.01
Tfd to CWIP on a/c of Larji & Khauli	-	-	-	-	-	4.14
Total	**15.12**	**17.13**	**22.71**	**15.68**	**40.47**	**39.87**

6.16 Gross Block of Assets

6.16.1 The Board has proposed the gross fixed block of assets of Rs. 2244.76 crore for FY 2005-06. The Commission notes with displeasure that the Commission's directive issued in the Tariff Order for FY 2004-05 has not been complied with in regard to the physical verification of assets. Commission had directed the Board to get an independent valuation done regarding the revenue earning potential and market value of the assets of the Board. It had tendered a statutory advice also to the GoHP to this effect. However, Board has failed to achieve any progress in this regard Further, Commission has been pressurizing the Board to come out with a list of unremunerative, idle and non-productive assets that are not useful and, therefore, not entitled for depreciation, return and R&M expenditure and should have been divested by the Board following prudent practices. In the absence of any details from the Board regarding such assets, the Commission has assumed Rs. 15 crore of assets as unproductive and disallows the depreciation on such assets. The Commission taking note of the non-compliance of advice regarding handing over the schools and hospitals run by the Board to the GoHP. treats their asset value as unproductive and adds it to other unproductive assets totaling to Rs. 15.56 crore.

6.16.2 The Board has further submitted in its revised submissions that it has added assets of Rs. 354.34 crore (including consumer contribution of Rs. 6 crore) in FY 2004-05.. The Commission, therefore, for the purpose of tariff determination approves the gross block of assets as Rs. 2132.67 crore against the proposed amount of Rs. 2244.76 crore after taking into account the addition in asset base as well as deduction on account of unproductive assets.

Table 6.31: Gross block of Assets (Rs. Crore)

Gross Block at the start of 2004-05	1,793.89
Estimated Capital Assets added during the yr	354.34
Less: Unproductive Assets	15.56
Total	2,132.67

S. No	Particulars	FY 2005-06 Proposed	FY 2005-06 Approved
1	Gross Block of Assets	2244.76	2132.67

6.17 Depreciation

6.17.1 The Board has proposed depreciation of Rs 56.12 crore on adhoc basis @ 2.5% stating that the data related to function-wise fixed assets is not available. The Commission in its last Tariff Order for FY 2004-05 had also stressed on the need of creation of fixed asset register in order to get function-wise classification of fixed assets.

6.17.2 The Commission has apportioned the total gross block as at the beginning of FY 2005-06 in the same proportion as at the end of FY 2002-03. The Commission has applied the rate of depreciation as prescribed by the CERC on the individual asset blocks available as at the beginning of FY 2005-06, to calculate the depreciation amount. Further, on account of non-commissioning of Larji project and late commissioning of Khauli project, the Commission has not allowed the proportionate depreciation on the same and has additionally disallowed Rs. 1.43

crore on account of cost overrun in generation projects. The details of the Commission's computations are given as under:

Table 6.32: Depreciation approved for FY 2005-06 (Rs. Crore)

Asset Block	Gross block at the end of the year 2002-03	Gross block at the beginning of FY 2005-06	Depreciation rate as per CERC norms	Depreciation (Approved)
Land	33.02	41.49	0.00%	0.00
Buildings	161.1	202.42	1.80%	3.64
Hydraulic works	339.7	426.84	1.80%	7.68
Other civil works	124.59	156.55	1.80%	2.82
Plant & Machinery	484.86	609.23	2.57%	15.66
Lines & Cable network	520.78	654.36	3.60%	23.56
Vehicles	17.9	22.49	6.00%	1.35
Furniture and fixture	13.57	17.05	6.00%	1.02
Office equipment	1.78	2.24	6.00%	0.13
Total	**1697.30**	**2132.67**	-	**55.87**
Tfd to CWIP for Larji, Khauli (partly)	-	-	-	12.76
Disallowed due to cost overrun	-	-	-	1.43
Revised Depreciation	-	-	-	**41.68**

6.18 Return on Equity

6.18.1 The Board has proposed a return of Rs. 45 crore @3% over Net fixed assets of Rs. 1500 crore. The Commission has, however, followed the Return on Equity (RoE) approach as described in the following paragraphs.

6.18.2 As per the Annual Report of FY 2003-04, the equity capital of the Board is Rs. 280 crore. Further, as per the information to the Commission, additional equity of Rs. 2.11 crore was infused in FY 2004-05. Considering no equity infusion in FY 2005-06, the Commission has apportioned the equity capital of the Board at Rs. 282.11 crore into generation, transmission and distribution in the same ratio as the GFA at the start of FY 2005-06.

6.18.3 The Commission has also disallowed RoE on account of Larji project and Khauli project (corresponding to 9 months) due to the delay in achieving commercial operation for these projects. The Commission has allowed RoE to the generation, transmission and distribution businesses at the rate of 14%, 14% and 16%, respectively, in accordance with its Regulations on 'Terms and Conditions of Determination of Tariff', as detailed in the table below:

Table 6.33: Return on Equity (Rs. Crore)

		Generation	Transmission	Distribution
Percentage Share in total GFA at start of FY 06		43.03%	18.69%	38.28%
Equity - FY06	**282.11**			
Average Equity		121.39	52.73	108.00
Return on Equity	-	14%	14%	16%
Return on Equity - Rs. Cr	-	16.99	7.38	17.28
Net Return on Equity	**-**	**41.66**	-	-

6.19 Annual Revenue Requirement

6.19.1 The Commission herewith approves the Annual Revenue Requirement (ARR) after incorporating the above changes, including the return on assets, at Rs. 1264 Crore as against Rs. 1446 Crore proposed by the Board for FY 2005-06. The detailed break up of various components of the ARR is shown below.

Table 6.34: Annual Revenue Requirement for FY 2005-06 (Approved) (Rs. Crore)

		FY 06	
S.No	**Expense**	**Proposed**	**Approved**
1	Power Purchase	705	692
2	Reduction in Cost for excess T&D loss		
3	Net Power Purchase Cost	705	692
4	Employee Cost	459	422
5	A&G	41	33
6	R&M	40	40
7	Depreciation	56	42
8	Interest & Financing	295	198
9	Total Gross Expenditure	**1596**	**1426**

10	Less: Reduction in generation expenditure due to GoHP share	-	5
11	Less: Reduction in generation exp. due to failure to submit separate gen tariff petitions	-	3
12	Less: Expenses Capitalised	195	196
13	**Net Total Expenses**	**1401**	**1223**
14	Return on Equity	45	41
15	**Annual Revenue Requirement**	**1446**	**1264**

6.20 Unbundled Revenue Requirement

6.20.1 The unbundled revenue requirement for each business, viz. generation, transmission and distribution, vis-à-vis the proposed revenue requirement is shown in the table below. However, it should be noted that for the purposes of segregation between different businesses, the Commission has had to accept the proportion considered by HPSEB in the absence of Fixed Asset Register and proper segregation of various cost components.

Table 6.35: Unbundled Revenue Requirement (Proposed/Approved) (Rs. Crore)

Particulars	**Generation**		**Transmission**		**Distribution**		**Total**	
	Proposed	Approved	Proposed	Approved	Proposed	Approved	Proposed	Approved
Repair & Maintenance	8.40	8.28	18.21	17.94	13.87	13.66	40.47	39.87
Employee Cost	75.38	69.32	40.76	37.48	342.39	314.85	458.53	421.65
Admn & Gen Expenses	1.80	1.45	1.20	0.97	38.25	30.76	41.25	33.17
Depreciation	21.78	16.18	12.48	9.27	21.86	16.24	56.12	41.68
Interest and finance	123.00	82.54	59.04	40.62	108.19	74.10	294.87	197.87
Less : Expense to be Capitalised	52.10	52.43	26.21	26.38	116.52	117.26	194.83	196.07
Sub – Total	**178.26**	**125.32**	**105.48**	**79.90**	**408.04**	**332.35**	**696.41**	**538.17**
Gross Assets at the beginning of the year	893.91	-	509.11	-	841.73	-	-	-
Net Fixed Assets at the beginning of the year	627.33	-	331.35	-	547.49	-	-	-
Return on the Net Fixed Assets*	18.82	16.99	9.94	7.38	16.42	17.28	45.18	41.66
Less								
Reduction in generation exp. due to GoHP share	-	4.70	-	-	-	-	-	4.70
Reduction in generation exp. due to failure to submit separate gen	-	2.70	-	-	-	-	-	2.64

tariff petitions								
Total costs	**197.08**	**134.91**	**115.42**	**87.28**	**424.47**	**349.63**	**741.59**	**572.49**

Note: * - The Commission has approved RoE and has not approved RoNFA as sought by the Board

6.21 Non Tariff Income

6.21.1 The Board has proposed Non-Tariff and other income of Rs. 71.27 crore for FY 2005-06 on account of various charges imposed by the Board. The Commission has analysed the proposal and found that there is under reporting of income by the Board. With the rise in connections, the meter rent is likely to increase by at least 10%. The measures adopted by the Board to curb theft, etc. would also result in an increase against recovery on account of theft and malpractices to at least Rs. 1 crore for FY2005-06. Further, the Board has not proposed any amount against PLEC and PLVC charges.

6.22 Other businesses

6.22.1 Sections 41 and 51 of the Electricity Act, 2003 specify that a transmission licensee or distribution licensee may, with prior intimation to the Commission, engage in any other business for optimum utilisation of its assets subject to the various provisions laid down in the regulations framed by Commission in this regard. The Commission feels that the Board should take benefit of this provision of the Act and should engage its manpower and assets to generate additional revenue streams. The Commission observes that the Board has lot of potential for doing “Other Businesses” as it possesses substantial manpower with adequate skills. The “Other Areas” in which the Board can engage to generate additional revenue streams are consultancy on structural, architectural and hydro power project designs, preparation of detailed project reports, wiring of electrical installations of houses, retailing of electrical equipment, broad band data and internet connectivity, manufacture of PCC poles, line and hardware fittings and construction of works on rechargeable basis on behalf of third parties, etc. Accordingly, the Commission has considered an amount of 10 Cr. to be generated from “Other Businesses” in its non-tariff income.

6.22.2 The details of the approved Non-Tariff and other income are given below:

Table 6.36: Approved Non tariff income for FY 2005-06 (Rs. Crore)

Particulars	FY2002-03 (Act.)	FY 2003-04 (Act.)	FY2004-05 (App.)	FY 2004-05 (Act.)	FY 2005-06 (Prop.)	FY 2005-06 (App.)
Non-tariff Income:						
a) Meter Rent/service line rentals	20.42	20.36	26.10	24.00	22.45	26.40
b) Recovery for theft of power/malpractices	0.14	0.01	0.00	0.00	0.01	1.00
c) Wheeling Charges recovery	2.12	6.38	0.00	0.00	7.03	7.03
d) Miscellaneous charges from consumers	0.87	1.47	1.12	0.00	1.62	1.62
e) PLEC and PLVC charges	-	-	10.59	-	-	10.00
Other Income						
a) Interest on Staff loans & advances	0.99	1.11		-	1.22	1.22
b) Income from Investments	0.15	0.02	0.45	-	0.02	0.02
c) Interest on loans & advances to licencees	-	0.00		-	0.00	0.00
d) Delayed payment charges from consumer	5.85	11.40	5.00	7.10	12.57	12.57
e) Interest on advances to suppliers/contractors	1.00	0.30	-	-	0.33	0.33
f) Interest on banks (other than on fixed deposits	0.22	-	-	-	-	-
g) Income from trading	0.68	0.55	-	-	0.61	0.61
h) Income from staff welfare activities	0.05	0.04	-	-	0.04	0.04
i) Income from Other business	-	-	-	-	-	10.00
j) Miscellaneous receipts	10.10	23.02	22.95	32.08	25.38	25.38
Surcharge on non payment of subsidy by GoHP	-	-	3.52	-	-	-
Less Rebate for supply at higher voltage	-	-	(3.55)	-	-	-

Total non-tariff & other income	**42.58**	**64.64**	**66.18**	**63.19**	**71.27**	**96.21**

6.23 Revenue Gap

6.23.1 The revenue gap, at the level of existing tariffs and non-tariff income is Rs 111 Crore, as shown in the table below.

Table 6.37: Revenue gap at level of existing tariff for FY 2005-06 (Rs crore)

	Description	Proposed	Approved
(1)	Revenue requirement	**1446**	**1264**
(2)	Income		
(a)	Sale of power within the State	849	851
(b)	Sale of power outside the State	233	206
(c)	Other income	71	96
	Total Income	**1154**	**1153**
	Net Gap (1-2)	**292**	**111**

SECTION 7

COST OF SUPPLY (COS) AT DIFFERENT VOLTAGE LEVELS

The "concept paper on tariff determination" circulated by the Commission in February 2005 deliberated upon the aspect of cost of supply at different voltages, the approach adopted by the Commission in this regard in earlier Tariff Orders as well as the approach proposed to be adopted by the Commission while determining tariffs for FY 2005-06. Having already elaborated earlier on the theoretical background for the need for determination of voltage level cost of supply as well as the broad methodology adopted by the Commission in the Tariff Order for FY 2004-05, the Commission has not reproduced these aspects in this Tariff Order. In this Section, the Commission has elaborated on the detailed methodology and assumptions used for determination of the cost of supply giving reasons for the changes in assumptions, wherever applicable.

7.1 Background

7.1.1 Section 62 (3) of the Electricity Act, 2003 empowers the Commission to differentiate between consumers based on certain predefined parameters, and states,

"62. (3) The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity 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."

7.1.2 In the earlier Tariff Orders, the Commission has made a sincere effort to reduce the cross-subsidies prevalent in the electricity sector in the State, by reducing the differential between the average realisation and the cost of supply at the respective voltage. At the same time, the Commission has also tried to ensure that no consumer category is subject to a tariff shock. As a consequence, considering the high level of cross-subsidy prevalent in the State prior to the advent of the regulatory regime, the reduction in cross-subsidy has had to be in a gradual manner. In this Order too, the Commission has accentuated the movement of category-wise tariffs towards the voltage level cost of supply.

7.1.3 Though the Commission had given directions to the HPSEB to submit relevant data to enable computation of the voltage level cost of supply in a more scientific and robust manner, the HPSEB has not submitted any additional data and has proposed tariffs in relation to the average cost of supply. Accordingly, the Commission has had to apply its own basis and assumptions to determine the voltage level cost of supply. Considering that there is no additional data to either prove or disprove the assumptions considered by the Commission in the previous Tariff Order, the Commission has by and large retained the same assumptions, apart from some changes to the loss levels in line with the target loss levels for FY 2005-06. In the subsequent paragraphs, the Commission has detailed its assumptions and the method of computation of the cost of supply for FY 2005-06. The Commission has also given certain directives to the Board to gather the relevant data required for determination of the voltage level cost of supply as well as the category-wise cost of supply. This data can be collected in conjunction with the data collection for the comprehensive T&D loss assessment study being undertaken by the Commission at the cost and expense of the Board.

7.2 <u>Assumptions</u>

7.2.1 The Commission has designed the CoS model on the 'basic assumption' that power in Himachal Pradesh electricity network flows through each voltage level to reach Low-Tension (LT) consumer. In other words, power to reach at LT network will transmit through 220 kV, 132 kV, 66 kV, 33 kV, 22 kV and 11 kV. Though this is strictly not a correct assumption, as power does flow from a higher voltage to lower voltages without passing through the intermediate voltages, for instance, 132 kV to 33 kV, 33 kV to 11 kV, the Commission has had to make this assumption in the absence of load flow study and accurate power flow diagram outlining the flow of energy from one voltage to another.

7.2.2 The Commission has also made certain assumptions to arrive at the sales and losses at each voltage level and hence the network cost at various voltage levels. These assumptions are described below:

7.2.3 The category-wise sales have been allocated to different voltages in the same proportion as that considered in the Tariff Order for FY 2004-05.

7.2.4 The losses at EHT level have been computed as the weighted average of the loss levels prevailing in the EHT system within the State as well as the EHT losses prevailing on the PGCIL system on sales outside the State. HPSEB has submitted that the loss level at EHT system for sales within the State is 3.71% and the loss level for sales outside the State is 3.45%. Accordingly, the loss at EHT system has been computed at 3.68%. The overall losses in HPSEB system for sales within the State have been mandated as 19.5%, considering a 1% reduction in losses over FY 2004-05 levels. The loss levels at above 11 kV level and below 11 kV have been correspondingly reduced, such that the T&D losses on sales within the State works out to 19.5%. The losses at 11 KV and above (HT) have been considered as 7.50% and losses at voltage levels below 11 KV (LT) have been considered as 20.30%.

7.2.5 The cost incurred at each level, i.e. generation, transmission and distribution has been computed on the same basis as last time, except for one significant change. The free power available earlier is no longer available as the GoHP has claimed that the free power belongs to the GoHP and it will sell this power in the market during summer and sell it to the Board during the winter at the average purchase rate at which the Board will purchase power during winter. As the free power was being considered as indirect subsidy to the domestic consumers, the effective cost incurred for domestic consumers will thus increase significantly, in the absence of availability of free power. In the Tariff Order for FY 2004-05, the Commission had apportioned Rs. 5 crore of the distribution cost to the transmission business in order to account for the cost incurred towards metering, billing and collection for consumers in the transmission system. The same assumption has been considered in FY 2005-06 also, in the absence of any better quality information. This cost has been apportioned to the sale to industrial consumers at EHT level and the power wheeled through this system to other voltages, and the loss incurred in this network

7.2.6 The distribution cost has been correspondingly reduced by Rs. 5 crore, and has been further segregated into HT and LT network costs in proportion to the sales in the respective networks.

7.3 Determination of CoS for FY 2005-06

7.3.1 The methodology used to determine the Cost of Supply at different voltage levels in FY 2004-05 has been carried forward to determine the CoS at different voltages in FY 2005-06 and is described below.

7.3.2 The per unit cost of generation and power purchase has been determined by dividing the total generation and power purchase cost with the total energy input in the system.

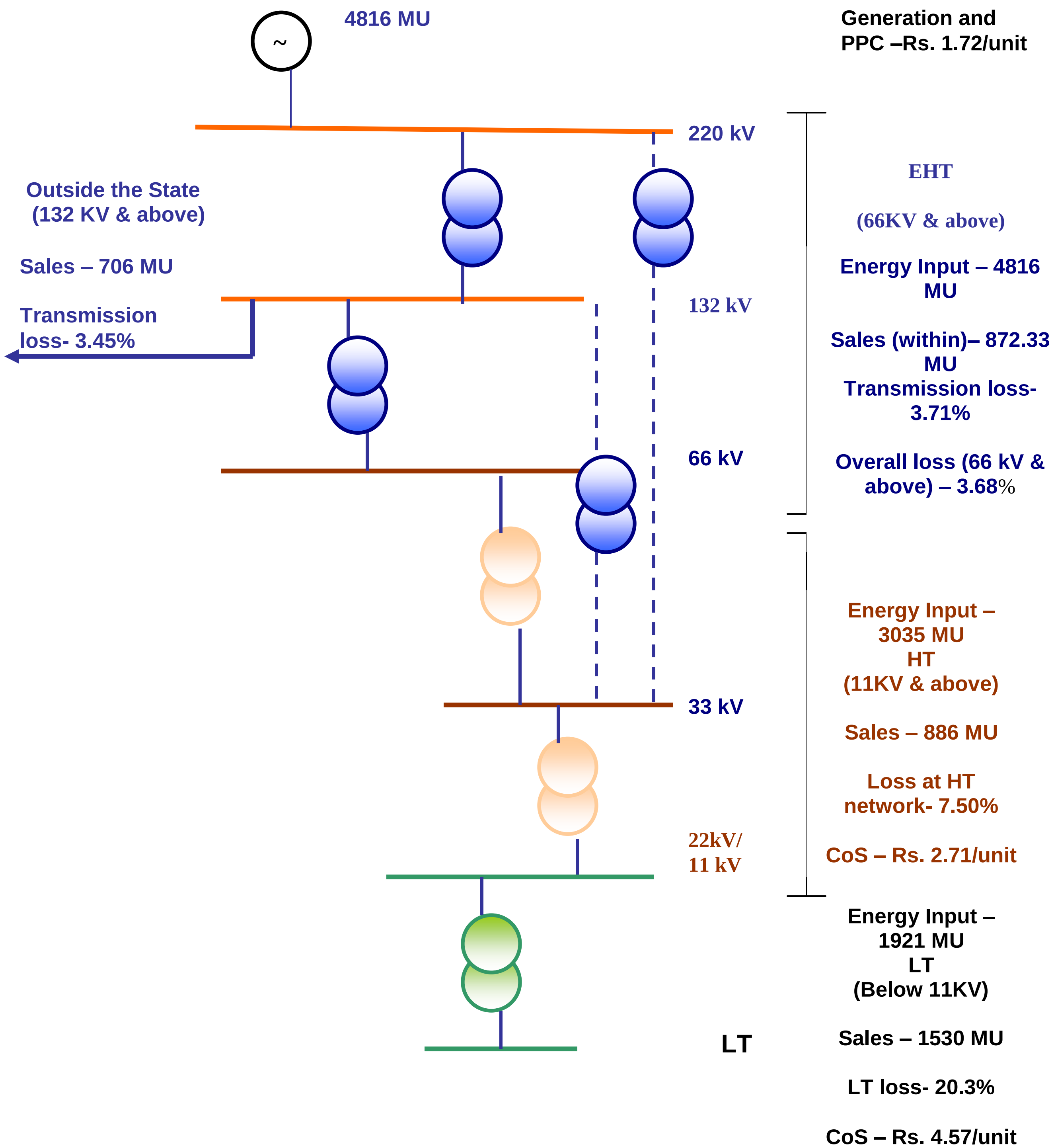
7.3.3 The per unit transmission cost has been determined by allocating the losses and cost according to the sales in this network (66 kV and above) and power wheeled through this network to reach the lower voltage level. Cost has also been allocated to the power wheeled through this network. Similarly, losses have been apportioned according to the sale at this system and the power wheeled through this system.

7.3.4 The Cost of Supply to consumers at High Tension (11 kV and above) has been estimated by allocating costs and losses according to the sales to HT consumers and power wheeled to reach the LT network. It also proportionally includes the cost and losses incurred during the wheeling of power at 66 kV and above network.

7.3.5 The Cost of Supply for the consumers at Low Tension (below 11 kV) level has been estimated by ascertaining the distribution cost (below 11 kV), losses (below 11 kV) and sales to LT consumers. It also includes the proportional costs (and losses) incurred during the wheeling of power at higher voltage levels (220 kV to 11 kV).

7.3.6 The schematic chart depicting the Commission's approach to determination of the Cost of Supply at different voltages and the CoS determined at the respective voltages is shown below:

Schematic chart
depicting the COS approach



7.4 Segregation of sales at various voltage levels

7.4.1 The sales at each voltage level, estimated on the basis of the assumptions discussed above, have been reproduced in the Table below:

Table 7.1: Sales at different voltages (FY 2005-06)

	Sales
132 kV and above	706
66 kV above (EHT)	872
11 kV and above (HT)	886
Below 11 kV (LT)	1530
Total	3994

7.4.2 The above sale includes sale of 706 MU outside the State (sale at 132 kV and above).

7.5 Segregation of losses

7.5.1 As discussed earlier, the losses at each voltage level have been assessed on the basis of certain assumptions. The losses at each voltage level have been presented in the Table below:

Table 7.2: Segregation of losses at various voltage levels

	T&D losses
132 kV and above	3.45%
66 kV above	3.71%
Weighted average loss at EHT	3.68%
11 kV and above (HT)	7. 50%
Below 11 kV (LT)	20.30%
Total HPSEB	19.50%

7.6 Segregation of costs

7.6.1 For arriving at the Aggregate Revenue Requirement (ARR) all the costs are divided into Generation, Transmission, and Distribution, in the following manner.

7.6.2 **Generation and power purchase cost**: The Commission has considered the approved generation and power purchase cost, which works out to Rs. 826.7 crore.

7.6.3 **Transmission Cost**: The Commission has approved transmission cost of Rs. 92.3 crore, including Rs. 5 crore, towards metering, billing and collection which is reflected in the distribution cost, as discussed earlier. This cost has been apportioned to the sale to industrial consumers, the power wheeled through this system and loss incurred in this network. The sale in transmission system (above 66 kV) also includes the outside sale, since it is wheeled through 132 and 220 kV systems of the Board.

7.6.4 **Distribution Cost**: For arriving at the CoS, the Commission has considered the distribution cost of Rs. 344.6 crore after deducting the metering, billing and collection cost incurred for the consumers in the transmission system. The distribution cost has further been divided into HT and LT network costs, according to the proportion of sales in these networks.

7.6.5 The sales; losses and cost at different voltage levels are given below in the table.

Table 7.3: Segregated sales, losses and cost at different voltage levels

Head	Sales	Losses	Cost at different voltage levels (Rs. Crore)
Generation and PPC			826.7
	MU	%	
Transmission system			92.3
132 KV and above	706	3.45%	
66 KV above	872	3.71%	
Weighted average loss		3.68%	
Distribution system			
11 KV and above (HT)	886	7.50%	126.4
Below 11 KV (LT)	1531	20.30%	218.2

Total	3994	19.50%	345.0

7.7 Allocation of costs to arrive at the COS

7.7.1 **Step 1**: The per unit cost of generation and power purchase has been arrived at by dividing the generation and power purchase cost with the total energy input in the system.

Table 7.4: Generation and PP C

Energy Input (MU)	MU	4816
Generation and PPC*	Rs. Crore	827
Cost of generation and PPC	Rs./unit	1.72

7.7.2 **Step 2**: The per unit transmission cost has been ascertained by allocating the losses and cost according to the sales in this network and power wheeled through this network to reach at the lower voltage level. Similarly, the losses also have been apportioned according to the sales at this level and the power wheeled through this system.

Table 7.5: Cost of Supply for EHT consumers (66 kV and above)

Energy input (MU)	4816
Percentage loss	3.68%
Losses (MU) (calculated @ 3.71%)	179
Sales (MU)	1578
Units wheeled to reach next level (MU) (after considering 25 MU loss in outside State sales)	3035
System cost that needs to be proportionally allocated (Rs.Crore)	92
Allocated Cost at 66 kV and above (Rs. Per unit)	2.02

Note: All calculations as per Cost of Supply Model developed by the Commission

7.7.3 **Step 3**: The Cost of supply to consumers at High Tension (11 kV and above) has been estimated by allocating the costs and the losses according to the sales to HT consumers and power wheeled to reach the LT network. It also includes proportionally the cost (and losses) incurred during the wheeling of power in the network at 66 kV and above.

Table 7.6: Cost of Supply for HT consumers (11 kV and above –till 66 kV)

Energy input at below 66 KV (MU)	3035
Percentage loss at 11 KV and above (till 66 KV)	7.50%
Losses (MU) at 11 KV and above (till 66 KV)	228
Sales (MU) at 11 KV and above (till 66 KV)	886
Units wheeled to reach LT network (below 11 KV)	1921
System cost that needs to be proportionally allocated (Rs.Crore)	126
Allocated Cost for High Tension consumers (11 KV till 66 KV)	2.71

7.7.4 **Step 4**: The Cost of Supply for the consumers at Low Tension (Below 11 kV) level has been estimated by ascertaining the distribution cost at below 11 kV, losses below 11 kV and sales to LT consumers. It also includes the proportional costs (and losses) incurred during the wheeling of power at higher voltage levels (11 kV to 220 kV).

Table 7.7: Cost of Supply for LT consumers (Below 11 kV)

Energy input below 11 KV (MU)	1921
Percentage loss	20.30%
Losses (MU)	390
Sales (MU)	1530
Units wheeled to reach next level	NA
System cost that needs to be allocated (Rs.Crore)	218
Allocated Cost for LT consumer	4.57

7.7.5 The approved COS at different voltage level for determination of tariffs is shown in the following table.

Table 7.8: COS at different voltage levels (FY 2004-05)

	EHT consumer	**HT consumer**	**LT consumer**
Energy input at different voltage level (MU)	4816	3035	1921
Percentage loss	3.68%	7. 50%	20.30%

Losses at different voltage level (MU)	179	228	390
Sales at different voltage level (MU)	1578	886	1530
Units wheeled in each voltage level	3035	1921	NA
System cost that needs to be allocated (Rs.Crore)	92	126	218
Allocated Cost at different voltage level (Rs./unit)	2.02	2.71	4.57

SECTION 8

COMMISSION'S TARIFF PHILOSOPHY & DESIGN OF TARIFF STRUCTURE

8.1 The philosophy of tariff determination is primarily guided by the principles enshrined in Section 61 of the Electricity Act, 2003, Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2004 and the National Electricity Policy issued by Ministry of Power, GoI on February 12, 2005. The guiding principles as laid down in Section 61 of the Act have been reproduced below: -

(a) the principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;

(b) the generation, transmission, distribution and supply of electricity are conducted on commercial principles;

(c) the factors which would encourage competition, efficiency economical use of the resources, good performance and optimum investments;

(d) safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;

(e) the principles rewarding efficiency in performance;

(f) multi-year tariff principles;

(g) that the tariff progressively, reflects the cost of supply of electricity, and also reduces and eliminates cross-subsidies within the period to be specified by the Appropriate Commission;

(h) the promotion of co-generation and generation of electricity from renewable sources of energy;

(i) the National Electricity Policy and tariff policy.

8.2 The Commission has also laid down similar guiding factors for determination of tariff in its HPERC (Terms and Conditions for Determination of Tariff) Regulations, 2004. These guiding factors further lay stress on reduction of losses and costs. The tariff determined by the Commission and the directions given in the Tariff Order shall be quid-pro-quo and mutually inclusive.

8.3 Apart from these principles, the National Electricity Policy has also laid down emphasis on Multi-Year Tariff framework, segregation of technical and commercial losses, incentives for the use of pre-paid meters, putting in place the governance structure in distribution needed for ensuring recovery of cost of service from consumers, minimum level of support for consumers of poor categories, need to correct the imbalance on account of cross subsidy progressively and gradually without giving tariff shock to the consumers and above all the competition which is the very quintessence. The National Electricity Policy also emphasises the advance subsidy to be given by the State Government as per Section 65 of the Act and mentions that necessary budgetary provision be made in advance so that the utility does not suffer financial problems. The Electricity Policy further makes mention of the efforts to ensure that subsidies reach the targeted beneficiaries in the most transparent and efficient way.

8.4 The Commission observes that the Board has lot of potential for doing "Other Businesses" as it possesses substantial manpower with adequate skills. The "Other Businesses" in which the Board can engage to generate additional revenue streams are consultancy on structural, architectural and hydro power project designs, preparation of detailed project reports, wiring of electrical installations of houses, retailing of electrical equipment, broad band data and internet connectivity, manufacture of PCC poles, line and hardware fittings, and construction of third party structures, etc. Accordingly, the Commission has considered an amount of 10 Cr. to be generated from "Other Businesses" in its non-tariff income.

