Mid-Term Performance Review Order For 3rd MYT Control Period (FY15-FY19)

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Determination of Tariff for FY18

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True-up of FY15 of 3rd MYT Control Period and True-up of Controllable Parameters of 2nd MYT Control Period

for

Himachal Pradesh State Electricity Board Limited (HPSEBL)

Himachal Pradesh Electricity Regulatory Commission

April 17, 2017

BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION AT SHIMLA

PETITION NO: 45/2016

CORAM

Sh. S.K.B.S. NEGI

IN THE MATTER OF:

Approval of the Aggregate Revenue Requirement (ARR) for FY18 and Mid-Term Performance Review (MPR) 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' or 'Petitioner') has filed a petition with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as 'the Commission' or 'HPERC') for Mid-Term Performance Review (MPR) of the Third MYT Control Period (FY15 - FY19) and approval of Aggregate Revenue Requirement (ARR) and determination of Wheeling and Retail Supply Tariff for FY18 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 and its amendments (hereinafter referred to as "MYT Regulations, 2011"). In the Petition, HPSEBL has also submitted True-Up of uncontrollable parameters of FY15 and True-Up of controllable parameters of Second MYT Control Period (FY12 – FY14).

The Commission having heard the applicant, interveners, consumers and consumer representatives of various consumer groups on 1st March, 2017 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 FY18 under Third MYT Control Period (FY15-FY19) and approved the Wheeling and Retail Supply Tariffs for FY18 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, 2017.

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, 2018. In the event of failure on the part of the licensee to file application for true-up for FY16 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, 2017, the tariff determined by the Commission shall cease to operate after March 31, 2018, 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 **(S. K.B.S. Negi)**
Dated: April 17, 2017 **Chairman**

Contents

List of Tables

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 a 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 487.5 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 Mid-Term Review of 3rd MYT and Tariff Petition for FY18

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 2011, 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 2015 and the Second Annual Performance Review Order under the Third Control Period for the distribution business of HPSEBL on 25th May 2016.

1.4.5 The HPSEBL has filed petition with the HPERC for Mid-Term Review (MTR) of the Third MYT Control Period (FY15 - FY19) and approval of Aggregate Revenue Requirement (ARR) and determination of Wheeling and Retail Supply Tariff for FY18 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, as part of the Mid-Term Review Petition, HPSEBL has submitted truing-up of uncontrollable parameters of FY15 and truing-up of controllable parameters for the Second Control Period i.e. FY12-FY14.

1.4.6 Under this Mid-Term Review Order under the Third Control Period, the Commission has undertaken review of the actual controllable parameters vis-à-vis the approved amounts in the MYT Order to undertake any adjustments, if required, for large variations in the approved and actual numbers for the balance years of the Third Control Period. Further, the uncontrollable parameters have been revised based on the actual information submitted by the Petitioner for FY15, FY16 and partial period of FY17. Also, final truing-up of controllable parameters for the Second Control Period (FY12-14) and truing-up of uncontrollable parameters for FY15 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. FY15 has also been considered for recovery along with the revised ARR for FY18.

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 Mid-Term Review (MTR) of the Third MYT Control Period (FY15-FY19) along with approval of ARR and determination of Wheeling and Retail Supply Tariff for FY18, with the Commission on 30th November, 2016. The petition also included true-up of uncontrollable parameters for FY15 and truing-up of controllable parameters for the Second Control Period (FY12-FY14). Based on various observations/ deficiencies pointed out by Commission, HPSEBL submitted further details and clarifications subsequently.

1.5.2 The Commission admitted the petition submitted by HPSEBL vide its interim order dated 28th December, 2016. M/s Deloitte Touche Tohmatsu India LLP 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

(i) HPERC/MYT3/MID-TERMREVIEW/HPSEBL/2016-17-2316-17dated 23.12.2016.

(ii) HPERC/MYT3/MID-TERMREVIEW/HPSEBL/2016-17-2562-65dated 13.01.2017

(iii) HPERC/MYT3/MID-TERMREVIEW/HPSEBL/2016-17-3256-58dated 06.03.2017

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.

