Second Annual Performance Review Order For 3rd MYT Control Period (FY15-FY19)

&

Determination of Tariff for FY17

&

True-up of FY13 and FY14 of 2nd MYT Control Period

for

Himachal Pradesh State Electricity Board Limited (HPSEBL)

Himachal Pradesh Electricity Regulatory Commission

May 25, 2016

BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION AT SHIMLA

CASE NO: 130/2015

CORAM

Sh. S.K.B.S. NEGI

IN THE MATTER OF:

Approval of the Aggregate Revenue Requirement (ARR) for FY17 and the Second Annual Performance Review (APR) of the Third MYT Order for the Control Period (FY15-FY19) under sections 62, 64 and 86 of the Electricity Act, 2003

AND

IN THE MATTER OF:

Himachal Pradesh State Electricity Board Limited

… APPLICANT

The Himachal Pradesh State Electricity Board Limited (hereinafter called the 'HPSEBL') has filed a petition with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as 'the Commission' or 'HPERC') for Second Annual Performance Review (APR) of the Third MYT Control Period (FY15 - FY19) and approval of Aggregate Revenue Requirement (ARR) and determination of Wheeling and Retail Supply Tariff for FY17 under Sections 62, 64 and 86 of the Electricity Act, 2003 (hereinafter referred to as "the Act"), read with the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 (hereinafter referred to as "The Regulations, 2011"). The HPSEBL has also filed Applications for the True-Up of uncontrollable parameters of FY14 and True Up of controllable parameters of 2nd MYT Control Period (FY12 – FY14).

The Commission having heard the applicant, interveners, consumers and consumer representatives of various consumer groups on February 25, 2016 at Shimla and having had formal interactions with the officers of the HPSEBL and having considered the documents available on record, herewith accepts the applications with modifications, conditions and directions specified in the following Tariff Order.

The Commission has determined the ARR of the distribution business of HPSEBL for FY17 under Third MYT Control Period (FY15-FY19) and approved the Wheeling and Retail Supply Tariffs for FY17 in accordance with the guidelines laid down in Section 61 of the Electricity Act, 2003, the National Electricity Policy, the National Tariff Policy and the regulations framed by the Commission that stipulate that the Wheeling and Retail Supply Tariff shall be decided every year taking into account adjustments on account of allowed variations in uncontrollable parameters.

The Commission, in exercise of the powers vested in it under Section 62 of the Electricity Act, 2003, orders that the approved Tariffs together with "Schedule of General and Service Charges" shall come into force w.e.f. 1st April, 2016.

The tariff determined by the Commission shall, within the period specified by it, be subject to compliance of the directions-cum-orders to the satisfaction of the Commission and non-compliance shall lead to such amendment, revocation, variation and alteration of the tariff as may be ordered by the Commission.

In terms of sub-regulation (6) of Regulation 3 of the Regulations, 2011, the Wheeling and Retail Supply Tariff shall, unless amended or revoked, continue to be in force up to March 31, 2017. In the event of failure on the part of the licensee to file application for true-up for FY15 and approval of Wheeling and Retail Supply Tariff for the ensuing financial year, in terms of Regulation 37 of the Regulations, 2011 on or before November 30, 2016, the tariff determined by the Commission shall cease to operate after March 31, 2017, unless allowed to be continued for further period with such variations or modifications as may be ordered by the Commission.

In terms of sub-regulation (5) of Regulation 42 of the Regulations, 2011, the consequential orders which the Commission may issue to give effect to the subsidy that the State Government may provide, shall not be construed as amendment of the notified tariff. The licensee shall, however, make appropriate adjustments in the bills to be raised on consumers for the subsidy amount in the manner as the Commission may direct.

The Commission further directs the licensee to publish the tariff in two leading newspapers, one in Hindi and the other in English, having wide circulation in the State within 7 days of the issue of the Tariff Order. The publication shall include a general description of the tariff changes and its effect on the various classes of consumers.

The HPSEBL is directed to make available the copies of the Tariff Order to all concerned officers up to AE level, and sub-divisions within two weeks of issue of this Order. The HPSEBL may file clarificatory petition in case of any doubt in the provisions of the Tariff Order, within 30 days of issue of the Tariff Order.

Shimla **Sd/-**

Dated: May 25, 2016 **(S.K.B.S. Negi)**

Chairman

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1 Introduction

Background

1.1 Himachal Pradesh Electricity Regulatory Commission

1.1.1 The Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as 'HPERC' or 'the Commission') constituted under the Electricity Regulatory Commission Act, 1998 came into being in December 2000 and started functioning with effect from 6th January, 2001. After the enactment of the Electricity Act, 2003 on 26th May, 2003, the HPERC has been functioning as statutory body with a quasi-judicial and legislative role under Electricity Act, 2003.

Functions of the Commission

1.1.2 As per Section 86 of the Electricity Act, 2003, 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 co-generation 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 licence;

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 Indian Electricity Grid Code specified with regard to grid standards;

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; and

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

1.1.3 The State Commission shall advise the State Government on all or any of the following matters, namely

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

b) promotion of investment in electricity industry;

c) reorganization and restructuring of electricity industry in the State;

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

1.2 History of HPSEBL

1.2.1 Electricity supply at the time of formation of the State in 1948 was available only in the capital of the erstwhile princely states and the connected load at the time was less than 500 kW. First electrical division was formed in August 1953 under the Public Works Department and subsequently a Department of Multi-Purpose Projects and Power was formed in April 1964 after realizing the need for exploiting the substantial hydel potential available in the river basins.

1.2.2 Himachal Pradesh State Electricity Board was constituted in accordance with the provisions of Electricity Supply Act (1948) in the year 1971. Thereafter, all functions of the Department of Multi-Purpose Projects and Power such as generation, execution of hydroelectric projects except functions of flood control and minor irrigation were transferred to the Board.

1.2.3 In accordance with provisions of the Act, the functions, assets, properties, rights, liabilities, obligations, proceedings and personnel of Himachal Pradesh State Electricity Board (HPSEB) were vested with the Government of Himachal Pradesh vide Notification No. MPP-A(3)-1/2001-IV dated 15th June, 2009. These functions, assets, properties, rights etc earlier vested with the Government of Himachal Pradesh were re-vested into corporate entities namely Himachal Pradesh State Electricity Board Limited (HPSEBL) and Himachal Pradesh Power Transmission Corporation Limited (HPPTCL) vide the 'Himachal Pradesh Power Sector Reforms Transfer Scheme in accordance with the provisions of the Act and were notified vide No. MPP-A(3)-1/2001-IV, dated 10th June, 2010. The HPSEBL, thus, came into being with effect from the date of re-vesting i.e. 10th of June, 2010. In the said transfer scheme the functions of generation, distribution and trading of electricity have been entrusted with the HPSEBL.

1.2.4 The Himachal Pradesh State Electricity Board Limited (hereinafter referred to as 'HPSEBL' or 'Licensee' or 'the Petitioner') is a deemed licensee under the first proviso to Section 14 of the Electricity Act, 2003 (hereinafter referred to as 'the Act') for distribution and supply of electricity in the State of Himachal Pradesh.

1.3 Overview of HPSEBL

1.3.1 The HPSEBL is a vertically integrated utility and is entrusted with the functions of generation, distribution and trading of power in the State of Himachal Pradesh. The HPSEBL is responsible for the development (planning, designing, and construction), operation and maintenance of power distribution system in Himachal Pradesh. Investigation & exploitation of hydro potential of the State either through State Sector or through Central, Joint and Private Sectors is also entrusted with the HPSEBL. The HPSEBL has share of power in Central Sector stations while it also imports power from neighbouring states.

1.3.2 Operation and maintenance of the distribution system in the HPSEBL is carried out by its Operation Wing, which has three zones - North, Central and South, each being headed by a Chief Engineer. There are 12 Operation Circles under all the above Operation Wings. The geographical area of the Circles is not strictly as per the territorial jurisdiction of districts.

1.3.3 The total installed capacity of generation of the HPSEBL is 481 MW and total line length (HT & LT) is approx 96300 km. Despite extreme geographical terrain and climate, with the population spread over far- flung and scattered areas, the State has achieved 100 percent electrification of towns and villages in 1988.

1.4 Multi Year Tariff Framework and Filing of Second APR of 3rd MYT and Tariff Petition for FY17

1.4.1 The Commission has adopted Multi Year Tariff (MYT) principles for determination of tariffs, in line with the provision of Section 61 of the Act. The MYT framework is designed to provide predictability and reduce regulatory risk. This can be achieved by approval of a detailed capital investment plan for the Petitioner, considering the expected network expansion and load growth during the Control Period. The longer time span enables the Petitioner to propose its investment plan with details on the possible sources of financing and the corresponding capitalization schedule for each investment.

1.4.2 The HPERC notified the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2007 and subsequently HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 were notified. The Commission carried out the amendments in the MYT regulations of 2011 during the month of November, 2013 to incorporate the need based changes keeping in view the experience gained by the commission during last two control periods, Model Tariff Regulations issued by the Forum of Regulators, recommendations of the Forum of Regulators and various progressive measures adopted by other Electricity Regulatory Commissions.

1.4.3 The Commission had adopted three year control periods during the first and the second MYT control periods. Since the Commission had gained sufficient experience in this regard, it was considered appropriate to move towards a five-year Control Period as per the recommendations in the National Tariff Policy. Accordingly the Commission vide notification dated 1st November 2013, in exercise of the powers conferred by Clause (9) of Regulation 2 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011, fixed the period of five years starting from 1 April 2014 as the third multi-year Control Period.

1.4.4 In accordance with the MYT regulations, the Commission issued 3rd MYT Order for distribution business of HPSEBL on 12th June, 2015. Subsequently, the Commission issued the First Annual Performance Review Order under the Third Control Period for the distribution business of HPSEBL on 10th April 2016.

1.4.5 The HPSEBL has filed petition with the HPERC for Second Annual Performance Review (APR) of the Third MYT Control Period (FY15 - FY19) and approval of Aggregate Revenue Requirement (ARR) and determination of Wheeling and Retail Supply Tariff for FY17 under Sections 62, 64 and 86 of the Electricity Act, 2003, read with the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011. Also, HPSEBL subsequently submitted truing-up of uncontrollable parameters of FY14 and truing-up of controllable parameters for the second Control Period i.e. FY12-FY14.

1.4.6 This is the second Annual Performance Review Order under the 3rd MYT Control Period. In this Order, Commission has undertaken determination of revised Aggregate Revenue Requirement of HPSEBL for FY17 under the third Multi Year Tariff (MYT) Control Period based on actual values of FY15 and approval of Wheeling and the Retail Supply Tariffs for FY17 based on the updated information submitted by HPSEBL. Also, final truing-up of uncontrollable parameters for FY13 and FY14 has also been undertaken based on the audited accounts of HPSEBL.

1.4.7 As per the MYT Regulations, Wheeling and Retail Supply Tariff shall be decided every year taking into account the adjustment on account of allowed variations in uncontrollable parameters based on the Annual Performance Review petition filed by the Licensee. Further, revenue gap on account of truing-up of previous years i.e. FY13 and FY14 has also been considered for recovery along with the revised ARR for FY17.

1.4.8 The Commission has reviewed the operational and financial performance of HPSEBL and has finalised this Order based on the review and analysis of past records, information submissions, necessary clarifications submitted by the licensee and views expressed by the stakeholders.

1.5 Admission of Petition and Interaction with the Petitioner

1.5.1 The HPSEBL filed the application for Second Annual Performance Review (APR) of the Third MYT Control Period (FY15-FY19) along with approval of ARR and determination of Wheeling and Retail Supply Tariff for FY16, with the Commission on 30th November, 2015. On various observations/ deficiencies pointed out by Commission, HPSEBL submitted further details subsequently. Subsequently, the petitioner also submitted true-up petition for second Control Period FY12-14 for truing-up of uncontrollable parameters of FY14 and controllable parameters for FY12-FY14 vide letter dated 4th January 2016.

1.5.2 The Commission admitted the petition submitted by HPSEBL vide its interim order dated 06th January, 2016. M/s Deloitte Touche Tohmatsu India Private Limited has been appointed as Consultant to assist the Commission in the assessment of the ARR and determination of the relevant tariffs during the Third MYT Control Period.

1.5.3 There have been a series of interactions between the HPSEBL and the Commission, both written and oral, wherein the Commission sought additional information/ clarification and justifications on various issues, critical for the analysis of the petition.

1.5.4 The petitioner was asked to remove various deficiencies/ provide additional information vide following HPERC communications

(a) HPERC/MYT3APR2/HPSEBL/2015-16-2947-49 dated 18.12.2015.

(b) HPERC/MYT3APR2/HPSEBL/2015-16-3380-82 dated 22.01.2016

(c) HPERC/MYT3APR2/HPSEBL/2015-16-3495 dated 10.02.2016

(d) HPERC/MYT3APR2/HPSEBL/2015-16-3542-44 dated 12.02.2016

(e) HPERC/MYT3APR2/HPSEBL/2015-16-3751-53 dated 03.03.2016

(f) E-mail dated 20.03.2016

(g) E-mail dated 29.03.2016.

1.5.5 The queries raised by the Commission vide above mentioned letters were partially replied by HPSEBL. However, delay in submission and non-submission of the complete information remained a major bottleneck which has resulted in delay of this Tariff Order.

1.5.6 The submissions made by the Petitioner, to the clarifications/ information sought by the Commission from time to time, as detailed hereunder, have also been taken on record:

Table 1: Communication with the Petitioner

No	Submission of the Petitioner
1	Filing No 01/2016 dated 01st January,2016
2	Filing No 14/2016 dated 19th February,2016
3	Filing No 18/2016 dated 05th March,2016
4	Filing No 21/2016 dated 15th March,2016
5	Filing No 23/2016 dated 18th March,2016
6	Filing No 34/2016 dated 26th March,2016
7	Letter no. HPSEBL/CE-(Comm.)/SERC-26/2016-61 dated 2.4.2016
8	Letter no. HPSEBL/CE-(Comm.)/SERC-26/2015-147 dated 6.4.2016

Public Hearings

1.5.7 The Commission issued an interim order to the HPSEBL on 25th February, 2016 for publishing a summary of the salient features of the petition for the information of all the stakeholders. In compliance to the order, the HPSEBL published the salient features of the petition in the following newspapers:-

a. The Tribune– 18th January, 2016.

b. Amar Ujala – 18th January, 2016

c. Hindustan Times– 20th January, 2016

d. Divya Himachal – 20th January, 2016.

1.5.8 The Commission invited suggestions and objections from the public on the tariff petition in accordance with Section 64 (3) of the Act subsequent to the publication of initial disclosure by the HPSEBL. The public notice inviting objections/ suggestions was published in the following newspapers:-

a. The Tribune (Chandigarh, Jalandhar and Bhatinda Edition) – 21st January, 2016.

b. Dainik Bhaskar (All Edition) - 21st January, 2016.

1.5.9 The interested parties/stakeholders were asked to file their objections and suggestions on the petition by 11th February, 2016. The date of filing replies by HPSEBL was fixed on 18th February, 2016.

1.5.10 The Commission received objections from 4 stakeholders by the stipulated date. The HPSEBL filed its replies to the objections/ suggestions set out by various objectors vide M.A No 25/2015, a copy of which was also sent to the individual objectors. The objectors were also allowed to file rejoinder, if any, to the Commission with a copy to the Petitioner till 25th February, 2016.

1.5.11 The Commission issued a public notice informing the public about the scheduled date of public hearing. 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 hearing.

1.5.12 Public hearing on the HPSEBL's petition was held on 25th February, 2016 at the Commission's Court Room in Shimla.

1.5.13 The issues and concerns voiced by various objectors have been carefully examined by the Commission. The major issues raised by the objectors in their written submission as well as those raised during the public hearing, have been summarized in Chapter 4 of this Order.

2 Interaction with Management of HPSEBL and Compliance of Decisions

2.1 Introduction

2.1.1 The Commission is having frequent interactions on continuous basis with the management of HPSEBL to understand the constraints, viewpoint and shape the strategies and future vision of HPSEBL. During the tariff determination process, the Commission interacted with the management of HPSEBL on 01st April, 2016. The minutes of this meeting was circulated vide HPERC letter no. 117-122 dated 12-04-2016.

2.1.2 The relevant extracts of the decisions taken in this interactive session is reproduced hereinafter.

2.2 Preparation of Accounting Manual as spelled out in Himachal Pradesh Electricity Regulatory Commission (Reporting System on Power Regulatory Accounting) Regulations, 2014

2.2.1 HPSEBL informed that HPSEBL has prepared Accounting Manual as per HPERC "Reporting System on Power Regulatory Accounting" Regulations, 2014. The Policies, guidelines relating to apportionment/ treating an expense item as major and minor, capitalization, deprecation, ROE, security deposit, common liabilities and common expense/ revenue etc with the Regulatory Accounts are being decided & are under process. The Annual Accounts of the Company for FY 2014-15 are being finalized and Regulatory Accounts for FY 2015-16 shall be prepared as per format prescribed in Regulations after audit of Accounts.

2.2.2 Preparation of separate accounts for each generating station and closure of accounts of completed projects.

2.2.3 HPSEBL informed that separate accounts for each generating station for FY 2012-13 has been prepared but these accounts are not showing proper result of each generating units due to the reason that apportionment of head Office, Chief Office & Circle Offices expense i.e. O&M expenses (Employee Cost, R&M & A&G), Interest & Finance charges, Depreciation are yet to be decided. The matter in this regards is under process and after finalization of the same Generating Unit wise balance sheet of FY 2013-14 shall be prepared. The closure of accounts of all Generating Stations of the Company has been completed except for Ghanvi – II for which works closure report is being prepared by the HPSEBL and assured that needful shall be done within two months positively.

2.3 Segregation of accounts and balance sheets for different business and assets mapping and revaluation.

2.3.1 It was informed that HPSEBL at present is primarily a distribution utility doing retail as well as wheeling business but at the same time it has some generation assets and also engaged in constructing new generating stations as well. Therefore, segregation of accounts and balance sheets of these different businesses are very much essential in fixation of tariff and to have better transparency and accountability. Chief Accounts Officer, HPSEBL informed that HPSEBL has identified the following Strategic Business Units with independent accounting system on the direction of Hon'ble HPERC and is maintaining separate accounts of each segment such as: Distribution, Wheeling, Generation, Projects, Area Load Dispatch Centre etc.

2.3.2 The separate accounts Ledgers of each Strategic Business Units are being maintained and balance sheet and Profit & Loss Accounts from FY 2011-12 were prepared and shown in Audited Balance Sheet in "Notes to Accounts" as additional information. It was further informed that the needful as desired by the Commission shall be done within three months positively.

2.3.3 Regarding Asset mapping, it was informed that the assets mapping work is over and validation/revaluation for the same is being carried out and shall be finalized within 2-3 months.

2.4 Steps taken to provide 24x7 supply to consumers.

2.4.1 It was pointed out that while approving the ARR of HPSEBL, HPERC has allowed all its power procurement for supplying 24x7 power supply to the consumers of the state. But, it has been learnt through newspaper items that the power supply position in the state has been deteriorating especially in the rural areas and the quality and reliability of power is not good even in the urban areas. There have been many places where low voltage problems are being faced by the consumers of the State. HPSEBL Management was directed to improve the quality and reliability of power in the industrial areas and hard working and efficient people be posted in the industrial areas and must be ensured that there has been no vacancy left in the industrial belt. HPSEBL being now a Company must work on the Commercial principles. Good performances by the employees must be rewarded and at the same time inefficiencies/ poor performances must be discouraged by appropriate mechanism. The main reason for deteriorating electricity supply position seems to be on account of inadequate expenditure in strengthening the power network as well as lack of efficient technical manpower. The Commission in its MYT order dated 12th June, 2014 has allowed the CAPEX proposed by HPSEBL. But, the physical progress on this front seems to be lacking. Also, there is an urgent need that HPSEBL must appoint adequate and skilled technical manpower so as to achieve reliable & quality 24x7 power supply in the state.

2.4.2 It was further emphasized that HPSEBL shall simplify the procedures for procurement of material and execution of works through contracts & delegate administrative and financial powers to field officers for speedy execution of works and shall try to take umbrella approval for works on generic and normative basis and the field officers need not seek repeated approvals from management for executing these works once AA & ES for group of schemes on lump-sum basis is given.

2.5 Power Procurement Planning for FY 17 to FY 19 - Prudent, efficient and cost effective management of procurement and disposal of surplus power.

2.5.1 It was informed that for prudent, efficient and cost effective management of procurement and disposal of surplus power, HPSEBL will have to act in a professional manner keeping in view the commercial aspects in mind. Power purchase is the main cost in the ARR of HPSEBL. For purchasing power for supply within the state (including contingent surplus), HPSEBL shall follow the merit order principle. The surplus power purchased by HPSEBL is the costliest power at margin and hence should be avoided and if unavoidable due to PPA obligations, this should be disposed of in such a manner that it does not encumber the consumers of the state as this power is not required for supply within the state. HPSEBL shall try to sell this surplus power at such a rate so that it fetches at least minimum of its power purchase cost and shall take a call whether it will be prudent to pay the capacity charges for the costly thermal power in case it is not able to surrender the SOR share from these stations. To offset the effect of this, HPSEBL shall make efforts to buy cheaper RE Power and also cover the losses due to capacity charges by sale of cheaper power on higher rates.

2.5.2 HPSEBL shall work out the strategy to avoid double payment of transmission charges for long term capacity as well as short term Open Access charges for banking and interstate sales transactions of seasonal surpluses and forecast its demand of power for long term, medium term as well as short term in a scientific manner by using various available tools.

2.5.3 It was informed by HPSEBL that they are very much comfortable with regard to the power availability for fulfilling the demand of the State. Also, HPSEBL is trying its best to sell its surplus power to get the best rates. The electricity rates at the platform of Power Exchanges are on the lower side and therefore HPSEBL is selling its surplus Renewable Energy from small hydro to outside the state and is getting good rates. It was also informed by HPSEBL that they are trying their best to reallocate its share in Kol Dam HEP to other agency for a period of 5 years and also should try to surrender the SOR share of those projects where cost is high.

2.6 Restoration works of Bhaba Power House and Completion status of Uhl Hydroelectric Station with actual time lines.

2.6.1 HPSEBL informed that 1st unit of Bhaba Power House shall come on bus-bar in the first fortnight of May, 2016 and second unit is expected by the second fortnight of May, 2016. It was informed that everything has been tied up and is in place. 40-50 people are presently working in the project so as to ensure that the project is completed as per the targeted schedule.

2.6.2 Regarding Completion status of Uhl Hydroelectric Station, it was informed that the balance work of Head Race Tunnel is programmed to be completed by September, 2016. 99.09% material of electrometrical equipment has been received at site form M/s BHEL and 96% erection of electrometrical equipment has been completed. It was informed that the 1st and 2nd units shall be commissioned by 31st October, 2016.

2.7 Completion of RAPDRP, RGGVY Schemes, IT Packages and status of Financial Restructuring Plan of GoI, UDAY etc.

2.7.1 Commission reiterated that Government of India has given grant to the special states like HP under RAPDRP, RGGVY Schemes. These schemes needs to be completed on priority as it will strengthen the distribution network as well as help in electrifying the left out houses/ helmets in the state.

2.7.2 Government of India has recently launched UDAY scheme to strengthen the balance sheets of the distribution companies countrywide. Regarding implementation of this Scheme, it was informed that the Govt. of Himachal Pradesh through Power Department has been requested to convey the consent of State Govt. for participating in the Scheme during December, 2015.

2.7.3 Regarding FRP of GOI, the proposal of balance amount of Rs. 227.09 cr. (Investment in Bonds) under FRP is pending with Canara bank at their Circle Office, Chandigarh for consideration. The final outcome is awaited from the Bank.

2.7.4 **Implementation of Smart Grid Pilot Project at Kala Amb, H.P.** It was informed that HPSEBL is implementing Smart Grid Pilot at Kala Amb. The Ministry of Power, GoI is providing 50% financial assistance for the implementation of the project. As per the guidelines of MoP M/s PGCIL has been appointed as Advisor cum Consultancy services provider to HPSEBL for establishment of Smart Grid Pilot Project.

2.7.5 **Completion status of RAPDRP Scheme (Part-B)** The physical works in respect of 6 towns namely Mandi, Chamba, Una, Hamirpur, Kullu and Nahan are almost complete. The works in remaining towns is expected to be completed by December, 2016. The total expenditure incurred till date is Rs. 204 Crores approx.

2.7.6 **Completion status RGGVY Scheme.** RGGVY Scheme was sanctioned by the GoI for the 10th /11th Plan for the strengthening of electrification system under rural areas and electrification of rural households for the 12 Districts of HP for which the works of the scheme for all the 12 districts have been completed /closed, except for 33kV HT line of Pangi Block in Chamba District

2.8 Customer Care and grievances redressal

2.8.1 HPSEBL informed that a Centralized Call Center has been working at Vidyut Bhawan Complex, Shimla-171004 to facilitate the consumers to register their grievances/complaints and to provide the requested information. The Consumers can call at toll free number 18001808060 to lodge their complaints as well for any other information. The grievances/complaints/queries received through IVRS/manual or at website are being received and passed to the concerned offices for taking further action accordingly. E-Samadhan has been implemented in HPSEBL to resolve the public grievances and consumers can deposit their electricity bills online as well.

2.8.2 It was informed by HPSEBL that ERP package has been functional in its South Zone as well as at its Head Quarters at Shimla. Online billing is being carried out for consumers having load more than 100 kVA. Computerized billing is being done at most of its Electrical Sub-Divisions barring few which shall also be completed in the near future.

2.9 Distribution network strengthening status.

2.9.1 HPSEBL informed that Ministry of Power has launched Integrated Power Development Scheme (IPDS) Scheme in December, 2014. In Himachal Pradesh, 54 towns have been covered under the IPDS scheme sponsored by government of India dedicated to urban areas of HP with the broad objective of strengthening of electrification system under urban areas.

2.9.2 Further, Ministry of Power, GoI has launched another scheme called Deendayal Upadhaya Gram Jyoti Yojna (DDUGJY) in December, 2014 for the strengthening of electrification system under rural areas and electrification of rural households. Accordingly the DPRs have been prepared to electrify 35 Nos. un-electrified villages and to connect un-electrified rural households.

2.9.3 It was informed by HPSEBL that as per census of 2011 total Nos. of un-electrified villages in H.P. is 55, out of which 35 villages have been covered in the DDUGJY Scheme and remaining 20 villages are not feasible for electrification being of migratory/ seasonal habitation. Till date two No. villages have been electrified and remaining shall be electrified by December, 2016.

2.10 Status of Capital works in progress as approved in 3rd MYT order and status of Capitalization thereof.

2.10.1 HPERC in its MYT order dated 12th June, 2014 has approved a Capital Expenditure worth Rs. 2220.00 Cr. for different schemes as submitted by the HPSEBL. HPSEBL updated the status of capital works being executed.

2.11 Non transfer of mini/micro hydro plants of HIMURA to HPSEBL as agreed earlier.

2.11.1 HPSEBL informed that a committee under the Chairmanship of Chief Engineer (Generation), HPSEBL, Sunder Nagar was formulated for thorough assessment of Physical, Financial and Technical implications for transfer of Himurja's Micro Hydel Projects to Generation Wing.

2.11.2 After interaction between committee members in its 1st and 2nd meeting, the basic information of Himurja Projects proposed to be transferred to Generation Wing of HPSEBL(namely Sach (900 kW), Billing (400 kW), Lingti (400 kW), Purthi (100 kW) & Sural (100 kW) MHEP situated in tribal belt in Pangi and Lahaul & Spiti Valley was sought. Committee visited all the above mentioned projects w.e.f. 17.09.2015 to 26.09.2015 to assess the physical, technical conditions & financial implications of these projects and has submitted the detailed report based on findings. The report stands submitted to the BODs of the HPSEBL and a decision in this regards shall be taken soon.

2.11.3 HPSEBL further informed that these five projects of HIMURJA which HPSEBL is planning to takeover are of approximately 5 Crore value. And, around 6-7 crore additional funds shall be required to make these projects operational. Commission suggested to seek funding for these projects from Tribal Department as this infrastructure being created is primarily for tribal areas.

2.12 Vacancies and rationalization of certain posts/cadres.

2.12.1 HPSEBL has large number of cadres in Technical category of posts; in different wings i.e. Operations, Power houses, Sub-Stations etc. and these carry different pay scale, promotion conditions; even where eligible qualifications levels are same or similar. Hence there is a need to review all such R&P Rules to provide for equity and experience. Also certain nature of job is specific even where qualification requirements are same hence continuity of incumbent to benefit from the expertise is required.

2.12.2 HPSEBL informed that 2000 posts of Junior T/Mates and Junior Helpers are being filled up from ITI qualified candidates. It was informed that 700 posts have already been filled up and 1300 remaining shall be filled up within next 3-4 months. It was informed by HPSEBL management that the separate cadre for Sub-station/ Generation may not be possible because of the limited promotional avenues. It was also suggested that a policy be made in which it is make mandatory to serve in different offices/ areas for at least 3 years.

2.12.3 It was also informed that HPSEBL is continuously filling up the vacancies in the Board. It has recruited 35 AEs in FY15 and 19 AEs are to be recruited in this Financial Year.

2.13 Decentralization and delegation of Administrative/ Financial/ Managerial powers to the field units.

2.13.1 It was discussed that the decentralization and delegation of Administrative/ Financial/ Managerial powers to the field units are very much essential so as to have speedy achievement of progress in various works/ schemes. It was informed by HPSEBL that the DOFP has been rationalized to delegate powers to field units. Further, power to sanction loads to consumers has been increased to facilitate consumers.

2.13.2 It was informed by HPSEBL that there is a provision for the AMR (Automatic Meter Reading) consumer billing for consumers having connected load above 100 KW.

2.13.3 It was informed that the online billing is functional in 136 subdivisions and in remaining subdivisions it will be completed by 31.12.2016.

2.14 Simplification of procedures in order to bring in ease of doing business.

2.14.1 HPSEBL informed that several affidavits required taking electricity connection earlier has now been reduced to single one except for the places falling under Town and Country Planning (TCP) as the same has been mandated in the TCP Act of HP.

2.14.2 It was suggested the issue may be taken up with the TCP to amend this provision of compulsory taking NOC from TCP department before issuance of electricity connection.

2.14.3 The current status of AT&C losses of HPSEBL, metering of feeders and Transformers and Energy Audit being carried out by HPSEBL was updated/ informed.

2.14.4 It was agreed that there is an urgent need of introducing innovative incentive/ disincentive schemes for field staff linked with reduction of losses. Field staff needs to be motivated so as to achieve this objective of reducing the losses.

2.15 Ways and means to increase revenue and reduce losses.

2.15.1 It was pointed out that HPSEBL needs to think to devise new ways and means to increase its revenue and reduce the losses. It needs to act as a Commercial entity. The HPSEBL management informed that this is being made possible by regular energy audits at sub division level, strict adherence to billing cycle, replacement of dead stop meters/ installation of electronic meters. The reduction in T&D losses are being monitored regularly at the level of Management and Circle wise targets are being fixed regularly. Reasons of Circle-wise losses are being analyzed and separate strategy has been finalized for each Circle to reduce the losses.

2.15.2 Collection efficiency has been increased from 87% to 97% which has reduced AT&C Losses to 14.9%, one of the Lowest in the country. Electromechanical Meters are being replaced by Electronic Meters on a large scale. Energy audit is being conducted at different level including Head Office. Feeder wise and DTR wise T&D losses are being worked out. Feeders and DTRs having high losses are being identified and reasons are being investigated along with remedial measures.

2.15.3 Short term power purchases are being progressively eliminated and winter power deficit is being met through banking.

2.15.4 Limited direct recruitments (except field technical staff/ need based) on contract basis at lower level are being made by the Company in different categories despite retirement of around 1200 employees every year. Shortage of staff in vital operations is being met through outsourcing. Maintenance gangs, Computer operators, Sweepers and Drivers are being used on outsourcing basis by the Company. Further efforts are on to rationalize the availability of staff within the overall available manpower, though redeployment of excess.

2.16 Organizational structure reforms in HPSEBL

2.16.1 It was conveyed that consequent upon reorganization of erstwhile HPSEB, distribution function is assigned to HPSEBL, along with generation, Project and S&I wings as other business of the Distribution Company. Since, construction of new projects, transmission and load dispatch functions are no longer with HPSEBL, the Head Quarter's functions require restructuring to give renewed focus and priority. Hence HPSEBL should look at delegation including decentralization of staff to field function, set up new functional centre for power planning, forecasting and procurement with professional functions outsourced or professionals hired, set up trading cell to make best money from surplus power, Project finance and centralized procurements including monitoring and availing various central funds and incentives, monitoring of other businesses for improving revenues.

2.17 Incentive grants on different schemes of GoI and GoHP – Status thereof.

2.17.1 HPSEBL is getting incentive grants from GoI as well as from GoHP for executing different schemes. HPSEBL management submitted the following status regarding incentive grants received form GOI and GoHP during FY 2014-15 and FY 2015-16 (Upto 2/2016)

Year	Nature of Grant	Amount
FY 2014-15	Grants against natural calamity for loss on accounts of flood cyclone fire etc. from HP through DC, Shimla	7.00 cr
FY 2015-16	Grant for Smart Grid Pilot Project through PFC through GOI	2.43 cr
	MNRE incentive/ grants through REC for preparation of DPR including for 12 No SHEP in HP	0.32 Cr

2.17.2 Further scheme wise grant received from GoI is as given below:

Sr. No.	Name of scheme	Total Scheme cost	GoI Grant (Rs. In Cr.)	GoI Grant received till date (Rs. in Cr.)
1	RGGVY (10th & 11th Plan)	317.25	276.08	276.08
2	R_APDRP (Part-B)	338.97	305.07*	122.964
3	DDUGJY	158.33	135.25	13.46
4	IPDS	110.60	94.01	Nil

**Initially loan and after that shall be converted into grant after successfully achieving the pre-determined milestones.*

2.18 Solar Power Generation in the State- Issues of net metering etc.

2.18.1 It was informed to HPSEBL that HP Government has issued Solar Policy for the state of HP. HPERC has also issued the relevant regulations in this regard. HPSEBL has to introduce the net metering for feeding solar power in its network.

2.18.2 HPSEBL informed that currently they are involved only in one project of 2.5MW at Kaza in solar related field. The project is proposed to be of 2.5 MW capacity with 2MW solar PV and 0.5 MW wind turbines. The project will be executed by the JVC of HPSEBL & Solar Energy Corporation of India (SECI) with 50:50 share holdings. In principle approval for 1000MW solar park in Spiti Valley has already been given by MNRE. The unavailability of power evacuation system for the project is of highest concern for its execution.

3 Summary of the True-up Petition for FY14

3.1 Sales Projections

3.1.1 The Petitioner has submitted that the actual Category-wise energy sales for FY14 as detailed in the table below

Table 2: Energy Sales for FY14 (MU)

Category	APR	Petition
Domestic Supply	713.3	703.87
Non-Domestic Non Commercial	68.1	72.17
Commercial Supply	266.4	256.48
Small and Medium Industrial Power	115.5	126.86
Large Industrial Power Supply	2604.9	2434.83
Water Pumping Supply	272	335.42
Street Lighting Supply	7.3	5.64
Bulk Supply	100.9	104.02
Temporary Metered Supply	19.5	16.29
Total	**4167.9**	**4055.58**

3.2 Energy Balance

3.2.1 HPSEBL has submitted that it has achieved a loss level of 12.36% in FY14. The Petitioner has submitted that the actual T&D loss for FY14 is higher than the approved loss and the Energy Balance is shown in table below:

Table 3: Energy Balance for FY14 (MU)

Particulars	APR Approved	Petition
Sales	8007.66	7535.83
Losses (MU)	1092.00	1063.15
Demand at Discom Periphery	**9099.66**	**8598.98**
Power availability from Outside State	6406.50	6459.92
Banking Purchase	1023.72	1221.68

Particulars	APR Approved	Petition
PGCIL Losses	209.59	227.75
Net Power availability from Outside State	**7220.63**	**7453.85**
Power Purchase Within State	3451.24	3144.72
Total Power availability at State Periphery	**10671.87**	**10598.57**
Sale of Power Outside State	1572.41	1999.59
Net Power Available for Sale within State	**9099.46**	**8598.98**
Actual T&D Loss	**12.00%**	**12.36%**

3.3 Power Purchase Cost

Purchase from HPSEBL's own stations

3.3.1 HPSEBL has submitted that the actual availability of power from owned generating stations for FY14 was only 1844.49 MUs as compared to the approved 2067.37 MUs.

3.3.2 The actual power purchase quantum and cost from own generating stations submitted by the petitioner is provided in the table below:

Table 4: HPSEBL Submission- Power Purchase from Own Generating Stations in FY14

Particulars	Quantum (MU)	Cost (Rs. Cr.)	Per unit Rate (Rs. kWh)
Bhaba	534.17	32.02	0.60
Bassi	227.85	28.35	1.24
Giri	231.15	19.40	0.84
Andhra	77.66	8.46	1.09
Ghanvi	66.90	10.75	1.61
Baner	37.44	10.78	2.88
Gaj	40.91	12.21	2.98
Binwa	19.25	5.26	2.73
Thirot	13.85	5.53	3.99
Gamma	-0.01	2.26	
Holt	8.29	2.81	3.39
Larji	525.84	210.36	4.00
Khauli	39.84	12.32	3.09
Nogli	5.92	2.58	4.36
Chaba	4.78	1.82	3.81
Rukti	0.56	0.59	10.54
Rongtong	0.65	1.17	18.00
Chamba	1.49	0.41	2.75
Killar	0.39	0.97	24.87
Sal-II	6.65	1.11	1.67

Particulars	Quantum (MU)	Cost (Rs. Cr.)	Per unit Rate (Rs. kWh)
Bhabha Augmentation	0.91	20.29	222.97
Uhl III	0.00	0.00	0.00
Ghanvi II	0.00	0.00	0.00
Total	**1844.49**	**389.45**	**2.11**

3.3.3 The actual power purchase quantum and cost from other generating stations submitted by the petitioner is provided in the table below:

Table 5: HPSEBL Submission- Power Purchase from Other than Own Sources, FY14

Particulars	Quantum (MU)	Cost (Rs. Cr.)	Per unit Rate (Rs. kWh)
NTPC			
Anta GPP	82.77	34.35	4.15
Auriya GPP	58.37	30.37	5.20
Dadri GPP	105.22	47.42	4.51
Unchahar-1	44.66	17.28	3.87
Unchahar-II	86.43	33.01	3.82
Unchahar-111	51.07	22.43	4.39
Rihand-1 STPS	244.85	56.57	2.31
Rihand-2 STPS	230.60	55.17	2.39
Singrauli STPS	49.69	8.39	1.69
Kahelgaon - II	143.19	58.04	4.05
Dadri 2	22.67	11.60	5.12
Jhajjar	36.57	19.95	5.46
NPCIL			
NAPS	94.42	23.50	2.49
RAPS	155.75	53.50	3.43
NHPC			
Salal	32.02	5.71	1.78
Tanakpur	12.12	3.06	2.52
Chamera I	66.19	11.55	1.74
Chamera II	60.93	18.97	3.11
Uri	68.10	15.38	2.26
Dhauliganga	13.58	3.82	2.81
Dulhasti	14.01	9.56	6.82
Sewa	4.11	2.19	5.33
THDC			
Tehri	127.22	51.95	4.08
Koteshwar	43.59	14.39	3.30

Particulars	Quantum (MU)	Cost (Rs. Cr.)	Per unit Rate (Rs. kWh)
BBMB			
BBMB Old	43.80	3.77	0.86
BBMB New	395.50	18.72	0.47
Dehar	178.65	13.44	0.75
Pong	51.89	2.13	0.41
Shared Stations			
Shanan	5.26	0.21	0.40
Shanan Ext	45.00	0.93	0.21
Yamuna	481.64	33.62	0.70
Khara	56.86	2.10	0.37
SJVNL			
Nathpa Jhakri (SOR)	0.00	0.00	0.00
NJPC Equity Share	390.66	155.22	3.97
IPPs			
Baspa - II	1050.06	321.01	3.06
Baspa-II Secondary Energy	120.95	0.00	0.00
Patikari	0.00	0.00	0.00
Private SHPs			
SHPs - Above 5 MW	248.36	0.00	0.00
SHPs - Up to 5 MW	913.53	307.70	3.37
SHPs - Up to 25 MW (REC Tariff)	0.00	0.00	0.00
Free Power			
Baira Siul	29.59	8.63	2.92
Chamera-1	84.93	24.77	2.92
Chamera-II	86.35	25.20	2.92
Shanan Share	2.63	0.77	2.93
Ranjeet Sagar Dam Share	67.84	19.80	2.92
Malana	57.65	16.83	2.92
Baspa II	159.68	46.62	2.92
Nathpa Jhakri (SOR)	688.56	200.98	2.92
Ghanvi	9.56	2.79	2.92
Baner	5.11	1.49	2.92
Gaj	5.58	1.63	2.92
Larji	71.71	20.94	2.92
Khauli	5.45	1.59	2.92
Allian Duhangan	9.31	2.71	2.91
Budhil	3.47	1.01	2.91

Particulars	Quantum (MU)	Cost (Rs. Cr.)	Per unit Rate (Rs. kWh)
Chamera-III	26.31	7.68	2.92
Karcham Wangtoo	80.17	23.37	2.92
Malang II	3.93	1.15	2.93
Private Micros	37.76	10.99	2.91
New Projects			
Rihand-3 Units-1,2	114.98	39.23	3.41
Chamera III	35.86	15.96	4.45
Parbatti III	0.28	0.20	7.14
URI II	1.39	0.53	3.81
Unallocated Power	0.00	0.00	0.00
Banking purchase	0.00	0.00	0.00
Less: Return of Banking Power	0.00	0.00	0.00
Singrauli bundled Solar	0.00	0.00	0.00
Bilateral	0.00	0.00	0.00
IEX	113.32	33.40	2.95
UI	225.29	24.96	1.11
Grand Total	**9604.77**	**2397.47**	**2.50**
Other Costs			
Prior Period Expense 2012-13		29.68	
Other prior Expenses		6.66	
POP from PGCIL		263.87	
UI Payable by Malana and GoHP		12.57	
Wheeling charges payable to HPTCL		11.92	
POP relates to prior period		-0.10	
Power purchased in previous years		90.60	
Reactive Energy from various CPUs/SEB		3.53	
ULDC Charges (Including POSCO)		1.12	
System/ Marketing operation charges Power System (op) Ltd.		1.48	
ST Open Access - PTC		52.17	
Sub total		**473.50**	
Total	**9604.77**	**2870.97**	**2.99**

3.4 Renewable Purchase Obligation

3.4.1 The Petitioner has submitted the following compliance to the renewable power purchase obligation for FY14:

Table 6: Details of RPPO Compliance (non- solar) by HPSEBL

Sl. No	Particulars	Quantum
1	Energy Sales	7535.83
2	T&D Loss	12.36%
3	Total energy procured for supply	8598.99
4	RPO (%)	10%
5	RPO (MU)	859.90
6	Total R.E. purchased on tariff u/s 62 & 64	
a	HPSEBL 's own generation from 25 MW & below projects	328.75
b	Power Purchase from IPP (25 MW & below)	1008.89
c	Free power of GoHP from IPP less than 25 MW	37.66
d	Free power of GoHP from own generation	25.70
	Total R.E. purchased	1400.99
8	R.E. sold outside its area of supply	0
9	Total R.E. purchased for supply	1400.99
10	**Total surplus RE eligible for REC**	**541.09**

Table 7: Details of RPPO Compliance (solar) by HPSEBL

Sl. No	Particulars	Quantum
1	Energy Sales	7535.83
2	T&D Loss	12.36%
3	Total energy procured for supply within the state	**8598.99**
4	Renewable Purchase obligation (%)- Solar	0.25%
5	Renewable Purchase Obligation (MUs)	21.50
6	Total Solar purchased on tariff u/s 62 & 64	3.00
7	**Total Surplus (+)/ Deficit (-)**	**-18.50**

3.4.2 HPSEBL has submitted that it has been able to meet its RPPO-solar shortfall for FY12 and FY13 from the surplus solar power projected to be available in FY16. Further the petitioner also submits that the Commission has already levied a penalty of Rs. 17.23 Crores for not being able to meet the RPPO for FY14 vide its order dated 10.11.2014.

3.5 Employee Cost

3.5.1 The employee cost submitted by HPSEBL for the FY14 is summarized in the table below.

Table 8: HPSEBL Submission- Employee Cost for FY14 (Rs. Cr.)

Particulars	Distribution	Generation	Total
Salaries & Allowances			
Salaries (Basic) + Dearness Pay	292.76	31.69	324.45
Merger of DA with Basic (Proposed)	0.00	0.00	0.00
Grade pay	60.11	6.60	66.71
DA	296.51	30.25	326.76
Employee Arrears - 5th Pay Commission	0.00	0.00	0.00
Other Allowances	31.64	2.61	34.25
Overtime	3.32	1.71	5.03
Bonus	0.19	0.07	0.26
Salaries - Total	**684.53**	**72.93**	**757.46**
Other Staff Cost			
Medical Expense Reimbursement	8.96	1.02	9.98
Fee & Honorarium	0.07	0.00	0.07
Earned Leave Encashment	69.28	4.98	74.26
Salary/Wages of Outsouced/Contractor.	5.19	0.07	5.26
Leave Salary Contribution	0.00	0.00	0.00
Payment under Workmen's Compensation	1.31	0.02	1.33
LTC	0.11	0.02	0.13
Staff Welfare Expenses/ employee contribution towards CPS	0.71	0.00	0.71
Other Staff Cost - Total	**85.63**	**6.11**	**91.74**
Terminal Benefits			
Provident Fund Contribution	0.00	0.00	0.00
Pension - Base	318.97	0.00	318.97
Pension - 5th Pay Commission Arrears	0.00	0.00	0.00
Gratuity	124.57	0.18	124.75
Any other Items (MRC to pensioners, benovelant fund and DLI)	9.50	0.55	10.05
Terminal Benefits - Total	**453.04**	**0.73**	**453.77**
Gross Employee Cost	**1223.20**	**79.77**	**1302.97**
Less : Employee Cost Capitalisation	45.65	1.87	47.52
Less : Employee Attrition Impact	0.00	0.00	0.00
Add: Prior period expenses	9.69	1.30	10.99
Net Employee Cost	**1187.24**	**79.20**	**1266.44**

3.6 Administrative and General Expenses

3.6.1 The Administrative and General Expenses submitted by HPSEBL for the FY14 is summarized in the table below.

Table 9: HPSEBL Submission- Administrative and General Expenses for FY14 (Rs. Cr.)

Particulars	Distribution	Generation	Total
Administration Charges			
Rent, Rates & Taxes	1.33	0.02	1.35
Telephone, Postage & Telegrams	2.48	0.21	2.69
Consultancy Charges	1.16	0.09	1.25
Conveyance & Travel	16.31	1.14	17.45
Regulatory Expenses	0.98	0.00	0.98
Income Tax Updating Charges	0.05	0.01	0.06
Consumer Redressal Forum	0.66	0.00	0.66
Insurance	0.02	0.00	0.02
Purchase Related Expenses & Other Charges	1.21	0.00	1.21
IT and other Initiatives	0.00	0.00	0.00
Administration Charges - Total	**24.20**	**1.47**	**25.67**
Other Charges			
Fees & Subscriptions, Books & Periodicals	0.18	0.01	0.19
Printing & Stationery	1.68	0.14	1.82
Advertisement Expenses	0.42	0.01	0.43
Electricity Charges	3.69	0.11	3.80
Water Charges / Cold weather expenses	0.30	0.02	0.32
Miscellaneous Expenses	0.39	0.00	0.39
Legal Charges	0.61	0.06	0.67
Audit Fee	0.27	0.00	0.27
Freight Material related Expenses	0.06	0.00	0.06
Entertainment Charges	0.06	0.00	0.06
Training to Staff	0.14	0.00	0.14
Public Interaction Program	0.21	0.00	0.21
Public Expenses / Other professional charges	1.85	0.00	1.85
Electricity Charges	3.80	0.00	3.80
GIS / GPS expenses related to High level Committee	0.63	0.00	0.63
Exp. On proving Cost Free CFL Bulb to D/S consumer	0.00	0.00	0.00
Transaction Charges to SCAB for collection of energy bills	0.42	0.00	0.42
Statutory Audit Fee	0.02	0.00	0.02
Internal Audit Fee	0.00	0.00	0.00
TA/DA Statutory Auditor	0.08	0.00	0.08
DSM Program	0.00	0.00	0.00
A&G - Total	**39.01**	**1.82**	**40.83**
Less: Capitalisation	1.58	0.01	1.59

Particulars	Distribution	Generation	Total
Add: Prior period adjustment	13.08	0.14	13.22
Net A&G Costs	**50.51**	**1.95**	**52.46**

3.7 Repairs and Maintenance Expenses

3.7.1 The Repairs and Maintenance Expenses submitted by HPSEBL for the FY14 is summarized in the table below:

Table 10: HPSEBL Submission- Repairs and Maintenance Expenses for FY14 (Rs. Cr.)

Particulars	Distribution	Generation	Total
Plant & Machinery	0.00	12.49	12.49
Buildings	1.86	1.75	3.61
Civil Works	0.47	5.07	5.54
Hydraulic Works	0.01	2.42	2.43
Lines, Cables Networks	42.47	1.33	43.80
Vehicles	18.63	2.18	20.81
Furniture & Fixtures	0.12	0.06	0.18
Office Equipments	2.00	0.01	2.01
R&M Cost - Total	**65.56**	**25.31**	**90.87**
Any other Items (Reallocated to Capital Works)	2.26	0.00	2.26
R&M Costs after Capitalisation	63.30	25.31	88.61
Less: Cost Reallocated to Employee Cost & A&G Expenses	12.88	0.00	12.88
Less: Cost Reallocated to Depreciation & Recovery of cost of vehicle from O&M and other units	21.80	4.07	25.87
Net R&M Expenses	**28.62**	**21.24**	**49.86**

3.8 O&M Expenses

3.8.1 The O&M Expenses submitted by HPSEBL for the FY14 is summarized in the table below.

Table 11: HPSEBL Submission- O&M Expenses for FY14 (Rs. Cr.)

Particulars	Actual submitted by Petitioner
Employee expenses (Gross)	1223.20
Less: Impact of employee attrition	
R&M expenses	28.62
A&G expenses (Gross)	39.01
Total O&M Expenses (Gross)	1290.83
Net Prior Period Expenses	22.77

Particulars	Actual submitted by Petitioner
Less: Capitalization on account of employee cost and A&G cost	47.23
Total O&M expenses (Net)	**1266.37**

3.9 Depreciation

3.9.1 The actual depreciation expenses submitted by HPSEBL for the FY14 is summarized in the table below.

Table 12: HPSEBL Submission- Depreciation for FY14 (Rs. Cr.)

Particulars	Distribution	Generation	Total
Land & Land Rights	0.02	0.02	0.04
Buildings	2.91	3.26	6.17
Hydraulic Works	0.62	64.11	64.73
Other Civil Works	4.62	3.60	8.22
Plant & Machinery	52.40	50.37	102.77
Lines & Cable Net	36.23	12.11	48.34
Vehicles	0.52	0.03	0.55
Furniture & Fixtures	0.44	0.08	0.52
Office Equipment	**2.18**	**0.10**	**2.28**
Data Processing Equipment	0.00	0.02	0.02
Assets not Belonging to the Board	0.00	3.26	3.26
Total	**99.94**	**133.67**	**233.61**

3.10 Working Capital Requirements

3.10.1 The working capital requirement calculated by the petitioner for FY14 is as below:

Table 13: HPSEBL Submission- Working Capital Requirement for FY14 (Rs. Cr.)

Particulars	Distribution
Interest on Working Capital for Retail Business	
1/12th of total O&M Expenses	2.16
Receivables equivalent to 2 months average billing	705.04
Maintenance Spares 40% of the R&M expense for one month	0.10
Less: Consumer Security Deposit	267.63
Less: One Month Power Purchase	211.41
Working Capital Requirement	228.25
interest on Working Capital @ 14.45% per Annum	32.98
Interest on Working Capital for wheeling Business	
1/12th of total O&M Expenses	5.23

Particulars	Distribution
Receivables equivalent to 2 months of wheeling charges	19.97
Maintenance Spares 40% of the R&M expense for one month	0.86
Less: Consumer Security Deposit	
Working Capital Requirement	26.05
Interest on Working Capital @ 14.45% per Annum	3.76
Total Interest on Working Capital	**36.75**

3.11 Interest Expenses

3.11.1 The actual interest expenses submitted by the petitioner for FY14 is as below.

Table 14: HPSEBL Submission- Interest Expense for FY14 (Rs. Cr.)

Particulars	Distribution	Generation	Total
RGGVY	0.00		0.00
LIC	0.00	11.91	11.91
REC	82.45	9.43	91.88
PFC	50.72	32.41	83.13
Bonds	21.32	6.15	27.47
Bank Loans	28.86	28.41	57.27
Interest on State Govt. Loan	0.00	0.00	0.00
Non SLR Bonds	0.00	0.00	0.00
Other Negotiated Loan	89.76	0.00	89.76
Interest on Overdraft	130.72	0.00	130.72
Interest on GPF & CPF	42.39	0.00	42.39
Cost of Raising Finances	6.76	0.00	6.76
Other Charges	107.85	0.00	107.85
Interest on Consumer Security Deposits	16.84	0.00	16.84
Charges payable to CTU / NLDC	0.00	0.00	0.00
Rebate allowed for Timely Payment	0.00	0.00	0.00
Interest & Finance Charges - Total	577.67	88.31	665.98
Additional Debt Infusion due to Capitalization	0.00	0.00	0.00
Interest on Debt	0.00	0.00	0.00
Cumulative Interest	0.00	0.00	0.00
Interest & Finance Charges	**577.67**	**88.31**	**665.98**
Less: Interest Capitalisation	119.49	0.32	119.81
Add: Prior Period Expenses	50.26	0.00	50.26
Net Interest & Financing Costs	**508.44**	**87.99**	**596.43**

3.12 Provision for Bad and Doubtful Debt

3.12.1 HPSEBL has submitted that the provision for bad and doubtful debt for the FY14 is Rs. 0.087 crores and requests the Commission to approve the same.