8.5 The Commission issued a concept paper on tariff determination in February 2005 which discussed the objectives, tariff principles, background of tariff regulations in Himachal, cost of supply and further refinement of tariff regulation through quality linked tariff and issues/areas of concerns and Multi-Year Tariff. The issues deliberated by the Commission in the concept paper have been briefly described below: -

- kVAh based tariff
- Refinement of cost of supply model used in Tariff Order for FY-2004-05.
- Introduction of time of use tariff for domestic customers with connected load of 20 kW and above.
- Linking qualitative and quantitative attributes of power supply to the tariff design.
- Issues and areas of concern for the implementation of Multi-Year Tariff frame work.
- Introduction of efficiency and performance targets on Multi-Year basis in the absence of credible base line data.
- Introduction of incentives to the Board depending on its performance in relation to the performance targets.
- Structure of incentives.
- The Control Period for the performance target.
- Assessment of the success of target based regulation in other States and in other countries.
- Establishment of monitoring system to ascertain the extent of accomplishment.

8.6 The objections/comments of the various stakeholders are quite significant in design of tariff. While the objections/comments have been discussed in detail in section 4, some of the important objections/comments expressed in writing as well as in public hearing, therefore, have been discussed in brief as under: -

(i) The industrial and commercial consumers have opposed the tariff increase by the Board. They pleaded as under: -

(a) The increase in tariff would be against the philosophy of the Commission to reduce the cross subsidy and bring the tariff to cost of supply level as the same has been stated and reiterated in the Tariff Order for FY-2001-02, Tariff Order for FY 2004-05 and also in HPERC (Terms and Conditions of Determination of Tariff) Regulations, 2004.

(b) Large industry consumers will have no choice but to seek open access from other sources and also abandon their future expansion plans as the proposed tariff by the Board was too high.

(c) Industry shall lose its competitive edge and would find it difficult to survive in the era of globalisation specially on account of the competition from China.

(ii) The consumers were also critical of lack of adequate information in the petition filed by the Board.

(iii) The consumers objected to the Board's proposal to create Regulatory Assets for the uncovered gap.

(iv) The consumers were highly critical of Board's non-compliance with the directives of the Commission.

(v) The consumers also objected to the high power purchase cost from outside the State, high T&D losses, high A&G expenses, high interest, high finance charges and high depreciation rates.

(vi) The industrial consumers objected to the poor quality of supply. The consumers also requested for increase in night time rebate and also extension in the period of night time concession.

(vii) The Association of hotels objected to the current classification of hotels in commercial category and pleaded for different tariffs for peak season and off-peak season.

(viii) Government of Himachal Pradesh submitted that

(a) Government Health Institutions, Educational Institutions, Panchayat Ghars and Patwarkhana and also WPS categories should be placed under domestic categories and also no service charge should be levied on domestic consumers who fall within the consumption slab upto 150 units per month.

(b) GoHP would dispose off the entire free power available to it at most competitive rates in the market instead of giving it to the Board at subsidised rates, except during winter when the GoHP share of free power shall be available to it at the average price paid by it for purchase from outside the State.

8.7 Impact of delay in submission of tariff petition

8.7.1 The Commission admitted the Board's petition on March 2, 2005, though the Board had submitted its initial petition on December 8, 2004. The delayed acceptance of the petition was on account of inadequate data submitted by the Board which was essential for processing the petition. The Commission is issuing the Order within 120 days of acceptance of the petition, though HPSEB has been giving data even as late as ten days before the issue of the Order. The Board is also well aware that the tariff revision will have prospective effect only and will be applicable from July 1, 2005 till March 2006, and will cease to be applicable after March 31, 2006, if the Board does not submit its tariff petition for FY 2006-06 by November 30, 2005. Accordingly, the Commission has computed the revenue for FY 2005-06 with the revised tariffs, assuming that the revised tariff is applicable for the entire year. Any revenue loss to the Board on account of this delay in implementation of the revised tariffs is to the Board's account, and will not be recoverable from the consumers.

8.8 Regulatory Asset for revenue gap in FY 2004-05

8.8.1 The Board has asked for approval of Regulatory Asset for the projected revenue gap in FY 2004-05. However, the Commission is of the view that creation of a Regulatory Asset is an unhealthy phenomenon, and should be undertaken only in extreme cases, when the revenue gap cannot be met through tariff changes in the same year, due to unforeseen circumstances. Moreover, the Commission has assessed the actual gap in FY 2004-05, which works out to much lesser than that estimated by the Board. Hence, the Commission has not considered this revenue gap in FY 2004-05 to be met either through tariffs or through creation of a Regulatory Asset.

8.9 Truing up Mechanism

8.9.1 The Commission directs the Board to maintain stringent control and fiscal discipline over its expenses, and in no case will the Commission allow any variation beyond +3%, except for uncontrollable factors. No expense/shortfall in revenue will be allowed to be recovered from consumers in the subsequent year through truing up, beyond +3%. While submitting the petition for FY 2006-07, if there is any uncovered gap in FY 2005-06, due to uncontrollable factors, the Board should give a detailed explanation of the reasons for the deviation from the

Commission's Tariff Order. The Commission will apply its prudency check and decide on the need and extent of truing up at that time.

8.10 The Commission's Tariff Orders for FY-2001-02 and FY-2004-05 deliberated upon a number of conceptual issues in the tariff design. These issues which are very relevant in the tariff design for the current year also are as follows: -

(a) Cost based tariff and reduction of cross subsidies
(b) kVAh based tariff
(c) Two part tariff structure and abolition of minimum guarantee charges
(d) Time of use tariff
(e) Rebate for supply at higher voltage

8.11 The relevance of the above conceptual issues can be ascertained from the fact that the Commission has received a positive feedback after the implementation from the various stakeholders and a strong insistence from the stakeholders for further continuance of these concepts. Though, the above concepts have been discussed in detail in the Tariff Orders of FY-2001-02 and FY-2004-05, the same have been discussed briefly with details of the manner in which these concepts have been taken forward, in the following paragraphs:

8.12 The Commission has also introduced following new concepts in the current Tariff Order:

(a) Restructuring of Distribution (operation) circles and putting in place appropriate governance structure as per National Electricity Policy.
(b) Efficiency and performance linked incentive mechanism on multiyear basis
(c) Prepaid metering
(d) Lifeline (Below Poverty Line – BPL) category within domestic category and with tariff equal to 50% of average cost of supply, in line with the National Electricity Policy.
(e) Reform surcharge @ 5% of the respective category's tariff for funding the reform and restructuring of the Board.
(f) Gradual increase in the recovery from fixed charges

8.13 The Commission has discussed these concepts in the subsequent paragraphs:

8.14 Cost of supply and reduction of cross subsidies

8.14.1 In the Tariff Order for FY 2004-05, the Commission moved a step further towards the reduction of cross-subsidy and attempted to align the tariffs with the cost of supply at various voltage levels. The Commission's thinking has also been echoed in the National Electricity Policy which highlights the urgent need for ensuring recovery of cost of service from consumers to make the power sector sustainable. In attempting to align tariffs with the cost of supply, the Commission acknowledged the fact that though there is urgent need for ensuring recovery of the cost of supply from the consumers to ensure fiscal sustainability of the Himachal Pradesh State Electricity Board (the Board), the exercise should not send tariff shocks to any class of consumers. Moreover, a minimum level of support would be required to make electricity affordable for households in BPL category.

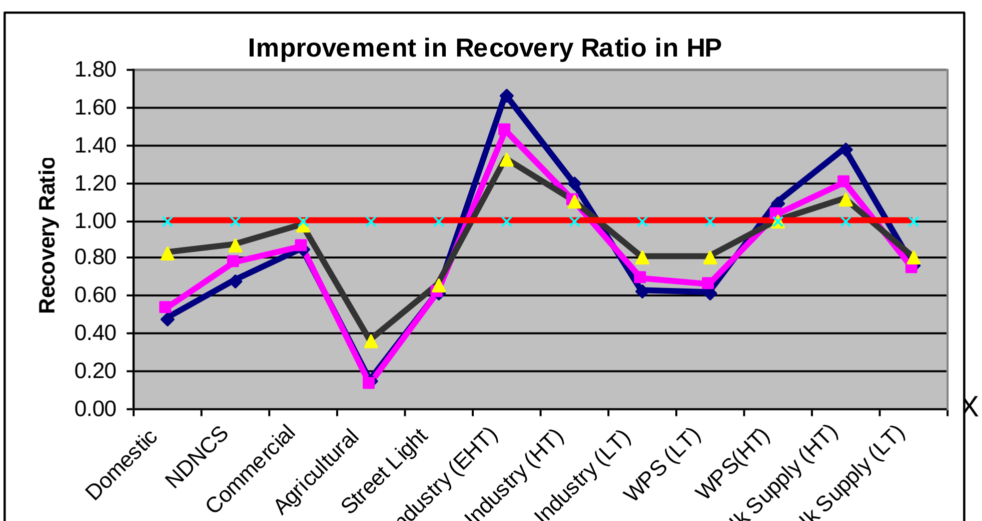
8.14.2 The Commission recognised that the estimation of cost of supply at different voltage levels would require extensive, reliable and credible data and information at different voltage levels and is a separate detailed exercise on its own. Nevertheless, the Commission endeavored to arrive at some estimates by making certain assumptions. In this Order, the Commission has extended the same principles to compute the voltage-wise CoS for FY 2005-06 as detailed in Section 7 of the Order.

8.14.3 The Commission focused on reduction in cross subsidy in the Tariff Order of FY-2004-05, and has accelerated the process of cross-subsidy reduction in FY 2005-06 also. The reduction in cross subsidy and change in cost of recovery from FY-2001-02 to FY-2005-06 is depicted by the following table and graphical representation respectively.

Table 8.1: Comparison of category wise cost recovery in FY 2001-02, FY 2004-05 and FY 2005-06

Consumer categories	Cost Recovery (%) FY 2001-02	Cost Recovery (%) FY 2004-05	Cost Recovery (%) FY 2005-06
Domestic	48%	53%	57%*/81%$
NDNCS	68%	77%	86%
Commercial	85%	86%	98%
Agricultural	15%	13%	36%
Street Light	61%	61%	65%
Industry (EHT)	166%	147%	133%
Industry (HT)	120%	110%	110%
Industry (LT)	62%	69%	80%
WPS (LT)	61%	66%	80%
WPS(HT)	109%	103%	100%
Bulk Supply (HT)	138%	120%	111%
Bulk Supply (LT)	76%	74%	80%

Note: * - without considering existing GoHP subsidy given to HPSEB for domestic category; $ - including existing GoHP subsidy given to HPSEB for domestic category at the same levels



8.14.4 The above table and graph clearly show that the Commission has consistently endeavoured and has achieved reduction in cross-subsidy every year through its Tariff Orders. In this Order, the agricultural tariff has been increased to 50% of the cost of supply at LT voltage. The domestic tariff has also witnessed a significant increase in line with the overarching objective of achieving reduction in cross-subsidy. The domestic tariffs have been suppressed at very low levels, and have been further cushioned due to the provision of GoHP subsidy.

8.14.5 The Commission would also like to clarify that if the GoHP desires to retain the tariffs for the domestic category at the existing levels, then it will have to pay subsidy equivalent to Rs. 126 crore, which is the sum of the additional revenue earned through the tariff increase determined by the Commission for FY 2005-06 for the domestic category and the existing subsidy of Rs. 40 crore.

8.15 kVAh based tariff

8.15.1 In the Tariff Order for FY 2001-02, the Commission had introduced two part kVAh based tariff for all large industrial consumers. The Commission had restricted this concept to large industrial consumers having connected load more than 100 kW only as it was a relatively new concept at that time and there were special metering requirements. In the Tariff Order for FY 2004-05, the Commission continued with the approach of adopting a phased extension of this concept. The Commission had directed that the two part kVAh based tariff structure in respect of Commercial, Non Domestic Non Commercial Supply, Water Pumping Supply, Small & Medium Supply and Bulk Supply should come into force on October 1, 2004. The deadline for this was later revised to April 1, 2005 considering the bottlenecks. Keeping in line with this philosophy, Commission directs the introduction of two-part tariff in the agricultural category and temporary connections also for connected load of above 20 kW. In case of mobile welding equipment/set, the consumer shall pay Rs. 50 per day in addition to the energy charges, and the user has to take the permission of the local SDO before connecting the welding set.

8.16 Two-part tariff

8.16.1 Though, the Board had some reservation about consumer service charges as introduced by the Commission in the Tariff Order FY-2001-02 and 2004-05, it had no such reservation in its petition for FY-2005-06 and, therefore, did not ask for any change. The Commission keeping in line with the earlier approach has persisted with the two-part tariff and consumer service charge.

8.17 Time of use tariff

8.17.1 In the Tariff Order for FY 2001-02, the Commission had recognized the importance and the need of including a time of use charge in the tariff structure so as to provide correct signals to the consumers and also help the Utility in maintaining a better system profile. The Commission had rationalised the Peak Load Exemption Charge (PLEC) and the Peak Load Violation Charge (PLVC). It had also introduced a night time concessional tariff for industrial consumers.

8.17.2 In the Tariff Order for FY 2004-05, the Commission continued with the levy of PLEC and PLVC for the categories of Small and Medium Industrial Power Supply, Large Industrial Power Supply, Water Pumping Supply and Agricultural Pumping Supply. Further, the Commission opined that the Time of Day (TOD) charge for consumption during the peak load hours and a rebate during off peak hours should be a part of the tariff structure for all consumers. Accordingly, the Commission approved the application of concessional night time tariff for commercial consumers with connected load above 100 kW as part of their tariff structure. These consumers mainly comprise the hotel industry who can utilise this incentive by shifting their consumption for heating purposes to night time and help flatten the load curve. The Commission has further incentivised the ToU tariff in the current Tariff Order by increasing the night time concession period from 6 hrs to 9 hrs, i.e., from 12:00 pm to 6:00 am to 9:00 pm to 6:00 AM. Further, the domestic consumers above 20 kW connected load shall have TOU tariff and will be able to avail of the rebate during off-peak hours. Similarly, the TOU tariff will now be applicable for commercial category consumers above 20 kW connected load, as compared to 100 kW connected load earlier.

8.18 Rebate for supply at higher voltage

8.18.1 The Commission in its Tariff Order for FY 2004-05 had allowed rebates to consumers availing supply at higher voltages, in accordance with the table given below:

Table 8.2: Prevailing voltage level rebates

Sl	Consumer Category	Supply at 11 kV & above
1	Domestic	7.5% on the energy charge
2	NDNCS	7.5% on the energy charge
3	Commercial	7.5% on the energy charge
		10 paise per kWh/kVah on the energy charge
4	Large Supply	NA
5	Water Pumping Supply	NA
6	Bulk Supply	NA
7	Street Lighting	NA
8	Temporary Metered Supply	NA

8.18.2 Upon hearing the various stakeholders, the Commission feels that there is a need for further rationalisation of these rebates.

8.19 Incentive linked efficiency improvement scheme on multiyear basis

8.19.1 The Commission in the tariff Order of FY-2004-05 had directed the Board to submit a proposal for introducing Multi-Year frame work that would allow it to better serve the public interest through economic efficiency, least cost service and improve service quality. The National Electricity Policy also states that MYT framework is an important structural incentive to minimise the risks to utility and consumers, promote efficiency and rapid reduction of system losses and to bring greater regulatory predictability in the consumers' tariff. Some of the parameters which can be covered under this scheme are generating plant availability and efficiency, transmission and distribution losses, collection efficiency, outages at customer level, employee costs, repair and maintenance costs, administrative and general costs, etc.

8.19.2 However, the implementation of MYT framework requires extensive, accurate, reliable database. The Commission in its Tariff Order for FY 2004-05 had observed that the Board's data is not reliable and is grossly inadequate and completely lacks credibility. On account of this inadequate database and also lack of institutional capability, the Commission observes that MYT framework on would prove to be dangerous for both Board as well as consumers.

8.19.3 Faced with above constraints the Commission has decided to introduce incentive linked efficiency and performance targets on Multi-Year basis for the parameters under the control of the Board. However, there is a prerequisite for the successful implementation of this incentive linked efficiency improvement scheme. The prerequisite which include complete overturning of existing structure of the Board is discussed as follows:-

8.19.4 The Commission is totally convinced that there is a total disequilibrium of the essential elements of an organisation in the Board, i.e., super-ordinate goal, strategies, systems, structure, staff, skills and style. Knee-jerk, incremental and patch up dressings reluctantly made by the Board only helped in tinkering with the organization already in shambles. Therefore, to implement any scheme complete restructuring as discussed in section 9 is essential. The success of inventive linked efficiency improvement scheme shall depend upon a holistic approach to be adopted by the Board for completely scientific re-organization with properly defined mission statement (Superordinate goal), well defined and clear short, medium and long term strategies, modern and simple procedures and systems based upon commercial principles, scientifically architectured structure, staff allocation on dynamically need basis with engineering and non-engineering resource management, skills with inventories and succession planning, development and management to keep pace with the changes in the substantive internal and external environment in the overall- all hierarchy of skills and finally style and work culture.

8.19.5 The approach proposed by the Commission is also in line with the spirit of the National Electricity Policy, which specifies that efforts have to be made to improve the efficiency of operations in all the segments of the industry. The Policy further stipulates that an action plan for reduction of the losses with adequate investments and suitable improvements in governance should be drawn up. Further, standards for reliability and quality of supply as well as for loss levels should also be specified, from time to time, so as to bring these in line with international practices by year 2012. The Commission would like to highlight that by laying down performance targets, the Commission will in effect be laying down an action plan for the Board to reduce losses and improve quality of supply.

8.19.6 The Commission feels that the establishment of efficiency and performance targets should go hand in hand with rewards so as to incentivise efficient operations by the Board across the multi-year period. In other words, incentives are required to induce the Board towards exceeding the performance targets set at the start of the multi-year period.

8.19.7 The National Electricity Policy also suggests that suitable performance norms of operations together with incentives and disincentives will need to be evolved along with appropriate arrangement for sharing the gains of efficient operations with the consumers. This will ensure protection of consumers' interests on the one hand and provide motivation for improving the efficiency of operations on the other.

8.19.8 The incentives provided to the Board shall be so structured that entire financial benefit (or loss) arising out of superior (or adverse) performance is shared (or absorbed) by means of a pre-determined formula as specified in the HPERC (Terms and Conditions for Determination Tariff) Regulations, 2004.

8.19.9 Efficiency improvements need time to take effect. Also, it is important that the Board be given adequate time to plan and make the requisite investment or efforts towards achieving the performance targets laid down by the Commission. Therefore, the Commission has laid down the time period of 10 years for the above incentive linked efficiency and performance targets.

8.19.10 The approach of Target Based Regulation described above has been used in other States in India. States like Maharashtra, Uttar Pradesh and Delhi have experimented with such an approach in an implicit manner with the objective of reducing losses. Target Based Regulation has been also been implemented in several Countries as a part of the overall MYT framework. Performance targets have been laid down for Utilities in relation to different parameters, primarily towards T&D loss reduction.

8.19.11 In order to ensure effective compliance with these performance targets and the extent of achievement of targets, these need to be monitored. The Commission, therefore, directs the Board to establish a monitoring system through Committees headed by the concerned Members within three weeks, to ascertain the extent to which the targets laid down for the Board are being achieved. Independent agencies to be appointed by the Commission, would undertake the verification and monitoring of the performance of the Board.

8.20 Prepaid metering

8.20.1 Prepaid metering is being used in more than 40 countries on account of its benefits to both utility and the consumer. The utilities are benefited because the payment is received in advance which substantially increases their collection efficiency. It obviates the need for regular meter reading, billing and also the associated irregularities, e.g., incorrect billing. The utility saves expenditure on meter reading and billing. Both utility and consumer save lot of time, as there is no scope of errors on account of human element in billing and meter reading. The consumer has direct control over his budget and is more aware of his consumption of power. This enables greater demand side management. The National Electricity Policy has also emphasised the introduction of pre-paid metering.

8.20.2 Keeping in view the above, the Commission has introduced the concept of prepaid metering. The Commission has directed the Board to take up a pilot project for prepaid metering by installing about 250 meters for a period of 6 months in Shimla. The pilot project shall establish the acceptance of this concept and also test the quality and accuracy of the prepaid meters available in the market. Subsequently, proposal has been received for two more pilot projects at Dharamshala and Mandi, each for 250 pre-paid meters for a period of six months.

8.20.3 In order to give the requisite encouragement to the prepaid metering the Commission has designed special introductory tariff for the consumer using pre-paid meters. The tariff shall have single slab and shall be lower than the tariff for other consumers. The Commission observes that the Board incurs more than 50 rupees per consumer per month, for metering and billing. This cost can be saved through pre-paid metering and, therefore, saving accrued shall be passed on to the consumers. The consumer shall have the option of either buying his own prepaid meter or paying through rentals if it is purchased by the Board. The consumer, however, shall not be required to pay the security deposit in case of prepaid meters. Any consumer who switches over to prepaid meters shall be refunded the security deposit paid earlier. The Commission strongly feels that introduction of pre-paid metering should be phased in such a manner that it matches the attrition of meter reading and billing staff in the Board. The Commission has drawn up a trajectory for phasing of the prepaid meters, which has been elaborated in Section 10 of the Order.

8.21 Lifeline (Below Poverty Line – BPL) category within domestic category

8.21.1 In the existing tariff structure, the consumers under the Antodaya Yojana scheme, who were expected to consume 45 units per month, were being charged at a highly concessional rate of 70 paise/kWh. The National Electricity Policy has stated that consumers Below Poverty Line or Lifeline consumers consuming upto 30 units per month should be given concessional tariff of 50% of average cost of supply. Hence, the Commission has renamed this category of consumers consuming upto 45 units per month as ‘BPL Category’ and the applicable tariff has been fixed as 45 units per month. If the GoHP desires, it can further subsidise this consumer category. If the consumption of BPL consumer in any given month is more than 45 units, then they shall be charged at the normal domestic tariff.

8.22 Reform surcharge

8.22.1 The Commission has given several ADVISORIES to the HPSEB with the intention of implementing reform and restructuring of the Board along efficient lines. For this purpose, the Commission has given an incentive of Rs. 50 crore to the Board for implementing the reform and restructuring. This incentive will be funded through a reform surcharge of 5% of the electricity bill of the consumer, excluding the electricity duty, which will continue to be in force till March 31, 2005, or till such time as the Commission specifies, depending on the achievement of specified milestones by the HPSEB. The modalities of the incentive and the mechanism of refund of incentives as a penalty for non-implementation have been elaborated in Section 9 of the Tariff Order on 'Incentives linked efficiency improvement scheme'.

8.23 Increase in recovery from fixed charges

8.23.1 In the existing tariff, only 9% of the revenue of the Board is recovered through fixed charges though over 70% of its costs are fixed in nature. This imbalance in the nature of the cost and the nature of recovery is not advisable, and has to be rectified gradually. Hence, the Commission has enhanced the recovery from fixed charges, by increasing the customer service charges and the demand charges, with a corresponding reduction in the energy charge wherever required, such that the overall objective of reduction in cross-subsidy is achieved.

8.24 Approved Tariff Design

8.24.1 DS: Domestic Supply

8.24.1.1 The existing schedule is applicable to consumers using electrical energy for lights, fans, heaters, cooking ranges, ovens, refrigerators, air conditioners, stereos, radios, televisions, mixers, grinders, electric iron, sewing/embroidery/knitting machines, domestic pumping sets and other domestic appliances in a single private house/flat or any other residential premises and religious places with connected load upto 5 kW, and Panchayat Ghars and Patwarkhanas upto 2 kW.

8.24.1.2 The Board has proposed no increase in the domestic and agriculture category. The State Government in their submissions to the Commission requested for the inclusion of Govt. Health Institutions, Government Educational Institution, Panchayat Ghars, Patwarkhanas, Water Supply Scheme and any other institution which the Government may decide from time to time to be covered under the domestic category.

8.24.1.3 The Commission has not agreed with the submission of GoHP for including the aforesaid consumers in domestic category. However, the residential portion of Panchayat Ghars and Patwarkhanas shall be charged at domestic tariff. In case of single room accommodation where two separate meters cannot be installed for residential and official purpose, the units consumed shall be divided equally and charged at domestic and NDNCS rates.

8.24.1.4 The Government has also submitted that the quantum of subsidy to be given by the Government of Himachal Pradesh to the targeted customer classes shall only be intimated after the notification of the Tariff Order for the current year.

8.24.1.5 In line with National Electricity Policy, the tariff for BPL consumer has been designed at 50% of average cost of supply.

8.24.1.6 The comparison of existing tariff, tariff proposed by the Board and that approved by the Commission for domestic category upto 20 kW is given below:-

Table 8.3: Tariff for domestic category (upto 20 kW) (Existing/Proposed/Approved)

DESCRIPTION	EXISTING		PROPOSED		APPROVED BY THE COMMISSION	
	ENERGY CHARGE	CONSUMER SERVICE CHARGE	ENERGY CHARGE	CONSUMER SERVICE CHARGE	ENERGY CHARGE	CONSUMER SERVICE CHARGE
Units/month	Rs./kWh	Rs/consum	Rs./kWh	Rs/consum	Rs./kWh	Rs/consumer

		er/month		er/month		/month
Antodaya Anna Yojana (Up to 45 units per month)	0.70		0.70	Nil	Reclassified as BPL for upto 45 units per month	
BPL consumers (0-45 units)					1.55	
0-45	0.85	11	0.85	11	1.75	20
46-150	1.30		1.30		2.10	20
Above 150	2.40		2.40		2.75	20
Pre-paid meter consumers	-	-	-	-	1.75	-

Note: Subsidy given by GoHP shall apply to prepaid meter consumers also. Should the GoHP decide to maintain the tariffs at the current levels after subsidy, then the prepaid consumers shall be deemed to be presently at the lowest slab in respect of entire consumption @70 paise/unit after State Government subsidy.

8.24.1.7 The rebates and surcharges have been detailed in 'Part-1 General of Annexure II', and have been listed below:

- **(a) Higher Voltage Supply Rebate (HVSR):** Applicable as specified under 'Part-1 General of Annexure II'.
- **(b) Lower Voltage Supply Surcharge (LVSS):** Applicable as specified under 'Part-1 General of Annexure II'.
- **(c) Lower Voltage Metering Surcharge (LVMS):** Applicable as specified under 'Part-1 General of Annexure II'.
- **(d) Late Payment Surcharge (LPS):** Applicable as specified under 'Part-1 General of Annexure II'.
- **(e) Night Time Concession (NTC):** Applicable @ 20 paise/kWh as specified under 'Part-1 General of this Annexure II'.
- **(f) Power Factor Surcharge (PFS):** Not Applicable.
- **(g) Disturbing Load Penalty (DLP):** Applicable as specified under 'Part-1 General of this Annexure II'.
- **(h) Harmonic Injection Penalty (HIP):** Not Applicable.
- **(i) Two Part Tariff and Related Charges:** Not Applicable.
- **(j) Peak Load Exemption Charges (PLEC)** Not Applicable.
- **(k) Peak Load Violation Charges (PLVC):** Not Applicable.

(l) **Reform Surcharge (RS):** Applicable as specified under 'Part-1 General of this Annexure II'.

8.24.1.8 The approved tariff will generate additional revenue of Rs. 86 crore in a full year and this represents an increase of 75% for the domestic category. If the existing GoHP subsidy as well as the supply of free power at subsidised rates to HPSEB, which were targeted at the domestic category are considered, then the tariff increase is small, and will not cause a tariff shock. A comparison of recovery of domestic category for FY 2001-02, FY 2004-05 and FY 2005-06 is given below :-

Table 8.3: Recovery from domestic category

Rs./kWh	**2001-02**	**2004-05**	**2005-06**
Average realisation (Rs./kWh)	1.15	1.39	2.60
Indirect subsidy (Rs./kWh)	0.72	1.12	1.12*
Average realisation including indirect subsidy (Rs./kWh)	1.87	2.51	3.72
Cost of supply (Rs./kWh)	3.86	4.73	4.57
% recovery (including indirect subsidy)	48.45%	53.18%	81%
% recovery (without indirect subsidy)	29.79%	29.45%	57%

* Assuming GoHP subsidy given to HPSEB for domestic category at the existing levels

8.24.2 Non Domestic Non Commercial Supply

8.24.2.1 This schedule is applicable to Govt and semi Government offices, Educational Institutions viz. Schools, Universities; I.T.Is, Colleges, Government Sports Institutions, Government Mountaineering Institutions and allied sports, Government Libraries, Hostels and residential quarters attached to the educational institutions if supply is given at a single point; Religious places such as Temples, Gurudwaras, Mosques, Churches with connected load greater than 5 kW, Orphanages, Sainik and Government Rest Houses, Working Women Hostels, Anganwari workers training centres and houses for destitute and old people; Hospitals and Leprosy Homes run by charity and un-aided by the Government; Sarais and Dharamsalas run by Panchayats and Municipal

Committees or on donations and those attached with religious places; and Panchayat Ghars and Patwar Khana greater than 2 kW.

NOTE: In the case of residences attached to the Government as well as private Institutions, the same shall be charged at the 'Domestic tariff' where further distribution to such residential premises is undertaken by the Board and the Board provides meters for individual consumers.

8.24.2.2 The comparison of existing tariff, tariff proposed by the Board and that approved by the Commission is given below:-

Table 8.4: kWh based Tariff for NDNCS category upto 20 kW

EXISTING		PROPOSED		APPROVED BY THE COMMISSION	
ENERGY CHARGE	CONSUMER SERVICE CHARGE	ENERGY CHARGE	CONSUMER SERVICE CHARGE	ENERGY CHARGE	CONSUMER SERVICE CHARGE
Rs./kWh	Rs/consumer /month	Rs./kWh	Rs/consumer/ month	Rs./kWh	Rs/consumer/ month
3.50	50	3.70	50	3.65	50

Table 8.5: kVAh based Tariff for NDNCS category above 20 kW)

EXISTING			PROPOSED		APPROVED BY THE COMMISSION		
CONSUMER SERVICE CHARGE	DEMAND CHARGE	ENERGY CHARGE	CONSUMER SERVICE CHARGE	ENERGY CHARGE	CONSUMER SERVICE CHARGE	DEMAND CHARGE	ENERGY CHARGE
Rs./con./ month	Rs./kVA/ month	Rs./kVAh	Rs./con./ month	Rs./kWh	Rs./con./ month	Rs./kVA/ month	Rs./kVAh
100	50	2.30	100	3.70	100	125	2.65

8.24.2.3 The rebates and surcharges have been detailed in 'Part-1 General of Annexure II', and have been listed below:

(a) **Higher Voltage Supply Rebate (HVSR):** Applicable as specified under 'Part-1 General of Annexure II'.

(b) **Lower Voltage Supply Surcharge (LVSS):** Applicable as specified under 'Part-1 General of Annexure II'.

(c) **Lower Voltage Metering Surcharge (LVMS):** Applicable as specified under 'Part-1 General of Annexure II'.

(d) **Late Payment Surcharge (LPS):** Applicable as specified under 'Part-1 General of Annexure II'.

(e) **Contract Demand Violation Charge:** Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'

(f) **Night Time Concession (NTC):** Applicable @ 20 paise/kVAh as applicable as specified under 'Part-1 General of Annexure II'.