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 114/2016 dated 30th November,2016

No	Submission of the Petitioner
2	Filing No 01/2017 dated 03rd January,2017
3	Filing No 11/2017 dated 14th February, 2017
4	Filing No 21/2016 dated 21st March,2017

Public Hearings

1.5.7 The Commission issued an interim order to the HPSEBL on 28th December, 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– 01st January, 2017.

b. Amar Ujala – 01st January, 2017.

c. Hindustan Times– 03rd January, 2017

d. Divya Himachal – 03rd January, 2017.

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. Hindustan Times (Chandigarh& Jalandhar Edition) – 05th January, 2017.

b. Divya Himachal (Dharamshala & Shimla Edition) – 05th January, 2017.

1.5.9 The interested parties/stakeholders were asked to file their objections and suggestions on the petition 31st January, 2017. The date of filing replies by HPSEBL was fixed on 15th February, 2017.

1.5.10 The Commission received objections from 19 stakeholders by the stipulated date. The HPSEBL filed its replies to the objections/ suggestions set out by various objectors vide letter Nos. HPSEBL/CE-(Comm.)/SERC-24/2017-14509-19 dated 15.02.2017 and HPSEBL/CE-(Comm.)/SERC-24/2017-14658-67 dated 20.02.2017, copies of which were 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 23rd February, 2017.

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 1st March, 2017 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 24th March, 2017. The minutes of this meeting was circulated vide HPERC letter no. 84-89 dated 12-04-2017.

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

2.2 Status of implementation of Ujwal DISCOM Assurance Yojana (UDAY)

2.2.1 Ujwal DISCOM Assurance Yojana (UDAY) is the financial turnaround and revival package for electricity distribution companies of India (DISCOMs) initiated by the Government of India with the intent to find a solution to the financial mess of the power distribution company. It allows state governments, which own the discoms, to take over 75 percent of their debt as of September 30, 2015, and pay back lenders by selling bonds. Discoms are expected to issue bonds for the remaining 25 percent of their debt.

2.2.2 The latest status on UDAY was updated by the HPSEBL management in the meeting. It was informed that after signing of Tripartite agreement among Government of India, Government of Himachal Pradesh (GoHP) and HPSEBL on 08th December, 2016, the GoHP raised funds amounting to Rs. 2890.50 Cr. at weighted average rate of interest of 7.88% through Reserve Bank of India on 28th February, 2017 and transferred these funds to the HPSEBL on 1st March, 2017.

This amount was paid by the HPSEBL to concerned lender and to SJVNL for part of its outstanding power purchase bills on 1st March, 2017. It was further conveyed by HPSEBL management that the process for restructuring of remaining 25% outstanding debt of Rs. 963.50 Cr. covered under UDAY and Rs. 598.14 Cr. disallowed by GoI has been initiated and the outcome shall be placed before the Board of Directors as soon as the same is completed.

2.3 Reforms initiatives proposed to be undertaken to turn around the HPSEBL

2.3.1 HPSEBL is a commercial entity and is presently reeling under financial distress. Therefore, some innovative steps are required to be taken so as to turn around the organization. It was conveyed by HPSEBL management that they have reduced its annual financial losses from Rs. 340.28 Crore in FY 2012-13 to around Rs. 10.51 Crore in FY 2015-16. The total cumulative financial loss till FY 2015-16 for HPSEBL stands out to be Rs. 1999.63 Crore. The following reform initiatives taken by the HPSEBL during last five years to reduce its financial losses were conveyed in the meeting:-

i) HPSEBL is striving hard to increase its productivity so as to cut down its financial losses.

ii) HPSEBL has reduced its man force and new recruitments are being carried out on contractual basis.

iii) HPSEBL is doing the billing for industrial consumers through AMR which has increased its billing & collection efficiency.

iv) AT&C losses of HPSEBL stands out at 13.50% which are the lowest in the country and T&D losses are also at 12.40 % level compared to 22.44% in 2004-05.

v) The employees are being re-deployed to the places where they are required. The efforts are being made to reduce the Operation and Maintenance expenses. Computerized billing is being introduced in most of the Sub-Divisions.

vi) HPSEBL has received good amount of outstanding dues including arrears of I&PH department.

vii) RAO audit paras of HPSEBL have also been reduced by 40%.