3.13 Net Prior Period Expenses

3.13.1 HPSEBL has submitted that the following table provide details of net prior period expenses in addition to the prior period expenses included in the computation of Power purchase cost, Interest and Financial charges and employee cost.

Table 15: HPSEBL Submission- Net prior period expenses for FY14 (Rs. Cr.)

Particulars	Distribution	Generation	Total
Operating expenses of previous years	-0.10	0.53	0.43
Depreciation under provided for previous years	1.57	0.04	1.61
Other charges relating to prior periods	0.00		0.00
Sub- Total	**1.47**	**0.57**	**2.04**

3.14 Non-Tariff Income

3.14.1 The details of non-tariff income submitted by the Petitioner for true up is summarised in the table below.

Table 16: HPSEBL Submission- Non-Tariff Income for FY14 (Rs. Cr.)

Particulars	Distribution	Generation	Total
Meter Rent/Service Line Rentals	45.52	0	45.52
Recovery for theft of Power / Malpractices	0.05	0	0.05
Wheeling Charges Recovery	119.79	0	119.79
Peak Load Violation Charges	0.42	0	0.42
Miscellaneous Charges from Consumers	9.96	0	9.96
Non-Tariff Income - Total	**175.74**	**0**	**175.74**
Other Income			
Interest on Staff loans & Advances	0.54	0	0.54
Income from Investments	4.2	0	4.2
Interest on Loans & Advances to Licensees	0	0	0
Delayed Payment Charges from Consumers	54.22	0	54.22
Interest on Advances to Suppliers / Contractors	1.37	0	1.37
Interest on Banks (other than on Fixed Deposits)	0	0	0
Income from Trading	2.15	0.49	2.64
Income fee collected against Staff Welfare Activities	0.06	0.02	0.08

Particulars	Distribution	Generation	Total
Miscellaneous Receipts	30.18	0.98	31.16
O&M Charges Recovery from HPPTCL	0	0	0
Recovery of Investigation & Survey Charges	0	0	0
Prior period Income	51.61	0.9	52.51
Other Income - Total	**144.33**	**2.39**	**146.72**
Total Non-Tariff Income & Other Income	**320.07**	**2.39**	**322.46**

3.15 Return on Equity

3.15.1 The Petitioner has requested the Commission to allow Return on Equity of Rs. 42.41 Crores considering a rate of return at 16% and based on the equity in generation and distribution business for FY14.

3.16 Aggregate Revenue Requirement

3.16.1 Based on the values determined by HPSEBL for the various parameters, the ARR for the FY14 is submitted as below for True-up against approved ARR of Rs. 3574.71 Crores in the APR Order for FY14.

Table 17: HPSEBL Submission- Aggregate Revenue Requirement for FY14 (Rs. Cr.)

Particulars	Distribution
Power Purchase Expenses	2536.91
PGCIL Charges	263.87
HPPTCL Charge	11.92
ULDC and other charges	54.77
Sub-Total Power Purchase Expense	**2867.47**
Employee Cost	1223.20
R&M Cost	28.62
A&G Cost	39.01
Interest & Financing Charges	508 .44
Interest on Working Capital	
Depreciation	99.94
Return on Equity	42.41
Less: Non-Tariff Income	320.07
Less: Capitalisation of Expenses	47.23
Add: Bad Debt	0.87
Add: Consumer Contribution towards RPPO Compensation Fund (as per HPERC order dated 10th November 2014)	5.00
Net Prior Period Expenses	2.04
Aggregate Revenue Requirement	**4443.14**

3.17 Revenue from Sale of Power

3.17.1 Revenue from Sale of Power within state submitted by the Petitioner is as below:

Table 18: HPSEBL Submission- Revenue from sale of Power within state for FY14 (Rs. Cr.)

Category	APR	Petition
Domestic Supply	713.30	703.87
Non-Domestic Non Commercial	68.10	72.17
Commercial Supply	266.40	256.48
Small and Medium Industrial Power	115.50	126.86
Large Industrial Power Supply	2604.90	2434.83
Water Pumping Supply	272.00	335.42
Street Lighting Supply	7.30	5.64
Bulk Supply	100.90	104.02
Temporary Metered Supply	19.50	16.29
Total	**4167.90**	**4055.58**

3.17.2 Revenue from Sale of Power outside state and sale of power under banking as submitted by the Petitioner based on the audited accounts is as below.

Table 19: HPSEBL Submission- Revenue from sale of power outside state for FY14 (Rs. Cr.)

Particulars	Amount
Total Inter State Sale of Power	
Consumers Deviation of Malana.	-
Reactive Energy from various CPU's/SEBs	4.81
UI Charges /Sale of Power NREB Through PGCIL.	34.67
M/S Indian Energy Exchange & Power exc. Of India	135.16
Revenue from SOP-Others (by BVPCL)	-
Sub-Total(A)	**174.63**
Revenue from Sale of Banking Power	
UPSEB (Banking)	93.89
Through Banking-BRPL/BYPL	238.38
Through Banking-Haryana Power Corp. Ltd.	127.47
Through Banking-P.S.E.B	199.25
Sub-Total	**658.99**

3.17.3 HPSEBL has submitted that banking sale of power and banking purchase is cashless transaction. Further, HPSEBL has mentioned that although banking sale and purchase has been considered as material financial transaction within the profit and loss account for FY 2013-14, the same has not been considered as a part of the ARR.

3.18 Revenue (Gap)/Surplus

3.18.1 HPSEBL has prayed to the Commission to approve the True up gap of Rs 219.48 Cr. for FY14 as detailed in table below:

Table 20: HPSEBL Submission- Revenue (Gap)/ Surplus for FY14 (Rs. Cr.)

Particulars	APR	Actual
Aggregate Revenue Requirement	3574.71	4449.70
Revenue From Sale of Power within State	4167.81	4055.38
Revenue from sale of power outside State	149.61	174.63
Revenue Surplus/(Gap)	742.71	-219.48

4 Summary of the APR Petition

4.1 Introduction

4.1.1 This chapter summarizes the highlights of the Annual Performance Review (APR) Petition filed by the HPSEBL for review of Aggregate Revenue Requirement (ARR) approved for FY17 in the MYT Order for the 3rd Control Period.

4.1.2 HPSEBL had filed the APR application on 28th November, 2015 and clarifications were submitted in response to the deficiency notes issued by the Commission.

4.1.3 The Annual Performance Review (APR) petition filed by HPSEBL constitutes revised estimates of HPSEBL distribution business for FY16 based on six months actual and revised projections for FY17 for the purpose of determination of the Aggregate Revenue Requirement (ARR) and revision in Distribution & Retail Supply Tariff for FY17.

4.2 Sales Projections

Projections for category-wise Sales

4.2.1 The petitioner has used the Compounded Average Growth Rate (CAGR) as recorded over the last few years to project the category-wise sales for the future years. The petitioner has taken into account the first six months sales as a basis for projecting the sales over the balance period of FY 2015-16. The breakup of the category-wise sales for the first six months of the current years, as submitted by the petitioner is summarized below:

Table 21: Actual Monthly Category-wise Sales (MUs) for 6 months of FY 16

Consumer Category	Apr	May	Jun	Jul	Aug	Sep	Total
Domestic	129.1	158.5	159.0	166.1	171.6	173.1	957.3
Antodaya	0.2	0.2	0.2	0.2	0.2	0.2	1.3
Non Domestic Non Commercial	11.9	9.3	9.3	8.8	9.5	9.9	58.7
Commercial	33.9	39.7	43.2	44.3	41.8	41.6	244.5
Temporary	2.2	2.0	2.2	2.5	2.0	2.6	13.5

Consumer Category	Apr	May	Jun	Jul	Aug	Sep	Total
Small Industries	6.7	7.0	7.6	7.3	7.2	10.7	46.6
Medium Industries	9.8	9.9	10.8	10.4	11.0	10.4	62.3
Large Industries (LT/HT)	248.5	242.3	271.2	267.3	260.3	266.1	1555.8
Large Industries (EHT)	85.5	130.7	115.0	124.1	127.5	135.8	718.6
Govt., Irrigation & Water Supply	40.4	44.5	44.9	46.9	40.0	43.8	260.6
Public Lighting	1.1	1.0	1.0	0.9	1.0	1.0	6.0
Agricultural	2.1	2.1	3.8	4.5	5.4	5.3	23.2
Bulk Supply	13.3	9.7	9.7	9.1	9.5	10.6	61.9
Total	**584.8**	**657.0**	**677.8**	**692.5**	**687.0**	**711.1**	**4010.1**

4.2.2 Based on the above sales figures, the estimated sales for the full year of FY16 has been assessed as 8184 MU by the petitioner. Further, CAGR as per the below tables have been applied to arrive at the category-wise sales projection for the FY17.

Table 22: CAGR & Growth Rate Considered for Sale Projection for FY17

Consumer Category	CAGR	CAGR	Growth Rate Considered
	5 years	3 years	
Domestic	11.23%	10.40%	8.00%
Non Domestic Non Commercial	7.66%	9.67%	7.66%
Commercial	9.14%	6.92%	6.92%
Temporary	-1.08%	-3.55%	0.00%
Small & Medium Industrial Power Supply			
Small Industrial Power Supply	5.11%	6.75%	5.11%
Medium Industrial Power Supply	2.76%	-0.47%	2.76%
Large Industrial Power Supply			
LT/HT	6.67%	3.92%	3.50%
EHT	3.38%	0.31%	6.00%
Govt., Irrigation & Water Supply	3.91%	4.54%	3.91%
Public Lighting	1.25%	1.14%	2.00%
Agricultural	4.25%	7.63%	8.00%
Bulk Supply	6.33%	-6.48%	2.00%

4.2.3 The revised category-wise sales projected by HPSEBL for FY17 is as provided in the table below:

Table 23: Sales Projections for FY16 and FY17 of the 3rd Control Period (MUs)

Consumer Category (MU)	FY 16 (RE)	FY 17 (Proj.)
Domestic	2017.16	2178.54
Non Domestic Non Commercial	137.18	147.69
Commercial	494.09	528.25
Temporary	26.29	26.29
Small & Medium Industrial Power Supply		

Consumer Category (MU)	FY 16 (RE)	FY 17 (Proj.)
Small Industrial Power Supply	87.67	92.15
Medium Industrial Power Supply	129.33	132.91
Large Industrial Power Supply		
LT/HT	2037.94	2109.27
EHT	2503.30	2653.49
Govt., Irrigation & Water Supply	536.90	557.91
Public Lighting	12.84	13.10
Agricultural	48.94	52.85
Bulk Supply	152.50	155.55
Total	**8184.14**	**8647.99**

4.2.4 The petitioner submits that the sales projections for FY16 and FY17 are less than the Sales approved by the Hon'ble Commission in the MYT Order and the subsequent Tariff Order for approval of 1st APR owing to the following reasons:

- Decrease in industrial sales due to procurement of power by the consumers through open access;
- Closure of certain industries (Mainly Steel Industries) in the state;
- Reduced consumption owing to effective implementation of DSM (Demand Side Measures) initiatives by municipal corporations and Nagar Panchayats.

4.3 Power Purchase

4.3.1 The petitioner has stated that the assessment of power purchase requirement is in accordance with the past approvals of the Commission. It has also taken into account the actual supply/generation from various sources in the first half of the current year for projecting the source-wise power purchase form the various sources. The commissioning of a few owned new plants is also taken into account while making the projections. The details of projected source-wise power purchase from the various sources are provided in subsequent tables.

4.3.2 As per the submission of the petitioner, the revised estimates of power procurement from own generating stations is as follows:

Table 24: Revised estimate of power procurement from own Generating Stations (MUs)

	Stations (MU)	FY 15-16 (RE)	FY 16-17 (Proj.)
1	Bhaba	-	374.74
2	Bassi	328.71	345.31
3	Giri	217.98	218.9
4	Andhra	64.96	86.43

	Stations (MU)	FY 15-16 (RE)	FY 16-17 (Proj.)
5	Ghanvi	93.72	81.15
6	Baner	46.79	52.85
7	Gaj	43.44	33.38
8	Larji	598.28	500.6
9	Khauli	46.98	43.65
10	Binwa	29.88	29.05
11	Thirot	4.6	17.58
12	Gumma	0.05	11.71
13	Holi		11.71
14	Bhaba Aug	14.55	17.58
15	Nogli	7.04	9.75
16	Rongtong		7.56
17	Sal-II		7.79
18	Chaba	8.37	7.59
19	Rukti		6.47
20	Chamba	0.14	1.75
21	Killar	0.36	1.15
22	Uhl III - BVPCL		129.1
23	Ghanvi II	41.81	45.77
Total		**1547.66**	**2041.57**

Revised Estimates for Power Purchase from GoHP free power

4.3.3 The petitioner has also revised the power availability from GoHP free power based on the actual power purchase till FY15 and in the first six months of FY16. The same is summarized in the table below:

Table 25: Revised estimated of power procurement from GoHP free power (MUs)

Stations (MU)	Plant capacity (MW)	Share (%)	FY 15-16 (RE)	FY16-17 (Proj.)
Baira Siul	180	12%	4.79	0.0
Chamera-I	540	12%	4.79	0.0
Chamera-II	300	12%	4.40	0.0
Chamera-III	231	12%	3.15	0.0
Shanan Share	0.5	Fixed	2.63	2.63
Ranjeet Sagar Dam Share	600	5%	85.25	69.41
Malana	86	20%	72.95	73.28
Baspa (Primary & Sec.)	300	12%	165.17	153.72
Nathpa Jhakri HEP	1500	12%	42.36	0.0
Ghanvi	22.5	12%	12.78	11.07
Baner	12	12%	6.38	7.21
Gaj	10.5	12%	5.92	4.55

Stations (MU)	Plant capacity (MW)	Share (%)	FY 15-16 (RE)	FY16-17 (Proj.)
Larji	126	12%	81.58	68.26
Khauli	12	12%	6.41	5.95
Uhl-III	100	13%	0.0	17.60
Ghanvi II	10	12%	5.70	6.24
SHEP Allocated	Varies	Varies	65.36	46.63
Total			**569.62**	**466.55**

Revised Estimates for Power Purchase from NTPC power plants

4.3.4 The revised availability from NTPC plants, as submitted by the petitioner, has been projected based on the average PLF achieved by respective generating stations during the last 3 years i.e. FY 2012-13, FY 2013-14 & FY 2014-15 based on the data available from CEA.

4.3.5 The revised estimates for power availability from NTPC power plants as projected in the APR petition is as follows:

Table 26: Revised estimated of power procurement from NTPC power plants (MUs)

Stations (MU)	Plant capacity (MW)	Share (%)	FY 15-16 (RE)	FY 16-17 (Proj.)
Anta (G)	419.33	3.58%	60.43	70.38
Anta (L)	419.33	3.58%	0.00	0.00
Anta (LNG)	419.33	3.58%	0.25	0.00
Auriya (G)	663.36	3.32%	68.15	71.44
Auriya (L)	663.36	3.32%	0.00	0.00
Auriya (LNG)	663.36	3.32%	1.11	0.00
Dadri (G)	829.78	3.01%	108.96	105.32
Dadri (L)	829.78	3.01%	0.00	0.00
Dadri (LNG)	829.78	3.01%	2.35	0.00
Unchahar-I	420	1.67%	56.56	53.15
Unchahar-II	420	2.86%	147.28	91.02
Unchahar-III	210	3.81%	98.15	59.86
Rihand-1 STPS	1000	3.50%	220.16	259.87
Rihand-2 STPS	1000	3.30%	203.26	252.73
Singrauli STPS	2000	0.00%	62.20	29.60
Kahalgaon - II	1500	1.53%	129.86	139.47
Rihand-3 Units-1,2	1000	3.37%	222.64	234.87
Dadri-II TPS	980	0.00%	16.86	15.58
Jhajjar TPS	1000	0.00%	10.89	0.00
Singrauli Solar	15	100.00%	27.20	24.97
Kol dam HEP	800	3.36%	0.00	0.00

Stations (MU)	Plant capacity (MW)	Share (%)	FY 15-16 (RE)	FY 16-17 (Proj.)
North Karanpura	1980	1.53%	0.00	0.00
Meja	1320	1.44%	0.00	0.00
Lata Tapowan HEP	171	1.53%	0.00	0.00
Rupsia Bagar HEP	261	1.53%	0.00	0.00
Singrauli III	500	3.50%	0.00	0.00
Tanda II	1320	3.50%	0.00	0.00
Tapovan Vishnugarh HEP	520	1.53%	0.00	0.00
Gider Baha	2640	1.50%	0.00	0.00
Unchahar IV	500	2.00%	0.00	0.00
Bilhaur	660	3.00%	0.00	0.00
SECI Solar Certificates			29.00	33.29
Total			**1465.31**	**1441.55**

Revised Estimates for Power Purchase from NPCIL power plants

4.3.6 HPSEBL has revised the power availability from NPCIL stations based on the average PLF achieved by respective generating stations during the last 3 years i.e. FY 2012-13, FY 2013-14 & FY 2014-15, based on the data available from CEA.

4.3.7 The revised estimates of power availability from NPCIL as submitted by the petitioner are as follows:

Table 27: Revised estimates of power procurement from NPCIL power plants (MUs)

Stations (MU)	Plant capacity (MW)	Share (%)	FY 15-16 (RE)	FY16-17 (Proj.)
NAPP	440	3.18%	102.6	73.95
RAPP (V & VI)	440	3.41%	147.89	135.15
RAPP (VII & VIII)	1400	1.90%	0.00	0.00
Total			**250.49**	**209.10**

Revised Estimates for Power Purchase from NHPC power plants

4.3.8 HPSEBL has revised the power availability from NHPC stations based on the average energy generated by respective stations during the last 3 years i.e. FY 2012-13, FY 2013-14 & FY 2014-15.

4.3.9 The revised estimates for power availability from NHPC as submitted by the petitioner are as follows:

Table 28: Revised estimates of power procurement from NHPC power plants (MUs)

Stations (MU)	Plant capacity (MW)	Share (%)	FY 15-16 (RE)	FY16-17 (Proj.)
Salal	690	0.99%	34.28	32.69
Tanakpur	94.2	3.84%	13.6	12.41
Chamera I	540	2.90%	72.19	68.38
Chamera II	300	3.67%	56.82	51.24
Chamera III	231	3.36%	0.65	0
Uri	480	2.71%	76.31	75.47
Dhauliganga	280	3.57%	37.94	25.39
Dulhasti	380	UA	5.03	0
Sewa	120	UA	2.17	1.41
Parbati III	520	3.36%	0.4	0
Total			**299.39**	**266.99**

Revised Estimates for Power Purchase from BBMB & Other Shared Stations

4.3.10 Power availability from BBMB and other shared stations has also been revised based on the average energy generated by the respective stations during the last three years i.e. FY13, FY14 and FY15.

4.3.11 The revised estimates for power availability from these stations as submitted by the petitioner are as follows:

Table 29: Revised estimates of power procurement from BBMB & Other Shared Stations (MUs)

Stations (MU)	Plant capacity (MW)	Share (%)	FY 15-16 (RE)	FY16-17 (Proj.)
BBMB Old	0	Fixed 1.2LU/day	43.80	43.80
BBMB New	1480	7.19%	364.45	348.46
Dehar	990	7.19%	192.08	179.24
Pong	396	7.19%	49.35	48.11
Shanan	60	Fixed 1MW	5.26	5.26
Shanan Ext	50	Fixed 45 MU	45.00	45.00
Yamuna	474.7	24.68%	465.49	453.12
Khara	72	20.00%	72.19	57.48
Total			**1237.62**	**1180.47**

Revised Estimates for Power Purchase from Nathpa Jhakri & Other Stations

4.3.12 The power availability from Nathpa Jhakri and Rampur stations for the SOR share has been projected based on the average energy generated by the respective stations in the last three years while the equity share in the Nathpa Jhakri and Rampur projects have been projected based on design energy.

4.3.13 The revised estimates for FY 17 as submitted by the petitioner are as follows:

Table 30: Projected Energy Availability from SJVNL & Other Stations (MUs)

Stations (MU)	FY 15-16 (RE)	FY 16-17 (Proj.)
Nathpa Jhakri SOR	184.11	168.62
Nathpa Jhakri Equity	1591.08	1505.14
Rampur	50.51	33.57
Rampur (Equity)	516.27	535.69
Small HEP/ Private Micro	1152.26	1239.27
Small HEP/ Private Micro -REC	392.01	462.31
Baspa II - Primary	1072.73	1050.06
Baspa - II Secondary Energy	158.51	77.22
Unallocated share from CGS	0.00	0.00
Total	**5117.48**	**5071.88**

Banking

4.3.14 HPSEBL has submitted that it is undertaking banking agreements with other state utilities for utilizing its surplus during summer and meeting its deficit during winter months. For financial year FY17, HPSEBL has planned to bank 1610 MUs of power during summer and the same is planned to be taken back in winter in order to meet the deficit during winter. However, no forward banking has been envisaged for FY17.

Revised Estimate for Total Power Purchase

4.3.15 Based on the methodology detailed in the petition, HPSEBL has submitted the revised estimates for FY16 and FY17 as summarized in table below:

Table 31: Revised estimates of total power procurement (MUs)

Stations/ Sources	FY 15-16 (RE)	FY 16-17 (Proj.)
Own generation	1547.68	2041.56
Free power	569.61	466.55
NTPC	250.49	209.10
NPCIL	1465.31	1441.55
NHPC	299.39	266.99
THDC	4.11	0.00
Other CG & shared Stations	1237.62	1180.47
SJVNL and Others	5117.48	5071.88
Banking	1682.00	1610.00
UI	118.08*	0.00
Contingency Purchase	244.95	147.03
Total	**12536.72**	**12435.13**

**UI considered is as per the actual data available from April to September*

Meeting Renewable Purchase Obligations

4.3.16 The petitioner has submitted that it mandatory to meet the renewable purchase obligation in line with the Regulation 4 of the HPERC (Renewable Power Purchase Obligation and its Compliance) Regulations, 2010 which provides the solar and non-solar obligation of HPSEBL for each year.

4.3.17 The petitioner has stated that it is meeting its Renewable Purchase Obligations of Non-Solar power from its existing sources itself. However, for the solar RPPO, it plans to procure the solar power from Singrauli Solar, pooled power from SECI. The overall revised estimate of solar RPPO as submitted by the petitioner is as below:

Table 32: Revised estimates of meeting solar RPPO

Particulars	FY16 (RE)	FY17 (Proj.)
Total Power consumption in the state (MU)	9364.01	9872.14
Solar Purchase Obligations (%)	0.25%	0.25%
Solar RPPO Obligations (MUs)	23.4	24.7
Solar Power Availability (MUs)		
SECI	29.0	33.3
Singrauli Solar	27.2	25.0
Surplus available after meeting RPPO Obligations of respective years (MUs)	**32.8**	**33.6**

4.3.18 The petitioner has further submitted that they would be able to meet its Solar RPPO obligations from the solar power projected to be available for FY 16 and FY 17. Even after meeting its estimated RPPO obligations for FY16 & FY17; the Petitioner would be left with sufficient solar power to meet the unmet obligations for the previous years as directed by the Commission in its Order on Suo-Moto Case No. 93(A)/2013 dated 29th July 2013. The shortfall in Solar RPO for FY12 and FY13 were 0.74 MUs and 18.4 MUs respectively.

4.3.19 For FY15, the Solar purchase obligation was 22 MUs (0.25% of 8806.9 MUs purchased for consumption in state) The Petitioner submits that it had not been able to completely meet the solar purchase obligation of 22 MUs for FY15 and the shortfall in purchase was of 19.4 MUs. The Petitioner further submits that the aforesaid shortfall of 19.4 MUs is proposed to be met by surplus solar power of FY16

& FY17 even after meeting the obligation of respective years as well as those of FY12 & FY13.

4.3.20 Therefore, HPSEBL has submitted that the shortfall of 19.4 MUs of FY 15 shall be met in following ways:

a. 13.6 MUs in FY16

b. 5.7 MUs in FY17

4.3.21 The Petitioner has requested the Hon'ble Commission to consider the estimated Solar Power for FY16 & FY17 for meeting the following:

a) Solar RPPO for FY 16

b) Unmet Solar RPPO of FY 12, FY 13 & FY 15

4.4 Transmission and Distribution (T&D) Losses

4.4.1 The T&D loss trajectory as approved by the Commission for the Third Control Period is shown in the table below:

Table 33: Proposed T&D Loss Trajectory for Third Control Period

Particulars	FY15	FY16	FY17	FY18	FY19
Approved T&D loss	12.80%	12.60%	12.40%	12.20%	12.00%
Loss Reduction	0.20%	0.20%	0.20%	0.20%	0.20%

4.4.2 The Petitioner has requested to approve the T&D losses of 12.60% and 12.40% for FY 16 and FY 17 respectively. The projected T&D losses are same as approved by the Commission in the MYT Order

4.5 Energy Balance

4.5.1 Based on the approved loss levels and the sales projections as above, the Petitioner has submitted the revised energy balance for FY16 and FY17. The summary of the annual energy balance as proposed by the Petitioner is reproduced below:

Table 34: Annual Summary of Energy Balance

Particulars (MU)	FY 16 (RE)	FY 17 (Proj.)
Power Procurement		
Own sources	1547.68	2041.56

Particulars (MU)	FY 16 (RE)	FY 17 (Proj.)
Others - Interstate, Banking, etc	10989.04	10393.57
Transmission losses	319.90	299.85
Total availability at HPSEBL periphery	**12216.83**	**12135.29**
Sales - within the state	8184.14	8647.99
T&D losses	1179.87	1224.15
Power required at HPSEBL periphery for intra state sales	**9364.01**	**9872.14**
Contingency	0.00	0.00
Banking sale / return at discom periphery	2179.89	1610.00
Interstate sales at periphery	672.93	653.15
Total power required at HPSEBL periphery	**12216.83**	**12135.29**

4.6 Power Purchase Cost

4.6.1 The petitioner has revised the power purchase cost after comparison with the costs as approved by the Commission in the MYT and APR Order.

4.6.2 The petitioner has revised the power purchase cost from own sources and brought out the following points based on which the revised power purchase cost for FY16 and FY17 has been projected in the current petition:

- HPSEBL has considered revised estimate for power purchase cost from own generation plants for FY16 & FY17 as per MYT for Generation business for the period FY 2014-15 to FY 2018-19 excluding eight plants for which generic tariff has been approved by the Commission in its Order dated 15.01.2014 against Petition no. 54/2013

- Petitioner is in the process of filing petition for Ghanvi-II, therefore, as of now power purchase cost as per MYT Order has been considered. However, in case of variation in purchase cost of Ghanvi-II at the time of final approval by Hon'ble Commission the same variation shall be considered in true-up and similarly for Uhl-III

4.6.3 Revised estimate for power purchase cost from own generation plants for FY16 and FY17, as submitted by the petitioner is as follows:-

Table 35 Revised estimates of power purchase cost from Own Generation

Stations (Rupees Crores)	FY 15-16 (RE)	FY 16-17 (Proj.)
Bhaba	28.30	30.58
Bassi	25.20	25.70

Stations (Rupees Crores)	FY 15-16 (RE)	FY 16-17 (Proj.)
Giri	20.40	21.90
Andhra	9.60	10.40
Ghanvi	21.10	18.30
Baner	9.30	9.80
Gaj	9.70	10.20
Larji	125.00	120.70
Khauli	10.60	9.80
Binwa	5.10	5.60
Thirot	1.00	4.00
Gumma	-	2.60
Holi	-	2.60
Bhaba Aug	3.30	4.00
Nogli	2.80	3.00
Rongtong	2.00	2.20
Sal-II	-	1.80
Chaba	0.30	0.30
Rukti	0.80	0.90
Chamba	0.30	0.30
Killar	0.10	0.30
Uhl III - BVPCL	-	58.10
Ghanvi II	14.50	14.50
Total	**289.4**	**357.58**

Revised Power Purchase Cost from GoHP free power

4.6.4 Revised estimate for power purchase cost from GoHP free power for FY16 and FY17 has been considered at the rate of Rs. 2.80/unit as per HPERC Order dated 31st March 2015 on GoHP free power for FY16. The power purchase cost projected for FY16 and FY17 as submitted by the petitioner is as follows:-

Table 36 Revised estimates of power purchase cost from GoHP free power

Stations (Rupees Crores)	FY 15-16 (RE)	FY 16-17 (Proj.)
Baira Siul	1.34	0.00
Chamera-I	1.34	0.00
Chamera-II	1.23	0.00
Chamera-III	0.88	0.00
Shanan Share	0.74	0.74
Ranjeet Sagar Dam Share	23.87	19.44
Malana	20.42	20.52
Baspa (Primary & Sec.)	46.25	43.04
Nathpa Jhakri HEP	11.86	0.00
Ghanvi	3.58	3.10

Stations (Rupees Crores)	FY 15-16 (RE)	FY 16-17 (Proj.)
Baner	1.79	2.02
Gaj	1.66	1.27
Larji	22.84	19.11
Khauli	1.79	1.67
Budhil	0.00	0.00
Allian Duhangan	0.00	0.00
Kol Dam	0.00	0.00
Parbati-II	0.00	0.00
Parbati-III	0.00	0.00
Rampur project	0.00	0.00
Karcham Wangtoo	0.00	0.00
Sawra Kuddu	0.00	0.00
Uhl-III	0.00	4.93
Ghanvi II	1.60	1.75
Malana II	0.00	0.00
Kashang I, II, III	0.00	0.00
Kashang IV	0.00	0.00
Sainj	0.00	0.00
Tidong	0.00	0.00
Song tong Karcham	0.00	0.00
Chirgaon Majgaon	0.00	0.00
Renuka Dam	0.00	0.00
SHEP Allocated	18.30	13.71
Total	**159.49**	**131.29**

Revised Power Purchase Cost from NTPC plants

4.6.5 In the petition, HPSEBL has revised the power purchase cost of NTPC plants for FY16 & FY17 by normative escalation of 5% on actual power purchase cost of FY15 and by taking into consideration the tariff orders which are yet to be issued for control period 2014-19 based on CERC tariff regulation 2014-19.

4.6.6 Revised estimate for power purchase cost from NTPC plants for FY16 and FY17 as submitted by the petitioner is as follows:

Table 37 Revised estimates of power purchase cost from NTPC plants

Stations (Rupees Crores)	FY 15-16 (RE)	FY 16-17 (Proj.)
Anta (G)	27.50	33.63
Anta (L)	0.00	0.00
Anta (LNG)	0.28	0.00
Auriya (G)	36.96	40.68

Stations (Rupees Crores)	FY 15-16 (RE)	FY 16-17 (Proj.)
Auriya (L)	0.00	0.00
Auriya (LNG)	1.48	0.00
Dadri (G)	55.54	56.36
Dadri (L)	0.00	0.00
Dadri (LNG)	3.01	0.00
Unchahar-I	22.15	21.85
Unchahar-II	56.82	36.87
Unchahar-III	43.05	27.57
Rihand-1 STPS	59.37	73.58
Rihand-2 STPS	57.44	74.99
Singrauli STPS	11.20	5.59
Kahalgaon - II	50.38	56.81
Rihand-3 Units-1,2	74.13	82.12
Dadri-II TPS	9.61	9.33
Jhajjar TPS	0.00	0.00
Kol dam HEP	0.0	0.0
Singrauli Solar	61.8	64.9
SECI	15.95	18.31
Total	**556.14**	**561.28**

Revised Power Purchase Cost from NPCIL plants

4.6.7 HPSEBL has revised the power purchase cost of NPCIL plants for FY16 & FY17 by normative escalation of 3% on actual power purchase cost of FY15. Revised estimates for power purchase cost from NPCIL plants for FY16 and FY17 as submitted by the petitioner is as follows:-

Table 38 Revised estimates of power purchase cost from NPCIL plants

Stations (Rupees Crores)	FY 15-16 (RE)	FY 16-17 (Proj.)
NAPP	26.29	19.52
RAPP (V & VI)	52.37	49.30
Total	**78.67**	**68.81**

Revised Power Purchase Cost from NHPC plants

4.6.8 For determining the power purchase cost from NHPC stations for FY16 & FY17, HPSEBL has considered a normative escalation of 3% on actual power purchase cost of FY15. Revised estimates for power purchase cost from NHPC plants for FY16 and FY17 as submitted by the petitioner is as follows:

Table 39 Revised estimates of power purchase cost from NHPC plants

Stations (Rupees Crores)	FY 15-16 (RE)	FY 16-17 (Proj.)
Salal	6.25	6.14
Tanakpur	4.01	3.77
Chamera I	12.73	12.42
Chamera II	17.83	16.56
Chamera III	0.30	0.00
Uri	14.72	15.00
Dhauliganga	11.06	7.63
Dulhasti	3.57	0.00
Sewa	0.95	0.64
Parbati III	0.19	0.00
Total	**71.61**	**62.16**

Revised Power Purchase Cost from BBMB & other shared plants

4.6.9 HPSEBL has revised the power purchase cost of BBMB & other shared plants for FY16 & FY17 by normative escalation of 3% on actual power purchase cost of FY15.

4.6.10 Revised estimates for power purchase cost from BBMB & other shared plants for FY16 and FY17 as submitted by the petitioner is as follows:-

Table 40 Revised estimates of power purchase cost from BBMB & other shared plants

Stations (Rupees Crores)	FY 15-16 (RE)	FY 16-17 (Proj.)
BBMB Old	4.25	4.38
BBMB New	21.13	20.81
Dehar	15.86	15.24
Pong	2.23	2.24
Shanan	0.22	0.22
Shanan Ext	0.96	0.98
Yamuna	34.27	34.36
Khara	5.35	4.39
Total	**84.27**	**82.62**

Revised Power Purchase Cost from Nathpa Jhakri

4.6.11 HPSEBL has revised the power purchase cost of Nathpa Jhakri SOR, Nathpa Jhakri Equity share, Rampur SOR, Rampur Equity share plants for FY16 & FY17 by normative escalation of 3% on actual power purchase cost of FY15.

4.6.12 Revised estimates for power purchase cost from these stations for FY16 and FY17 as submitted by the petitioner are as follows:

Table 41 Revised estimates of power purchase cost from Nathpa Jhakri

Stations (Rupees Crores)	FY 15-16 (RE)	FY 16-17 (Proj.)
Nathpa Jhakri SOR	59.81	56.42
Nathpa Jhakri Equity	500.92	488.07
Rampur SOR	20.73	14.19
Rampur Equity	157.98	168.85
Small HEP/ Private Micro	326.20	361.36
Small HEP/ Private Micro - REC	90.44	109.86
Baspa – II Primary	323.17	325.83
Baspa – II Secondary	47.75	23.96
Unallocated share from CGS	0.0	0.0
Total	**1527.00**	**1548.54**

Revised Overall Power Purchase Cost

4.6.13 The overall revised power purchase cost, as submitted by the petitioner, for FY16 and FY17 is as follows:

Table 42 Revised estimates of overall power purchase cost

Stations (Rupees Crores)	FY 15-16 (RE)	FY 16-17 (Proj.)
Own Generation	289.30	357.55
Free Power	159.49	131.29
NPCIL	78.67	68.81
NTPC	556.14	561.28
NHPC	71.61	62.14
THDC	2.12	0
Other CG & shared Stations	84.27	82.63
SJVNL and Others	1527.00	1548.54
Banking	0.00	0.00
UI	39.52	0.00
Contingency Purchase	93.82	59.13
Total	**2902.00**	**2871.37**

Transmission and Other charges

4.6.14 The summary of the transmission and other charges as proposed by the Petitioner is shown in table below:

Table 43: Summary of Transmission Charges (in Rs Cr.)

Description	FY 16 (RE)	FY 17 (Proj.)
PGCIL Charges	275.88	275.88

Description	FY 16 (RE)	FY 17 (Proj.)
HPPTCL Charges Payable	3.47	3.31
ULDC Charges	2.14	2.40
STOA Charges	34.77	34.77
NRLDC Charges	0.85	0.85
Total	**317.11**	**317.21**

4.7 Operation & Maintenance Expenses (O&M)

Employee Expenses

4.7.1 Petitioner has followed similar methodology as provided in the MYT Regulations for projection of employee cost for FY16 and FY17. The 3 year and 5 year $CPI_{inflation}$ rate calculated by the petitioner is as per the following table:

Table 44: CPI Calculation

Year	CPI	% Increase
FY 2014-15	246.92	4.63%
FY 2013-14	236.00	9.68%
FY 2012-13	215.17	10.44%
FY 2011-12	194.83	8.39%
FY 2010-11	179.75	10.45%
5 Yr Average		**8.72%**
3 Yr Average		**8.25%**

4.7.2 Higher of the 3 yr and 5 yr CPI inflation rate has been considered for projection of employee costs.

4.7.3 The Petitioner has estimated the growth factors on the basis of the number of consumers handled per employee within the state. It is assumed that the number of consumers handled per employee shall increase at a rate of 3% annually during the MYT period. Accordingly, the growth (G_n) in number of employees has been calculated as under:

Table 45: Projected Growth factor for Employee Costs

Particulars	FY 15	FY 16	FY 17
	Actual	RE	Proj.
Number of Employees	17448	17416	17386
Growth (G) % in Employees on Account of Consumer connections		-0.18%	-0.17%

Computation of Terminal Benefits

4.7.4 As per the annual budget prepared by the Petitioner, the terminal benefits liability proposed for FY 2015-16 is Rs. 531.75 Cr. for the entire board. The Terminal Benefit liability for the distribution employees are computed based on the segregated terminal benefits for FY 2014-15 and the same are provided in the table given below:

Table 46: Provisional segregated terminal Benefits for FY15

Particulars	HPSEBL	Generation	Distribution
Terminal Benefits	478.00	0.57	477.43

4.7.5 Based on the above, the Terminal Benefits for Distribution Business for FY 2015-16 comes out to be Rs. 531.12 Cr. From the same, it could be inferred that the growth in terminal benefits is projected to be around 11%-12%. This is on account of the fact that a large number of employees of HPSEBL are retiring in FY 2015-16 thereby resulting in higher terminal liability

4.7.6 For FY 2016-17, a growth rate of 10% has been considered by HPSEBL due to the fact that the employees retiring in FY 2016-17 would be lesser than that retiring in FY 2015-16. Thus, after applying a growth rate of 10% over the estimated terminal benefit liability of FY 2015-16, the terminal benefit liability for FY 2016-17 is projected to be Rs. 584.23 Cr.

Additional Liability on account of 7th Pay Commission

4.7.7 The Petitioner has submitted that the salary revision of Government employees on account of the recommendations of the 7th Pay Commission is due w.e.f. 01st January 2016. The revision in the salary is expected to be around 20%. However, the Petitioner envisages that the salary revision would be effected only in FY 2016-17. Thus, the Petitioner has considered a provision of 10% of the salaries and the gratuity as the additional liability on account of salary revision due to implementation of 7th Pay Commission's recommendations.

4.7.8 As per the projected values of terminal benefits, additional liability, G_n and $CPI_{inflation}$, the Petitioner has projected the employee expenses calculated for the FY16 and FY17 as under:

Table 7: Projected Employee Costs (Rs Cr.)

Particulars	FY 16 (RE)	FY 17 (Proj.)
Salaries (Basic)	309.2	335.6
Grade pay	63.2	68.6
DA	390.5	423.8
Other Allowances	33.5	36.4
Overtime	3.5	3.7
Total Salaries	**800.1**	**868.3**
Incentives/Awards	0.3	0.4
Incentives/Awards	0.0	0.0
Earned Leave Encashment	56.9	61.8
Medical Expense Re-Imbursement	9.6	10.5
Payment Under Workman'S Compensation And Gratuity	1.9	2.0
Staff Welfare Expenses	0.7	0.8
Gross Other Staff Cost	78.4	85.1
Terminal Benefits	531.12	584.23
Gross Employee Cost	1409.6	1537.6
Chargeable To Construction Works	56.5	61.4
Net Employee Cost	**1353.1**	**1476.3**
Additional Liability on account of 7th Pay Commission		98.1
Grand Total		**1574.4**

Administrative and General Expenses

4.7.9 The Petitioner has projected the A&G Expenses as per the HPERC MYT Distribution Regulations. The norms calculated by the Petitioner is shown in the table below:

Table 47: Norms for computing A&G expenses

Norms	FY 15 (Actuals)
No. of employees	17448
A&G cost (Rs Cr.)	41.96
A&G / employee (Rs '000 / employee)	**24.05**
No. of consumers	2,199,970
A&G cost (Rs. Cr.)	41.96
A&G / 1000 consumers (Rs '000 / 1000 consumers)	**190.73**

4.7.10 The projections for number of employees and consumers as estimated by the Petitioner is presented in the table below. These projections, along with the WPI inflation as calculated in the previous section have been used to estimate the A&G costs during the Third Control Period:

Table 48: Basis for A&G Norms

Particulars	FY 15 (Actuals)	FY 16 (RE)	FY 17 (Proj.)
No. of employees	17,448	17,416	17,386
No. of consumers	2,199,970	2,261,789	2,325,588
Weightage of A&G/Employee	50%		
Weightage of A&G/1000 Consumers	50%		
WPI	6.77%		

4.7.11 Considering the A&G Norms, WPI and weightage of no. of employees and consumers as shown in above table, the Petitioner has calculated the A&G expenses as shown in the following table. The sub-heads of A&G cost have been projected on the basis of historical proportion of these sub-heads in the total A&G cost:

Table 49: Projected A&G Expenses for FY16 and FY17 (Rs. Cr.)

Particulars	FY 16 (RE)	FY 17 (Proj.)
Administration Charges		
Rent, Rates & Taxes	1.9	2.1
Telephone, Postage & Telegrams	2.9	3.1
Consultancy Charges	0.6	0.7
Conveyance & Travel	18.2	19.7
Regulatory Expenses	1.0	1.1
Income Tax Updating Charges	0.1	0.1
Consumer Redressal Forum & Ombudsman	0.5	0.5
Insurance	0.0	0.0
Purchase Related Expenses & Other Charges	2.8	3.0
Incentive awards to employees outsiders	0.0	0.0
Administration Charges - Total	**27.9**	**30.2**
Other Charges		
Fees & Subscriptions, Books & Periodicals	1.8	1.9
Printing & Stationery	1.8	2.0
Exp. Under RTI and processing fee	0.7	0.8
Advertisement Expenses	3.9	4.2
Donation/ Contribution	0.3	0.4
Electricity Charges	1.2	1.3
Water Charges / Cold weather expenses	1.1	1.2
Miscellaneous Expenses	0.6	0.7
Legal Charges	0.0	0.0

Particulars	FY 16 (RE)	FY 17 (Proj.)
Audit Fee/Statutory Audit Fee	0.0	0.0
Freight Material related Expenses	0.1	0.1
Entertainment Charges	0.0	0.0
Training to Staff	0.0	0.0
Public Interaction Program	0.6	0.6
Public Expenses / Other professional charges	6.1	6.6
GIS/GPS expenses related to High level Committee	0.3	0.4
Expense for providing cost free CFL bulbs to domestic consumers	0.0	0.0
Expense of collection of energy bill through agency	0.7	0.7
Fee for SSA Examination	0.1	0.1
A&G - Total	**47.3**	**51.2**
Less: Capitalisation	2.0	2.1
Net A&G Costs	**45.4**	**49.1**

Repair and Maintenance Expenses

4.7.12 Petitioner has followed the methodology as provided in the MYT Tariff regulations. As per the methodology, the petitioner has computed the k factor for FY16 and FY17 as the average of k factors for the last four financial years i.e. from FY 12 to FY 15.

4.7.13 The 'WPI inflation' computed by the Petitioner is shown below:

Table 50: Details of Historical WPI

Year	WPI	% Increase
FY 2014-15	181.19	2.00%
FY 2013-14	177.64	5.98%
FY 2012-13	167.62	7.35%
FY 2011-12	156.13	8.72%
FY 2010-11	143.62	9.78%
5 Yr Average		**6.77%**
3 Yr Average		**5.11%**

4.7.14 As per the table given above, the 5 year WPI inflation is higher than 3 year WPI inflation and thus WPI inflation considered for projection of R&M expenses is 6.77% based on the MYT Regulations, 2013 which stipulate consideration of higher of 3 year and 5 year WPI inflation for projection of R&M expense.

4.7.15 The Petitioner has projected the R&M Expenses considering the average GFA for a year, GFA added during the year, average of ratio of R&M expenses for last 4 years (k factor) and WPI.

4.7.16 The sub-heads of R&M cost have been projected on the basis of historical proportion of these sub-heads in the total R&M cost. Table below summarizes the revised estimates of R&M expenses projected by the petitioner for FY16 and FY17:

Table 51: Proposed R&M expenses for FY16 and FY17 (Rs. Cr.)

Particulars	FY 16 (RE)	FY 17 (Proj.)
Plant & Machinery	0.05	0.06
Buildings	2.12	2.29
Civil Works	0.23	0.25
Hydraulic Works	0.22	0.24
Lines, Cables Networks	63.11	68.05
Vehicles	21.82	23.53
Furniture & Fixtures	0.03	0.03
Office Equipment	2.15	2.32
R&M Cost - Total	**89.75**	**96.76**
Any other Items (Reallocated to Capital Works)	0.00	0.00
R&M Costs after Capitalisation	**89.75**	**96.76**
Less: Cost Reallocated to Employee Cost & A&G Expenses	0.32	0.34
Less: Cost Reallocated to Depreciation & Recovery of cost of vehicle from O&M and other units	39.66	42.76
Overall R&M Expenses	**49.77**	**53.66**

4.7.17 The total O&M expense proposed by the Petitioner for the Third MYT Control Period is shown as below:

Table 52: Projected O&M cost for FY16 and FY17 (Rs Cr.)

Particulars	FY16	FY17
Net Employee Cost	1353.06	1574.36
Net A&G Cost	45.39	49.11
Net R&M Cost	49.77	53.66
Net O&M Cost (In Rs Cr.)	**1448.21**	**1677.31**

4.8 Depreciation

4.8.1 For working out the depreciation, the Petitioner has considered the opening balance of assets in the beginning of the year and the projected capitalization. Assets funded through grants have been excluded in the calculation of depreciation. The Depreciation rates used are as per the HPERC MYT Tariff regulations.

4.8.2 The proposed break-up of assets and depreciation rates considered during the Third Control Period is shown in the following tables:

Table 53: Proposed GFA for depreciation calculation for FY16 and FY17 (Rs Cr.)

Particulars	FY 15 (Actual)	FY 16 (RE)	FY 17 (Proj.)
Land & Land Rights	62.65	69.11	75.35
Building & civil works	130.18	142.42	154.24
Hydraulic Works	16.57	18.23	19.82
Towers,Poles, Fixture, overhead, conductors devices	1,796.37	1961.03	2119.98
Swithchgears, controlgears & protection	585.25	643.67	700.07
Plants & Machinery	1,476.21	1609.84	1738.84
Vehicles	13.74	15.11	16.43
Furniture Fixture	9.47	10.34	11.17
Office equipment incl intangibles	59.95	64.90	69.67
Assets not belonging to the Board		0.11	0.21
Others civil works	160.47	176.50	191.97
Total	**4310.86**	**4711.26**	**5097.76**
Intangible Assets	22.44	22.44	22.44
Assets not in use	4.10	4.10	4.10
G. Total	**4337.40**	**4737.80**	**5124.30**

4.8.3 The depreciation for each year of the Control Period has been computed as per the depreciation rates prescribed in the MYT Distribution Regulations. The depreciation proposed for each year of the Third Control Period is summarized in table below:

Table 54: Details of depreciation projected for FY16 and FY17 (Rs Cr.)

Particulars	FY 16 (RE)	FY 17 (Proj.)
Depreciation	158.64	172.43

4.9 Interest and Finance charges

4.9.1 For the current petition, HPSEBL has estimated the Interest & Finance charges for FY 16 and FY 17 as per the following:

a. Interest Charges on the loans outstanding as on 31st March 15 – Refers to the interest charge payable by the Petitioner on the outstanding loans at the end of FY 15. The said loans have been raised from REC, RGGVY, ADB, Non SLR Bonds, state government, Loans as per the FRP restructuring, etc.

b. Interest on new Capex – Interest charges payable for the loans projected to be raised for the capital investment projected for FY 16 and FY 17. For the purpose of projecting the ARR for the petition, the Petitioner has considered the proposed capital investment as submitted by the Petitioner and thus, the interest charges for FY 16 and FY 17 on account of new loans.

c. Interest on Normative Working Capital – Projected in accordance with the MYT Regulations 2011 and its subsequent amendments from time to time.

d. Cost of raising finances: These includes the expenses incurred by the Petitioner while raising the debt for the capital investment during the year. The Cost of raising finances has been considered at 2% of the loans proposed to be raised during FY 16 and FY 17.

e. Interest on Consumer Security Deposit – Refers to the interest charges payable on security deposit held with the petitioner by the consumers.

A rate of 8.5% per annum has been applied on the projected consumer security deposit based on the projected consumers for FY 16 and FY 17 and the provisional consumer security deposit as on 31st March 2015. The detail of provisional and projected consumer security deposit has been provided in the table given below:

Table 55: Details of Consumer Security Deposit FY16 and FY17 (Rs Cr.)

Financial Year	Consumer Security Deposit (Rs. Cr.)	No. of consumers
31st March 15 (Provisional)	297.23	2,199,970
31st March 16 (Estimated)	305.58	2,261,789
31st March 17 (Projected)	314.20	2,325,588

4.9.2 The summary of the proposed interest and finance charges for FY16 and FY17 is provided in table below:

Table 56: Summary of the proposed Interest and Finance charges FY16 and FY17 (Rs Cr.)

Particulars	FY 16 (RE)	FY 17 (Proj.)
RGGVY - Existing loans as on 31 march 2015	3.39	3.39
REC - Existing loans as on 31 march 2015	85.56	78.08
PFC - Existing loans as on 31 march 2015	17.05	18.15
ADB - Existing loans as on 31 march 2015	0.76	0.76
Short Term Bank Loans as per FRP Restructuring Plan converted to Long term loans	112.83	105.61
Interest on State Govt. Loan	-	-
Non SLR Bonds	38.97	44.64
Cost of Raising Finances	13.10	12.15

Particulars	FY 16 (RE)	FY 17 (Proj.)
Interest on Consumer Security Deposits	25.26	25.97
Interest on new CAPEX loans	255.30	331.86
Interest on WC Borrowing & Other Charges	80.08	85.59
Interest & Finance Charges - Total	**632.30**	**706.20**
Less: Interest Capitalization	135.06	174.38
Net Interest & Financing Costs	**497.25**	**531.82**

4.10 Interest on Working Capital

4.10.1 The Normative Working Capital requirement as well as the Interest on Normative Working Capital for FY 2015-16 and FY 2016-17 has been computed by HPSEBL as per the methodology provided in the MYT Tariff Regulations. The interest on Normative Working Capital has been considered to be 13.21% which is the average base rate for the period from April'15 to Sep'15 plus 350 basis points.

4.10.2 The normative working capital requirement and interest thereon as projected by HPSEBL for the distribution business is summarized below:

Table 57: Proposed Interest on working capital for FY16 and FY17 (Rs Cr.)

Particulars	2015-16 (RE)	2016-17 (Proj.)
O&M expenses	1448.21	1677.31
R&M expenses	49.77	53.66
A&G expenses	45.39	49.11
Employee expenses	1353.06	1574.36
O&M expenses for 1 month	120.68	131.59
Annual revenues from tariffs and charges	4735.92	4971.6
Receivables equivalent to 2 months average billing	789.32	828.60
Maintenance Spares (40% of R&M Expense of 1 Month)	1.66	1.79
Less: Consumer Security Deposit (CSD)	305.58	314.20
Total Working Capital	**606.08**	**647.78**
Interest on Working Capital	**80.08**	**85.59**

4.11 Return on equity

4.11.1 For the 2nd APR of the Third Control Period, the petitioner has submitted that the actual equity received by the petitioner from the Government for FY 14 and FY 15 was Rs. 44.15 Cr. and Rs. 62.50 Cr., respectively.

4.11.2 For the purpose of computation of RoE, the Petitioner has considered the opening equity for the distribution business for FY 2015-16 as Rs. 429.91 Cr. Equity addition during FY 16 and FY 17 has been considered to be Rs. 34.81 Cr. and Rs. 32.93 Cr.

which is same as envisaged in the MYT petition filed for the approval of ARR for the Third Control Period.

4.11.3 The return on equity as proposed by the Petitioner for FY16 and FY17 is summarized below:

Table 58: Proposed Return on Equity for FY16 and FY17 (Rs. Cr.)

Particulars	FY 16 (RE)	FY 17 (Proj.)
Opening Equity	429.91	464.72
Equity Infusion	34.81	32.93
Closing Equity	464.72	497.65
Rate of Return on Equity	16.00%	16.00%
Return on Equity	**71.57**	**76.99**

4.12 Provision for Bad and Doubtful Debt

4.12.1 The Petitioner has submitted provision for bad debt as follows:

Table 59: Provision for Bad and Doubtful Debt for FY16 and FY17 (Rs. Cr.)