(g) **Power Factor Surcharge (PFS):** Not Applicable.

(h) **Disturbing Load Penalty (DLP):** Applicable as specified under 'Part-1 General of Annexure II'.

(i) **Harmonic Injection Penalty (HIP):** Applicable as specified under 'Part-1 General of Annexure II'.

(j) **Peak Load Exemption Charges (PLEC):** Not Applicable.

(k) **Peak Load Violation Charges (PLVC):** Not Applicable.

(l) **Reform Surcharge (RS):** Applicable as specified under 'Part-1 General of Annexure II'.

8.24.2.4 The cost recovery from this category increases to 86% after the above tariff changes approved by the Commission. The new tariff will generate additional revenue of Rs. 0.3 Crore in a full year and represents an increase of 4% over the revenue of Rs. 8.6 Crore from existing tariff. A comparison of recovery from NDNCS category for FY 2001-02, FY 2004-05 and FY 2005-06 is given below :-

Table 8.6: Recovery from NDNCS category

Rs./kWh	**2001-02**	**2004-05**	**2005-06**
Average realisation (Rs./kWh)	-	3.63	3.95
Cost of supply (Rs./kWh)	-	4.73	4.57
Cost Recovery	68%	77%	86%

8.24.3 Commercial Supply (CS)

8.24.3.1 This schedule is applicable to consumers for lights, fans, appliances like pumping sets, central air conditioning plants, lifts, heaters, embroidery machines, printing press, power press and small motors in all Commercial premises such as shops, business houses, cinemas, clubs, banks, private offices, private hospitals, petrol pumps, hotels/motels, welding sets, construction power to hydroelectric projects, service stations, private nursing homes, private rest/guest houses, private research institutions, private coaching institutions, private museums, dry cleaning, garages and private auditoriums, departmental stores, restaurants, lodging and boarding houses. This schedule will also include all other categories, which are not covered by any other tariff schedule.

8.24.3.2 The Board has proposed single part tariff for all commercial consumers and has proposed increase in the energy charges. As already ordered by the Commission, the commercial consumers above 20 kW are being charged on two-part tariff. The existing tariff, tariff proposed by the Board and tariff approved by the Commission is given in the table below.

Table 8.7: kWh based Tariff for Commercial category upto 20 kW (Existing/Proposed/Approved)

EXISTING		PROPOSED		APPROVED BY THE COMMISSION	
ENERGY CHARGE	CONSUMER SERVICE CHARGE	ENERGY CHARGE	CONSUMER SERVICE CHARGE	ENERGY CHARGE	CONSUMER SERVICE CHARGE
Rs./kWh	Rs/consumer /month	Rs./kWh	Rs/consumer/ month	Rs./kWh	Rs/consumer /month
3.50	50	4.00	50	4.00	50

Table 8.8: kVAh based Tariff for Commercial category above 20 kW (Existing/Proposed/Approved)

EXISTING			PROPOSED		APPROVED BY THE COMMISSION		
CONSUMER SERVICE CHARGE	DEMAND CHARGE	ENERGY CHARGE	CONSUMER SERVICE CHARGE	ENERGY CHARGE	CONSUMER SERVICE CHARGE	DEMAND CHARGE	ENERGY CHARGE

Rs./con./month	Rs./kVA/ month	Rs./kVAh	Rs./con./ month	Rs./kWh	Rs./con./month	Rs./kVA/ month	Rs./kVAh
20 – 100 kW							
100	50	2.40	100	4	100	125	2.80
ABOVE 100 KW							
200	100	2.10	200	4	200	175	2.50

8.24.3.3 In case of unauthorised mobile welding sets, the consumer will pay Rs. 20 per kW per day, in addition to the energy charges.

8.24.3.4 The applicable rebates and surcharges have been detailed in 'Part-1 General of Annexure II', and have been listed below:

(a) **Higher Voltage Supply Rebate (HVSR):** Applicable as specified under 'Part-1 General of Annexure II'.

(b) **Lower Voltage Supply Surcharge (LVSS):** Applicable as specified under 'Part-1 General of Annexure II'.

(c) **Lower Voltage Metering Surcharge (LVMS):** Applicable as specified under 'Part-1 General of Annexure II'.

(d) **Late Payment Surcharge (LPS):** Applicable as specified under 'Part-1 General of Annexure II'.

(e) **Contract Demand Violation Charge:** Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'

(f) **Night Time Concession (NTC):** Applicable @ 20 paise/kVAh as applicable as specified under 'Part-1 General of Annexure II'.

(g) **Power Factor Surcharge (PFS):** Not Applicable.

(h) **Disturbing Load Penalty:** Applicable as specified under 'Part-1 General of Annexure II'.

(i) **Harmonic Injection Penalty (HIP):** Not Applicable.

(j) **Peak Load Exemption Charges (PLEC):** Not Applicable.

(k) **Peak Load Violation Charges (PLVC):** Not Applicable.

(l) **Reform Surcharge (RS):** Applicable as specified under 'Part-1 General of Annexure II'.

8.24.3.5 The approved tariff will generate additional revenue of Rs. 12.5 Crore, i.e., an increase of 13% over the existing revenue base of Rs. 99 Crore. The recovery from this category increases to 98% at the approved tariffs. A comparison of recovery of commercial category for FY 2001-02, FY 2004-05 and FY 2005-06 is given below

Table 8.9: Recovery from commercial category

Rs./kWh	**2001-02**	**2004-05**	**2005-06**
Average realisation (Rs./kWh)	-	4.04	4.46
Cost of supply (Rs./kWh)	-	4.73	4.57
Cost Recovery	85%	86%	98%

8.24.4 Small and Medium Industrial Power Supply (SMS)

8.24.4.1 This schedule is applicable to Industrial consumers with connected load not exceeding 100 kW including pumps (other than irrigation pumping), wheat threshers, tokas, poultry farms and sheds, cane crushers, Atta Chakkies, and also for supply to Information Technology Industry, limited only to IT Parks recognised by the State/Central Government. The Industrial type of Agricultural loads with connected load falling in the above-mentioned range and not covered by Schedule "APS" shall also be charged under this schedule.

8.24.4.2 The existing tariff, tariff proposed by the Board and tariff approved by the Commission is given in the table below.

Table 8.10: kWh based Tariff for SMS category upto 20 kW (Existing/Proposed /approved)

EXISTING		**PROPOSED**		**APPROVED BY THE COMMISSION**	
ENERGY CHARGE	CONSUMER SERVICE CHARGE	ENERGY CHARGE	CONSUMER SERVICE CHARGE	ENERGY CHARGE	CONSUMER SERVICE CHARGE
Rs./kWh	Rs/consumer /month	Rs./kWh	Rs/consumer /month	Rs./kWh	Rs/consumer/ month
3.10	50	3.25	50	3.55	50

Table 8.11: kVAh based Tariff for SMS category above 20 kW

(Existing/Proposed tariff/approved)

EXISTING TARIFF			PROPOSED TARIFF		APPROVED BY THE COMMISSION		
Consumer Service Charge	Demand Charge	Energy charge	Consumer Service Charge	Energy Charge	Consumer Service Charge	Demand Charge	Energy charge
Rs./con./month	Rs./kVA/ month	Rs./kVAh	Rs./con./ month	Rs./kWh	Rs./con./month	Rs./kVA/ month	Rs./kVAh
100	50	2.40	100	3.50	100	150	2.55

8.24.4.3 The rebates and surcharges have been detailed in ‘Part-1 General of Annexure II’, and have been listed below:

(a) **Higher Voltage Supply Rebate (HVSR):** Applicable as specified under ‘Part-1 General of Annexure II’.

(b) **Lower Voltage Supply Surcharge (LVSS):** Applicable as specified under ‘Part-1 General of Annexure II’.

(c) **Lower Voltage Metering Surcharge (LVMS):** Applicable as specified under ‘Part-1 General of Annexure II’.'

(d) **Contract Demand Violation Charge:** Applicable as specified under ‘Part-2 Schedule of Tariff of Annexure II’

(e) **Late Payment Surcharge (LPS):** Applicable as specified under ‘Part-1 General of Annexure II’.

(f) **Contract Demand Violation Charge:** Applicable as specified under ‘Part-2 Schedule of Tariff of Annexure II’

(g) **Night Time Concession (NTC):** Applicable @ 20 paise/kVAh as applicable as specified under ‘Part-1 General of Annexure II’.

(h) **Power Factor Surcharge (PFS):** Applicable as specified under ‘Part-1 General of Annexure II’.

(i) **Disturbing Load Penalty (DLP):** Not Applicable.

(j) **Harmonic Injection Penalty (HIP):** Applicable as specified under ‘Part-1 General’ of Annexure II.

(k) **Reform Surcharge (RS):** Applicable as specified under ‘Part-1 General of Annexure II’.

8.24.4.4 All consumption for bonafide factory lighting, i.e., energy consumed in factory premises including factory building, its offices, stores, time keeper office, canteen, library, staff dispensary, welfare centre and factory yard lighting shall be charged under this tariff schedule. The consumption for bonafide use of residential/staff quarters and street lighting of the colony shall also be charged under this tariff schedule if the supply is not taken separately but taken at the same single supply point of the industry. Such consumption shall be charged for the energy consumed at the following rates, irrespective of whether the consumer has opted for peak time consumption or not:

(a) During normal times : normal rate
(b) During peak times : the PLEC rate
(c) During night time : the night time rate

8.24.4.5 If supply for colony lighting / residences is taken separately than the same shall be charged as per the relevant category under this schedule of tariff.

8.24.4.6 The Commission has introduced two-part PLEC and PLVC charges as follows:

Table 8.12: Approved PLEC for peak time consumption for SMS

DESCRIPTION	Existing	Proposed	Approved
	Energy Charge		
	Rs./kVAh	Rs./kWh	Rs/kVAh
20 – 100 kW	4.80	6.20	5.10

Table 8.13: Approved PLVC for peak time consumption for SMS

DESCRIPTION	Existing	Proposed	Approved	
			Demand Charges	Energy Charges
	Rs./kVAh		Rs/kVA/month	Rs/kVAh
20 – 100 kW	7.20	9.30	300	7.65

8.24.4.7 The above tariff will generate total additional revenue of Rs. 7.1 Crore from this category, representing an overall increase of 14% over revenue from existing tariffs. The cost recovery improves to 80% at approved tariffs. A comparison of recovery from SMS category for FY 2001-02, FY 2004-05 and FY 2005-06 is given below :-

Table 8.14: Recovery from SMS category

Rs./kWh	**2001-02**	**2004-05**	**2005-06**
Average realisation (Rs./kWh)	-	3.24	3.68
Cost of supply (Rs./kWh)	-	4.73	4.57
Cost Recovery	62%	69%	80%

8.24.5 Large Industrial Power Supply

8.24.5.1 This schedule is applicable to all industrial power consumers with connected load exceeding 100 kW including mini steel mills/steel rolling and re-rolling mills/calcium carbide/ferro silicon units and arc/induction furnaces and also the Information Technology industry, limited only to IT parks recognized by the State/Central Government and all industrial consumers not covered by schedule "WPS" or schedule "APS".

8.24.5.2 The Board has retained the two part tariff structure in its petition. The existing tariff, tariff proposed by the Board and tariff approved by the Commission is given in the table below:-

Table 8.15: Tariff for LS category (Existing/Proposed/Approved)

EXISTING			PROPOSED			APPROVED BY THE COMMISSION		
Consumer Service Charge	Demand Charge	Energy charge	Consumer Service Charge	Demand Charge	Energy Charge	Consumer Service Charge	Demand Charge	Energy charge
Rs./con./ month	Rs./kVA/ month	Rs./kVAh	Rs./con./ month	Rs./kVA/ month	Rs./ kWh	Rs./con./ month	Rs./kVA/ month	Rs./kVAh
EHT								
300	150	2.15	300	170	2.60	300	165	2.10
HT								
200	150	2.22	200	170	2.80	200	240	2.20

8.24.5.3 The Commission has introduced penalty @ Rs. 500 per kW of connected load per month for the violation of acceptable harmonic levels in the system. A part of the month shall be considered as full month for this purpose.

8.24.5.4 The rebates and surcharges have been detailed in 'Part-1 General of Annexure II', and have been listed below:

(a) **Higher Voltage Supply Rebate (HVSR): Not** Applicable.

(b) **Lower Voltage Supply Surcharge (LVSS): Not** Applicable.

(c) Lower Voltage Metering Surcharge (LVMS): Applicable as specified under 'Part-1 General of Annexure II'.

(d) Late Payment Surcharge (LPS): Applicable as specified under 'Part-1 General of Annexure II'.

(e) Contract Demand Violation Charge: Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'

(f) Night Time Concession (NTC): Applicable @ 20 paise/kVAh as specified under 'Part-1 General of Annexure II'.

(g) Contract Demand Violation Charge: Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'

(h) Power Factor Surcharge (PFS): Not Applicable**.**

(i) Disturbing Load Penalty (DLP): Not Applicable**.**

(j) **Harmonic Injection Penalty (HIP):** Applicable as specified under 'Part-1 General of Annexure II'.

(k) **Reform Surcharge (RS):** Applicable as specified under 'Part-1 General of Annexure II'.

8.24.5.5 All consumption for bonafide factory lighting i.e. energy consumed in factory premises including factory building, its offices, stores, time keeper office, canteen, library, staff dispensary, welfare centre and factory yard lighting shall be charged under this tariff schedule. The consumption for bonafide use of residential/staff quarters and street lighting of the colony shall also be charged under this tariff schedule if supply is taken at a single point. Such consumption shall be charged for the energy consumed at the following rates, irrespective of whether the consumer has opted for peak time consumption or not:

a. During normal times : normal rate
b. During peak times : the PLEC rate
c. During night time : the night time rate

8.24.5.6 If supply for colony and/or its residences is taken separately then the same shall be charged as per the relevant consumer category of this schedule of tariff.

8.24.5.7 The applicable PLEC and PLVC charges are as follows:

Table 8.16: Approved PLEC for peak time consumption for LS

DESCRIPTION	Existing	Proposed	Approved
	Energy Charges (Rs./kVAh)		
EHT	4.30	4.30	4.20
HT	4.45	4.45	4.40

Table 8.17: Approved PLVC for peak time consumption for LS

DESCRIPTION	Existing	Proposed	Approved	
			Demand Charges	Energy Charges
	Rs./kVAh		Rs/kVA/month	Rs/kVAh
EHT	6.45	6.45	300	6.30
HT	6.70	6.70	300	6.60

8.24.5.8 The Board has proposed an increase in recovery from this category. The Commission recognises that the tariff applicable to this category is already significantly above the cost of supply with a significant level of cross subsidy. Any increase in the cross subsidy and cost recovery from this category would further aggravate this distortion and would be against the Commission's own philosophy and approach.

8.24.5.9 The above changes will result in a reduction in revenue by Rs.4.8 Crore, in a full year, a decrease of 2% over the revenue from existing tariff for the EHT industrial consumers. Their corresponding cost recovery is 133%.

8.24.5.10 The above changes will result in a reduction in revenue by Rs.5.4 Crore, in a full year, a decrease of 3% over the revenue from existing tariff for the HT industrial consumers. Their corresponding cost recovery is 110%.

8.24.5.11 A comparison of recovery from LS category for FY 2001-02, FY 2004-05 and FY 2005-06 is given below :-

Table 8.18: Recovery from LS category

Rs./kWh	**2001-02**	**2004-05**	**2005-06**
Industry EHT			
Average realisation (Rs./kWh)	-	2.73	2.69
Cost of supply (Rs./kWh)	-	1.86	2.02
Cost Recovery	166%	147%	133%
Industry HT			
Average realisation (Rs./kWh)		2.91	2.97
Cost of supply (Rs./kWh)		2.63	2.71
Cost Recovery	120%	110%	110%

8.24.6 Water Pumping Supply (WPS)

8.24.6.1 The existing schedule is applicable to Government connections for water and irrigation pumping. The schedule also covers all consumption for bonafide Pump House lighting.

8.24.6.2 GoHP in its written as well as oral submission had submitted that this category should be included in the domestic category. The Commission has not agreed with this submission of GoHP as the consumption pattern of WPS is entirely different from that of domestic category.

8.24.6.3 The Board has proposed single part tariff in place of existing two part tariff for this category. The Commission does not agree to single part tariff and shall continue with the existing two-part tariff. The existing tariff, tariff proposed by the Board and tariff approved by the Commission is given in the table below:-

Table 8.19: Tariff for WPS category (Existing/Proposed tariff/approved)

EXISTING			PROPOSED		APPROVED BY THE COMMISSION		
Consumer Service Charge	Demand Charge	Energy charge	Consumer Service Charge	Energy Charge	Consumer Service Charge	Demand Charge	Energy charge
Rs./con./ month	Rs./kVA /month	Rs./kVAh	Rs./con./ month	Rs./kW h	Rs./con./ month	Rs./kVA/ month	Rs./kVAh
LT							
100	125	2.20	100	3.25	100	175	2.60
HT							
100	125	1.85	100	3.00	100	125	1.95

8.24.6.4 The applicable rebates and surcharges have been detailed in 'Part-1 General of Annexure II', and have been listed below:

(a) **Higher Voltage Supply Rebate (HVSR):** Not Applicable.

(b) **Lower Voltage Supply Surcharge (LVSS):** Not Applicable.

(c) Lower Voltage Metering Surcharge (LVMS): Applicable as specified under 'Part-1 General of Annexure II'.

(d) Late Payment Surcharge (LPS): Applicable as specified under 'Part-1 General of Annexure II'.

(e) Contract Demand Violation Charge: Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'

(f) Night Time Concession (NTC): Applicable 20 paise/kVAh as applicable as specified under 'Part-1 General of Annexure II'.

(g) Power Factor Surcharge (PFS): Applicable as specified under 'Part-1 General of Annexure II'.

(h) Disturbing Load Penalty (DLP): Applicable as specified under 'Part-1 General' of Annexure II.

(i) Harmonic Injection Penalty (HIP): Not Applicable.

(j) Reform Surcharge (RS): Applicable as specified under 'Part-1 General of Annexure II'.

8.24.6.5 The applicable PLEC and PLVC charges are as follows:

Table 8.20: Approved PLEC for peak time consumption for WPS

DESCRIPTION	**PLEC**		
	Energy Charges		
	Existing (Rs./kVAh)	Proposed (Rs/kWh)	Approved (Rs./kVAh)
Supply at less than 11kV	4.40	6.20	5.20
Supply at 11kV & above	3.70	5.40	3.90

Table 8.21: Peak Load Violation Charges for WPS

DESCRIPTION	Existing	Proposed	Approved	
			Demand Charges	Energy Charges
	Rs./kVAh	Rs/kWh	Rs/kVA/ month	Rs/kVAh
LT	6.60	9.30	300	7.80
HT	5.50	8.10	300	5.85

8.24.6.6 The above tariff will generate total additional revenue of Rs. 13.9 Crore from this category, representing an overall increase of 18% over revenue from existing tariffs. The cost recovery of HT category has been kept at100% at approved tariffs, while the recovery from LT category has been increased to 80%. A comparison of recovery from WPS category for FY 2001-02, FY 2004-05 and FY 2005-06 is given below :-

Table 8.22: Recovery from WPS category

Rs./kWh	2001-02	2004-05	2005-06
HT Category			
Average realisation (Rs./kWh)	-	2.71	2.70
Cost of supply (Rs./kWh)	-	2.63	2.71
Cost Recovery	109%	103%	100%
LT Category			
Average realisation (Rs./kWh)		3.11	3.66
Cost of supply (Rs./kWh)		4.73	4.57
Cost Recovery	61%	66%	80%

8.24.7 Agriculture Pumping Supply (APS)

8.24.7.1 This schedule shall be applicable to Irrigation Pumping loads with connected load not exceeding 20 kW. Private Irrigation loads in individual /Society's names above 20 kW are also covered under this tariff.

8.24.7.2 The Board has not proposed any tariff increase for the agricultural pumping supply category. The existing tariff, tariff proposed by the Board and tariff approved by the Commission for APS upto 20 kW is given in the table below:-

Table 8.23: Tariff for APS category upto 20 kW (Existing/Proposed /approved)

EXISTING		PROPOSED		APPROVED BY THE COMMISSION	
ENERGY CHARGE (RS/UNIT)	CONSUMER SERVICE CHARGE)	ENERGY CHARGE (RS/UNIT)	CONSUMER SERVICE CHARGE	ENERGY CHARGE (RS/UNIT)	CONSUMER SERVICE CHARGE
Rs./kWh	Rs/consumer /month	Rs./kWh	Rs/consumer /month	Rs./kWh	Rs/consumer /month
.50	20	0.50	20	1.55	20

8.24.7.3 The Commission has introduced two-part tariff for the APS consumers having connected load above 20 kW. The kVAh tariff approved for these consumers is as under: -

Table 8.24: kVAh based tariff for APS (above 20 kW)

DESCRIPTION	ALL CONSUMERS
Energy Charge (Rs/kVAh)	1.00
Demand Charge (Rs./kVA/month)	50
Consumer Service Charge (Rs/month/consumer	20

8.24.7.4 The rebates and surcharges have been detailed in 'Part-1 General of Annexure II', and have been listed below:

a. **Higher Voltage Supply Rebate (HVSR):** Applicable as specified under 'Part-1 General of Annexure II'.
b. **Lower Voltage Supply Surcharge (LVSS):** Applicable as specified under 'Part-1 General of Annexure II'.
c. **Lower Voltage Metering Surcharge (LVMS):** Applicable as specified under 'Part-1 General of Annexure II'.
d. **Late Payment Surcharge (LPS):** Applicable as specified under 'Part-1 General of Annexure II'.
e. **Contract Demand Violation Charge:** Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'
f. **Night Time Concession (NTC):** Applicable @ 20 p/kVAh as specified under 'Part-1 General of Annexure II'.
g. **Power Factor Surcharge (PFS):** Applicable as specified under 'Part-1 General of Annexure II'.
h. **Reform Surcharge (RS):** Applicable as specified under 'Part-1 General of Annexure II'.
i. **Disturbing Load Penalty (DLP):** Applicable as specified under 'Part-1 General' of Annexure II.
j. **Harmonic Injection Penalty (HIP):** Not Applicable.

8.24.6.7 The applicable PLEC and PLVC charges are as follows:

Table 8.25: Approved PLEC for peak time consumption for APS

Existing		Proposed	Approved by the Commission
Demand Charges	Energy charges	Energy charges	Energy Charge
(Rs/kVA/ month)	(Rs./kWh)	(Rs./kWh)	(Rs./kVAh)
85	1.00	1.00	2.00

Table 8.26: Approved PLVC for peak time consumption for APS

Existing		Proposed		Approved by the Commission	
Demand Charges	Energy charges		Energy charges	Demand changes	Energy Charge
(Rs/kVA/ month)	(Rs./kWh)		(Rs./kWh)	(Rs/kVA/ month)	(Rs./kWh)
85	1.50		1.50	150	3.00

8.24.7.5 The above tariff will generate additional revenue of Rs. 2.9 Crore in a full year. The Commission has ensured that the recovery from this category is increased significantly, as the cross-subsidy to this category is very high. The Commission has equated the tariff for this category to the tariff applicable for BPL sub-category under domestic category. A comparison of recovery from this category for FY 2001-02, FY 2004-05and FY2005-06 is given as under: -

Table 8.27: Recovery from APS category

Rs./kWh	**2001-02**	**2004-05**	**2005-06**
Average realisation (Rs./kWh)	-	0.59	1.64
Cost of supply (Rs./kWh)	-	4.73	4.57
Cost Recovery	15%	13%	36%

8.24.8 Bulk Supply

8.24.8.1 This schedule is applicable to general or mixed loads to M.E.S and other Military establishments, Railways, Central PWD Institutions, Hospitals, Departmental colonies, A.I.R Installations, Aerodromes and other similar establishments where further distribution to various residential and non-residential buildings is to be undertaken by the consumers for their own bonafide use and not for resale to other consumers with or without profit. However, in case of MES, this schedule shall continue to apply till such time M.E.S. do not avail open access.

8.24.8.2 The existing tariff, tariff proposed by the Board and tariff approved by the Commission is given in the table below: -

Table 8.28: Tariff for BS category (Existing/Proposed /approved)

	Existing			**Proposed**		**Approved by the Commission**		
	Consumer Service Charge	Demand Charge	Energy charge	Consumer Service Charge	Energy Charge	Consumer Service Charge	Demand Charge	Energy charge
	Rs./con./ month	Rs./kVA/month	Rs./kVAh	Rs./con./ month	Rs./kWh	Rs./con./ month	Rs./kVA/ month	Rs./kVAh
LT	100	40	2.50	100	3.70	100	175	2.70
HT	100	50	2.10	100	3.40	100	140	2.15

8.24.8.3 The rebates and surcharges have been detailed in 'Part-1 General of Annexure II', and have been listed below:

(a) Higher Voltage Supply Rebate (HVSR): Not Applicable..

(b) Lower Voltage Supply Surcharge (LVSS): Not Applicable.

(c) Lower Voltage Metering Surcharge (LVMS): Applicable as specified under 'Part-1 General of Annexure II'.

(d) Late Payment Surcharge (LPS): Applicable as specified under 'Part-1 General of Annexure II'.

(e) Night Time Concession (NTC): Applicable @ 20 p/kVAh as specified under 'Part-1 General of Annexure II'.

(f) Contract Demand Violation Charge: Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'

(g) Reform Surcharge (RS): Applicable as specified under 'Part-1 General of Annexure II'.

(h) Power Factor Surcharge (PFS): Not Applicable.
(i) Disturbing Load Penalty (DLP): Not Applicable.

(j) Harmonic Injection Penalty (HIP): Not Applicable.

(k) Peak Load Exemption Charges (PLEC): Not Applicable.

(l) Peak Load Violation Charges (PLVC): Not Applicable.

8.24.8.4 The above tariff will generate total revenue of Rs. 29.6 Crore from the Bulk supply category, representing an overall reduction of Rs. 1.5 cr over the revenue from existing tariff. A comparison of recovery of this category for FY 2001-02, FY 2004-05 and FY 2005-06 is given below: -

Table 8.29: Recovery from BS category

Rs./kWh	2001-02	2004-05	2005-06
Bulk supply HT			
Average realisation (Rs./kWh)	-	3.15	3.00
Cost of supply (Rs./kWh)	-	2.63	2.71
Cost Recovery	138%	120%	111%
Bulk supply LT			
Average realisation (Rs./kWh)		3.50	
Cost of supply (Rs./kWh)		4.73	
Cost Recovery	76%	74%	

8.24.9 Street Lighting Supply

8.24.9.1 This schedule is applicable for Street Lighting system including traffic control signal systems on roads and Park lighting in Municipalities, Panchayats and Notified Committee areas.

8.24.9.2 The Board has proposed increase in both energy and consumer service charge for this category. The existing, proposed and the tariff approved by the Commission is given as under :-

Table 8.30: Tariff for Streetlights (Existing/Proposed tariff/approved)

EXISTING		PROPOSED		APPROVED BY THE COMMISSION	
ENERGY CHARGE	CONSUMER SERVICE CHARGE	ENERGY CHARGE	CONSUMER SERVICE CHARGE	ENERGY CHARGE	CONSUMER SERVICE CHARGE
Rs./kWh	Rs/consumer /month	Rs./kWh	Rs/ consumer/ month	Rs./kWh	Rs/consumer/ month
2.85	50	3.00	50	2.95	50

8.24.9.3 The rebates and surcharges have been detailed in 'Part-1 General of Annexure II', and have been listed below:

(a) **Higher Voltage Supply Rebate (HVSR):** Applicable as specified under 'Part-1 General of Annexure II'.
(b) **Lower Voltage Supply Surcharge (LVSS):** Applicable as specified under 'Part-1 General of Annexure II'.
(c) **Lower Voltage Metering Surcharge (LVMS):** Applicable as specified under 'Part-1 General of Annexure II'.
(d) **Late Payment Surcharge (LPS):** Applicable as specified under 'Part-1 General of Annexure II'.
(e) **Night Time Concession (NTC):** Not Applicable.
(f) **Reform Surcharge (RS):** Applicable as specified under 'Part-1 General of Annexure II'.
(g) **Power Factor Surcharge (PFS):** Not Applicable.
(h) **Disturbing Load Penalty (DLP):** Not Applicable.
(i) **Harmonic Injection Penalty (HIP):** Not Applicable.
(j) **Peak Load Exemption Charges (PLEC):** Not Applicable.
(k) **Peak Load Violation Charges (PLVC):** Not Applicable.

8.24.9.4 The Commission is fully aware that street light is a public service. However, the tariff has to be increased so as to reduce the cross-subsidy from the previous year. A comparison of recovery from street light category for FY 2001-02, FY 2004-05 and FY 2005-06

Table 8.31: Recovery from Street Light category

Rs./kWh	2001-02	2004-05	2005-06
Average realisation (Rs./kWh)	-	2.88	2.93
Cost of supply (Rs./kWh)	-	4.73	4.53
Cost Recovery	61%	61%	65%

8.24.9.5 The above tariff will generate additional revenue of Rs 0.1 Crore in a full year representing an increase of 3%.

8.24.10 Temporary Metered Supply

8.24.10.1 This schedule is applicable to all loads of temporary nature including exhibitions, touring talkies, circuses, fairs, melas, marriages, festivals, temporary agricultural loads such as wheat thrashers, paddy thrashers, temporary supply for construction purposes including civil works by Government departments and other similar purposes for temporary needs only.

8.24.10.2 The existing tariff, tariff proposed by the Board and tariff approved by the Commission is given in the table below:-

Table 8.32: Tariff for Temporary Supply upto 20 kW (Existing/Proposed/approved)

EXISTING		PROPOSED		APPROVED BY THE COMMISSION	
ENERGY CHARGE	**CONSUMER SERVICE CHARGE**	**ENERGY CHARGE**	**CONSUMER SERVICE CHARGE**	**ENERGY CHARGE**	**CONSUMER SERVICE CHARGE**
Rs./kWh	Rs/consumer /month	Rs./kWh	Rs/consumer/ month	Rs./kWh	Rs/consumer/ month
6	100	7	100	6	100

8.24.10.3 The rebates and surcharges have been detailed in ‘Part-1 General of Annexure II’, and have been listed below:

(a) **Higher Voltage Supply Rebate (HVSR):** Applicable as specified under 'Part-1 General of this Annexure II'.

(b) **Lower Voltage Supply Surcharge (LVSS):** Applicable as specified under 'Part-1 General of this Annexure II'.

(c) **Lower Voltage Metering Surcharge (LVMS):** Applicable as specified under 'Part-1 General of this Annexure II'.

(d) **Late Payment Surcharge (LPS):** Applicable as specified under 'Part-1 General of this Annexure II'.

(e) **Night Time Concession (NTC):** Applicable @ 20 p/kVAh as specified under 'Part-1 General of this Annexure II'.

(f) **Power Factor Surcharge (PFS):** Not Applicable..

(g) **Reform Surcharge (RS):** Applicable as specified under 'Part-1 General of this Annexure II'.