2.4 Steps taken to improve reliability and quality of power supply to the Consumers

2.4.1 It was conveyed to HPSEBL that the HPERC while approving the ARR of HPSEBL has allowed its power procurement for supplying 24x7 power supply to the consumers of the state. But, it has been learnt through newspapers items that the power supply position in the state has been deteriorating especially in the rural areas. The quality and reliability of power is not good even in the urban areas. Also, there have been many places where low voltage problems are being faced by the consumers of the State. It was emphasized that the quality and reliability of power in the industrial areas must be ensured being high revenue generating consumers to HPSEBL. 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.

2.4.2 Chairman, HPERC especially pointed out about the low voltage problem and outages being faced in the Kala Amb area. Director (Operation), HPSEBL informed that the problem will be solved by July, 2017.

2.4.3 HPSEBL management further conveys that the availability of power in HP is purely from hydro generating stations and generation at the hydro generating stations entirely depends upon the weather conditions. It was informed that the availability from hydro generating stations squeezed to 20% during winter months and to ensure reliable power supply to the consumers of the State, HPSEBL resorts to the following arrangements:-

a) Availing firm power against committed shares on long term basis from NTPC & NPCIL as per Long Term Power Purchase Agreements. It is pertinent to mention that this very firm power against thermal/gas stations of NTPC can be surrendered/ booked during real time operations and facilitates regulation of power as per requirements. It is also emphasized here that this very power facilitates mitigation of deficits as URS in real time operations can be booked only from those projects in which HPSEBL has entitlements and in the past this facility has averted the power cuts to a large extent in the State.

b) Banking summer/monsoon surpluses with neighbouring States/Utilities under firm as well as under As & When Available/Required basis banking arrangements to mitigate winter shortages to avoid power cuts in the State.

c) Power swap arrangements under banking i.e. disposing off power in the surplus slots to neighbouring State/Utilities and thereafter taking back during the deficit slots of the same day.

d) Purchasing need based power at the platform of Energy Exchanges thus providing comforts to the consumers.

2.4.4 It was further informed by HPSEBL that for the ensuing FY 17-18, HPSEBL has tied up energy to the tune of 1475 MUs under firm banking arrangements to ensure reliable power supply to the consumers during winter months.

2.4.5 To provide quality power supply to its consumers, HPSEBL is using all interstate nods efficiently to draw maximum power during winter months. Also many new system elements are being added in the network and where system constraints are being observed system is being augmented. During summer/ monsoon months HPSEBL is able to seamless transfer of supply from one source to other. However, during winter months, when hydro generation squeeze, some problems are there in seamless transfer of supply owing to system constraints and efforts are being made to resolve the same.

2.5 Customer Care and grievances redressal issues

2.5.1 It was conveyed to HPSEBL that the first and foremost requirement for effective customer care is that the procedures laid down by the distribution licensee should be transparent, simple and objective so as to facilitate ease of doing business. To ensure quality service to the customers, the standards of performance have to be laid down and the distribution licensee has to abide by these standards.

2.5.2 To ensure that the grievances of customers are timely and effectively addressed, a robust grievances redressal system has to be in place. All the institutions as mandated in the Electricity Act, 2003 such as FRGC and Electricity Ombudsman are to be very active and efficient. However, these institutions have not been able to achieve their desired results as it has been noticed that:

a) The number of customers approaching FRGC and EO are very small.

b) Most of the grievances are only related to billing.

c) Mostly industrial customers are approaching FRGC and EO.

2.5.3 However, a large number of customer complaints are reported in the media which are related to low voltage, frequent tripping, power failures etc.

2.5.4 HPSEBL management informed that HPSEBL is providing the best services to its consumers and has established a 24X7 Customer Complaint Centre wherein consumers can register their complaint on a toll free No.1800-180-8060 and 1912. Further, there is a plan for dedicated complaint cell for Industrial areas as well. Further Complaint handling mechanism has been submitted before the Commission for its approval.

2.6 Load Forecasting on short-term, medium-term and long-term basis

2.6.1 The Tariff Policy 2016 provides that:-

"Appropriate Commission should mandate Distribution Licensee to undertake load forecasting every year and to publish and submit to the Commission their short, medium and long-term power procurement plans to meet the load."

2.6.2 HPSEBL is submitting its power procurement plan to HPERC but without appropriate load forecasting studies based on scientific techniques. Therefore, it must be made mandatory to undertake load forecasting as envisaged in the Tariff Policy, 2016.