Particulars	FY 16	FY 17 (Proj.)
Receivable from customers as at the beginning of the year	1077.99	594.47
Revenue billed for the year	4736	4972
Collection for the year		
Against current dues	4357.04	4573.90
Against arrears upto previous year	862.39	475.58
Gross receivable from customers as at the end of the year	594.47	516.62
Receivables against permanently disconnected consumers	6.30	6.30
Receivables	588.17	510.32
% of provision	0.70%	0.70%
Provision for bad and doubtful debts	**4.13**	**3.58**

4.13 Additional Interest amount towards Kurthala substation & line

4.13.1 HPSEBL has submitted that M/s Tissa Power Transmission Private Limited (formerly Tissa Power Transmission Corporation) has constructed the 2x50/63 MVA, 33/132 kV Sub-Station at Kurthala (Near Tissa) and 132 kV D/C Transmission line from Kurthala to Bathri Sub-Station of HPSEBL including 132 kV Terminal Bays at Bathri Sub-Station).

4.13.2 The cost of entire “Works” is to be reimbursed to M/s Tissa Power Transmission Private Limited in 5 (five) equal installments along with interest commencing from one year after handing over of “Works/ Assets” to the HPSEBL Ltd.

4.13.3 The Petitioner has therefore requested to approve Rs 10.31 Cr. and Rs. 8.25 Cr. for FY16 & FY17, respectively, as Interest Liability for Kurthala substation & line.

4.14 Compensation amount for non-compliance of RPPO in FY 2013-14

4.14.1 The Petitioner has submitted that in FY 2013-14 it had a shortfall in Solar RPPO of 18.537 MUs and was also unable to purchase the Solar REC available in the power exchanges.

4.14.2 Accordingly, the Hon'ble Commission in its order dated 10th November 2014 against the Petition No. 129/2013 directed HPSEBL to deposit the compensation amount of Rs. 17.23 Cr. in a separate fund to be created by the HPSEBL in its accounts as RPPO Compensation Fund for non-compliance of RPPO in 2013-14. The Hon'ble Commission further stated that out of Rs. 17.23 Cr., Rs. 5 Cr. would be provided in the true-up for FY 2013-14 and the remaining Rs. 12.23 Cr. would be provisioned in the ARR of FY 2015-16.

4.14.3 The Petitioner has therefore requested for approval of Rs. 12.23 Cr. in the revised estimate of ARR for FY 2015-16.

4.15 Additional amount for safety measures

4.15.1 In line with the methodology adopted by the Commission in previous MYT Order and APR Order, the Petitioner has proposed Rs. 1 Cr. as additional amount for safety measures for FY 16 and FY 17.

4.16 Non-tariff Income

4.16.1 The Petitioner has estimated non-tariff and other Income for the FY16 and FY17 as shown in the table below:

Table 60: Non-Tariff Income for Third Control Period (Rs. Cr.)

Particulars	FY 16 (RE)	FY 17 (Proj.)
Meter Rent/Service Line Rentals	48.81	54.56
Recovery for theft of Power / Malpractices	0.06	0.06
Wheeling Charges Recovery	133.67	153.56
Miscellaneous Charges from Consumers	5.96	6.85
Non-Tariff Income – Total	**188.50**	**215.03**
Other Income		
Interest on Staff loans & Advances	0.52	0.52

Particulars	FY 16 (RE)	FY 17 (Proj.)
Income from Investments	0.00	0.00
Delayed Payment Charges from Consumers	68.80	72.32
Interest on Advances to Suppliers / Contractors	0.59	0.52
Income from Trading	1.13	1.20
Income fee collected against Staff Welfare Activities	0.13	0.13
Miscellaneous Receipts	29.00	29.00
O&M Charges Recovery from HPPTCL	0.00	0.00
PLVC charges	0.00	0.00
Gain on sale of fixed assets	0.00	0.00
Other Income – Total	**100.17**	**103.59**
Total Non-Tariff Income & Other Income	**288.67**	**318.62**

4.17 Revenue from Sale of Power

4.17.1 The revenue from sale of power to the consumers within the state for FY 16 and FY 17 at existing tariff as estimated by HPSEBL is summarized below:

Table 61: Revenue at existing Tariff for FY16 and FY17 (Rs Cr.)

Categories	FY 2015-16			FY 2016-17		
	Sales (MUs)	Revenue (Rs. Cr.)	Average tariff (Rs./kWh)	Sales (MUs)	Revenue (Rs. Cr.)	Average tariff (Rs./kWh)
Domestic	2,017.16	829.91	4.11	2,178.54	891.64	4.09
Non Domestic Non Commercial	137.18	79.24	5.78	147.69	85.32	5.78
Commercial	494.09	286.75	5.80	528.25	305.17	5.78
Small Industrial	87.67	53.94	6.15	92.15	56.21	6.10
Medium Industrial	129.33	95.23	7.36	132.91	97.35	7.32
Large Industrial - HT	2,037.94	1,393.93	6.84	2,109.27	1,438.71	6.82
Large Industrial - EHT	2,503.30	1,340.15	5.35	2,653.49	1,429.19	5.39
WIPS	585.84	325.20	5.55	610.76	339.55	5.56
Bulk Supply	152.50	108.82	7.14	155.55	110.92	7.13
Street Light	12.84	6.14	4.78	13.10	6.27	4.79
Temporary	26.29	24.91	9.47	26.29	25.23	9.60
Total	**8,184.14**	**4,544.21**	**5.55**	**8,647.99**	**4,785.55**	**5.53**

4.18 Revenue from Inter-state sale of power

4.18.1 Petitioner has submitted that surplus power to be available for FY 16 and FY 17 would be 672.9 MUs and 653.2 MUs which is projected to be sold as interstate power. This includes the contingency power of 314.75 MUs and 320.34 MUs for FY 16 and FY 17 which has been taken at around 3% of the total power purchase. This contingency power is meant to meet the unforeseen events in case of shutdown of any plant and variations in generation due to weather changes.

4.18.2 The average sale rate of interstate power for FY 16 and FY 17 has been considered to be Rs. 2.85/kWh which is the average Market Clearing Price discovered at Indian Energy Exchange for the period Apr'15 to Sep'15. Revenue projected from interstate sale of power is as provided in the table given below:

Table 62: Revenue from sale of Interstate Power for FY16 and FY17 (Rs Cr.)

Particulars	FY 16	FY 17
Interstate Sales (MUs)	672.93	653.15
Price (Rs./kWh)	2.85	2.85
Revenue from sale of Inter State Power (Rs Cr.)	**191.71**	**186.07**

4.19 Aggregate Revenue Requirement

4.19.1 The Petitioner's submission of ARR for the FY16 and FY17 has been summarised below:

Table 63: Details of the ARR proposed by the Petitioner for the FY16 and FY17 (Rs Cr.)

Particulars	FY 16 (RE)	FY 17 (Proj.)
Purchase of Power	2901.97	2871.37
Transmission Charges	317.11	317.21
R&M Expense	49.77	53.66
Employee Expenses	1353.06	1574.36
A&G Expense	45.39	49.11
Additional Amounts for safety measures	1.00	1.00
Depreciation	158.64	172.43
Interest & Finance Charges	497.25	531.82
Additional Interest amount towards Kurthala substation and Line	10.31	8.25
Payment of Arrears of Nathpa Jhakri and Khara Power Plants	0.00	
Provision for bad and doubtful debt	4.13	3.58

Particulars	FY 16 (RE)	FY 17 (Proj.)
Amount Towards RPPO Compensation Fund	12.23	
Return on Equity	71.57	76.99
Surplus Power Purchase as per PPA obligation	0.00	
Less: Non-Tariff Income	288.67	318.62
Annual Revenue Requirement	**5133.75**	**5341.16**

4.20 Revenue Surplus/ (Gap) for FY 16 & FY17

4.20.1 Based on the projection of ARR and Revenue, the revenue surplus / (Gap) projected by HPSEBL for FY 16 and FY 17 is provided below:

Table 64: Projected Revenue Surplus/ Gap for the FY16 and FY17 (Rs Cr.)

Particulars	FY 16	FY 17
Projected ARR	5,133.75	5,341.16
Revenue at Existing Tariff	4,544.21	4,785.55
Revenue from sale outside state	191.71	186.07
Total Revenue	**4,735.92**	**4,971.63**
Revenue Surplus / (Gap)	**(397.83)**	**(369.53)**

4.21 Allocation of ARR into wheeling and retail supply

4.21.1 The Petitioner has allocated the total ARR for HPSEBL into wheeling ARR and retail supply ARR based on the approach adopted by the Commission in the Tariff Order for the Third MYT Control Period:

Table 65: Basis for ARR allocation in Wheeling and Retail Supply

Particulars	Wheeling allocation	Retail Supply allocation
Power Purchase Expenses	0%	100%
Transmission Charges	0%	100%
Employee Expenses	70%	30%
R&M Expenses	90%	10%
A&G Expenses	60%	40%
Additional amount for safety measures	90%	10%
Interest & Financing Charges (other than interest on working capital)	95%	5%
Less : Interest & Other Expenses Capitalised	95%	5%
Interest on Working Capital	10%	90%
Additional Interest amount towards Kurthala substation and Line	95%	5%
Depreciation	95%	5%

Particulars	Wheeling allocation	Retail Supply allocation
Other Debits (incl. Prov for Bad debts)	0%	100%
Return on Equity on Wheeling Business	100%	0%
Public Interaction Program	0%	100%
Non-tariff Income (excluding wheeling charges received from other states)	0%	100%
Wheeling charges received from other states	100%	0%
Addition items (Prior period / true up, etc)	50%	50%

4.21.2 Based on the above allocation rationale, the ARR of wheeling and retail supply business is summarized in tables below:

Table 66: Wheeling ARR for FY16 and FY17 (Rs. Cr.)

Wheeling ARR	FY 16 (RE)	FY 17 (Proj.)
Power Purchase Expenses	0.0	0.0
Transmission Charges	0.0	0.0
Employee Expenses	947.14	1,102.05
R&M Expenses	44.79	48.29
A&G Expenses	27.23	29.47
Additional amount for Safety Measures	0.90	0.90
Interest & Financing Charges (other than interest on working capital)	524.61	589.58
Less : Interest & Other Expenses Capitalised	(128.30)	(165.66)
Interest on Working Capital	8.01	8.56
Additional Interest amount towards Kurthala substation & line	9.79	7.83
Depreciation	150.71	163.81
Other Debits (incl. Prov for Bad debts)	0.0	0.0
Non Tariff Income (excluding wheeling charges received from other states)	0.0	0.0
Wheeling Charges received from other states	(133.67)	(153.56)
Addition items (Prior period / true up, etc)	**0.0**	**0.0**
ARR	**1522.79**	**1708.27**

Table 67: Retail Supply ARR for FY16 and FY17 (Rs. Cr.)

Retail supply ARR	FY 16 (RE)	FY 17 (Proj.)
Power Purchase Expenses	2,901.97	2,871.37
Transmission Charges	317.11	317.21
Employee Expenses	405.92	472.31
R&M Expenses	4.98	5.37
A&G Expenses	18.16	19.64
Additional amount for Safety Measures	0.10	0.10
Interest & Financing Charges (other than interest on working capital)	27,61	31.03
Less : Interest & Other Expenses Capitalised	(6.75)	(8.72)

Retail supply ARR	FY 16 (RE)	FY 17 (Proj.)
Interest on Working Capital	72.07	77.03
Additional Interest amount towards Kurthala substation & line	0.52	0.41
Depreciation	7.93	8.62
Other Debits (incl. Prov for Bad debts)	4.13	3.58
Amount Towards RPPO Compensation fund	12.23	
Non Tariff Income (excluding wheeling charges received from other states)	(155.00)	(165.07)
Wheeling Charges received from other states		
Addition items (Prior period / true up, etc)		
ARR	**3610.97**	**3632.89**

4.22 Tariff Proposal

4.22.1 After repeated reminders from the Commission, the Petitioner has submitted the tariff proposal for FY16-17 which includes the revenue gap on account of true-up of controllable parameters for 2nd Control Period, revised ARR for FY16 and projected ARR for FY17 as detailed in table below:

Table 68: Projected Revenue Gap based on Revised ARR for FY16 & FY17 (Rs. Cr.)

Particulars	FY 2015-16	FY 2015-16	FY2016-17
	Approved	R.E.	Proj. @ existing tariff
Annual Revenue Requirement	**4,655.63**	**5,133.75**	**5,341.16**
Covered by			
Revenue at Existing Tariff to consumers within state	4,324.84	4,544.21	4,785.55
Revenue from Sale Outside State	243.35	191.71	186.07
Grant Available from 13th Finance Commission	132.99	0.00	0.00
Revenue at Existing Tariff	**4,701.18**	**4,735.92**	**4,971.63**
Revenue Surplus / (Gap)	**45.55**	**(397.83)**	**(369.53)**
Combined Revenue Surplus / (Gap) for FY 2015-16 and FY 2016-17			(767.37)
Revenue Surplus / (Gap) for Second Control Period			(789.33)
Total Revenue Surplus / (Gap)			**(1,556.70)**
Proposed tariff to recover ARR (Rs Cr.)			**6,528.32**

4.22.2 HPSEBL has proposed to recover Rs. 6,528.32 Cr. i.e. ARR for FY 2016-17 and revenue gap for FY 2015-16 as well as True up of Second Control Period by increasing tariff and to generate additional revenue to recover the total ARR.

4.22.3 Based on the tariff proposed in the Tariff proposal, the projected revenue from the proposed tariff vis-à-vis revenue from the existing tariff is provided in the table given below:

Table 69: Projected Revenue at Proposed Tariff vis-à-vis Existing Tariff Rs. Cr.)

Tariff Category	Revenue @ Existing Tariff (Rs. Cr.)	Revenue @ Proposed Tariff (Rs. Cr.)	Tariff Hike (Rs. Cr.)	Tariff Hike (%)
Domestic Supply	891.64	1,041.40	149.77	17%
Non Domestic Non Commercial Supply	85.32	115.01	29.68	35%
Commercial Supply	305.17	403.68	98.51	32%
Small Industrial Power Supply	56.21	73.14	16.93	30%
Medium Industrial Power Supply	97.35	122.06	24.71	25%
Large Industrial Power Supply	2,867.90	3,942.38	1,074.48	37%
Irrigation & Drinking Water Pumping Supply	339.55	460.52	120.97	36%
Bulk Supply	110.92	143.14	32.22	29%
Street Lighting Supply	6.27	8.45	2.18	35%
Railway Supply	-	-	-	-
Temporary Metered Supply	25.23	32.78	7.55	30%
Total	**4,785.55**	**6,342.56**	**1,557.01**	**33%**

4.23 Additional Submissions

4.23.1 Introduction of category for telecommunication

HPSEBL has prayed that a new tariff category for telecommunication may be formed as per Hon'ble Commission lt. No. 1322 dt. 24.07.2015. The proposed tariff by the Petitioner is provided below as below:

Table 70: Proposed Tariff for Telecommunication category

Particulars	Details

Demand Charges	
(More than 20 kVA but upto 100 kVA)	Rs. 100/ kVA/ month
Above 100 kVA	Rs. 150/ kVA/ month
Energy Charges	
(More than 20 kVA but upto 100 kVA)	Rs. 6.30 / kVAh
Above 100 kVA	Rs. 6.20 / kVAh

Demand charges is proposed be levied on the actual maximum recorded demand in a month in any 30 minute interval in a month or 90% of the contract demand, whichever is higher but up to a ceiling of Contract Demand. Contract Demand Violation Charges shall be applicable beyond such ceiling.

4.23.2 Inclusion of Lawyers, NGOs in Non-Domestic Non-Commercial Category

HPSEBL has prayed for inclusion of lawyers and NGOs under the Non-Domestic Non-Commercial Category of Tariff.

4.23.3 Introduction of Prepaid Metering for all government and large consumers (1 MW and above)

In compliance with the Financial Restructuring Plan of HP Govt., HPSEBL has requested for introduction of prepaid metering for all the government institutions/ Offices as well as large consumers with connected load 1 MW and above in the state so as to address the problems of cash flow being faced by HPSEBL.

4.23.4 Separate tariff for LED Street Light

The Petitioner has prayed that charges for maintenance/ replacement for the LEDs street lighting fixtures under the Schedule of Street Light Supply may also be determined.

5 Objection filed and Issues raised by Stakeholders during Public Hearing

5.1 Introduction

5.1.1 Four stakeholders filed written objections to the Petition for Second Annual Performance Review for the third Control Period FY15-19 and True-up of uncontrollable parameters of FY14 and controllable parameters of 2nd MYT Control Period (FY12-14) filed by HPSEBL. The list of the stakeholders are as follows:

Table 71: Details of Objectors

Sl.	Objector	Address
1	M/S Vardhman Textiles Ltd.	Sai-Road, Baddi, Tehsil Nalagarh, Distt. Solan, H.P.-173205
2	Sh. P. N. Bhardwaj	Consumer Representative, HPERC ARCADIA, P.o. Dharampur, Distt. Solan (HP)- 174103
3	BBNIA	EPIP Phase-I, Jharmajri, Baddi, Distt. Solan -174103
4	Himachal Pradesh Power Corporation Ltd.	Shimla Bypass NH 22, Chaura Maidan, Shimla, Himachal Pradesh 171005

5.1.2 The public hearing was held on 25th February, 2016 at the Commission's Court Room in Shimla. The representatives of the stakeholders presented their cases before the Commission during public hearing.

5.1.3 Issues raised by the stakeholders in their written submission and during the public hearing, along with replies given to the objections by the HPSEBL and views of the Commission are mentioned in following paras:

Objections Raised on True up of FY12-14

5.2 True-up Related

5.2.1 The stakeholders have made the following objections and observations on the Petition:

a) HPSEBL has proposed a true up for FY 12-FY 14 i.e. for the second MYT control period. The true-ups for these years have been earlier filed by the petitioner and the matter was settled by the Hon'ble Commission in the respective petitions. It appears that the petitioner is putting for true up again before the Commission for the components that have been disallowed in the past. As per MYT principles and Regulations, the variations on account of controllable parameters were disallowed in the past. The same are being brought up again for true-up before the Commission.

b) The HPSEB Ltd has claimed revenue deficit of Rs.789 crore in true up of FY 2012-14 in which a large part of the revenue gap is on account of expenses already disallowed by the Commission and mainly belongs to higher employee cost, interest cost, higher depreciation and return on equity. The stakeholder requested the Commission to thoroughly examine the true-up petition and the claim of the petitioner should be allowed on actual basis alone as claimed by the Board.

Petitioner's Response

5.2.2 The Petitioner has submitted the following responses and clarifications on the above power purchase related objections raised by stakeholders:

a) HPSEBL filed the petition based on final audited accounts in accordance with HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 and its amendments from time to time The Relevant extracts of the same are reproduced below:

"11. True Up

(b) for controllable parameters -

(I) any surplus or deficit on account of the O&M expenses shall be to the account of the licensee and shall not be trued up in ARR unless such is treated as uncontrollable by the Commission in accordance with these regulations;

(II) any surplus or deficit on account of the distribution losses shall be shared between the licensee and the consumers in accordance with these regulations;

(III) during mid-term performance review and during the end of the control period true up

(i) O&M expenses treated as uncontrollable may be trued-up on the basis of

actual/ audited information and prudence check by the Commission;

(ii) any surplus or deficit on account of variations in the costs and targets of distribution losses treated as uncontrollable, may be trued-up on the basis of actual/ audited information and prudence check by the Commission and shall be shared between the licensee and the consumers in accordance with these regulations;

(iii) The Commission shall review the actual capital investment vis-à-vis approved capital investment;

(iv) Depreciation and financing cost, which includes cost of debt including working capital (interest), cost of equity (return) shall be trued up on the basis of actual/ audited information and prudence check by the Commission.

(2) The distribution licensee, for the approved true-up of any year over and above that approved in the Tariff Order for that year, shall be entitled to a carrying cost at the Base Rate of State Bank of India plus 350 basis points and for any true-up resulting in less than that approved in the Tariff Order for that year, the carrying cost shall be recovered at the same rate.

(3) Notwithstanding anything contained in these regulations, the gains or losses in the controllable items of ARR on account of force majeure, change in law and change in taxes and duties after adjusting for proceeds from any insurance scheme, if any, shall be passed on as an additional charge or rebate in ARR over such period as may be mentioned in the order of the Commission.

Accordingly, as per the provisions of these regulations, HPSEBL has filed true-up Petition for second control period considering controllable parameters for complete 2nd control period from FY 2011-12 to FY2013-14 and uncontrollable parameters for FY 2013-14.

Commissions Observations

5.2.3 The Petitioner has submitted the true up petition for the controllable parameters of 2nd MYT Control Period and the uncontrollable parameters of FY14 in compliance with the Regulations set forth by the Commission. The Commission in this Order has reviewed the various submissions of the Petitioner and undertaken prudence check while allowing each parameter in line with the provisions of the MYT Regulations, 2011.

Objections Raised on ARR of FY17

5.3 Power Purchase

5.3.1 The stakeholders have made the following objections and observations on the Petition:

a) In view of the long term agreements for purchase of power, the power purchase cost per unit should not have gone up. HPSEBL has estimated an increase in power purchase cost per unit from Rs. 2.13 per unit to Rs. 2.31 per unit (an increase of 18 Paise per unit). It may also be noted that the HPSEBL's own generation is projected to drop in comparison to FY15. The decrease of generation which is cheaper power is largely impacting the power purchase cost.

b) The stakeholder has opined that the lower efficiencies of the plants owned by HPSEBL has to be scrutinised. The lower energy availability from these plants is forcing the utility to purchase power from external costly sources which in turn increases the power purchase expenses and ultimately passed through to the consumers.

c) The stakeholders has also pointed out that HPSEBL has been purchasing a large share of the power purchase quantum from thermal sources outside the state even though the State of HP has abundant hydro potential. The stakeholders requested the Commission to enforce HPSEBL to purchase clean energy generated in Himachal Pradesh.

Petitioner's Response

5.3.2 The Petitioner has submitted the following responses and clarifications on the above power purchase related objections raised by stakeholders:

a) The projected power purchase cost has increased due to CERC tariff regulation 2014-19 which has an impact on central power stations from which HPSEBL has long term power purchase agreement. The drop in HPSEBL's own generation is due to accident at Bhaba power plant (120 MW) which is now scheduled to re-commissioned in May'16. This, therefore, is a temporary drop of generation in FY 2016-17.

b) The approved quantum of generation for FY 2014-15 as per MYT order is 2087 MUs against which actual generation from own hydro stations of HPSEBL is 1981.72 MUs (excluding free energy) which is slightly lower than the approved quantum because of shutdown of Bhabha in Jan'15. Therefore, there is no question of inefficiency of HPSEBL's own hydro station. Generation from Bhabha HEP, which met with an accident in Jan'15, will start from July'16 onwards and it shall supply power for the rest of the year.

Commissions Observations

5.3.3 The Commission has taken into consideration the actuals power purchase cost of FY 2014-15 and ten months of FY2015-16 while examining the power purchase projections of the Petitioner for FY 2016-17.

5.3.4 With respect to lower generation achieved by HPSEBL in FY15 due to shut down of Bhabha plant, the same shall be analysed at the time of truing-up for FY15 based on the reasons for shutdown of the plant and appropriate decision shall be taken in this regard.

5.3.5 While the Commission is of the opinion that the HPSEBL needs to maintain an optimal mix of power purchase from different clean sources of generation for ensuring reliable supply to its consumers throughout the year. Accordingly, the HPSEBL is encouraged to plan its power procurement in the best interest of the consumers. The Commission will continue with its policy of power procurement for 3rd MYT Control Period i.e. 100% clean energy in merit order pricing. The Commission will endeavour isolating the retail tariff from the impact of costly power purchase, in merit order, in excess of State requirement.

5.4 Variations in ARR components

5.4.1 The following objections were received regarding the variations in various components of the ARR:

a) The ARR for FY 2017 has been estimated to increase by 13.21% from Rs. 4717.84 Cr. approved by the Commission for FY 2017 to Rs. 5341.16 Cr.

b) Excess in A&G Expenses being controllable parameter should not be allowed.

c) There is a huge excess in depreciation to an extent of Rs. 91.53 Cr. The objector has questioned the rationale for this increase in depreciation and requests the Commission to scrutinise the same.

d) The Board has claimed very high depreciation charges for FY 2015-16 to 2018-19 based on incremental increase in fixed assets. This is our submission that depreciation must be allowed based on actual capacity added/ assets created.

e) There is a surplus of Rs. 93.15 Crores in the other income.

f) The excess expenditure of Rs. 1.97 in R&M Expenses should not to be allowed as this is a controllable parameter under MYT.

Petitioner's Response

5.4.2 Increase in ARR year-on- year can't be estimated by a stable yearly increase. The cost of different goods, commodity, salary of employees, increase in number of employees etc. are dynamic figures and the cost/ expenditure associated with these components do not tend to vary linearly year on year. Further, the mechanism of APR/True up is also to address the variations in projections.

5.4.3 HPSEBL submits that the revised A&G expenses is as per HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 amended from time to time.

5.4.4 HPSEBL submits that the revised depreciation is projected after considering the growth in HPSEBL business and distribution network and resultant capitalization. HPSEBL requests Hon'ble Commission to approve the revised depreciation.

5.4.5 The other income mentioned by objectors is non-tariff income which is Rs. 318.62 Cr. against approved amount of Rs. 225.47 Cr. HPSEBL submits that the amount considered is Rs. 93.15 Cr. higher than the approved cost which is a plus point because the same amount is deducted from the total ARR.

5.4.6 HPSEBL submits that the revised R&M expenses is as per HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 amended from time to time.

Commissions Observations

5.4.7 The various components of ARR are segregated under controllable and uncontrollable parameters. As per the MYT Regulations, the controllable parameters shall remain constant and will not be revised generally during the Control Period. Therefore, the Commission while approving the ARR for FY17 has considered revision only on account of uncontrollable parameters. Other Controllable elements like O&M expense, depreciation, interest cost, etc. shall be considered for any revision based on the performance of the petitioner at the time of mid-term review/ end of control period.

5.5 Cost of supply/ Voltage-wise Cost of Supply

5.5.1 It has been pointed out by several stakeholders that industrial consumers are burdened by the element of cross subsidy built in the tariff. Also the tariff determination exercise doesn't adequately take into account the cross subsidy and the voltage-wise average cost of supply. On these lines, the stakeholders have suggested as under:

a) The tariff of subsidised class of consumers should be raised to minimum 85% of the average cost of supply.

The objector has submitted that in para 8.3 of National Tariff Policy, which deals with the tariff design: linkage of tariff to cost of service, it is clearly stipulated that for achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC should notify a roadmap, which would ensure that by 2011, the tariff would be within 20% plus/minus of the average cost of supply. Further, the objector has also mentioned that the Commission in Tariff Regulations, 2013 has stated that tariff of the subsidizing consumers will not be more than 10% of average cost of supply and subsidized class would not be less than 85% of the average cost of supply. Therefore, the tariff of the subsidized class of consumers should be raised to the minimum 85% of the average cost of supply determined by the Commission.

Determination of category-wise cost of supply and cross subsidy based on category-wise cost of supply required to meet the requirement of the Electricity Act, 2003. Section 62(3) of the Electricity Act 2003 requires the

Appropriate Commission to consider the following factors for tariff determination: i) load factor ii) Power factor and iii) Voltage etc.

It also requires that any undue preference should not be given to any consumer. By adopting the principles of average cost of supply, the Board is giving undue preference to the domestic consumers where cost of supply works out to be higher because of supply at low voltage as compared to high voltage supply to industrial consumers.

b) The cross subsidy of the subsidizing class of consumers has been growing due to the adoption of average cost of supply principle. In the past, the tariff was based on category wise cost of supply. The change in the tariff principle from category wise cost of supply to average cost of supply has led to increase in cross subsidy generated by the subsidizing class of consumers. It is against the spirit of the Electricity Act, 2003. Therefore, the Commission is requested that cross subsidy burden on subsidizing class of consumers may be brought down.

c) Category wise cost of supply should be worked out as has been done earlier. Accordingly, the cross subsidy level should be determined reflecting the true cost of supply and actual cross subsidy given/charged from different categories of consumers.

Tariffs should be based on voltage wise cost of supply rather than the average cost of Supply. We urge the Hon'ble Commission to follow the voltage-wise cost of supply methodology. The voltage of supply largely affects the cost of supply as the T & D losses are in inverse relation with the supply voltage.

d) Board’s contention for moving the tariff in the range of 80%-120% of cost of supply by referring to NTP is not valid and tariff for the subsidizing class of consumers should not be increased in such a way, which will increase the cross subsidy beyond the existing level given by the subsidizing class of EHT consumers. The approach of the board is discriminatory, arbitrary and not in conformity with the Electricity Act 2003 as well as the methodology adopted by the HPERC in its previous tariff orders since many years.

Petitioner's Response

5.5.2 The Petitioner has provided the following responses on the above objections:

a) Hon'ble Commission shall take decision on category wise cost of supply as per relevant sub regulation of HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 amended from time to time. Regulation 41B (Second amendment) 3(b) indicate a roadmap for reduction and/or rationalization of cross subsidies in the MYT Orders for the Control Periods starting from 1.4.2014 and thereafter. The road map shall be based on the approach of a gradual reduction/rationalization in cross subsidy, guided by the principles laid down in the National Tariff Policy, with a target that by the end of the control period starting from 1.4.2014 tariffs for the consumer categories, other than the life line category, are within (-)15% to (+) 10% of the average cost of supply and by the end of the subsequent control period, the same are within (-)10% to (+)15%.

b) The process to undertake a study to determine the voltage wise cost of supply has been initiated and the report shall be submitted to Hon'ble Commission on completion.

c) The current tariff applicable is in line with National Tariff Policy, 2006. The same has been adopted by Hon'ble Commission in its MYT tariff regulations. Hon'ble Commission may decide for switching of tariff philosophy from National Tariff Policy based tariff to Voltage-wise tariff at appropriate stage.

Commissions Observations

5.5.3 On the issue of determination of voltage-wise cost reflective tariff, the Commission has been following an approach for voltage-wise cost allocation to facilitate tariffs and pegging them to voltage-based Cost to Serve. The tariff under each category is being approved as per this methodology. The Commission has instructed the HPSEBL to undertake a detailed voltage-wise Cost of Supply study and submit the findings of the same to the Commission for further analysis and decision making.

5.5.4 In accordance with the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulation, 2011 (read with amendments), the Commission has indicated a roadmap wherein, by the end of the current Control Period, the tariffs for all consumer categories except lifeline consumers are to be brought within (-)15% to (+)10% of the average cost of supply and the Commission is endeavouring towards achieving this. Further, in line with the revised formula prescribed in the amendment to the National Tariff Policy notified by the Government on 28th January, 2016, the Commission has computed cross-subsidy surcharge for the various open access consumer categories.

5.6 Interest Charges

5.6.1 The following objections have been received regarding the interest on loan amount:

a) The interest cost is estimated to grow at Rs. 497.25 crore in FY 2015-16 and Rs. 531.82 crore in FY 2016-17 against approved interest charges of Rs. 196.88 crore & 229.76 crore in tariff order. As per the submission the reasonable interest cost as per the regulations is unclear. It is also not clear that loan raised/proposed to be raised strictly belongs to those assets, which are commissioned and/or where work is in progress. Therefore, it is submitted that the Commission may look into the details of the loans before approving the interest charges.

In response to the Petitioner clarifications, the objector has mentioned that as per MYT Regulation 2013, all loans considered for this purpose shall be identified with the assets created. In fact, the loan requirement for the capital work has been approved based on the actual work accomplished in the related year as well as the past performance of the Board vis-à-vis approved capital expenditure. Therefore, the requirement for loans should be linked with the actual performance and future projections should also be based on the same.

b) There is an alarming excess of Rs.302.06 Cr. in interest and finance charges as compared to the approved values. The variations observed are huge.

Petitioner's Response

5.6.2 The Petitioner has provided the following responses on the above objections:

a) HPSEBL has submitted all the details of interest charges paid. It is also submitted that the interest approved is very much on the lower side and the Commission was requested to re-consider this during mid-term review as the HPSEBL is no longer availing short term borrowing.

b) HPSEBL submits that it has determined the interest cost projections based on the actual interest on existing loans.

Commissions Observations

5.6.3 The Commission has approved interest on loans with adequate due-diligence and with due cognizance to past practices. Detailed analysis regarding the same has been provided in the MYT Order dated 12th June, 2014. However, while analysing the truing-up for the controllable parameters of 2nd MYT Control Period, the Commission has observed that the petitioner is not maintaining proper information with respect to the funding of various capital works and directs HPSEBL to maintain prudent accounting practices for recording information with respect to capital expenditure under various schemes and sources of funding for each scheme.

5.6.4 While the Commission has been approving the interest on working capital as per the normative working capital requirement, any shortfall in recovery of revenue as against the ARR is approved along with carrying cost. Therefore, no short term loans are considered by the Commission while approving the interest and finance charges.

5.7 Return on Equity

5.7.1 Following objections have been received regarding return on equity:

a) Stakeholders have stated that return on equity invested in work in progress shall be allowed from the date of commercial operation. Therefore, the burden of the return on equity, which may be invested in coming years, cannot be passed on to the present consumers in the State. Further, as per the regulations, the equity invested in projects, which are yet to start commercial operation cannot be provided. In this background, it is submitted that return on equity may be approved.

b) The board has projected an increase in return on equity of Rs 71.57 crore and 76.99 crore against approved Rs.30.24 crore in FY 16 and FY 17. However, it is not cleared that how this equity will be infused and where the cash generated will be used. It is our submission that return on equity should be allowed only if such equity is actually invested and used in creation of tangible asset which can be used for the benefits of the consumers.

c) Reasonable Return on Equity has also been revised upwardly by the petitioner, which needs to be looked into.

Petitioner's Response

5.7.2 HPSEBL has projected return on equity based on the equity infused by GoHP and as per HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 amended from time to time.

Commissions Observations

5.7.3 In the MYT Order the Commission had observed that all past capex undertaken by the Petitioner are predominantly being funded through grants and debt. Therefore, the Commission had considered the same approach while approving funding for capital expenditure approved for the third Control Period and any equity infused for funding of the schematic capex shall be considered during the mid-term review and review at the end of Control Period. The Commission has continued with the philosophy defined in the MYT Order and will approve additional RoE in the true-up of controllable parameters at the end of the 3rd Control Period.

5.8 Capital Expenditure

5.8.1 The stakeholder has stated that the petition is silent on the progress of CAPEX permitted. It is essential that the APR should have this information with explanation if the targets remain unachieved. Any slackness in achieving the prescribed targets should be dealt with sternly. In the past too, the progress in capital expenditure has been dismal. The stakeholder also requests the commission not to permit such laxity and impose penalties.

5.8.2 It has also been suggested by some consumers that the cost of funds diverted from capital to revenue account should be disallowed by the Commission.

Petitioner's Response

5.8.3 The petitioner submitted that the data regarding the capital expenditure data has been provided to the HPERC.

Commissions Observations

5.8.4 The Commission agrees with the point raised by the stakeholder regarding necessity of submission of information regarding capital expenditure undertaken at the time of filing of APR. While some details in this regard has been submitted by the petitioner in response to the queries raised by the Commission, the petitioner is directed to include details of such capital expenditure vis-à-vis the approved expenditure in its subsequent APR filings.

5.9 T&D Losses

5.9.1 The stakeholders in their submissions cited various shortcomings in the functioning of HPSEBL as well as highlighted other operational deficiencies which are as follows:

a) The petition is silent on the circle wise losses. There are a few circles where the T&D losses are prohibitively high. The licensee should be asked to supply all consumer related information that have a direct bearing on additional burden on the consumers.

Petitioner's Response:

5.9.2 The petitioner has informed that T&D loss data has already been supplied to the Commission. Further, targets for reduction of losses have been fixed for each division and action has been taken against defaulting circles.

Commissions Observations

5.9.3 Based on the information submitted by the petitioner, it is observed that the petitioner has been able to meet the T&D losses for FY15 and should be in a position to meet the loss targets in the rest of the Control Period. However, the continued high losses in some circles are a cause for concern. The petitioner should focus its efforts on these areas and strive to bring their loss level at par with that of the entire state.

5.10 Employee Cost

5.10.1 The employee cost has been growing continuously. The Board has projected a continuous increase in the employee cost during FY 16 & FY 17. Against Rs.1266.27 crore and Rs. 1414.82 Crore approved employee cost, the Board has claimed Rs.1353.06 crore and Rs. 1574.36 crore. It is submitted that the same should be controlled for the ARR purpose. Therefore, the same should not be allowed and only employee cost linked with increase in inflation should be allowed.

5.10.2 The Commission in its previous tariff orders has also objected to high employee cost of the Board and disapproved a part of the same. Therefore, only that part of the employee cost claimed by the Board should be allowed, which is reasonable, justified and efficiently incurred.

5.10.3 The stakeholders have pointed out that HPSEBL has resorted to manpower on contract basis to meet many of its requirements including maintenance activities of distribution and transmission networks, energy billing etc. The stakeholders have questioned the relevance of such high manpower on the rolls of HPSEBL given the very high increase in employee cost year on year.

5.10.4 Employee Expenses have been projected to exceed the estimates by Rs. 159.54 Cr. The increase in employee cost should be allowed only to an extent of inflation. Year after year the employee cost is going up despite the efficiency measures adopted by the petitioner. There should be a cap in terms of employee cost per unit on the petitioner. As per FY 2014 data the employee cost per unit is Rs 1.19 per unit which is among the highest in the country and is a large component of Average cost of supply. In Uttarakhand, which has similar topography as a hill state, this component is only Re 0.37 per unit. Deliberations are needed on this matter as to how to contain this cost. It has also been observed that terminal benefits forms a very large component of the Employee Cost, which is not the case with the other utilities in the country. The terminal benefits need to be reviewed viz. a viz. the other utilities in the country.

Petitioner's Response:

5.10.5 The compilation of the replies to the above issues filed by the Petitioner is as follows:

a) The employee cost projections have been prepared in accordance with the MYT Tariff Regulations of HPERC and additional 10% impact of 7th Pay Commission for FY 2016-17 has also been factored.

b) HPSEBL further informs that it always endeavours to limit its expenses and therefore, the objective to outsource works to private agencies is to reduce the employee cost. The productivity of HPSEBL can be ascertained from the fact that only 17448 nos. of employees are working against sanctioned manpower of 24849 as on 31.03.2015.

c) HPSEBL employee cost contains a major portion of terminal benefits, which is projected as Rs 531.12 Cr and Rs 584.23 Cr. for FY 2015-16 & FY 2016-17 respectively and this amount is borne by HPSEBL whereas for Uttarakhand terminal benefit is borne by Uttarakhand government and the liability on discom projected is Rs 61.67 Cr. and 68.82 Cr for FY 2015-16 & FY 2016-17 respectively only.

d) Employee cost of HPSEBL can't be compared with Uttarakhand. Since other factors like electrification, AT&C losses, quality of supply etc. have also a direct bearing on the employee cost.

Commission's Observations:

5.10.6 The Commission has provided its detailed analysis and approval of the employee cost for each year of the Control Period in Chapter 7 of the MYT Order dated 12th June, 2014. The Commission has been adopting adequate prudence while approving the employee cost of HPSEBL and cost with respect to the functions other than distribution have not been approved in the previous Orders.

5.10.7 Also, in view of the high pension liabilities of HPSEBL, the Commission has issued the HPERC (Terms and Conditions for sharing of Cost of Terminal benefits of Personnel of the erstwhile Himachal Pradesh State Electricity Board and Successor Entities) Regulations, 2015 In line with the Regulations, the terminal benefits of HPSEBL is required to be apportioned between the time period of Pre-Transfer Scheme and Post-Transfer Scheme and the return approved on GoHP equity share as well as pension contribution of employees on deputation in commissioned projects and in BVPCL, Projects and S&I is to be adjusted against the terminal benefits component (Pre-Transfer Scheme) of the employee cost of HPSEBL.

5.11 Tariff Related Aspects

5.11.1 The following objections were raised:

a) The stakeholder submitted that a tariff hike should not be allowed and the level of cross subsidy should not be increased from the present level and should be progressively reduced to reduce the impact on all categories especially EHT

b) The present rate of demand charges for EHT consumers @ Rs 350/ kVA is very high and results in a large fluctuation in the overall per unit rate, on account of load factor of a unit. It is suggested that the demand charges for all categories of industries should be uniform.

c) Presently the industrial colonies are not being charged at domestic rates of tariff although the workers residing in these colonies use electricity for domestic/ residential purpose. The residents of these residential colonies are being discriminated against other domestic users. It was suggested that a separate tariff category be formed for industrial housing colonies having similar tariff as domestic but without the highly concessional slabs and the supply be given at a single point to industrial colonies, who would further distribute to individual units. For such colonies the billing should be carried out in the name of industrial undertaking. The industry will pay the bills, even if they collect it from the employees or not

d) The minimum demand charges, which are presently 90% of total contract demand, should be reduced to 80% to avoid unnecessary burden on consumers. If the demand charges are calculated at 90% of the contract demand, the consumer will be required to seek more revisions of contract demand in a year as against two revisions allowed by the Commission in its recent orders. Therefore, consumers should be provided a cushion of 20% (100-80) to accommodate changes in demand due to these various reasons as mentioned.

e) A separate tariff category should be evolved and made applicable for 66 KV, 132 KV and 220 KV consumers in the State as different T&D loss matrix is there at each voltage. Such tariff is applicable in several other states.

f) The night tariff concession in the state is not adequate to create major change in consumption pattern. The same may be increased to 100 paisa per unit from the current level unit to make it more effective for flattening the load curve. The demand will automatically align with ToD tariff differentials being appropriate. The recommendation after the interactive session conclude that there should be different rates for monsoon and non- monsoon period i.e. seasonal basis. Night usage by the industry should be encouraged irrespective of the seasons and therefore the surplus or short availability is not applicable. The basis of night concession is the fluctuation of price of power during day and night hours across the country over the energy exchanges.

Thus the concessional rates should be uniform for the entire year and irrespective of the voltage level. The concession should be based on differential tariff during day and night hours over the energy exchanges in the country. Moreover, having different night energy rates for different„ seasons will again create implementation issues and we will move in a direction away from simplification.

g) Demand charges of HT2 and EHT consumers are very high and should be reduced.

h) Concept of Connected Load in kW should be replaced with contract demand in case of Industrial consumers as the consumption is recorded in kVAh and accordingly the billing is also made in kVAh & kVA only. Further, continuation of the concept of connected load for the purpose of billing/connection release leads to avoidable harassment of the consumers at the hands of the utility staff.

i) The past years arrears allowed during true up, forming the part of current year tariff, must be shown separately from the base tariff, in the form of a surcharge, so that the transparency with regard to the base tariff is maintained.

j) If the minimum supply to a Customer is not available for more than 3 days in a month, proportionate adjustments should be provided in demand charges as relief to the customer on a pro-rata basis.

k) Directions were issued to the HPSEBL to undertake category and age wise analysis of the arrears with break up. Their response is vague and does not answer any break up of arrears as directed.

l) There should be time bound mechanism for refund of excess amount charged by HPSEBL. The refunds linger on for years together and the customers are losing interest on the amounts recovered in excess by HPSEBL.

Petitioner's Response:

5.11.2 The compilation of the replies to the above issues filed by the Petitioner is as follows:

a) The petitioner submits that revenue gap for any year can be met only through a tariff hike and the final decision has to be made by the Commission.

b) Major CAPEX and power purchase from costly sources aim to fulfil the industrial demands which are borne by all other consumers as well. Moreover, reduction of demand charges will reduce the revenue requirement and the same can only be compensated by higher energy charge from EHT consumers.

c) In response to objection/suggestion regarding domestic connection to industrial colonies, HPSEBL submitted that provision for private housing colonies under schedule of Bulk supply are already in place

d) The reduction in demand charges will impact the revenue requirement of HPSEBL and the same can only be compensated by higher rate of higher energy charges. Hence, HPSEBL does not agree with the proposal of stakeholder for revising the billable demand at 80% of the contract demand or the actual demand whichever is higher.

e) HPSEBL for its distribution business alone has huge asset base and earmarking of assets, liabilities, revenue and expenses across different voltage level is lengthy and time-taking process. GIS mapping of all assets will be completed during FY 2015-16. The current tariff applicable is in line with National Tariff Policy, 2006. Hon'ble Commission may decide for switching of tariff philosophy from National Tariff Policy based tariff to voltage-wise tariff at appropriate stage.

f) HPSEBL is already providing night-time concession. Further increase in night-time concession will not result in major shift in load-curve. The night load curve is already stable and HPSEBL does not envisage any further shift of consumption in respect of single shift industries. Further HPSEBL does not see any merit in allowing it for the whole year since less power is available during winters as surplus during night time. Therefore, HPSEBL does not find any merit in further changing the same.

g) Major CAPEX and power purchase from costly sources aim to fulfil the industrial demands which are borne by all other consumers as well. Moreover, reduction of demand charges will reduce the revenue requirement and the same can only be compensated by higher energy charge from EHT consumers.

h) Requisite changes have already been made in the Supply Code by the Hon'ble Commission as well as in the MYT order dated 12/06/2014 and since it is ongoing process, the concept of complete KVA based connection will evolve eventually in time.

i) HPSEBL requests to Hon'ble Commission to take decision on the allowance of past arrears during true up to form part of the current tariff.

j) HPSEBL submits that its distribution business has incurred a huge expense in its asset base to ensure a continuous supply to its consumers. And this fixed costs incurred by HPSEBL on its system created to supply power on demand by the consumer and therefore this cost has to be borne by the consumer even if there is no consumption due to any reason.

k) HPSEBL has already provided details of receivables/ payables as on to the Hon'ble Commission. The HPSEBL is making concerted efforts to recover all outstanding arrears. The Board has been able to recover most of the old arrears barring such claims which are sub-judice.

l) HPSEBL refunds the claims for excess amount recovered from the consumers from the very next billing cycle. However any specific case of default may be brought to the notice of HPSEBL for its redressal.

Commission's Observations:

5.11.3 Various steps were taken during the multi-year tariff order issued on 12th June, 2014 for simplification/rationalisation of tariff structure. These steps were taken after detailed deliberation with all the Stakeholders including various Industrial Associations. The multi-year tariff principles have been adopted to provide greater predictability to consumer tariff during the control period. Therefore, it will not be in the overall interest of the electricity sector in the State to alter the tariff concepts perceived for the 3rd MYT control period midway. Some of the issues raised by the Industrial Associations have been deliberated in the past and the Commission had taken a balanced view in such matters. These issues have not been discussed in detail here. In this context, the observation of the Commission on various issues is as under:-

a) In accordance with section 62 of Electricity Act, the Commission has to determine the Electricity Tariff wherein consumers of electricity may be differentiated in accordance to their load factor, power factor, voltage, total consumption of electricity during any specified time period, the time at which supply is required, geographical position of any area, nature of supply and the purpose for which supply is required. Therefore, voltage can be one of the criteria for fixing of tariffs but it need not be the sole criteria. In accordance with National Tariff Policy the level of cross subsidies is to be restricted for various consumer categories other than lifeline domestic consumers, to a level of (±)20% of the average cost of supply. However the Commission has gone a step further and laid out a roadmap in the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Wheeling Tariff and Retail Supply Tariff) Regulations, 2011, wherein by the end of the current Control Period the level of cross subsidies shall be within (-)15% and (+)10% of the average cost of supply.

b) The provision of levying demand charges on the basis of Contract Demand helps consumer to reduce his cost by managing his demand during various hours of the day. The provision of levying demand charges on 90% of Contract Demand takes care of marginal variations in the assessment of demand vis-a-vis actual demand. Since sufficient flexibility is available to the consumer wherein he can reduce his demand up to 50% twice a year, there is no need to change the chargeable demand from 90%.

c) The basic purpose of providing night time concession is for balancing of load throughout the day which would eventually help in reducing the purchase of costly power during the peak hours. HPSEBL sources being predominantly hydel, there are no surpluses at night in most part of the year.

d) As far as separate tariffs within HT category for different voltage levels are concerned, the Commission is of the view that increasing the number of tariff categories within the HT category shall lead to unnecessary complication in the tariff structure. While the consumers opting for higher voltage levels automatically benefit through better power supply, the licensee also benefits through lower T&D losses. Hence it is a mutually beneficial condition and the Commission sees no merit in any further complication of HT tariff structure.

e) The demand charges for all categories of consumers are being determined in accordance with the provisions of the relevant regulations and the Electricity Act 2003. The Commission feels that the demand charges cannot be made uniform for all HT consumers. This is because the licensee is required to tie up for greater capacities for larger consumers and the marginal cost of the licensee increases in such a situation. Hence, there needs to be an inherent differential in the demand charges based on the voltage level.

f) In case the distribution licensee fails to maintain certain critical distribution system parameters within the permissible limits, the compensation mechanism has already been laid down in the Himachal Pradesh Electricity Regulatory Commission (Distribution Performance Standards) Regulations, 2010.

5.12 Other/ General Objections or suggestions

5.12.1 The stakeholders pointed out the following general issues related to the Multi Year Tariff Petition for the 3rd Control Period filed by the HPSEBL:

a) The Periodic Inspection Charges under the Electrical Safety Rules are being charged by two agencies from the consumers i.e. o/o the Chief Electrical Inspector, Himachal Pradesh as well as HPSEBL. The multiple recoveries under the same provisions is being raised by the consumers. Periodical Inspection must be carried out by one agency only. The Hon'ble Commission vide their letter no. HPERC/MYT3/HPSEBL/2014- 15/2579-82 dated 17.11.14 had acknowledged the issue.

We request that Periodic Inspection & Testing Charges must be deleted from the Schedule of General and Service Charges with immediate effect.

b) As per Part-I General Conditions of Tariff, Para H Explanation Note No. 6, all the consumers who are getting supply at a lower voltage than the standard supply voltage, who were in existence before 1.12.2007, LVSS is not chargeable up to 31.3.2016. After 31.3.2016 LVSS will be charged from these units. There are feasibility issues for some consumers to shift to a higher voltage at some locations. It is neither in the interest of the utility to direct these consumers to shift to a higher voltage, because the capacity at the existing voltage sub-station shall go idle and un-utilized. Further, there might not be the feasibility of the required standard supply voltage in the area.

c) The Centralized Complaint System is in very bad shape. The complaints in industrial areas, should be attended throughout the 24 hours in a day, so as to minimize the loss to the petitioner due to non-supply. Special vehicles and mobile transformers must be provided in order to restore the supply faster

d) The need for papers required for getting a power connection needs to be simplified and the formalities need to be reduced. The affidavit needs to be shortened. Rather it should simply be in the form of an undertaking that the customer will abide by the rules and regulations framed by HPERC. The other lengthy language and details, many of which are irrelevant in today's context must be deleted and it should be redrafted. The need for NOC from local bodies and Town and Country Planning Department must be done away with. IT enabled application and approvals must be enforced.

e) There are industries which have closed operations due to various reasons but they still own land and building and might still have the entire plant and machinery staying idle on their shop floors. Such industries need a power connection only for security and lighting purposes. Presently, there is a lot of confusion about what type of power connection should be given to such industries. In many cases, the petitioner is giving temporary which ideally is meant for temporary purposes only. In our view, commercial connection should be allowed to be given on industrial plots in the situations when no manufacturing activity is to be carried out. Alternatively, a separate category should be carved out for such industries

f) It has been suggested that power cuts, if unavoidable should be uniformly applied on all categories of consumers and industrial consumers alone should not be discriminated against on this account.

g) Sec. 59 of EA, 2003 prescribes for information with respect to levels of performance every year. This petition being a yearly performance review, is silent on the various performance related provisions of the Act.

Petitioner's Response:

5.12.2 The compilation of the replies to the above issues by the Petitioner is provided below:

a) The matter regarding duplicity of recovery of Periodic inspection charges has already been taken up by HPSEBL with Chief Electrical Inspector and shall be resolved soon.

b) HPSEBL has submitted that sufficient time has already been given to the consumers by the Commission to shift to standard supply voltage as per connected load and as per provisions of schedule of tariff. LVSS shall be charged from all consumers who have not shifted to standard supply voltage after 31.03.2016.

c) HPSEBL is working on measures to provide the best services to its consumers and would soon be able to attend the complaints throughout 24 hrs.

d) The Application process has already been simplified. It is HPSEBL obligation to abide by the rules and regulation framed under various Acts like Air (prevention & Control of pollution) Act, 1974 etc. wherein it is required to take NOC from these bodies before release of electricity connection.

e) HPSEBL has requested the Commission to take decision on tariff applicability with respect to industrial connections which have closed down their operation but require power connection for security and lighting purposes.

f) Connected load of domestic consumers is very less as compared to Industrial consumer and in light of this it is prudent to impose load shedding on industries who have high connected load and also many have standby DG capacity to ensure continuity of supply.

g) HPSEBL has filed the petition in accordance with HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 amended from time to time and has provided the relevant data for the same.

Commission's Observations:

a) The Commission expects HPSEBL to sort out the matter with Chief Electrical Inspector expeditiously.

b) The Commission has already liberalized the provisions relating for standard supply voltage which may avoid the necessity of change over to higher voltage in some cases. Even in case of connections already existing in 01.12.2007, if such necessity continues to prevail, the consumers have been given an option either to shift to appropriate higher voltage or pay LVSS at prevalent rates. Such consumes who are entitled to such option and want to continue at the existing voltage due to reason of feasibility or otherwise can do so by paying LVSS. The Commission also observes that LVSS is not a penalty of any sort but is charged merely to account for the additional expenses/costs which are incurred by HPSEBL in such cases.

c) Regarding 24x7 centralized complaint handling system for industrial consumers, HPSEBL is directed to ensure efficient and effective operation of the already established centralized complaint handling system in order to facilitate timely redressal of the complaints of such consumers.

d) The Commission, while appreciating the steps initiated by the HPSEBL to simplify the procedure for grant of new connection, expects it to continue its effort in this direction.

e) HPSEBL has not come out with the issues on which Commission's decision is required. The Commission feels that in case the existing industrial connection has got disconnected permanently, a separate connection can be given at relevant tariff by providing separate circuit(s) for such loads and by completing the codal formalities. However if the industrial connection is not got disconnected, the lighting and security requirements can be met as per the provisions of factory lighting and colony supply under relevant industrial tariff. HPSEBL may examine the matter in detail. If any other issues are involved, it may come out with clear proposal.