(h) **Disturbing Load Penalty (DLP):** Not Applicable.

(i) **Harmonic Injection Penalty (HIP):** Not Applicable.

(j) **Peak Load Exemption Charges (PLEC):** Not Applicable.

(k) **Peak Load Violation Charges (PLVC):** Not Applicable.

8.24.10.4 The Commission has not made any revision in the tariff applicable for temporary connections. However, the Commission has introduced two-part kVAh tariff for temporary connections above 20 kW connected load, as follows:

Table 8.33: kVAh based tariff for Temporary Connections (above 20 kW)

DESCRIPTION	ALL CONSUMERS
Energy Charge (Rs/kVAh)	4.45
Demand Charge (Rs./kVA/month)	300
Consumer Service Charge (Rs/month/consumer)	100

8.25 Night time concession

8.25.1 The existing tariff has the provision for a 'night-time' concession of 20 paise/unit for the categories of domestic (above 20 kW), Small & Medium Industrial Power Supply, Large Industrial Power Supply and Water Pumping. The Board, like in the previous petition, has submitted that the concession for off-peak consumption should be applicable only to industries willing to shift their load to off-peak hours as against a general applicability to all industrial users consuming during off-peak hours. The Board during the public hearings gave presentations intimating the frequency, availability and load profile of during the night time. The Board pleaded that since the frequency at the night time hours was below 50 hz and the demand almost matches the availability, it would therefore, not be possible to shift the load to night time. The Board contended that the night time concession and shifting of load thereto should not be encouraged.

8.25.2 The Commission has examined the pleading of the Board and is not convinced with their contention primarily because the potential consumers having potential to shift load to night time would have already shifted and there would be marginal increase in shifting of load to night-time, if the shifting is encouraged. Also, the Commission feels that shifting of load on account of Board's consumers would hardly make any impact on the grid frequency. Therefore, the Commission has persisted with the current level of concession, i.e., 20 paise per unit and has also increased the duration of night time concession from existing 12:00 pm to 6:00 am to 9:00 pm - 6:00 am. The Commission also extends this concession to all the domestic, commercial and APS consumers having connected load above 20 kW.

8.26 Surcharge for Delayed payment

8.26.1 Commission has retained the existing provision of surcharge for delayed payment which is reproduced as under:-

8.26.2 "Surcharge for late payment shall be applied at the rate of 1% per month or part thereof on the outstanding amount specified in the bill and levied on the unpaid amount of the bill (excluding electricity duty/taxes etc) for all categories."

8.27 Overall revenue –expenditure position of HPSEB

8.27.1 The overall revenue–expenditure position of the HPSEB after the revision in tariff is given in the table below:

Table 8.34: Overall revenue-expenditure position (as per approved tariff)

DESCRIPTION	RS. CRORE
Total Revenue requirement	1264
Revenue from sale of power within the State	962
Revenue from sale of power outside the State	206
Non-tariff income	96
Total Revenue	1264
Net revenue gap	Nil

8.27.2 The Commission has thus not approved the creation of a regulatory asset as proposed by the Board.

8.27.3 Based on the category-wise tariffs approved as above, the break-up of revenue generated from the existing and approved tariff is presented in the table below:-

Table 8.35: Revenue breakup for FY 2005-06 (Existing/Approved)

Description	Existing	Approved	Difference	Difference
	(Rs. Crore)	(Rs. Crore)	(Rs. Crore)	%
Domestic	114.3	200.4	86.1	75%
NDNCS	8.6	9.0	0.3	4%
CS	99.1	111.6	12.5	13%
SMS	50.7	57.8	7.1	14%
LS - EHT	237.1	232.3	-4.8	-2%
LS - HT	211.4	206.0	-5.4	-3%
LS - Total	448.6	438.4	-10.2	-2%
WPS	90.9	104.9	13.9	15%
APS	1.6	4.5	2.9	180%
SLS	3.3	3.4	0.1	3%
Bulk Supply	31.0	29.6	-1.5	-5%
Temporary Supply	2.4	2.4	0.0	0%
Revenue from sale of power within the State	850.6	961.9	111.2	13%
Income from sale of power outside the State	206	206	-	-

Sub Total	1056.7	1167.9	111.2	11%
Non -Tariff Income	96	96	-	-
Total Income	1152.7	1263.9	111.2	10%

8.28 Recovery Ratio Index

8.28.1 The above category wise increases in tariff have been designed so that the average realization from each category converges towards their respective cost of supply. To measure the extent to which this has been done, the following index has been used by the Commission:

$$RRI = \sqrt{\{\overline{\Sigma[(AR_c/AC_c)-1]^2}\}/\Sigma N_c}$$

Where RRI = Recovery Ratio Index
AR_c = Average realization of each category
AC_c = Cost of supply of each category
N_c = Number of categories

8.28.2 The above index ideally should converge to Zero over the years. The convergence towards zero would reflect alignment of average realisation of each category with overall average realisation.

8.28.3 The Recovery Ratio Index has been calculated at the existing tariffs and also at the revised tariffs approved by the Commission. The results are given in table below.

Table 8.36: Recovery Ratio Index

DESCRIPTION	
RRI at existing tariffs	0.43
RRI at revised tariffs	0.29
Improvement (%)	34%

8.28.4 The above table shows that the cross subsidy in the State has been reduced significantly by 34% at the tariffs approved by the Commission.

SECTION 9

INCENTIVES LINKED ADVISORY DIRECTIVES
(ROADMAP FOR TURNAROUND)

- **BACKGROUND**

9.1.1 The matters arising out of public hearings held at Kala Amb, Baddi, Manali, Dharamshala, Dalhousie and Shimla and formal interactions with the senior officers including almost all the Chief Engineers, CAO, Secretary, MDs of HPJVVNL and PVCL spanning some four weeks were finally discussed with the Members and Chairman of the Board on May 30, 2005. List of issues to be discussed was sent to the Board on May 29, 2005. A copy is attached at Annexure 9-A. The interactive meeting was attended by the Chairman, Members (Administration), (Operation), (Technical) and (Civil). In all 67 issues were discussed.

9.1.2 When the Board introduced and made presentation of its tariff petition on May 2, 2005, its Member (F&A) made passionate plea that the directions, if and as, given by the Commission in its forthcoming Tariff Order must be linked with efficiency gains on sharing basis instead of making them only quid-pro quo. The Commission in its interim order of May 2, 2005 directed that in the Tariff Order for 2005-06 the directions must aim at achieving and accomplishing the multi-year tariff principles if not the tariffs per se which shall, however, require very accurate, reliable and credible database and may have to wait until the Board develops such a database.

9.1.3 As highlighted in the concept paper, the MYT framework has been considered as an important structural incentive to promote efficiency, enhance productivity and facilitate rapid reduction of system losses. Implementation of the MYT framework has also been stressed in the National Electricity Policy and the draft Tariff Policy. As pointed out in the concept paper, the implementation of an MYT framework usually requires extensive data. Further, the data required for this framework needs to be reliable. In the absence of adequate and reliable data, most targets for efficiency improvement would be limited to conservative estimates, which would either not draw maximum initiative of improvement from the public sector or result in excessive profits for the private sector. The availability of reliable data is also important for the reasons that the implementation of the MYT framework would require forecasting data over the Control Period.

9.1.4 In the Tariff Order for FY 2004-05, the Commission had observed that the data submitted by the Board is unreliable, inaccurate and inadequate. This constrained the Commission in its desire to move in the direction of determination of tariff based on the principles of Multi Year Tariff as envisaged under section 61(f) of the Act. The absence of a credible, accurate and exhaustive database continues to constrain the Commission in moving towards an MYT framework. The Commission also feels that the institutional preparedness of the Board for implementing a high-powered framework like Multi Year Tariffs is low.

9.1.5 Given the above considerations, the Commission feels that designing an MYT regime on shaky foundations would be detrimental as it could increase the risks for the Board as well as the consumers. At the same time, the Commission feels that there is a need to incentivize the Board towards this end by providing stronger incentives for cost optimization and innovation. Therefore, the Commission is introducing incentives linked efficiency and performance targets for the Board on a multi-year basis. In other words, the Board is being provided with incentives for the achievement of these performance targets.

9.1.6 The interim order of May 2, 2005 has been seizing the attention of the Commission. The Commission has undertaken a detailed examination of the performance of the Board, various documents related to the internal working of the Board, report of the Norms Committee, issues and concerns raised by consumers, the strategies, systems and the working procedures of different departments of the Board as well as the problems and difficulties being faced by them and the discussions in the interactive meetings with the officers and Wholetime Members of the Board.

9.1.7 DELPHI STUDY

9.1.7.1 In the present age of modern management and science, we have such techniques available to us as can enable us to assess and evaluate the similarities of ideas of the community in respect of a particular subject. There are three exercises to be conducted in this process. The first is the “Idea Engineering” in which the ideas are garnered in order of predominance and priority. Second exercise is called the DELPHI Study. Rand Corporation during the 2nd World War wished to evaluate and assess different weapon systems, which could give them a competitive edge during the war. For this, they had to make short and long term forecasts and build scenarios as to which weapon system shall be available by what time and what use can it be put to. Beginning of this was made in the context of war but subsequently this has been used in peace times and for development purposes also. This has been used in the energy sector, transport, etc. where the future scenarios were drawn and to achieve such future scenarios, plans were made.

9.1.7.2 Delphi study owes its origin, to ancient Greek Civilization. There was an Oracle (temple) whose priestess used to go in ‘samadhi’ and in that state of ‘samadhi’ when questions were asked, she could make predictions about the future.

9.1.7.3 The organizers of this study prepare questionnaires divided in several parts. In the context of HPSEB, the different parts or dimensions are

- HRD,
- Technical,
- Financial,
- Commercial,
- Customer Services

9.1.7.4 On each dimension or part, the questionnaires are prepared. The answers are given on a 5 point scale. The answers can be :

a) no work has been done as yet;
b) some work has been done;
c) satisfactory work has been done;
d) much has been done;
e) whatever was to be done has been done or don’t know.

9.1.7.5 This exercise is repeated until absolute consensus is reached. This is done in total anonymity. In the third exercise five/six teams are constituted each with 5/6 persons. Each team works in unison. There can be all types of persons – specialists and others with professional abilities. To trigger off the thought process, the results of idea engineering are placed before them. They are asked to draw the future scenarios for short, medium and long term. Two types of scenarios are drawn - larger view of what would happen at the global level. Three different situations can be made - one, if we don't do anything, and everything goes on as is at present, what would be the scene after 5,10,20 years? Second, it is not that if we don't do anything nothing shall change. The people are working all the times for development and progress. What then is the most probable scenario? This may not be the desired scenario or preferred scenario. One may conjure up the most preferred scenario. Three types of scenarios for every year, so determined, can be drawn on big or small or local scale and then equilibrium or compatibility established between them. When these roadmaps are drawn, the teams also list the obstacles in the way of achieving the same. Milestones of success can be earmarked which can facilitate the accomplishing of objectives. In this manner of building of future scenarios, some inferences are drawn on which action plan can be formulated. To the Commission, this is the real MYT and not merely the principles which are not worth the paper on which they are written if the actions to achieve the same are not prescribed and taken.

9.1.7.6 The Commission has also used the Delphi Study technique in identifying the problems being faced by the Board, the solutions and the type of performance targets that should be laid down in respect of such problems. The purpose of the Delphi Study is to elicit information and judgments from participants to facilitate problem-solving, planning, and decision-making. The approach tends to be a group of techniques rather than an individual procedure. Typically the approach involves an expert panel; a number of information gathering rounds each of which ends with an analysis process and feedback into subsequent rounds. Individuals are given the opportunity to revise judgments as a result of feedback. The number of iterations can vary (the more rounds the closer the consensus is likely to be) as can the size of the panel - from a handful to several hundred participants. This technique is designed to take advantage of participants' creativity as well as the facilitating effects of group involvement and interaction. It is structured to capitalize on the merits of group problem-solving and minimize the liabilities of group problem-solving.

9.1.7.7 The Commission would like to explain the use of the Delphi Study in this exercise. The Commission identified to its staff that the basic objective of this exercise was to improve the power sector in Himachal Pradesh by bringing about improvements in the Board. For this purpose, the Commission asked its staff and consultants to brainstorm individually and list the steps that should be taken to improve the sector, the constraints in the path of these steps and solutions or means to address these constraints. The Commission stressed that these ideas need not be fully developed. Expressing the idea in one brief sentence or phrase would suffice. Further, the Commission clarified that no attempt should be made to evaluate or justify these ideas at this stage.

9.1.7.8 The Commission gathered the thoughts of its staff and the consultants and analyzed the ideas given by the staff. The Commission then communicated all the steps that should be taken to improve the sector, the constraints in the path of these steps and solutions or means to address these constraints to all the staff and consultants. The Commission gave all of the ideas and issues sent in response to the first round to its staff and asked them to refine their ideas.

9.1.7.9 Through such formal assessment of the group's opinions and ideas, the Commission evaluated all the ideas and submissions of the staff. The Commission discussed all ideas and submissions with the staff. These discussions led to the emergence of a consensus and the Commission was able to come up with the steps that should be taken to improve the sector, the constraints in the path of these steps and solutions or means to address these constraints. The exercise was declared finished after this. The areas of improvement identified by the Commission and the framework for improvement that has been laid down by the Commission is an outcome of this approach.

9.1.8 AREAS OF IMPROVEMENT

9.1.8.1 Human Resources Development and Management:

a) Re-organisation of Operation (distribution) Circles along functional lines viz:

i) O&M;
ii) Planning, Design and Construction;
iii) Customers services;
iv) Engineering Resources Management;
v) Personnel and Administration;
vi) Accounts and Finance.

b) Super-ordinate goals or mission statements separately for generation, transmission, distribution and trading businesses;

c) Long, medium and short term policy statements for each business in various areas;

d) Simplification of systems and procedures based upon the commercial principles and ease of application for each business and each area;

e) Scientifically architectured structures with appropriate differentiation (specialization) and integration (linkages, centres of responsibility, accountability) for each business of generation, transmission, distribution and trading;

f) Staff allocation not on normative but on dynamic need-basis with engineering and non-engineering resource management aimed at full loading of the work force and near 100% productivity level in respect of each business of generation, transmission, distribution and trading;

g) Skills with inventories and succession planning together with appropriate motivational and job enrichment/satisfaction schemes and development and management of the staff to keep pace with the changes in substantive internal and external environment in the overall hierarchy of skills in respect of each business of generation, transmission, distribution and trading with common training academy to cater to the needs of all the four businesses;

h) Styles and work-culture together with effective leadership, qualification and experience for the top management in respect of each business of generation, transmission, distribution and trading;

i) Computerised MIS based control, coordination and monitoring.

9.1.8.2 Technical:

a) Generation;

b) Transmission;

c) Distribution;
d) Trading;
e) Other businesses;
f) Technology drivers;
g) Computerised MIS based control, coordination and monitoring.

9.1.8.3 Financial:

a) Capital and financial restructuring;
b) Accounts and Finance;
c) Audit;
d) Dis-investment;
e) Computerised MIS based control, coordination and monitoring.

9.1.8.4 Commercial:

a) Regulations and Regulatory matters;
b) AT&C losses;
c) System operations;
d) Computerised MIS based control, co-ordination and monitoring

9.1.8.5 Customer Services:

a) Public inter-action;
b) Standards of performance and guaranteed standards;
c) Metering, billing and collection;
d) Dispute settlement mechanism;
e) Consumer protection;
f) Computerised MIS based control, co-ordination and monitoring.

9.1.9 DIAGNOSTIC ANALYSIS

9.1.9.1 Effort was made to diagnose the causes for tardy and slow compliance with Commission's directions, imperceptional and almost invisible improvement in the working of the Board even in the fifth year of reforms. It was felt that almost all the ills and problems of the Board could be attributed to bad organization where even the best work done by best of men and women was ruined predominantly because of total disequilibrium of the essential 7-S elements of an organization namely super ordinate goal, strategies, systems, structure, staff, skills and style.

Coupled with the excessive politicization of the Board and resistance from employee unions this has resulted in abysmally low productivity of not more than 8%, shabbily and unprofessionally planned, maintained and operated power system plagued by low voltage, high losses, poor quality of service, very high employee cost, very high generation, transmission and distribution cost, very low Plant utilization factor, unprecedented high time and cost overruns on almost all Board Projects, right people in wrong jobs and wrong people in right jobs. There is no reward for good work and no punishment for bad work. They have all contributed to high cumulative loss of the order of Rs.400 Crores even while the Commission had allowed Rs.35.82 crores as return besides Rs. 46.05 crores depreciation in the Tariff order of FY 2004-05. It may be no exaggeration to state that the human resources of the Board have been grossly abused, manipulated and politicized such that they have become a problem rather than a resource.

9.1.9.2 The present system suffers from the following drawbacks:

a) Supervisory mechanism in field has totally collapsed.
b) Most of the problems can be attributed to highly unrealistic and archaic staffing norms.
c) There is no specialization or differentiation of duties and responsibilities and no appropriate integration with the right type of responsibility centres.
d) The present organization structure of the HPSEB is a multi-tier one with omnibus working at all levels of management, all the levels doing all the things. All the levels are doing routine work only resulting in assigning lower priority to key functions.
e) There is not much job rotation resulting in lack of multiple job experience.
f) There is a total lack of accountability which has lead to gradual degeneration of initiatives. There is lack of appreciation for good work or reprimand for bad work.
g) The human resource manpower development and planning is relatively unknown, on the contrary there is degeneration.
h) Strength of modern management fundamentals, viz., commercialization, professionalisation, devolution, specialization, modernization and automation is missing. HPSEB has failed to make use of technological innovations and automation like unmanned substations, dedicated communication system, computerization of various functions in day to day routine work, modern

management techniques like MIS, GIS planning and monitoring, industrial engineering, operational research etc. for improvement of its working.

i) HPSEB has failed to recognize its dedicated and disciplined employees as a major valuable resource, even more valuable than money and introduce some semblance of resource management aimed at optimum productivity of its manpower resources.

j) There are atleast 100 operation sub-divisions, 17 operation divisions and 3 operation circles which do not constitute financially viable building blocks.

9.1.9.3 Board was asked vide interim order dated May 2, 2005 to file Sub-division, Division, Circle and Zone-wise revenue, expenditure and actual staff figures by June 6, 2005. The Board has failed to file the information in regard to sub-divisions. However, from the information provided belatedly on June 16, 2005 it reveals that out of 51 Operation Divisions, 17 Divisions are revenue deficit. Assuming 5/6 sub-divisions per Division, number of loss making sub-divisions may be over 100. The deficit Divisions have been identified on the basis of revenue expenditure less cost of power, depreciation, O&M, etc. If the identification is done after taking into consideration the cost of power, deprecation, O&M, etc, the numbers shall be mind – boggling. Such appears to be extent of abuse manipulation and politicization of the working of the Board.

9.1.9.4 These problems defy all solutions but unless solutions are found, all the players in the sector shall remain a part of the problem. Consultants may suggest theoretical solutions as in the past by World Bank approved Consultants 'SGV Manila' which are not capable and feasible of implementation in the socio-political milieu of the State. Solutions have, therefore, to be found in-house only.

9.1.9.5 HPSEB in its 259th meeting held on October 18, 2000 decided that the organizational structure and staffing pattern in operation wing of the Board is proposed to be reviewed in terms of staff, functional and territorial jurisdiction in consultation with affected parties and as a pilot project it was decided to implement it in Shimla Operation Circle by January 2001. Later, in the 262nd meeting, it was decided to include Mandi and Kangra Operation Circles also as pilot projects so that there is one in each operation Zone, viz., South, North and Central Zones.

9.1.9.6 Reliance is placed on the above proposal approved by the Board which was based largely upon the Norms Committee Report of 1996 headed by Chief Engineer (Operation) North. It should do well to refer to some of the salient features of that report:

9.1.9.7 In the present set up, the Executive Engineers/Assistant Engineers in charge of the Divisions and sub divisions are responsible for a large number of activities on daily basis. Annexure 9-C thereto lists down the various duties of field engineers in operation and average monthly hours requirement to carry out these duties in the rural and urban areas. XENs/AEs incharge of the Divisions/sub divisions have to perform on an average some 165 activities on daily basis requiring some 100 full time working hours per day against 6.5 paid working hours per day. Though this precise number of activities and the time required to perform these may be open to argument, there is no doubt that in carrying out all these activities, a field engineer has either to be a superman doing work of 16 persons or in other words is doing only 1/16th of the work actually prescribed for him by various departmental codes, manuals and the instructions. With this diffused, divided and imbalanced attention, no wonder, the problems are merely patched up. While the more urgent day-to-day, time bound and pressing functions of accounts, audit, personnel and general administration are placed at high priority on the daily time management of the field engineers, the other important duties of design & construction, operation and maintenance and consumer services including cash collections etc. are relegated down stream and neglected completely. This has resulted in shabbily planned, maintained and operated distribution system plagued by low voltage, high losses, poor quality of service and poor revenue collections.

9.1.9.8 On the other hand, the field staff is grossly under-worked because of wrong place arrangement. The measurement of performance using indicator of manpower efficiency would enable the HPSEB to compare its performance with other SEBs and power utilities in some other countries.

9.1.9.9 There is imperative need, therefore, to enhance the manpower efficiency at least by 100% from the existing level at the earliest.

9.1.9.10 In some categories of field staff, there is shortage, while in overall context there is overstaffing. This imbalance coupled with defective organizational structure and wrong work place arrangements is the main cause of inefficiency and low productivity since the field staff is not being optimally utilized. In the wake of the fact that HPSEB is termed as an overstaffed organization, the field officers feel frustrated in not being able to get the desired output primarily on account of defective organizational structure and wrong work place arrangements.

9.1.9.11 Directions of the Commission issued in Tariff Order for FY 2001-02 and FY 2004-05 per se were in the best interest of the Board and if implemented faithfully, could have not only turned around the Board but placed it on top of the power utilities in the country but this was not to be because of; firstly, the mindset – the change of which is perhaps the most formidable challenge, secondly, the lack of maturity, dignity and the wisdom on the part of all the arms of governance to accept the neo paradigm of regulation and last but not the least, the absence of proper ground for undertaking reforms. This last factor is the most critical and vital for ushering in any semblance of change.

9.1.9.12 It is a matter of common sense that the playing field cannot be levelled without razing the structures already built upon and entrenched in it. Political compulsions and employees' unions' would just not permit it. Nevertheless, the reformist knows that reform consists of overturning the entire structures. As the policies, the conduct of officials and ordinary folk all act on each other, reforms entails working on all these fronts simultaneously. Thus, the effort has to be focused, the reforms have to be across the Board, their sustainability has to be assured and the reforms must be relentless. The transition has to be intimately overseen and controlled, otherwise the changes can go haywire and out of control.

9.1.9.13 It was perhaps because of this reason that the directions of the Commission did not find wide and general acceptance as they were unfeasible to comply with in the given time and set-up. Perhaps the Commission erred in making an extremely bold presumption that the HPSEB's organisation was a scientifically architectured organisation with all the seven –S elements viz super-ordinate goal, strategies, systems, structure, staff, skills and styles in perfect equilibrium and harmony capable of responding to and complying with the directions of the Commission to its satisfaction within the time allowed to it. Knee jerk, incremental and patch-up dressings, reluctantly made by the Board only helped in tinkering with the organisation already in shambles.

9.1.10 SOLUTION

9.1.10.1 It required a holistic approach, comprising ,

a) A completely scientific organisation with properly designed mission statement (superordinate goal) and not the mix of 3 or 4 different and not too complementary and compatible statements of generation, transmission, distribution and trading;

b) modern and simple systems and procedures based upon commercial principles;

c) scientifically architectured structure with appropriate differentiation (specialization) and integration (linkages, centres of responsibility, accountability);

d) staff allocated not on normative basis but on dynamic need basis with engineering and non-engineering resource management aimed at full loading of the workforce and near 100% productivity level ;

e) skills with inventories and succession planning together with appropriate reward and punishment scheme, development and management to keep pace with the changes in the substantive internal and external environment in the overall hierarchy of skills;

f) styles and work-culture to be provided by effective leadership to be led from front, 97% of which comes from character, integrity, truthfulness, courage and determination and only 3% from knowledge of the sector.

9.1.10.2 In its interaction with the Secretary, Members and Chairman of the Board, the Commission found endorsement of its views, diagnosis and vision with almost total agreement. It was, however, felt that upstaging of such structural changes and governance structures in distribution would be most opportune when the Board is reorganized and restructured in terms of Section 131 of the Electricity Act, 2003. The Commission in its 2nd STATUTORY ADVICE to the State Govt. of HP on reorganization and restructuring of Electricity Industry in the State, dated April 6, 2005, under clause (iii) of sub-section 2 of section 86 of the Act, had advised that the successor companies must start with a clean state and not be burdened with past liabilities and inefficiencies. The Commission is convinced that the new distribution Companies must start with new organizational and governance structures.

9.1.10.3 The Commission is in the process of tendering of the 3rd statutory advice on re-organisation and restructuring of the electricity industry in the State under the above provision of the Act which is aimed at restructuring of the distribution segment which is the weakest link in the power sector's value chain and has tremendous scope for improvement for providing efficient, economical and competitive service to the end use consumers. The real challenge of reforms in power sector lies in efficient management of distribution sector.

9.1.10.4 National Electricity Policy in para 5.4.1 states that Distribution is the most critical segment of the Electricity business chain. The real challenge of the reforms in the power sector lies in efficient management of the distribution business. Policy stresses that for achieving efficiency gains, proper restructuring of distribution utilities is essential. Adequate transition financing support would also be necessary for these utilities. Such support should be arranged linked to attainment of predetermined efficiency improvements and reduction in cash losses and putting in place appropriate governance structure for insulating the service providers from extraneous interference while at the same time ensuring transparency and accountability. For ensuring financial viability and sustainability, State Governments would need to restructure the liabilities of the State Electricity Boards to ensure that the successor companies are not burdened with past liabilities. The Central Government would also assist the States, which develop a clear roadmap for turnaround, in arranging transition financing from various sources which shall be linked to predetermined improvements and efficiency gains aimed at attaining financial viability and also putting in place appropriate governance structures.

9.1.11 ROADMAP FOR FUTURE

9.1.11.1 The Commission has developed a road map for the next ten years which also sets out an action plan to achieve the year-wise milestones laid down therein, to make the Board and its successor entities, indeed of world-class standard. Each milestone has been incentivized with efficiency-sharing arrangement in accordance with Regulation 21 of HPERC (Terms and Conditions of Determination of Tariff), 2004 or wherever necessary on adhoc basis depending upon the usefulness of efficiency improvement to the Board, consumers and the stakeholders. Bar charts giving milestones for various activities are attached in Annexure 9 A.

9.1.11.2 The incentive to be given to HPSEB for undertaking the reform and restructuring as outlined above will be in the form of a 'Reform Surcharge', as stated earlier. The total incentive of Rs. 50 crores will be available to HPSEB in the first year, i.e. FY 2005-06, if the milestones specified by the Commission are achieved. The Commission has linked the incentives proportionally to each of the major activities, viz. (a) Reorganisation of distribution circles and Training Academy, (b) Transfer & posting of employees, and (c) Productivity linked incentives for employees in generation wing, and their sub-activities, as detailed in the following Charts. For the milestones beyond FY 2005-06, the Commission has stated the broad milestones, which will have to be fine-tuned later depending on HPSEB's response to this stimuli provided by the Commission. The Commission hopes that this mechanism will enable the establishment of a MYT framework, encompassing all facets of the Board's functioning. The Commission fervently hopes, trusts and prays that this massive incentive of Rs.50 crores for advisory directives and nearly two third of profits as a result of improvement in efficiencies as held out in the roadmap for future shall be viewed as a measure of faith and trust of the consumers in the Board which the later shall not betray.

9.1.11.3 The Commission, therefore issues ADVISORY directives on three aspects as follows:-

a) Reorganisation Of Distribution Circles & Training Academy
b) Transfer & Posting Of Employees

c) Productivity Linked Incentives For Employees In Generation Wing

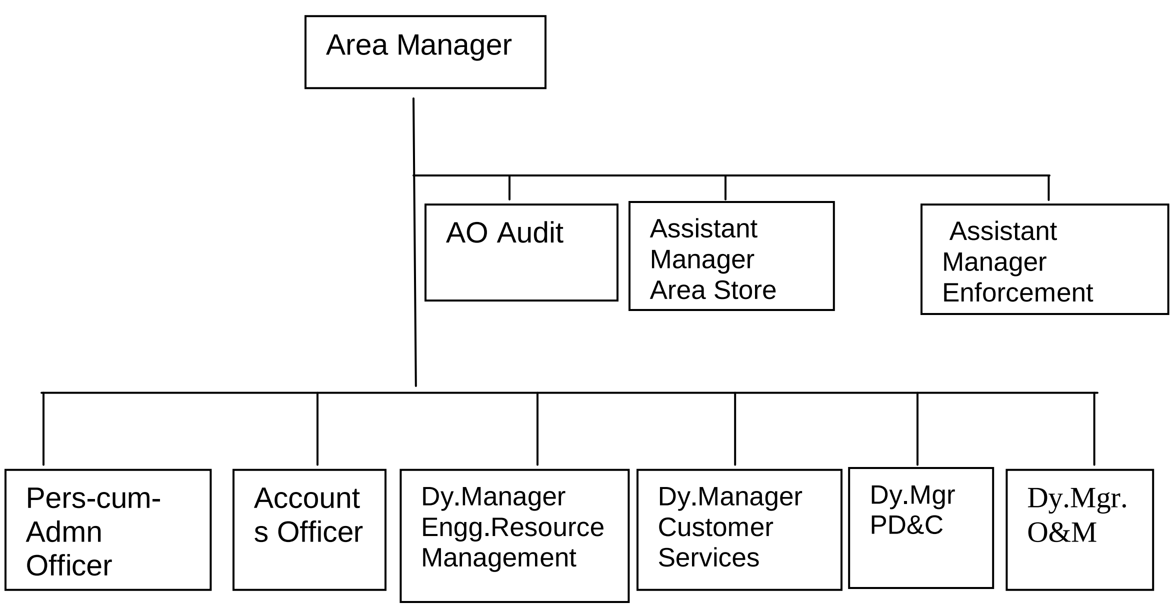
○ **REORGANISATION OF DISTRIBUTION CIRCLES**

9.2.1 Pending constitution of distribution Companies as may be decided by the GoHP, the existing Circles shall be treated as independent Areas each to be controlled by Area SE or Dy.CE or equivalent as head of that unit (to be designated as Area Manager) and shall be the responsibility and expenditure center vested with full powers as Chief Executive Officer(CEO). He will not have any Chief Engineer as Controlling Officer above him, but shall report directly to the Managing Director/Chairman of the Board/Company.

9.2.2 All functions under the Area Manager shall be segregated as follows:-

a) Operation and Maintenance;
b) Planning, Design and Construction;
c) Customer Services;
d) Finance, Accounts & Audit;
e) Personnel & General administration;
f) Engineering Resource Management

9.2.3 The suggested outline if the Organization Chart is given below:



9.2.4 All the above six functions except accounts and audit shall be looked after by the officers shown in the chart. All of them will be located at Circle (Area) headquarters under direct supervision of Area Manager. There shall be no separate office staff for Area Manager except his personal staff, viz., PS, peon, etc.