2.6.3 It was conveyed by HPSEBL that they are doing Load forecasting on short term basis on day ahead basis in 15 minutes time block by using all available tools i.e. demand profile of previous 7 days, collecting generation schedule from various generating stations, generation trend of previous days, anticipated schedule from ISGS and weather forecast data being made available by IMD Department, Shimla daily. In so far as Medium & Long term load forecasting is concerned, it is primarily based upon the Demand projections on past five to ten years trends/load growth, likely addition of specific loads being released by HPSEBL. However, the major concern is of availabilities particularly for Hydro sources. Based on long term load forecasting so made, HPSEBL has tied up power from upcoming projects of NTPC/NHPC/SHPs owned by IPPs in HP which will be sufficient to meet the future demand of the State for next 10-15 years. Further, on availing Equity power of GoHP in NJHPS and Rampur HEPs, HPSEBL is anticipated to be surplus in power particularly in summer/monsoon months.

Therefore, as per the direction of HPERC, HPSEBL has offered its share in NTPC's Anta, Auriya & Dadri gas stations for reallocation by MOP, GOI. However, the same has not yet been reallocated. HPSEBL has also offered the 15% unallocated share of HP in Koldam for reallocation and this share also has not been reallocated to any other utility till date. However, Discom must continue to make serious efforts to surrender costly power.

2.6.4 It was further conveyed that in the recent meetings of NRPC, TCC and OCC, discussions are being held for adoption some software tool for accurate load forecasting and HPSEBL is in a process to give its consent to adopt the software tool.

2.7 Power Procurement strategy and planning

2.7.1 It was conveyed by Chairman, HPERC to HPSEBL management 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. Power Procurement strategy and planning has to be such that it not only fulfill the demand of the State but also have some contingency reserves as well. Presently, HPSEBL is power surplus during summer/ monsoon months and is deficit during winter months. Due to which it has to sell its surplus power at throwaway prices at the platform of power exchanges. This position is due to the fact that 85% of the power procured by HPSEBL is from hydro generation. Therefore, HPSEBL has to plan its power procurement and surplus sales in such a manner so as to have minimum losses and ensure that it has a mix of all generation in its portfolio because relying on a single source may be risky proposition.

2.7.2 HPSEBL management informed that they have constituted a standing committee under the Chairmanship of Managing Director, HPSEBL as an institutional arrangement for review of monthly / fortnightly forecasting / assessing power requirement and procurement and trading strategies so as to manage 24x7 power supply and prudent disposal of surpluses.

2.7.3 In the present energy availability basket of HPSEBL under long term purchase contracts, there is adequate availability of power which is in excess of the demand. In line with the guidelines of the Commission, surplus power available during the Summer / Monsoon months is banked to meet the shortfall during winter months. Banking arrangement is being done to secure the winter deficit of the State and also to mitigate the volatility of market prices. The surplus power beyond banking arrangement available with HPSEBL is sold in the market. It is an endeavour of HPSEBL to earn higher returns in the markets to improve the financial health of the organization. HPSEBL has also been selling its surpluses to the neighboring states as a green power.

2.7.4 In the present energy availability basket of HPSEBL under long term purchase contracts, share of energy from sources outside H.P. is marginal. The State of Himachal Pradesh has firm allocated share in Central Sector Generating Stations (CGS) of NTPC, NHPC, NPCIL & SJVNL. In addition to the firm share, most of these stations have 15% unallocated power. In case of Koldam HEP, HPSEBL has been allocated 15% unallocated quota under the PPA and this power is available to HPSEBL since February, 2016.

2.7.5 The energy availability from NTPC & NPCIL has been considered on the average PLF achieved by the respective generating stations during the last 3 years. In case of generating stations of NHPC & SJVNL & all other hydro generating stations, the design energy of the respective station with reference to the average of the last three year generation.

2.7.6 Power is also available to HPSEBL from BBMB projects, UJVNL projects, UPJVNL project, Shanan project (PSPCL), Baspa II HEP and IPP owned SHP upto 25 MW capacity located in the State who has signed PPA with HPSEBL either on preferential tariff basis or at APPC rate under REC framework.

2.7.7 Apart from the above stated projects, HPSEBL has been availing GoHP Equity power on long term basis from Nathpa Jhakri HEP & Rampur HEP. Over & above the energy availability from various sources discussed above, HPSEBL has availability from GoHP free power from the directly connected projects with HPSEBL system i.e. Shanan, Malana, RSD, Baspa II & IPP owned SHP upto 25 MW.