5.12.3 The Commission directs the HPSEBL to take into cognizance issues and complaints highlighted by consumers/ consumer representatives during the ARR/ Tariff determination process and take appropriate actions to resolve the same at the earliest.

6 True-up of uncontrollable parameters for FY13 under the Second MYT Control Period

6.1 Background

6.1.1 In the MYT Order for the third Control Period, the Commission had undertaken provisional true-up of uncontrollable parameters for FY13. In the Order, following was mentioned:

"6.1.3 The Commission is provisionally approving expenses and revenue on the basis of the accounts submitted by HPSEBL. The Commission wishes to highlight that since this true-up is based on provisional accounts for the period 01.04.2012 to 31.3.2013, this is a provisional true-up and may be reviewed once the audited accounts are made available for the entire period of FY13."

6.1.2 In the current APR petition, HPSEBL had not submitted for the final truing-up for FY13. During the Technical Validation meeting, it was brought to the notice of the Petitioner that the true-up approved for FY13 was based on provisional accounts and reminded HPSEBL to submit its claim towards final true-up of FY13 based on audited accounts.

6.1.3 In its response to queries raised during technical validation session, HPSEBL vide filing no. 18/2016 dated 05.03.2016 has submitted the following statement of deviation with respect to the provisional true-up for FY13 previously conducted in the MYT Order for the third Control Period as under:

Table 72: Deviation Statement for Audited Accounts with the Provisional True-up for FY13 (Rs. Cr.)

Particulars	As per Audited Accounts FY13	True up petition	Approved true up	Difference (2-4)
1	2	3	4	5
Purchase of Power	2629.38 313.84*	2357.47	2518.46	424.76

Particulars	As per Audited Accounts FY13	True up petition	Approved true up	Difference (2-4)
1	2	3	4	5
O &M cost	1356.59	1588.30	1264.45	92.14
Employee Cost	1188.81 66.72*	1488.78	1192.91	62.62
R&M Cost	56.40	56.82	32.83	23.57
A&G Cost	44.66	42.70	38.71	5.95
Interest & Finance cost (Net)	429.46	385.71	92.47	336.99
Deprecation	209.55	209.12	97.11	112.44
Other Prior period etc.	46.44			46.44
Return on Equity	0	159.63	30.24	
Less Non-Tariff Income	539.06	291.22	337.40	
Less capitalization of Expense	50.92	49.71	37.68	
ARR	4395.28	4359.30	3627.65	
Adjustment:				
Total trued-up for 1st control period			303.59	
Addl. Employee cost for FY 11			50.91	
Impact of review order			0.85	
Total ARR after adjustment	**4395.30**	**4359.30**	**3983.00**	**412.30**

** Shows the prior period expenses and detailed format for FY 2012-13*

6.1.4 The Commission observed significant variations in actual expense recorded in the final audited accounts with respect to the provisionally approved figures for true-up of FY13 in the MYT Order. The petitioner was asked to submit additional information and clarify on the reasons for variation in provisional and final accounts for FY13.

6.1.5 The Commission has undertaken a detailed scrutiny of the actual expenses for FY13 based on the audited accounts of FY13 and additional information submitted by the petitioner which is presented in the subsequent sections:

6.2 Energy Sales and Revenue

6.2.1 There is no change in the energy sales to various consumer categories submitted during the provisional true-up and actual sales figures recorded in the audited accounts. The Commission therefore retains the sales approved during the provisional true-up as provided below:

Table 73: Category-wise Trued-up Energy Sales for FY13 (MUs)

Category (MU)	Approved in APR Order	Approved in Provisional True-up	Now Approved (Trued up)
Domestic	1440.96	1618.45	1618.45

Category (MU)	Approved in APR Order	Approved in Provisional True-up	Now Approved (Trued up)
Non Domestic Non Commercial	104.44	106.82	106.82
Commercial	406.33	408.73	408.73
Public Lighting	14.10	13.91	13.91
Small Power	216.65	61.48	61.48
Medium Power		144.69	144.69
Large Supply	4569.89	4173.16	4173.16
Irrigation & Agriculture	476.11	453.98	453.98
Govt. Irrigation & Water Pumping		46.62	46.62
Temporary	31.20	25.90	25.90
Bulk Supply	273.40	169.78	169.78
Total Energy Sales	**7533.08**	**7223.51**	**7223.51**

6.2.2 Based on the audited accounts submitted, it is observed that the revenue from various categories differ with respect to the provisionally approved numbers. Revenue generated from sale of power within the state from various categories have been considered based on the final accounts as presented in the table below:

Table 74: Category-wise Trued-up Revenue from Sale of Power for FY13 (Rs. Cr.)

Particulars	As Per Provisional True up	Now Approved (Trued up)
Domestic	551.01	564.55
Commercial	218.05	225.56
Small Power	27.73	28.31
Medium Power	79.59	78.52
Large supply	2011.29	1989.09
Agriculture/Irrigation	24.62	25.98
Public Lighting	8.26	8.84
Bulk and Grid supply	98.23	98.63
Common Pool	0.00	0.00
Non Domestic/Non commercial	64.56	66.37
Other (Water Works and sewerage)	254.09	256.12
Temporary Metered Supply	15.82	15.97
Total	**3353.25**	**3357.95**

6.2.3 Revenue from sale of power outside the state has also been considered based on the audited accounts for final true-up for FY13. Revenue from banking has been excluded in line with the methodology followed in the past.

Table 75: Trued up Revenue from Sale of Power outside State for FY13

Particulars	As Per Provisional True up	Now Approved (Trued up)
Bilateral Sales	227.99	106.53
UI		60.74
Reactive Energy		1.38
IEX and PXIL		44.29
Consumer Deviations of Malana		5.32
Revenue from sale outside state	**227.99**	**218.27**

6.3 Power Purchase

6.3.1 The Commission had asked the petitioner to submit the source-wise actual power purchase cost based on the audited accounts of FY13. The Petitioner in their response dated 26th March, 2016 has provided the following details against the purchase of power from various sources:

Table 76: Power Purchase details submitted by the Petitioner for FY13

	Particular	Quantum (MU)	Amount (Rs Cr.)
(A)	**NTPC**		
	Anta(LNG)	3.21	2.88
	Anta(G)	73.86	30.96
	Anta (L)	0.01	0.01
	Auraiya(LNG)	4.68	4.75
	Auraiya(G)	65.47	28.82
	Auraiya(L)	0.05	0.06
	Dadri(LNG)	4.68	4.77
	Dadri(G)	106.89	44.66
	Dadri(L)	0.03	0.03
	Unchahar-I	56.29	18.92
	Unchahar-II	107.08	38.22
	Unchahar-III	68.28	26.32
	Rihand-1 STPS	270.88	52.9
	Rihand-2 STPS	315.21	63.6
	Kehalgaon	134.34	44.44
	Singrauli	124.07	18.07
	Dadri II TPS	53.87	24.14
	Jhajjar STPS	32.91	17.09
	Rihand-3 STPS	36.93	12.09
	Total (A)	**1458.73**	**432.73**
(B)	**BBMB**		

	Particular	Quantum (MU)	Amount (Rs Cr.)
	BBMB Old	43.80	3.42
	BBMB New	318.39	16.29
	Dehar	180.90	12.96
	Pong	53.52	1.66
	Total (B)	**596.61**	**34.33**
(C)	**NHPC**		
	Chamera-I	70.49	11.43
	Chamera-II	64.12	19.52
	Salal	32.45	4.46
	Tanakpur	14.44	3.48
	Uri	80.29	14.98
	Dhauli Ganga	46.55	14.75
	Dulhasti	15.41	10.25
	Sewa	4.97	2.29
	Chamera-III	24.57	11.78
	Total (C)	**353.30**	**92.94**
(D)	**Other Stations**		
	NAPP	91.49	22.65
	RAPP	151.47	51.83
	Nathpa Jhakri SoR	192.94	57.39
	Shanan	5.26	0.21
	Shanan Extn	45.00	0.93
	Yamuna (UJVNL)	438.13	26.22
	Khara	71.90	2.66
	Baspa –II	983.48	297.47
	Baspa II Sec Energy	95.87	28.47
	Tehri I	104.50	51.03
	Koteshwar	35.73	15.59
	Total (D)	**2215.77**	**554.45**
(E)	**Free & Equity Power**		
	Baira Suil	41.11	11.92
	Chamera-I	114.37	33.17
	Chamera –II	144.55	41.92
	Shanan Share	2.63	0.76
	Ranjeet Sagar Dam	62.49	18.12
	Malana	49.40	14.33
	Baspa – II	147.18	42.68
	Nathpa Jhakri	386.46	112.07
	Nathpa Jhakri Equity	0.00	0
	Karcham Wangtoo	77.35	22.43
	Private Micros (Upto 5 MW)	1.54	0.45
	Private Micros (Above 5 MW)	32.05	9.29
	Ghanvi	8.81	2.56

	Particular	Quantum (MU)	Amount (Rs Cr.)
	Baner	5.18	1.5
	Gaj	4.69	1.36
	Larji	78.09	22.65
	Khauli	5.64	1.64
	AD Hydro	15.92	4.62
	Chamera-III	25.08	7.27
	Budhil	1.79	0.52
	Malana - II	3.15	0.91
	Total (E)	**1207.48**	**350.17**
(F)	**Private Stations (upto 25 MW)**	**1023.05**	**278.54**
	Other Sources		
	Bilateral Purchase	0.02	0.01
	IEX/PXIL	61.89	20.48
	UI Power	211.57	50.01
(G)	**Total (G)**	**273.48**	**70.50**
	Grand Total: (A+B+C+D+E+F+G)	**7128.42**	**1813.66**

6.3.2 In view of the difficultly in reconciliation in the power purchase cost claimed and actual amount recorded in the audited accounts, the following approach was undertaken to approve the trued-up power purchase cost for FY13:

- The actual power purchase cost as per the audited accounts excluding “Other Costs” are adjusted for banking cost from PSEB, UPPCL, BRPL/BYPL and Haryana Power Generation Company as available in the audited accounts. No cost has been considered towards banked power as it is a cashless transaction.

- The cost of power from own generating stations has been determined based on the actual energy generation quantum as submitted by the Petitioner and the variable cost and fixed charges approved for FY13 in the MYT Order for second Control Period FY12-FY14.

- In a response to Commission’s query, the petitioner has submitted that the amount of Rs. 73.96 Cr. towards BBMB arrears which was earlier reduced by the Hon’ble Commission is not included in the power purchase cost. HPSEBL in its response has stated that these bills were raised by GoHP against the additional power from BBMB and stands withdrawn from HPSEBL accounts in line with the Order of the Commission dated December 28, 2013 in Petition no. 57/2013.

- The prior-period power purchase expense as claimed by the Petitioner amounted to Rs. 313.84 Cr. Based on detailed analysis of the prior period expenses, it was observed that an amount of Rs. 147.27 crores was on account of banking adjustment which was reduced from the claimed amount as banking has been considered at zero cost. Therefore, the Commission has determined the prior period power purchase expense as Rs. 166.57 Crores (Rs. 313.84 Crores- Rs. 147.27 Crores)

6.3.3 The detailed calculations for ascertaining the power purchase cost is as provided below:

Table 77: Power Purchase Cost Approved for FY13 (Rs. Cr.)

S. No.	Particulars	Now Approved (Trued-up)
A	**Power Purchase Cost (excluding PGCIL & Other Cost) as per audited accounts**	**2321.77**
	Less:	
B	**Banking Power Purchase (i)+(ii)+(iii)+(iv)**	**577.41**

S. No.	Particulars	Now Approved (Trued-up)
(i)	PSEB	265.37
(ii)	UPPCL	45.25
(iii)	Purchase of Power Through Banking BRPL/BYPL	121.16
(iv)	Banking -Haryana Power Gen Company	145.64
	Add:	
C	**Own Generation**	**254.41**
D	**Other Costs (i)+(ii)+(iii)+(iv)+(v)+(vi)**	**474.18**
(i)	O&M Charges	14.24
(ii)	Inter-State Transmission charges	246.94
(iii)	Short term Open Access	39.63
(iv)	Prior Period Expenses	166.57
(v)	Expenses related to ULDC Scheme in the northern region under unified scheme.	5.05
(vi)	System/ Marketing operation charges Power System (op) Ltd.	1.76
E	**Total Power Purchase Cost (A-B+C+D)**	**2472.95**

6.4 Energy Balance

6.4.1 Based on the sales and power purchase data submitted by HPSEBL, it is observed that the utility has not achieved the target T&D loss level for FY13. In response to the queries of the Commission, the petitioner has submitted that the overall T&D losses for FY13 stood at 13.62%.

6.4.2 Energy balance now approved based on the data contained in the accounts for FY13 and data submitted by HPSEBL is shown in the table below:

Table 78: Approved Energy Balance for FY13 (MUs)

S.No.	Particulars	As per Petitioner Submission	Approved (Trued up)
A	Sales	7223.58	7223.58
B	T&D Loss (%)	13.62%	12.40%
C	T&D Losses [(A/(1-B))-A]	1138.98	1022.52
D	**Demand at Discom Periphery (A+C)**	**8362.56**	**8246.10**
E	Power availability from Outside State	8298.89	7128.42
F	Banking Purchase	-	1170.46
G	PGCIL Losses	215.23	215.23
H	Net Power availability from Outside State (E+F-G)	8083.66	8083.66
I	Power Purchase Within State	1707.65	1707.65
J	Total Power availability at State Periphery (H+I)	9791.31	9791.31

S.No.	Particulars	As per Petitioner Submission	Approved (Trued up)
K	Sale of Power Outside State	1428.71	1428.71
L	**Net Power Available for Sale within State (J-K)**	**8362.61**	**8362.61**

6.4.3 Further, the Commission observes that T&D losses achieved by the Petitioner for sale of energy within state is 13.62% vis-à-vis the approved T&D loss level of 12.40% for FY13 (which was based on T&D losses of 12.66% in FY11).

6.4.4 Distribution Loss is a controllable parameter and reflects the performance of the Distribution Licensee. Clauses 4 (c) to (e) of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 state that:

"Trajectory for specific parameters shall be stipulated by the Commission, where the performance of the applicant is sought to be improved through incentives and disincentives; and Annual review of performance shall be conducted vis-à-vis the approved forecast and categorization of variations in performance into controllable factors and uncontrollable factors; and Profit sharing shall be applied on the profits arising from the distribution licensee's better performance vis-à-vis distribution loss targets and targets for the other controllable parameters specified by the Commission. The distribution licensee shall be free to utilise its share in the profit."

6.4.5 Further Clause 7 (a) of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 states that:

"The Commission shall set targets for each year of the Control Period for the items or parameters that are deemed to be "controllable" and which will include- Distribution losses, which shall be measured as the difference between total energy input for sale to all its consumers and sum of the total energy billed in its licence area in the same year."

6.4.6 Since the petitioner has not been able to achieve the T&D loss target for FY13, disallowance on account of the power purchase quantum and cost has been worked out as under:

Table 79: Approved Power Purchase Quantum for FY13

S. No.	Particulars	Now Approved (Trued-up)
A	Energy Sales within state (MU)	7223.58
B	T&D Losses (%)	12.40%
C	Power Purchase Requirement to meet state requirement (MU)	8246.10
D	Inter – State Sale (MU)	
1.	For Banking arrangements	876.82
2.	Sale outside state (i+ii+iii)	551.50
(i)	Sale through UI Mechanism	117.00
(ii)	Sale through IEX & PXIL	177.20
(iii)	Bilateral Sales	257.30
E	**Total Power Purchase Quantum Approved at State Periphery (MU) (C+D1+D2)**	**9674.42**
F	Actual Power Purchase Quantum at State Periphery (MU)	9791.31
G	**Disallowed Power Purchase Quantum (MU)**	**116.90**

6.4.7 The actual average power purchase rate of Rs 2.24/unit has been considered excluding the own generation. Accordingly, the Commission disallows power purchase cost of Rs 26.18 Cr. at the average power purchase rate on account of non-achievement of T&D loss target approved for FY13. The Commission would have disallowed the power purchase quantum at the rate of merit order at the margin, but has considered the average power purchase rate and directs HPSEBL to improve the performance in future.

Table 80: Dis-allowance of Power Purchase cost for non-achievement of T&D Loss targets (Rs. Cr.)

Particulars	Approved in Provisional True-up	Now Approved (Trued up)
Total Power Purchase Cost	2,544.57	2472.95
Less: Power Purchase cost due to under-achievement of T&D loss	26.11	26.18
Net Power Purchase Cost	**2,518.46**	**2446.77**

6.5 Operation and Maintenance Expenses

6.5.1 The operation and maintenance expenses comprises of Administrative and General Expenses, Repairs and Maintenance and Employee Expenses. The detailed evaluation of these expenses are provided in the subsequent sections:

6.6 Employee Cost

6.6.1 With respect to employee cost, the Commission had stated the following during the true-up for FY12:

"The Commission had approved Employee Expenses for the second Control Period based on data collected from HPSEBL on March 2011 salary, assuming that it reflected the impact of revision in pay due to the Pay Commission's recommendations. However, the Commission observes that the impact of pay revision due to Pay Commission recommendations was not implemented fully in March 2011 salary and revisions kept happening during FY12 as well. Therefore, the Commission has reviewed the Employee Expenses for FY12.
In respect of terminal benefits, the Commission had escalated these at the rate of 5%, and is subject to true-up at the end of every year during the Control Period."

6.6.2 Therefore, the Commission had reviewed the employee cost for FY13 in the provisional truing up for FY13 based on the actual employee cost as contained in the provisional accounts. It is observed that the actual employee cost recorded in the audited accounts has undergone a change. In view of the change in actual employee cost in the audited accounts, the Commission is revisiting the employee cost approved at the time of provisional truing-up.

6.6.3 The Petitioner through their reply to queries dated 06 April 2016 has provided the break-up of employee expense for FY13 into the various divisions- Distribution, S&I, Generation and Projects. As per the submission of Petitioner, gross employee cost attributable to the distribution function is Rs. 1093.95 Cr. and an additional amount of Rs. 66.72 Cr. has been paid as part of 5th Pay Commission arrears during FY13. Further, the HPSEBL has also submitted that the provision of Rs. 201.62 Cr. towards unfunded pension liabilities for erstwhile Board employees has been excluded while finalizing the accounts.

6.6.4 The Commission has accordingly approved the employee expenses for FY13 based on the above submission of the Petitioner and the same has been summarised below:

Table 81: Approved Employee Cost for FY13 (Rs. Cr.)

Particulars	Approved in Provisional True-up	Now Approved (Trued up)
Salaries - Total	738.45	718.23
Terminal Benefits	505.18	375.72

Particulars	Approved in Provisional True-up	Now Approved (Trued up)
Arrears on account of 5th Pay Commission	150.89	66.72
Gross Employee Cost	**1394.52**	**1160.64**
Less: Provision for unfunded pension liabilities	201.62	
Approved Gross Employee Cost	**1192.9**	**1160.64**

6.6.5 In line with the approach in the provisional truing-up for FY13, the Commission is of the opinion that employee expenses on account of Projects wing should be on account of the respective projects and I&P wing should work on self-sustaining basis and in fact should be a source of additional income for HPSEBL. The Commission, therefore, has not considered these expenses while approving the employee expenses for the distribution business. However, the Commission has considered the revenue recovered from Project and I&P wing after adjusting for the employee cost for Projects and I&P wings in the non-tariff income.

6.7 Repairs and Maintenance (R&M) and Administrative and General (A&G) Expenses

6.7.1 As per Regulation 11 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011, R&M and A&G expense are controllable parameter and any surplus or deficit on account of actual R&M and A&G expense compared shall be to the account of the Petitioner and shall not be trued up.

6.7.2 Therefore, the Commission has approved R&M and A&G expense at the same level for the distribution business as approved in the MYT as well as the APR Order for FY13.

Table 82: Approved R&M and A&G Expenses for FY13 (Rs. Cr.)

Particulars	Approved in APR Order	Actual for distribution business	Now Approved (trued-up)
R&M Cost	32.83	36.02	32.83
A&G Cost	38.71	38.04	38.71

6.8 Capitalization of Expenses

6.8.1 The Petitioner has claimed total employee capitalization of Rs. 47.97 Cr. of which Rs. 30.33 Cr. is towards distribution business as per the submission by the Petitioner dated 06 April 2016. The Commission has considered actual capitalisation of Employee Expenses and A&G Expenses towards distribution business based on the submission of the petitioner as provided below:

Table 83: Trued-up Capitalization of Employee and A&G Expenses for FY13 (Rs. Cr.)

Particulars	Now Approved (Trued-up)
Employee Expenses Capitalized	30.33
R&M Expenses Capitalized	2.08
Total Capitalization	**32.41**

6.9 Working Capital

6.9.1 The working capital requirement for the Petitioner in FY13 is calculated on normative basis based on the approved cost elements determined in the previous sub-sections. The detailed calculations of the working capital requirement and interest on working capital is presented in the table below:

Table 84: Trued-up Working Capital for FY13 (Rs. Cr.)

Particulars	Now Approved (Trued up)
O&M Expenses for one month	102.68
Receivables equivalent to 2 months	586.41
Maintenance Spares 40% of the R&M expense for one month	1.09
Less: Consumer Security Deposit	253.04
Less: One Month Power Purchase	206.08
Working Capital Requirement	**231.07**
Interest rate	*14.75%*
Interest on Working Capital	**34.08**

6.10 Consumer Contribution

6.10.1 The consumer contribution and interest on consumer contribution approved for final true-up for FY13 as per the audited accounts is as below:

Table 85: Trued-up Interest on Consumer Security Deposit for FY13 (Rs. Cr.)

Particulars	Now Approved (Trued up)
Closing Balance of Consumer Security Deposit	253.04
Interest on Consumer Security Deposits	16.02

6.11 Non Controllable Parameters

6.11.1 According to Clause 11 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011:

"(b) at the end of the Control Period –

i. the Commission shall review actual capital investment vis-à-vis approved capital investment.

ii. depreciation and financing cost, which includes cost of debt including working capital (interest), cost of equity (return) shall be trued up on the basis of actual/audited information and prudence check by the Commission."

6.11.2 As per the HPERC MYT Regulations, 2011, any variation in actual capital expenditure and subsequent variations in depreciation, interest cost and return on equity with respect to the figures approved in the MYT Order shall be considered at the end of the MYT Control Period.

6.11.3 Therefore, the Commission has considered the depreciation and return on equity at the same level as approved in the MYT Order / APR Order for FY13. However, interest expense has been revised to the extent of revision in normative interest on working capital requirements and actual interest paid on consumer security deposits by HPSEBL in FY13. The table below presents the final trued up Interest Expenses, Depreciation and RoE for FY13.

Table 86: Trued-up Interest Expenses, Depreciation and RoE for FY13 (Rs. Cr.)

Particulars	Approved in previous True-up	Now Approved (Trued up)
Interest & Financing Charges	92.47	124.90
Depreciation	97.11	97.11
Return on Equity	30.24	30.24

6.12 Non-Tariff Income (NTI)

6.12.1 The non-tariff income is required to be deducted from the ARR of the Petitioner. The Petitioner has claimed a non-tariff income of Rs. 539.06 Cr. The Commission has scrutinised the various elements of non-tariff income as presented in the accounts and has made adjustments for the following:

- Based on the break-up and clarification submitted by the petitioner with respect to prior-period income, interest on staff loan and advances amounting to Rs. 14.08 Cr. have been considered while other accounting adjustments and reversal of excess provisions have been excluded.

- Further, as per the submission of the petitioner with respect to O&M charges receivable from HPPTCL being included in the 'Wheeling Charges Recovery', the same has not been accounted to avoid double counting of the same.

- With respect to amount recoverable on account of work done by Petitioner towards survey and investigation, the Commission had considered an amount of Rs. 118.67 Cr. in the provisional truing-up in line with the Review Order dated 26.11.2013 which mentioned the following:

  "Out of total of Rs 467 Cr., the HPSEBL has shown its inability to recover Rs 122.60 Cr. and has therefore illustrated that it is in position to recover the balance amount of Rs 344.65 Cr. out of which Rs 118.67 Cr. have been shown as already recovered, Rs 160.97 Cr. as that which is in the process of recovery and Rs 65.01 Cr. as amount that would be deferred for recovery in the future;"

  The petitioner has confirmed issuance of share certificates by HPPCL against Rs. 113.07 Cr. in FY13. The Commission has accordingly considered the recovered amount of Rs. 118.67 Cr. as part of NTI for FY13 after excluding the employee cost of Rs. 4.24 Cr., A&G Expenses of Rs. 4.09 Crores and R&M expense of Rs. -2.32 Crores towards Projects and S&I wings.

6.12.2 The table below summarizes the NTI as approved for final true-up for FY13:

Table 87: Trued up Non-Tariff Income for FY13 (Rs. Cr.)

Particular	Approved in previous True-up	Now Approved (Trued up)
Meter Rent/Service Line Rentals	41.41	41.41
Recovery for theft of Power / Malpractices	35.23	0.10
Wheeling Charges Recovery	81.29	84.75

Particular	Approved in previous True-up	Now Approved (Trued up)
Miscellaneous Charges from Consumers	5.59	5.25
Sub-Total	**163.52**	**131.51**
Interest on Staff loans & Advances	0.52	0.53
Income from Investments	18.24	18.24
Delayed Payment Charges from Consumers	29.87	30.01
Interest on Advances to Suppliers / Contractors	0.27	1.05
Income fee collected against Staff Welfare Activities	0.09	0.09
Miscellaneous Receipts	3.63	35.45
Recovery of Investigation & Survey Charges	114.43	112.66
PLVC charges		35.15
Sub-Total	**167.05**	**233.19**
Income from Other Businesses		
Income from Trading	1.65	1.56
O&M Charges Recovery from HPPTCL	5.18	-
Prior Period Income	-	14.08
Sub-Total	**6.83**	**15.63**
Total Non-Tariff Income	**337.41**	**380.33**

6.13 Annual Revenue Requirement

6.13.1 The ARR approved by the Commission in provisional true-up and the final true-up now approved by the Commission for FY13 are shown in the table below:

Table 88: Trued-up Annual Revenue Requirement for FY13

Particulars	Approved in Provisional True-up	Now Approved (Trued up)
Power Purchase Expenses for Supply in the State	2518.46	2446.77
Operation & Maintenance Costs	1264.45	1232.18
Employee Cost	*1192.91*	*1160.64*
R&M Cost	*32.83*	*32.83*
A&G Cost	*38.71*	*38.71*
Interest & Financing Charges	92.47	124.90
Depreciation	97.11	97.11
Return on Equity	30.24	30.24
Less: Non-Tariff & Other Income	337.40	380.33
Less: Capitalization of Expense	37.68	32.41
Aggregate Revenue Requirement	**3627.65**	**3518.46**

Particulars	Approved in Provisional True-up	Now Approved (Trued up)
Adjustments		
Impact of review order – Call centre operation cost	0.85	0.85
Total trued-up gap approved for 1st Control Period (including FY11 uncontrollable factors)	303.59	303.59
Additional Employee Cost for FY11	50.91	50.91
Total ARR after adjustments	**3983.00**	**3873.81**

6.14 Revenue Gap

6.14.1 The Commission had approved a revenue gap of Rs. 401.77 Cr. based on the provisional accounts for FY13 which also considered for recovered along with the ARR for FY15 as per the MYT Order. Subsequently, based on the review Order no. 153/2014 dated 31.12.2014, the petitioner was allowed an additional gap of Rs. 34.81 Cr. along with carrying cost of Rs. 11.13 Cr. to be recovered along with ARR for FY16.

6.14.2 Based on the trued-up ARR and revenue as per the audited accounts, the revised revenue gap now approved for FY13 vis-à-vis the approved revenue gap of Rs. 401.77 Cr. against the provisional truing-up for FY13 is shown in the table below:

Table 89: Revenue Surplus/(Gap) for FY13 (Rs. Cr.)

Particulars	Approved in previous True-up	Now Approved (Trued up)
ARR after Adjustments	3,983.00	3,873.81
Revenue from sale of power	3,581.23	3,576.22
Revenue Surplus / (Gap)	**(401.77)**	**(297.59)**
Revenue Gap approved in Review Order 153/2014	(34.81)	
Total Revenue Surplus/ (Gap)	**(436.58)**	**(297.59)**
Differential Revenue Surplus / (Gap)		**138.99**

6.14.3 It is observed that an excess amount of Rs. 138.99 Cr. has been allowed to be recovered by the petitioner in the ARR for FY15 and FY16. Therefore, the excess amount has been adjusted against the revenue gap determined for FY14 in the subsequent Chapter.

7 True-up of uncontrollable parameters for FY14 under the Second MYT Control Period

7.1 Background

7.1.1 HPSEBL has submitted a petition for true-up of uncontrollable parameters for FY14 on the basis of variation in actual expenses and revenue in FY14 vis-à-vis the expenses and revenue approved for FY14 in the APR Order dated April 27, 2013. The actual expense and revenue are supported by the audited accounts for the period April 1, 2013 to March 31, 2014 submitted along with the Petition.

7.1.2 The Commission has reviewed the operational and financial performance of HPSEBL for FY14 based upon the accounts made available, and has finalised the true up in line with the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 (hereinafter referred to as the 'MYT Regulations, 2011'), taking into account all the information, data submissions and necessary clarifications submitted by the licensee as well as views expressed by stakeholders.

7.1.3 The Commission has undertaken prudence check of the various expenses and revenue on the basis of the audited accounts submitted by HPSEBL.

As per Clause 11 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011:

"(1) The true up across various controllable and uncontrollable parameters shall be conducted as per principles stated below: -
(a) Variation in revenue / expenditure on account of uncontrollable sales and power purchase shall be trued up every year. Truing-up shall be carried out based on the actual/audited information and prudence check by the Commission:

Provided that if such variations are large, and it is not feasible to recover in one year alone, the Commission may take a view to create a regulatory asset, as per the guidelines provided in clause 8.2.2 of the National Tariff Policy;
Provided further that under business as usual conditions, the Commission, to ensure tariff stability, may include the opening balances of uncovered gap / trued-up costs in the subsequent Control Period's ARR instead of including in the year succeeding the relevant year of the Control Period after providing for transition financing arrangement or capital restructuring.
(b) for controllable parameters –
(i) any surplus or deficit on account of O&M expenses shall be to the account of the licensee and shall not be trued up in ARR; and
(ii) at the end of the Control Period –

I. the Commission shall review actual capital investment vis-à-vis approved capital investment.
II. depreciation and financing cost, which includes cost of debt including working capital (interest), cost of equity (return) shall be trued up on the basis of actual/ audited information and prudence check by the Commission.

Notwithstanding anything contained in these regulations, the gains or losses in the controllable items of ARR on account of force majeure factors after adjusting for proceeds from any insurance scheme, if any, shall be passed on as an additional charge or rebate in ARR over such period as may be specified in the order of the Commission."

Truing-up for Controllable Parameters of Second Control Period

7.1.4 The petitioner has also submitted for truing-up of Controllable parameters for the second Control Period. Based on the submission of the petitioner it was observed that the information provided for truing-up of controllable parameter was deficient in several aspects like scheme-wise expenditure, capitalization, sources of funding, etc. Accordingly, the Commission had asked the petitioner to submit appropriate information with respect to the controllable parameters. In spite of several reminders and discussions during technical validation session, the data provided by HPSEBL was not sufficient to undertake truing-up of controllable parameters with respect to the generation and distribution functions of HPSEBL. Also, the information provided by the petitioner did not validate with the information of assets, CWIP, etc. contained in the audited accounts of the respective years.

7.1.5 In view of the unsatisfactory and invalidated information, the Commission is constrained to undertake truing-up of controllable parameters for the second Control

Period in this Order. The Commission takes serious note on the non-maintenance of proper records of various schemes and their capitalization in the past years and directs HPSEBL to compile scheme wise information for both generation and distribution functions separately for the second Control Period and submit the same along with the mid-term review petition. The information of capital works and capitalization should be comprehensive and should be reconciled with the audited accounts. Also, sources of funding i.e. details of equity, debt, grant, consumer contribution, etc. should be provided against the works which have been capitalized in the respective years of the second Control Period. In absence of adequate and appropriately compiled information, the Commission shall be constrained to disallow the capital expenditure and adjust the related parameters.

7.1.6 The following sections details the methodology adopted by the Commission for truing-up of uncontrollable parameters for FY14 based on the final audited accounts of HPSEBL for FY 14.

7.2 Energy Sales and Revenue

7.2.1 HPSEBL in its true up petition for FY14 has submitted the actual sales for FY14 as 7536 MU as compared to 8007.66 MU approved by the Commission in the APR Order for FY14. It is observed that the actual total sales have been lower by 471 MU as compared with the approved sales. The Commission accepts the actual sales figures given by utility which also reconciles with the sales figure provided in the audited accounts of FY14.

7.2.2 The following table shows the sales approved by the Commission in the APR Order for FY14, sales submitted as actual by HPSEBL in its true up petition for FY14, and trued up (approved) sales for FY14.

Table 90:Category-wise Trued-up Sales for FY14 (MUs)

Consumer Category	MYT Approved	APR Approved	Petition	Now Approved
Domestic Supply	1423.31	1755.62	1774.00	1774.00
Non-Domestic Non Commercial	113.56	115.46	118.00	118.00
Commercial Supply	446.65	447.58	451.00	451.00
Small and Medium Industrial Power	227.76	216.07	203.00	203.00
Large Industrial Power Supply	4858.43	4731.71	4288.00	4288.00
Water Pumping Supply	519.88	538.74	512.00	512.00
Street Lighting Supply	13.98	13.94	12.00	12.00

Consumer Category	MYT Approved	APR Approved	Petition	Now Approved
Bulk Supply	394.07	163.38	151.00	151.00
Temporary Metered Supply	24.38	25.16	27.00	27.00
Total	**8022.02**	**8007.66**	**7536.00**	**7536.00**

7.3 Revenue from Sale of Power

7.3.1 Based on the submission of the Petitioner and the information provided in the audited accounts with respect to the revenue from sale of power within the state during FY14, the Commission approves the amount of Rs. 4055.58 Cr. as revenue billed during FY14 as presented in the table below:

Table 91: Category-wise Trued-up Revenue from Sale of Power (Rs. Cr.)

Consumer Category	APR Approved	Petition	Now Approved
Domestic Supply	713.30	703.87	703.87
Non-Domestic Non Commercial	68.10	72.17	72.17
Commercial Supply	266.40	256.48	256.48
Small and Medium Industrial Power	115.50	126.86	126.86
Large Industrial Power Supply	2604.90	2434.83	2434.83
Water Pumping Supply	272.00	335.42	335.42
Street Lighting Supply	7.30	5.64	5.64
Bulk Supply	100.90	104.02	104.02
Temporary Metered Supply	19.50	16.29	16.29
Total	**4167.90**	**4055.58**	**4055.58**

7.3.2 The Commission has also reviewed the submission by the Petitioner for revenue from sale of power outside state and approves the revenue of Rs. 174.62 Crores against the previously approved revenue of Rs.149.61 Crores in the APR Order for FY14. Banking being a cashless transaction, notional cost of the banked power considered in the accounts have been excluded from the revenue from sale of power outside the state. Accordingly, the revenue from sale of power for FY14 considered for true-up for FY14 is as detailed in table below:

Table 92: Trued-up Revenue from Sale of Power outside State for FY14 (Rs. Cr.)

Particulars	Now Approved
Revenue from sale of power outside State	819.58
Less: Banking Sale	644.96

Particulars	Now Approved
Net Revenue from sale of power outside State	**174.62**

7.4 Power Purchase

7.4.1 HPSEBL has submitted actual power purchase cost of Rs. 2871 Cr. for FY14 for truing-up. The petitioner has excluded the cost towards banking from the claim of the power purchase cost. The claimed power purchase cost for true-up of FY14 is as below:

Table 93: Power Purchase Cost Submitted by the Petitioner

Particulars	Units (MU)	Amount (Rs. Cr.)	Rate (Rs. /kWh)
Gross Power Purchase Cost	9604.77	3056.46	3.18
Less: Banking	-	658.99	
Net Power Purchase Cost Excluding Banking	9604.77	2397.47	2.50
Other Costs		473.50	
Total Power Purchase Cost Excluding Banking	**9604.77**	**2870.97**	**2.99**

7.4.2 The Commission has scrutinised the submission made by the Petitioner with the audited accounts for FY14 and observed that the values provided by the petitioner did not reconcile with the accounts. The petitioner was asked to clarify the difference in the power purchase cost between the claimed amount and actual amount as per audited accounts from various sources.

7.4.3 In response to the queries of the Commission, HPSEBL submitted that the differences in the claimed amount and audited account was due to the following:

"a) Own Generation- An amount of Rs 397.24 Cr. has been considered in petition against own generation computed based on approved APR Order for FY 2014 dt. 27th April 2013. Due to this there is a difference in power purchase cost filed in petition and power purchase cost given in audited accounts

b) Shared generation: Actual power purchase cost from BBMB power stations is Rs. 38.06 crores. Due to netting off power purchase cost against revenue from sale of HP's share of electricity, the net amount paid for power purchase cost is Rs. 18.92 crores is reflected in accounts. The amount also includes power procured from shanan and shanan ext.

c) NHPC: Actual power purchase cost from NHPC is Rs 92.90 cr out of which Rs. 86.95 crore is for power purchased to the tune of 308.59 MUs in FY 2013-14 and the balance amount of Rs 5.95 cr is for past year arrear.

d) Free Power: Power purchase cost in procuring GoHP free power in FY 2013-14 including past arrears should be Rs 438.43 cr. which was inadvertently considered as

Rs 455.28 Cr., and thus the amount of Rs. 438.43 Cr. depicted in the Balance sheet may be considered.

e) IEX: HPSEBL is making the purchase/sale of power through IEX platform on day head basis and expenses are being booked after making the netting between sale and purchase. Thus the figure of Rs.17 Crore as appearing in balance sheet is net power purchase during the year 2013-14.

f) Prior Period: Prior period expenses related to power purchase amounts to Rs.107.47 Crore which were given as Rs 90.60 Crore.

g) Banking: Banking being a cashless transaction is considered zero in petition under total power purchase cost, however the same is considered as Rs. 658.98 Crore in Balance Sheet."

7.4.4 However, the amount of power purchase cost claimed by HPSEBL could not be reconciled with the audited account for FY14. In response to an additional clarification of the Commission, HPSEBL further submitted the following table for reconciling the difference:

Table 94: Deviation in Submission and Annual Accounts (Rs. Cr.)

Description	As per Petition	As per Audited Accounts	Difference
Total POP	2871.00	2992.72	
Add: banking	658.98		
Less: own projects	397.24		
Prior period POP cost	-	107.47	
Less: Excess IEX	16.4		
Total	**3116.34**	**3100.19**	**16.15**

7.4.5 With respect to the differential amount of Rs. 16.15 Cr., the Petitioner has submitted the following:

"The above differences of Rs. 16.15 cr. is due to some new projects of IPPs which have commissioned/ starts generation during the FY 2013-14 i.e. Hamal HEP, Kurmi HEP, Kotlu HEP, Tulang GEP and Jogini HEP and their bills have been accounted for during FY 2014-15. The energy of these projects has been accounted for during FY 2013-14. Besides, some bills pertaining to prior period have been accounted for in FY 2014-15 whereas the energy has been accounted in FY 2013-14 ie. Suman, Sarabai, Manjhal and Baspa II HEPs etc."

7.4.6 It is to be noted that as per the regulations final truing-up is required to be done based on the audited accounts. Therefore, the Commission has considered the amount towards power purchase cost for FY14 which is reflected in the audited accounts of FY14. In order to avoid any double counting of the power purchase expense any amount pertaining to power purchase cost for FY14 being recorded in the accounts for FY15 shall be considered in the true-up for FY15.

7.4.7 Further, it was observed that the petitioner has computed the power purchase cost for own generating stations erroneously leading to very high power purchase cost from own generating stations. The same was clarified during the technical validation session and it was observed that HPSEBL has incorrectly considered the fixed charge as the total AFC. As per the MYT Regulations, the fixed charges are to be computed as 50% of the AFC. Therefore, the cost of own generation has been reworked based on the actual energy generated after excluding auxiliary consumption and GoHP free share of power and the AFC and energy charge approved by the Commission in the MYT Order for the own generating stations under consideration.

7.4.8 Accordingly, the Commission has worked out the trued-up Power Purchase cost for FY14 as per the methodology detailed below:

Table 95: Trued-up Power Purchase Cost (Rs. Cr.)

Particulars	As per Audited Accounts
Gross Power Purchase Cost as per Audited Accounts	**2662.85**
Less: Banking	
Banking from BRPL/BYPL	238.38
Banking from Haryana	127.47
Banking from PSEB	199.26
Banking from UPPCL	93.90
Sub-Total	**659.01**
Add:	
Own Generation	**235.58**
Net Power Purchase Cost After Adjustments	**2239.41**

7.4.9 Further the Commission has approved the transmission charges, open access charges, etc. based on the amount recorded in the audited accounts towards the total cost of Power Purchase for FY14. The approved total power purchase cost for the final true-up of FY14 is summarized in table below:

Table 96: Trued-up Total Power Purchase Cost for FY14 (Rs. Cr.)

Particulars	APR Approved	Petition	Now Approved (Trued-up)
Power Purchase Expenses	2304.21	2397.47	2239.41
PGCIL Charges	199.24	263.87	263.19
HPPTCL Charges	11.92	11.92	11.92
Short Term Open Access Charges	26.51	52.17	52.17
Prior Period Expenses	0.00	126.84	107.47
Other Charges	10.81	18.70	2.60
Less: Reduction in cost on account of efficiency in purchase	(30.00)	-	-
Less: Adjustment in PP cost on account of underachievement	-	-	(8.45)
Total Power Purchase Expense	**2522.69**	**2870.97**	**2668.31**

7.5 Energy Balance

7.5.1 The Commission has analysed the energy balance of HPSEBL based on the sales and power purchase data submitted by HPSEBL. The utility has submitted in its petition that the overall T&D losses for FY14 stood at 12.36%.

7.5.2 The Commission observes that the T&D loss achieved by the Petitioner for sale of energy within state is 12.36% as against the target of 12.00% approved for FY14. Since the loss trajectory was decided with the consensus of HPSEBL, the Commission does not allow the higher T&D loss for FY14 and has retained the T&D loss of 12.00% approved for FY14.

7.5.3 Accordingly, the Commission has worked out the energy balance for FY14 based on the approved T&D loss for FY14 of 12%. The energy balance approved by the Commission for FY14 is as provided below:

Table 97: Approved Energy Balance for FY14

S. No.	Particulars	Now Approved (Trued-up)
A	Energy Sales within state (MU)	7,536
B	T&D Losses (%)	12.00%
C	**Power Purchase Requirement to meet state requirement (MU)**	**8,564**
D	**Inter – State Sale (MU) (i+ii)**	**1999.59**
(i)	For Banking arrangements (MU)	1,311.51
(ii)	Sale outside state (MU)	688.08
E	**Total Power Purchase Quantum Approved at State Periphery (MU)**	**10,563.23**

S. No.	Particulars	Now Approved (Trued-up)
	(C+D)	
F	Actual Power Purchase Quantum at State Periphery (MU)	10,598.57
G	**Disallowed Power Purchase Quantum (MU) (F-E)**	**35.34**

7.5.4 Based on the above table, power purchase requirement with respect to the approved loss level has been determined and any excess quantum of power procurement is disallowed.

7.6 Penalty for Under-achievement of T&D Loss

7.6.1 As detailed in the section above, HPSEBL has not been able to achieve the T&D loss target and accordingly the Commission has computed the penalty for under-achievement of T&D loss as follows:

Table 98: Penalty for under-achievement of T&D Loss

S.No.	Particulars	Unit	Amount
A	**Disallowed Power Purchase Quantum**	**MU**	**35.34**
B	**Cost of Power for under-achievement**		
(i)	Cost of Power Purchase from Other than own sources	Rs. Cr.	2084.77
(ii)	Power purchased from other than own sources	MU	8978.56
(iii)	Less: PGCIL Losses	MU	227.75
(iv)	Net Power Purchase (ii-iii)	MU	8750.81
C	**Cost of Power Purchase from Other than own sources (i / iv)**	**Rs. /Kwh**	**2.38**
D	**Penalty on account of T&D under-achievement (A X C)**	**Rs. Cr.**	**8.42**

7.6.2 The Petitioner has submitted total power purchase (excluding own generation, other charges and arrears) as Rs 2,084.77 Cr. The total power purchase quantum at state periphery (excluding own generation) is 8,750.81 MU. The average rate of this power purchase is Rs 2.38/unit. The Commission, therefore, disallows power purchase cost of Rs 8.42 Cr. on account of disallowance in power purchase quantum at average power purchase rate. The Commission would have disallowed the power purchase quantum at the rate of merit order at the margin, but has considered the average power purchase rate and directs HPSEBL to improve the performance in future.

Other ARR Parameters

7.7 Employee Expense

7.7.1 HPSEBL has submitted actual employee cost of Rs. 1223.20 Cr. towards distribution business as against the approved employee cost of Rs. 1025.07 Cr. for FY14 in the APR Order for FY14.

7.7.2 During the true-up for FY12, the Commission had stated.

"*The Commission had approved Employee Expenses for the second Control Period based on data collected from HPSEBL on March 2011 salary, assuming that it reflected the impact of revision in pay due to the Pay Commission's recommendations. However, the Commission observes that the impact of pay revision due to Pay Commission recommendations was not implemented fully in March 2011 salary and revisions kept happening during FY12 as well. Therefore, the Commission has reviewed the Employee Expenses for FY12.*

In respect of terminal benefits, the Commission had escalated these at the rate of 5%, and is subject to true-up at the end of every year during the Control Period."

7.7.3 Accordingly, the Commission has reviewed and approved the employee expenses in previous true-up exercise carried out for FY12 and FY13. In line with the methodology followed in the earlier true-up for the Second Control Period, the Commission is reviewing the employee cost for FY14 in the current truing up for FY14.

7.7.4 Based on the submission of HPSEBL, the Commission observed that the employee cost was allocated between generation and distribution functions. However, in the past truing-up HPSEBL has been submitting allocation of employee cost between four functions including S&I and Projects as well. Based on the query of the Commission, the Petitioner submitted the following break-up of the employee cost for FY14:

Table 99: Break-up of division-wise Employee Cost submitted by HPSEBL (Rs. Cr.)

Particulars	Distribution	Generation	S&I	Projects	Total
Salary Cost	666.53	72.93	4.97	13.03	757.46
Other Cost	83.66	6.11	0.50	1.47	91.74
Terminal Benefits	452.56	0.73	-	0.48	453.77
Total	**1202.75**	**79.77**	**5.47**	**14.98**	**1302.97**
Less: Cost capitalized	35.48	1.87	3.77	6.40	47.52
Net Employee Cost	**1167.27**	**77.90**	**1.70**	**8.58**	**1255.45**

7.7.5 The Commission notes that the employee cost of Rs. 1255.45 Cr. is inclusive of Generation, Projects and I&P wings. The employee cost for generation business has already been included in the tariff approved for the respective generating stations. The Commission is of the opinion that employee expenses on account of Projects wing should be on account of the respective projects and I&P wing should work on self-sustaining basis and in fact should be a source of additional income for HPSEBL. The Commission, therefore, has not considered these expenses while approving the employee expenses for the distribution business. However, the Commission has considered the revenue recovered from Project and I&P wing after adjusting for the employee cost for Projects and I&P wings in the non-tariff income.

7.7.6 The employee expenses approved by the Commission based on the as against the submission by the petitioner is summarised in the table below.

Table 100: Employee Cost Approved for FY14 (Rs. Cr.)

Particulars	APR Approved	Petition	Now Approved (Trued-up)
Total Salary Cost	813.71	770.16	750.29
Terminal Benefits	314.28	453.04	453.77
Less: Effect of Net attrition	57.92	-	-
Gross Employee Cost	**1070.07**	**1223.20**	**1204.06**
Less: Capitalization	45.00	45.65	35.48
Add: Prior Period Expenses	-	9.69	-
Net Employee Cost approved	**1025.07**	**1187.24**	**1168.58**

7.8 Repairs and Maintenance Expense and Administrative and General Expenses

7.8.1 As per Regulation 11 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011, R&M and A&G expense are controllable parameter and any surplus or deficit on account of actual R&M and A&G expense compared shall be to the account of the Petitioner and shall not be trued up.

7.8.2 Based on submission of the petition, it is observed that the claim of the Petitioner towards R&M expense is lower than the approved value while the amount of A&G expense attributable towards distribution expense is higher than the approved values for the FY14. The Petitioner was asked to submit the break-up between the various functions and reconcile the same with audited accounts.

7.8.3 As per the submissions in this regard, it was observed that the R&M and A&G expense for the distribution business was lower than the approved amounts for FY14.

7.8.4 In line with the MYT Regulations, the Commission has approved R&M and A&G expense at the same level for the distribution business as approved in the MYT as well as the APR Order for FY14.

Table 101: R&M and A&G Expenses Approved for FY14 (Rs. Cr.)

Particulars	APR Approved	Petition	Revised Submission	Now Approved
R&M Expenses	36.45	28.62	28.50	36.45
A&G Expense	42.33	50.51	37.98	42.33

7.9 Capitalization of Expenses

7.9.1 The Petitioner has submitted the employee and A&G capitalization of Rs. 35.48 Cr. and Rs. 1.06 Cr., respectively towards distribution business as per the audited accounts of FY14. In the APR Order for FY14, the Commission had approved employee capitalization of Rs. 45.00 Cr. and A&G capitalization of Rs. 3.05 Cr. The Commission has therefore considered the actual amount of capitalization of Rs. 35.48 Cr. and Rs. 1.06 Cr against the employee cost and A&G expense attributable to the distribution business for FY14.

7.10 Interest and Finance Charges

7.10.1 The Commission has reviewed and revised the Interest and Finance charges to the extent of change in working capital and consumer security deposit as per the audited accounts for FY14. The interest on capital loans shall be trued-up based on the true-up of capital expenditure and capitalization for the Control Period FY12-FY14.

7.10.2 The Working capital requirements and interest on working capital has been revised and approved as follows:

Table 102: Trued-up Interest on Working Capital for FY14 (Rs. Cr.)

Particulars	APR Approved	Petition	Now Approved
O&M Expenses for one month	81.23	7.39	106.90
Receivables equivalent to 2 months	617.99	725.01	657.38
Maintenance Spares 40% of the R&M expense for one month	1.21	0.96	1.22
Less: Consumer Security Deposit	375.70	293.68	267.58
Less: One Month Power Purchase	233.14	211.41	223.06
Working Capital Requirement	**91.58**	**228.27**	**274.86**
Interest on Working Capital (@14.45%)	**12.13**	**36.75**	**39.72**

7.10.3 Further the interest on consumer security deposit has been considered as per the audited accounts of FY14 and is approved as below:

Table 103: Trued-up Interest on Consumer Security Deposit for FY14 (Rs. Cr.)

Particulars	Now Approved
Opening	253.04
Additions	14.54
Closing	267.58
Interest on Consumer security deposit	**16.84**

7.10.4 Based on the revision in interest on working capital and consumer security deposit, the total interest expense approved for final truing-up for FY14 is as below.

Table 104: Trued up Interest and Finance Charges for FY14 (Rs. Cr.)

Particulars	Approved in APR Order	Now Approved
Interest on Long term loans	100.35	100.35
Interest on Working Capital	12.13	39.72
Interest on Consumer security deposit	8.71	16.84
Total Interest & Finance Charges	**121.19**	**156.91**

7.11 Other Controllable Parameters

7.11.1 According to Clause 11 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011:

"(b) at the end of the Control Period –

1. The Commission shall review actual capital investment vis-à-vis approved capital investment.

2. Depreciation and financing cost, which includes cost of debt including working capital (interest), cost of equity (return) shall be trued up on the basis of actual/audited information and prudence check by the Commission."

7.11.2 As per the HPERC MYT Regulations, 2011, any variation in actual capital expenditure and subsequent variations in depreciation, interest cost and return on equity with respect to the figures approved in the MYT Order shall be considered at the end of the MYT Control Period.

7.11.3 Therefore, the Commission has considered the depreciation and return on equity at the same level as approved in the MYT Order / APR Order for FY14.

Table 105: Depreciation and Return-on-Equity approved for FY14 (Rs. Cr.)

Particulars	APR Approved	Petition	Now Approved
Depreciation	109.02	99.94	109.02
Return on Equity	30.24	42.41	30.24

7.12 Non-Tariff Income

7.12.1 The non-tariff income is required to be deducted from the ARR of the Petitioner. The Petitioner has claimed a total non-tariff income of Rs. 322.46 Cr. including Rs. 320.07 Cr. of non-tariff income towards distribution business and Rs. 2.39 Cr. towards generation business for true-up of FY14.

7.12.2 The Commission has been considering the entire non-tariff income as part of the distribution business as the generation tariff is determined plant-wise without considering any non-tariff income.

7.12.3 It is observed that the petitioner has considered prior period income as well as expense without going into merits. Based on the response to the Commission's query, the petitioner had submitted the break-up of prior period income. It is observed that of the total amount of Rs. 52.51 Cr. claimed by the petitioner, majority of the income are book adjustment to write-back provisions or comply with audit observations and have not resulted in any additional income.