9.2.5 Second unit of O & M and customer services shall be provided where justified on the ground of higher revenue or geographical jurisdiction. Second unit shall also be located at Circle (Area) headquarters.

9.2.6 All the existing operation sub divisions shall be restructured and renamed as:

a) O& M sub divisions
b) Customer services Sub-Divisions
c) Planning, Design and Construction Sub-Divisions

9.2.7 The number of each of the above sub divisions shall be in the ratio of 2:2:1, assuming that there are, on an average, 5 sub-divisions in the existing operation Division.

9.2.8 At least one O & M sub division and one commercial sub division shall be located at the existing headquarters of Divisional office. Planning, Design and Construction sub division shall also be preferably located at the existing Divisional headquarters, if there is sufficient workload in and around that area.

9.2.9 The details of sections and supporting staff have to be worked out sub-division-wise according to their functions.

9.2.10 Operation & Maintenance Division shall perform the following functions:-

a) Operation and maintenance of the electric power supply system so that consumer is provided with reliable and quality power and the system is maintained and fault attended as per standards of performance.
b) Providing of service connections to the new consumers.

9.2.11 Customer Services Divisions shall be responsible for following functions:-

a) Meter Readings
b) Consumer billing of all categories of Consumers
c) Revenue collection
d) Processing of cases relating to new consumers including framing of estimates and issue of service connection orders. The SCO shall be passed on to Operation Division/Sub division of the respective areas for releasing of connections to the consumers.
e) Checking of meters and consumers' installations
f) Attending to Consumer complaints regarding billing and metering
g) Checking of energy theft/pilferage

9.2.12 Planning, Design & Construction Division shall look after the following functions:-

a) Planning and design of entire secondary distribution system starting from high voltage down to service lines to the consumer premises and preparation of schemes for upgradation, improvement, extension etc.
b) Design and Construction of all HT/LT lines and sub stations under the Circle (Area) against working programme in respect of various capital schemes.

9.2.13 Resource Management Division shall be responsible for following functions:-

i) He shall have control over all resources, viz. technical and commercial manpower, money and materials and source these to the respective engineering departments and commercial department strictly in accordance with the HPERC (Distribution Licensee's Standards of Performance) Regulations, 2005 as and when notified by the Commission under Section 57 of the Electricity Act, 2003 (These are presently in the process of prior publication) the pre-requisite of which is the re-organization of Operation Circles.

ii) Handling custody and regulating Circle stores and providing the same to O&M, Customer Services and Design Planning and Construction Divisions.
iii) Plan the manpower requirement and regulate the same for O&M, Customer Services and Design Planning and Customer Services activities.

iv) Maintain and regulate the transport system, communication, stationary, computers etc. and other inputs required for all other units under the Circle (Area).

9.2.14 Finance & Accounts

9.2.14.1 The entire finance and accounts functions of the Area shall be controlled by Accounts Officer. Only Resource Management Division shall be declared as accounting Division and other Divisions shall be non-accounting Divisions with skeleton staff in Division office for operation of finances through imprest etc. All accounts shall be rendered to AO who shall compile the same for Circle. Audit shall be controlled by Area Manager himself.

9.2.15 Personnel & General Administration

9.2.15.1 All the personnel matters including securities, incumbencies, promotions, posting and transfers, compensations, service matters, disputes and court cases etc. shall be looked after centrally for the whole Circle (Area) through this Section.

9.2.15.2 In order to maintain efficient and satisfactory Customer services mobility of officers and supervisory staff should be enhanced through introduction of private vehicle scheme, allowing private cars and motor cycles as per admissibility. Similarly for operation and maintenance, officers & supervisory staff should be allowed mobile telephone system with certain fixed limit upto supervisory level.

9.2.15.3 While heavy vehicles such as trucks shall be under the control of Construction Division, Maintenance Vans/ pickup vans shall be controlled by O & M Division. Each O & M Sub division shall have at least one pickup/maintenance van.

- **IMPLEMENTATION**

9.3.1 HPSEB has got extension as State Transmission Utility and a licensee upto December 10, 2005. Restructuring of the Board has to be done for which two statutory advices have already been given by the Commission to GoHP on July 30, 2004 and April 6, 2005. As detailed above, the Operation Wing of the Board within itself requires major restructuring for which the detailed planning exercise is required to be completed to match with the time period allowed to HPSEB for overall restructuring. As such the following time bound programme is advised for implementation of restructuring of Distribution wing as per the said proposal.

9.3.2 Task Forces shall be constituted for each area immediately.

9.3.3 Draft notifications/orders/ instructions with regard to the detailed proposal, renaming of Divisions, Sub divisions and Sections together with territorial jurisdictions, the description of duties and role, the interface between the sub departments(namely O&M, Planning, Design & Construction, Resource Management, Customer Services, Accounts and Audit, Personnel & General Administration), flow charts indicating the procedures, the deployment of resources between various sub-departments and transfers/movements of officers and staff should be got prepared by HPSEB through some Consultants and the Secretary, HPSEB should issue the necessary administrative orders latest by October 1, 2005. The interactive sessions and briefing courses should commence from 3rd week of October, 2005 upto middle of Nov.2005, so that the reorganized setups start functioning from December 10, 2005. (The extended date for restructuring of the Board). Commission and its officers shall be available at all reasonable times for extending any clarification that may be required.

9.3.4 Training Academy

9.3.4.1 The National Electricity Policy notified by the Central Government under Section 3 of the Electricity Act, 2003 has also stressed on the need for augmenting training infrastructure to ensure that the Utility's personnel are geared to meet the requirements of the evolving electricity industry in new areas like power trading and regulation. The Policy states:-

"Training and Human Resource Development

In the new reforms framework ushered by Electricity Act 2003, it is particularly important that the electricity industry has access to properly trained human resource. Therefore, concerted action would be taken for augmenting training infrastructure so that adequate well-trained human resource is made available as per the need of the industry. Special attention would need to be paid by the industry for establishing training infrastructure in the field of electricity distribution, regulation, trading and power markets. Efforts should be made so that personnel of electricity supply industry both in the private and public sector become more cost-conscious and consumer-friendly."

9.3.4.2 In line with the National Electricity Policy, the Board is directed to augment the training infrastructure and ensure that its personnel have the opportunity to participate in the workshops/seminars in the country as well as to interact with their counterparts in other parts of the country. Regular training should become an integral part of the Human Resource Development (HRD) activity of the Board. The Board is directed to formulate a training programme for its personnel at different levels in the organization and to submit the training programme for the approval of the Commission within two months of issue of this Order. Within six months of the issue of this Order, the Board should set up a training academy which can impart training to its officers as well as other participants from the industry in order to offset the costs. The Board should ensure that the trained staff is posted in accordance with the training imparted. All employees should mandatorily undergo training in relevant areas once in three years. The entire expenditure on account of training will be a pass through in the ARR.

9.3.4.3 As observed earlier, National Electricity Policy in para 5.4.1, while laying overly emphasis on reforms in distribution business stresses proper restructuring of and putting in place appropriate governance structures in distribution utilities. It holds out an assurance to assist the States, which develop a clear road map for turnaround, in arranging transition financing from various sources. The Commission has no doubt whatsoever that the restructuring of distribution segment as advised herein shall be attendant with allround efficiencies which should yield massive spurt in productivity level and ensure financial viability and sustainability even in the short term. Apart from the incentives being provided in this Tariff order, the Board may pose this road map to the Central

Government for arranging transition financing in respect of these as well as other milestones.

9.3.4.4 The incentive for achieving the ADVISORY directive on re-organisation of operation circles and establishment of training Academy shall be as follows:

Sl	Name of circle	Incentive per circle (Rs. crores)	Total Incentive (Rs. crores)
1	Shimla, Solan, Nahan	5.0	15.00
2	Rampur, Rohru, Bilaspur, Mandi, Kullu, Hamirpur, Kangra, Una, Dalhousie	2.5	22.50
3	Training Academy	2.5	2.5
			40

- **TRANSFER & POSTINGS OF EMPLOYEES**

9.4.1 Another matter of great concern to the Commission is the increasing politicization in transfers/postings of offices and staff of the State Electricity Board which has led to serious aberrations, malpractices and corruption in the system, wrong people in right places, and right ones in wrong places and de-motivating the honest officers and employees without connections in high places. This is the very antithesis of pragmatic personnel management which is the backbone of human resources development and management and this cancer is spreading and eating into the very vitals of the Board.

9.4.2 Hon'ble Supreme Court in IA Nos. 23, 26, 29, 31-34 and 36 in WP No.79 of 1997 D/-February 24, 2005 in Suresh Chandra Sharma Petitioner V Chairman UPSEB and others, Respondents (AIR 2005 Supreme Court, 2021) has dealt with somewhat similar case and some portions of the said order are reproduced below:

9.4.2.1 One of the issues on which the Kaul Committee had adversely commented is that transfers and posting of officers and staff are not made in the State Electricity Board in a transparent and accountable manner. Although guidelines for transfer policy of officers of the state Government (see at Page 495 Volume 1A of the Paper Book), are supposed to be the transfer policy of such officers of the Board also, they have been observed in breach. The State Government has power under the Electricity Act to issue directives in the nature of policy directives but with Board's Chairman and top Executive heads packed by political bosses, the State Government appears to be exercising unbridled power of interference in the day-to-day working of the Electricity Board. The interference in transfers and postings with political patronage has totally destroyed the autonomous nature of the Electricity Board, which has been identified as a serious malaise affecting the functioning of the Electricity Board.

9.4.2.1 The original Electricity Board has now been split into U.P. Power Corporation Limited (for Distribution and Transmission), with five subsidiary distribution companies namely, Kanpur Electric Supply Company Limited (KESCO); Purvanchal Vidyut Vitaran Nigam Limited, Varanasi; Madhyanchal Vidyut Vitaran Nigam Limited, Lucknow; Paschimanchal Vidyut Vitaran Nigam Limited, Meerut and Dakshinanchal Vidyut Vitaran Nigam Limited, Agra. Thermal generation is entrusted to U.P. Rajya Vidyut Utpadan Nigam Limited and Hydro-generation to U.P. Jal Vidyut Nigam Limited. All these companies are Government companies, though under the provisions of the Electricity Act, yet independent bodies subject only to the directives of the State Government on matters of general policy.

9.4.2.2 That there has been large scale interference with the autonomous functioning of the Electricity Board (now transformed into eight autonomous Corporations), is evident from the highly critical report made by Kaul Committee, whose findings are as under :

a) The State Electricity Board is functioning as an extension of the State Government.
b) The Government of U.P. and individual UP politicians have long regarded the UPSEB as a social service agency, not a commercial enterprise.
c) Although the UPSEB is, on paper, an independent entity, its management services at the pleasure of Government of UP and changes frequently.
d) The GOUP officially imposes non-commercial constrains on UPSEB pricing and personnel policies.

e) While individual politicians interfere unofficially in personnel, operations, collections, procurement and more.

f) Employee morale and productivity are low due to lack of accountability and incentives.

g) Corruption is generally accepted to be serious at all levels."

9.4.2.3 Learned Amicus Curiae took us to the several paragraphs of the Kaul Committee's Report which highlighted the deplorable state of affairs found by it.

9.4.2.4 When we queried the learned counsel appearing for the State of U.P. and the learned counsel representing the electricity Corporations as to under what authority there was governmental interference with the day-to-day affairs of the Corporations in the matters like transfers and postings of officers and staff, neither of them was in a position to contest the situation that no minister or Government officer had any role to play in the transfers/posting of officers and staff of such Corporations.

9.4.2.5 Learned Amicus Curiae suggested that as the transfer season is round the corner, it is necessary to pre-empt another round of transfers/postings in the manner and for the reasons as highlighted by the Kaul Committee Report. He submitted that one way to ensure transparency in the matter of postings/transfers of officers of these Corporations would be to appoint an independent Monitoring Committee consisting of persons with impeccable reputation and proven administrative ability, which would look into each and every case of posting/transfer and ensure that they are totally free from political interference.

9.4.2.6 We have heard the learned counsel for the State of U.P. and the Corporations, we are satisfied that the suggestion made by the Amicus Curiae has merit and needs to be accepted. That there is imperative necessity to act urgently, is borne out by the facts, considering that the transfers are likely to be made in a couple of months, we think that urgent steps are needed to be taken. We, therefore, direct as follows :

a) No Minister of the State of U.P. nor any Government officer shall interfere with the transfers/posting of the officers in any of the Corporations named above.

b) All postings/transfers of the officers/staff of the aforesaid Corporations shall be monitored by an independent Committee consisting of the following persons:

   i) Shri S. Venkatnarayanan, (IAS) Retd. Former Chairman, National Power Finance Corporation, as Chairman;

   ii) A member of the U.P.S.C. to be nominated by the Chairman of the U.P.S.C.;

   iii) A nominee of the Chairman of the Central Electricity Authority.

   iv) A nominee of the Comptroller and Auditor General; and

   v) A nominee of the Central Vigilance Commission.

c) All proposals for transfers/posting of officers and staff of the aforesaid Corporations should, before finalization, be placed before the independent Committee which shall examine and approve the transfers/postings on merits and in the light of the guidelines for transfer policy of officers.

d) No transfer/posting which is disapproved by the said Committee shall be made by the Board of Directors of any of the aforesaid eight Corporations.

e) The Committee shall make a report to this Court containing its observations with regard to the transfers/postings of officers and staff, if any, made for the year 2005, after all such cases have been considered and decisions thereupon taken.

9.4.2.7 The Chairman, Union Public Service Commission; the Chairman, Central Electric Authority; the Comptrollers and Auditor General and the Central Vigilance Commission shall appoint one nominee each to be a member of the Independent Committee referred to in paragraph 2 of this order. The said nominations shall be made within a period of 3 weeks of receipt of a copy of this order.

9.4.2.8 The Chairman of the said independent Committee shall be entitled to remuneration of Rs. 3,000/- per sitting, while each of the members shall be entitled to remuneration of Rs. 2500/- per sitting. The remuneration payable to the Chairman and the members of the said Committee as well as the expenditure incurred by the Committee in the discharge of its functions shall be payable in equal proportion by the above said eight Corporations and the State of U.P. The U.P. Power Corporation Limited shall, in the first instance, defray the expenses of the said Committee and pay the remuneration fixed per sitting and shall be entitled to recover the proportionate shares from the other Corporations as well as the State of U.P.

9.4.2.9 The Registrar General is directed to forthwith forward a copy of this order to Shri S. Venkatanarayanan, (IAS) Retd. Former Chairman, National Power Finance Corporation; the Chairman, U.P.S.C.; the Comptroller and Auditor General and to Central Vigilance Commission, for information and immediate action."

9.4.2.10 The situation in HPSEB is no better. As a matter of fact, the situations in UP and HP State Electricity Boards are identical, the variation being in slight degree only. This has dangerous undertones for the personnel and human resource health of the Board. Taking support of the said judgment of SC the Commission is approving the transfer/posting policy for officers and staff of HPSEB/successor Companies which is enclosed at Annexure 9-D. The Board is advised to take the following steps immediately:-

a) No external interference or influence from any quarter in the matter of transfer/posting of officers and staff in the Electricity Board or its successor companies shall be entertained.

b) All postings/transfers of the officer and staff of the aforesaid Board on successor companies shall be monitored by an independent Committee

c) The Committee will be constituted by the Commission and the terms of reference of the Committee shall be notified by the Commission separately

d) All proposals of transfers/postings of officers and staff of the Board and its successor companies should before finalisation, be placed before the above committee which shall examine and approve the transfers/postings on merits and in the light of the guidelines for transfer/postings.

e) No transfer/posting which is disapproved by the said Committee shall be made.

f) The terms and conditions of the Chairman and Members of the Committee shall be decided and notified by the Commission separately. The remuneration payable to the Chairman and the members of the said Committee as well as the expenditure incurred by the Committee in the discharge of its functions shall be payable by the Board or its successor companies and allowed as pass through.

g) All officers and staff on high revenue and industrial Circles/Divisions/Sub-Divisions shall be screened for reputation and integrity in the next 4 weeks and those with poor reputation or integrity shall be immediately transferred to non-sensitive office jobs.

h) The incentive for achieving this ADVISORY directive shall be Rs.5.00 crores.

- **PRODUCTIVITY LINKED INCENTIVES FOR EMPLOYEES IN GENERATION WING**

9.5.1 The next most important matter of extremely urgent nature is the declining generation in almost all the Board's Power Stations which are operating at plant utilization factors of mere 11-51 %, except Bhaba. Generation in other stations is far below the design energy, to speak nothing of secondary energy. The generation cost touches as high as Rs.18 per unit. This has to be understood and realized by the Board that power houses are its bread and butter and the generation from the projects has to be heavily incentivized. The Board was directed vide interim order dated May 16, 2005 to file the copy of the report on generation incentives by Chief Engineer (Generation) in 1993-94. Chief Engineer (Generation) Mr. S.C.Prabhakar was also asked to produce it. The Board has failed to file it on the grounds that this is not traceable. In the wrap-up of hearings on May 16, 2005, the Board was queried as to the incentives for improved generation. There were contradictory views of the Members.

9.5.2 The Commission, therefore, issues the following ADVISORY directive:

a) Power houses are located, more often than not, at far off, hard, difficult and isolated places lacking even the basic amenities of life and the nature of duties is highly taxing and stressful. Power house personnel do not enjoy the same facilities as are available to their counterparts posted in towns and in transmission and distribution. The technical staff in generation (Cadre being separate) remains posted in the Power houses with remote possibility of transfer to less difficult and less hard places. Most of the staff in generation is not interested to stay in the wing. They are a highly demotivated people and suffer from physical, mental, psychological, social and emotional trauma and disintegration. It is no wonder that generation stations are in an appalling state of neglect and demotivation.

b) Increase in generation from the existing power houses can bring additional revenue to the Organization without any significant investment only if the manpower deployed therein is motivated and adds to their efficiency. This is an investment and insurance. For their motivation, it is essential to treat them differently from other employees since the financial benefit to be given to such person will be much less than increased output in terms of increased generation. Following incentives to generation staff(in addition to the benefits already available and if these are not being given at present) shall be given:-

c) All officers and staff working in Power houses shall be provided with rent free, hard furnished accommodation in the power house colonies. In case such officers/employees are not in a position to shift their families to site, leased family accommodation/ or rent in lieu thereof for retaining the family at their station of choice be given. In such circumstances the officer/employee may be provided only single room/common hostel type accommodation at site. Such accommodation where not available should be converted from existing accommodation at site.

d) Free electricity at site of powerhouse shall be provided to them.

e) Some of the power stations are located at such places where staff is not from local areas, but from distant places. Persons avoid posting at such places like

Bhaba, Andhra, Thirot, Killar etc. Persons posted at such places (except local staff belonging to within 50 KM radius) shall be given six advance increments which should be treated as pay for the purpose of other allowances.

f) Sufficient funds shall be made available in the budget provisions at the disposal of Resident Engineer to encourage recreational and sports activities at such places.

g) Delegation of Financial Powers to RE/SE shall be reviewed to enable them to carry out the emergency repairs without approval of higher authorities. Spot purchase committees shall be constituted for each generation circle for emergent purchases.

h) Encashment of earned leave shall be allowed for power house staff to make good the shortage of skilled staff.

i) Shift duty officers and staff shall be allowed higher causal leave in lieu of gazetted/restricted holidays, which should be considered as duty days as per the roster.

j) Officers and staff must undergo training for atleast 3 weeks in all facets of generation once every year in some Hydro-Training Institute and in-house Academy.

k) All power houses should be planned for Renovation, Modernisation, and Uprating wherever required.

l) 10% of the additional revenue as a result of every 1% increase above the highest generation in the last 5 years shall be distributed to them as generation linked incentive at the end of the year in the ratio of their basic pay subject to maximum of maximum of their pay scale, per month.

m) 25% of the additional revenue as a result of every 1% increase above the design energy (DPR) shall be distributed as generation linked incentive at the end of the year in the ratio of their basic pay subject to maximum of maximum of their pay scale per month.

n) Only graduate or post graduate engineers should be posted in the power houses. Those who have risen from ranks should not be sent to power stations.

o) The incentive for achieving this ADVISORY directive shall be Rs.5.00 crores.

- **REFORM SURCHARGE**

9.6.1 Following package of incentives shall be available in respect of the various advisory directives:

Reorganisation of Distribution (Operation) Circles		
Name of Circle	Incentive per circle (Rs Cr)	Total Incentive amount (Rs. Cr.)
Shimla, Solan and Nahan	5.00	15.00
Rampur, Rohru, Bilaspur, Mandi, Kullu, Hamirpur, Kangra, Una and Dalhousie	2.50	22.50
Sub-Total		**37.50**
Training Academy		**2.50**
Transfer & Posting of Employees		**5.00**
Productivity linked incentive for employees in Generation wing		**5.00**
TOTAL		**50.00**

9.6.2 In respect of all the ADVISORY directives, the package of incentives shall aggregate Rs.50.00 crores. Reform surcharge @ 5% shall be levied on the entire electricity bill excluding electricity duty. The package shall be monitored at the highest level and if at any stage the Commission has the slightest reason to believe that the ADVISORIES are not being implemented strictly as per the milestones, the Commission may order the refund of the surcharge already paid by the consumers.

SECTION 10

DIRECTIONS-CUM-ORDERS

10.1 While issuing the tariff order for FY 2001-02 and FY 2004-05, the Commission had given a number of directions-cum-orders to the Board, both at the time of public hearings and in the order issued. The Board has complied with some of the directions partially or wholly following intensive review and monitoring hearings held by the Commission. The detailed status of compliance of each of the directives issued by the Commission in the past has been discussed in Section 2. All directions given by the Commission in the past are still valid and continue to be applicable till compliance to the satisfaction of the Commission.

10.2 Captions of some of the important directions-cum-orders, issued in the Tariff Orders of FY 2001-02 and FY 2004-05, which have not been complied with to the satisfaction of the Commission together with the new directions-cum-orders in detail contained in the present tariff order, are given here below.

10.3 DIRECTIONS-CUM-ORDERS OF TARIFF ORDER OF FY 2001-02
(Resting with the interim orders dated 10 June, 2005 in Compliance Case No. 15/2004)

10.3.1 Unbundled Cost (Direction Nos. 7.1, 7.2, 7.3)

10.3.2 Financial Restructuring (Direction No. 7.8)

10.3.3 Simulating Competitive Condition (Direction No. 7.9, 7.10)

10.3.4 Public Interaction (Direction No. 7.11, 7.12)

10.3.5 Unproductive Assets (Direction No. 7.13)

10.3.6 Power Sector Reforms (Direction No. 7.14)

10.3.7 Marginal Cost Pricing (Direction No. 7.22)

10.3.8 Wholesale supply of power & Malana Project (Direction No. 7.25, 7.26)

10.3.9 Voltage-wise Data (Direction No.7.29)

10.4 DIRECTIONS OF TARIFF ORDER OF 2004-05
(Resting with the interim orders dated 10 June, 2005 in Compliance Case No. 15/2004)

10.4.1 Debt Restructuring (Direction No. 7.13, 9.4.1.1 to 9.4.1.4)

10.4.2 Prioritisation of Deliverables from ASCI (Direction No. 9.4.15)

10.4.3 Valuation of Assets (Direction No. 7.15 to 7.17 & 9.4.1.8)

10.4.4 T&D Losses (Direction No. 7.4 & 9.4.2.)

10.4.5 Capital Works In Progress (CWIP) (Direction No. 7.15 to 7.17 & 9.4.3)

10.4.6 Capital Projects (Direction No. 9.4.4).

10.4.7 Multi year Tariff (Direction No. 9.4.6).

10.4.8 Category-wise details of sales etc. (Direction No. 9.4.8)

10.4.9 Cost and time overruns (Direction No. 9.4.11)

10.4.10 Outstanding Dues from Government Departments (Direction No. 9.4.13)

10.4.11 Employee Cost (Direction No. 7.5, 7.6, & 9.4.14)

10.4.12 Material Management (Direction No.7.28 & 9.4.15)

10.4.13 Metering billing and Collection efficiency (Direction No. 7.18, 7.19 & 9.4.17)

10.4.14 Mobility of field staff (Direction No. 9.4.18)

10.4.15 400 KV Line from Nalagarh to Kunihar and 400 KV Sub Station at Kunihar (Direction No. 9.4.19)

10.4.16 Justification of REC funded schemes (direction No. 9.4.20)

10.4.17 Himachal Pradesh Jal Vidyut Vitran Nigam Ltd (HPJVVNL) and PVCL (Direction No. 9.4.21)

10.4.18 Generation Cost of Board's Own Projects (Direction No. 9.4.24)

10.4.19 Harmonic Distortions (Direction No. 9.4.25)

10.4.20 Miscellaneous:

a) e-Governance

b) GPF, CPF etc. of Employees

c) Scheduling of Baspa-II:

d) 3rd Party Meter Testing:

10.5 DIRECTIONS OF THIS TARIFF ORDER

10.5.1 In this Section, the Commission has listed the additional directions to the Board for improving its efficiency and the quality of supply to the Board's consumers.

10.5.2 **Declining generation of Board's own stations:** The Commission directs the Board to conduct an investigation into the declining generation in respect of its Stations. The Board shall submit the Report on the same to the Commission within three months from the date of issue of this Order.

10.5.3 **Procurement of long-term Power:** The Central Government has notified the 'Guidelines for Determination of Tariff by Bidding Process for Procurement of Power by Distribution Licensees' dated 19th January, 2005. The specific objectives of these guidelines are as follows:

– Promote competitive procurement of electricity by distribution licensees;

- Facilitate transparency and fairness in procurement processes;
- Facilitate reduction of information asymmetries for various bidders;
- Protect consumer interests by facilitating competitive conditions in procurement of electricity;
- Enhance standardization and reduce ambiguity and hence time for materialization of projects;
- Provide flexibility to suppliers on internal operations while ensuring certainty on availability of power and tariffs for buyers.

10.5.4 The Board is directed to procure power for long-term strictly in accordance with the above guidelines issued by the Central Government. The Commission will not approve any purchase of power undertaken outside the framework of the competitive bidding guidelines.

10.5.5 **High Voltage Distribution System:** In line with the National Electricity Policy, the Board is directed to study the feasibility of implementing HVDS and the cost benefit analysis of the scheme and submit the report on the same to the Commission within three months from the date of issue of this Order.

10.5.6 **Installation of single phase transformers:** During discussions with the Board's officials, the Commission was given to understand that the Board is not installing single phase transformers and has not even ordered or procured these transformers, though there is a specific provision for the same in the APDRP schemes. The Board should utilise the funds available from APDRP for the intended purposes of single phase transformer installations as approved in APDRP schemes and shall install single phase transformers within a specified time limit of 26 weeks.

10.5.7 Ratio of single and two-phase lines to three phase LT lines:

10.5.7.1 The Commission has been repeatedly asking the Board to submit details of the ratio of single phase and two-phase lines to three-phase lines within the LT network. The Board is directed to submit this data within 15 days of issue of this Order.

10.5.7.2 The Commission has been stressing on this aspect because a higher proportion of single and two phase lines vis-à-vis three phase lines is not healthy and results in higher distribution losses, besides higher failure rate of distribution transformers. This situation is mainly prevalent in rural areas. Single phase lines result in lot of problems including problems in augmentation, imbalanced loading, DT failure and lower quality of supply. On the other hand, having a higher proportion of three phase lines imparts redundancy, as well as greater system stability, and better quality of power. The Board is directed to improve the ratio of single phase and two phase lines to 3 phase lines to 1:1 by the end of FY 2005-06 and cover the same under the Rajiv Gandhi Grameen Vidyutikaran Yojana.

10.5.8 **Integrated grid in the State:** Currently, the Board is fed by two different grids, viz. the BBMB grid, from where the bulk of the power enters the State, and the Yamuna grid, from where power from UP and Uttaranchal is fed into the State. Unfortunately, these two grids are not interconnected and integrated as they operate with a phase angle difference. This hampers the Board's flexibility in scheduling the power from the respective grids, as the Yamuna grid is used to transmit UP and Uttaranchal power to nearby locations in HP, such as Nahan, etc. In instances of power shortage fed through the BBMB grid, the Board is not able to draw power from the Yamuna grid. This is an unhappy state of affairs, and the Board should study the feasibility of integrating the two grids, and submit the Report on the same within six months from the date of issue of this Order. If found feasible, the Board should initiate the implementation of the same on war footing. The Commission would allow the cost of study and cost of implementation in the investment and debt plan and pass through in the ARR of the next period.

10.5.9 **Interface metering:** The Board has only achieved around 84% completion of the interface metering at the feeder level, which is not satisfactory. The Board shall ensure that Interface metering is provided on all works completed upto 31st March 2005 within six months of the date of issue of this Order, besides providing the same on all on-going and future works before declaring them as used assets. This will facilitate the assessment of T&D losses and enable identification of the weak sections and greater control over the operations of the Board.

10.5.10 **Replacement of defective/dead stop meters:** The Board plans to replace all dead/stopped/defective meters as on March 31, 2005 by the end of December 2005. The Commission is not satisfied with such long time frame in this regard and directs the Board to replace all defective/dead/stopped meters as on 31-3-2005 within three months of the date of issue of this Order.

10.5.11 **Prepaid metering:** The Board shall throw open prepaid metering to the consumers who wish to install their own meters with immediate effect in Shimla, Dharamshala and Mandi towns and go for phased replacement of conventional meters with pre-paid meters after 6 months of the implementation of the pilot project on prepaid metering depending on the quality of meters, with particular emphasis on failure rate and accuracy in other areas. The Board shall replace the conventional electro-mechanical meters/electronic meters by pre paid meters to match with the natural attrition of the meter reading staff as given below. The Commission intends that eventually, all consumers will have the option to shift to prepaid meters.

Sl	**Year**	**Consumers covered through Prepaid meters per year**
1	2005-06	10000
2	2006-07	25000
3	2007-08	100000
4	2008-09	150000
5	2009-10	200000
6	2010-11	300000
7	2011-12	400000
8	2012-13	300000
9	2013-14	200000
10	2014-15	150000

10.5.12 **Consumer services for senior citizens:** The Board is directed to be extremely considerate to senior citizens. The Board shall undertake following measures to facilitate the senior citizens:

- The disconnection shall not be ordered immediately for non payment of domestic bills in time by senior citizens, for the bill amount upto Rs. 2000/-, and a grace period of one month would be given to enable the senior citizens to pay their bills.
- Bill payment shall be facilitated through cheques at the time of spot billing. Cheques may be received by the staff distributing the bill on spot.
- Separate counters/queues for the senior citizens at bill collection centers.
- Seating arrangement, drinking water facility and reading material to be provided.
- Staff to call on request from disabled, infirm senior citizens for any difficulty including bill payment.
- Staff to assist the senior citizens in completing the codal formalities in case of new connections/disconnections/reconnections, refund of security etc. and priority shall be given in the seniority for all these services.