2.7.8 It was informed by HPSEBL management that the disposal of anticipated surplus power of 2837 MUs in Summer / Monsoon months during FY2017-18 shall be done as under:

I. HPSEBL has already issued LOI for Sale of Renewable power to the tune of approximately 460 MUs on RTC basis through open tendering system.

II. HPSEBL has already issued LOI for banking of power to the tune of approx 1475 MUs through open tendering system.

III. HPSEBL has been floated tenders for sale of surplus power to the tune of approx. 402 MUs.

IV. HPSEBL has kept 300 MUs as contingent surplus.

2.7.9 Also, disposal of anticipated surplus power of 2997 MUs in Summer / Monsoon months of FY 2018-19 shall be done as under:

I. HPSEBL shall float tenders for Sale of Renewable power to the tune of approximately 650 MUs on RTC basis.

II. HPSEBL shall float tenders for banking of power to the tune of approximately 1600 MUs.

III. HPSEBL shall float tenders for sale of surplus power to the tune of approximately 450 MUs.

IV. HPSEBL has kept 300 MUs as contingent surplus.

2.8 Demand Side Management initiatives and way forward

2.8.1 Demand side management (DSM) is the modification of consumer demand for energy through various methods such as financial incentive and behavioural change through education. Usually, the goal of demand side management is to encourage the consumer to use less energy during peak hours, or to move the time of energy use to off-peak times such as night-time and weekends. Peak demand management does not necessarily decrease total energy consumption, but could be expected to reduce the need for investments in networks and/or power plants for meeting peak demands. An example is the use of energy storage units to store energy during off-peak hours and discharge them during peak hours.

2.8.2 HPSEBL management informed that the DSM action plan has been prepared by M/S EESL for HPSEBL under which Energy saving potential has been identified for different category of consumers. After the approval of BOD, DSM action plan has been submitted to the HPERC for final approval. However, it is pertinent to mention here that HPSEBL has implemented DELP/UJALA Programme in the State through M/S EESL. Now approval to distribute LED Tube light and Energy Efficient Fan in the state has been accorded to M/S EESL (which is the extension of UJALA Scheme).

2.8.3 HPSEBL informed that the following initiatives attributes to comfortable demand management:

1) By regulating own resources to the extent of availability to meet the demand.

2) Daily drawl schedule given by NRLDC which includes entitlements from Central Sector Shares, bilateral shares, bilateral arrangements.

3) Procurement of power i.e. firm banking arrangements, As & When banking arrangement, swapping of power under intraday banking.

4) Procurement at Energy Exchanges platform under week ahead, day ahead, day ahead contingency and intraday market

5) Booking of URS power as per the provisions against entitlements in thermal/gas generating stations.

2.9 Open Access issues

2.9.1 Section 42 of the Electricity Act, 2003 provides that the distribution licensee will have to give the open access of its system in a non-discriminatory manner subject to the payment of charges as fixed by the appropriate commission.

2.9.2 Accordingly, some of the big consumers of HPSEBL are procuring power from the Power Exchanges through open access depending upon the cost economics. Therefore, the more consumers are likely to opt for open access in future. HPSEBL was asked for its preparedness to address the issues concerning open access.

2.9.3 It was informed by HPSEBL that under the ambit of provisions of prevalent procedures for Short Term Open Access, HPSEBL gives consent to the promising consumers intending to opt for open access and HPLDS gives NOC to facilitate consumer to avail power under Short Term Open Access. However, under the prevalent procedures, the following constraints are still faced

1) In many instances, the schedule given by open access consumers does not comply to the actual power availed under short term open access and this

uneven procurement ultimately affects the day ahead anticipations and this very unprecedented act in real time when HPSEBL finds it difficult to procure/dispose off the deficits/surpluses, results into violation of grid discipline.

2) In order to settle above mentioned constraints, the necessity of the time warrants introduction of Intrastate ABT which shall curb such hurdles to the minimum extent and provide prudency towards power transactions.

2.10 Issues relating to working of HPSLDC

2.10.1 It was conveyed to HPSEBL that the spirit of the Electricity Act, 2003 is to ensure independence and autonomy of the State Load Despatch Centres. Section 31 of the Electricity Act, 2003 talks about the Constitution of State Load Despatch Centres. From the provisions of the Electricity Act, 2003, it is very much evident that a State Load Despatch Centre cannot engage in a business of power trading. Further, the function of the State Load Despatch Centres has been described in the Section 32 of the Electricity Act, 2003.