7.12.4 As per the break-up for Rs. 52.51 Cr. provided by the Petitioner, an amount of Rs. 48.50 Cr. included the following:

"The amount claimed Rs. 49.91 crore against prior period income of Rs. 52.52 crore (other income relating to prior period). The break-up of which is as follows:

- *An amount of Rs. 42.70 crore on a/c of amortization on assets created through consumers' contribution has been charged to prior period income in order to comply the AS-12 (Assets accrued from consumers' grants and Govt. contribution).*
- *The amount of Rs. 5.80 crore has been charged to prior period income to comply with the old audit observations by the various Units.*
- *The remaining amount of Rs 1.41 crore is miscellaneous income related to prior period and accounted by the various units"*

7.12.5 Therefore, the Commission has considered an amount of Rs. 1.58 Cr. towards prior period income after excluding the accounting adjustments as provided in table below:

Table 106: Prior Period Income considered under Non-Tariff Income for FY14 (Rs. Cr.)

Particulars	Amount
Total Prior Period Income as per Audited Accounts	52.51
Less: Interest & other Finance Charges relating to previous years.	(2.51)
Less: Other excess provision in prior period.	4.93
Less: Excess provision of Income Tax in prior period	0.01
Less: Income Relating to Prior periods	48.5
Net Prior Period Income	**1.58**

7.12.6 In the APR Order for FY14, the Commission had included Rs. 50 Cr. towards S&I works done in the past by HPSEBL. However, in response to a query of the Commission, HPSEBL has submitted that it has been able to recover Rs. 1.25 Cr.

under S&I receivables during FY15. The amount has been adjusted against the employee cost allocated to S&I which is Rs. 1.70 Cr. as per the submission of the Petitioner. No negative impact of the S&I business has been considered in the non-tariff income of FY14.

7.12.7 Also, an amount of Rs. 14.80 Cr. is observed as Extraordinary Income in the audited accounts. The petitioner was asked to provide details of the amount. In its response the petitioner has stated that the amount of Rs. 14.80 Cr. has been received from Deputy Commissioner, Shimla Division on accounts of calamity relief fund for repair and restoration of damaged assets/ materials & has been shown under extra ordinary credit in P&L Accounts. HPSEBL has submitted that these amounts are received from GoHP against the assets/ material which has been damaged in past years and repaired/ recovered the same from HPSEBL's own revenue expenditure (R&M). Since the R&M is considered as a controllable parameter as per the regulations, the amount received against R&M of damaged asset has not been considered as part of non-tariff income.

7.12.8 The Commission approves the Non-Tariff income for FY14 as summarised below

Table 107: Trued-up Non-Tariff Income for FY14 (Rs. Cr.)

Particulars	Now Approved
Meter Rent/Service Line Rentals	45.52
Recovery for theft of Power / Malpractices	0.05
Wheeling Charges Recovery	119.79
Miscellaneous Charges from Consumers	9.96
Sub-Total	**175.32**
Interest on Staff loans & Advances	0.54
Income from Investments	4.20
Delayed Payment Charges from Consumers	54.22
Interest on Advances to Suppliers / Contractors	1.37
Income fee collected against Staff Welfare Activities	0.08
Miscellaneous Receipts	31.16
PLVC charges	0.42
Sub-Total	**91.98**
S&I Activity	0.00
Income from Trading	2.64
Prior Period Income	1.58
Sub-Total	**4.22**
Total Non-Tariff Income	**271.52**

7.13 Renewable Purchase Obligation (RPO)

7.13.1 In the true-up petition, the petitioner has submitted that a penalty of Rs. 17.23 Crores has been imposed on HPSEBL for non-compliance of RPO as per the HPERC Order against Petition No. 129/2013 dated 10th Nov 2014. The relevant excerpts of the Order are as below:

"In the light of above discussion, the Commission is of the view that the HPSEBL should deposit the compensation amount of Rs.17.23 Crores in a separate fund to be created by the HPSEBL in its accounts as RPPO Compensation Fund for non-compliance of RPPO in 2013-14. Renewable sources of energy are highly dispersed in the State and creation of sub-transmission system infrastructure is of paramount importance for promotion of renewables. Currently the HPSEBL is facing liquidity problems and creation of such infrastructure does not find desired impetus. Therefore, the Commission directs that this amount shall be utilised as HPSEBL's share in project financing (10% share) to create sub-transmission infrastructure (11 kV and 33kV) during the next two years, the HPSEBL will deposit Rs.5.00 Crores this year which will be provided by the Commission in the true up order for FY 2013-14 and balance amount will be provisioned in the ARR of the FY 2015-16. This fund will be treated as grant/consumer contribution and, therefore, will not be admissible for depreciation and any other interest/return"

7.13.2 The Commission enquired about the status of the above mentioned fund to be created by HPSEBL during the technical validation sessions. The Petitioner vide its response dated 13.03.16 has submitted the following:

"HPSEBL submits that as per direction of Hon'ble Commission, fund of Rs. 17.23 crore towards non-compliance of RPO has been created and a sum of Rs. 13.00 crore has been deposited in this fund upto 2/16 while the balance amount of Rs. 4.23 crore shall be deposited during March, 2016. The utilization of amount deposited in FY 2014-15 is as follows:

- *An amount of Rs 75.87 Lac has been utilized against 10% Board share till date.*
- *Utilization of the balance amount shall be in FY 2016-17."*

7.13.3 The commission has considered penalty for non-achievement of RPO of Rs. 17.23 Crores for FY14 in line with its order dated 10.11.2014. An amount of Rs. 5 Cr. has been included as part of the FY14 ARR. Further, the Commission shall treat this amount as consumer contribution and exclude the same from computation of depreciation or return on equity. The Petitioner is directed to keep the account separate and provide the details of the schemes and amount of utilization from this fund along with each tariff filing.

7.14 Annual Revenue Requirement

7.14.1 The ARR approved by the Commission in the APR Order, ARR as submitted by the Petitioner in its true-up petition and ARR now approved by the Commission for FY14 are shown in the table below:

Table 108: Trued-up Annual Revenue Requirement for FY14 (Rs. Cr.)

Particulars	Approved APR Order	Petition	Now Approved (Trued-up)
Power Purchase Expenses	2522.69	2867.47	2668.34
Operation & Maintenance Costs	1100.80	1290.83	1282.84
Employee Cost	*1025.07*	*1223.20*	*1204.06*
R&M Cost	*36.45*	*28.62*	*36.45*
A&G Cost	*42.33*	*39.01*	*42.33*
Interest & Financing Charges	121.19	508.44	156.91
Depreciation	109.02	99.94	109.02
Return on Equity	30.24	42.41	30.24
Provision for Bad & Doubtful Debtors	-	0.87	-
Amount towards RPPO Compensation Fund	-	5.00	5.00
Less: Non-Tariff & Other Income	309.20	320.07	271.52
Less: Capitalization of Expenses	48.05	47.23	36.54
Net Prior Period Expenses	-	2.04	-
Aggregate Revenue Requirement	**3574.71**	**4449.70**	**3944.29**

7.15 Adjustments to ARR

7.15.1 In the Order for APR for FY14, the Commission had also undertaken true-up of FY12 and considered an amount of Rs. 683.03 Cr. along with carrying cost of Rs. 42.15 Cr. which has been included along with the approved ARR for FY14 for recovery during FY14. However, the petitioner has not considered this amount in its truing-up claim for FY14 resulting in incorrect claim.

7.15.2 Since the true-up amount of FY12 was approved for recovery along with the ARR of FY14, the trued-up ARR for FY14 after considering the approved adjustments for true-up of FY12, is as below:

Table 109: Final ARR after Adjustments for FY14 (Rs. Cr.)

Particulars	Approved APR Order
Aggregate Revenue Requirement	3944.29
Add : Trued up Gap of FY12	683.03
Add: Carrying Cost	42.15
Total ARR	**4669.47**

7.16 Revenue Gap

7.16.1 The Revenue Gap/Surplus for the FY2013-14 based on the approved trued-up costs and revenues of HPSEBL is as determined below:

Table 110: Trued-up Revenue Gap for FY14 (Rs. Cr.)

Particulars	Approved APR Order
Aggregate Revenue Requirement	**4669.47**
Revenue	
Revenue from sale of power within state	4055.58
Revenue from sale of power outside state	174.62
Total Revenue	**4230.20**
Revenue Surplus/(Gap)	**(439.27)**

7.17 Carrying Cost

7.17.1 The Petitioner has requested for approval of the revenue gap along with carrying cost as per the provisions of clause (2) of Regulations 11 as amended by HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) (Second Amendment) Regulations, 2013.

7.17.2 The Commission has undertaken final true-up of uncontrollable parameters for FY13 and FY14 based on the audited accounts of the respective years in this Order. As per the true-up the following revenue surplus and gap was determined for FY13 and FY14:

Table 111: Approved Revenue Surplus / (gap) for FY13 and FY14 (Rs. Cr.)

Particulars	Amount
Excess Revenue Surplus / (Gap) for FY13	138.99
Revenue Surplus / (Gap) for FY14	(439.27)

7.17.3 As per the Regulation 11(2), carrying cost is to be provided as following:

"The distribution licensee, for the approved true-up of any year over and above that approved in the Tariff Order for that year, shall be entitled to a carrying cost at the Base Rate of State Bank of India plus 350 basis points and for any true-up resulting in less than that approved in the Tariff Order for that year, the carrying cost shall be recovered at the same rate."

7.17.4 Accordingly, carrying cost is determined based on the opening and closing amount of revenue surplus/ (gap) and the cumulative amount has been adjusted in the ARR for FY17 in the subsequent Chapter. The computation of carrying cost and cumulative revenue surplus/ (gap) is summarized in table below:

Table 112: Approved Carrying Cost for Revenue Surplus/ (Gap) (Rs. Cr.)

Particulars	FY13	FY14	FY15	FY16
Opening Surplus / (Gap)	-	148.38	(300.30)	(340.84)
Trued-up Surplus/ (Gap) for FY 2012-13	138.99			
Trued-up Surplus/ (Gap) for FY 2013-14		(439.27)		
Interest Rate for Carrying Cost	*13.50%*	*13.20%*	*13.50%*	*13.35%*
Carrying Cost	9.38	(9.41)	(40.54)	(45.50)
Closing Surplus / (Gap)	**148.38**	**(300.30)**	**(340.84)**	**(386.34)**

8 Analysis of the Annual Performance Review (APR) and ARR Proposals for FY17

8.1 Background

8.1.1 The Commission has analyzed the revised Aggregate Revenue Requirement (ARR) Petition for FY17 submitted by the Petitioner (HPSEBL) for approval of the revised ARR of HPSEBL and determination of Wheeling and Retail Supply Tariff for FY17.

8.1.2 The Commission held several rounds of technical discussions to validate the data submitted by the Petitioner and sought further clarifications on various issues. The Commission has considered all information submitted by the Petitioner as part of the tariff petition, audited and provisional accounts for past years, responses to various queries raised during the discussions and also during the public hearing, for determination of tariff.

8.1.3 This chapter contains detailed analysis of the HPSEBL's ARR petition and the Commission's Annual Performance Review of various parameters for determination of revised ARR for the distribution business of HPSEBL for FY17.

8.2 Aggregate Revenue Requirement (ARR) of HPSEBL as per 3rd MYT Order

8.2.1 The Aggregate Revenue Requirement approved by the Commission for HPSEBL for the third Control Period (FY15-FY19) under its MYT Order dated June 12, 2014 is summarized in the table below:

Table 113: Approved ARR for the Third Control Period (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
Power Purchase Expenses for Supply in the State	2,554.17	2,762.53	2,872.90	3,095.02	3,355.08
Cost of electricity purchase including own generation	2,258.72	2,431.22	2,505.69	2,685.08	2,901.05

Particulars	FY15	FY16	FY17	FY18	FY19
Inter-State Charges					
Power Grid Charges	230.51	258.53	288.29	326.97	365.45
Open Access Charges	53.12	58.43	64.28	70.71	77.78
Intra-State Charges					
HPPTCL Charges	3.45	3.47	3.32	3.36	3.46
SLDC Charges	8.37	10.88	11.32	8.89	7.34
Operation & Maintenance Costs	1,247.23	1,372.09	1,510.39	1,663.11	1,830.80
Employee Cost	1,166.37	1,284.81	1,414.82	1,557.50	1,714.12
R&M Cost	43.51	46.79	51.69	58.02	65.09
A&G Cost	36.35	39.48	42.89	46.58	50.60
Additional amount for Safety measures	1.00	1.00	1.00	1.00	1.00
Interest & Financing Charges	176.61	196.88	229.76	266.97	302.53
Depreciation	62.74	70.27	80.90	93.90	107.91
Return on Equity	30.24	30.24	30.24	30.24	30.24
Surplus Power Purchase as per PPA Obligation	135.31	173.29	219.11	282.27	325.73
Less: Non-Tariff & Other Income	207.14	216.07	225.47	235.36	245.77
Aggregate Revenue Requirement	**3,999.16**	**4,389.24**	**4,717.84**	**5,196.15**	**5,706.52**

8.2.2 The approved ARR vis-à-vis the revenue projected for each year of the 3rd Control Period in the MYT Order dated June 12, 2014 is summarized below:

Table 114: Revenue Surplus/ (Gap) for the Control Period (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
Total Approved ARR	**4,542.56***	**4,389.24**	**4,717.84**	**5,196.15**	**5,706.52**
Revenue from Sale outside state	255.15	290.42	350.03	425.37	482.64
Revenue as per Revised Tariff	4,288.95#	4,469.25	4,700.59	4,946.11	5,206.81
Total Projected Revenue	**4,544.09**	**4,759.67**	**5,050.62**	**5,371.48**	**5,689.45**
Surplus/(Gap)	**1.54**	**370.43**	**332.78**	**175.33**	**(17.07)**

**including prior period adjustments on account of true-up of FY 13 including carrying cost, provisional amount towards true-up for FY 11 & FY 12 and the impact of review order*

#estimated revenue for FY15 is based on four months of existing tariff and eight months applicability of revised tariff

8.3 Approach of the Second Annual Performance Review under the 3rd MYT Control Period

8.3.1 In accordance with the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 and amendments thereof, HPSEBL has filed for annual performance review for FY17.

8.3.2 The Commission in its Third MYT Order (FY15 to FY19) dated 12th June, 2014 has fixed the targets for controllable parameters. Any gain or loss due to over/ under performance of the licensee on these controllable parameters would be to its own account. However, any variation on account of factors deemed uncontrollable such as power purchase cost and energy sales is treated as a pass-through expense in the Annual Performance Review exercise after due diligence by the Commission.

8.3.3 HPSEB has filed for a review of the ARR for FY16 and FY17 and for the corresponding revision of tariff for FY17 in accordance with the variation of the revised ARR vis-s-vis the ARR approved in the MYT Order/ APR Order.

8.3.4 The Commission has already reviewed the ARR approved in the MYT Order for FY16 in the First APR Order based on the actual information for FY14 and FY15 provided by the Petitioner for the revised projections of the uncontrollable parameters for FY16. Therefore, the Commission is of the view that any change in approved and actual figures of FY16 shall be considered at the time of truing-up of FY16 based on audited accounts of FY16.

8.3.5 In this Order, the Commission has reviewed the ARR for FY17 on account of uncontrollable parameters as provided in the MYT Regulations, 2011 and amendments thereof. Other controllable components of costs i.e. O&M expense, depreciation, return on equity, interest on loans, etc. are considered as per the amount approved by the Commission in the third MYT Order.

8.4 Sales Forecast

8.4.1 For projecting the energy sales of HPSEBL for the FY17, the Commission has taken into account the category-wise actual trend of past sales. The Commission has made use of Compounded Annual Growth Rate (CAGR) which gives the smoothed annualized growth rate of a parameter like energy sales in order to capture fluctuations in the value of that parameter over a period of time. CAGRs corresponding to different lengths of time were calculated for each consumer category and depending on the specific characteristics of each category, a particular CAGR has been chosen as the basis of sales projection for that category.

8.4.2 HPSEBL has projected energy sales by applying the category-wise CAGR of 1, 3 and 5 years as well as actual sales for first six months of FY16. HPSEBL has estimated sales for FY16 at 8184 MU as base for projection and projected energy sales within the State at 8648 MU for FY17.

8.4.3 The Commission has undertaken a detailed analysis of the sales projected by the HPSEBL. The Commission analyzed the year-on-year variations in sales as well as the short term, medium term and long term trends in sales and computed the CAGR for different lengths of time (2 years, 3 years, 4 years, 5 years, 6 years, 8 years and 10 years) for all categories.

8.4.4 The Commission has estimated the revised sales for FY16 based on actual sales of six months of FY16 and past CAGRs witnessed across various categories of consumers. The revised estimate for FY16 has been considered as the base for the purpose of projections of sales for various categories of the consumers for FY17 after applying the category-wise growth factors.

8.4.5 On the basis of such analysis, the Commission approves total sales of 8650 MU for FY17. The Commission approves sale for each category of consumer as detailed below.

Domestic Supply

8.4.6 The energy sales to domestic category have shown a significant increase during the past five years with annual growth of over 10% year on year. However, it has been observed that the overall growth has been slowing down. The growth in sales recorded for FY15 was 6.7% over the past as compared to 9.6% growth in FY14. Further, energy efficiency schemes like distribution of LED to domestic consumers is expected to have a controlling effect on the domestic consumption.

8.4.7 The long term analysis of growth presents that the CAGR of sales has been in the range of 7% to 10% for a period of 1 year to 10 year respectively.

8.4.8 Considering the long term CAGR of sales as well as recent developments which are expected to have an impact on the energy offtake in this category, the Commission has adopted a growth rate of 7% for sales projections in domestic category for FY17.

Non Domestic Non Commercial Supply (NDNCS)

8.4.9 In contrast to previous MYT period, there is adequate segregated data existing for NDNC and commercial supply category, based on which the Commission has projected the energy sales for NDNC and commercial consumer category separately.

8.4.10 The CAGR for a period of 3 to 5 years has been in the range of 9.7% to 7.7%, with 5 year CAGR being 7.7%. Thus, the Commission has adopted the 5 year CAGR as the growth rate for projections of energy sales for FY17.

Commercial Supply

8.4.11 The sales to commercial category have seen growth over the last few years, ranging from year on year growth of 5% to 17%. HPSEBL has projected the sales growth at 6.9% per annum for the Control Period in view of the 5 year and 3 year CAGR of 9.1% and 6.9% respectively.

8.4.12 In view of the growth factors of the recent years, the Commission has considered a 3 years CAGR of 6.9% for the projection of energy sales in this category.

Industrial Power Supply

8.4.13 In the MYT Order, the Commission had approved changes in the tariff structure leading to rationalization and reduction of industrial tariff. These structural measures and reforms in the tariff design were expected to encourage the industrial consumers to draw higher quantum of power. However, based on the actual sales data for FY15 and six months of FY16, the Commission has projected the sales to the industrial categories as below:

Small and Medium Industrial Power Supply

8.4.14 An assessment of year on year growth of sales to this category indicates wide variations ranging from -3.0% to 20%, which could be attributed to the changes in economic cycle and conditions prevalent in the country.

8.4.15 The actual sales in FY15 to this category increased by 2.8% as compared with FY14 after witnessing a negative growth of 1.5% in FY14. As per the proposed growth in sales to small and medium industry, an increase of 3.5% has been considered which is also in line with the 5 year CAGR.

8.4.16 The Commission has considered the share of sales to small and medium industry supply for past year, to allocate the total sales in this category between now existing separate small industrial consumers and medium industrial consumers.

Large Industrial Power Supply

8.4.17 While the analysis of past year-on-year growth of sales for last 7-8 years in this category indicates high growth levels in the beginning, the sales in this category has stagnated with marginal level of growth primarily due to completion of tax holiday period which was offered to the industries. The growth in actual sales during FY14 and FY15 has been 2.7% and 3.0%, respectively in this category.

8.4.18 In view of the revised cross subsidy surcharge as per the amended National Tariff Policy as well as the additional surcharge, the Commission has considered the sales projection of the petitioner in this category to grow at 4.0% during FY17 which is also in line with the projected sales worked out by the petitioner.

Irrigation and Drinking Water Pumping Supply (IDWPS)

8.4.19 The sales to this category have been steady with CAGR ranging from 3% to 7% y-o-y for last five years. The Commission has projected sales for FY17 considering a growth rate of 5.2%, which is in line with the CAGR of last three years.

8.4.20 Sales to private agriculture irrigation within this category have witnessed large variations with year on year growth ranging from -4% to 29%, owing to the variations in average recorded rainfall. In FY15 actual sales in this category has increased by 9% as against a decrease of 11% in FY14. Therefore, the Commission has considered sales projections equal to the actual energy sales to this category in FY15 as per the submission by HPSEBL.

Public Lighting

8.4.21 No specific trend is observed in the year on year growth of sales to public lighting. However, it is observed that the sales in this category have remained range bound between 12 MUs to 14 MUs. Therefore, the Commission has considered no growth in sales projections for this category for FY17.

Bulk Supply

8.4.22 While the sales in this category for FY15 has witnessed an increase 5% over FY14, over a longer period sales in this category have declined by nearly 12% and 11% during FY13 and FY14 as majority of the load in this category is taken by small hydro plants for construction work. Therefore, the Commission has considered the bulk supply sales similar to the actual sales of HPSEBL for FY15.

Temporary Supply

8.4.23 The analysis of sales in this category indicates range bound sales during last five to six years. Therefore, the Commission has considered the temporary supply sales to remain constant for projections of FY17.

8.4.24 After detailed scrutiny of the consumer category wise sales, the Commission estimates the following sales to retail consumers within the State for FY17:

Table 115: Revised Approved Sales for FY17 (MUs)

S. No.	Consumer Category	MYT Approved	Petitioner Submission	Revised Approved
1.	**Industrial Power Supply**			
a.	Small Industries	73	92	76
b.	Medium Industries	174	133	147
c.	Large Industries (HT)	2,832	2,109	2,817
d.	Large Industries (EHT)	2,239	2,653	1,961
2.	Domestic	2,256	2,179	2,168
3.	**Irrigation and Drinking Water**			
a.	Govt., Irrigation & Water Supply	565	558	556
b.	Private Agricultural Irrigation	46	53	45
4.	Commercial	597	528	532
5.	Bulk Supply	157	156	158
6.	Non Domestic Non Commercial	139	148	151
7.	Public Lighting	13	13	13

S. No.	Consumer Category	MYT Approved	Petitioner Submission	Revised Approved
8.	Temporary	27	26	26
	Total	**9,118**	**8,648**	**8,650**

Note: In the MYT Order the Commission had revised the applicability of two part tariff and categorization of consumers based on contracted demand. Therefore, the above projections for category-wise sales may differ from the actual due to shift of consumers. This shift in sales may be between categories, however, the overall quantum is expected to remain in line with the projections.

8.5 Transmission and Distribution Losses

8.5.1 In the MYT Order for the third Control Period, the Commission had approved a trajectory for T&D losses based on the actual T&D losses of the Petitioner and appropriate reduction each year. The approved T&D loss for the third Control Period is provided in table below:

Table 116: Approved T&D loss for Third Control Period

Particulars	FY15	FY16	FY17	FY18	FY19
Approved T&D loss	12.80%	12.60%	12.40%	12.20%	12.00%
Loss Reduction	0.20%	0.20%	0.20%	0.20%	0.20%

8.5.2 As per the APR petition, the petitioner has submitted that it shall be able to achieve the T&D loss target for FY16 and FY17 as approved by the Commission in the MYT Order. The energy balance for FY17 has been proposed by the petitioner as per the approved loss of 12.40% for FY17. However, it was observed that the petitioner had not submitted any details of the actual T&D loss for FY15 or estimated loss for FY16. In response to the query of the Commission, HPSEBL has submitted that it has been able to achieve T&D loss of 12.36% for FY15 as against the approved T&D Loss of 12.80%.

8.5.3 In view of the actual loss of 12.36% in FY15 as against the T&D loss target of 12.80%, the Commission is of the view that the petitioner shall not have any issue with respect to the T&D loss trajectory approved in the MYT Order as HPSEBL has already achieved much lower T&D loss in the first year of the Control Period. However, HPSEBL should continue to take adequate measures for further reduction of T&D losses even if it has overachieved the loss target provided by the Commission in the initial years.

8.5.4 Accordingly, the Commission has considered the T&D loss target of 12.40% set for HPSEBL for projecting the energy balance for FY17.

8.6 Energy Requirement

8.6.1 The Commission's estimates of energy requirement at state periphery for FY17 are based on the revised sales and T&D loss target approved by the Commission. The Commission's estimates for power requirement are tabulated as follows:

Table 117: Approved Energy Requirement for FY17

Particulars	MYT	Petitioner	Revised Approved
Sales (MU)	9118	8,648	8650
Approved Loss (%)	12.40%	12.40%	12.40%
Energy Requirement at State Periphery for own consumption (MU)	**10408.68**	**9872.15**	**9873.92**

8.7 Power Purchase

8.7.1 As per the MYT Regulations, power purchase is an uncontrollable parameter and needs to be reviewed every year based on actual. Hence, any variation in the power purchase cost shall be trued up at the end of every year of the Control Period.

8.7.2 For the Annual Performance Review (APR) of FY17, the Commission has updated the station-wise projection of energy availability and power purchase cost for FY17 taking into consideration the actual normative parameters achieved by generating stations in FY15 and ten months of FY16 as well as change in allocation, if any.

8.7.3 The Commission has retained the projection of energy generation from HPSEBL's own stations at the same level as approved in the 3rd MYT Order (FY15-FY19) as the same has been estimated on the basis of operational norms approved in the MYT Order for the generation business. Any variation in units generated from the owned plants of HPSEBL shall be considered at the time of truing-up of uncontrollable parameters for the respective year.

8.7.4 The following power generating stations have been considered for the purpose of estimation of power availability for the Control Period:

- HPSEBL's own generating stations
- Purchase from BBMB and shared stations;

- Purchase from Baspa, Patikari HEPs, private SHPs up to 25 MW and under APPC mechanism for REC;
- Purchase of Free and Equity power from the GoHP;
- Purchase through bilateral short term arrangements;
- Purchase from Central Generating Stations of NTPC, NHPC, SJVNL, NPCIL and THDC; New Plants expected to be commissioned during the Control Period;

8.7.5 In the following sub sections, estimation of power purchase along with certain assumptions thereof, from each of the above sources has been discussed.

Allocation and Energy Availability from Own Generating Stations

8.7.6 Based on the existing arrangements between the HPSEBL and GoHP, the Commission has considered 100% allocation from HPSEBL's own generating stations except those stations where HPSEBL is obligated to supply 12% free power to the GoHP.

8.7.7 The table below summarizes HPSEBL's share, generation and auxiliary consumption considered by the Commission for the projection of power purchase quantum from own generating stations above 25 MW for FY17 whereas the generation from power projects below 25 MW has been considered under renewable power (non-solar).

Table 118: Allocation and Energy Availability from Own Generating Stations*

Generating Station	Capacity (MW)	Generation (MUs)	HPSEBL Share	Annual Energy available to HPSEBL
Larji	126	586.82	88%	515.37
Bhaba	120	375.49	100%	374.74
Bassi	60	346.83	100%	346.14
Giri	60	289.55	100%	288.97
Total Energy Available				**1525.22**

**Excluding own generating stations with capacity of less than 25MW*

8.7.8 The petitioner has submitted that the Bhabha generating station which was under shutdown since the month of January 2015, is expected to recommission by May 2016. Therefore, the Commission has considered projections of energy availability to HPSEBL from the Bhabha station to be same as per the submission by the petitioner.

Allocation and Energy Availability from Shared Generating Stations

8.7.9 HP has fixed allocation from Shanan and Shanan (Extension) at 1 MW at 60% PLF and 45 MU respectively. The Commission has considered the same while projecting the availability from these stations for FY17. For power availability from Yamuna, the Commission has considered the power generation as per the MYT Order of UJVNL Hydro Stations for FY15. In case of energy available from Khara, the Commission has considered the average of the energy generated during last three years.

Table 119: Allocation and Energy Availability from Shared Generating Stations

Name of Generating Station	Expected PLF/ Energy Generated	Aux Cons.	HPSEB Share	Annual Energy available to HPSEBL (MUs)
Shanan	60%		Fixed at 1 MW	5.26
Shanan (Extension)			Fixed 45MU	45.00
Yamuna		1%	24.68%	390.44
Khara		1%	20%	71.31
Total Available from Shared Generating Stations				**512.00**

Allocation and Energy Availability from IPP with Long-term PPA

8.7.10 The total energy available from Baspa-II HEP during FY17 has been considered as 1050 MUs as per the MYT Order for the Third Control Period of Baspa-II approved by the Commission. Any variations in the quantum available shall be considered at the time of truing-up of FY17.

Allocation and Energy Availability from Free Power

8.7.11 The GoHP has free power entitlement in several stations including NTPC, NHPC, SJVNL, PSPCL, HPSEBL and IPPs in lieu of project site used by these generating stations. This power is available to HPSEBL for meeting its power requirement as per mutually agreed terms between HPSEBL and GoHP at a price fixed by the Commission.

8.7.12 In line with the methodology followed in the MYT Order for 3rd Control Period and APR Order for FY16, the petitioner has proposed free power availability only from those generating stations that are directly connected to the State Grid. The Commission has accordingly considered the free power availability from the stations proposed by HPSEBL. While projecting the power generation from these generating stations, the Commission has considered either last 3 years average or design energy generation based on availability.

8.7.13 The petitioner's projection with respect to free power available from small HEP/ Private micro projects is very less considering the actual power procurement of approx. 60 MUs during FY15. Therefore, free power availability from Small HEP/Private Micro is determined based on the actual allocation of free power from such station available during FY15 and additional power from share of GoHP free power to be available from IPPs which are expected to commission during FY16 and FY17.

8.7.14 The table summarizes the stations and quantum of free power available to HPSEBL during FY17:

Table 120: Energy Availability from Free Power (MU)

Free Power	MYT Approved	Petition	Now Approved
Shanan Share (Fixed)	2.63	2.63	2.63
Ranjeet Sagar Dam Share (4.60%)	68.63	69.41	68.63
Malana (20%)	64.49	73.28	67.82
Baspa-II	143.18	153.72	143.16
Ghanvi	11.07	11.07	11.07
Baner	7.21	7.21	7.21
Gaj	4.55	4.55	4.55
Larji	70.28	68.26	70.28
Khauli	5.95	5.95	5.95
Uhl III	46.78	17.60	17.60
Ghanvi II	6.24	6.24	6.24
Small HEP/ Private Micro	40.24	46.63	88.02
Total Power Available from GoHP share of Free Power	**471.25**	**466.55**	**493.16**

Allocation and Energy Availability from BBMB

8.7.15 In case of generating stations of BBMB, the average energy has been considered based on the energy generated during the last 3 years. The table below summarizes the allocation as well as energy available from BBMB stations during the MYT Control Period.

Table 121: HPSEBL Share and Energy Availability from BBMB for FY17

Name of Generating Station	Energy (ex-bus)	HPSEB Share	Energy available to HPSEBL (MUs)
BBMB Old		Fixed 1.2LU/day	43.80
BBMB New	4980.06	7.19%	358.07
Dehar	2541.40	7.19%	182.73
Pong	1311.59	2.97%	38.95
Total			**623.55**

Energy Availability from Renewable Power (Non-Solar and Solar)

8.7.16 The Petitioner is required to comply with the HPERC (Renewable Power Purchase obligation and its Compliance) Regulation, 2010 wherein the Commission had approved the non-solar and solar renewable power procurement trajectory to be complied by the licensee. The obligation for non-solar and solar power purchase for FY17 is detailed below:

Table 122: Minimum quantum of purchase from Renewable Sources

Financial Year	Total RPPO %age.	Minimum Non-Solar RPPO %age of the total purchase	Minimum Solar RPPO %age of the total purchase
FY17	12.25	12	0.25

Renewable Power (Non-solar)

8.7.17 The Petitioner has owned generating hydro power plants which are lower than 25MW capacity and qualify under the renewable power projects. The Commission has considered availability from these plants based on the availability approved in the MYT Order for the 3rd Control Period for HPSEBL Generation Business and Tariff Order for 8 plants issued on 15.01.2014 against Petition no. 54/2013. The table below summarizes the power available from these stations during FY17:

Table 123: Allocation, HPSEBL share and Energy Availability from Own Generating Stations

Name of Generating Station	Capacity (MW)	Generation (MUs)	HPSEBL Share	Auxiliary Consumption (MUs)	Annual Energy available to HPSEBL (MUs)
Andhra	16.95	87.30	100%	0.87	86.43
Ghanvi	22.50	93.34	88%	1.12	81.15
Baner	12.00	60.67	88%	0.61	52.86
Gaj	10.50	38.31	88%	0.38	33.38

Name of Generating Station	Capacity (MW)	Generation (MUs)	HPSEBL Share	Auxiliary Consumption (MUs)	Annual Energy available to HPSEBL (MUs)
Khauli	12.00	49.95	88%	0.35	43.65
Binwa	6.00	29.25	100%	0.20	29.05
Thirot	4.50	17.74	100%	0.16	17.58
Gumma	3.00	11.83	100%	0.12	11.71
Holi	3.00	11.83	100%	0.12	11.71
Bhaba Aug	4.50	17.74	100%	0.16	17.58
Nogli	2.50	9.85	100%	0.10	9.75
Rongtong	2.00	7.64	100%	0.08	7.56
Sal-II	2.00	7.88	100%	0.09	7.79
Chaba	1.75	6.54	100%	0.07	6.47
Rukti	1.50	7.67	100%	0.08	7.59
Chamba	0.45	1.77	100%	0.02	1.75
Killar	0.30	1.16	100%	0.01	1.15
Total	**105.45**	**460.47**			**427.17**

8.7.18 In addition, the Petitioner has PPAs with various SHPs/ IPPs/ private micro hydel projects. Power from these projects is also considered towards meeting the non-solar renewable obligation of the Petitioner.

8.7.19 In response to the query of the Commission, the Petitioner has submitted that on an average the capacity addition during any year for small hydro plants would be in the range of 35 to 40 MW. The details of new IPP projects which have been commissioned during FY16 and which are expected to commission during FY17 as per the submission of HPSEBL are as follows:

Table 124: Project Commissioned during FY16

Name of Project	Capacity (MW)	Date of Commissioning
Shimla	5.00	19.08.2015
Baner II	6.00	27.06.2015
Baragran	24.00	12.10.2015
Total	**35.00**	
Projects to be Commissioned during FY17		
Shaung	3.00	FY17
Mannuni	3.50	FY17
Kurhed	4.50	FY17
Bagrood	0.24	FY17
Brua	9.00	FY17
Kut	24.00	FY17

Name of Project	Capacity (MW)	Date of Commissioning
Total	**44.24**	

8.7.20 The Commission has taken into consideration this input to determine the availability of power from small hydro plants. Additional projects which are expected to commission during FY17 as per the submission of the petitioner have also been considered for projecting the energy available in FY17.

8.7.21 The table below summarizes energy availability for HPSEBL from own and private small and micro hydel projects:

Table 125: Energy Availability from Small Hydro Own and IPPs/ Private Stations

Particulars	Energy Available (MUs)
Small Hydro Own Generation	427.17
Small HEP/ Private Micro <5MW	970.67
Small HEP/ Private Micro >5MW	312.74
Total Non-solar Renewable Power	**1710.58**

8.7.22 Further, power procured by HPSEBL from any other renewable source i.e. municipal solid waste, refuse derived fuel, etc. during FY 2016-17, for which the Commission has approved generic tariff, shall be considered at the time of truing up based on the actuals.

Renewable Power (Solar)

8.7.23 The Petitioner has submitted procurement of 15 MW solar energy from NTPC for supply along with 15 MW bundled power from NTPC thermal power plants. HPSEBL has started procuring power under this agreement from 31.12.14. Further, the petitioner has also considered additional power from SECI under MNRE. The Commission has provisionally considered the submission of the Petitioner in this regard and has approved the following solar power purchase for FY17:

Table 126: Energy Availability from Solar Power in FY17

Particulars	Energy Available (MUs)
Singrauli Solar	24.97
SECI	33.29
Total solar power available to HPSEBL	**58.26**
Solar RPPO for FY17	21.62
Excess availability of solar power	36.63

8.7.24 It is observed that the HPSEBL shall be procuring excess power from solar as against the quantum computed in line with the solar Renewable Power Procurement Obligation (RPPO) for FY17. The petitioner has submitted that excess procurement of solar power during FY17 shall be considered towards meeting the solar RPPO for FY12 and FY13 in line with the Commission's Order against suo-moto case no. 93(A)/2013 dated 29th July 2013. The Commission provisionally approves the excess procurement of solar power and shall consider the actual position at the time of truing-up for the respective year.

8.7.25 In addition, the Commission has also approved generic levelized tariff for Solar PV projects for FY 2016-17 vide Order dated 29.04.2016. HPSEBL's power procurement from such solar plants shall be considered as per actuals at the time of truing up.

Energy Availability from Private Micro Hydel Projects (Purchase at APPC under REC Framework)

8.7.26 The Petitioner also purchases power at Average Power Purchase Cost (APPC) rate from small and micro hydel projects which are under the REC framework.

8.7.27 The Commission has determined the availability of power from this source after taking into consideration the power purchase data in FY15 submitted by the Petitioner. The power purchase quantum of FY15 was assumed to escalate at 10% per annum to arrive at the Power Purchase Quantum for FY17 from Small and Micro HEPs (under REC Framework)

8.7.28 The details of power available from micro hydro projects under REC mechanism during FY17 is provided below:

Table 127: Energy Availability from IPPs and Private SHPs

Particulars	Energy Available (MUs)
Small HEP/ Private Micro - REC	328.79

Energy Availability from Equity Share in Generating Plants

8.7.29 The GoHP has equity share of 22% in the Nathpa Jhakri and 26.1% share in Rampur. The Commission has projected the energy available from NJPS for FY17 based on the actual energy generated during the last three years. In case of Rampur HEP, the target energy to be generated as per CEA for FY16 has been considered after adjustment for free power and auxiliary consumption. The details of power projected from these plants are as per table below:

Table 128: HPSEBL share and Energy Availability from NJPS and Rampur for FY17

Name of Generating Station	Generation (MUs) Ex Bus	HPSEBL Share	Annual Energy available to HPSEBL (MUs)
Rampur Equity	1633.86	26.1%	426.44
Nathpa Jhakri Equity	6935.27	22%	1525.76
Total from Equity share			**1952.20**

Allocation and Energy Availability from firm Share in Central Generating Stations (CGS)

8.7.30 The State of Himachal Pradesh has firm allocated share in Central Sector Generating Stations (CGS) of National Thermal Power Corporation (NTPC), National Hydroelectric Power Corporation (NHPC), Tehri Hydro Development Corporation (THDC), Satluj Jal Vidyut Nigam Limited (SJVNL) and Nuclear Power Corporation Limited (NPCIL). In addition to the firm share allocation, most of these stations (except Baira Siul, Salal, Tanakpur, Chamera-I and Uri stations of NHPC) have 15% unallocated share of power. The distribution of this unallocated power among the constituents of Northern Region is decided from time to time, based on the power requirement and power shortage in different States.

8.7.31 The Commission has considered allocation of firm power from CGS in accordance with latest allocations issued by the Northern Regional Power Committee.

8.7.32 During the processing of APR for FY16, the Commission had directed the petitioner to surrender the costly power from central generating stations and had accordingly not considered the power availability from gas stations like Anta, Auraiya and Dadri. In line with the direction, the Petitioner has already written to the Government for surrendering the costly power available from these stations. However, it has been brought to the notice of the Commission that the Ministry of Power has not been taking any decision on the same. Therefore, the Commission has considered power from these sources for the projections of energy availability for FY17. The petitioner is directed to pursue with the MoP for surrender of its share in these stations as per unit cost from these stations is significantly higher than the alternative power procurement options available.

8.7.33 The energy available from NTPC and NPCIL has been considered based on the average PLF achieved by respective generating stations during the last 3 years, based on the data available from CEA. The Commission has considered normative auxiliary consumption as approved by CERC to arrive at the energy generated from each of these stations.

8.7.34 As per the submission of the petitioner, it is procuring bundled power of 30 MW out of which 15 MW is being procured from Singrauli Solar and remaining 15MW from Thermal stations- Singrauli STPS, Rihand I, Rihand II, Rihand III, Unchahar I, Unchahar II, Unchahar III and Dadri II. The details as provided by the petitioner is as below:

Table 129: Energy Availability from firm Share in Central Generating Stations as per Petitioners Submission

Station	Capacity (MW)	Unallocated Share	
		%	MW
Singrauli STPS	2000	0.21	4.20
Rihand-I	1000	0.20	3.70
Rihand-II	1000	0.22	3.52
Rihand-III	1000	0.25	3.62
Unchahar-I	420	0.08	1.75
Unchahar-II	420	0.24	3.10
Unchahar-III	210	0.24	4.05
Dadri	980	0.23	0.23
Total Thermal (Bundled)			**15.00**
Singrauli Solar	15	100	15.00
Total			**30.00**

8.7.35 While the petitioner has considered the availability of bundled power from these plants along with the fixed share from respective plants, the Commission has separately determined the power available from 15MW of allocation from various plants based on normative PLF and auxiliary consumption.

8.7.36 In line with the petitioner submission regarding surrender of power from costly power stations of Tehri, Koteshwar, Parbati III, Koldam and Chamera III in the Order for FY16, the Commission has not considered any power availability from these stations for FY17.

8.7.37 In case of generating stations of NHPC and SJVNL, average energy available has been considered based on the energy generated during the last 3 years.

8.7.38 Further, in response to the queries and clarifications raised by the Commission, HPSEBL vide submission no. 18/2016 dated 5th March 2016 has additionally submitted that the SOR share to HPSEBL from the Koldam station has been surrendered for next five years from the COD of the project and same has been reallocated to the State of Haryana vide Ministry of Power Letter dated 09.07.2015. However, as per the standard norms, State of HP shall be provided 15% unallocated quota available from the project at the disposal of GoI. With reference to MoP, GoI letter dated 03.02.2016 and other related correspondences, the 15% unallocated quota from Koldam has been allotted to the HPSEBL which shall result in additional power purchase cost of Rs. 196.88 Cr. against 453.64 Mus @4.34 per unit.

8.7.39 It is observed that HPSEBL already has availability of surplus power and has no requirement for additional power procurement particularly during the summer season. Therefore, the power available from Koldam will only result in adverse impact on the petitioner and additional burden on the consumers. Therefore, the Commission advices the Petitioner to take up the matter with MoP for surrender of this 15% unallocated power from Koldam for a suitable period. Accordingly, the Commission has not considered the energy availability from Koldam for projection of energy availability for FY17. The Commission shall consider the purchase of this power at the time of truing-up of the FY17 based on the concerted efforts of the petitioner for surrender of this power.

8.7.40 The table below summarizes the allocation as well as energy available from CGS during FY17.

Table 130: Energy Availability from firm Share in Central Generating Stations- Approved

Name of Generating Station	Expected PLF/ Energy at Ex Bus	HPSEBL Share (%)	Energy available to HPSEBL
SJVNL			
Nathpa Jhakri SOR	6935.27	2.47%	171.30
Rampur SOR	1633.86	2.80%	45.75
Total			**217.05**
NPCIL			
NAPP	2453.51	3.2%	78.51
RAPP (V & VI)	2981.04	3.4%	101.36

Name of Generating Station	Expected PLF/ Energy at Ex Bus	HPSEBL Share (%)	Energy available to HPSEBL
Total			**179.87**
NTPC – Thermal			
Anta (G)	1874.18	3.6%	67.47
Auriya (G)	2014.64	3.3%	66.48
Dadri (G)	3351.60	3.0%	100.55
Unchahar-I	2935.37	1.7%	49.90
Unchahar-II	2935.37	2.9%	85.13
Unchahar-III	1467.68	3.8%	55.77
Rihand-1 STPS	6707.82	3.5%	234.77
Rihand-2 STPS	6854.44	3.3%	226.20
Rihand-3 Units-1,2	6707.82	3.4%	228.07
Kahalgaon-II	8716.55	1.5%	130.75
Singrauli Bundled (Thermal)	101.64		101.64
Total			**1346.72**
NHPC			
Salal	3483.90	1.0%	34.84
Tanakpur	385.71	3.8%	14.66
Chamera I	2527.12	2.9%	73.29
Chamera II	1630.21	3.7%	60.32
Uri	2836.65	2.7%	76.59
Dhauliganga	1121.32	3.6%	40.37
Total			**300.06**
Grand Total			**2043.70**

Energy Availability from Unallocated Power from CGS

8.7.41 The Petitioner's share in CGS unallocated quota varies from time to time based on the allocation made to HP depending upon power requirement and power shortage in different States. Considering the uncertainty associated with the availability from the unallocated quota, the Commission has not considered the same in energy balance. However, energy to the extent of 350 MU from this unallocated quota has been considered to be utilized towards meeting the demand-supply gap or a substitute for costly power. The Petitioner is directed to consider the commercial principles and merit order before procuring power from the unallocated quota.

Allocation and Energy Availability from New Projects

8.7.42 The Commission has considered energy availability from the new own generating stations of HPSEBL i.e. Ghanvi-II as the same has been commissioned. Power availability from Ghanvi-II has been considered as per the design energy of the station in line with the submission of HPSEBL. The allocation from Ghanvi-II has been considered as 88% (45.77 MUs) after deducting 12% share of free power to the GoHP.

8.7.43 Power availability from Uhl-III which is expected to commission in October 2016 has also been considered for projecting power availability to HPSEBL for FY17. Unit availability from this plant has been considered as per the submission of HPSEBL.

8.7.44 The table below summarizes the power availability projected from new generating stations owned by HPSEBL for FY17 approved by the commission:

Table 131: Energy Availability from New Generating Stations (MU)

Name of Plant	Installed (MW)	Share of HPSEBL (%)	Energy Available to HPSEBL (MU)
Own Station			
Ghanvi II	10.00	88.0%	45.77
Uhl III	100.00	88.0%	129.10
Total Power from New Plants			**174.87**

Allocation and Energy Availability from Other Sources, Bilateral and Short Term Arrangements

8.7.45 For the purpose of projecting power purchase from Bilateral, Short term arrangements and Banking, the Commission has carried out a month-wise demand supply analysis for FY17.

8.7.46 For FY17, the Commission has considered that the commercially prudent surplus power available during the summer months can be banked to meet the shortfall during the winter months. Any further shortfall can be met from the GoHP free/equity power share, unallocated quota in CGS and market purchases. However, the Petitioner may consider the most appropriate combination of banking and bilateral arrangement for meeting the deficit on commercial principles and with the intention of reducing the power purchase cost. The summary of monthly demand supply positions during FY17 is shown in the tables as follows:

Table 132: Monthly Demand Supply Position – FY17

Power Purchase	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Sales (MU)	663	703	722	726	723	745	712	700	723	738	728	766	8650
Losses	12.4%	12.4%	12.4%	12.4%	12.4%	12.4%	12.4%	12.4%	12.4%	12.4%	12.4%	12.4%	12.4%
Monthly Demand (MU) State Periphery	756	803	825	829	826	850	813	799	825	842	831	875	9874
Monthly Availability (MU) State Periphery	668	958	1186	1380	1457	1186	784	553	456	428	468	714	10240
Deficit Power (MU) State Periphery	88	0	0	0	0	0	29	245	369	414	363	161	1670
Deficit Power (MU) Ex Bus	91	0	0	0	0	0	30	254	383	429	377	166	1731
Surplus Power (MU) State Periphery	0	156	361	551	632	336	0	0	0	0	0	0	2036
Surplus Power (MU) Ex Bus	0	161	375	572	655	348	0	0	0	0	0	0	2111
Net Surplus/(Deficit) (Ex Bus)	**(91)**	**161**	**375**	**572**	**655**	**348**	**(30)**	**(254)**	**(383)**	**(429)**	**(377)**	**(166)**	**380**

8.7.47 Based on the analysis of month-wise energy demand and supply considering the firm sources, it is observed that the Petitioner shall be in a deficit for the month of April and for a period October to March. However, on an annual basis, surplus power is available to HPSEBL. Therefore, the surplus during summer months can be banked for meeting the winter shortfall during FY17.

8.8 Power Purchase Cost

8.8.1 The cost of power purchase from various sources has been considered based on the following:

Generation cost of HPSEBL own stations

8.8.2 The cost of generation from the HPSEBL‘s own generating stations, excluding eight stations for which generic tariff has been approved by the Commission in its Order dated 15.01.2014 against Petition no. 54/2013, have been considered as per the MYT Order for 3rd Control Period for the HPSEBL Generation.

8.8.3 The generic tariff of Rs. 2.25 per unit as approved by the Commission in its Order dated 15.01.2014 against Petition no. 54/2013 has been considered for the balance eight stations i.e. Ghanvi, Khauli, Thirot, Gumma, Holi, Bhaba Aug, Sal-II and Killar.

Cost of Free Power

8.8.4 As per the Commission‘s Order dated 13.04.2016, the purchase rate of free power available to the HPSEBL from GoHP has been fixed at 292 paise/unit (inclusive of trading margin, if any) for FY17. Therefore, in order to project the power purchase cost for FY17 the Commission has considered 292 paise/unit as the rate of free power available to the HPSEBL from GoHP for FY17.

Cost of Power from NPCIL Stations

8.8.5 The cost of power for NPCIL plants for FY17 has been considered based on the actual rate of power for ten months of FY16 submitted by the Petitioner with an escalation of 5%.

Cost of Power from BBMB and Other Plants

8.8.6 The cost of power from BBMB, Dehar, Pong, Shanan, Khara and Yamuna has been considered based on the actual power purchase cost as submitted by HPSEBL during FY15 and ten months of FY16.

Cost of Power from SJVN Plant

8.8.7 For projecting the cost of power from NJPS and Rampur stations for FY17, the Commission has considered the actual fixed and variable charges considering the AFC and design energy as per the CERC Order dated 20.06.2014 for determination of tariff for FY09-FY14 of NJPS plant. Any additional changes in tariff from NJPS on account of revised tariff for FY17 shall be considered at the time of truing-up.

Cost of Power from IPPs and Private SHPs

8.8.8 The Commission has considered the Annual Fixed Cost from Baspa-II plant as per the Tariff Order for Baspa-II issued by the Commission for the year FY17.

8.8.9 The average rate of power from private SHP during ten months of FY16 has been considered for the existing quantum of power being available from various private SHPs.

8.8.10 APPC for purchase of power from SHPs generator in the State availing REC facility has been re-determined by the Commission and fixed at Rs. 2.31 per unit through order dated 07.12.2015. The same has been considered as the rate of power procurement from Small HEP/ Private Micro under REC.

Cost of Additional Solar Power

8.8.11 For projecting the power purchase cost from NTPC Singrauli solar plant for FY17, an average rate of power purchase as per the actual values of power purchase cost for 10 months of FY16 has been considered. For purchase of the solar quantum from SECI, the Commission has provisionally considered the rate of Rs. 5.50 per unit as submitted by the petitioner.

Cost of Power from NTPC stations

8.8.12 The tariff for NTPC stations is required to be determined as per the tariff approval for the respective plants by the CERC. However, the tariff orders for the current Control Period of FY15-19 for all stations are unavailable. Therefore, the Commission has considered the fixed cost approved for FY14 for the CGS stations by CERC and has applied the allocation to the state of HP for approving the fixed cost from the respective CGS plants for FY16. Any change in fixed charge based on the issuance of tariff order for the respective NTPC plant shall be considered at the time of truing-up for FY17.

8.8.13 The variable cost for existing NTPC thermal generating stations, including Fuel Price Adjustment (FPA) for FY17 has been based upon the actual power purchase data for ten months of FY16, as submitted by the HPSEBL in Form 4a. An escalation of 5% has been applied to arrive at the variable cost for projecting the variable charge for FY17. Other Charges (per unit) have been considered to be at the same level as incurred during FY15 and six months of FY16 by HPSEBL based on the power purchase information submitted by the petitioner.

Cost of Power from NHPC Plants

8.8.14 As reasoned for NTPC stations, the tariff order of NHPC stations for the Control Period 2015-19 is to be issued by CERC. Therefore, the Commission has considered the annual charges approved by the CERC for FY14 and has applied the allocation of power from these plants to the State of HP to compute the charges payable by the Petitioner for the FY17. In case of few NHPC plants i.e. Tanakpur and Dhauliganaga where CERC has issued the Tariff Order for FY15-19, the Commission has considered the fixed and variable charge for these stations in line with the approved annual charges for FY17. The other charges payable to NHPC are considered to be at the level as actually paid by HPSEBL during FY15.