10.5.13 **Unmanning of Sub-Stations:** Despite the Commission's suggestion in the last Tariff Order for phased programme of converting all the existing manned sub-stations into un-manned sub-stations regardless of the voltage level and not to have any new manned sub-stations in future, new substations planned by the Board have been proposed in manned mode. The Commission directs that all new sub-stations planned by the Board shall be in the un-manned mode. The Board is further directed to comply with the following time bound plan for converting all the existing manned sub-stations into un-manned sub-stations. All future sub stations shall be in unmanned mode.

Sl	Year	Conversion of manned 33 kV Sub-stations to unmanned mode	Conversion of manned 66 kV Sub-stations to unmanned mode	Conversion of manned 66 kV Sub-stations to unmanned mode	Conversion of manned 66 kV Sub-stations to unmanned mode

1	2005-06	3	-	-	-
2	2006-07	10	-	-	-
3	2007-08	20	-	-	-
4	2008-09	30	-	-	-
5	2009-10	30	-	-	-
6	2010-11	32	-	-	-
7	2011-12		6	-	-
8	2012-13		7	-	-
9	2013-14		-	8	
10	2014-15		-	7	7

10.5.14 **Legal liability insurance:** Whenever there are accidents, fatal or non-fatal involving human life and animal life, due to the negligence attributable to the Board, the Board is subject to the risk of paying compensation and the quantum of compensation can vary. In order to limit the liability on such occurrences, the Commission directs the Board to take legal liability insurance for third party accidents, within six weeks, to cover compensation as may be awarded by the Courts. The insurance premium on this account will be allowed as a pass through in the ARR. This is not to say that the Board is allowed to be negligent and cause accidents. The Board should ensure and strive to achieve accident free system and operations.

10.5.15 **Audit:** The Board shall ensure that its Audit Teams have a revenue focus and the best auditors are posted in high revenue areas for perpetual audit of consumer accounts. The Board is directed to ensure that audit should be co terminus with billing in such areas. The Board to also carry out special audit, purchase audit, audit for ensuring compliance of the Recovery of Expenditure regulations and test audits of the projects. The action taken reports on the internal audit reports and the CAG reports to be submitted to the Commission on a regular basis.

10.5.16 **Outstanding dues from local bodies:** Commission directs the Board to approach the State Government to clarify its stand on the matter of long outstanding dues from the various local bodies within 3 weeks of this order and file response in one week thereafter.

10.5.17 **Pay & Allowances:** The Board shall follow only the PSEB pattern of pay scales and allowances. The existing payscales and allowances, wherever in deviation of PSEB, shall be reviewed and brought in line with PSEB scales and allowances.

10.5.18 **Litigation:** The Board is advised to analyze the old court cases and undertake a cost benefit analysis to facilitate decision making regarding settlement of certain cases out-of-court, with a commercial focus. A Committee headed by Member (Administration) shall be constituted to review all Court cases.

10.5.19 **O&M of generation projects in tribal areas:** The high cost generation projects of the Board in far flung tribal areas threaten the commercial viability of the Board. The Board is advised to consider hiving off high cost generation projects, especially those located in tribal areas to Himurja, Panchayats, Co-operative societies and other local bodies in the respective areas, or atleast transfer the O&M of such projects to such bodies. This would enhance the economic viability of the Board's operations which are severely affected by the high capital cost and high operational cost of these generation stations.

10.5.19.1 In case the Board is not able to disinvest these projects, the Board should explore the option of obtaining funds from the Tribal Development Fund of GoHP for the O&M of such projects. The funds obtained from the Tribal Development Fund should be equal to the difference between the generation tariff determined by the Board and the tariff fixed by the Commission for these projects, which is Rs. 2.50 in case of projects up to 5 MW and Rs. 2.25 in case of projects greater than 5 MW. GoHP should be approached, and their response filed before the Commission in 6 weeks time.

10.5.19.2 If the Board is not able to avail of either of the above two options, it should consider closing down the project.

10.5.20 **Grid Stability and systematic load shedding** The Commission is aware that the grid is susceptible to collapse under adverse loading conditions at critically low frequencies and therefore it is imperative that all constituents of the Northern grid collaborate effectively through long term/short term measures for protecting /safeguarding the grid, thus preventing blackouts. One such long term measure is installation of under frequency/RLSE (rotational load shedding) relays on high load feeders. The Board is advised that it may, in consultation with NRLDC explore the scope for implementing such measures, if not in existence already.

10.5.21 **Other Businesses** The Board should consider spinning off into other businesses like internal wiring of buildings, plumbing, manufacture of line and hardware fittings, consultancy on structural, architectural and hydro power designs, preparation of DPRs and construction and supervision of civil and electrical works on behalf of third parties, manufacturing of poles, etc. to utilize its skilled and surplus staff. The optical fibre cables laid by the Board should be used to provide internet and other high speed communication facilities to consumers. This will also improve the commercial viability of the Board.

10.5.22 **Toll tax on Larji Tunnel** The Commission is advising the Board to levy a toll tax on the traffic passing through the Larji HEP Tunnel, to recover some of the expenditure on the very high cost station. The Board has submitted that it is collecting data of traffic census on the route and a comprehensive proposal alongwith financial implications involved vis-à-vis collection of toll is being prepared and shall be submitted after its finalisation. The Commission directs the Board to submit its comprehensive report on this matter within 8 weeks of issue of this Order.

10.5.23 **Submission of Quarterly Accounts** The Commission directs the Board to prepare and submit its quarterly accounts detailing the expenses and revenue in a manner done by other Companies under the Companies Act, 1956. The data submitted should highlight deviations from the Tariff Order, if any, and the reasons for the same. This data and accounts should be submitted within three weeks of the month following the completion of the quarter.

10.5.24 **Fiscal Discipline & truing up** The Commission directs the Board to maintain stringent control and fiscal discipline over its expenses, and in no case will the Commission allow any variation beyond +3%, except for uncontrollable factors. No expense/shortfall in revenue will be allowed to be recovered from consumers in the subsequent year through truing up, beyond +3%

10.6 REVIEW, MONITORING AND REMOVAL OF DIFFICULTIES

10.6.1 (a) The Commission is also issuing several ADVISORY directives. The implementation of these measures is in the Board's own interest. The Commission has heavily incentivised such ADVISORY directives. A discussion on the Commission's recommendations, and the linkage to incentives has been elaborated in great detail in Section 9 of the Tariff Order.

(b) **INTERACTIVE SESSIONS ON TARIFF ORDER**

The Board shall ensure that interactive sessions are held at the circle level with the officers from the field as well as the Commission to familiarize the officers with the provisions of the Tariff Order.

(c) **MONITORING OF TARGETS**

In order to ensure effective compliance with the performance targets laid down in Section 9 and the extent of achievement of targets, these need to be monitored. The Commission, therefore, directs the Board to establish a monitoring system thro' Committees headed by the concerned Members, within three weeks, to ascertain the extent to which the targets laid down for the Board are being achieved. Independent agencies, to be appointed by the Commission, would undertake the verification and monitoring of the performance.

10.6.2 The Commission shall hold review hearings as and when necessary to monitor and review the progress and the status of compliance of various directions-cum-orders as well as the ADVISORY directives as and when considered necessary by the Commission. The first review hearing after the issue of this Order will be held on July 16, 2005 which shall focus mainly on the highlights of this Tariff Order particularly the incentive linked ADVISORY directives contained in

Section-9. The Board shall submit the Status Report on compliance of the directions-cum-orders in compliance case No. 15/2004 through affidavit atleast 4 days prior to the date of hearing. All Orders of the Commission following the review hearings shall be put up on the Commission's website.

10.6.3 The Board may file clarificatory petition in case of any doubt regarding the directives or advisory directives given by the Commission in this Order, within 30 days after issue of the Order. The Commission shall be available at all reasonable times for interaction with the Board in case of any difficulty in understanding or implementing the directives and advisories of the Commission.

ANNEXURE-1

SCHEDULE OF GENERAL & SERVICE CHARGES

S.No.		Description of item	Proposed	Approved by Commission
1		2	4	5
1	A.	**Meter Inspection and Testing Charges:**		
	(i)	Single Phase	Rs. 55/-per meter	Rs. 55/-per meter
	(ii)	Poly phase (LT)	Rs. 225/-	Rs. 225/-
	(iii)	HT or special meter (MDI or Trivector Meter)	Rs.550/- Rs. 1100/ with CT/ PT combined unit	Rs.550/- Rs. 1100/ with CT/ PT combined unit
	Note:- This amount shall be deposited by the consumer alongwith his application for the inspection of the meter and will be refunded to him in case the meter is not found to be correct with in the prescribed limits.			
	B.	**Testing Charges of Transformers & other equipment of private parties:**		
	(I)	**Protective Relays:** Testing including current and Time Setting of protective relays	Rs.1100/-per Relay	Rs.1100/-per Relay
	(II)	**Power and Distribution Transformers**		
	(a)	Insulation resistance tests of winding	Rs. 770/-per Transformer	Rs. 770/-per Transformer
	(b)	General checking of breather & other accessories	Rs. 400/-per Transformer	Rs. 400/-per Transformer
	(c)	Dielectric strength test of oil	Rs.220/-per Transformer	Rs.220/-per Transformer
	(d)	Testing of buchuolz relay and temperature indicators functioning	Rs.800/-each	Rs.800/-each
	(III)	**Circuit Breaker 400 volts and 11/33kV** General checking of breaker and testing of the tripping mechanism	Rs. 800/-each	Rs. 800/-each
	(IV)	**Current transformer and Potential transformers and meters:**		
	(a)	Testing of single phase LT current transformer	Rs.165/-each	Rs.165/-each
	(b)	Current Testing of 3 phase LT current transformer	Rs. 440/-each	Rs. 440/-each
	(c)	Testing of single phase 11kV & 33kV CTs	Rs. 550/-each	Rs. 550/-each
	(d)	Testing of three phase 11kV & 33kV CTs	Rs.1100/-each	Rs.1100/-each
	(e)	Testing & recalibration of single phase LT energy meter	Rs. 90/-per meter	Rs. 90/-per meter
	(f)	Testing & recalibration of three phase energy meter w/o CT	Rs. 330/-per meter	Rs. 330/-per meter
	(g)	Testing & recalibration of three phase energy meter With CT	Rs.660/-per meter	Rs.660/-per meter
	(h)(i)	Testing & recalibration of HT/EHT metering equipment	Rs. 2000/-per meter	Rs. 2000/-per meter
	(ii)	With CT/PT combined unit	Rs. 2500/-per unit	Rs. 2500/-per unit
	(I)	Testing & recalibration of maximum demand indicator	Rs. 660/-per meter	Rs. 660/-per meter
	(j)	Testing & adjustment of voltmeter/ ammeter	Rs.165/-each	Rs.165/-each
	(V)	**Checking of Capacitors (other than initial checking) on consumer's request:**		
	(a)	At 400 volts	Rs. 110/-per job	Rs. 110/-per job
	(b)	At 11kV and above	Rs. 110/-per job	Rs. 110/-per job
	(VI)	**General**		
	(a)	Dielectric strength of oil of various equipment	Rs. 220/-per sample	Rs. 220/-per sample
	(b)	Earth test of substation	Rs. 220/-per earth	Rs. 220/-per earth
	(c)	Insulation resistance of cables/insulation of various equipment /installations	Rs. 220/-per cable/ equipment	Rs. 220/-per cable/ equipment

	C.	**Testing charges I/c protection and control for complete sub-station of Private parties before the release of connections or routine periodical inspections inclusive of all manpower required(Testing protocol to be prepared in detail)**		
	(i)	11/22 kV	Rs. 10000/-	Rs. 10000/-
	ii	33 kV	Rs. 15000/-	Rs. 15000/-
	(iii)	66 kV	Rs. 25000/-	Rs. 50000/-
	(iv)	132 kV	Rs. 50000/-	Rs. 100000/-
	(v)	220 kV	Rs.75000/-	Rs. 300000/-
	D.	**<u>Visiting charges</u>** Visiting charges for Officers & staff to Consumers premises for testing of equipments(other than C above)	Rs. 3500/- per day for complete team ***PLUS*** actual journey charges as per out turn of vehicle	Rs. 3500/- per day for complete team ***PLUS*** actual journey charges as per out turn of vehicle
	Remarks: -			
		(i) The visiting charges mentioned under D above include the visiting charges of M&T staff as well.		
		(ii) The charges for Board's maintenance/testing Vans or Trucks if needed for the purpose will be extra. All Charges shall be got deposited before undertaking the testing work.		
		(iii) Complete testing of 11KV,22KV and 33 KV connections as per item C above shall be conducted before the release of HT connection.		
		iv) Test reports on suitable forms will be issued by the operation sub-divisions/M&T Lab, which will be produced by the prospective consumer alongwith the wiring Contractor's test report.		
		v) The insulation, earth and oil tests as well as general checking and inspection should be performed by the operation sub-division. Other tests requiring M&T Lab. facilities shall be aranged by the operation sub-division/division in the nearest M&T Lab., or by arranging the visit of the M&T staf to the consumer's premises.		
		vi) The requests for testing shall be entertained by the concerned operation sub-division which will be responsible for arranging all tests including tests by the M&T Lab and also for the recoveries of all the charges, including those of M&T Lab.		
		vii) The amount recovered from consumers for testing carried out by the M&T Lab shall be adjusted through inter divisional adjustment between the operation divisions and the M&T divisions.		
2		**<u>Changing the position of meter at the request of consumer:</u>**		
	(i)	Single phase	Rs.45/-	Rs.45/-
	(ii)	Poly phase (LT) With out CT	Rs. 220/-	Rs. 220/-
		With CT	Rs.440/-	Rs.440/-
	(iii)	HT or special meter	Rs. 1100/-	Rs. 1100/-
3		**<u>Resealing charges</u>**		
	(i)	Meter cup board	Rs.25/-	Rs.25/-
	(ii)	Meter Cover or Terminal Cover (single phase)	Rs. 110/-for meter terminal cover & full cost of the meter where M&T seal is found broken.	Rs. 110/-for meter terminal cover & full cost of the meter where M&T seal is found broken.
	(iii)	Meter cover or terminal cover (three phase)	Rs. 350/-for meter terminal cover & full cost of the meter where M&T seal is found broken.	Rs. 350/-for meter terminal cover & full cost of the meter where M&T seal is found broken.
	(iv)	Cutout (where it has been independently sealed)	Rs. 25/-	Rs. 25/-
	(v)	Maximum demand indicator	Rs. 550/-	Rs. 550/-
	(vi)	Potential fuse(s) time switch/CT chamber	Rs. 550/-	Rs. 550/-
4		**<u>Monthly meter/equipment rentals:</u>**		
	(i)	Single phase energy meter low tension	Rs. 12/- per month	Rs. 12/- per month
	(ii)	Polyphase energy meter low tension (up to 50 Amps.)	Rs. 30/- per month	Rs. 30/- per month
	(iii)	a) Polyphase low tension meters with CTs (up to 20 kW)	Rs. 35/- per month	Rs. 35/- per month
		b) Polyphase low tension meters with CTs(above 20 kW)	Rs. 50/- per month	Rs. 50/- per month
	(iv)	Polyphase 11kV meter with CT/PT without any breaker of HPSEB	Rs. 550/-per month	Rs. 550/-per month
	(v)	Polyphase 11kV meter with CT/PT with one 11kV breaker of HPSEB	Rs. 4000/- per month	Rs. 4000/- per month
	(vi)	Single phase Pre Paid energy meter low tension	Nil	Rs 60/- per month

	(vi)	Polyphase 33,22 KV meter with CT/PT without any 33, 22 KV breaker of HPSEB	Rs. 800/- per month	Rs. 800/- per month
	(vii)	Polyphase 33,22 KV meter with CT/PT with one 33, 22 KV breaker of HPSEB	Rs. 7000/- per month	Rs. 7000/- per month
	(viii)	Polyphase meter with CT/PT with or without circuit breaker of voltage 66 KV and above		
	(a)	66 KV with CT/PT	Rs. 1300/- per month	Rs. 1300/- per month
	(b)	66 KV with circuit breaker and CT/PT	Rs. 13500/- per month	Rs. 13500/- per month
	(c)	132 KV with CT/PT	Rs. 2500/- per month	Rs. 2500/- per month
	(d)	132 KV with circuit breaker and CT/PT	Rs. 20000/- per month	Rs. 20000/- per month
5		**Reconnection of supply**		
	(I)	Small power industrial consumers	Rs. 100/-	Rs. 100/-
	(ii)	Medium power industrial consumers	Rs. 500/-	Rs. 500/-
	(iii)	Large power industrial consumers	Rs. 1000/-	Rs. 1000/-
	(iv)	All other categories of consumers	Rs. 40/-	Rs. 40/-
6		**Fuse replacement:**		
		Replacement of fuse(s) pertaining to the Board/ Consumer	Rs. 5/-	Rs. 5/-
7		**Testing consumer's installation:**		
	(I)	The first test and inspection of a new installation or of an extension to the existing installation	Nil	Nil
	(ii)	For every subsequent visit for the test and inpsection of a new installation or of an extension to the existing installation		
	(a)	Single Phase	Rs. 60/-	Rs. 60/-
	(b)	Three Phase LT	Rs.100/-	Rs.100/-
	(c)	Three Phase HT	Rs.500/-	Rs.500/-
		Note:- These charges shall be deposited by the consumer in advance before every subsequent visit for inspection of installation		
8		**Replacement of meter card:**		
	(I)	Domestic/NDNCS/Commercial	Rs.10/- in each case	Rs.10/- in each case
	(ii)	All other categories of consumers	Rs.10/-in each case	Rs.10/-in each case
9		**Replacement of meter glass:**		
	(I)	Replacement of broken glass of meter cup board when the consumers is considered to have broken it	Rs. 50/-	Rs. 50/-
	(ii)	Replacement of broken or cracked glass of meter when there is no evidence of consumer having broken it or tempered with the meter	Rs. 50/-	Rs. 50/-
	(iii)	Replacement of broken glass of meter when the consumer has tempered with or broken by consumer:		
		a) Single phase	*Rs.500/-or the actual cost of meter which ever is higher	*Rs.500/-or the actual cost of meter which ever is higher
		b) Three phase	Rs.1500/-*or the actual cost of meter, which ever is higher.	Rs.1500/-*or the actual cost of meter, which ever is higher.
		Note-1: This amount will be charged without prejudice to the right of the board to take any other action or impose penalty on the consumer as per the prevailing rules. Since in such cases, the meter has to be sent to M&T lab, the meter changing charges shall be levied additionally. *- This is without prejudice to the Board's right to recover the estimated cost of theft of energy. Principles of natural justice shall invariably be followed and opportunity of being heard given to the consumer before levying such charge.		
10		**Supply of duplicate copies of the bills/ review of bills:**		
	(I)	Review of bills (all Categories)	Nil	Nil
	(ii)	Supply of duplicate copies of bills		
	(a)	Domestic/NDNCS/Commercial	Rs. 5/-	Rs. 5/-
	(b)	Medium & large power supply	Rs. 5/-	Rs. 5/-
	(c)	All other categories	Rs. 5/-	Rs. 5/-

	(iii)	**Supply of duplicate copies of Demand notice:**		
	(a)	Domestic consumers	Rs.10/-	Rs.10/-
	(b)	Non residential consumers	Rs.10/-	Rs.10/-
	(c)	Small Industrial & Agriculture consumers	Rs.10/-	Rs.10/-
	(d)	Medium Industrial consumers	Rs.10/-	Rs.10/-
	(e)	Large Industrial and other categories of consumers	Rs.10/-	Rs.10/-
	(iv)	**Supply of detailed print out of the meter recording**	Rs.50/-	Rs.50/-
11		**Attendants for functions**		
		Deputing attendants (line staff) for all functions.		
		(Per Attendant per day per function limited to 8 hours/day)	Rs. 250/-	Rs. 250/-
12		**Monthly Service Rentals:**		As per HPERC (Recovery of Expenditure) Regulations, 2005
	(i)	Single phase individual Domestic service connections with (connected load up to 2kW)		
	(a)	Up to 30 meters	Nil	
	(b)	Beyond 30 meters	50 paise per metre in excess of 30 metre	
	(ii)	Single phase individual Domestic service connections with connected load more than 2 KW & up to 5 KW		
	(a)	Up to 30 meters	Nil	
	(b)	Beyond 30 meters	60 paise per metre in excess of 30 metre	
	(iii)	All Single phase individual service connections with connected load exceeding 5kW		
	(a)	Up to 30 meters	Nil	
	(b)	Beyond 30 meters	No rentals, actual cost is to be charged.	
	(iv)	All three phase service connections for all categories of consumers		
	(a)	Up to 30 meters	Nil	
	(b)	Beyond 30 meters	No rentals, actual cost is to be charged.	
13		**Cost of Application/Agreement Form and wiring Contractor's test report forms:**		
	(i)	Domestic Supply	Rs. 15/-per copy per form	Rs. 15/-per copy per form
	(ii)	Industrial supply (Small, Medium and Large)	Rs. 15/-per copy per form	Rs. 15/-per copy per form
	(iii)	For all other categories	Rs. 15/-per copy per form	Rs. 15/-per copy per form

IV

Annexure 2

HIMACHAL PRADESH STATE ELECTRICITY BOARD

*NOTIFICATION *

NO. DATED: -

In pursuance of the tariff order dated June 29, 2005 issued by the Himachal Pradesh Electricity Regulatory Commission, the Himachal Pradesh State Electricity Board is pleased to notify the following Schedule of Tariff and the general conditions of tariff for supply of electricity to various categories of consumers in Himachal Pradesh with effect from July 01, 2005.

PART - I GENERAL

This schedule may be called the **' Himachal Pradesh State Electricity Board Schedule Of Electricity Tariff, 2005 '**

This Schedule Of Tariff shall come into force with effect from July 01, 2005 and will be applicable through out the state of Himachal Pradesh.

The rates mentioned in this Schedule of Tariff are exclusive of electricity duty, taxes and other charges already levied or as may be levied by the government of Himachal Pradesh from time to time.

This tariff automatically supersedes the existing tariff that was in force with effect from **July 5, 2004 amended from time to time**, except in such cases where 'Special Agreements' have otherwise been entered into for a fixed period, by HPSEB with its consumers. Street Lighting Agreements shall however, not be considered as 'Special Agreements' for this purpose and revised tariff as per schedule **'SLS'** of this Schedule Of Tariff shall be applicable.

This Schedule Of Tariff is subject to the provisions of related **HPERC Regulations** notified by the HP Electricity Regulatory Commission from time to time, and **'Schedule Of General and Service Charges'**.

Force Majeure Clause - in the event of lockout, fire or any other circumstances considered by the Board to be beyond the control of the consumer, he shall be entitled to proportionate reduction in consumer service charge, demand charge or any other fixed charge, if applicable, provided he serves at least 3 days notice on the supplier for shut down of not less than 15 days duration.

Standard Supply Voltage - The standard of supply voltage, as existing on the relevant network system, in KV, to be followed by HPSEB, based on the connected load measured in KW, as specified under each consumer category of this 'Schedule Of Tariff', in respect of supply of electricity to prospective consumers OR at the time of application of 'Lower Voltage Supply Surcharges' and 'Higher Voltage Rebates' respectively to its existing consumer categories in their bills.

Single Point Supply - the various tariffs referred to in this Schedule are based on the supply being given at a single voltage and through a single delivery and metering point. Supply given at other voltages and through other points, if any, shall be separately metered and billed.

Lower Voltage Supply Surcharge (LVSS) – Consumers availing electricity supply at a voltage lower than the 'Standard Supply Voltage' as specified under the relevant category, shall be charged a 'Lower Voltage Supply Surcharge' at the following rates on only the amount of energy charges, billed, for each level of specified step down (as given in table below) from the 'Standard Supply Voltage' to the level of Actually Availed Supply Voltage. The existing consumer availing supply at a voltage lower than the specified standard supply voltage, shall be given six months time from the date of this notification, to avail supply at the standard voltage specified and till such time such consumer shall not be liable to pay such surcharge.

Standard Supply Voltage	**Actually Availed Supply Voltage**	**VSS**
11KV or 15KV or 22 KV	LT (1Ø 0.23 KV or 3Ø 0.415KV) OR 2.2 KV	7.5%
33 KV or 66 KV	11 KV or 15KV or 22 KV	5%
>= 132 KV	33 KV or 66 KV	3%

Higher Voltage Supply Rebate (HVSR) – A consumer availing electricity supply at a voltage higher than the 'Standard Supply Voltage' as specified under the relevant category, shall be given a 'Higher Voltage Supply Rebate' at the following rates on only the amount of energy charges, billed, for each level of specified step up from the 'Standard Supply Voltage' to the level of Actually Availed Supply Voltage.

Standard Supply Voltage	**Actually Availed Supply Voltage**	**HVSR**
LT (1Ø 0.23 KV or 3Ø 0.415 KV) OR 2.2 KV	11KV or 15KV or 22 KV	7.5%
11KV or 15KV or 22 KV	33 KV or 66 KV	5%
33 KV or 66 KV	>= 132 KV	3%

Lower Voltage Metering Surcharge (LVMS) - In respect of consumers, for whom the metering for maximum demand or energy consumption or both, is done on the lower voltage side of the transformer, instead of higher voltage side at which the supply has been taken by the consumer, on account of non-availability of the higher voltage metering equipment or its unhealthy operation, the consumer shall be charged "Lower Voltage Metering Surcharge" at the rate of 2% on the amount of only the energy charges billed.

Late Payment Surcharge (LPS) **-** Surcharge for late payment shall be levied at the rate of 1% per month or part thereof, on the outstanding amount excluding electricity duty/taxes of for all consumer categories.

Peak Load Exemption Charge (PLEC) - Electricity Supply shall, normally, not be available to the consumers covered under the categories, 'Agricultural Pumping' (APS), 'Small and Medium Industrial Power Supply' (SMS), 'Large Industrial Power supply (LS) and 'Water Pumping Supply' (WPS), of this schedule of tariff during the peak load hours of the day. The duration of peak load hours in summers and winters shall be as under

a) Summer (April to October) 18.00 hours to 21.00 hours
b) Winter (November to March) 17.30 hours to 20.30 hours

However, where the above categories of consumers want to avail of exemption to run their unit during the peak load hours for any special reason, a separate sanction for the exemption, for running the unit (full load or part thereof), from the Board shall be required. This sanction (for full load or part thereof) shall be issued at the request of the consumer and shall be subject to availability of power in the area during the above specified peak hours.

Consumers requesting for peak load exemption (PLE) must get tri-vector or suitable meters installed which are capable of recording the maximum demand for every 30 minute block in twenty four (24) hours of the day for a whole month, apart from recording the energy consumption. However, any consumer possessing sanction for peak load exemption (for full load or part thereof) and without an installed tri-vector meter or a suitable meter, would also need to get the meter installed within three months of issue of this notification.

Where sanction for running of unit (for full load or part thereof) during peak load hours is already issued, no further sanction shall be required to the extent of the load for which the exemption has already been obtained. All consumers who have been given exemption to run their units (for full load or part thereof) during the peak load hours shall be charged a ‘Peak Load Exemption Charge’, as separate energy charges (In kVAh/month or kWh/month as per Two Part or Single Part Tariff applicable respectively) for the energy consumption during peak load hours in a month, at the rate specified in the relevant category of this schedule of tariff. It shall therefore be necessary to separate the components of energy consumption during off peak hours and energy consumption during peak load hours for application of energy charge rates for each component separately.

Provided that the lighting load of such consumers shall be deemed to have been exempted and no separate approval shall be required. The lighting load as per the ‘Test Report’ alone shall be deemed to have been exempted

Peak Load Violation Charge (PLVC) –Consumers who do not have the peak load exemption but are found using the electricity during peak hours or consumers who have the exemption but are found exceeding the exempted load during peak load hours will have to pay ‘Peak Load Violation Charge’ as specified under the relevant schedule of tariff. Violation in excess of five times in a year shall result in disconnection of the defaulting consumer without prejudice to recover such charges. No Higher Voltage Supply Rebate (HVSR) shall be applicable/available on the quantum of energy consumed under this violation

In case Consumers, without an installed meter capable of recording energy during different times of the day, are found violating the peak load hour exemption, one half of the consumption for the month shall be billed at the specified PLVC rate (Rs./KWh).

Maximum Demand Charge (MDC) – Consumers billed on the basis of KVAh tariff as applicable for the relevant category under this Schedule Of Tariff, shall also be charged at the rate specified, in addition to the KVAh charges per month, the 'Maximum Demand Charges' per month per KVA, calculated on the [Maximum Demand (in KVA) recorded on the energy meter during any consecutive 30 minute block period of the month] OR the [Contract Demand (in KVA) or 80% of the Connected Load (computed in KVA assuming 0.9 power factor) in the absence of Contract Demand] whichever is higher.

Contract Demand Violation Charge (CDVC) – In the event the Maximum Demand (in KVA), recorded on the energy meter during any consecutive 30 minute block period of the month, exceeds the Contract Demand (in KVA) OR 80% of the Connected Load (computed in KVA assuming 0.9 power factor) in the absence of the Contract Demand, the consumer shall be charged 'Contract Demand Violation Charges' at the rate of Rs. 300/- per month per KVA to the extent the violation has occurred in excess of the Contract Demand OR 80% of the Connected Load (computed in KVA assuming 0.9 power factor) in the absence of the Contract Demand.

Harmonic Injection Penalty (HIP): Any consumer injecting harmonics beyond the permissible limits as per IEEE-519 standard 519-1992 shall pay by way of penalty Rs.500 per KW of connected load per month. A part of the month shall be considered as full month for this purpose.

Disturbing Load Penalty (DLP) - In case where there is unauthorized use of mobile welding sets, the consumer will pay by way of penalty, Rs.20 per kVA of the load rating of welding, set per day, in addition to the energy charges.

Night Time Concession (NTC) – Night Time Concession on consumption of energy from 21:00 hours to 06:00 hours, and shall be applicable to consumers with connected load greater than 20 KW, at the rate specified in the relevant consumer category under this Schedule Of Tariff. However such consumers shall have to install suitable meters capable of recording energy during different times of the day.

Reform Surcharge (RS)- A Reform Surcharge @ 5% shall be levied on the entire bill excluding Electricity Duty/taxes in respect of all consumers except BPL families. This surcharge shall be levied during the current tariff period and shall cease on 31/03/2006

Seasonal industries - In this schedule, unless the context otherwise provides, seasonal industries mean the industries which by virtue of their nature of production, work only during a part of the year, continuously or intermittently up to a maximum period of 7.5 months in a year, such as atta chakkies, saw mills, tea factories, cane crushers, irrigation water pumping, rice husking/hullers, ice factories, ice candy plants and such other factories as may be approved and declared as seasonal by the board from time to time. Seasonal industries shall be governed under the following conditions: -

The consumer shall intimate in writing to the concerned Sub-Divisional officer of the Board, one month in advance, the months or the period of off-season during which he will close down his plant(s).