2.10.2 These functions gained prominence subsequent to the structural changes in sector and introduction of new market mechanisms such as the Availability Based Tariff (ABT), Open Access and Power trading. The complexity in market operation is already increasing due to an increase in the number of market players. With growing commercial consciousness among the market players, market related activities and tasks, which were formerly done in an offline mode, have now become a time-constrained activity and moved into the online operation control centre. Moreover, as a "Market Operator", the Load Despatch Center has to discharge its duties in a non-discriminatory and transparent manner.

2.10.3 The Ministry of Power, constituted a committee headed by Shri Gireesh B. Pradhan, Addl. Secretary, MoP vide order no. 6/2/2008-Trans dated 04th February 2008 to examine issues relating to manpower, certification and incentives for the personnel employed on System Operation at various levels and also for ring-fencing the Load Despatch Centres to ensure their functional autonomy and give recommendations. The committee on 11th August, 2008 gives its recommendations and one of the suggestions was that the LDCs should be ring-fenced suitably to ensure their functional autonomy.

2.10.4 In the state of Himachal Pradesh, the role of the State Load Despatch Centre has been enacted by the Himachal Pradesh Load Dispatch Society (HPLDS), Shimla. But, HPLDS is doing only the offline activities of SLDC and the real time operation and its control is still with the HPSEBL. HPSEBL, being a deemed trading licensee as per the Electricity Act, 2003 cannot perform the function of SLDC.

2.10.5 Therefore, the real time operation of the SLDC shall have to be undertaken by HPLDS at the earliest and efforts be made to create an environment where the H.P. Load Despatch Centre has functional autonomy, independence and sustainable revenue streams and are adequately staffed with people having the right skills, equipment and incentives to deliver.

2.10.6 HPSEBL management stressed upon the need of Area Load Despatch Centre (ALDC) for which it also requires fully automated monitoring system. Further, it was informed by HPSEBL that ALDC of HPSBL shall be made fully functional by June, 2018 and thereafter the present SLDC shall be handed over to Himachal Pradesh Load Despatch Society (HPLDS). Till that time both SLDC and ALDC of HPSEBL shall utilize the existing infrastructure.

2.11 Detail of AT&C Losses and T&D losses and the future trajectory

2.11.1 The performance of a distribution utility is known by its AT&C losses. HPERC in its MYT order dated 12th June, 2014 has provided the trajectory for Transmission & Distribution loss reduction targets to HPSEBL. The following are the approved T&D losses:-

Financial Year	FY15	FY16	FY17	FY18	FY19
Approved loss (%)	12.80	12.60	12.40	12.20	12.00

2.11.2 The actual T&D losses reported by the HPSEBL have been very much on the lower side to that of approved by the HPERC. The actual losses reported for FY2014-15 has been 11.46% against approved 12.80% and for FY2015-16 has been 12% against approved 12.60%. Therefore, it was conveyed to HPSEBL that there is a need to revise the loss trajectory.

2.11.3 HPSEBL management informed that it is true that the T&D losses were on the lower side during FY 2014-15. But, the trend of the losses has been on the increasing side. T&D losses were 12.04% during FY 2015-16 and it is 12.46% for

FY 2016-17 till December, 2016. The reasons for increasing losses are primarily the stagnation of demand of the industrial category of consumers and also increase in low tension network due to the implementation of schemes like RGGVY. It was informed that the T&D losses will be difficult to reduce from the current level. Therefore, the T&D loss trajectory already fixed by the Commission may not be revised.

2.12 Smart meters initiative as mandated in the Tariff Policy-2016

2.12.1 HPSEBL was apprised about the following provisions of the Tariff Policy, 2016 regarding smart metering:-

The Appropriate Commission may provide incentives to encourage metering and billing based on metered tariffs, particularly for consumer categories that are presently unmetered to a large extent. The metered tariffs and the incentives should be given wide publicity. Smart meters have the advantages of remote metering and billing, implementation of peak and off-peak tariff and demand side management through demand response. These would become essential in future for load-generation balancing due to increasing penetration of intermittent type of generation like wind and solar power.