Source-wise Power Purchase Cost

8.8.15 Based on the principles discussed above, the table below summarizes power purchase cost of each plant for FY17.

Table 133: Source wise Power Purchase Cost for FY17

Particulars	Units (MUs)	Cost (Rs.Cr.)
Own Generating Stations		
Bhaba	374.74	27.66
Bassi	346.14	25.66
Giri	288.97	21.92
Andhra	86.43	10.38

Particulars	Units (MUs)	Cost (Rs.Cr.)
Ghanvi	81.15	18.26
Baner	52.86	9.23
Gaj	33.38	9.61
Larji	515.37	113.92
Khauli	43.65	9.82
Binwa	29.05	5.59
Thirot	17.58	3.96
Gumma	11.71	2.64
Holi	11.71	2.64
Bhaba Aug	17.58	3.96
Nogli	9.75	3.03
Rongtong	7.56	2.19
Sal-II	7.79	1.75
Chaba	6.47	1.64
Rukti	7.59	0.94
Chamba	1.75	0.34
Killar	1.15	0.26
Uhl III	129.10	58.10
Ghanvi II	45.77	14.53
Total - Own Generation	**2127.25**	**348.00**
Free Power		
Shanan Share	2.63	0.77
Ranjeet Sagar Dam Share	68.63	20.04
Malana	67.82	19.80
Baspa (Primary & Sec.)	143.16	41.80
Ghanvi	11.07	3.23
Baner	7.21	2.11
Gaj	4.55	1.33
Larji	70.28	20.52
Khauli	5.95	1.74
Uhl III	17.60	5.14
Ghanvi II	6.24	1.82
Small HEP/ Private Micro – Free	88.02	25.70
Total Free Power	**493.16**	**144.00**
NTPC Plants		
Anta (G)	67.47	31.59
Auriya (G)	66.48	37.34
Dadri (G)	100.55	53.01
Unchahar-I	49.90	19.53
Unchahar-II	85.13	33.67
Unchahar-III	55.77	24.57
Rihand-1 STPS	234.77	65.55
Rihand-2 STPS	226.20	66.55

Particulars	Units (MUs)	Cost (Rs.Cr.)
Kahalgaon-II	130.75	52.37
Rihand-3 Units-1,2	228.07	79.95
Singrauli Bundled	101.64	30.49
Total NTPC	**1346.72**	**494.61**
NPCIL Plants		
NAPP	78.51	20.51
RAPP (V & VI)	101.36	36.61
Total NPCIL	**179.87**	**57.12**
NHPC Plants		
Salal	34.84	5.65
Tanakpur	14.66	4.40
Chamera I	73.29	11.02
Chamera II	60.32	14.28
Uri	76.59	11.07
Dhauliganga	40.37	11.37
Total NHPC	**300.06**	**57.78**
Shared Stations		
BBMB Old	43.80	4.42
BBMB New	358.07	20.16
Dehar	182.73	14.64
Pong	38.95	1.71
Shanan (available to HPSEB)	5.26	0.21
Shanan Ext (available to HPSEB)	45.00	0.93
Yamuna	390.44	29.29
Khara	71.31	5.13
Total Shared Stations	**1135.55**	**76.49**
SJVNL & Others		
Nathpa Jhakri SOR	171.30	51.62
Nathpa Jhakri Equity	1525.76	459.78
Rampur	45.75	17.83
Rampur Equity	426.44	166.14
Small HEP/ Private Micro <5MW	970.67	266.94
Small HEP/ Private Micro >5MW	312.74	78.19
Small HEP/ Private Micro – under REC framework	328.79	75.95
Baspa - II	1050.06	142.30
Total SJVNL & Other Plants	**4831.51**	**1258.75**
Solar Plants		
Singrauli Solar	24.97	19.83
SECI	33.29	18.31
Total Solar Power	**58.26**	**38.14**
Grand Total	**10472.38**	**2474.89**

Merit Order Purchase

8.8.16 As per the monthly demand supply analysis detailed in para 8.7.46, it is observed that the Petitioner would be surplus during summer months and deficit during winter months. Banking arrangements would be required to be undertaken by the Petitioner for meeting the deficit during winter months. For this purpose, it is important that the Petitioner is fully aware of the cost of power from various sources and the merit order so that it is able to take decisions based on commercial principles.

8.8.17 As also stated in the MYT Order for the 3rd Control Period, the Commission reiterates its intention of strategic shift in power procurement policy towards total green energy. Considering the availability of equity share of power in NJPS and Rampur generating stations and upcoming hydro stations within the State, the Commission is of the view that adequate availability of green energy shall be there for meeting the demand of the State while any shortfall can be met by procuring power from less costly conventional thermal stations.

8.8.18 It is observed that in spite of efforts for surrender of costly power, HPSEBL shall have power available from costly sources i.e. Anta, Auriya, Dadri, Unchahar, Kahalgaon, etc. during FY17. This power is the most expensive power in the merit order and can be easily replaced by alternate power i.e. GoHP free share of power. The Petitioner should make appropriate arrangements for disposal of such surplus power in a manner that average cost of procurement of such surplus power is realized. This is essential considering the fact that any shortfall in recovery from sale of this surplus power shall put additional burden on the consumers in the State, which is not prudent.

8.8.19 The merit order for FY17 has been prepared based on the green energy and status of plant i.e. owned generating station, must run stations, power purchase towards renewable power obligations, etc. The merit order for FY17 is summarized in table below; keeping in view the Commission's policy of 100% clean energy supply in the State:

Table 134: Merit Order for FY17

Sr. No.	Source	Units (MUs)	Cost (Rs. Cr.)	Rate (Rs. Per unit)
	Power Procurement for Supply in State	**10,106**	**2,289.07**	**2.27**

Sr. No.	Source	Units (MUs)	Cost (Rs. Cr.)	Rate (Rs. Per unit)
I	**Clean Energy**	**9,476**	**2,102.78**	**2.22**
(A)	**Green (Renewable) Energy**	**1,815**	**484.01**	**2.67**
(i)	SHP own generation	473	100.75	2.13
(ii)	SHP PPAs Preferential Tariff (Excluding on APPC under REC)	1,283	345.12	2.69
(iii)	Solar	-	-	
(a)	NTPC Singrauli	25	19.83	7.94
(b)	SECI	33	18.31	5.50
c)	Solar Net Metering			
(B)	**Green Energy Hydel Sources**	**7,481**	**1,561.65**	**2.09**
(i)	Own generation	1,654	247.25	1.49
(ii)	BBMB and other shared projects			**-**
a)	BBMB	624	40.93	0.66
b)	Shanan & Shanan Ext.	50	1.14	0.23
c)	Yamuna & Khara	462	34.42	0.75
(iii)	Baspa -IPP	1,050	142.30	1.36
(iv)	On APPC under REC framework	329	75.95	2.31
(v)	GoHP Free Power in Projects directly connected to HPSEBL	493	144.00	2.92
(vi)	SoR Share NHPC	300	57.78	1.93
(vii)	NJPS equity share	1,526	459.78	3.01
(viii)	SoR Share NJPS	171	51.62	3.01
(ix)	SoR Share Rampur	46	17.83	3.90
(x)	Equity Power Rampur	426	166.14	3.90
(xi)	Unallocated share	350	122.50	3.50
(C)	**Clean Energy Nuclear**	**180**	**57.12**	**3.18**
	NPCIL	180	57.12	3.18
II	**Conventional Thermal Sources**	**630**	**186.30**	**2.96**
(i)	Rihand-1 STPS	235	65.55	2.79
(ii)	Rihand-2 STPS	226	66.55	2.94
(iii)	Singrauli Bundled	102	30.49	3.00
(iv)	Rihand-3 Units-1,2	68	23.70	3.51
	Total (I + II)	**10,106**	**2,289.07**	**2.27**
	Surplus purchases under PPA obligation for disposal/ trading in addition to I & II above	**716**	**308.32**	**4.30**
A	**Contingent Purchase if required in case of shortfall in availability or increase in demand**	**225**	**81.57**	**3.63**
(a)	**Green Energy Hydel sources**	**-**	**-**	-
(b)	**Conventional Thermal Sources**	**225**	**81.57**	**3.63**

Sr. No.	Source	Units (MUs)	Cost (Rs. Cr.)	Rate (Rs. Per unit)
(i)	Rihand-3 Units-1,2	160	56.25	3.51
(ii)	Unchahar-I	50	19.53	3.91
(iii)	Unchahar-II	15	5.79	3.96
B	**Surpluses for Trading due to PPA obligation**	**491**	**226.75**	**4.61**
(a)	**Green energy Hydel**	**-**	**-**	-
(b)	**Conventional Thermal Sources**	**491**	**226.75**	**4.61**
(i)	Unchahar-II	70	27.87	3.96
(ii)	Kahalgaon - II	131	52.37	4.01
(iii)	Unchahar-III	56	24.57	4.41
(iv)	Anta (G)	67	31.59	4.68
(v)	Dadri (G)	101	53.01	5.27
(vi)	Auriya (G)	66	37.34	5.62
	Grand Total	**10,822**	**2,597.39**	**2.40**

8.8.20 The Commission observes that with the revival of the Bhabha station and availability of power from new own generating stations such as Uhl III and Ghanvi II during FY17, HPSEBL has sufficient green power to meet the requirement for supply within the State.

8.8.21 Further, it is observed from the merit order table above that the average power purchase cost for meeting the demand in the State during FY17 is Rs. 2.27/kWh.

8.8.22 Since HSPEBL has availability of power from various cleaner sources including free share of GoHP in various hydro stations, equity share of GoHP in Rampur, etc. which can be utilized for not only meeting the deficit but also reducing the power purchase cost, additional power available from conventional thermal stations are considered as an obligation under PPA to purchase and has to be managed differently.

Banking Subject to Prudency

8.8.23 The Petitioner has been undertaking banking agreements as a matter of routine and without any commercial prudence with other state utilities for utilizing its surplus during summer and meeting its deficit during winter months. But it is important to note that the power banked by the Petitioner during summer is returned after a lag of four-six months which has carrying cost implications on the Petitioner. Also, it is important for the utility to understand that the cost of the power available for banking is at the marginal cost of power as per the merit order. In addition, since banking involves two inter-state transfer transactions, licensee has to pay transmission charges, including losses and system operation charges twice, as against once if direct purchase is involved. The Commission in its previous tariff orders had indicated the same to the Petitioner and had instructed to be cautious in its power purchase planning. In the APR Order for FY14, the Commission had stated:

"6.92 Moreover, the cost of power procured during summer months to be (forward) banked should be carefully strategized. Banking occurs when surplus available is lent to other entities for return during deficit times and such surplus comes at a cost. Such cost is the most expensive power at the margin in the merit order. ***The utility ought to avoid banking of costly power that is procured from thermal sources in summer, relying instead on buying economical power that is available for purchase during winter months.*** *For instance, the utility need not buy power at an average rate of above Rs 4.00/unit during summer months from CSGS, only to bank it with other states with the assurance of getting back the same quantum of power during winter months. Instead, the utility can find alternate buyers for this quantum of power during summer months when other states in the Northern Region face a power deficit. Once winter approaches, the utility should plan its power purchase in such a way that it is able to procure the same quantum of power for meeting its own demand at a lower rate, say, Rs 3.50 to Rs 4.00/unit.* ***However, if banking is considered prudent then the Petitioner should buy extra Free Power from GoHP, if available at cheaper rates or from any other cheaper source."***

8.8.24 Therefore, the Commission is of the view that in case HPSEBL is required to bank power to meet the winter requirement, it should ensure additional quantum of power (say 10-20%) at the time of return during winters which would be beneficial for covering the working capital requirement of HPSEBL. Otherwise the petitioner may look at other arrangements including bilateral sales, etc. to recover the cost of the power procured so that it does not burden the consumers in the state.

Management of Surplus Power to Recover Cost of Purchase in Merit Order

8.8.25 The cost of the surplus power is the most expensive which ranges from Rs. 3.51/kWh to Rs. 5.62 /kWh during FY17. The Petitioner should undertake adequate measures for avoiding the burden of its inefficient power purchase planning on the consumers. The Commission may disallow any such inefficiency to be passed at the time of true-up for the respective year.

8.8.26 For the purpose of disposal of this surplus power, the Commission has considered the average cost of purchase of such power as per the merit order principle with a view to avoid loading of any shortfall recovery by the Petitioner in the tariff for consumers in the State.

8.8.27 Even though with the recommissioning of Bhabha station in May 2016 and commissioning of Uhl III plants in October 2016, the Commission has considered a contingency quantum of 225 MU to meet the contingencies arising from unforeseen demand or unexpected problems in power availability. This buffer/contingency surplus shall also help in reducing the marginal power purchase cost of the utility and, if not required for demand within state, can be disposed-off through inter-state sales. It will also help in avoiding over-drawl from the system for maintaining grid discipline. The disposal of this contingency surplus has been considered at average marginal cost as per the merit order.

8.8.28 The Commission approves the power purchase quantum and cost from various sources as discussed above for supply within the State, including for contingent surplus and banking. However, expenses for purchase of power not required for supply within the State but is unavoidable shall be treated as purchase of surplus power under PPA obligation (not as power for supply) and will be provided in the ARR as separate item of expense. However, in line with the Commission's view expressed above, HPSEBL should be prudent in purchase of energy and its banking arrangements.

8.8.29 In view of the above, a summary of the total power purchase for meeting the sales requirement within the State has been provided in the table below. Also, the details of the surplus power purchase as per the PPA obligation is also provided. However, the Commission feels that the avoidance of such power purchase is in the best interest of the consumers in the State.

Table 135: Power Purchase Approved for FY17

Power Purchase Summary	Units (MUs)	Cost (Rs. Cr.)	Per Unit (Paisa per unit)
Total own generation	2127	348	164
Total free Power	493	144	292
Total NTPC	855	268	313
Total NPCIL	180	57	318
Total NHPC	300	58	193

Power Purchase Summary	Units (MUs)	Cost (Rs. Cr.)	Per Unit (Paisa per unit)
Total SJVNL & Others	2169	695	321
IPPs & Others	3798	640	168
Total Solar	58	38	655
Total Unallocated power	350	123	350
Total Power purchase for meeting State demand (including contingency reserve)	**10331**	**2371**	**229**
Total Surpluses Power Purchase for Trading due to PPA obligation	491	227	461
Grand Total Power Purchase	**10822**	**2597**	**240**

8.9 PGCIL & HPPTCL Charges

8.9.1 It is observed that the actual PGCIL charges of HPSEBL for FY15 has been Rs. 160.44 Cr. During the technical validation session, HPSEBL had clarified that due to revision in PoC charges by CERC, the actual payable charges for the petitioner has reduced. The petitioner has also submitted actual PGCIL charges of Rs. 70.48 Crore for 6 months of FY16 (after netting off amount recoverable from PTC on account of PGCIL charges).

8.9.2 For approving the PGCIL charges for FY17, the 6 months PGCIL charges for FY16 has been pro-rated for 12 months and an escalation of 10% has been considered for projecting the PGCIL charges for FY17.

8.9.3 HPPTCL charges for FY17 have been considered as approved by the Commission in the MYT Order for the Third Control Period. The summary of the PGCIL and HPPTCL transmission charges approved for FY17 are summarized in table below:

Table 136: Approved PGCIL & HPPTCL Charges for FY17 (Rs. Cr.)

Particulars	Approved in MYT Order	Proposed in APR Petition	Now Approved
PGCIL Charges	288.29	275.88	158.33
HPPTCL Charges	3.32	3.31	3.32

8.10 Other Power Purchase Related Charges

8.10.1 The SLDC charges are considered as approved in the MYT Order for FY17 for HPSLDS.

8.10.2 With respect to short-term open access charges, the Petitioner has claimed Rs. 34.77 Crore for FY17. Based on the actual short-term open access charges (PTC) of Rs. 50.95 Crore submitted by the HPSEBL for FY15, an annual escalation of 5% has been considered for approving the short-term open access charges for FY17. The same would be trued up along with other power purchase cost, based on actual amount paid for FY17. The summary of SLDC charges and open access charges are provided in table below:

Table 137: Approved SLDC & Short-term Open Access Charges for FY17 (Rs. Cr.)

Particulars	Approved in MYT Order	Proposed in APR Petition	Now Approved
SLDC Charges	11.32	3.25	11.32
Open Access charges	64.28	34.77	56.18
Total	**75.60**	**38.02**	**67.50**

8.11 Operation and Maintenance (O&M) Expenses

8.11.1 As per the MYT Regulations 2011 and amendments thereof, O&M expenses are controllable and hence the O&M expenses approved for the Control Period, as per the methodology specified in the Regulations, are not subjected to truing-up in the APR. Further, any surplus or deficit on account of O&M expenses shall be considered in line with the provisions of the regulations at the time of true-up for the respective year.

8.11.2 In the APR petition, HPSEBL has claimed higher employee cost, R&M expense and A&G expense for FY17 as against the approved amount for the respective year in the MYT Order for the third Control Period. Further, the petitioner has not provided any rationale for the increased O&M cost elements. The Petitioner was asked to submit the break-up of O&M expenses for FY15 and six months of FY16 between the various functions i.e. generation, projects, S&I and distribution business. As per the submission, the Petitioner has submitted the following O&M expense towards the distribution business for FY15.

Table 138: Actual O&M Expense for FY15 & 6 months of FY16 for Distribution Business (Rs. Cr.)

Particulars	FY15 Amount	FY16 (6 months) Amount
Employee Expense	1234.86	692.46
R&M Expense	47.39	19.10

Particulars	FY15 Amount	FY16 (6 months) Amount
A&G Expense	41.96	11.48
Total	**1324.21**	**723.04**

8.11.3 Based on the submissions of actual employee cost for FY15, it is observed that the Petitioner has not considered the adjustment of return on equity of Rs. 47.50 Cr. towards the pension cost of the board employees retired prior to the transfer scheme. The Commission in the MYT Order for the 3rd Control Period as well as the APR Order for FY16 had adjusted the return on equity of GoHP towards the pension and terminal liabilities. Also in the APR Order for FY16, the Commission has made a note of the new regulations with respect to treatment of pension liabilities which is as below:

"5.11.4 In line with the HPERC (Terms and Conditions for sharing of Cost of Terminal benefits of Personnel of the erstwhile Himachal Pradesh State Electricity Board and Successor Entities) Regulations, 2015, the terminal benefits of HPSEBL is required to be apportioned between the time period of Pre-Transfer Scheme and Post-Transfer Scheme and the return approved on GoHP equity share as well as pension contribution of employees on deputation in commissioned projects and in BVPCL, Projects and S&I is to be adjusted against the terminal benefits component (Pre-Transfer Scheme) of the employee cost of HPSEBL."

8.11.4 Therefore, considering the same principles as set out in the MYT Order and APR Order for FY16, the approved employee cost for FY15 towards distribution business of HPSEBL is broadly in line with the actual amount submitted by the petitioner as highlighted in table below:

Table 139: Employee Expenses Presented by the Petitioner (Rs. Cr.)

Particulars	Approved Employee Cost	Actual Employee Cost FY15 (Provisional)
Salaries and other staff cost	845.23	809.54
Terminal Benefits	410.87	477.43
Gross Employee Cost	**1256.11**	**1,286.97**
Less: Capitalization	42.24	52.11
Net Employee cost	**1213.87**	**1,234.86**
Less: RoE	47.50	47.50
Net Employee Cost	**1,166.37**	**1,187.36**

8.11.5 In view of no major deviation in the actual vis-à-vis the approved employee cost for FY15, the Commission feels that there is no merit in the claim of the petitioner for the revision in the estimates of employee cost. Also, the regulations clearly mention the employee cost which is part of O&M cost as controllable parameter and is not required to be revised at the time of annual performance review. The Commission has therefore continued with the projections of employee cost for FY17 and the same shall be dealt at the time of truing-up based on the prudence check.

8.11.6 In line with the HPERC (Terms and Conditions for sharing of Cost of Terminal benefits of Personnel of the erstwhile Himachal Pradesh State Electricity Board and Successor Entities) Regulations, 2015, the terminal benefits of HPSEBL is required to be apportioned between the time period of Pre-Transfer Scheme and Post-Transfer Scheme and the return approved on GoHP equity share as well as pension contribution of employees on deputation in commissioned projects and in BVPCL, Projects and S&I is to be adjusted against the terminal benefits component (Pre-Transfer Scheme) of the employee cost of HPSEBL.

8.11.7 The pension contribution of employees on deputation in commissioned projects and in BVPCL, Projects and S&I which was earlier considered as part of the non-tariff income in the MYT Order for the 3rd Control Period has now been adjusted in the employee cost. Accordingly, the approved employee cost for FY17 in the MYT Order for the 3rd Control Period has been apportioned as below:

Table 140: O&M Expense Approved for FY17 (Rs. Cr.)

S. No.	Particulars	Amount
A	**Employee Cost**	**1018.23**
B	**Pension and Terminal benefits (a +b)**	**427.94**
a)	Terminal Benefit liabilities post Transfer Scheme	130.03
	- 50% of Pension & Terminal benefits of employee retired after 31.3.2010	130.03
b)	Terminal Benefit liabilities pre Transfer Scheme	297.91
	- Pension of employee retired till 31.3.2010	234.91
	- Balance 50% of Pension & Terminal benefits of employee retired after 31.3.2010	130.03
	Less:	
	Annual Share of State Government (Return on GoHP Equity approved for Generation and Distribution)	47.50
	Pension contribution of employees on deputation in commissioned projects and in BVPCL, projects and S&I	19.53

S. No.	Particulars	Amount
	Gross Employee Cost (A+B)	**1,446.17**
	Less: Capitalization	50.88
	Net Employee Cost approved	**1,395.28**

8.11.8 In its APR petition, HSPEBL has also submitted additional liability on account of pay revision which is due w.e.f. 1st January 2016. The petitioner has submitted that approx. 20% revision in salary is expected which shall be effected in FY 2016-17. Accordingly, HPSEBL has proposed a 10% provision of the salaries and gratuity as an additional liability on account of implementation of Pay Commission recommendation.

8.11.9 In view of the financial hardships faced by the petitioner and large amount of true-up required to be allowed during the second control period with respect to the implementation of the Pay Commission, the Commission has allowed a provisional amount of Rs. 30 Cr. in line with the recent announcement of GoHP to provide interim relief w.e.f. 01.08.2016 towards the Pay Commission's revision. The same shall be trued-up based on the actual as per the audited accounts for FY17. The petitioner is required to prepare and submit the additional amount required to be paid as employee cost towards the impact on account of pay revision.

8.11.10 In case of R&M and A&G expense as well, a comparison of the approved and actual cost submitted by petitioner for FY15 and six months of FY16 clearly indicate that the variations are not large enough requiring any revisions in projections for FY17. Therefore, in line with the provisions of MYT Regulations, which prescribe that O&M expenses are controllable and shall not be revised, the Commission approves the R&M and A&G expense similar to that approved in the MYT Order.

8.11.11 With respect to the additional amount of Rs. 1 Cr. each year towards safety measures allowed by the Commission in the MYT Order, the petitioner was asked to submit the details of safety measures undertaken during FY15 and six months of FY16. However, the petitioner has not been able to submit details of any such measures undertaken. The Commission would like to clarify that the amount provided towards safety measures is provisional and in absence of any steps taken by HPSEBL on this front, the amount shall be trued-up at the time of truing-up for the respective year.

8.11.12 Accordingly, the Commission approves the O&M expense for FY17 as approved in the MYT Order for the third Control Period as provided in table below:

Table 141: O&M Expense Approved for FY17 (Rs. Cr.)

Approved	Approved in MYT	Approved Now
Employee Cost	1414.82	1395.28
R&M Expense	51.69	51.69
A&G Expense	42.89	42.89
Additional amount for Safety measures	1.00	1.00
Total O&M Expense	**1510.39**	**1490.86**
Additional amount towards Interim Relief		30.00
Total	**1510.39**	**1520.86**

8.12 Capital Investment

8.12.1 As part of the annual performance review the petitioner is required to provide the details of the actual capital expenditure and capitalization undertaken in the previous year and during six months of the current year against the approved capital schemes in the MYT Order. However, it was observed that the petition filed by HPSEBL was completely silent with respect to capital expenditure and capitalization.

8.12.2 After several queries and reminders for submission of scheme wise capital expenditure and capitalization undertaken during FY15 and FY16, the Petitioner has submitted the following information:

Table 142: Capital Expenditure Details FY15 and FY16 (Rs. Cr.)

Particulars	FY2014-15	FY2015-16 (10 months)
Generation	**116.74**	**-4.05**
Distribution		
EHV (Distribution)	117.37	60.07
-RGGVY	1.28	-0.11
-R-APDRP	81.33	35.76
Total Distribution	**199.98**	**95.72**

8.12.3 The Commission observes that the actual capital expenditure incurred as submitted by the petitioner of Rs. 199.98 Cr. is substantially lower as against the approved capital expenditure for FY15 of Rs. 429.88 Cr.

8.12.4 Submission of proper scheme wise capital expenditure and capitalization details along with their funding is one of the areas which the Commission feels that HPSEBL is required to look into sincerely. In spite of providing them with specific formats and discussions during the technical validation session, no adherence has been done with respect to submission of related information. The Commission takes serious note on the casual approach and directs HPSEBL to prepare proper records of the capital schemes and submit the same along with mid-term review. The Petitioner's relaxed approach towards the regulatory filing and submission has been taken seriously by the Commission. In absence of adequate and appropriately compiled information, the Commission shall be constrained to disallow the capital expenditure and adjust the related parameters at the time of mid-term review.

8.12.5 The Commission reiterates its direction of the previous Order and expects that the Petitioner would undertake appropriate measures for timely execution of the various projects covered under the R-APDRP / RGGVY schemes. Conversion of applicable grants into loan due to non-achievement of the targets under the centrally sponsored schemes shall not be considered as a pass through in the tariff. The Petitioner is required to undertake all efforts for completion of these schemes and achievement of the targets under such schemes.

8.12.6 The capital investment of HPSEBL for FY17 shall be the same as approved in the 3rd MYT Order dated 12th June, 2014. This amount, however, shall be reviewed at the time of mid-term review based on the actual capital expenditure incurred by HPSEBL, subject to prudence check and the Commission's approval.

8.13 Asset Capitalisation

8.13.1 With respect to capitalization during FY15, the Petitioner has submitted the following details against the query of the Commission towards providing details of the actual capitalisation of assets during FY15. The details furnished by the Petitioner is as follows:

Table 143: Capitalization of Assets during FY15 as submitted by HPSEBL (Rs. Cr.)

Name of Office	Loans	Grants	Subsidies	Consumer Contribution	Equity	Total
Chief Engineer, South, Shimla	53.20	11.66		21.26	7.37	93.49
Chief Engineer, ES, Hamirpur	1.62	3.46		0.06	0.74	5.88
Chief Engineer, North, Dharamshala	31.17	2.32		13.72	3.45	50.66

Name of Office	Loans	Grants	Subsidies	Consumer Contribution	Equity	Total
Chief Engineer, Central Zone, Mandi	38.42	6.89	0.02	9.24	6.25	60.82
Chief Engineer, Gen, Sundernagar	5.05				1.19	6.24
Chief Engineer, SO&P, Shimla					1.12	1.12
Chief Engineer, PCA, Shimla	9.99	25.34				35.33
Superintending Engineer, IT, Shimla	23.59				4.26	27.85
Total	**163.04**	**49.67**	**0.02**	**44.28**	**24.39**	**281.41**

8.13.2 While the petitioner has submitted office wise capitalization details but the scheme-wise capitalization and their funding details has not been provided. No segregation has been provided with respect to the generation and distribution schemes. The Petitioner is required to prepare appropriate scheme-wise information and submit the same along with mid-term review for reference of the Commission.

8.13.3 The asset capitalization of Rs. 551.33 Crore approved for FY17 in the MYT Order for the 3rd Control Period shall remain the same. The Commission would like to highlight that the capitalization approved is provisional and the same would be subjected to review/ true-up at the time of mid-term review and end of the Control Period.

8.14 Depreciation

8.14.1 Depreciation for each year of the 3rd Control Period in the MYT Order dated 12th June, 2014 has been approved by the Commission. Being a controllable parameter, depreciation shall not be revised in the annual performance review and shall be reviewed only during the mid-term review or at the end of the Control Period.

8.14.2 Therefore, the Commission approves the depreciation for FY17 as approved in the MYT Order for the 3rd Control Period.

8.15 Working Capital Requirement

8.15.1 Based on the approved O&M Expenses, expected receivables and consumer security deposits, the Commission in the 3rd MYT Order had approved the working capital requirement for the Control Period.

8.15.2 The previously approved working capital for FY17 is updated for the year in line with the revision of uncontrollable parameters approved by the Commission in this order as below:

Table 144: Working Capital Requirement Approved for FY17

Particulars	Approved in MYT Order	Now Approved
1/12th of total O&M Expenses	125.87	126.74
Receivables equivalent to 2 months average billing	799.93	827.68
Maintenance Spares 40% of the R&M expense for one month	1.72	1.72
Less: Consumer Security Deposit	341.93	314.20
Less: One Month Power Purchase	239.41	235.55
Working Capital Requirement	**346.18**	**406.39**

8.16 Interest and Financing Charges

8.16.1 The Commission has approved a capital investment plan as well as its capitalization schedule, source of funding and financing for the third MYT Control Period. This capital plan shall be reviewed at the end of the mid-term review/ end of the Control Period based on actual.

8.16.2 Accordingly, the summary of means of finance and interest cost approved for the capital loans by the Commission for FY17 remains the same as approved in the 3rd MYT Order.

8.16.3 The interest on working capital requirement and consumer security deposit has been revised for FY17. Interest on the revised normative working capital has been computed based on the average base rate of the last six months prior to the filing of the MYT petition plus 350 basis points. The revised estimates of interest on working capital requirements is as below:

Table 145: Approved Interest on Working Capital for FY17

Particulars	Approved in MYT Order	Now Approved
1/12th of total O&M Expenses	125.87	126.74
Receivables equivalent to 2 months average billing	799.93	827.68
Maintenance Spares 40% of the R&M expense for one month	1.72	1.72
Less: Consumer Security Deposit	341.93	314.20
Less: One Month Power Purchase	239.41	235.55

Particulars	Approved in MYT Order	Now Approved
Working Capital Requirement	**346.18**	**406.39**
Rate of Interest on Working Capital	13.27%	12.88%
Interest on Working Capital	**45.93**	**52.32**

8.16.4 Further, the revised interest on consumer security deposit is determined as provided in table below:

Table 146: Approved Interest on Consumer Contribution for FY17 (Rs. Cr.)

Particulars	Approved in MYT Order	Now Approved
Opening consumer security deposit	319.71	305.58
Additions	22.23	8.62
Closing consumer security deposit	341.93	314.20
Rate of Interest for Consumer Security Deposit	8.50%	8.50%
Interest on Consumer security deposit	**29.77**	**26.34**

Additional Interest amount towards Kurthala substation & line

8.16.5 In addition to the above, HPSEBL in its tariff petition has filed additional claim towards payment for construction of 2x50/63 MVA, 33/132 kV sub-station at Kurthala and 132kV D/C transmission line from Kurthala to Bathri sub-station to M/s Tissa Power Transmission Pvt. Ltd. in the ARR for FY17. The Petitioner has submitted that:

“The cost of entire "Works" is to be reimbursed to M/s Tissa Power Transmission Private Limited in 5 (five) equal instalments along with interest commencing from one year after handing over of "Works/ Assets" to the HPSEBL Ltd.”

8.16.6 Accordingly, the petitioner has requested the Commission to allow Rs. 8.25 Crores as interest liability for Kurthala substation and line for the year FY17.

8.16.7 The Commission observed that the issue has already been raised by the HPSEBL earlier and the Commission vide its letter no. 355-56 dated 01.05.2015 has clarified regarding the treatment of expenditure with respect to the Kurthala scheme as follow:

"The amount capitalized by the HPSEBL on this account shall be treated for depreciation and interest & finance charges as per power sector principals and applicable HPERC Regulations. The depreciation and interest & finance charges have been determined for the 3rd MYT Control Period in the MYT Order dated 12th

June, 2014 and these parameters being controllable shall be reviewed at the time of mid-term review or review at the end of the 3rd MYT Control Period."

8.16.8 Therefore, with reference to the letter in this regard, the Commission has not provided for the Rs. 8.25 Cr. claimed by the petitioner towards payment of interest liability for Kurthala substation and line in the ARR for FY17. Based on the details of interest and financing charges discussed above, the revised approved Interest and Finance charges for FY17 are as below:

Table 147: Revised Interest and Finance Charges for FY17 (Rs. Cr.)

Particulars	Approved in MYT Order	Now Approved
Interest on Long Term Loans	154.06	154.06
Interest on Working Capital	45.93	52.32
Interest on Consumer Deposit	29.77	26.34
Total	**229.76**	**232.73**

8.17 Return on Equity

8.17.1 Based on the RoE approved for FY17 in the MYT Order for the 3rd Control Period, the Commission has considered the same RoE as no revisions have been envisaged in the capitalization or funding pattern as against that approved in the MYT Order for 3rd Control Period.

8.17.2 The Commission shall, however, true-up the funding and financing approved at the end of the Third Control Period.

8.18 Non-tariff and Other Income

8.18.1 In the MYT Order for the 3rd Control Period, the Commission had considered FY13 actual non-tariff income for projecting the non-tariff income for each year of the 3rd Control Period with some adjustments.

8.18.2 The Petitioner has submitted the actual non-tariff income for FY15 as per the provisional accounts, which is considerably higher as compared with the actual for FY14. In view of the same, HPSEBL has projected non-tariff income of Rs. 318.62 Crore for FY17 in the APR petition.

8.18.3 During the discussions, it was pointed out that the amount of wheeling charges considered as part of non-tariff income for FY15 is inclusive of the PGCIL charges recovered from M/s PTC which is also occurring as an expense under PGCIL charges. Since the Commission has approved the PGCIL charges for HPSEBL net of the recovered from M/s PTC, the same amount has been reduced from the wheeling charges of FY15 to project the non-tariff income for FY17.

8.18.4 As per sub-regulation 2(A) of Regulation 3 of HPERC (Terms and Conditions for sharing of Cost of Terminal benefits of Personnel of the erstwhile Himachal Pradesh State Electricity Board and Successor Entities) Regulations, 2015, the pension contribution of employees on deputation in commissioned projects and in BVPCL, projects and S&I is to be adjusted against the terminal benefits component of employee of HPSEBL. Therefore, in line with the same an amount of Rs. 19.53 Cr. has been reduced from the approved non-tariff income and has been adjusted in the employee cost of HPSEBL for FY16 which shall have no impact on the total ARR of HPSEBL. The revised non-tariff income after adjusting for the above mentioned components is summarized in table below:

Table 148: Revised Approved Non-Tariff Income for FY17 (Rs. Cr.)

Particulars	Now Approved
Meter Rent/Service Line Rentals	48.15
Recovery for theft of Power / Malpractices	0.06
Wheeling Charges Recovery	132.07
Miscellaneous Charges from Consumers	5.81
Sub-Total	**186.08**
Interest on Staff loans & Advances	0.58
Income from Investments	0.00
Interest on Loans & Advances to Licensees	0.00
Interest on Advances to Suppliers / Contractors	0.78
Income fee collected against Staff Welfare Activities	0.14
Miscellaneous Receipts	35.50
Sub-Total	**37.01**
Income from Other Businesses	
Commissioned Projects of Generation Business	
S&I Activity	18.92
- S&I Income	25.00
- Provision of Employee Cost	6.08
Income from Trading	1.22
O&M Charges Recovery from HPPTCL	1.32
Sub-Total	**21.46**

Particulars	Now Approved
Total Non-Tariff Income	**244.55**

8.19 Aggregate Revenue Requirement

8.19.1 The table given as follows provides a summary view of the Aggregate Revenue Requirement of Distribution business as approved by the Commission for FY17:

Table 149: Aggregate Revenue Requirement for FY17 (Rs. Cr.)

Particulars	MYT Approved	Petitioner Submission	Revised ARR
Power Purchase Expenses for Supply in the State	**2,872.90**	**3,188.58**	**2826.54**
Cost of electricity purchase including own generation	2,505.69	2,871.37	2597.39
Inter-State Charges			
Power Grid Charges	*288.29*	*275.88*	*158.33*
Open Access Charges	*64.28*	*34.77*	*56.18*
Intra-State Charges			
HPPTCL Charges	*3.32*	*3.31*	*3.32*
SLDC Charges	*11.32*	*3.25*	*11.32*
Operation & Maintenance Costs	**1,510.39**	**1,678.13**	**1,520.86**
Employee Cost	*1,414.82*	*1,574.36*	*1,425.28*
R&M Cost	*51.69*	*53.66*	*51.69*
A&G Cost	*42.89*	*49.11*	*42.89*
Additional amount for Safety measures	*1.00*	*1.00*	*1.00*
Interest & Financing Charges	229.76	531.82	232.73
Depreciation	80.90	172.43	80.90
Return on Equity	30.24	76.99	30.24
Interest amount towards Kurthala sub-station & line	-	8.25	-
Provision for Bad & Doubtful Debtors	-	3.58	-
Surplus Power Purchase as per PPA Obligation	219.11	-	-
Less: Non-Tariff & Other Income	225.47	318.62	244.55
Aggregate Revenue Requirement	**4,717.84**	**5,341.16**	**4,446.72**

8.19.2 In addition to the Distribution ARR of Rs. 4419.69 Cr. approved for FY17, the Commission has considered the following adjustments in the ARR:

a. Impact of Final True up of FY13 and FY14

In accordance with Chapter 6 and 7, the Commission has considered the approved gap of Rs. 386.34 Cr. along with carrying cost to be adjusted in the ARR for FY17.

b. Impact of Provisional Gap for FY16

In the Tariff Order for FY16, the Commission had considered an amount of Rs. 132.99 Cr. available as incentive grant from Government of India to the State of HP in line with the recommendations of 13th Finance Commission for development of renewable energy. However, it has been brought to the notice that the amount has not been transferred to HPSEBL and the matter is sub judice in the Hon'ble APTEL. Therefore, the Commission has considered the amount of Rs. 132.99 Cr. due to the financial difficulties of HPSEBL in the ARR of FY17 and shall adjust the same based on final judgement of Hon'ble APTEL.

8.19.3 Based on the above adjustments, the revenue requirement is summarized in table below:

Table 150: Total Revenue Requirement for FY17 including Past Adjustments (Rs. Cr.)

Particulars	Amount Approved
Annual Revenue Requirement for FY17	4,446.72
Adjustments:	
Impact of Final Truing-up for FY13 & FY14	386.34
Provisional Gap resulting in non-receipt of Incentive Grant considered in the Order for FY16	132.99
Total Revenue Requirement for FY17	**4,966.05**

8.20 Allocation of Distribution ARR into Wheeling and Retail Supply

8.20.1 As per the MYT Regulations, 2011, the total Distribution ARR for the Control Period has to be allocated between Wheeling and Retail Supply business. The wheeling charges would be calculated on the Wheeling ARR and the Retail Tariffs would be calculated on the Retail Supply ARR.

8.20.2 In absence of segregated information for wheeling and retail supply being maintained by the Petitioner, for purpose of segregating the ARR for each year of the 3rd Control period, the Commission had continued with the segregation approved in the MYT Order for the 2nd Control Period with certain modifications.

8.20.3 The revised allocation statement approved by the Commission in the MYT Order for 3rd Control Period is as under:

Table 151: Approved Allocation of ARR of Distribution Business

Particulars	Wheeling	Retail Supply
Power Purchase Expenses	0%	100%
PGCIL Charges	0%	100%
HPPTCL Charges	0%	100%
SLDC Charges	0%	100%
Open Access Charges	0%	100%
Employee Expenses	70%	30%
R&M Expense	90%	10%
A&G Expense	60%	40%
Interest and Financing Charges	95%	5%
Depreciation	95%	5%
Return on Equity	100%	0%
Non-tariff Income	0%	100%
Wheeling Charges	100%	0%

8.20.4 The summary of Wheeling and Retail Supply ARR for the Control Period is shown as follows:

Table 152: Approved ARR of Wheeling Business for FY17 (Rs. Cr.)

Particulars	Amount
Operation & Maintenance Costs	1,070.95
Interest & Financing Charges	221.09
Depreciation	76.86
Return on Equity	30.24
Aggregate Revenue Requirement	**1,399.14**

Table 153: Approved ARR of Retail Supply Business for FY17 (Rs. Cr.)

Particulars	Amount
Power Purchase Expenses for Supply in the State	2,826.54
Operation & Maintenance Costs	449.91
Interest & Financing Charges	11.64
Depreciation	4.05
Less: Non-Tariff & Other Income	244.55
Aggregate Revenue Requirement	**3,047.58**

9 Tariff Philosophy and Design

9.1 Tariff Principles

9.1.1 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, 2011, National Tariff Policy and the National Electricity Policy.

9.1.2 The Commission has issued amendments to the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 on 1st November, 2013 wherein the Commission has laid down the principle of progressively moving towards the targeted roadmap of (-) 15% and (+) 10% of the average cost of supply by end of the Third Control Period for all categories of consumers excluding life line consumers. The Commission has continued with the approach as per these regulations while approving tariff for the FY17.

9.1.3 However, the Regulation 41-B also states that during the interim periods as mentioned as sub regulations (3) and (4), the Commission shall, with an objective of broadly assessing, the trends and levels of category wise cost of supply for indicative purposes also carry out suitable exercise based on the available data, suitable assumptions and the concepts as may be considered appropriate. The assumptions and methodologies to be broadly followed for the allocation of costs for the purpose of cost to serve calculations has been considered similar to that followed in the MYT Order for the 3rd Control Period.

Sales at Various Voltage Level

9.1.4 Accordingly sales at various voltage levels have been worked out and are presented in the table below:

Table 154: Sales at different Voltage Levels for FY17 (MUs)

Category	FY17

	Total Sales	EHT (>=66 kV)	HT (>=11 kV & <66kV)	LT (< 11 kV)
Domestic	2,168	-	-	2,168
NDNCS	151	-	45	105
Commercial (CS)	532	-	80	452
Small & Medium Industrial Power (SMS)	224	-	-	224
Large Power Supply (LS)	4,777	1,961	2,817	-
Irrigation and Drinking Water Pumping (IDWP)	602	-	162	439
Street Lighting	13	-	-	13
Bulk supply	158	-	110	47
Temporary Supply	26	-	-	26
Total (within State)	**8,650**	**1,961**	**3,214**	**3,474**

9.1.5 The cost to serve at different voltage level as calculated on this basis is indicated in the following table:

Table 155: Cost to Serve for FY17

Particulars	Generation bus bar	>= 66 kV	>=11 kV & <66kV	< 11 kV	Total
Energy Input (MU)	9,873.9	9,873.9	7,913.0	4,698.7	
Loss (MU)		-	-	-	-
Sales at respective level (MU)		1,960.9	3,214.3	3,474.3	8,649.6
Cost at respective level (Rs. Cr.)	2,518.2	523.1	500.8	501.3	4,043.5
Cost Allocation (Rs. Per unit)					
Power Purchase Cost		2.69	2.57	1.76	
Cost of Losses		0.15	0.21	0.40	
Transmission & Open Access Charges		0.26	0.26	0.26	
Distribution Cost (> 66kV)		0.71	0.60	0.60	
Distribution Cost (> 11 kV)			0.87	0.75	
Distribution Cost (< 11 kV)				1.44	
Cost of Serve Model		**3.81**	**4.52**	**5.22**	**4.78**

**Rs 4.78 per unit is the average cost of supply without considering past gap and carrying cost*

9.1.6 The above cost does not include the impact of the expenses pertaining to the past periods which have been approved at Rs. 519.33 Cr. on account of Impact of Final Truing-up for FY13 & FY14 and non-receipt of incentive grant considered in the FY16 Order. These amounts of the past gap shall also have to be loaded to the above stated costs and shall increase the average cost of supply by about 60 paise per unit.

The total average cost of supply including these provisions adds up to Rs. 5.38 per unit.

9.1.7 The Commission would like to clarify here that these calculations have been made only for indicative purposes and for assessing the trends and not for fixing the tariffs. However, the data relating to cost allocation shall be used for determining the voltage wise open access charges as adoption of an average rate for this purpose shall otherwise be restrictive to open access, as discussed in separate chapter relating to open access.

9.1.8 In view of the provisions of the Regulations and also in absence of authentic information regarding voltage level cost and losses, the Commission has computed the average cost of supply, as also mandated in the National Tariff Policy and amended HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011, for purpose of fixation of tariff for various categories of consumers for the third year of the Third Control Period i.e. FY17.

9.1.9 The average cost of supply computed for FY 17 is provided in table below:

Table 156: Average Cost of Supply for FY 2016-17 based on Approved ARR

Particulars	FY17
Approved Aggregate Revenue Requirement (Rs. Cr.)	4,446.72
Less: Sale of Surplus Power (Rs. Cr.)	308.32
Net Aggregate Revenue Requirement (Rs. Cr.)	4,138.40
Projected Sales (MU)	8,650
Average Cost of Supply (Rs./unit)	**4.78**

9.1.10 The average cost of supply for FY 2016-17 works out to Rs. 4.78 per unit which does not include the prior period and other adjustments as detailed in Para 8.19.3. Taking into account the past gap, the average cost of supply comes out to be Rs. 5.38 per unit.

Revenue from Existing Tariff

9.1.11 The Commission has computed the revenue from various categories as per the sales approved for FY17 and the existing applicable tariff in the respective categories. The summary of the estimated revenue for the FY17 is summarized in table below:

Table 157: Revenue for FY17 based on Existing Tariff

Category	Sales (MUs)	Revenue (Rs. Cr.)
Industrial Power Supply	**5,001**	**2,743.70**
Small Industrial	168	90.10
Medium Industrial	56	31.27
Large Industrial	4,777	2,622.33
Domestic	2,168	928.61
Irrigation and Drinking Water	602	326.34
Commercial	532	298.90
Bulk Supply	158	94.93
NDNC	151	81.05
Public Lighting	13	6.37
Temporary Supply	26	23.36
Total	**8,650**	**4,503.26**

Revenue from Sale of Power Outside State

9.1.12 The Commission in Chapter 8 of this Tariff Order has talked about the need for HPSEBL to show commercial prudence in its power arrangements and avoid purchasing of costly surplus power. The same has been treated in the ARR as purchase of trading surpluses under PPA obligation and the sale of this surplus power have been considered similar to the purchase cost to exclude any impact of the difference in purchase and sale cost of this surplus power on the consumers in the State.

9.1.13 The Commission has also allowed for contingency buffer of 225 MU to maintain continuous supply in the State in case of any unforeseeable difficulty i.e. shutdown of any large generating station, increase in sales within State, etc. In case the power remains unused, the same is estimated to be sold at the average rate of purchase of contingent power in the merit order for the year.

9.1.14 The projected revenue from sale of power outside State is tabulated as follows:

Table 158: Revenue from Sale of Power outside the State for FY17

Parameters	Units (MUs)	Revenue (Rs. Cr.)	Cost (Paisa per unit)
Sale of Contingent Purchase	225	81.57	3.63
Sale of Surpluses for Trading due to PPA obligation	491	226.75	4.61
Total	**716**	**308.32**	**4.30**

Revenue Surplus/Gap at Existing Tariff for FY16

9.1.15 Taking into account the revenue from sale within state at existing tariffs, revenue estimated from sale of power outside state for FY17 is as follows:

Table 159: Revenue Surplus/ Gap for FY17 based on Existing Tariff (Rs. Cr.)

Parameters	FY17
Approved Annual Revenue Requirement	**4,446.72**
Add:	
Impact of Final Truing-up for FY13 & FY14	386.34
Provisional Gap resulting in non-receipt of Incentive Grant considered in the Order for FY16	132.99
Total Revenue Requirement	**4,966.05**
Less: Revenue from Sale of Power within State at existing tariff	4,503.26
Less: Revenue from sale of Power Outside State	308.32
Revenue Surplus / (Gap)	**(154.48)**

9.1.16 The above estimated revenue gap of Rs. 154.48 Cr. for FY17 also takes into account the adjustments on account of revenue gap for FY13 & FY 14 along with non-receipt of Rs. 132.99 Cr. on account of incentive grant.

9.1.17 Accordingly, the Commission in this Tariff Order hereby increases tariff to recover this gap of Rs. 154.48 Cr. so as to ensure that the entire revenue requirement of the utility is fulfilled and prevent any further deterioration in the financial health of HPSEBL. The category-wise tariff approved for FY17 is detailed as follows:

9.2 Issues related to Tariff Structure

Philosophy for Demand Charges

9.2.1 The aggregate cost of supply can be divided on the basis of functions performed such as generation/power purchase, transmission and distribution etc. Each of the functionalized cost can be further classified, based on intrinsic nature into fixed and variable costs. The total fixed costs would primarily comprise of demand related costs which would have mainly two distinct and independent components i.e. the one relating to network cost and the other one relating to power procurement. The fixed network cost comprises of the wheeling charges of the Distribution System and the same corresponding to power procurement would normally include the fixed charges associated with the PPAs for purchase of power and the corresponding transmission charges and losses of Power Grid and HPPTCL etc. Ideally all the demand related fixed costs should be recovered from the consumers in the area of supply through demand charges. The category wise rates of demand charges should be fixed by taking into account such fixed costs and the pattern of the consumption for various categories of consumers such as load factor and demand factors etc. Since the demand charges have to be payable irrespective of the actual usage of the sanctioned contract demand, it may not be practicably feasible to fix the rates of demand charges at such levels in view of historical trends and the tariff shocks and other distortions/anomalies that may be caused in the category wise tariff by way of exorbitant higher average charges in respect of the particular periods in which the consumption by a consumer may be low due to certain reasons.

9.2.2 The Commission is also aware of the fact that determination of demand charges on cost to serve basis would require detailed studies based on the coincident demand of each category of consumers during different time blocks as well as during the period in which the peak demand occurs. Such detailed exercise would be more relevant at the stage when Commission shifts to the pricing on the basis of cost to serve model instead of that based on average cost. In case of EHT and HT consumers (above 1 MVA), the demand charges, based on voltage wise wheeling charges and other fixed costs, including cost of power, Power Grid/HPPTCL charges losses, forming part of the total ARR for power procurement, work out to be of the order of Rs.1100 per kVA per month. As such, the present rates of demand charges broadly work out to be of the order of only about one third of the indicative rate as mentioned above and revising the same as per the actual has to be done in a phased manner. Therefore, the Commission has revised the present demand charges marginally in order to align them with the actual demand charges.

9.2.3 The Commission also observes that in some cases, the consumers may avail open access in distribution system on short term basis, even on daily basis or for certain discrete or indiscrete time blocks of a day. In such cases, open access consumers retain their normal prevalent contract demands as consumers of distribution licensee and as such are required to pay the demand charges in full apart from the open access charges. In order to avoid any anomalous situations, the Commission clarifies that in case where a consumer availing short-term open access retains his contract demand, the wheeling charges shall be charged at 50% of the normal rates and remaining 50% shall be deemed to have been included in the demand charges. The balance portion of demand charges, if any, after adjusting the wheeling charges in the aforesaid manner shall be considered to have been provided for on account of a part of the fixed costs in relation to power procurement including transmission cost. Even though the Commission may duly account for such balance portion while fixing the rates of additional surcharge, if any, the consumers shall always be required to pay the demand charges even in absence of any additional surcharge.

9.3 Approved Tariff

9.3.1 The Commission has retained the tariff structure as per the MYT Order for the 3rd Control Period. The tariff has been revised suitably to meet this additional requirement after taking into account various related factors including the fact that there is a persistent stagnation in the growth of energy consumption in the industrial sector. The existing and revised tariff for each category is as under:

DS: Domestic Supply

9.3.2 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; Religious places with connected load up to 5 kW; Monasteries; Panchayat Ghars with connected load up to 5 kW; Patwarkhanas and Kanungoo Bhawans (Government Buildings only) with connected load up to 5 kW; Community gausadans managed by institutions/ government with connected load up to 5kW; Orphanages, homes for old people and homes for destitute; Working Women Hostels, Hostels attached to the educational institutions if supply is given separately to each hostel and the electricity charges are recovered from the students based on actual consumption; Leprosy Homes run by charity and un-aided by the Government; "Home Stay Units" in rural areas duly registered with the District Tourism Development Officer; and Offices of the Himachal Pradesh Senior Citizen Forum.

Note:

(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 supply to tenants, other flats etc. is strictly prohibited.

*(iii) No compounding will be permissible. For residential societies which 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 3,500 units, the first 1,250 (125*10) units would be charged at Rs 3.70 per kWh, the next 1,750 (175*10) at Rs 4.60 per unit and the balance 500 units at Rs. 5.10 per unit. Consumer service charge shall be Rs. (50x10).*

9.3.3 The Commission, after a detailed analysis, approves the tariff for Domestic category as under:

Table 160: Existing and Revised Approved Tariff for Domestic Category

Description Units/month	Existing		Approved	
	Energy Charges (Rs/kWh)	Consumer Service Charges (Rs. /con/month)	Energy Charges (Rs/kWh)	Consumer Service Charges (Rs. /con/month)
0 -60 (Lifeline consumers including BPL)	2.85	30.00*	2.85	30.00*
0-125	3.50	40.00	3.70	50.00
126-300	4.40	40.00	4.60	50.00
301 & above	4.95	40.00	5.10	50.00
Pre-paid meter	4.40	Nil	4.60	Nil

**consumer service charge for tribal and difficult area is also fixed at Rs. 30/month irrespective of consumption*

9.3.4 The Commission is continuing with the approach followed during the previous tariff Order of FY15 & FY16 whereby it had extended the benefit of lower electricity tariff available for BPL households, also to very poor and marginalized consumers, in line with the principles laid out in Electricity Act, National Electricity Policy and National Tariff Policy.

9.3.5 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

NDNC: Non Domestic Non Commercial Supply

9.3.6 This schedule is applicable to Government and semi Government offices; Government – Hospitals, primary health centres, dispensaries and veterinary hospitals; Educational Institutions viz. Schools, Universities; I.T.Is, Colleges, Centre for Institute of Engineers, Sports Institutions, Mountaineering Institutions and allied sports and Libraries Hostels, Government Libraries, Centre for Institute of Engineers, 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; Sainik and Government Rest Houses, Anganwari worker training centres, Mahila mandals, village community centers; Hospitals run on charity basis; Sarais and Dharamsalas run by Panchayats and Municipal Committees or by voluntary organizations; and Panchayat Ghars with connected load greater than 5 kW; Patwar Khanas and Kanungoo Bhawans (Government buildings only) with connected load greater than 5 kW; Community gausadans managed by institutions/ Government with connected load above 5kW; Office of Lawyers and Government recognized Non-Government Organizations (NGOs).

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 Petitioner and the Petitioner provides meters for individual consumers.