The minimum working period for a seasonal industry in a year shall be taken as 4 (four) months.

During the off-season, the entire energy consumption and the power utilised for maintenance and overhauling of the plant and the factory lighting will be charged at "commercial supply" tariff.

The consumer service charge, demand charge or any other fixed charge shall be levied for the seasonal period only.

Power Factor Surcharge (PFS) -

i) If at any point of time the power factor of consumers specified under the relevant category of schedule of charges having connected load upto and including 20 KW is checked by any means and found to be below 0.90 lagging, a surcharge @ 10% on the amount of energy charges irrespective of voltage of supply shall be charged form the consumer from the month of checking and will continue to be levid till such time the consumer has improved his power factor to at least 0.90 lagging by suitable means under intimation to the concerned sub divisional officer who shall immediately get it checked.

ii) Should the monthly power factor fall below 0.85, it must be brought up to minimum of 0.90 by the consumer through suitable means within a period of 3 months, failing which, without prejudice to right to collect surcharge, the connection shall be disconnected unless the power factor (or the average power factor, for consumers with connected load above 20 KW) is improved to 0.90 by the consumer to the satisfaction of the Board.

iii) The monthly average power factor will be calculated on readings of Tri-Vector Meter/Bi-Vector Meter/Two Part Tariff Meters as per formula given below and shall be rounded up to two decimal places.

POWER FACTOR = KWH / KVAH

In case of defective tri-vector meter/bi-vector meter/two part tariff meter, power factor will be assessed on the basis of average power factor recorded during last three consecutive months when the meter was in order. In case no such readings are available then the monthly average power factor of three months obtained after installation of correct tri-vector meter/bi-vector meter/two part tariff meter shall be taken for the purpose of power factor surcharge during the period the tri-vector meter/bi-vector meter/ two part tariff meter remained defective.

iv) The said power factor surcharge shall be independent of the supply voltage.

v) The consumer service charge, demand charge or any other fixed charge shall not be taken into account for working out the amount of power factor surcharge, which shall be levied on the amount of KWh energy charges only.

vi) No new supply to L.T. installations with induction motor(s) of capacity above 3 H.P and/or welding transformers above 2.0 KVA shall be given unless shunt capacitors of appropriate ratings are installed to the entire satisfaction of the Board.

W. Replacement of Defective/Missing/damaged Shunt Capacitors -

i) It will be obligatory on the part of the consumer to maintain capacitors in healthy conditions and in the event of its becoming burnt/damaged he shall have to inform the Sub Divisional Officer concerned immediately in writing and also to get the defect rectified within a maximum period of one month from the date the capacitor has gone defective.

ii) In case shunt capacitor(s) is/are found to be missing or inoperative or damaged, 15 days notice shall be issued to the consumer for rectification of the defect and setting right the same. In case the defective capacitor(s) is/are not replaced / rectified within one month of the issue of the notice, a surcharge @ 10% per month on bill amount shall be levied w.e.f the date of inspection to the date of replacement of defective/damaged missing capacitors.

X. In case any dispute regarding interpretation of this tariff order and/or applicability of this tariff arises, the decision of the Commission will be final and binding.

DEFINITIONS

1. **Act: The Act shall mean The Electricity Act, 2003** as amended from time to time.

2. **Average Power Factor:** shall mean the average energy factor and shall be taken as the ratio of the “kilo-watt-hours” (kWh) to the “kilo-volt-ampere hours” (kVAh) supplied during any period.

3. **Board:** means the Himachal Pradesh State Electricity Board.

4. **Commission:** shall mean the Himachal Pradesh State Electricity Regulatory Commission.

5. **Connected Load:** shall mean the sum of all the rated capacities of all the energy consuming devices/apparatus at the consumer’s installation. This shall not include the stand by or spare energy consuming apparatus installed through the changeover switch provided the competent authority has accorded the requisite prior permission.

6. **Consumer Service Charges:** shall mean the fixed amount to be paid by the consumer as defined in the respective tariff schedule.

7. **Contract demand:** shall mean the maximum demand for which the consumer has entered into an agreement with the Board.

8. **Demand Charges:** shall mean the amount chargeable based upon the billing demand in kVA as defined in the relevant tariff schedule.

9. **Energy Charges:** shall mean the charges for energy actually taken by the consumer and is applicable to the units consumed in the relevant billing period.

10. **Maximum Demand:** for any month shall mean the highest average load measured in kilovolt amperes during any consecutive 30 minutes period of the month.

11. **Rules:** shall mean Indian Electricity Rules, 1956 as amended from time to time until Regulations under Section 53 of the Act are made by CEA.

12. **Sanctioned Load:** shall mean load for which the Board has agreed to supply from time to time subject to the governing terms and conditions. The total connected load is required to be sanctioned from the competent authority.

13. **Schedule:** shall mean this Tariff Schedule.

14. **Supplier:** shall mean the Himachal Pradesh State Electricity Board.

PART – II - SCHEDULE OF TARIFF

SCHEDULE -DOMESTIC SUPPLY (DS)

1. **Applicability**

This schedule is applicable to consumers using electrical energy for lights, fans, heaters, cooking ranges, ovens, refrigerators, air conditioners, stereos, radios, televisions, mixers, grinders, electric iron, sewing/embroidery/knitting machines, domestic pumping sets and other domestic appliances in a single private house/flat or any other residential premises; AND religious places with connected load up to 5 KW.

(i) Where a portion of the dwelling is used regularly for the conduct of a business, the consumption in that portion shall be separately metered and billed under the appropriate Commercial or Industrial power tariff whichever is applicable. If separate circuits are not provided, the entire supply will be classified under "Commercial Supply."

(ii) Resale and sub-metering of supply to tenants, other flats etc. is strictly prohibited.

(iii) Panchayat Ghars and Patwar Khanas with connected load up to 2 kW.

(iv) No compounding will be permissible. For residential societies who wish to take a single point supply, this would be permitted, and the energy charges would be divided by the number of such units to determine the relevant slab. Thus if there are 10 dwelling units in a society and the energy consumption in a month is 3000 units, the first 450 (45*10) units would be charged at Rs 1.75 per kWh, the next 1050 units (105*10) units at Rs.2.10 per kWh unit and the remaining 1500 units at Rs. 2.75 per kWh. Consumer service charge shall be Rs. (20*10).

2. **Character Of Service**

Connected Load (KW)	Standard Supply Voltage (AC 50 Hz)
<= 50 KW	LT (1Ø 0.23 KV or 3Ø 0.415 KV) OR 2.2 KV
> 50 KW	11 KV or 15 KV or 22 KV

3. **Single Part Tariff:**

a) Consumer Service Charge (Charges-1)

Description	Consumer Service Charge (Rs./Month)

1. Below Poverty Line	NIL
2. Other consumers	20

b) Energy Charge (Charges-2a) [Other Than Pre-Paid Metered]

Description	Slabs (KWh per month)	Energy Charge (Rs./kWh)
1) Below Poverty Line	(upto 45 KWh)	1.55
2) Others	0-45	1.75
	46-150	2.10
	Above 151	2.75

Note : **In the case of **Below Poverty Line** beneficiaries the concessional tariff will be available for use of electricity by these families upto a maximum of 45 units per month. In case this limit is exceeded, the normal domestic tariff will apply for the entire consumption.*

c) Energy Charge (Charges-2b) [Prepaid Meter]

Description	Slabs (KWh per month)	Energy Charge (Rs./kWh)
Prepaid meter consumers	Entire consumption	1.75

Note: Subsidy given by GoHP shall apply to prepaid meter consumers also. Should the GoHP decide to maintain the tariffs at the current levels after subsidy, then the prepaid consumers shall be deemed to be presently at the lowest slab in respect of entire consumption @70 paise/unit after State Government subsidy.

4. **Higher Voltage Supply Rebate (HVSR):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
5. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
6. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
7. **Late Payment Surcharge (LPS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
8. **Night Time Concession (NTC):** Applicable @ *20 p/kWh as specified under 'Part-1 General of this Annexure II'.*
9. **Power Factor Surcharge (PFS):** *Not Applicable.*
10. **Disturbing Load Penalty (DLP):** *Applicable as specified under 'Part-1 General of this Annexure II'.*

11. **Harmonic Injection Penalty (HIP):** *Not Applicable.*

12. **Two Part Tariff and Related Charges:** *Not Applicable.*

13. **Peak Load Exemption Charges (PLEC)** *Not Applicable.*

14. **Peak Load Violation Charges (PLVC):** *Not Applicable.*

15. **Reform Surcharge (RS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*

SCHEDULE - NON -DOMESTIC NON-COMMERCIAL SUPPLY (NDNCS)

1. Applicability

This schedule is applicable to the following consumers:

a) Government and semi Government offices

b) Educational Institutions viz. Schools, Universities, I.T.Is, Colleges, Sports Institutions, Mountaineering Institutions and allied sports and Libraries Hostels and residential quarters attached to the educational institutions if supply is given at single point.

c) Religious places such as Temples, Gurudwaras, Mosques, Churches etc. with connected load greater than 5 KW.

d) Orphanages, Sainik and Govt. Rest Houses, Working Women Hostels, Anganwari workers training centres and houses for destitute and old people.

e) Hospitals and Leprosy Homes run by charity and un-aided by the Government.

f) Panchayat Ghars and Patwar Khanas with connected load greater than 2KW.

g) Sarais and Dharamsalas run by Panchayats and Municipal Committees or on donations and those attached with religious places, subject to the condition that only nominal and token amount to meet the bare cost of upkeep and maintenance of the building etc. is being recovered and no rent as such is charged.

NOTE: *In the case of residences attached to the Institutions, as at (b) and (f) above, the same shall be charged at the Domestic tariff, in cases where, further distribution to such residential premises is undertaken by the Board and the Board provides meters for individual consumers.*

2. **Character of service**

Connected Load (KW)	Standard Supply Voltage (AC 50 Hz)
<= 50 KW	LT (1Ø 0.23 KV or 3Ø 0.415 KV) OR 2.2 KV
51 KW upto 2000 KW	11 KV or 15 KV or 22 KV
2001 KW upto 10000 KW	33 or 66 KV
>10000 KW	>= 132 KV

3. **Single Part Tariff for connected load <= 20 KW**

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	**50**

b) Energy Charge (Charges-2))

Energy Charge (Rs./kWh/month)	**3.65**

4. **Two Part Tariff for connected Load > 20 KW**

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	**100**

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	**2.65**

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	**125**

5. **Higher Voltage Supply Rebate (HVSR):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
6. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
7. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*

8. **Late Payment Surcharge (LPS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
9. **Contract Demand Violation Charge:** *Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'*
10. **Night Time Concession (NTC):** *Applicable* @ 20 p/kVAh *as specified under 'Part-1 General of this Annexure II'*.
11. **Power Factor Surcharge (PFS):** *Not Applicable.*
12. **Disturbing Load Penalty (DLP):***Applicable as specified under 'Part-1 General of this Annexure II'.*
13. **Harmonic Injection Penalty (HIP):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
14. **Peak Load Exemption Charges (PLEC):** *Not Applicable*.
15. **Peak Load Violation Charges (PLVC):** *Not Applicable.*
16. **Reform Surcharge (RS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*

SCHEDULE – COMMERCIAL SUPPLY (CS)

1. Applicability

This schedule is applicable to consumers for lights, fans, appliances like pumping sets, central air conditioning plants, lifts, heaters, embroidery machines, printing press, power press and small motors in all commercial premises such as shops, business houses, cinemas, clubs, banks, private offices, private hospitals, petrol pumps, hotels/motels, welding sets, servicing stations, private nursing homes, private rest/guest houses, private research institutions, private coaching institutions, private museums, dry cleaning, garages and private auditoriums, departmental stores, restaurants, lodging and boarding houses.

This schedule will also include all other categories, which are not covered by any other tariff schedule.

NOTE: - *Resale and sub-metering to tenants, adjoining houses and to other parties is strictly prohibited.*

2. Character of service

Connected Load (KW)	**Standard Supply Voltage (AC 50 Hz)**
<= 50 KW	LT (1Ø 0.23 KV or 3Ø 0.415 KV) OR 2.2 KV
51 KW upto 2000 KW	11 KV or 15 KV or 22 KV
2001 KW upto 10000 KW	33 or 66 KV
>10000 KW	>= 132 KV

3. Single Part Tariff for connected load <= 20 KW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	**50**

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	**4.00**

4. <u>Two Part Tariff for connected Load > 20 KW</u>

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	
20 – 100 kW	100
Above 100 kW	200

b) Energy Charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
20 -100 kW	2.80
Above 100 kW	2.50

c) Demand Charge (Charges-3))

Demand Charge (Rs/kVA/month)	
20 -100 kW	125
Above 100 kW	175

5. **Higher Voltage Supply Rebate (HVSR):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
6. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
7. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
8. **Late Payment Surcharge (LPS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
9. **Contract Demand Violation Charge:** *Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'*
10. **Night Time Concession (NTC):** *Applicable @ 20 p/kVAh as specified under 'Part-1 General of this Annexure II'*.
11. **Power Factor Surcharge (PFS):** *Not Applicable.*
12. **Disturbing Load Penalty:** *Applicable as specified under 'Part-1 General of this Annexure II'.*
13. **Harmonic Injection Penalty (HIP):** *Not Applicable.*
14. **Peak Load Exemption Charges (PLEC):** *Not Applicable.*

15. Peak Load Violation Charges (PLVC): *Not Applicable.*

16. Reform Surcharge (RS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

SCHEDULE -SMALL AND MEDIUM INDUSTRIAL POWER SUPPLY (SMS)

1. Applicability

This schedule is applicable to Industrial consumers with connected load not exceeding 100 kW including pumps (other than irrigation pumping) wheat threshers, tokas, poultry farms and sheds, cane crushers, Atta Chakkies, and also for suply to Information Technology Industry, limited only to IT Parks recognised by the State/Central Government. The Industrial type of Agricultural loads with connected load falling in the abovementioned range and not covered by Schedule "APS" shall also be charged under this schedule.

2. Character of service

Connected Load (KW)	Standard Supply Voltage (AC 50 Hz)
<= 50 KW	LT (1Ø 0.23 KV or 3Ø 0.415 KV) OR 2.2 KV
51 KW upto 100 KW	11 KV or 15 KV or 22 KV

3. Single Part Tariff for connected load <= 20 KW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	**50**

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	**3.55**

4. Two Part Tariff for connected Load > 20 KW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	**100**

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	**2.55**

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	**150**

4. Peak load exemption charges (PLEC) and peak load violation charges (PLVC)

a) Peak Load Exemption Charge (Energy Charge-1)

PLEC (Rs./kVAh)	5.10

b) Peak Load Violation Charge (Charge-2)

Description	**Demand Charge**	**Energy Charge**
	PLVC (Rs./kVA/month)	**PLVC (Rs./kVAh)**
	300	7.65

Note:

1. The Peak Load Violation Charges shall be applicable to the demand as well as the consumption recorded during the peak load hours only.
2. Consumers who have the exemption but are found exceeding the exempted load shall be deemed to have used energy in proportion to the load in excess of the exempted load.

5. **Higher Voltage Supply Rebate (HVSR):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
6. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
7. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
8. **Late Payment Surcharge (LPS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
9. **Contract Demand Violation Charge:** *Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'*
10. **Night Time Concession (NTC):** *Applicable @ 20 p/kVAh as specified under 'Part-1 General of this Annexure II'*.
11. **Power Factor Surcharge (PFS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*

12. **Disturbing Load Penalty(DLP):** *Not Applicable.*

13. **Harmonic Injection Penalty (HIP):** *Applicable as specified under 'Part-1 General' of Annexure II.*

14. **Reform Surcharge (RS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*

15. **Factory lighting & colony supply**

All consumption for bonafide factory lighting i.e. energy consumed in factory premises including factory building, its offices, stores, time keeper office, canteen, library, staff dispensary, welfare centre and factory yard lighting shall be charged under this tariff schedule. The consumption for bonafide use of residential/staff quarters and street lighting of the colony shall also be charged under this tariff schedule if the supply is not taken separately but taken at the same single supply point of the industry. Such consumption shall be charged for the energy consumed at the following rates, irrespective of whether the consumer has opted for peak time exemption or not:

i) During normal times : normal rate

ii) During peak times : the PLEC rate

iii) During night time : the night time rate

If supply for colony lighting / residences is taken separately than the same shall be charged as per the relevant category under this schedule of tariff.

SCHEDULE - LARGE INDUSTRIAL POWER SUPPLY (INCLUDING MINI STEEL MILLS) (LS)

Applicability

This schedule is applicable to all industrial power consumers with connected load exceeding 100 kW including mini steel mills/steel rolling and re-rolling mills/calcium carbide/ferro silicon units and arc/induction furnaces and also the Information Technology industry, limited only to IT parks recognized by the State/Central Govt. and all industrial consumers not covered by schedule "WPS" or schedule "APS".

Character Of Service

Connected Load (KW)	Standard Supply Voltage (AC 50 Hz)
101 KW to 2000 KW	11 KV or 15 KV or 22 KV (HT)
2000 KW to 10000 KW	33 or 66 KV (EHT)
>10000 KW	>=132 KV (EHT)

3. Two Part Tariff

a) Consumer Service Charge (Charges-1)

Description	Consumer Service Charge (Rs/month)
EHT	300
HT	200

b) Energy charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
EHT	2.10
HT	2.20

c) Demand Charge (Charges-3) *

Description	Demand Charge (Rs/kVA/month)
EHT	165
HT	240

4. Peak load exemption charges (PLEC) and peak load violation charges (PLVC)

a) Peak Load Exemption Charge (Energy Charge-1)

Description	PLEC (Rs./kVAh)
EHT	4.20
HT	4.40

b) Peak Load Violation Charge (Charge-2)

Description	Demand Charge	Energy Charge
	PLVC (Rs./kVA/month)	PLVC (Rs./kVAh)
EHT	300	6.30
HT	300	6.60

Note:

i) The Peak Load Violation Charges shall be applicable to the demand as well as the consumption recorded during the peak load hours only.

ii) Consumers who have the exemption but are found exceeding the exempted load shall be deemed to have used energy in proportion to the load in excess of the exempted load.

5. Higher Voltage Supply Rebate (HVSR): *Not Applicable.*

6. Lower Voltage Supply Surcharge (LVSS): *Not Applicable.*

7. Lower Voltage Metering Surcharge (LVMS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

8. Late Payment Surcharge (LPS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

9. Contract Demand Violation Charge: *Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'*

10. Night Time Concession (NTC): *Applicable @ 20 p/kVAh as specified under 'Part-1 General of this Annexure II'*.

11 Power Factor Surcharge (PFS): *Not Applicable.*

12 Disturbing Load Penalty(DLP): *Not Applicable.*

13. Harmonic Injection Penalty (HIP): *Applicable as specified under 'Part-1 General of this Annexure II'.*

14. Reform Surcharge (RS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

15 Factory lighting & colony supply

All consumption for bonafide factory lighting i.e. energy consumed in factory premises including factory building, its offices, stores, time keeper office, canteen, library, staff dispensary, welfare centre and factory yard lighting shall be charged under this tariff schedule. The consumption for bonafide use of residential/staff quarters and street lighting of the colony shall also be charged under this tariff schedule if supply is taken at a single point. Such consumption shall be charged for the energy consumed at the following rates, irrespective of whether the consumer has opted for peak time consumption or not:

a. During normal times : normal rate
b. During peak times : the PLEC rate
c. During night time : the night time rate

If supply for colony and/or its residences is taken separately then the same shall be charged as per the relevant consumer category of this schedule of tariff.

SCHEDULE - WATER PUMPING SUPPLY (WPS)

Applicability

This schedule is applicable to Government connections for water and irrigation pumping. The schedule also covers all consumption for bonafide Pump House lighting.

Character of service

Connected Load (KW)	Standard Supply Voltage (AC 50 Hz)
<= 50 KW	LT (1Ø 0.23 KV or 3Ø 0.415 KV) OR 2.2 KV
51 KW upto 2000 KW	11 KV or 15 KV or 22 KV
2001 KW upto 10000 KW	33 or 66 KV
>10000 KW	>= 132 KV

Two Part Tariff

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	
LT	100
HT	100

b) Energy Charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
LT	2.60
HT	1.95

c) Maximum Demand Charge (Charges-3)

Maximum Demand Charge (Rs/kVA/month)	
LT	175
HT	125

5. Peak load exemption charges (PLEC) and peak load violation charges (PLVC)

a) Peak Load Exemption Charge (Charge-1)

PLEC	Energy Charges (Rs./kVAh)
LT	5.20
HT	3.90

b) Peak Load Violation Charge (Charge-2)

Description	Demand Charge	Energy Charge
	PLVC (Rs./kVA/month)	PLVC (Rs./kVAh)
LT	300	7.80
HT	300	5.85

Note:

1. The Peak Load Violation Charges shall be applicable to the demand as well as the consumption recorded during the peak load hours only.
2. Consumers who have the exemption but are found exceeding the exempted load shall be deemed to have used energy in proportion to the load in excess of the exempted load.

6. **Higher Voltage Supply Rebate (HVSR):** *Not Applicable.*

7. **Lower Voltage Supply Surcharge (LVSS):** *Not Applicable.*

8. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*

9. **Late Payment Surcharge (LPS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*

10. **Contract Demand Violation Charge:** *Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'*

11. **Night Time Concession (NTC):** *Applicable @ 20 p/kVAh as specified under 'Part-1 General of this Annexure II'*.

12. **Power Factor Surcharge (PFS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*

13. **Disturbing Load Penalty(DLP):** *Applicable as specified under 'Part-1 General' of Annexure II.*

14. **Harmonic Injection Penalty (HIP):** *Not Applicable.*

15. **Reform Surcharge (RS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*

SCHEDULE - AGRICULTURAL PUMPING SUPPLY (APS)

Applicability

This schedule is applicable to Irrigation Pumping loads for agriculture purpose only. Private Irrigation loads in individual/ society's names shall also be charged under this tariff.

NOTE

i) *For other Industrial type of Agricultural loads such as Air Conditioning for growing of mushrooms etc., threshers, heaters for defrosting in orchards or providing flood lights for scaring away the birds and animals and spraying etc. in the field, the relevant industrial tariff shall apply.*

ii) *Agricultural pumping consumers in rural areas are allowed to run chaff cutters, threshers and cane crushers on their motors under this schedule subject to the condition that the total connected load does not exceed 20 kW. However, in case of separate connection for the above purpose the relevant industrial tariff shall be applicable. Also in case of any other industrial load being run along with the "AP" supply, the entire supply will be billed under relevant industrial tariff.*

Character of service

Connected Load (KW)	Standard Supply Voltage (AC 50 Hz)
<= 50 KW	LT (1Ø 0.23 KV or 3Ø 0.415 KV) OR 2.2 KV
51 KW upto 2000 KW	11 KV or 15 KV or 22 KV
2001 KW upto 10000 KW	33 or 66 KV
>10000 KW	>= 132 KV

Single Part Tariff for connected load <=20 KW

a) Consumer Service Charge (Charges-1)

Description	Consumer Service Charge (Rs/month)
All consumers	20

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	**1.55**

Two Part Tariff for connected Load > 20 KW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	**20**

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	**1.00**

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	**50**

5. Peak load exemption charges (PLEC) and Peak Load Violation Charges (PLVC)

a) Peak Load Exemption Charge (Charge-1)

PLEC	**Energy Charges (Rs./kVAh)**
APS	2.00

b) Peak Load Violation Charge (Charge-2)

Description	**Demand Charge**	**Energy Charge**
	PLVC (Rs./kVA/month)	**PLVC (Rs./kVAh)**
APS	150	3.00

Note:

i) The Peak Load Violation Charges shall be applicable to the demand as well as the consumption recorded during the peak load hours only.

ii) Consumers who have the exemption but are found exceeding the exempted load shall be deemed to have used energy in proportion to the load in excess of the exempted load.

6. **Higher Voltage Supply Rebate (HVSR):** *Applicable as specified under 'Part-1 General of this Annexure II'.*

7. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*

Lower Voltage Metering Surcharge (LVMS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

Late Payment Surcharge (LPS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

Contract Demand Violation Charge: *Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'*

Night Time Concession (NTC): *Applicable @ 20 p/kVAh as specified under 'Part-1 General of this Annexure II'*.

Power Factor Surcharge (PFS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

Reform Surcharge (RS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

Disturbing Load Penalty (DLP): *Applicable as specified under 'Part-1 General' of Annexure II.*

Harmonic Injection Penalty (HIP): *Not Applicable.*

Pump House Lighting : Only one bulb of not more than 100 watts shall be allowed for pump house lighting and consumption for lighting shall also be charged at the above agricultural tariff but will be metered separately.

SCHEDULE - BULK SUPPLY (BS)

Applicability

This schedule is applicable to general or mixed loads to M.E.S and other Military establishments, Railways, Central PWD Institutions, Construction power for Hydro-Electric projects, Hospitals, Departmental colonies, A.I.R Installations, Aerodromes and other similar establishments/institutions where further distribution to various residential and non-residential buildings is to be undertaken by the consumer, for its own bonafide use and not for resale to other consumers with or without profit. However, in case of MES, this schedule shall continue to apply till such time MES do not avail Open Access.

Character of service

Connected Load (KW)	Standard Supply Voltage (AC 50 Hz)
<= 50 KW	LT (1Ø 0.23 KV or 3Ø 0.415 KV) OR 2.2 KV
51 KW upto 2000 KW	11 KV or 15 KV or 22 KV
2001 KW upto 10000 KW	33 or 66 KV
>10000 KW	>= 132 KV

3. Two Part Tariff

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	
LT	100
HT	100

b) Energy Charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
LT	2.70
HT	2.15

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	
LT	175
HT	140

Higher Voltage Supply Rebate (HVSR): *Not Applicable.*

Lower Voltage Supply Surcharge (LVSS): *Not Applicable.*

Lower Voltage Metering Surcharge (LVMS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

Late Payment Surcharge (LPS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

Contract Demand Violation Charge: *Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'*

Night Time Concession (NTC): *Applicable @ 20 p/kVAh as specified under 'Part-1 General of this Annexure II'*.

Reform Surcharge (RS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

Power Factor Surcharge (PFS): *Not Applicable.*

Disturbing Load Penalty (DLP): *Not Applicable.*

Harmonic Injection Penalty (HIP): *Not Applicable.*

Peak Load Exemption Charges (PLEC): *Not Applicable*.

Peak Load Violation Charges (PLVC): *Not Applicable.*

SCHEDULE - STREET LIGHTING SUPPLY (SLS)

Applicability

This schedule is applicable for Street Lighting system including traffic control signal systems on roads and Park lighting in Municipalities, Panchayats and Notified Committee areas.

Character of service

Connected Load (KW)	Standard Supply Voltage (AC 50 Hz)
<= 50 KW	LT (1Ø 0.23 KV or 3Ø 0.415 KV) OR 2.2 KV
>50 KW	11 KV or 15 KV or 22 KV

3. Single Part Tariff

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	**50**

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	**2.95**

4. Line maintenance and lamp renewal charges

Line Maintenance and lamp renewal charges shall be charged in addition to the energy charges. These charges shall be charged at the following rates:

Where the bulbs, tubes etc. are to be provided and replaced at the cost of the Board, the line maintenance and renewal charges shall be levied as under:

Description	Charge
	Rs./point/month
(a) Bulbs all wattage	14
(b) Mercury vapour lamps up to 125 watt	40
(c) Mercury vapour lamps 126 watt to 400 watt	95
(d) Fluorescent 2 ft. 20 watt single tube fixture	21
(e) Fluorescent 2 ft. 20 watt double tube fixture	35

(f) Fluorescent 4 ft. single tube fixture	35
(g) Fluorescent 4 ft. double tube fixture	48

Note:

(a) *For special type of fixtures like sodium and neon vapour lamps, fittings or any other fixtures not covered above, the material for maintenance of the fixtures and the lamps for replacement shall be provided by the Public Lighting consumers themselves and only replacement charges shall be levied.*

(b) When the bulbs/Mercury vapour lamps/tubes and other accessories are provided by the Public Lighting consumers and only replacement is to be done by the Board, Line Maintenance and lamp renewal charges shall be as under:

Description	**Charge**
	Rs./point/month
Bulbs	7
Tubes and MVL etc	12
Sodium/Neon Vapour lamps or any other special fixture not covered above	18

5. **Higher Voltage Supply Rebate (HVSR):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
6. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
7. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
8. **Late Payment Surcharge (LPS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
9. **Night Time Concession (NTC):** *Not Applicable.*
10. **Reform Surcharge (RS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
11. **Power Factor Surcharge (PFS):** *Not Applicable.*

12. **Disturbing Load Penalty (DLP):** *Not Applicable.*

13. **Harmonic Injection Penalty (HIP):** *Not Applicable.*

14. **Peak Load Exemption Charges (PLEC):** *Not Applicable*.

15. **Peak Load Violation Charges (PLVC):** *Not Applicable.*

SCHEDULE - TEMPORARY METERED SUPPLY (TM)

Applicability

This schedule is applicable to all loads of temporary nature including exhibitions, touring talkies, circuses, fairs, melas, marriages, festivals, temporary agricultural loads such as wheat thrashers, paddy thrashers, temporary supply for construction purposes including civil works by Government departments and other similar purposes for temporary needs only.

Character of service

Connected Load (KW)	Standard Supply Voltage (AC 50 Hz)
<= 50 KW	LT (1Ø 0.23 KV or 3Ø 0.415 KV) OR 2.2 KV
51 KW upto 2000 KW	11 KV or 15 KV or 22 KV
2001 KW upto 10000 KW	33 or 66 KV
>10000 KW	>= 132 KV

Single Part Tariff for connected load <= 20 KW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	**100**

b) Energy Charge (Charges-2))

Energy Charge (Rs./kWh)	**6.00**

Two Part Tariff for connected Load > 20 KW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	**100**

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	**4.45**

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	**300**

Higher Voltage Supply Rebate (HVSR): *Applicable as specified under 'Part-1 General of this Annexure II'.*

Lower Voltage Supply Surcharge (LVSS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

Lower Voltage Metering Surcharge (LVMS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

Late Payment Surcharge (LPS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

Contract Demand Violation Charge: *Applicable as specified under 'Part-2 Schedule of Tariff of Annexure II'*

Night Time Concession (NTC): *Applicable @ 20 p/kVAh as specified under 'Part-1 General of this Annexure II'*.

Power Factor Surcharge (PFS): *Not Applicable..*

Reform Surcharge (RS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

Disturbing Load Penalty (DLP): *Not Applicable.*

Harmonic Injection Penalty (HIP): *Not Applicable.*

Peak Load Exemption Charges (PLEC): *Not Applicable*.