2.12.2 Appropriate Commission shall, therefore, mandate smart meters for:

(a) Consumers with monthly consumption of 500 units and more at the earliest but not later than 31.12.2017;

(b) Consumers with monthly consumption above 200 units by 31.12.2019.

2.12.3 *Further, two way smart meters shall be provided to all prosumers, who also sell back electricity to the grid as and when they require.*
In order to enable energy audit in the distribution system, all distribution companies shall ensure smart meters in their electricity system throughout the chain from transformers at 132kV level right down to distribution transformer level at 11kV and further down to each consumer. Further, in order to reduce theft of power, the distribution companies should have enabling feature like distribution SCADA with distribution management system and energy audit functions. SERCs shall mandate these to be in place within two years.

2.12.4 HPSEBL management in this regard intimated that Smart Meters are in a conceptual stage and HPSEB Ltd Management is still contemplating on the issue.

It was further conveyed that CEA has come up with draft proposal that EESL will procure the smart meters and cost will be recovered through savings.

2.13 Centralized Billing of all the consumers above 100 kVA contract demand

2.13.1 Today the use of technology/ automation is very much essential for giving better services to the consumers as well as to reduce the cost of the organization. The new technologies are now available especially in metering so as to have better accuracy in billing. HPSEBL may opt to these and in the last meeting with the management of HPSEBL, it was agreed that Billing of all the consumers above 100 kVA contract demand should be centralized. The pre-audit of all such consumer needs to be done. Any progress made by HPSEBL in this regard can be discussed further.

2.14 Status of Capital works in progress and Capitalization

2.14.1 Distribution network is the backbone of a distribution utility. It has been noticed that HPSEBL's distribution network has been deteriorated over the years and immediate attention of the management of HPSEBL in this regard is required. 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.

2.14.2 The status of the capital works in progress and detail of capitalization was updated by the HPSEBL management.

2.15 Status of capital schemes funded from grant

2.15.1 Being a special category states, HPSEBL is getting funds upto 90% as grant in aid in the schemes of GoI like Integrated Power Development Scheme (IPDS), Deendayal Upadhaya Gram Jyoti Yojna (DDUGJY), RGGVY and R-APDRP etc. Also, the state is providing funds under SCSP/BADP/ Tribal Sub Plan etc. The detail of these works were submitted by the HPSEBL.

2.16 Restoration works of Bhaba Power House and Completion status of Uhl-III

2.16.1 Bhaba Power House has been under shut down since 22-01-2015 when an outbreak of fire occurred in the plant. After completion of the restoration work due to fire incident, Unit No. 1 was commissioned on dated 10-07-2016 and Unit-

II was commissioned on 21.09.2016. On 25.09.2016, the stator and rotor of generator of Unit No. 1 got damaged due to over speeding and is under shut down.

2.16.2 It was conveyed by HPSEBL that Unit No. 1 can be put on bar only after its repair. And, it has submitted a new scheme/ proposal to HPERC RMU& LE works. It was conveyed to HPSEBL management that it is very important that this plant comes on bar as soon as possible keeping in view the low cost of generation. Similarly, Uhl HEP commissioning needs to be expedited. It was informed by HPSEBL that Uhl HEP shall be commissioned by July, 2017

2.17 Preparation of separate accounts for each generating station

2.17.1 Separate accounts for each generating stations are required so as to fix the tariff for each station in a transparent manner and also to have better clarity of each generating station.

2.17.2 It was informed by HPSEBL that as per the existing practice, the monthly accounts of Generation Wing are being prepared as per its RE, Divisions which include more than one or two Generating Plants/ Power station. Therefore, the practice of maintaining account as per generating plant is yet to be introduced in Generation Wing of HPSEB Ltd. However, separate accounts of Generation wing are being maintained from 2010-11 at Head Office level as per the direction of HPERC and efforts to prepare Balance sheet and P&L Accounts of each generating station with correct methodology are being made so that meaningful and reliable accounts of each generating plant present true & fair picture.

2.18 Non-filing of mid-term review petition for generation function and Ghanvi-II HEP

2.18.1 It was conveyed to HPSEBL that the Mid-Term Performance Review Petition for generation function as well as for approving the capital cost and determination of tariff thereof for Ghanvi-II has not been filed yet by HPSEBL. It was informed by HPSEBL that due to non-capitalization of the works it could not file the petitions but the same shall now be filed within a period of three months.