9.3.7 The Commission has revised the tariff for NDNCS category as shown in the table below:

Table 161: Existing and Approved Tariff for NDNCS Category

Slab	Existing		Approved by Commission	
	Energy Charges (Rs. /kWh)	Consumer Service Charges (Rs. /con/month)	Energy Charges (Rs. /kWh)	Consumer Service Charges (Rs. /con/month)
Up to 20kVA	4.70	70.00	4.95	100.00

Table 162: Existing and Approved Tariff for NDNCS Category: Above 20kVA

Slab	Existing			Approved by Commission		
	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)
Above 20kVA	4.40	-	120	4.65	-	140

9.3.8 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

CS: Commercial Supply

9.3.9 This schedule is applicable to consumers for lights, fans, appliances like pumping sets, central air conditioning plants, cold storages, 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, 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, shopping malls and multiplexes. This schedule will also include all other categories, which are not covered by any other tariff schedule.

9.3.10 The Commission has revised the tariff for the Commercial Supply category as shown in the tables below:

Table 163: Existing and Approved Tariff for CS Category

Slab	Existing		Approved by Commission	
	Energy Charges (Rs. /kWh)	Consumer Service Charges (Rs. /con/month)	Energy Charges (Rs. /kWh)	Consumer Service Charges (Rs. /con/month)
Up to 20kVA	4.95	70.00	5.05	100.00

Table 164: Existing and Approved Tariff for CS Category

Slab	Existing			Approved by Commission		
	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)
Above 20-100 kVA	4.70	-	80	4.80	-	110
Above 100kVA	4.60	-	140	4.70	-	170

9.3.11 In case of mobile welding sets, the consumer will pay Rs 200 per day, in addition to the energy charges.

9.3.12 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

SIP: Small Industrial Power Supply

9.3.13 This schedule is applicable to industrial consumers with contracted demand not exceeding 50 kVA including pumps (other than irrigation pumping), poultry farms and sheds, Atta Chakkis, 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 "IDWPS" shall also be charged under this schedule.

9.3.14 The Commission has revised the tariff for the SIP category as shown in the tables below:

Table 165: Existing and Approved Tariff for Small Industrial Supply

Slab	Existing			Approved		
	Energy Charges	Consumer Service Charges (Rs. /con/ month)	Demand Charges (Rs./kVA/month)	Energy Charges	Consumer Service Charges (Rs. /con/ month)	Demand Charges (Rs./kVA/month)
Up to 20kVA	4.70 (Rs./kWh)	90	-	4.70 (Rs./kWh)	110	-
Above 20kVA - 50kVA	4.50 (Rs/kVAh)	-	80	4.50 (Rs/kVAh)	-	100

9.3.15 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

MIP: Medium Industrial Power Supply

9.3.16 This schedule is applicable to industrial consumers with contracted demand above 50kVA and not exceeding 100 kVA including pumps (other than irrigation pumping), poultry farms and sheds, Atta Chakkis, 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 "IDWPS" shall also be charged under this schedule.

9.3.17 The Commission, after a detailed analysis, has retained the tariff for the MIP category as shown in the tables below:

Table 166: Existing and Approved Tariff for Medium Industrial Supply Category

Slab	Existing			Approved		
	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)
Above 50kVA-100kVA	4.50	-	100	4.50	-	120

The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

LIPS: Large Industrial Power Supply

9.3.18 This schedule is applicable to all industrial power consumers with contracted demand exceeding 100 kVA including the Information Technology industry (limited only to IT parks recognized by the State/Central Government) and not covered by the schedule "IDWPS".

9.3.19 The Commission, after a detailed analysis, has revised the tariff for the Large Industrial Power Supply category as shown in the tables below:

Table 167: Existing and Approved Tariff for Large Industrial Power Supply Category

Slab	Existing			Approved		
	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)
EHT	4.10	-	350.00	4.10	-	425.00
HT-1 (up to 1 MVA)	4.50	-	200.00	4.50	-	250.00
HT-2 (More than 1 MVA)	4.20	-	350.00	4.20	-	400.00

9.3.20 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

BS: Bulk Supply

9.3.21 This schedule is applicable to general or mixed loads to M.E.S and other Military establishments, Central PWD Institutions, Hospitals, Departmental colonies, A.I.R Installations, Aerodromes, construction power to hydroelectric projects 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.

9.3.22 The Commission has revised the tariff for the Bulk Supply category as shown in the tables below:

Table 168: Existing and Approved Tariff for Bulk Supply Category

Slab	Existing			Approved		
	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)
LT	4.85	-	200.00	5.00	-	250.00
HT	4.35	-	300.00	4.50	-	350.00
EHT	4.00	-	300.00	4.10	-	350.00

9.3.23 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

SLS: Street Lighting Supply

9.3.24 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.

9.3.25 The Commission has revised the tariff for Street Lighting category as shown in the table below.

Table 169: Existing and Approved Tariff for Street Lighting Supply Category

Existing		Approved by Commission	
Energy Charges (Rs. /kWh)	Consumer Service Charges (Rs. /con/mth)	Energy Charges (Rs. /kWh)	Consumer Service Charges

			(Rs. /con/mth)
4.70	70.00	4.95	100.00

9.3.26 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

TS: Temporary Metered Supply

9.3.27 This schedule is applicable to all loads of temporary nature including exhibitions, touring talkies, circuses, fairs, melas, marriages, festivals, temporary supply for construction purposes including civil works by Government departments and other similar purposes for temporary needs only. However, this tariff is not applicable to wheat threshers and paddy threshers which shall be covered under Irrigation and Drinking Water Pumping (IDWP) even for temporary connection.

9.3.28 The Commission has revised the tariff for the Temporary Supply category as shown in the tables below:

Table 170: Existing and Approved Tariff for Temporary Meter Category (upto 20kVA)

Slab	Existing		Approved	
	Energy Charges (Rs. /kWh)	Consumer Service Charges (Rs. /con/mth)	Energy Charges (Rs. /kWh)	Consumer Service Charges (Rs. /con/mth)
Up to 20kVA	7.50	140.00	7.80	200.00

Table 171: Existing and Approved Tariff for Temporary Meter Category (above 20 kVA)

Slab	Existing			Approved by Commission		
	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)
Above 20kVA	6.00	-	350.00	6.30	-	400.00

9.3.29 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

IDWPS: Irrigation and Drinking Water Pumping Supply

9.3.30 The existing schedule is applicable to Government connections for water and irrigation pumping and also covers all consumption for bona fide Pump House lighting. This schedule shall also be applicable to private Irrigation Pumping loads. This schedule shall also be applicable to green houses, poly houses, mushroom growing, processing facilities for agriculture, pisci-culture, horticulture, floriculture and sericulture etc. where all such activities are undertaken by farmers only under this category. This schedule will also be applicable to temporary agricultural loads such as wheat threshers, paddy threshers, tokas, and cane crushers.

9.3.31 Since this schedule of tariff covers 'processing facilities for agriculture', all consumers having processing facilities relating to agriculture such as seed treatment, etc. shall also be covered under this schedule. However, the consumers involved in manufacturing, processing and service sector activities based on agriculture produce such as mushroom processing, etc. shall be covered under relevant industrial schedule of tariff.

9.3.32 The Commission has revised the tariff for this category as shown in the tables below:

Table 172: Existing and Approved Tariff for IDWPS up to 20 kVA

Slab	Existing		Approved	
	Energy Charges (Rs. /kWh)	Consumer Service Charges (Rs. /con/mth)	Energy Charges (Rs. /kWh)	Consumer Service Charges (Rs. /con/mth)
Up to 20kVA	3.50	50.00	3.70	70.00

9.3.33 The two-part tariff applicable for IDWPS for connected load above 20 kVA shall be as shown in the table as follows:

Table 173: Existing and Approved Tariff for IDWPS above 20 kVA

Slab	Existing			Approved		
	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)
LT	4.60	-	40.00	4.85	-	50.00
HT	4.20	-	350.00	4.45	-	400.00
EHT	4.00	-	350.00	4.10	-	400.00

9.3.34 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

RT: Railway Traction

9.3.35 The Commission has revised the tariff for Railway Traction as shown in the table below:

Table 174: Tariff for Railway Traction

Existing			Approved		
Energy Charges (Rs/kVAh	Consumer Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)
4.50	400.00	350.00	4.70	-	400.00

9.3.36 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

9.4 Revenue Projection at Approved Tariff

9.4.1 The following paras summarize the Commission's revenue projection at the revised tariff now approved in this Tariff Order.

Revenue from Sale of Power within State

9.4.2 The Commission has calculated the revenue from sale of power for FY17 across each consumer category at the revised approved tariff as shown in the table as follows:

Table 175: Projected Revenue for FY 17 at Approved Tariff

Consumer Category	Sales (MU)	Revenue (Rs. Cr.)	Avg. Realization (Rs./unit)
Industrial Power Supply	**5,001**	**2,801.54**	**5.60**
Small Industrial	168	91.69	5.47
Medium Industrial	56	31.63	5.66
Large Industrial	4,777	2,678.22	5.61
Domestic	2,168	976.36	4.50
Irrigation and Drinking Water	602	347.18	5.77
Commercial	532	316.65	5.96

Consumer Category	Sales (MU)	Revenue (Rs. Cr.)	Avg. Realization (Rs./unit)
Bulk Supply	158	100.59	6.38
NDNC	151	87.07	5.78
Public Lighting	13	6.75	5.06
Temporary Supply	26	25.09	9.79
Total	**8,650**	**4,661.23**	**5.39**

9.4.3 The average revenue realization as percentage of average cost based on the tariff approved for FY17 is provided below:

Table 176: Average Realization as % of Average CoS for FY17

Consumer Category	FY17 (Approved Tariff)
Industrial Power Supply	105%
Domestic *	88%
Irrigation and Drinking Water	110%
Commercial	111%
Bulk Supply	118%
NDNC	107%

**The domestic consumers exclude Lifeline consumers, whose average tariff is more than 50% of the average cost of supply as mandated under the National Tariff Policy*

9.5 Overall Revenue–Expenditure Position of HPSEBL at Approved Tariff

9.5.1 The Commission has computed the revenue surplus/ gap for FY16 based on the approved ARR and approved tariff which is given in the table below:

Table 177: Revenue Surplus/ (Gap) for FY17 (Rs. Cr.)

Parameters	FY17
Total Approved ARR (including prior period adjustments)	**4,966.05**
Less: Revenue from Sale of Power within State at Revised Tariff for FY17	4,661.23
Less: Revenue from sale of Power Outside State	308.32
Revenue Surplus / (Gap)	**3.49**

9.5.2 Based on the above table it is observed that the Petitioner would have a marginal surplus for FY17 which can be considered at the time of truing-up for the respective year. Further, any amount received by HPSEBL during FY17 and subsequently on account of sale of renewable energy certificates on account of excess RPPO quantum of power purchase by the petitioner shall also be considered at the time of truing-up of the respective year.

9.5.3 The Commission directs the Petitioner to transfer any surplus revenue realised in FY17 and subsequent years at approved tariffs to the MYT Contingency Reserve as per Regulation 12 of the HPERC (Terms and Condition for determination of Wheeling Tariff and Retail Supply Tariff) Regulation, 2011.

9.6 Subsidy by Government of Himachal Pradesh

9.6.1 The Govt. of Himachal Pradesh has made a provision of Rs. 410 Crores in the financial budget for 2016-17, for providing rollback subsidy to electricity consumers of domestic and agriculture categories during the year.

9.6.2 In accordance with provisions of Section 65 of the Electricity Act, 2003, the Commission in terms of sub-regulation (5) of Regulation 42 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 in giving effect to the subsidy hereby makes the following provisions:

a. The effective energy charges for Domestic Supply category, as proposed by the GoHP after accounting for Government subsidy, shall be as given in the table below:-

Table 178: Subsidized tariff for Domestic category

Particulars	Units/month	Approved Tariff for FY17 (Rs/kWh)	GoHP Subsidy for FY17 (Rs./kWh)	Effective Tariff after subsidy (Rs/kWh)
Lifeline consumers	0-60	2.85	1.85	1.00
Other consumers	0-125	3.70	2.20	1.50
	126-300	4.60	1.70	2.90
	Above 300	5.10	0.75	4.35
	Prepaid consumers	4.60	1.70	2.90

b. With respect to agricultural consumers under Irrigation and Drinking Water Pumping Supply (IDWPS) category, the energy charges shall be Rs 1.00 per kWh to the consumer category up to 20 kW under single part tariff and Rs.

1.00 per kVAh only for LT category under two part tariff. These revised energy charges on the account of Government subsidy would only be applicable to agricultural and allied activities, and which are paid for by individuals/ user groups but shall not be applicable for government supply.

c. The above revised tariffs in respect of Domestic and Agricultural consumers shall be effective retrospectively from April 1, 2016. HPSEBL shall give appropriate adjustments in consumer bills for the subsidy amount.

d. In case the GoHP/ HPSEBL want to change the level of subsidy provided to above classes/ categories of consumers, they shall inform the Commission accordingly for necessary changes.

9.6.3 The Commission orders that subsidy amount shall be paid in advance to the HPSEBL as per the provisions of Section 65 of the Electricity Act, 2003, and reconciled after every quarter. HPSEBL is directed to submit quarterly report regarding the payment of subsidy as well as the outstanding amount; if any. In case the State Government fails to pay the subsidy, as per the provisions of Section 65 of the Act, the tariffs in respect of above two categories shall stand reverted back to the original tariff, as approved by the Commission in this tariff order.

10 Open Access and Renewable Power Purchase Obligation

10.1.1 The Commission has permitted Open Access to all the generators irrespective of installed capacity and to all the consumers having contract demand above 1 MVA. The Commission has also made enabling provisions for availing the Open Access since First MYT Regulations by segregation of the ARR of the distribution licensee in to ARR for Retail Supply and Wheeling Supply. Accordingly the Wheeling Tariff and Retail Supply Tariffs are being determined by the Commission for each year of the First and Second Control period.

10.1.2 Based on the wheeling ARR approved in para 5.20.4, the average wheeling charges for FY17 are as below:

Table 179: Wheeling Charges for FY17

Particulars	Amount (Rs. Cr.)
Total ARR for Wheeling Business approved for FY16 (Rs. Cr.)	1,399.14
Approved Energy Sales (MU)	8650
Average Wheeling Charge (paisa per unit)	**162**

10.1.3 The above computed average wheeling charge of 162 paisa is for the total distribution network of HPSEBL. Most of the open access consumers are utilizing higher voltage level of the network and therefore, applying the average wheeling charge would restrict the open access within the State. Therefore, for the purpose of promoting open access, the Commission has worked out the voltage-wise wheeling charge applicable for open access consumers at various voltage level.

10.1.4 Regulation 27 (2) of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 stipulate that:

"*The distribution licensee shall maintain separate books of accounts for wheeling and retail supply business. For such period until accounts are segregated and separate books of accounts are maintained, the Commission shall stipulate the ratio of allocation of all expenses and return component, based on data obtained from the distribution licensee.*"

10.1.5 In the absence of separate accounts for wheeling and retail supply business, the ARR of HPSEBL for FY17 have been segregated in to wheeling and retail supply businesses in accordance with the allocation statement as detailed in para 8.20.4. The various charges payable by the consumers availing open access have been determined in this chapter.

10.2 Wheeling Charges

10.2.1 The distribution system of HPSEBL consists of lines and associated equipment at various voltage levels of EHV, HV and LV connected with the generating stations, HPPTCL system and the consumers of HPSEBL. Wheeling costs are dependent on the voltage level at which the supply is wheeled and therefore form an integral part of the wheeling tariff. The Commission during the tariff determination exercise requested HPSEBL to submit the details of voltage wise assets. However, in response the HPSEBL submitted that the exercise of asset mapping via GIS and GPS was under progress and the results shall be submitted separately. In the absence of actual voltage wise assets of HPSEBL, the Commission has apportioned the cost of HPSEBL's wheeling business of Rs. 1,399.14 Cr. as determined in the para 8.20.4, to various voltage classes and accordingly determined the wheeling charges for the EHT (66 kV and above), HT (33 kV), HT (11 kV to less than 33 kV) and other voltage levels (up to 11 kV) of the distribution system. Certain reasonable assumptions have however been made, wherever required, in view of the non-availability of complete data which are detailed below:

10.2.2 The assumptions and methodologies used by the Commission for computing the voltage-wise wheeling cost is as below:

Assumptions

10.2.3 The Commission has considered the following assumptions:

(1) Energy Input: Only the energy input into the State transmission system is considered for intra-state consumption. Hence, the Commission has not considered energy sale outside the State for the computation of wheeling charges.

(2) Category-wise sales have been allocated to different voltages proportionately based on past information, except for categories where sales data at different voltages is available, such as Large Industrial Power, Irrigation and Drinking Water Pumping, and Bulk Supply.

(3) Data on cost segregation across voltage levels and consumer category wise is done based on past information and reasonable assumptions in case of absence of data.

Methodology

10.2.4 Cost of Supply to consumers at 66 kV and above has been determined by allocating approximately 33% of the total wheeling cost and power wheeled through this network.

10.2.5 Cost of Supply to consumers at High Tension (33 kV and 11kV) has been estimated by allocating costs to the sales to HT consumers and power wheeled to reach the LT network. It also includes the cost incurred during the wheeling of power at 66 kV and above network. This has further been bifurcated between 33kV and 11kV based on the estimated sales at each level.

10.2.6 Cost of Supply for the consumers at Low Tension (below 11 kV) level has been estimated by estimating the distribution cost (below 11 kV) and sales to LT consumers. It also includes the proportional costs incurred for wheeling the power at higher voltage levels (from 220 kV till 11 kV).

Sales at various voltage levels

10.2.7 The sales at various voltage levels considered by the Commission are presented in the table as follows:

Table 180: Estimated Sales at Different Voltage Levels for FY17 (MU)

Category	Total Sales	EHT (>=66 kV)	HT (33kV)	HT (>=11 kV & <33kV)	LT (< 11kV)
Domestic Supply	2,168	-	-	-	2,168
NDNCS	151	-	18	27	105

Category	Total Sales	EHT (>=66 kV)	HT (33kV)	HT (>=11 kV & <33kV)	LT (< 11kV)
Commercial	532	-	32	48	452
Small & Medium Industrial Power	224	-	-	-	224
Large Power Supply	4,777	1,961	1,408	1,408	-
Irrigation & Drinking Water Pumping	602	-	65	97	439
Street Lighting	13	-	-	-	13
Bulk supply	158	-	22	88	47
Temporary Supply	26	-	-	-	26
Total (within State)	**8,650**	**1,961**	**1,545**	**1,669**	**3,474**

Cost Segregation

10.2.8 The Commission has continued the existing practice of cost segregation as followed in the MYT Order for the 3rd Control Period. In order to validate the voltage-wise per unit Distribution cost allocated to different voltage levels, the Commission also assessed the same based on certain other relevant parameters including the pattern of usage of the system by consumers at various voltages, and found the rates worked out in table below to be reasonable.

10.2.9 Hence, the costs are divided into EHT, HT and LT voltages, in the following manner:

(a) Cost of wheeling at EHT: The Commission has estimated cost of wheeling at EHV at Rs 461.72 Cr based on EHV component of the GFA. The same has been apportioned to sales at all voltage level.

(c) Cost of Wheeling at HT: The Commission has considered the wheeling cost at HT level considering the balance of total wheeling charges and cost determined towards EHT level. The balance wheeling cost has been allocated between HT and LT based on the proportion of sales at HT and LT network. Further, the HT cost determined has been further bifurcated between HT (33kV) and HT (11kV) based on the proportion of sales. The HT cost so determined is apportioned to sales at HT (33kV and 11kV and above) and LT voltage level only.

(c) Cost of Wheeling at LT: The Commission has considered the wheeling cost at LT level based on the balance wheeling cost after accounting for EHT and HT wheeling cost. The resultant cost is only towards sales at LT level and has been accounted accordingly.

10.2.10 The approved CoS at different voltage levels for determination of tariff is shown in the table as follows:

10.2.11 Wheeling Charges as determined by Commission are tabulated in the following table:-

Table 181: Approved Wheeling Charges for Open Access Consumers for FY17

Sr. No.	Description	EHT (≥66kV)	HT (33kV)	HT (>=11kV & <33kV)	LT (<11 kV)
(i)	Total cost apportioned (Rs in Crore)	461.72	216.58	233.92	486.93
(ii)	Cost allocation brought forward from the next higher voltage block) {(i)-(v)*vi)/1000}[Rs. In Crore]		357.04	441.09	455.97
(iii)	Total allocation (i) + (ii) (Rs. In Crore)	**461.72**	**573.62**	**675.01**	**942.90**
(iv)	Total Energy Quantum (Sales relevant to determination of per unit rate) in MU	8,650	6,689	5,143	3,474
(v)	Energy Sales	1,961	1,545	1,669	3,474
(vi)	**Rate of wheeling Charges in Paisa/unit (iii)/iv) of previous column**	**53**	**86**	**131**	**271**

10.2.12 The long-term and medium-term open access entail firm allocation of wheeling capacity by HPSEBL to the consumer availing open access as well as generators. Accordingly, the charges for these consumers is required to be computed based on capacity basis (per MW) as against the short-term open access consumers for which the wheeling charges shall be determined based on per unit basis. In the above table the Commission has worked out the open access charges for short-term consumers. Since the information with respect to voltage-wise demand and coincident demand is not available, appropriate voltage-wise wheeling charges cannot be computed at this stage. The Commission directs HPSEBL to carry out a study of the voltage-wise demand and coincident demand at various voltage levels and submit along with the APR petition for the subsequent year. Till such time, the above computed wheeling charges shall be applicable for long-term and medium-term open access consumers as well.

10.2.13 Wheeling charges shall be levied on the energy drawn at the delivery point in the distribution system.

10.2.14 In case the power is withdrawn from the distribution system at a voltage level which is different from the voltage level for injection of power into the distribution system, the wheeling charges corresponding to the lower voltage level shall be applicable.

10.2.15 In case where power is injected at HT level in to an EHT substation of the licensee, the wheeling charges shall be worked out by allowing increase of 5% on the wheeling charges applicable for EHT system.

10.2.16 In case of Generators these will be applicable on the energy injected into the system.

10.3 Wheeling Charges for Renewable Generator

10.3.1 In accordance with section 86(1)(e) read with section 61(h) of the Electricity Act, 2003, the Commission, for the promotion of renewable can provide suitable measures for connectivity with the grid. The small hydroelectric projects up to an installed capacity of 25 MW are covered under the renewable energy sources. In order to promote generation from these renewable sources, the Commission decides that the wheeling charges payable by the SHPs covered under renewable energy sources shall be comparable to the wheeling charges for the EHV category of open access consumers i.e. 53 paise/ unit for FY17. However the renewable energy generator shall have to bear the losses as per the actual connected voltage level. These concessional wheeling charges shall not be available to the renewable generators selling power, under Renewable Energy Certificate (REC) framework, to the open access consumers or in power exchange or bilateral sale outside the State or captive consumers availing certain portion of power as captive power producers.

10.4 Wheeling Charges for Embedded Consumers availing Short Term Open Access

10.4.1 The consumers availing short term open access while simultaneously maintaining their contract demand with the distribution license shall, in addition to the applicable demand charges, pay wheeling charges @50% of the wheeling rates applicable at respective voltage levels. Such consumers shall, however, have to pay the distribution losses applicable at relevant voltage levels. However, if the consumer avails open access over and above the contract demand, full wheeling charges shall be payable. These wheeling charges shall be fixed, without any subsequent true-up.

10.5 Additional Surcharge:

10.5.1 The Commission has determined the Additional Surcharge for the consumers availing short-term open access vide its Order dated 18th February, 2016 against Petition No. 103/2015. An additional surcharge of 78 paisa per kWh has been determined in the Order which shall continue to be applicable till the determination of the fresh rate. Such fresh rate shall be applicable from the date of issuance of that order determining the additional surcharge..

10.6 Cross Subsidy Surcharge

10.6.1 Sub-regulation 2 of Regulation 3 of Himachal Pradesh Electricity Regulatory Commission (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulations, 2006 stipulates that the Consumers availing Open Access shall have to pay the Distribution Licensee Cross Subsidy Surcharge which shall be determined by the Commission on a methodology and surcharge formula mentioned in the National Tariff Policy.

10.6.2 The Commission has been approving the cross-subsidy surcharge applicable to open access consumers as per the formula specified in the National Tariff Policy 2006. Ministry of Power has notified a revised Tariff Policy dated 28th January 2016. As per the revised Tariff Policy, the cross-subsidy formula has been revised as under:

Surcharge formula:

S= T – [C/ (1-L/100) + D+ R]

Where

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

R is the per unit cost of carrying regulatory assets.

Provided that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access.

10.6.3 The revised cross-subsidy surcharge formula has been considered for determination of the cross-subsidy surcharge.

Cross-subsidy Surcharge for Long-term and Medium-term Open Access Consumers

The Cross-subsidy Surcharge has been worked out based on the above methodology and formula as per the revised Tariff Policy. Further, the Commission in line with its HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulations, 2006, is required to reach a normative level of 20% of its opening level. Considering the same, the Cross Subsidy Surcharge computed and approved by the Commission for FY17 is tabulated below:

Table 182: Approved Cross Subsidy Surcharge for Long-term & Medium-term Open Access Consumers

Sr. No.	Description of Consumers	Cross Subsidy Surcharge (Rs./ unit)	20% of the Cross Subsidy Surcharge (Rs./ unit)	20% of the Tariff applicable to respective category (Rs./unit)	Minimum of (B) & (C) (Rs./unit)
		(A)	(B)	(C)	(D)
1	Large Industrial Power Supply EHT Consumers	1.95	0.39	1.05	0.39
2	Large Industrial Power Supply HT 2 Consumers	2.05	0.41	1.16	0.41
3	Irrigation & Drinking Water Supply Category - EHT Consumers	2.56	0.51	1.17	0.51
4	Irrigation & Drinking Water Supply Category - HT Consumers	1.83	0.37	1.21	0.37
5	Bulk Supply Category - EHT Consumers	2.59	0.52	1.18	0.52
6	Bulk Supply Category - HT Consumers	2.01	0.40	1.25	0.40

Cross-subsidy Surcharge for Short-term Open Access Consumers

10.6.4 In case of short term open access by the consumer, the rates as per table above shall be applicable only in cases where open access is availed for the full day (24 hours of the day) and the same quantum of power is availed through open access throughout the day. However certain consumers may avail open access for certain hours of the day to meet part of their requirement. The computed cross-subsidy surcharge for peak hours for FY17 based on the above formula are higher than the approved cross-subsidy surcharge for peak hours during FY16. Further, as per the present tariff structure, the tariff during peak hours are higher than the normal hours and the cross subsidy surcharge computed as per revised formula will be higher as compared to normal hours. Therefore, the Commission has approved the cross subsidy surcharge for peak hours and non-peak hours considering 20% of the computed cross subsidy in line with its HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulations, 2006.

Table 183: Cross Subsidy Surcharge for Short-term Open Access Consumers during Time of the Day

Sr. No.	Description of Consumers	Cross Subsidy Surcharge for Part of the Day	
		Non-Peak Hours (Rs./ unit)	Peak Hours (Rs./ unit)
1	Large Industrial Power Supply EHT Consumers	0.39	0.82
2	Large Industrial Power Supply HT 2 Consumers	0.41	0.78
3	Irrigation & Drinking Water Supply Category - EHT Consumers	0.51	0.81
4	Irrigation & Drinking Water Supply Category - HT Consumers	0.37	0.66
5	Bulk Supply Category - EHT Consumers	0.52	0.52
6	Bulk Supply Category - HT Consumers	0.40	0.40

Note: The cross subsidy surcharge as per Table above, as applicable shall be levied on the energy drawn at the delivery point in the distribution system through open access.

10.6.5 The Commission also feels that in some cases the consumers may have to avail Open Access because of inability of Distribution Licensee to supply power during certain specific hours for reasons of power shortages etc. In order to avoid any hardships to consumers, the Commission hereby stipulates that in cases where the Distribution Licensee has communicated in advance to the consumer about its inability to meet any part of power requirements of a consumer for a specific duration, the cross subsidy surcharge shall not be applicable for such part of the energy requirement (for which Distribution Licensee had expressed its inability to supply) as is met through open access during such periods.

10.6.6 The Commission has continuously endeavoured to reduce the cross-subsidy and has been guided by the principles laid down in the National Tariff Policy. Since the target of realization being +/-20% of average cost of supply was achieved by FY14, the Commission in the amendments to the Regulations, 2011 have laid down a road map for with a target that by end of 3rd Control Period (i.e. FY19), tariff for consumer categories, other than lifeline consumers, shall be within (-)15% and (+)10% of the average cost of supply. However, for computation of cross-subsidy surcharge, the Commission is following the formula specified in the tariff policy notified by Government of India.

10.7 Distribution Losses

10.7.1 In addition to above charges, the Open Access consumers shall have to bear the distribution losses in kind as per the provisions of the Open Access regulations and shall be credited to the respective licensees through energy accounting mechanism to the respective licensees. The distribution losses at following rates shall be applicable to the open access consumers including generators, other licensees and traders:

Table 184: Approved Loss Level for Open Access Consumers

Voltage Level	220kV/ 132 kV	66kV	33kV	22kV/ 11kV	LT
Loss level (in % of energy)	4.0	6.0	7.5	9.0	19.0

10.7.2 The losses at LT are for indicative purposes only as no open access may actually be availed on LT.

10.7.3 In order to provide non-discriminatory access to its system to the open access consumers, the HPSEBL shall maintain such systems in accordance with the provisions of the Himachal Pradesh Electricity Regulatory Commission (Distribution Performance Standards) Regulations, 2010.

10.8 Renewable Power Purchase Obligation (RPPO)

10.8.1 The Commission vide Regulation 4 of the HPERC (Renewable Power Purchase Obligation and its Compliance) Regulations, 2010 (read with amendments) has specified the minimum ceiling of solar and non-solar RPPO for the distribution licensee over a time span of ten years. Accordingly the minimum RPPO of the distribution licensee for solar and non-solar energy for FY17 is as under:

Table 185: Minimum quantum of Purchase from Renewable Sources & Projected RPO Obligation for FY17

Particular	Minimum RPPO %age of the gross requirement	Minimum RPPO quantum in MUs
Non-Solar	12%	1212.71
Solar	0.25%	25.26
Total RPPO	**12.25%**	**1237.97**

10.8.2 The Commission while deciding the suo-moto case no. 93(A)/2013, in its order dated 29.07.2013 had observed that HPSEBL had fully met and in fact exceeded the specified target in respect of Non-Solar RPPO for the last three years but was unable to meet the Solar RPPOs for the FY12 and FY13. There was a shortfall of 0.74MU and 18.4MU in the solar RPPO during FY12 and FY13. The Commission in the order decided that the shortfall of Solar RPPOs for FY12 and FY13 shall be met during the FY16 and FY17 respectively, in addition to the Solar RPPOs of those years. Accordingly, for meeting solar quantum of FY17, the Commission has considered an additional solar RPPO quantum.

10.8.3 Accordingly in this Order the Commission has approved the total purchase of renewable power by HPSEBL for FY17 as under:

Table 186: Approved Quantum of Renewable Power Purchase for FY17

Source	FY17	
	MU	Rs Cr
Solar	**58.25**	**38.14**
Singrauli Solar*	24.97	19.83
SECI	33.29	18.31
Non-Solar	**1,756.35**	**445.88**
SHP Own Generation	472.93	100.75
SHP PPAs Preferential Tariff (Excluding on APPC under REC)	1,283.42	345.12

**Cost from Singrauli solar excluding bundled thermal power.*

10.8.4 In line with the 3rd amendment dated 30.12.2014 of CERC (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, HPSEBL are eligible for RECs for the surplus quantum of power procured from renewable sources. As per Commission's Order dated 07.03.2015, HPSEBL is eligible for non-solar RECs corresponding to 541.09 MUs of excess renewable energy purchase for FY14. HPSEBL shall be eligible for RECs in the subsequent years also, as the quantum of power purchase from renewable sources shall exceed the RPPO quantum.

10.8.5 In accordance with Regulation 4 of the HPERC (Renewable Power Purchase Obligation and its Compliance) Regulations, 2010 (read with amendments), the minimum percentage of RPPO obligation is also applicable to captive generation/ open access consumers including DG sets above 1MW installed capacity. Since HPSEBL has surplus quantum of renewable power available after meeting its RPPO, these consumers can convert their conventional energy into renewable energy by payment of Rs. 1.50 per unit (i.e. floor price of the non-solar RECs as approved by CERC in Order 142/2011 dated 13.06.2011) to HPSEBL. The HPSEBL is directed to maintain account of consumers availing this facility of conversion to renewable power and submit the same to the Commission on quarterly basis.

10.8.6 The surplus quantum of renewable power purchased by HPSEBL after meeting its RPPO, sale of renewable power outside the State and conversion of conventional energy to green energy by other obligated entities within the State shall be eligible for issuance of RECs or disposal in any other admissible mode.

11 Directions and Advisories

11.1.1 The Commission had issued directions and advisories to HPSEBL in the MYT Order for the 3rd Control Period. In response to the directives and compliances submitted by the petitioner during the processing of the First APR Petition for the 3rd Control Period, the Commission had mentioned its observations with regard to the appropriateness and completeness of the compliance submitted by the Petitioner.

11.1.2 The petitioner has now submitted further action/ information with respect to the observations of the Commission on the directives issued in the MYT Order. The same are summarized below:

Direction	Commission's observation	Compliance status	Additional Observation
Clause 5.6.3: The Hon'ble Commission appreciates the efforts made by the Petitioner to recover outstanding dues. Further, the Hon'ble Commission is of the view that the Petitioner should take action in accordance with the relevant provisions of the Electricity Act, 2003. **The Petitioner is directed to keep the Hon'ble Commission updated on the status where consumers are delaying payment of legitimate dues.**	The Commission appreciates the efforts being made by the petitioner for recovering outstanding dues. However the progress made by the petitioner is still not very encouraging. The Commission directs the petitioner to take up the matter of outstanding arrear against I&PH department at the government level or look at options of working out suitable settlements for such long outstanding arrears. The Commission directs the petitioner to provide quarterly reports on the actions taken for the recovery of these arrears from the date of publishing of this order. The Commission also directs the petitioner to undertake an category-wise and age-wise analysis of the arrears with breakup of the arrears into: • Principal outstanding • Surcharge outstanding • Arrears of less than one years • Arrears of one to five years • Arrears older than five years The Commission also directs the	The issue of outstanding dues from I& PH department as well as the release of subsidy on account of Roll back of Tariff has been taken up with the government repeatedly with the request to sanction additional amount to IPH department to clear energy charges of HPSEBL. A copy of correspondence in this regard vide letters No. HPSEBL/ F&A/ Comp.-I/ Subsidy/ 2015-2765-73 dated 31.08.2015 And No. HPSEBL/ F&A/ Comp.-I/ Subsidy/ 2015-2782-90 dated 22.09.2015 along with the details of receivables/ payables as on 31.07.2015 (Provisional) is provided in **Annexure II.**	HPSEBL should strongly take up the matter for the I&PH outstanding dues which is a significant amount and needs to be recovered in order to avoid the financial difficulties faced by the petitioner. Further, the petitioner is still to provide information with respect to the category-wise and age-wise analysis of the arrears.

Direction	Commission's observation	Compliance status	Additional Observation
	petitioner to identify non-recoverable arrears and initiate proceedings for writing the same off. The petitioner is directed to submit the above report on arrears within three months from notification of this order.		
Clause 7.6.27: Considering the uncertainty associated with the availability from the unallocated quota, the Hon'ble Commission has not considered the same in energy balance. However, energy to the extent of 400 MUs from this unallocated quota. **The Petitioner is directed to consider the commercial principles and merit order before procuring power from the unallocated quota.**	While the demand-supply may vary on a year-to-year basis, the petitioner is required to use prudence and commercial principles in mind while undertaking power procurement from the unallocated quota and evaluate alternative options.	In Order to meet the winter deficit and to avoid the purchase of costly thermal power, GoHP free power was requisitioned by HPSEBL which is available at a comparatively cheaper cost. However, the above proposal was turned down by GoHP and instead equity power of Rampur HEP was allocated to HPSEBL. Further it is informed that allocation of unallocated quota is at the discretion of GoI and mostly it is allocated from the plants of Northern Region wherein PPA is in existence.	Compliance noted. The petitioner is required to maintain commercial prudence in procurement of power. Requirement for GoHP free share of power should be ascertained before start of each year and necessary action should be taken in this regard.
Clause 7.8.30: Since HP has abundant Hydel Power, which is firm power, although having seasonal variations, **the HPSEBL shall study how the base load for the entire year will be met from the hydel power itself or thermal power in return of surplus hydel power banked or both, so**	The direction was given to the petitioner more than a year ago. In the intervening period, the petitioner should have prepared a plan or should have undertaken a feasibility study for the same. However the Commission is disappointed to see that the petitioner has failed to demonstrate any constructive movement on this front. The Commission reiterates its	HPSEBL shall give due compliance to the advice of Hon'ble Commission. However, it is informed that the entire summer surplus of power is being banked with its return on firm basis which is sufficient to meet the base load demand of winter months.	Compliance noted.

Direction	Commission's observation	Compliance status	Additional Observation
that HPSEBL avoids buying costly power from new thermal stations in future.	direction and instructs the petitioner to provide tangible proof of any actions taken in this regard.		
Clause 7.15.2: a) The Petitioner is directed to submit the complete details of the proposed schemes along with the cost benefit analysis and obtain the scheme wise approval (excluding the central sponsored schemes like R-APDRP and RGGVY etc.) in accordance with the provisions of the Regulations for the capital expenditure to be incurred during each year of the Third Control Period as per the annual investment plan drawn for the purpose. The licensee shall also indicate the sources of funding including its own contribution and consumer contribution. The licensee's financial contribution to the scheme will be treated as normative loan. However pending such submission, the	While the petitioner is claiming to provide the cost benefit analysis scheme-wise to the Commission, there has been no DPRs/ cost-benefit report/ any other document submitted to the Commission along with the Business Plan and MYT Petition last year. Similarly no documents were furnished along with the First APR petition. The directive stands continued.	All the scheme are being formulated/ prepared on the basis of cost benefit analysis REC guidelines and only viable schemes approved by Board and M/s REC are being considered for execution. Infrastructure Development charges are being recovered from the prospective consumer as per the HPERC, Regulations, 2012 (Recovery of expenditure regulation 419/2012). Further, Every effort is being made by the officials to achieve the loss reduction targets as per RGGVY/ R- APDRP norms, so that full grant as per provision in the scheme is availed in R- APDRP Towns. However, the petitioner would like to submit that it requests for more time to provide the scheme –wise benefit analysis of the schemes to the Hon'ble Commission as same details are being collected from field units	As per the claim of the petitioner all schemes are formulated / prepared on the basis of cost benefit analysis. The Commission fails to understand the delay in submission of the requisite information from the past two years. The Petitioner is required to provide the requisite information within six months from issue of this Order. It is also observed that the petitioner is unable to provide scheme-wise / work-wise capital expenditure undertaken in the past years. The Commission has serious concerns over maintenance of details with respect to capital expenditure and capitalization by the petitioner and directs the Petitioner to compile all work-wise and scheme-wise information and submit the same along with the petition for mid-term review.

Direction	Commission's observation	Compliance status	Additional Observation
Commission has provisionally considered capital expenditure of Rs.2,220 Cr. for ARR projection. b) The licensee shall streamline its process for decision making, financing, tendering and contracting to enhance its capacities for speedy execution of schemes for cost efficiency and quality of service enhancement. c) The licensee shall undertake only such works as considered viable based on the cost benefit analysis. d) The licensee shall ensure the capital cost recoverable from the prospective consumer as per the relevant regulations. e) The licensee shall ensure timely completion and compliance of the loss reduction targets as well as various other conditions associated with R-APDRP and RGGVY schemes. In case the licensee fails to get any			

Direction	Commission's observation	Compliance status	Additional Observation
loan converted into grant as per the provision of R-APDRP due to non-compliance of any condition, the Commission shall not allow any such loan as pass through in the ARR. f) The Petitioner shall submit the quarterly progress report of actual capital investment within one month of the respective quarter.			
Clause 7.15.4: The Commission reiterates its direction of the previous Order and expects that the Petitioner would undertake appropriate measures for timely execution of the various projects covered under the R-APDRP / RGGVY schemes.	While the petitioner has provided details of various works under the RGGVY/ R-APDRP schemes, the status of the projects (timely, delayed, etc) is not provided. Therefore, the petitioner is directed to provide the scheme wise report for each town. The report shall include the following parameters: • Original timeline for completion • Actual completion date • Expected date of completion (for incomplete projects) • Reasons for delays • Benefits achieved after implementation of the scheme • Any other parameters that	**RGGVY :** In respect of 12 Nos. RGGVY schemes, all the works except for 33 KV line work in Pangi Block of Distt. Chamba have been completed. The balance work of 33 KV line of Pangi Block shall be undertaken departmentally. The closure report of remaining Distt. Sirmour had also been submitted to M/s REC Ltd. vide Principal Secretary (Power) to Govt. of HP vide letter No. MPP-F (5)-3/97-XXVII dated 22.12.2014 (Copy Enclosed) **Zone wise status of RGGVY is as under :-** **Chief Engineer (OP) North/South/Central Zone :** RGGVY works of 11th Plan under Operation, North / South / Central Zone have been completed and closure reports of all Districts have been submitted. **R-APDRP (Part-A) :**	Information with respect to the directive is incomplete. Petitioner is required to submit the all information as per the directive.

Direction	Commission's observation	Compliance status	Additional Observation
	the petitioner deems fit. The petitioner is directed to provide the above report within three months from the issue of this order.	A brief Status of RAPDRP Part-A project is as below. • Data Center at Shimla is functional. • The Disaster Recovery Center at Paonta Sahib is functional. • HPSEBL Ltd., has declared the 14 towns Go-live to the Minister of Power (MoP), Govt. of India (GoI) in July, 2014. • User Acceptance Testing (UAT) of Data Center (DC) has been completed. The UAT of the Data Center (DC)- Disaster Recovery Center (DRC) has also been completed. The UAT of Sub-Division and other offices of 14 towns under R- APDRP Part- A project are in progress. • Third Party verification to inspect/ verify the activities completed under the project is currently in progress. The following supporting documents in this regard are enclosed for reference please. **(Annexure-III)** 1. Town Go-live declarations issued by IT cell to M/s Power Finance Corporation Ltd. (Ministry of Power) (MoP), Govt. of India (GoI). 2. Original timelines given by the Ministry of Power (MoP) through M/s PFC for RAPDRP Part-A completion in Himachal Pradesh. 3. 2 Years extension granted to all States for R-APDRP Part-A completion. 4. Further 1 year extension granted to Himachal Pradesh for R-APDRP Part-A completion 5. Timelines conveyed to the M/s PFC regarding the completion of pending	

<table>
<tr><th>Direction</th><th>Commission's observation</th><th>Compliance status</th><th>Additional Observation</th></tr>
<tr><td></td><td></td><td>activities/ milestones during the extended time period of one year under R-APDRP Part-A project.

R-APDRP (Part-B) :
In respect of 14 No. R-APDRP (Part-B) towns viz. Chamba, Hamirpur, Kullu, Nahan & Una have been almost completed (only financial part remaining) & 9 No. towns (i.e. Baddi, Bilaspur, Dharamshala, Mandi, Paonta Sahib, Shimla, Solan, Sundernagar & Yol) are likely to be completed in December, 2016. The scheme wise report of each town is being enclosed herewith for your ready reference (Annexure-IV) as per desired parameters.</td><td></td></tr>
<tr><td>Clause 7.16.1:
The Commission has analyzed the available details to consider provisional capitalization for the Control Period and the same would be subjected to true-up at the end of the Control Period. The Petitioner is directed to submit actual details of capitalization for each year for the Control Period by September 30 of the following year to the Commission for scrutiny and year-wise capitalization of assets.</td><td>The capitalization of assets is essential for prudence check in allowing capital costs. Also it has been noticed that several assets are not capitalized in the books of accounts despite they being put to use by the petitioner. This delays the recovery of several fixed cost components pertaining to such assets and is an undue burden on the consumers. Hence the Commission directs the petitioner to ensure timely capitalization of assets. The Commission also directs the petitioner to explore the possibility of the deployment of IT initiatives in project management and monitoring thus ensuring better project management practices.</td><td>The wing wise/ year-wise detail of assets capitalization is tabulated as under:-
Rs. Crores
<table>
<tr><th rowspan="2">Sr. No.</th><th rowspan="2">Name of Chief Engineer</th><th colspan="4">Year</th></tr>
<tr><th>2010-11</th><th>2011-12</th><th>2012-13</th><th>2013-14</th></tr>
<tr><td>1.</td><td>Chief Engineer (Op.), North, Dharamshala.</td><td>25.69</td><td>111.15</td><td>131.85</td><td>51.29</td></tr>
<tr><td>2.</td><td>Chief Engineer (Op.), Central Zone, Mandi.</td><td>32.49</td><td>96.36</td><td>158.99</td><td>38.15</td></tr>
<tr><td>3.</td><td>Chief Engineer (Op.), South, Shimla.</td><td>22.23</td><td>181.10</td><td>190.04</td><td>101.44</td></tr>
<tr><td>4.</td><td>Chief Engineer (ES), Hamirpur</td><td>79.98</td><td>157.43</td><td>162.89</td><td>125.61</td></tr>
<tr><td>5.</td><td>Chief Engineer (Gen.), Sundernagar.</td><td>18.12</td><td>191.80</td><td>206.54</td><td>20.76</td></tr>
</table></td><td>The details provided are inadequate and has not been correlated with the directive.</td></tr>
</table>

Direction	Commission's observation	Compliance status	Additional Observation
		Total 178.51 737.84 850.31 337.25	
Clause 7.21.2: b) Inclusion of balance recoverable amount as income from S&I wing. As per the information supplied by the Petitioner in the Review order no. 88/2013 decided on 26-11-2013, the Commission had noted: "Out of total of Rs467 Cr., the HPSEBL has shown its inability to recover Rs.122.60 Cr. and has therefore illustrated that it is in position to recover the balance amount of Rs.344.65 Cr. out of which Rs.118.67 Cr. have been shown as already recovered, Rs.160.97 Cr. as that which is in the process of recovery and Rs.65.01 Cr. as amount that would be deferred for recovery in the future;" The Commission has provisionally considered an amount of Rs.125 Cr. to be recovered equally during the Third Control Period. **The Commission also directs HPSEBL for**	The Commission notes the efforts of the petitioner for recovery of the S&I charges from IPPs. However, if repeated requests have not helped in recovery of these charges, the Commission directs the petitioner to list out what further legal /other steps the petitioner intends to take for recovery of the said sum. Since the amount is significant, the Commission reiterates its previous direction to ensure the recovery at the earliest. In case the recoveries cannot be affected with the IPPs and other entities on mutually agreeable terms, the Commission directs the petitioner to take necessary help from GoHP for recovery of these dues or undertake suitable legal options for the same.	A meeting of Director Level Committee was held on dated 29.04.2015 in the chamber of Director (Finance), HPSEBL. Accordingly, the action plan recommended by the Director level Committee, the case was forwarded in the shape of Memorandum for consideration and approval of Board of Directors of HPSEBL. (Copy Enclosed for ready Reference – **Annexure-V)** As such necessary action shall be taken after the decision of the Board.	The petitioner is directed to expedite the decision on the same and take necessary action for recovery of the balance amount from the IPPs.

Direction	Commission's observation	Compliance status	Additional Observation
recovery of the balance amount of Rs.100.98 Cr. during the Control Period and retain it as contingent surplus for meeting the liability that may arise out of pay commission revisions during this period, with prior approval of the Commission.			

11.1.3 The Commission also arranged a Management meeting with the senior officials of HPSEBL to discuss on 1st April 2016 to understand the constraints and viewpoint of the petitioner and highlight the key strategies and action plan required to be undertaken in the future. Various points were discussed including status of the progress in various capital expenditure schemes i.e. RGGVY, R-APDRP, etc. being undertaken by HPSEBL. In view of the discussions and inadequate data available with respect to the capital works and schemes, the Commission feels that the progress of various capital works needs to be monitored by the petitioner on an ongoing basis and in proper manner. Also, this information needs to be submitted in summarized manner along with adequate supporting documents to the Commission on a half yearly basis.

11.1.4 Further, it is observed that the Ghanvi-II HEP is operational while Uhl-III HEP is expected to commission during FY17. HPSEBL is directed to file separate petition for determination of capital expenditure and approval of tariff for these hydro power stations.

11.1.5 HPSEBL has included truing-up of generation business along with the truing-up for petition for the 2nd Control Period i.e. FY12-FY14. However, details with regard to work undertaken in the various plants, scheme cost, cost-benefit analysis, DPR and necessary documents have not been provided by the petitioner. As per the HPERC (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2011, the petitioner is required to submit petition for the additional capitalization of each plant along with necessary information and documents.

Annexure – I

General Conditions of Tariff and Schedule of Tariff

PART-I: General Conditions of Tariff

A. This Schedule of Tariff shall come into force with effect from **1st April, 2016** and will be applicable throughout the State of Himachal Pradesh.

Provided further that this Tariff Order shall not be applicable to consumers who have been permanently disconnected prior to the date of issue of this Order unless such consumers get their connections re-instated in the future

B. 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.

C. This tariff automatically supersedes the existing tariff w.e.f. **1st April, 2016** that was in force with effect from 1st April, 2015 except in such cases where 'Special Agreements' have otherwise been entered into for a fixed period, by HPSEBL 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.

D. This Schedule of Tariff is subject to the provisions of **'Schedule of General and Service Charges' (Appendix – A)** and related Regulations notified by the Commission, from time to time.

E. Force Majeure Clause: In the event of lockout, fire or any other circumstances considered by the HPSEBL 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.

F. Standard Supply Voltage: shall be regulated in accordance with the **Part –II**.

G. 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.

H. Lower Voltage Supply Surcharge (LVSS): Consumers availing electricity supply at a voltage lower than the 'Standard Supply Voltage' as mentioned in part-II shall, in addition to other charges, be also charged a 'Lower Voltage Supply Surcharge' (LVSS) at the rates given in the following Table on only the amount of energy charges billed, for each level of step down (as given in following table) from the 'Standard Supply Voltage' to the level of Actually Availed Supply Voltage.

Standard Supply	Actually Availed Supply Voltage	LVSS
11kV or 15kV or 22 kV	1Ø 0.23 kV or 3Ø 0.415kV OR 2.2 kV	5%
33 kV	11 kV or 22 kV	3%
66 kV	33 kV	2%
≥ 132 kV	66 kV	2%

EXPLANATION:

1) *In case of voltage based tariffs, the tariff applicable at the standard supply voltage or at the lower voltage (i.e. voltage at which connection is actually availed), whichever of the two is higher, shall be applicable and the LVSS shall be levied in addition to the said tariff.*
2) *The revised provisions of standard supply voltage under the HPERC Electricity Supply Code have been notified and new connections shall be released on that basis. In cases of existing connections, the applicability of LVSS shall be determined, subject to relaxation clause (6) below, on the basis of the revised provisions.*
3) *Here the expression "for each level of step down" as an example shall mean that in a particular case if the Standard Supply Voltage is 33kV and the Actually Availed Supply Voltage is less than 11 kV, then the number of step downs shall be two (2) and the rate of LVSS applicable shall be 8% (5%+3%). Similarly, if the Standard Supply voltage is 132 kV or 220 kV and actual availed supply voltage is 33 kV LVSS shall be applicable @4%.*
4) *The LVSS shall be charged at 50% of the rates determined as per the above provisions if any one or all of the following conditions are met:-*
   i. *if supply is given through a dedicated feeder or a joint dedicated feeder and metering for billing purpose is done at the licensee's sub-station; and/or*
   ii. *If the LVSS becomes payable inspite of the contract demand being within the relevant permissible limit applicable for the standard supply voltage viz 50 kVA for LT supply, 2200 kVA for 11 kV or 22 kV supplies, 10000 kVA for 33 kV and 12000 kVA for 66 kV supplies.*
5) *The low voltage surcharge shall also be applicable in cases where the consumer, after having taken the connection, is found to have violated the maximum demand or the connected load beyond the maximum limits applicable for the relevant Standard Supply Voltage corresponding to the voltage at which supply has been availed.*
6) *LVSS shall not be applicable for the period upto 31.03.2016 to such HT consumers (11kV or 15kV or 22 kV or 33 kV) or to such EHT consumers (66 kV and above) who were already existing on 01.12.2007 and were getting supply at a voltage less than the specified Standard Supply Voltage as per*

Part-II. Such consumers shall had the option to either shift to appropriate higher voltage before 31.03.2016 or to pay low voltage surcharge at these rates w.e.f. 01.04.2016 till such shifting to higher voltage. In view of above, LVSS at normal rates shall be charged from such consumers who were already existing on 1-12-2007 and are getting supply at a voltage less than the specified standard supply voltage. However, in case any extension of load is sanctioned in such cases after 01.12.2007 LVSS, if any, is applicable with reference to the Standard Supply Voltage applicable from time to time. The extension in time limit (i.e. up to 31.03.2016) for the purpose of levy of LVSS, as aforesaid, was not applicable in such cases.

I. Lower Voltage Metering Surcharge (LVMS): In respect of consumers, for whom the metering (for maximum demand (kVA) or energy consumption (kWh or kVAh) or both) instead of being done on the higher voltage side of the transformer at which the supply had been sanctioned by the HPSEBL, is actually done on the lower voltage side of the transformer due to non-availability of higher voltage metering equipment or its unhealthy operation, such consumers shall in addition to other charges, be also charged "Lower Voltage Metering Surcharge" (LVMS) at the rate of 2% on the amount of only the energy charges billed.