Peak Load Violation Charges (PLVC): *Not Applicable.*

List of Objectors

Venue	Name of the Objector/Party
Kala Amb	Sh. Amba Metals, Partners, Kala Amb Chamber of Commerce & Industry, Kala Amb, Sirmour. Sh. Surinder Jain J.B. Rolling Mills (P) Ltd. Kala Amb, Sirmour. Sh. H.C.Goyal, Director, Shri Ganpati Concast India Ltd.Kala Amb, Sirmour. Sh. Anupam Batra, Managing Director, Knight Queen Industries (P) Ltd. Kala Amb, Sirmour. Sh. Ashok Vashisht, Director, Vashisht Chemicals (P) Ltd. Kala Amb, Sirmour. Manager, Saboo Ispat (P) Ltd. Kala Amb, Sirmour. Sh. S.K.Chhajer, Director, Pashupati Spinning & Weaving Mills Ltd. Kala Amb, Sirmour. Director, Amba Shakti Ispat Ltd. Kala Amb, Sirmour. Sh. Rajnish Bansal, Director, M/s HM Steel Ltd. Kala Amb, Sirmour. Sh. Umesh Garg, President Kala Amb CMI, Kala Amb, Sirmour. Sh. J.N.Singh, Executive Director, Ruchira Papers Ltd.Kala Amb, Sirmour. Shri. Satish Goyal, President, Himachal Chamber of Commerce & Industry, Paonta Sahib, Sirmour. Shri B.P. Negi, Works Manager, Himachal Terepene Products (P) Ltd., Kala Amb Sirmour.
Baddi	Sh. Gulshan Sharma, Sr. Manager Purewal & Associates Ltd. R/o village Jubbar, Tehsil Kasauli, Solan. Sh. Pradeep Aggarwal, Director M/s Rama Steels Ltd. Parwanoo, Solan Sh. Sachit Jain, Executive Director, Auro Spinning Mills, Baddi, Solan Sh. Deepak Bhandari, Sr. Vice-President BBN Industries

	Association Baddi, Solan Sh. Alok Sharma, President, Parwanoo Industries Association Parwanoo, Solan Shri Tirlok Lal, c/o Dr. Virendar Mohan, Sabhathu Road, Dharampur- 173209, Solan M/s Secure Meters Ltd., Baddi
Manali	Sh. R.P.Kapoor, M/s Mandav Air Industries, Plot No. 12, Industrial Area, Sauli-Khad, Mandi Sh. Munish Sood, President, Mandi Hotelier Association Mandi Sh. C.L.Lamba, Prop. Hotel Hill Queen, Model Town Manali, Kullu Sh. C.R.Premi, General Secretary, Manali Hoteliers Association Manali, Kullu Sh. Jagarnath Sharma, President, The Kullu Hotels and Guest House Association, Kullu Sh. C.R.Premi, Proprietor, Hotel Jamuna, Gompa Road, Manali, Kullu
Dharamshala	Sh. C.S.Kapur, General Secretary, Mehatpur Industries Association, Una Sh. Rakesh Kaushal, President, Tahliwalla Industries Association, Phase-III Industrial Area Tahliwalla, Una
Dalhousie	Sh. Manoj Chadha, Patron in Chief, Federation of Hotel and Restaurant Association Dalhousie Capt. G. S. Dillon, Director-cum-Principal Dalhousie Public School Dalhousie Ms Geeta Mahajan, Dalhousie Hilltop School, Dalhousie

Shimla	Sh. Daljeet Singh Ghai, ACC Gagal Cement Works, P.O. Barmana, Bilaspur Capt. J.S.Thakur, Chief Executive Officer, Indus Hospital Shimla Shri Asad Wasi, Joint Secretary, PHDCCI, PHD House 42, Siri Institutional Area, August Kranti Marg, New Delhi Sh. J.C. Toshniwal, Jt. President, GACL, Unit Himachal, P.O. Darlaghat, Tehsil Arki, Solan Sh. Ashok Tandon, Chairman, CII, HP State Council, Sector 31-A, Dakshin Marg, Chandigarh Sh. H.R.Sharma, Addl. Secy (Power), GOHP Shimla
	Consumer Representative
	Sh. P.N. Bhardwaj, ARCADIA, PO: Dharampur – 173209, Solan
	Representative of Unorganised Domestic Consumer Groups
	Sh. R.K. Gupta, Sewa Niwas, Engine Ghar, Sanjauli, Shimla - 6

Annexure 5 A

Schedule of formal interactions with the Officers & Members of HPSEB, Corporations owned by HPSEB and Govt. of H.P.

S.No.	Date & Time	Concerned officers
1.	19.05.05 at 11.30 AM	Chief Engineer (Central Zone) and Superintendent Engineer (M&T) Circle Bilaspur
2.	19.05.05 at 3.00 PM	Chief Engineer (North) and Superintendent Engineer (Op) Circle Dalhausie
3.	20.05.05 at 11.30 AM	Chief Engineer (South) and Superintendent Engineer (OP) Circle Shimla
4.	20.05.05 at 3.00 PM	Chief Engineer (System Planning), Director PSP Director (Interstate), and SE SLDC, Shimla
5.	21.05.05 at 11.30 AM	Chief Engineer (Materials Management) Shimla
6.	21.05.05 at 1.00 PM	Chief Engineer (P&M) Shimla
7.	21.05.05 at 3.00 PM	Chief Engineer (PSP) Shimla
8.	24.05.05 at 11.30 AM	Chief Engineer (Transmission) and Director Design (Sub-Stn.) Hamirpur
7.	24.05.05 at 3.00 PM	Chief Engineer (Generation) and Director Design Sundernagar
8.	25.05.05 at 11.30 AM	Chief Engineer (Commercial), Shimla
9.	26.05.05 at 11.30 AM	Chief Engineer (Larji) and Director (Designs) Mandi
10.	26.05.05 at 1.00 AM	MD, Himachal Pradesh Jal Vidyut Vikas Nigam
11.	26.05.05 at 3.00 PM	Chief Engineer (Design), Sunder nagar
12.	27.05.05 at 11.30 AM	Chief Accounts Officer, Shimla
13.	27.05.05 at 3.00 PM	Secretary, HPSEB, Shimla
14.	28.05.05 at 11.30 PM	Chief Engineer (Projects) HPSEB, Shimla
15.	28.05.05 at 3.00 PM	Chief Engineer (I&P)
16.	30.05.05 at 11.30 AM	Chairman and Members of the Board
17.	30.05.05 at 3.00 PM	MD, Pabbar Valley Power Corporation
18.	31.05.05 at 11.30 AM	Principal Secretary ,MPP & Power, GOHP

Annexure 6 A
Investment Plan and Debt Plan

Sl. No.	As submitted by the Board					As approved by the Commission	
	Description	**Investment**	**Means of Finance**				
		(Amount-Rs./Crs.)	**Debt amount**	**Own Plan**	**Grants**	***(Amount-Rs./Crs.)***	**Remarks**
	Planned Schemes						
Generation Schemes							
1	Larji	**95.02**	**78.72**	**16.30**		0	Matter being subjudice shall be considered as per the judicial order.
2	HPJVVNL	**39.63**		**39.63**		0	Both the Corporations have to take approval of the Commission for undertaking projects through a petition and then get the annual investment planned approved.
3	PVC	**22.6**		**22.6**		0	
4	Khauli	20.41		20.41		20.41	
	Mini-Micro Hydel scheme						
5	(1)Bhaba P/H Augumenation	9.13	3.25	5.88		9.13	Loan of Rs 3.25 Cr approved from PFC @ 8.25% p.a
6	Holi	0.49		0.49		0.49	
7	Completed projects allocated to clear old liabilities	4.00		4.00		4.00	
8	Renovation & Modernisation of P/H	2.95	2.00	0.95		2.95	Loan of Rs 2.0 Cr approved from PFC @ 8.25% p.a
9	Survey and investigation schemes	16.00		16.00		16.00	
	Sub total 'A'	**210.23**	**83.97**	**126.26**	**0.00**	**52.98**	
Transmission Schemes							
1	66 kV & above	66.33	0.50	65.83		65.83	Loan amount of Rs. 0.50 Cr from REC not approved.Board may opt for grant from Rajiv Gandhi Vidyutikaran Yojna
Distribution Schemes							
1	33kV an Below	5.75		5.75		5.75	
	Sub total 'B'	**72.08**	**0.50**	**71.58**	**0.00**	**71.58**	
Distribution							
1	RE Schemes	8.85		8.85		8.85	
2	Normal Programme	16.48	16.48			0.00	Loan amount of Rs. 19.25 cr from REC not approved.Board may opt for grant from Rajiv Gandhi Vidyutikaran Yojna
3	System Improvement Scheme	2.05	2.05			0.00	
4	RE(SCP)	0.72	0.72			0.00	
5	RE(BASP)	0.65			0.65	0.65	
	Sub total 'C'	**28.75**	**19.25**	**8.85**	**0.65**	**9.50**	
Special Grants/Loans							
1	APDRP	173.48	17.35		156.13	173.48	Loan of Rs 17.35 Cr approved from APDRP @ 8.25% p.a
2	PMGY	2.10			2.10	2.10	
	Sub total 'D'	**175.58**	**17.35**	**0.00**	**158.23**	**175.58**	
Other than Planned Schemes							
1	Miscellaneous Capital Expenditure	5.00		5.00		5.00	
2	Kuti jyoti scheme	0.10			0.10	0.10	
3	Renuka Hydel project	0.70		0.70		0.70	
	Sub total 'E'	**5.80**		**5.70**	**0.10**	**5.80**	
Repayment		**238.54**		**238.54**		**0.00**	Not approved as Board cannot take loan to repay earlier loans
SubTotal		**730.98**	**121.07**	**450.93**	**158.98**	**315.44**	
Investment in Inventory for maintaining redundancy in the transmissionsystem		**15.8**	**15.8**	**0.00**	**0.00**	**15.8**	
	TOTAL	**746.78**	**136.87**	**450.93**	**158.98**	**331.39**	

Summary of Investment Approval

S. No	Details	Rs Crore
1	Total Investment Proposed	730.98
2	Repayment of old debt	238.54
3	Investments Disallowed	177.00
4	Additional Investment approved for Transmission system redundancy	15.8
5	Investments approved (1+4-2-3)	331.39
6	Grants available	158.98
7	Net Loan Requirement (5-6)	172.26

Approved Loans

S. No	Institution	Rate of Interest (%)	Amount (Rs. Cr)
1	PFC	8.25%	5.25
2	PFC (Tr. System Redundancy)	8.00%	15.8
3	REC	No fresh loan approved	
4	APDRP (Loan Component)	10.5%	17.35
5	Loan from KCC-Bank (as proposed in plan)	9.00%	35.8
6	Non SLR Bonds	10.5%	98.06

As mentioned in the investment plan above, the loan from REC has been disapproved. Further, the Commission has taken a conservative view regarding the loans and made efforts to bring down the interest cost of the Board. The Commission has approved the loans proposed by Board from the banks viz. Kangra Co-operative Bank, as the funds available from such institutions are typically cheaper than the NSLR Bonds. Hence, while approving the debt plan for FY 2005-06, Commission has made an effort to utilize N SLR bonds facility to the minimum in order to bring down the interest cost.

ANNEXURE 9 A: BAR CHART FOR REORGANISATION OF DISTRIBUTION (OPERATION) CIRCLES

Description	Weeks															
	7/7/05	14/7/05	21/7/05	28/7/05	4/8/05	11/8/05	18/8/05	25/8/05	1/9/05	8/9/05	15/9/05	22/9/05	29/9/05	6/10/05	13/10/05	20/10/05
Reorganisation of Circles																
Constitution of Taskforce/Counterpart team																
Training of Task Forces																
Appointment of consultant																
Detailed proposals and approval thereof																
Organising buildings for offices																
Renaming of sub-divisions & sections with territorial jurisdiction																
Flow charts, procedures, deployment of resources																
Proposals for transfer of officers, movement of officers & staff to be put up to Committee																
Approval by the Committee																
Issue of administrative orders by Secretary																
Interactive sessions & briefing courses																
Transfer and movement of officers and staff																
Complete Reorganisation																

ANNEXURE 9 A: BAR CHART FOR TRANSFER & POSTING OF OFFICERS & STAFF OF HPSEB

Description	Weeks															
	7/7/05	14/7/05	21/7/05	28/7/05	4/8/05	11/8/05	18/8/05	25/8/05	1/9/05	8/9/05	15/9/05	22/9/05	29/9/05	6/10/05	13/10/05	20/10/0
Transfer and Posting Policy																
Constitution of Committee in line with Commission's notification in this regard																
Identification of revenue sensitive Sub-divisions & circles																
Screening of all officers & staff working in revenue sensitive sub-divisions, divisions & circles																
Proposals for transfers & postings to be placed before the Committee in respect of above & reorganised set ups*																
Approval by the Committee*																
Transfer orders to be issued by the Board*																

* Dates mentioned above against these activities are for initial restructuring exercise. However, for regular exercise these dates shall be considered as third and fourth week of March, First week of April and Second week of April respectively for these * activities

ANNEXURE 9 A: BAR CHART FOR ESTABLISHMENT OF TRAINING ACADEMY

Description	Weeks															
	7/7/05	14/7/05	21/7/05	28/7/05	4/8/05	11/8/05	18/8/05	25/8/05	1/9/05	8/9/05	15/9/05	22/9/05	29/9/05	6/10/05	13/10/05	20/10/05
Training																
Appointment of Consultant																
Training Needs Analysis																
Report of Consultant on location, course, modules, for diff. categories, syllabus, faculty																
Approval of Consultant's Report by the Board																
Hiring of Buildings, Identification of faculty, identification of officers & staff for training in the next 3 years																
Appointment of faculty & letters to trainees																
Joining of faculty																
Joining of trainees																

Note: This is continuing process. However, the bar chart shows the milestones until the establishment of Academy and the first training batch.

ANNEXURE 9 A: BAR CART FOR PRODUCTIVITY LINKED INCENTIVE SCHEME FOR EMPLOYEES IN GENERATION WING

Description	**Weeks**															
	7/7/05	14/7/05	21/7/05	28/7/05	4/8/05	11/8/05	18/8/05	25/8/05	1/9/05	8/9/05	15/9/05	22/9/05	29/9/05	6/10/05	13/10/05	20/10/0
Incentive Schemes for Generation Staff																
Notification of Incentive Scheme for generation staff																

ANNEXURE 9 A: BAR CHART FOR HUMAN RESOURCES DEVELOPMENT AND MANAGEMENT

Description	FY06		FY07		FY08		FY09		FY10		FY11		FY12		
	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Mile
HUMAN RESOURCE DEVELOPMENT															
Reorganisation of Operation Circles along functional lines	12 circles to be reorganised	Rs. 37.5 crore													
O&M															
Planning, Design & Construction															
Customers services															
Engineering Resource Management															
Personnel & Administration															
Accounts & Finance															
Mission statements															
Generation			Mission statement for each business to be prepared	Share of extra profit over & above ARR, as per Tariff Regulations											
Transmission															
Distribution															
Trading															
Policy Statements for short term, medium term and long term															
Generation			Policy statement for each business to be prepared	Share of extra profit over & above ARR, as per Tariff Regulations											
Transmission															
Distribution															
Trading															
Simplification of systems & procedures															
Generation			Systems & procedures to be simplified & streamlined	Share of extra profit over & above ARR, as per Tariff Regulations											
Transmission															
Distribution															
Trading															

ANNEXURE 9 A: BAR CHART FOR HUMAN RESOURCES DEVELOPMENT AND MANAGEMENT (Continued)

Scientifically architectured structures															
Generation			Reorganisation of Generation Wing	Share of extra profit over & above ARR, as per Tariff Regulations											
Transmission			Reorganisation of Transmission Wing												
Distribution															
Trading															
Staff and allocation on ERM															
Generation				Share of extra profit over & above ARR, as per Tariff Regulations											
Transmission															
Distribution															
Trading															
Styles & Work culture															
Generation			Improvement in style and work culture, after scientific study	Share of extra profit over & above ARR, as per Tariff Regulations											
Transmission															
Distribution															
Trading															
Computerised MIS based control, co-ordination & monitoring															
Generation				Share of extra profit over & above ARR, as per Tariff Regulations											
Transmission															
Distribution															
Trading															

ANNEXURE 9 A: BAR CHART FOR REFORMS IN TECHNICAL DEPARTMENTS

Description	FY06		FY07		FY08		FY09		FY10		FY11		FY12		FY13		F
	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone
TECHNICAL																	
Generation					Increase in PLF by 5% from current levels	Share of extra profit over & above ARR, as per Tariff Regulations	Increase in PLF by 10% from current levels	Share of extra profit over & above ARR, as per Tariff Regulations	Increase in PLF by 15% from current levels	Share of extra profit over & above ARR, as per Tariff Regulations	Increase in PLF by 20% from current levels	Share of extra profit over & above ARR, as per Tariff Regulations	Increase in PLF by 25% from current levels	Share of extra profit over & above ARR, as per Tariff Regulations			
Transmission					1% Improvement in Availability		2% cumulative Improvement in Availability		3% cumulative Improvement in Availability		4% cumulative Improvement in Availability						
Distribution					Improvement in employee productivity by 10%		Cumulative improvement in employee productivity by 20%		Cumulative improvement in employee productivity by 30%		Cumulative improvement in employee productivity by 40%		Cumulative improvement in employee productivity by 50%				
Trading					Improvement in trading volumes by 10%		Cumulative improvement in trading volumes by 20%		Cumulative improvement in trading volumes by 30%		Cumulative improvement in trading volumes by 40%						
Other Business	Achieve net income of Rs. 10 cr, through other business	Share of extra profit over & above ARR, as per Tariff Regulations	Achieve net income of Rs. 25 cr, through other business	Share of extra profit over & above ARR, as per Tariff Regulations	Achieve net income of Rs. 40 cr, through other business		Achieve net income of Rs. 60 cr, through other business		Achieve net income of Rs. 80 cr, through other business		Achieve net income of Rs. 100 cr, through other business						
Technology drivers																	
1. Prepaid Metering	10000 Prepaid Meters		25000 Prepaid Meters		100000 Prepaid Meters		150000 Prepaid Meters		200000 Prepaid Meters		300000 Prepaid Meters		400000 Prepaid Meters		300000 Prepaid Meters		200000 Prepaid Meters
2. Conversion of Manned Stations	33 kV- 3 Nos		33 kV- 10 Nos		33 kV- 20 Nos		33 kV- 30 Nos		33 kV- 30 Nos		33 kV- 32 Nos		66 kV- 6 Nos		66 kV- 7 Nos		132 kV- 8 Nos
3.Establishment of computerised complaint centres as per SoP	At least one subdivision covered per division		All Subdivisions														
Computerised MIS based control, co-ordination and monitoring	Integral part of running the business, to be continuously done																

ANNEXURE 9 A: BAR CHART FOR REFORMS IN FINANCE AND ACOUNTS

Description	FY06		FY07		FY08		FY09		FY10		FY11		FY12		
	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	M
FINANCIAL															
Capital restructuring			Debt:Equity ratio of 70:30												
Accounts & Finance			Preparation of Qtly Books of Accounts & reconciliation with Regulatory Accounts												
Audit			Qyly audit of revenue sensitive circles												
Disinvestments	Idle, unutlized & unremunerative assets to be disposed off & reduced by 50%		Idle, unutlized & unremunerative assets to be disposed off completely												
Computerised MIS based control, co-ordination and monitoring	Integral part of running the business, to be continuously done														

ANNEXURE 9 A: BAR CHART FOR REFORMS IN COMMERCIAL OPERATIONS

Description	FY06		FY07		FY08		FY09		FY10		FY11		FY12		
	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Mileston e	Incentive	Milestone	Incentive	Mile
COMMERCIAL															
Compliance with Regulations & Regulatory matters	ARR & Tariff Filing for FY 07, by Nov. 30, 2005		ARR & Tariff Filing for FY 08, by Nov. 30, 2006		ARR & Tariff Filing for FY 09, by Nov. 30, 2007		ARR & Tariff Filing for FY 10, by Nov. 30, 2008		ARR & Tariff Filing for FY 11, by Nov. 30, 2009		ARR & Tariff Filing for FY 12, by Nov. 30, 2010		ARR & Tariff Filing for FY 13, by Nov. 30, 2011		ARR Tari Filin FY Nov 201
Technical & Commercial Loss	Reduction of 1% in technical and commercial losses	Share of extra profit over & above ARR, as per Tariff Regulatio ns	Reduction of 1% in technical and commercia l losses	Share of extra profit over & above ARR, as per Tariff Regulations	Reduction of 1% in technical and commercia l losses	Share of extra profit over & above ARR, as per Tariff Regulatio ns	Reduction of 1% in technical and commercia l losses	Share of extra profit over & above ARR, as per Tariff Regulatio ns	Reduction of 1% in technical and commercia l losses	Share of extra profit over & above ARR, as per Tariff Regulatio ns	Reductio n of 1% in technical and commerc ial losses	Share of extra profit over & above ARR, as per Tariff Regulatio ns			
System Operations															
Computerised MIS based control, co-ordination and monitoring	Integral part of running the business, to be continuously done														

ANNEXURE 9 A: BAR CHART FOR REFORMS IN CUSTOMER SERVICES

Description	**FY06**		**FY07**		**FY08**		**FY09**		**FY10**		**FY11**		**FY12**		
	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Milestone	Incentive	Mileston e	Incentive	Milestone	Incentive	M
CUSTOMER SERVICE															
Public Interaction															
Standards of performance and guaranteed standards															
Consumer Grievance Forum	Pending cases to be limited to 25% of cases received, at end of year	Share of extra profit over & above ARR, as per Tariff Regulations													
Metering, billing & collection	Collection efficiency to improve to 100%	Share of extra profit over & above ARR, as per Tariff Regulations	% defective meters to be reduced to 2%	Share of extra profit over & above ARR, as per Tariff Regulations	defective meters to be eliminated completely	Share of extra profit over & above ARR, as per Tariff Regulations									
Dispute settlement mechanism	Disputes to be resolved within 60 days of filing of application	Share of extra profit over & above ARR, as per Tariff Regulations	Pending cases to be limited to 25% of cases received, at end of year	Share of extra profit over & above ARR, as per Tariff Regulations											
Consumer protection															
Computerised MIS based control, co-ordination and monitoring	Integral part of running the business, to be continuously done														

Annexure 9 B

TRANSFER/POSTING POLICY FOR OFFICERS AND STAFF OF HPSEB

1. Officers shall not be posted in their home districts. Home district shall be defined as the district entered in his service record at the time of joining the service or the district where he has built/owns a house, whichever is later.
2. Other employees shall not be posted within the radius of 50 Km from employee’s home town/village declared at the time of his entry into service or where he has built/ owns a house, whichever is later.
3. No officer/ employee shall be disturbed/ shifted in less than three years unless proved to be inefficient and involved in corrupt and malpractices. After completion of his tenure in a particular station, his case may be included in the proposal for transfer.
4. All officers and employees posted in revenue sensitive circles/divisions/sub-divisions and other sensitive offices will have a tenure not exceeding two years. These sensitive circles/ divisions/ sub-divisions and offices shall be identified by the Board before August 1, 2005. They should not be re-posted in such areas on the same post.
5. Postings in projects shall be governed by rotation between planning/design and field. For project construction sites, the officers and employees shall be placed at the disposal of the project in-charge.
6. All officers and employees shall be rotated between the field and offices as well as various disciplines including those of the head office.
7. Transfer and posting proposal within the circle shall be submitted by the Area Manager/ SE and for intercircle by heads of departments direct to the committee. Inter-wing Transfers and postings shall be submitted to the committee by the Company Secretary/Board. The same principle shall be followed for posting on promotion while submitting the proposal to the committee.
8. No officer or employee shall be deployed in shift duties exceeding a period of three years during his entire service, to the extent possible.
9. Officers and employees having completed their posting in tribal/ hard areas as defined by the State Government, unless they belong to that area, shall never be posted again in these areas.
10. Perpetual audit of consumer account shall be co-terminus with the billing in respect of all revenue intensive sub-divisions and the auditors for these shall be rotated every two years.
11. General transfer shall be ordered once in April every year.
12. Officers and employees should be encouraged to go on deputation to other organizations.
13. Persons with post graduation and specialized training in a particular field, should as far as possible be posted in their sphere of training/ specialization.

Where persons are working on specialized jobs and it is not in the interest of organization to shift them frequently, such proposals with full justification should be brought to the committee.

14. Outside interference in regard to transfers and postings shall attract disciplinary proceedings.
15. All class-IV posts shall be declared as circle level cadre and their postings and transfers restricted accordingly.

Annexure 9 C

Duties of Field Engineers under Operation

S. No	Description of Duties	Average Monthly Hour required to carry out duties	
		Rural Charges	Urban Charges
1	Attendance on Ministers & VIPs	24	10
2	Liaison with Municipal Committees and local bodies	14	10
3	Meetings with general Administration	10	5
4	Meetings in Higher Offices	20	10
5	Attendance on National Events	2	1
6	Petty purchases	10	5
7	Imprest accounts	15	10
8	Control over expenditure	15	10
9	Verification of T&P	20	10
10	Office Security Supervision	1	1
11	Security of stores	15	15
12	Security of cash	10	10
13	Returns & log book	10	10
14	Audit Reports, Inspection reports, store verification reports	30	30
15	Verification of suppliers bill	10	7
16	Surveying	10	2
17	Completion reports and closing of estimates	20	20
18	Maintenance & repair of vehicles	60	20
19	Sub Divisional store supervision	20	15
20	Store Material Security	10	5
21	Store verification	20	15
22	Store Collection	20	15
23	Handling of material	20	20
24	Receipt of materials	20	20
25	Wharfage and demurrage	10	5
26	Inspection of materials	30	20
27	Issues of store	15	10
28	Sales Accounts	10	5
29	Defalcations & Shortages	10	5
30	Planning of materials	20	20
31	Disposal of stores & T&P	20	20
32	Inspection of sub-office	20	10

33	Reservation and entertainment and attendance on inspecting officers appraisal and monitoring parties	10	10
34	Permanent disconnection	1	1
35	Removal of service lines	3	3
36	Bill distribution	15	10
37	Issuance of muster-rolls	3	3
38	Checking of staff on M/Rolls	30	20
39	Augmentations	10	5
40	Switching	2	1
41	Operation of system	15	10
42	Liaison with other divisions or source points	30	10
43	Maintenance of street lighting	30	10
44	Patrolling of lines	30	20
45	Preparation and execution of R&M estimates	60	30
46	Notices for shutdowns	10	5
47	Programming of shutdowns	10	5
48	Breakdowns	15	10
49	Permit to work and cancellation	1	1
50	Monitoring system parameters	4	2
51	Enforcement of peak load restriction	5	3
52	Enforcement of power cut	5	3
53	Inspection of system	25	15
54	Maintenance of transformers	20	20
55	Maintenance of O.C.Bs	20	20
56	Tree Cutting	15	10
57	Maintenance and replacement of poles	30	20
58	Maintenance and replacement of service lines	10	5
59	Liaison with M&T for relay testing and protection	10	5
60	Fuse replacement orders	5	3
61	Operation and maintenance	5	5
62	Damaged transformers & Investigation	5	5
63	Theft of material from already erected works	1	1
64	Safety gadgets, issuance and upkeep	2	2
65	Issuance of Job Orders/Work Orders	3	2
66	Checking of staff on Job Orders/Work Orders	30	20
67	Designs	10	5
68	Estimation	20	10
69	Recruitment of casual staff	10	5
70	Construction of works	40	30
71	Commissioning & testing of works	60	30
72	Material at site accounts.	30	20
73	PTCC clearance	1	1
74	Railway crossing and forest clearance	1	1

75	Receipt and scrutiny of application for supply	20	15
76	Consultation to prospective consumers	10	5
77	Site visits following consumer’s complaints	20	15
78	Service line register scrutiny thereof	20	15
79	Cancellation of applications	10	10
80	Meter reading schedules	5	5
81	Supervision of meter reading	10	10
82	Large power meter readings	10	5
83	Sealing including MDI’s	10	5
84	Meter inspections	20	10
85	Periodical testing of meters	15	10
86	Meter movement registers.	15	15
87	Follow-up action on meter inspection reports	15	10
88	Installation inspections site visits	10	10
89	Periodical inspection of installation	30	20
90	Defective installation notices	15	10
91	Demand Notice	15	10
92	Service Connection Orders	15	15
93	Summary Job Orders	15	10
94	Test reports	10	5
95	Meter connection large power	5	1
96	Disconnection orders on request on DI and non payment	2	1
97	Reconnection orders	30	20
98	Allocation of Account Nos.	1	1
99	Removal of idle meters	1	1
100	Meter change orders	13	8
101	Meter test orders	5	3
102	Meter test reports	10	5
103	Defective and dead stop meters	10	5
104	Administration of minimum consumption guarantees	7	5
105	Meeting consumers and visitors	30	20
106	Telephone calls from consumers	30	20
107	Theft of energy and court cases	5	4
108	100% check of staff meters	10	5
109	Verification of connected load of large power connections	10	7
110	Power factor measurement and notices	10	7
111	Seniority list of pending applications	10	5
112	Liaison with M&T department	30	20
113	Consumer services	40	20
114	Correspondence with consumers	30	20
115	Inspections of Electrical Inspectors	20	20
116	Data for rural electrification scheme	20	20
117	Data for improvement schemes	20	20

118	Accidents and accident investigation reporting	25	15
119	Complaints of low voltage	10	5
120	Complaints of interruption of supply	10	7
121	Complaints shock and leakage	10	7
122	Budget estimates	20	10
123	Overhauling of consumers accounts	5	3
124	Administration of minimum consumption guarantees	7	7
125	100% check of large power bills	3	1
126	Simple check of other bills	30	20
127	Checking revenue ledgers	10	10
128	Checking and follow up variation registers	10	10
129	Deposits and refunds	10	10
130	Credit ratings	10	10
131	Cash collection & signing receipts over Rs. 100/-	10	7
132	Consumer cash receipt book	30	30
133	Cash Book	30	30
134	Cash Chest	10	10
135	Counting of cash	10	5
136	Banking	2	1
137	Remittance to Bank and pay-in-slips	2	1
138	Payment of staff	10	5
139	Bad Debts	10	5
140	Write off of bad debts	1	1
141	Control over expenditures	15	10
142	Monthly accounts	30	20
143	Audit report inspection reports and store verification reports	30	20
144	Preparation of and checking of pay bills of staff	10	7
145	Completion reports and closing of estimates	20	20
146	Closing data for RE scheme	2	1
147	Monitoring report of works	2	1
148	Transfers	10	5
149	Promotions	15	15
150	Discipline and Punishment	10	10
151	Training of apprentice Engineers/Lineman	1	1
152	Correspondence with higher offices	30	30
153	Personal matters & claim of staff	15	15
154	Sports, Cultural & Welfare activities	7	10
155	Inauguration	7	2
156	Service books and increments	15	15
157	Office supervision	3	3
158	Office inspection	2	2
159	Furniture and Fitting, office T&P and office machines	1	1
160	Diary and Dispatch	5	5

161	Postage and Stamps	5	5
162	Stationary and printing	10	10
163	Maintenance of Board buildings	10	10
164	Purchase of contingencies	5	5
165	Incoming mail	10	10
	Total	2383	1652

Total Number of Working Days per Month = 22 Days

Time Required per day in Hours:

- For Rural Charges = 2383/22 = 108.32
- For Urban Charges = 1652/22 = 75.1