J. Late Payment Surcharge (LPS): Surcharge for late payment shall be levied at the rate of 2% per month or part thereof, on the outstanding amount excluding electricity duty/ taxes for all the consumer categories.

K. Supply during peak load hours: The following additional conditions shall be applicable for use of power during peak load hours(6:30 PM to 10 PM) in case of the consumers covered under small industrial power supply, medium Industrial power supply, large industrial power supply and irrigation and drinking water power supply:

i) Such consumption shall be recorded separately through suitable meters which are capable of recording the energy (kVAh/kWh) during the peak load hours. In cases where such meters do not already exist, the consumer intending to use power during peak load hours shall give a notice of 3 months to HPSEBL and may start using power during peak load hours after such meter has been installed;
ii) The consumers who have already obtained sanction from HPSEBL for using electricity during peak load hours may continue doing so to the extent of permission granted to them without any additional notice;
iii) Where the meters as per clause (i) already exist but the consumers have not already obtained exemption to run their plant during peak load hours or want to use higher load than what was permitted during peak load hours, they shall give a prior intimation of 30 days to HPSEBL where after they may start using power or additional power during peak load hours as per their requirement within their sanctioned contract demand unless HPSEBL issues any instructions to the contrary through a general or specific order. In the meanwhile, consumers may continue using power to the extent of bonafide factory lighting and colony supply forming part of sanctioned connected load or to the extent of permission obtained. The consumption shall however be charged at the rates applicable for respective periods (normal, peak and night) as a part of the total consumption during such respective periods.
iv) HPSEBL shall, in case of any constraint, always be entitled to impose any restrictions on usage of power during peak load hours in all cases through general or specific order;

v) In cases where HPSEBL imposes any restrictions through general or specific orders the consumer shall abide by such restrictions failing which the HPSEBL shall be entitled to disconnect the supply to such consumers after giving a notice;
vi) The sanctioned contract demand shall not be violated;
vii) Payment of peak load charges (demand and energy) shall be made as per the respective schedules of tariff;

L. Demand Charge (DC): Consumers under two (2) part tariff, whose energy consumption during non-peak load hours of the month is billed/ charged in Rs/kVAh, shall in addition to the kVAh charges, be also charged at the rates as per Part-III, the 'Demand Charges' (in Rs/kVA/month), calculated on the actual Maximum Demand (in kVA) recorded on the energy meter during any consecutive 30 minute block period of the month or at 90 % of the Contract Demand (in kVA), whichever is higher but up to a ceiling of contract demand as currently applicable. The demand in excess of Contract Demand will be charged under clause "M" relating to Contract Demand Violation Charges (CDVC).

Explaination:

i) During the actual number of days of billing in any period, the above mentioned parameters i.e. actual recorded Maximum Demand and Contract Demand as the case may be and the prescribed respective rates of charges in the relevant schedule of tariff alone shall form the basis for calculation of Demand Charges and the licensee, based on the number of days of billing in excess or short of a month (of 28 or 29 or 30 or 31 days), shall not apply any other factor other than mentioned in this para, that may alter or vary either of these parameters in any way.

ii) Where the contract demand has not been applied for or sanctioned, the limit corresponding to 90% of the connected load (in kW) converted into kVA by adopting power factor of 0.9 shall be deemed as the contract demand;

M. Contract Demand Violation Charge (CDVC): In the event, the actual Maximum Demand (in kVA) recorded on the energy meter during any consecutive 30 minute block period, exceeds the Contract Demand (in kVA), the consumer shall be charged 'Contract Demand Violation Charges' (CDVC) (in Rs/ kVA) at a rate which shall be three (3) times the rate of the demand charges (DC) (referred to in para '**L**') to the extent the violation has occurred in excess of the Contract Demand.

NOTE: In cases where the Contract Demand has been got reduced temporarily as per applicable provisions; such reduced Contract Demand shall be considered as the Contract Demand for the purpose of determining the Contract Demand Violation Charges (CDVC); if any.

N. 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.

NOTE: Authorization shall mean authorization (temporary or permanent) to a consumer by the designated office of the licensee in whose area the supply to the consumer exists and shall not be assumed as authorization of any form from local or other bodies.

O. *Night Time Concession (NTC)*: Night Time Concession (in Rs/kVAh) on consumption of energy (in kVAh) from 22:00 hours to 06:00 hours shall be available to two pat tariff consumers falling under the category to which such concession has been allowed as per Part-III – Schedule of Tariff, at the rates fixed in the relevant consumer category under the Schedule of Tariff. However such consumers must be provided with suitable tri-vector meters capable of recording energy during different times of the day.

P. 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 chakkis, 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 HPSEBL from time to time. Seasonal industries shall be governed under the following conditions: -

i) The consumer shall intimate in writing to the concerned Sub-Divisional Officer of the HPSEBL, one month in advance, the months or the period of off-season during which he will close down his plant(s).
ii) The minimum working period for a seasonal industry in a year shall be taken as 4 (four) months.
iii) 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.
iv) The consumer service charge, demand charge or any other fixed charge shall be levied for the seasonal period only.

Q. Power Factor Surcharge (PFS):

i) If at any point of time, the power factor of consumers, to whom power factor surcharge is applicable as per Part-III Schedule of Tariff, 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 from the consumer from the month of checking and will continue to be levied 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) 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 as follows and shall be rounded up to two decimal places:

$$\text{Power Factor} = \text{kWh} / \text{kVAh}$$

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.
iii) The said power factor surcharge shall be independent of the supply voltage.
iv) The consumer service 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.
v) No new supply to L.T. installations with induction motor(s) of capacity above 3 H.P and/ or welding transformers above 2 kVA shall be given unless shunt capacitors of appropriate ratings are installed to the entire satisfaction of the HPSEBL.

R. 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, one month 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.

S. Temporary Revision of Contract demand:

The consumers to whom two part tariff is applicable shall be entitled to revise their contract demand within the total sanctioned contract demand without surrendering their lien of the total sanctioned contract demand, subject to the following conditions-

(a) the consumer shall not reduce the contract demand to lesser than 50% of the total sanctioned contract demand subject to a further condition that the contract demand shall not be reduced below the lowest limit of contract demand as per the tariff category (or any sub-category thereof) applicable to him;

Illustration.- A HT-2 single supply consumer having sanctioned contract demand of 1.8 MVA shall not be entitled to reduce the contract demand to 1000 kVA or any value lesser than 1000 kVA;

(b) the consumer shall not be entitled to revise the contract demand more than twice a year subject to the condition that the time gap between two successive revisions shall not be less than 3 months;

(c) the consumer shall give a notice of at least one month to the HPSEBL before revising the contract demand under this mechanism. Even though the consumer shall not be required to obtain any sanction from the HPSEBL for change in contract demand under this mechanism, he, so as to avoid the disputes, shall ensure that the notice(s) for such revision are duly served by him upon the licensee through registered post or through courier service or is delivered by hand against signed receipt therefor;

(d) in cases where the contract demand is reduced under this mechanism, such reduced contract demand shall be applicable for billing purposes; and

(e) in cases where the consumer gets his contract demand reduced permanently, the limit under clause (a) shall be considered with respect to such reduced contract demand, but such reduction shall not be considered to have been made under this mechanism and the time gap of 3 months as per clause (b) shall be reckoned from the date from which the demand was last revised under this mechanism.

Illustration.- If a consumer who is having sanctioned contract demand of 10 MVA temporarily revises the contract demand to 6 MVA w.e.f. 01.08.2014 under this mechanism but gets his sanctioned contract demand permanently reduced to 8 MVA w.e.f. 01.09.2014, he shall have to pay charges based on 6 MVA contract demand till 31.10.2014 (i.e. till the expiry of 3 months period from the date at which the contract demand was last revised i.e. from 01.08.2014). However, if the contract demand is to be reduced permanently to lesser than 6 MVA (say 4 MVA as on 01.09.2014), the demand charges would have been based on a contract demand of 4 MVA during the period upto 31.10.2014.

T. Sanction of Contract Demand:

1) In case of new connections, except for Domestic Supply, the Contract Demand shall invariably be incorporated in the Application and Agreement form as well in the load sanction, irrespective of the connected load.
2) In case of such existing connections, other than Domestic Supply, where the Contract Demand has not been applied for or has not been sanctioned, 90% of the sanctioned connected load, converted in to kVA by adopting a power factor of 0.9, shall be deemed as the Contract Demand till such time the consumer informs HPSEBL about the quantum to be considered as his Contact Demand.

U. HPSEBL shall provide suitable meters capable of recording the parameters for billing purposes as per the tariff structure under respective schedules.

V. 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:** means The Electricity Act, 2003 as amended from time to time;

2. **Average Power Factor:** means the ratio of kWh (kilo Watt hour) to the kVAh (kilo Volt Ampere hour) registered during a specific period;

3. **HPSEBL:** means the Himachal Pradesh State Electricity Board Limited;

4. **Commission**: shall mean the Himachal Pradesh Electricity Regulatory Commission;

5. **Connected Load**: expressed in kW, means aggregate of the manufacturer's rated capacities of all energy consuming devices or apparatus connected with the distribution licensee's service line, on the consumer's premises, which can be simultaneously used;

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**: expressed in kVA units means the maximum demand contracted by the consumer in the agreement with the licensee and in absence of such contract, the contract demand shall be determined in accordance with the relevant sections of this Tariff Order;

8. **Demand Charges**: for a billing period shall mean the amount chargeable based upon the recorded maximum demand in kVA or the contract demand; whichever is higher but up to a ceiling of Contract Demand and shall be calculated at the rates prescribed in this Tariff Order and shall be in addition to the energy charges and other fixed charges wherever applicable;

9. **Energy Charges**: expressed in Rs/kWh or Rs/kVAh for a billing period shall mean the amount chargeable in rupees based on the quantity of electricity supplied measured in (kWh or kVAh) and calculated at the rates prescribed in this Tariff Order. The Demand or other fixed charges, wherever applicable, shall be in addition to the energy charges;

   Note: During the actual number of days of billing in any period, the above mentioned parameters i.e. energy (in kWh or kVAh) and the prescribed respective rates of charges in the relevant schedule of tariff, alone, shall form the basis for calculation of energy charges and the licensee, based on the number of days of billing in excess or short of a month (of 28 or 29 or 30 or 31 days), shall not apply any other factor other than mentioned in para '9' above, that may alter or vary either of these parameters in any way.

10. **Maximum Demand:** means the highest load measured in kVA or kW at the point of supply of a consumer during consecutive period of 30 minutes or as laid down by the Commission, during the month;

11. **Rules:** means the Rules or Safety Regulations made or saved under the Act.

12. **Sanctioned Load**: means the load expressed in kW/kVA of the consumer, which the licensee has agreed to supply, from time to time, in the agreement;

13. **Schedule**: shall mean this Tariff Schedule;

14. **State**: means the State of Himachal Pradesh;

15. **Supplier**: shall mean the Himachal Pradesh State Electricity Board Limited;

16. For the purpose of this tariff order, the voltage wise categorization shall be as follows:

    a) **EHT** means the voltage, which exceeds 33,000 volts; under normal conditions subject, however, to the percentage variation allowed under electricity rules;
    b) **HT** means the voltage higher than 400 volts but not exceeding 33,000 volts under normal conditions, subject, however, to the percentage variation allowed under the electricity rules;
    c) **LT** means the voltage, not exceeding 230 volts between phase and neutral and 400 volts between phases under normal conditions, subject, however, to the percentage variation allowed under electricity rules.

Part-II : Character of Supply - Standard Supply Voltage/ Supply Voltage

Depending upon the minimum and maximum limits of contract demand (or connected load in case of domestic supply) the character of supply under the respective schedules shall be as per the relevant provisions of the Himachal Pradesh Electricity Supply Code, 2009, as amended from time to time. The relevant provisions are as below:

1. Standard Supply Voltage:

The standard supply voltage shall mean the standard voltage at which electricity shall be given to the consumer through a common or dedicated or joint dedicated feeder without payment of any lower voltage supply surcharge(LVSS). Depending upon the connected load(kW or MW), contract demand (kVA or MVA), nature of load and existence of a voltage (volts/kV) and phase in the relevant distribution system, the standard supply voltage for a consumer shall be as provided in clauses (a) and (b) of this para and para 3-

(a) The maximum limits of connected load (kW or MW) and contract demand (kVA or MVA) for the supply of power at a voltage, shall be as under-

Sr. No.	Standard Supply Voltage	Maximum Connected Load	Maximum Contract Demand
1.	Single phase 230 volts or three phase 415 volts or 2.2 kV; (for supplies not involving special category loads)	50 kW	50 kVA
2.	Three phase 11 kV or 22 kV; (for supplies not involving special category loads)	3 MW	2.2 MVA
3.	Three phase 33 kV	12 MW	10 MVA
4.	Three phase 66 kV	14 MW	12 MVA
5.	Three phase 132 kV or 220 kV	No limits	

Provided that where special category loads are involved, the standard supply voltage shall be 11 kV or 22 kV, as may exist on the relevant distribution system, if –

(i) the total connected load does not exceed 1 MW, irrespective of special category loads; or

(ii) the total quantum of connected load in respect of special category loads does not exceed 750 kW within the overall limit of total connected load upto 3 MW and total contract demand upto 2.2 MVA:

Provided further that, if neither of the limits given in the first proviso, in relation to supplies involving special category loads, are adhered to, the standard supply voltage shall be 33 kV or the appropriate higher voltage in accordance with the limits specified in this clause:

Provided further that where a consumer having connected load of not more than 50 kW is already getting supply at LT voltage immediately before commencement of the Himachal Pradesh Electricity Supply Code (First Amendment) Regulations, 2014, he shall continue to be covered under a LT standard voltage (i.e. single phase 230 volts or three phase 415 volts) irrespective of contract demand already sanctioned in his favour, so long as he does not further extend his connected load or contract demand beyond the specified limits of 50 kW or 50 kVA respectively:

Provided further that where a consumer is getting supply at a voltage higher than the standard supply voltage as per the said specified limits, he shall continue to get supply at such higher voltage without any rebate for higher voltage supply.

(b) Where the connected load or contract demand exceeds the relevant ceiling limit specified in clause (a), the appropriate higher voltage at which both such limits can be adhered to, shall be considered as standard supply voltage and there shall be no minimum limits for supply of power at a particular voltage.

2. Supply at Lower Voltage:

Where the consumer seeks supply of power at a voltage lower than the standard supply voltage as per para (1), the licensee shall supply power at such lower voltage subject to the maximum limits of connected load and contract demand as specified in this para; payment of lower voltage supply surcharge (LVSS) by the consumer at the rates given in the tariff order applicable from time to time; and other conditions, as may be relevant, specified in this para or in para (3) or elsewhere in the Supply Code :-

Sr. No.	Supply Voltage	Description	Maximum Connected Load	Maximum Contract Demand
1.	11 kV (for supplies not involving special category loads)	(a) If 22 kV or 33 kV voltage level exists in the relevant distribution system.	5 MW	4 MVA
		(b) If 22 kV or 33 kV voltage level does not exist in the relevant distribution system.	6 MW	5 MVA
2.	22 kV (for supplies not involving special category loads)	(a) If 33 kV voltage level exists in the relevant distribution system.	6 MW	5 MVA
		(b) If 33 kV voltage level does not exist in the relevant distribution system.	7 MW	5.5 MVA
3.	33 kV	(a) If 66 kV voltage level exists in the relevant distribution system.	15 MW	12 MVA
		(b) If 66 kV voltage level does not exist in the relevant distribution system.	18 MW	14 MVA
4.	66 kV	(a) Through a common or dedicated or joint dedicated feeder	18 MW	14 MVA
		(b) Through a dedicated or joint dedicated feeder	30 MW	24 MVA

Provided that all such supplies, excepting the same at Sr. No.4(a), shall be given through dedicated or joint dedicated feeders only and that in case of Sr. No. 4(a) the supply shall be given through a common or dedicated or joint dedicated feeder:

Provided further that in case of supply involving special category loads, the same shall be given at 11 kV or 22 kV subject to further conditions that the total connected load in respect of the special category loads does not exceed 1.5 MW within the total connected load upto 3 MW and contract demand upto 2.2 MVA and that the supply is to be given through a dedicated feeder or a joint dedicated feeder emanating from EHV sub-station:

Provided further that if the conditions given in second proviso, in relation to the supplies involving special category loads, are not adhered to, the supply shall be given at 33 kV or at appropriate higher voltage depending on the total connected load and contract demand:

Provided further that the provisions of this para, shall be further subject to the following condition:-

(i). that the voltage regulation limits shall have to be adhered to while deciding the supply arrangements;

(ii). that in case of special category loads and other such loads which can cause disturbances in the power distribution system, the consumer shall provide suitable protection equipments as per the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 and other prudent practices to adequately insulate the distribution system from the disturbance caused by such loads;

(iii). that the consumer already getting supply at higher voltage as compared to the standard supply voltage or the limits given in this para, shall not be entitled to any higher voltage supply rebate; and

(iv). that in cases of joint dedicated feeder, the limits of maximum connected load and maximum contract demand as per this para shall be applicable for the summation of the connected loads and contract demands of both the consumers.

Explanation.- For the purposes of this para,-

(a) "dedicated feeder" means the electric supply line emanating from the sub-station of the licensee through which electricity is, or is intended to be, supplied to a single consumer; and

(b) "joint dedicated feeder" means the electric supply line emanating from the sub-station of the licensee through which electricity is, or is intended to be, supplied to two consumers.

3. (i) Where the contract demand has not been applied for or sanctioned, the limit corresponding to 90% of the connected load (in kW) converted into kVA by adopting power factor of 0.9 shall be deemed as the contract demand.

(ii) The supply shall be made at the minimum voltage level at which all the relevant limits and conditions are adhered to. However, if the consumer opts for supply of power at a voltage higher than the standard supply voltage, the licensee shall allow the same excepting the cases in which there may be some constraint.

(iii) Where the connected load or contract demand is to be enhanced, the standard supply voltage under para (1) and the supply voltage under para (2) shall be redetermined as per the provisions under the said paras based on enhanced connected load and enhanced contract demand.

Explanation.- For the purposes of paras (1) and (2), “special category loads” means furnace loads and mass induction heating loads and shall also include any other load as the Commission may, after taking into consideration electrical characteristics and its impact on the distribution system, by order, declare it to be a special category load.

PART-III : Schedule of Tariff

SCHEDULE - DOMESTIC SUPPLY (DS)

1 Applicability

This schedule is applicable to the following consumers:

a) 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;

b) Religious places with connected load up to 5 kW;

c) Orphanages, homes for old people and homes for destitute;

d) Working Women Hostels, Hostels attached to the educational institutions if supply is given separately to each hostel and the electricity charges are recovered from the students based on actual consumption;

e) Leprosy Homes run by charity and un-aided by the Government;

f) Panchayat Ghars with connected load up to 5 kW;

g) Patwar Khanas and Kanungoo Bhawans (Government Buildings only) with connected load up to 5 kW;

h) Community gausadans managed by institutions/ government with connected load up to 5kW;

i) Monasteries;

j) “Home Stay Units” in rural areas duly registered with the District Tourism Development Officer; and

k) Offices of the Himachal Pradesh Senior Citizen Forum.

Note:

(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 supply to tenants, other flats, etc. is strictly prohibited.

(iii) No compounding will be permissible. For residential societies which 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 3500

*units, the first 1250 (125*10) units would be charged at Rs 3.70 per kWh, the next 1750 (175*10) at Rs 4.60 per unit and the balance 500 units at Rs. 5.10 per unit. Consumer service charge shall be Rs. (50*10).*

2 **Character of Service:** *Applicable as per the relevant provisions under Part – II.*

3 **Single Part Tariff**

A) Consumers Other than Pre-Paid Metered

a) Consumer Service Charge (Charges-1)

Description	Consumer Service Charge (Rs./Month)
Lifeline consumers and Consumers in Tribal & Difficult Areas	30.00
Other consumers	
0-125	50.00
126-300	50.00
Above 300	50.00

b) Energy Charge

Description	Slabs (kWh per month)	Energy Charge (Rs./kWh)
Lifeline consumers	0-60	2.85
Other consumers	0-125	3.70
	126-300	4.60
	Above 300	5.10

Note:

1. *In the case of **Lifeline consumers** the concessional tariff will be available for use of electricity by these families up to a maximum of 60 units per month. In case this limit is exceeded, the normal domestic tariff slabs of 0-125; 126-300; and above 300 kWh per month respectively will apply.*
2. *In the case of Domestic Category consumers with consumption in the slabs 0-125, 126-300; and above 300 kWh per month respectively, the slab rates for 0-60 kWh per month shall* not *apply.*

B) Energy Charge [Prepaid *Meter*]

Description	Slabs (kWh per month)	Energy Charge (Rs./kWh)
Prepaid meter consumers	Entire consumption	4.60

Note:

1. *Subsidy given by GoHP for second slab i.e. 126-300 kWh 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 placed in the slab of 126-300 kWh per month and the subsidy applicable for the slab of 126-300 kWh shall also apply to prepaid meter consumers.*
2. *Prepaid meter consumer shall be charged energy charges only and no other fixed charges i.e. meter rent and service charges shall be applicable to such consumers.*

4. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

5. **Lower Voltage Metering Surcharge (LVMS)*:*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

6. ***Late Payment Surcharge (LPS):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

7. ***Night Time Concession (NTC):*** *Not Applicable.*

8. ***Power Factor Surcharge (PFS):*** *Not Applicable.*

9. ***Disturbing* Load Penalty (DLP):** *Applicable as per the provisions under 'Part-1 General Conditions of Tariff'.*

SCHEDULE - NON-DOMESTIC NON-CO*MM*ERCIAL SUPPLY (NDNCS)

1. Applicability

This schedule is applicable to the following consumers:

a) Government and semi Government offices;

b) Educational Institutions viz. Schools, Universities, ITIs, Colleges, Centre for Institute of Engineers, 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) Sainik and Govt. Rest Houses, Anganwari workers training centers, Mahila mandals, village community centres;

e) Government Hospitals, primary health centers, dispensaries and veterinary hospitals;

f) Panchayat Ghars with connected load greater than 5kW;

g) Patwar Khanas and Kanungoo Bhawans (Government Buildings only) with connected load greater than 5kW;

h) Sarais and Dharamsalas run by Panchayats and Municipal Committees or by voluntary organizations.

i) Community gausadans managed by Institutions/ Government with connected load above 5kW

j) Office of Lawyers and Government recognized Non-Government Organizations (NGOs)

Note: *In the case of residences attached to the Institutions, as at (b), (f) and (g) above, the same shall be charged at the Domestic Supply (DS) tariff, in cases where the consumer seeks a separately metered connection for the residential portion.*

2. Character of service: *Applicable as per the relevant provisions under Part – II.*

3. Single Part Tariff for contract demand ≤ 20 kVA

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	100.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	4.95

4. Two Part Tariff for contract demand > 20 kVA

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	Nil

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	4.65

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	140.00

Demand charges would be levied on the actual maximum recorded demand in a month in any 30 minute interval in a month or 90% of the contract demand, whichever is higher but up to a ceiling of Contract Demand. Contract Demand Violation Charges shall be applicable beyond such ceiling.

Note:

a. *HPSEBL shall continue with the existing practice of installation of tri-vector meters capable of reading parameters applicable for two-part tariff, for all consumers in this category and having connected load of more than 20 kW, even though some of these consumers may be covered in single part tariff.*

b. *The present practice of meter reading through MRI/ AMR shall be continued for all consumers with connected load above 20kW irrespective of applicability of single/ two part tariff.*

5. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

6. ***Lower Voltage Metering Surcharge (LVMS):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

7. ***Late Payment Surcharge (LPS):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

8. ***Contract Demand Violation Charge:*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

9. ***Night Time Concession (NTC):*** *Not Applicable.*

10. ***Power Factor Surcharge (PFS):*** *Not Applicable.*

11. ***Disturbing Load Penalty (DLP):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

12. ***Peak Load Charges (PLC):*** *Not Applicable.*

<u>SCHEDULE – COMMERCIAL SUPPLY (CS)</u>

1 Applicability

This schedule is applicable to consumers for lights, fans, appliances like pumping sets, central air conditioning plants, cold storages, 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, shopping malls and multiplexes.

This schedule shall also include all other categories which are not covered by any other tariff schedule.

<u>Note:</u> *Resale of electricity to tenants, adjoining houses and to other parties is strictly prohibited.*

2. Character of service: *Applicable as per provisions under Part – II.*

3. Single Part Tariff for contract demand ≤ 20 kVA

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	100.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	5.05

4. Two Part Tariff for contract demand > 20 kVA

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	
20 – 100 kVA	Nil
Above 100 kVA	Nil

b) Energy Charge (Charges-2)

Contract Demand	**Energy Charge (Rs./kVAh)**
>20 kVA ≤ 100 kVA (More than 20 kVA but upto 100 kVA)	4.80
Above 100 kVA	4.70

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	
>20 kVA ≤ 100 kVA (More than 20 kVA but upto 100 kVA)	110.00
Above 100 kVA	170.00

Demand charges would be levied on the actual maximum recorded demand in a month in any 30 minute interval in a month or 90% of the contract demand, whichever is higher but up to a ceiling of Contract Demand. Contract Demand Violation Charges shall be applicable beyond such ceiling.

Notes:

a) *HPSEBL shall continue with the existing practice of installation of tri-vector meters capable of reading parameters applicable for two-part tariff, for all consumers in this category and having connected load of more than 20 kW even though some of these consumers may be covered under single part tariff.*

b) *The present practice of meter reading through MRI/ AMR shall be continued for all consumers with connected load above 20kW irrespective of applicability of single/ two part tariff.*

5 **Lower Voltage Supply Surcharge (LVSS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

6. ***Lower Voltage Metering Surcharge (LVMS):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

7. ***Late Payment Surcharge (LPS):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

8. ***Contract Demand Violation Charge:*** *Applicable as specified under 'Part-1 General Conditions of Tariff'.*

9. ***Night Time Concession (NTC):*** *Not Applicable.*

10. ***Power Factor Surcharge (PFS):*** *Not Applicable.*

11. ***Disturbing Load Penalty:*** *Applicable as specified under 'Part-1 General Conditions of Tariff' of this Annexure I.*

12. ***Peak Load Charges (PLC):*** *Not Applicable.*

SCHEDULE - *SMALL INDUSTRI*AL POWER SUPPLY (SIP)

1. Applicability

This schedule is applicable to Industrial consumers with contract demand not exceeding 50 kVA including pumps (other than irrigation pumping), tokas, poultry farms and sheds, cane crushers, Atta Chakkis, and also for supply to Information Technology Industry (limited only to IT Parks recognised by the State/Central Government). Industrial type of Agricultural loads with connected load falling in the abovementioned range and not covered by Schedule "IDWPS" shall also be charged under this schedule.

2. Character of service: *Applicable as per provisions under Part-II.*

3. Single Part Tariff for contract demand ≤ 20 kVA

a. Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	110.00

b. Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	4.70

4. Two Part Tariff for contract demand > 20 kVA ≤ 50 kVA

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	Nil

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	4.50

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	100.00

Demand charges would be levied on the actual maximum recorded demand in a month in any 30 minute interval in a month or 90% of the contract demand, whichever is higher but up to a ceiling of Contract Demand. Contract Demand Violation Charges shall be applicable beyond such ceiling.

Note:

a. *HPSEBL shall not only continue with the existing practice of installation of tri-vector meters capable of recording the relevant parameters applicable for two-part tariff for* *different time blocks of the day, for all consumers in this category having connected load of more than 20 kW, but shall also provide such meters for new/ existing connections under single part tariff wherever the consumer expresses his intention to use power during peak load hours.*

b. *The present practice of meter reading through MRI/ AMR shall be continued for all consumers under this category with connected load above 20kW irrespective of applicability of single/ two part tariff.*

5. Peak load charges (PLC)

Description	Additional Charges on Average Demand * (Rs./kVA/month)	Energy Charge for consumption during peak load hours
Contract Demand ≤ 20 kVA	Nil	1.5 times of the normal per kWh charges
Contract Demand > 20 kVA	100.00	Rs. 6.40/kVAh

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* These additional charges shall be charged on the average demand during peak load hours for the billing month, which shall be calculated in kVA by dividing the total kVAh consumption during peak load hours of the month by a fixed figure of 105.

6. Lower Voltage Supply Surcharge (LVSS): *Applicable as per provisions under ‘Part-1 General Conditions of Tariff’.*

7. Lower Voltage Metering Surcharge (LVMS): *Applicable as per provisions under ‘Part-1 General Conditions of Tariff’.*

8. Late Payment Surcharge (LPS): *Applicable as per provisions under ‘Part-1 General Conditions of Tariff’.*

9. Contract Demand Violation Charge: *Applicable as per provisions under ‘Part-1 General Conditions of Tariff’.*

10. Night Time Concession (NTC): *Applicable for the consumers having Contract Demand of more than 20kVA, as per provisions under ‘Part-1 General Conditions of Tariff’, at the following rates:*

(i) 80 paise/kVAh for consumption during night hours for the month of June, July and August 2016;

(ii) 40 paise/kVAh for other months.

11. Power Factor Surcharge (PFS): *Applicable as per provisions under ‘Part-1 General Conditions of Tariff’.*

12. Disturbing Load Penalty (DLP): *Not Applicable.*

13. Factory lighting and 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:

a) During Normal times and night time: Normal Rate subject to the condition that the night time concession as per 10 above shall be given on consumption during night time.

b) During peak load hours: The rates (demand and energy) applicable for peak load hours shall be charged.

If supplies for colony and/or its residences are taken separately then the same shall be charged as per the relevant consumer categories of this schedule of tariff.

SCHEDULE - MEDIUM INDUSTRIAL POWER SUPPLY (MIP)

1. Applicability

This schedule is applicable to Industrial consumers with contract demand above 50 kVA but not exceeding 100 kVA including pumps (other than irrigation pumping), tokas, poultry farms and sheds, cane crushers, Atta Chakkis, and also for supply to Information Technology Industry (limited only to IT Parks recognised by the State/Central Government). Industrial type of Agricultural loads with connected load falling in the abovementioned range and not covered by Schedule "IDWPS" shall also be charged under this schedule.

2. Character of service: *Applicable as per provisions under Part – II.*

3. Two Part Tariff

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	Nil

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	4.50

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	120.00

Demand charges would be levied on the actual maximum recorded demand in a month in any 30 minute interval in a month or 90% of the contract demand, whichever is higher but up to a ceiling of Contract Demand. Contract Demand Violation Charges shall be applicable beyond such ceiling.

4. Peak load charges (PLC)

Description	***Additional Charges on Average Demand**	**Energy Charge**
	(Rs./kVA/month)	**(Rs./kVAh)**
> 50 kVA	100.00	Rs. 6.20

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* These additional charges shall be charged on the average demand during peak load hours for the billing month, which shall be calculated in kVA by dividing the total kVAh consumption during peak load hours of the month by a fixed figure of 105.

5. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

6. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

7. **Late Payment Surcharge (LPS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

8. **Contract Demand Violation Charge:** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

9. **Night Time Concession (NTC):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff', at the following rates:*

   (i) 80 paise/kVAh for consumption during night hours for the month of June, July and August 2016;

   (ii) 40 paise/kVAh for other months.

10. **Power Factor Surcharge (PFS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

11. **Disturbing Load Penalty (DLP):** *Not Applicable.*

12. **Factory lighting and 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:*

    a) During Normal times and night time: Normal Rate subject to the condition that the night time concession as per 9 above shall be given on consumption during night time.

    b) During peak load hours: The rates (demand and energy) applicable for peak load hours shall be charged.

    If supplies for colony and/or its residences are taken separately then the same shall be charged as per the relevant consumer categories of this schedule of tariff.

SCHEDULE - LARGE INDUSTRIAL POWER SUPPLY (LIPS)

1. Applicability

This schedule is applicable to all other industrial power consumers with contract demand exceeding 100 kVA including the Information Technology industry (limited only to IT parks recognized by the State/Central Govt.) and not covered by schedule "IDWPS".

2. Character of Service: *Applicable as per provisions under Part – II.*

3. Two Part Tariff

a) Consumer Service Charge (Charges-1)

Description	Consumer Service Charge (Rs/month)
EHT	Nil
HT-1 (Contract Demand up to and including 1MVA)	Nil
HT-2 (Contract Demand above 1 MVA)	Nil

b) Energy charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
EHT	4.10
HT-1 (Contract Demand up to and including 1MVA)	4.50
HT-2 (Contract Demand above 1 MVA)	4.20

c) Demand Charge (Charges-3)

Description	Demand Charge (Rs/kVA/month)
EHT	425.00
HT-1 (Contract Demand up to and including 1MVA)	250.00
HT-2 (Contract Demand above 1 MVA)	400.00

Note: Demand charges would be levied on the actual maximum recorded demand in a month in any 30 minute interval in a month or 90% of the contract demand, whichever is higher but up to a ceiling of Contract Demand. Contract Demand Violation Charges shall be applicable beyond such ceiling.

4. Peak load charges (PLC)

Description	*Additional Charges on Average	Energy Charge

	Demand (Rs/kVA/month)	(Rs./kVAh)
EHT	100.00	6.00
HT-1	100.00	6.20
HT-2	100.00	6.20

. * These additional charges shall be charged on the average demand during peak load hours for the billing month, which shall be calculated in kVA by dividing the total kVAh consumption during peak load hours of the month by a fixed figure of 105.

5. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*
6. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*
7. **Late Payment Surcharge (LPS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*
8. **Contract Demand Violation Charge:** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*
9. **Night Time Concession (NTC):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff' of this Annexure I at following rates:-*

   a) For HT-1 category: 80 *paise/kVAh for the month of June, July and August 2016; and*
   40 paise/kVAh for other months.

   b) For HT-2 and EHT categories*: 40 paise/kVAh for the month of June, July and August 2016; and*
   20 paise/ kVAh for other months.
10. **Power Factor Surcharge (PFS):** *Not Applicable*.
11. **Disturbing Load Penalty (DLP):** *Not Applicable*
12. **Factory lighting and 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:
    a) During Normal times and night time: Normal Rate subject to the condition that the night time concession as per 9 above shall be given on consumption during night time.
    b) During peak load hours : The rates (demand and energy) applicable for peak load hours shall be charged.

If supplies for colony and/or its residences are taken separately then the same shall be charged as per the relevant consumer categories of this schedule of tariff.

SCHEDULE - IRRIGATION AND DRINKING WATER PUMPING SUPPLY (IDWPS)

1 Applicability

This schedule is applicable to connections for water and irrigation pumping and also covers all consumption for bonafide Pump House lighting. This schedule is also applicable to Private Irrigation loads in individual/ society's names, green houses, poly houses, mushroom growing, processing facilities for agriculture, fisheries, horticulture, floriculture and sericulture etc. where all such activities are undertaken by agricultural land holders and temporary agricultural loads such as wheat threshers and paddy threshers.

Since this schedule of tariff covers 'processing facilities for agriculture', all consumers having processing facilities relating to agriculture such as seed treatment, etc. shall also be covered under this schedule. However, the consumers involved in manufacturing, processing and service sector activities based on agriculture produce such as mushroom processing, etc. shall be covered under relevant industrial schedule of tariff.

2. Character of service: *Applicable as per provisions under Part – II of this Annexure I.*

3 Single Part Tariff for contract demand ≤20 kVA

a) Consumer Service Charge (Charges-1)

Description	Consumer Service Charge (Rs/month)
All consumers	70.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	3.70

4. Two Part Tariff for contract demand > 20 kVA

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	
LT	Nil
HT	Nil
EHT	Nil

b) Energy Charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
LT	4.85
HT	4.45
EHT	4.10

c) Demand Charge (Charges-3)

Maximum Demand Charge (Rs/kVA/month)	
LT	50.00
HT	400.00
EHT	400.00

Demand charges would be levied on the actual maximum recorded demand in a month in any 30 minute interval in a month or 90% of the contract demand, whichever is higher but up to a ceiling of Contract Demand. Contract Demand Violation Charges shall be applicable beyond such ceiling.

Notes:

a) *HPSEBL shall not only continue with the existing practice of installation of tri-vector meters capable of recording the relevant parameters applicable for two-part tariff for different time blocks of the day, for all consumers in this category having connected load of more than 20 kW, but shall also provide such meters for new/ existing connections under single part tariff wherever the consumer expresses his intention to use power during peak load hours.*

b) *The present practice of meter reading through MRI/ AMR shall be continued for all consumers with connected load above 20kW irrespective of applicability of single/ two part tariff.*

5. Peak load charges (PLC)

Description	*Additional Charges on Average Demand (Rs./kVA/month)	Energy Charges (Rs./kVAh)
LT	100	6.40
HT	100	6.20
EHT	100	6.00

* These additional charges shall be charged on the average demand during peak load hours for the billing month, which shall be calculated in kVA by dividing the total kVAh consumption during peak load hours of the month by a fixed figure of 105.

6. Lower Voltage Supply Surcharge (LVSS): *Applicable as specified under 'Part-1 General Conditions of Tariff'.*

7. *Lower Voltage Metering Surcharge (LVMS):* *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

8. *Late Payment Surcharge (LPS):* *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

9. *Contract Demand Violation Charge:* *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

10. *Night Time Concession (NTC):* *Applicable as per provisions under 'Part-1 General Conditions of Tariff', at the following rates:*

(i) 40 paise/kVAh for consumption during night hours for the month of June, July and August 2016;

(ii) 20 paise/kVAh for other months.

11. ***Power Factor Surcharge (PFS): Applicable as per provisions*** *under 'Part-1 General Conditions of Tariff'.*

12. ***Disturbing Load Penalty (DLP):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

13. **Factory lighting and 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:

    a) During Normal times and night time: Normal Rate subject to the condition that the night time concession as per 9 above shall be given on consumption during night time.

    b) During peak load hours : The rates (demand and energy) applicable for peak load hours shall be charged.

If supplies for colony and/or its residences are taken separately then the same shall be charged as per the relevant consumer categories of this schedule of tariff.

SCHEDULE - BULK SUPPLY (BS)

1 Applicability

This schedule is applicable to general or mixed loads to M.E.S and other Military establishments, Central PWD Institutions, Construction power for Hydro-Electric projects, Hospitals, Departmental/private colonies, group housing societies, 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.

2. Character of service: *Applicable as per provisions under Part – II.*

3. Two Part Tariff

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	
LT	Nil
HT	Nil
EHT	Nil

b) Energy Charge (Charges-2)

Description	**Energy Charge (Rs./kVAh)**
LT	5.00
HT	4.50
EHT	4.10

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	
LT	250.00
HT	350.00
EHT	350.00

Demand charges would be levied on the actual maximum recorded demand in a month in any 30 minute interval in a month or 90% of the contract demand, whichever is higher but up to a ceiling of Contract Demand. Contract Demand Violation Charges shall be applicable beyond such ceiling.

4. Lower Voltage Supply Surcharge (LVSS): *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

5. *Lower Voltage Metering Surcharge (LVMS* *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

6. *Late Payment Surcharge (LPS* *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

7. ***Contract Demand Violation Charge:*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

8. ***Night Time Concession (NTC):*** *Not applicable.*

9. ***Power Factor Surcharge (PFS):*** *Not Applicable.*

10. ***Disturbing* Load Penalty (DLP):** *Not Applicable.*

11. ***Peak Load* Charges (PLC):** *Not Applicable.*

SCHEDULE - STREET LIGHTING SUPPLY (SLS)

1 Applicability

This schedule is applicable for Street Lighting system including traffic control signal systems on roads and Park lighting in Municipalities, Nagar Panchayats, SADA areas and Panchayats.

2 Character of service: *Applicable as per provisions under Part – II of this Annexure I.*

3. Single Part Tariff

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	100.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	4.95

4. Line maintenance and lamp renewal charges

Where the bulbs, tubes etc. are to be provided and replaced at the cost of the HPSEBL, Line Maintenance and lamp renewal charges shall be charged in addition to the energy charges. These charges shall be charged at the following rates:

Description	**Charge** (Rs./point/month)
Fluorescent Tube 4' 1x40 W	35
Fluorescent Tube 4' 2x40 W	42
Fluorescent Tube 2' 1x20 W	31
Fluorescent Tube 2' 2x20 W	45
MVL up to 125 W	49
MVL above 125 W	91
SVL up to 150 W	68
SVL above 150 W	105
CFL	63
T-5 Tube light	48
Metal Halide up to 150 W	102
Metal Halide above 150 W	140
LED	150
High Mast Light	No. of lamps of any of above category x charges applicable for each point of such category

Note:

i) *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..*

ii) *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 *HPSEBL, Line Maintenance and lamp renewal charges shall be as follows:*

Description	**Charge (**Rs./point/month)
Fluorescent Tube 4' 1x40 W	25
Fluorescent Tube 4' 2x40 W	30
Fluorescent Tube 2' 1x20 W	25
Fluorescent Tube 2' 2x20 W	30
MVL up to 125 W	35
MVL above 125 W	35
SVL up to 150 W	35
SVL above 150 W	35
CFL	25
T-5 Tube light	35
Metal Halide up to 150 W	35
Metal Halide above 150 W	35
LED	35
High Mast Light	No. of lamps of any of above category x charges applicable for each point of such category
Any other special fixture not covered above	35

5. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

6. ***Lower Voltage Metering Surcharge (LVMS):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

7. ***Late Payment Surcharge (LPS):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

8. ***Night Time Concession (NTC):*** *Not Applicable.*

9. ***Power Factor Surcharge (PFS):*** *Not Applicable.*

10. ***Disturbing Load Penalty (DLP):*** *Not Applicable.*

SCHEDULE - TEMPORARY METERED SUPPLY (TMS)

1 Applicability

This schedule is applicable to all loads of temporary nature including exhibitions, touring talkies, circuses, fairs, melas, marriages, festivals, temporary supply for construction purposes including civil works by Government departments and other similar purposes for temporary needs only.

2 Character of service: *Applicable as per provisions under Part – II of this Annexure I.*

3 Single Part Tariff for contract demand ≤ 20 kVA

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	200.00

b) Energy Charge (Charges-2))

Energy Charge (Rs./kWh)	7.80

4 Two Part Tariff for contract demand > 20 kVA

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	Nil

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	6.30

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	400.00

5. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*
6. ***Lower Voltage Metering Surcharge (LVMS):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*
7. ***Late Payment Surcharge (LPS):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*
8. ***Contract Demand Violation Charge:*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*
9. ***Night Time Concession (NTC):*** *Not Applicable.*
10. ***Power Factor Surcharge (PFS):*** *Not Applicable.*
11. ***Disturbing Load Penalty (DLP):*** *Not Applicable.*

12. ***Peak Load Charges (PLC):*** *Not Applicable.*

SCHEDULE – RAILWAY TRACTION

1 Applicability

This schedule is applicable to Railways for Traction loads.

2 Character of service

Standard Supply Voltage (AC 50 Hz)	≥ 66kV

3 Two Part Tariff for contract demand > 20 kVA

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	Nil

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	4.70

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	400.00

4. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*
5. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*
6. ***Late Payment Surcharge (LPS):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*
7. ***Contract Demand Violation Charge:*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*
8. ***Night Time Concession (NTC):*** *Not applicable.*
9. ***Power Factor Surcharge (PFS)*****:** *Not Applicable.*
10. **Disturbing Load Penalty (DLP):** *Not Applicable.*
11. **Peak Load Charges (PLC):** *Not Applicable*.

Appendix-A : Schedule of General and Service Charges

S. No.	Description	Approved by the Commission
1. Particulars:		
A. Meter Inspection and Testing Charges (Challenge of Correctness of Meter by Consumer)		
(i)	Single Phase	Rs. 55/- per meter
(ii)	Poly phase (LT)	Rs. 225/-
(iii)	HT or special meter (MDI or Trivector meter)	Rs. 550/-
		Rs. 1100/- with CT/PT combined unit
Note:- This amount shall be deposited by the consumer along with his application for the inspection of the meter and will be refunded to him in case the meter is not found to be correct within the prescribed limits.		
B. Testing Charges of Transformers or other equipment of consumer or private party		
(I)	Protective Relays:	
	Testing including current and Time Setting of protective relays	Rs. 1100/- per Relay
(II)	Power and Distribution Transformers	
(a)	Insulation resistance tests of winding	Rs. 770/- per Transformer
(b)	General checking of breather and other accessories	Rs. 400/- per Transformer
(c)	Dielectric strength test of oil	Rs. 220/- per Transformer
(d)	Testing of buchuolz relay and temperature indicators functioning	Rs. 800/- each
(III)	Circuit Breaker 400 volts and 11/33kV	
	General checking of breaker and testing of the tripping mechanism	Rs. 800/- each
(IV)	Current transformer and Potential transformers and meters:	
(a)	Testing of single phase LT current transformer	Rs. 165/- each
(b)	Current Testing of 3 phase LT current transformer	Rs. 440/- each
(c)	Testing of single phase 11kV & 33kV CTs	Rs. 550/- each
(d)	Testing of three phase 11kV & 33kV CTs	Rs. 1100/- each
(e)	Testing & recalibration of single phase LT energy meter	Rs. 90/- per meter
(f)	Testing & recalibration of three phase energy meter w/o CT	Rs. 330/- per meter
(g)	Testing & recalibration of three phase energy meter With CT	Rs. 660/- per meter
(h)(i)	Testing & recalibration of HT/EHT metering equipment	Rs. 2000/- per meter
(h)(ii)	With CT/PT combined unit	Rs. 2500/- per unit
(i)	Testing & recalibration of maximum demand indicator	Rs. 660/- per meter
(j)	Testing & adjustment of voltmeter/ ammeter	Rs. 165/- each
(V)	Checking of Capacitors (other than initial checking) on consumer's request:	
(a)	At 400 volts	Rs. 110/- per job
(b)	At 11 kV and above	Rs. 110/- per job
(VI)	General	
(a)	Dielectric strength of oil of various equipment	Rs. 220/- per sample

<table>
<tr><th>S. No.</th><th colspan="2">Description</th><th>Approved by the Commission</th></tr>
<tr><td>(b)</td><td colspan="2">Earth test of substation</td><td>Rs. 220/- per earth</td></tr>
<tr><td>(c)</td><td colspan="2">Insulation resistance of cables/insulation of various equipment /installations</td><td>Rs. 220/- per cable/ equipment</td></tr>
<tr><td colspan="4">C. Testing charges at the time of routine periodical inspections or first test and inspection of new installation which includes protection and control of complete sub-station (including Transformers, Capacitor Banks, Meter and Metering equipment having connected load >50 kW and/or supply voltage 11 kV or higher) and inclusive of all manpower required
(Note1: In accordance with Regulation 31 of Central Electricity Authority (Measures Relating to Safety and Electricity Supply) Regulations, 2010, the supplier shall either test the installation himself or accept the test results submitted by the consumer when the same has been duly signed by the licensed by the licensed Electrical Contractor.
Note 2: In accordance with Regulation 30 of Central Electricity Authority (Measures Relating to Safety and Electricity Supply) Regulations, 2010, where an installation is already connected to the supply system of the supplier, every such installation shall be inspected and tested at intervals not exceeding five (5) years (known as routine periodical inspections and testing).</td></tr>
<tr><td>(i)</td><td>11/22 kV</td><td rowspan="5">Substations</td><td>Rs. 10,000/-</td></tr>
<tr><td>(ii)</td><td>33 kV</td><td>Rs. 15,000/-</td></tr>
<tr><td>(iii)</td><td>66 kV</td><td>Rs. 50,000/-</td></tr>
<tr><td>(iv)</td><td>132 kV</td><td>Rs. 1,00,000/-</td></tr>
<tr><td>(v)</td><td>220 kV</td><td>Rs. 3,00,000/-</td></tr>
<tr><td>(vi)</td><td>SHP Capacity (up to 2.5 MW)</td><td rowspan="2">Small Hydro Plants</td><td>Rs. 25,000/-</td></tr>
<tr><td>(vii)</td><td>SHP Capacity (greater than 2.5 MW)</td><td>Rs. 50,000/-</td></tr>
<tr><td>D.</td><td colspan="2">Visiting charges</td><td></td></tr>
<tr><td></td><td colspan="2">Visiting charges for Officers and staff to Consumers premises for testing of equipments(other than C above)</td><td>Rs. 3500/- per day for complete team PLUS actual journey charges as per out turn of vehicle</td></tr>
<tr><td colspan="4">Remarks: -</td></tr>
<tr><td colspan="4">(i) The charges mentioned under ‘C’ above shall be charged for the actual Periodical Inspection done and shall be on per inspection basis only.</td></tr>
<tr><td colspan="4">(ii) Visiting charges mentioned under D above include the visiting charges of M&T staff as well.</td></tr>
<tr><td colspan="4">(iii) Charges for HPSEBL'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.</td></tr>
<tr><td colspan="4">(iv) Complete testing of 11kV, 22kV and 33 kV connections as per item C above shall be conducted before the release of HT connection.</td></tr>
<tr><td colspan="4">(v) Test reports on suitable forms will be issued by the operation sub-divisions/M&T Lab, which will be produced by the prospective consumer along with the wiring Contractor's test report.</td></tr>
<tr><td colspan="4">(vi) 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 arranged by the operation sub-division/division in the nearest M&T Lab., or by arranging the visit of the M&T staff to the consumer's premises.</td></tr>
<tr><td colspan="4">vii) 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</td></tr>
<tr><td colspan="4">viii) 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.</td></tr>
</table>

S. No.	Description	Approved by the Commission
2. Changing the position of meter at the request of consumer		
(i)	Single phase	Rs. 45/-
(ii)	Poly phase (LT) without CT	Rs. 220/-
	Poly phase (LT) with CT	Rs. 440/-
(iii)	HT or special meter	Rs. 1100/-
3. Resealing charges		
(i)	Meter cupboard	Rs. 25/-
(ii)	Meter Cover or Terminal Cover (single phase)	Rs. 110/- for meter terminal cover and 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 and full cost of the meter where M&T seal is found broken.
(iv)	Cutout (where it has been independently sealed)	Rs. 25/-
(v)	Maximum demand indicator	Rs. 550/-
(vi)	Potential fuse(s) time switch/CT chamber	Rs. 550/-
4. Monthly meter/equipment rentals:		
(i)	Single phase energy meter low tension	Rs. 15/- per month
(ii)	Polyphase energy meter low tension (up to 50 Amps.)	Rs. 30/- per month
(iii)	a) Polyphase low tension meters with CTs (up to 20 kW)	Rs. 35/- per month
	b) Polyphase low tension meters with CTs(above 20 kW)	Rs. 50/- per month
(iv)	Polyphase 11kV meter with CT/PT without any breaker of HPSEBL	Rs. 550/- per month
(v)	Polyphase 11kV meter with CT/PT with one 11kV breaker of HPSEBL	Rs. 4000/- per month
(vi)	Single phase Pre Paid energy meter low tension	NIL
(vi)	Polyphase 33,22 kV meter with CT/PT without any 33, 22 kV breaker of HPSEBL	Rs. 800/- per month
(vii)	Polyphase 33,22 kV meter with CT/PT with one 33, 22 kV breaker of HPSEBL	Rs. 7000/- per month
(viii)	Polyphase meter with CT/PT with or without circuit breaker of voltage 66 kV and above	
(a)	Polyphase 66 kV with CT/PT without any 66 kV circuit breaker of HPSEBL	Rs. 1300/- per month
(b)	Polyphase 66 kV with CT/PT with 66 kV circuit breaker of HPSEBL	Rs. 13500/- per month
(c)	Polyphase 132 kV with CT/PT without any 132 kV circuit breaker of HPSEBL	Rs. 2500/- per month
(d)	Polyphase132 kV with CT/PT with 132 kV circuit breaker of HPSEBL	Rs. 20000/- per month

S. No.	Description	Approved by the Commission
5. Reconnection of supply		
(I)	Small Industrial Power Supply consumers (contract demand< = 50 kVA)	Rs. 100/-
(ii)	Medium Industrial Power Supply consumers (contract demand > 50 kVA and < = 100 kVA)	Rs. 500/-
(iii)	Large Industrial Power Supply consumers (contract demand > 100 kVA)	Rs. 1000/-
(iv)	All other categories of consumers	Rs. 40/-
6. Fuse replacement:		
	Replacement of fuse(s) pertaining to HPSEBL/ Consumer	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
(ii)	For every subsequent visit for the test and inspection of a new installation or of an extension to the existing installation	
(a)	Single Phase LT	Rs. 60/-
(b)	Three phase (LT)	Rs. 100/-
(c)	Three phase (HT)	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
(ii)	All other categories of consumers	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/-
(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/-
(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 whichever is higher
(b)	Three phase	Rs. 1500/- *or the actual cost of meter, whichever is higher.
	Note-1: This amount will be charged without prejudice to the right of HPSEBL 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 HPSEBL'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.	

S. No.	Description	Approved by the Commission
10. Supply of duplicate copies of the bills/ review of bills:		
(i)	Review of bills (all Categories)	Nil
(ii)	Supply of duplicate copies of bills	
(a)	Domestic/NDNCS/Commercial	Rs. 5/-
(b)	Medium and large power supply	Rs. 5/-
(c)	All other categories	Rs. 5/-
(iii)	Supply of duplicate copies of Demand notice:	
(a)	Domestic consumers	Rs. 10/-
(b)	Non residential consumers	Rs. 10/-
(c)	Small Industrial and Agriculture consumers	Rs. 10/-
(d)	Medium Industrial consumers	Rs. 10/-
(e)	Large Industrial and other categories of consumers	Rs. 10/-
(iv)	Supply of detailed print out of the meter recording	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/-
12. Cost of Application/Agreement Form and wiring Contractor's test report forms:		
	For all categories	Nil
13. Processing fee for change in contract demand		
	Fee for change in Contract Demand (CD)	Rs. 25/- per kVA of the changed quantum of CD