2.19 Status of transfer of mini/micro hydro plants of HIMURA to HPSEBL

2.19.1 It was decided in a meeting held with HPSEBL and Himurja on 17th December, 2014 that some of the identified projects owned by Himurja shall be transferred by Himurja to HPSEBL, after taking necessary approvals from the A.C.S (Power), at a cost of net investment made by Himurja after deducting the grants/ subsidies plus interest minus depreciation. The mode of payouts shall be worked out by HPSEBL and Himurja and the exercise of transfer of these projects shall be completed by 31st March, 2015. This arrangement is ideal and desirable for both the institutions and is in the ultimate benefit of the consumers of the area for which these plants are meant for.

2.19.2 It was also agreed that HPSEBL and HIMURA will come to an modality within a month and seek the approval of Power Department if required and thereafter obtain Commissions approval so that transfer of agreed projects are operationalised w.e.f. 01.04.2015. In the last management meeting with HPSEBL, it was given to understand by the management of HPSEBL that a decision in this regard shall be taken soon. But, it was conveyed to HPSEBL that nothing has been heard in this regard as to whether these power houses have been transferred or not to HPSEBL as agreed.

2.19.3 HPSEBL management apprised that this issue was discussed in the 27th meeting of the BODs of the Company held on 19.10.2016 when Board was of the considered view that before taking any such action, an agreement/ MOU between HIMURJA and HPSEBL be executed in the first instance. Thereafter, the case be immediately brought to the Board for approval. It was further informed that a draft Memorandum of Understanding (MOU) to be executed between HIMURJA & HPSEBL has been prepared and the same shall be executed at the earliest.

2.20 Preparation of Accounting Manual

2.20.1 HPSEBL was to prepare Accounting Manual as spelled out in Himachal Pradesh Electricity Regulatory Commission (Reporting System on Power Regulatory Accounting) Regulations, 2014 and submit Regulatory Audited Accounts to HPERC as per the provisions contained in the said regulation.

2.20.2 HPSEBL management was apprised that as per the Himachal Pradesh Electricity Regulatory Commission (Reporting System on Power Regulatory Accounting)

Regulations, 2014, HPSEBL shall within 90 days after the commencement of these regulations i.e. 22nd December, 2014 or the grant of the licensee or the beginning of the regulated business, prepare an accounting Manual containing the details as given in the said regulation. The Utility shall also submit the Regulatory Audited Accounts every year within seven months of the end of the Financial Accounting Year to the Commission in accordance with the formats appended to these regulations. But, the detail as desired in the regulation from HPSEBL is still awaited.

2.20.3 It was informed by the HPSEBL that the draft Accounting Manual has been prepared through M/s Deloitte and chapter to comply with the HPERC Regulation, 2014 has been incorporated in the Accounting Manual for regulatory account. The Annual Accounts of the Company for FY 2014-15 are being prepared as per HPERC regulation by the Retainer Consultants (CAs) of HPSEB Ltd. After preparation of these accounts, the same will be audited by the Chartered Accountants appointed by the Company (CAs) and thereafter, the same will be submitted to HPERC for perusal.

2.21 Segregation of accounts and balance sheets for different business

2.21.1 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.

2.21.2 HPSEBL submitted that it has identified five strategic Business Units i.e. Generation, Transmission, ALDC, Projects & Distribution as per direction of HPERC and we are maintaining separate accounts for each profit centre. Segment wise Balance sheet and Profit & Loss Accounts of each Strategic Business Unit is being shown/disclosed from 2011-12 onwards in audited Balance sheet/ Financial Statements of the Company in the Notes to Accounts. The accounts of each business are also being audited by Statutory Auditors of the Company for consolidation of Balance sheet of the HPSEBL.

2.21.3 In this regard, the Commission clarified that HPSEBL has to prepare separate balance sheets and profit& loss accounts for each Business units.

2.22 Organizational structure reforms

2.22.1 HPSEBL management in the last meeting has agreed to take suitable steps to undertake structural reforms and fill up the vacancies especially of the technical staff in key positions/ areas. HPSEBL management apprised that technical posts are being filled up as per the requirement and non-functional posts are being abolished.

2.22.2 Chairman, HPERC advised HPSEBL to take suitable steps to cut down its non-functional posts. The per unit employee cost of HPSEBL is at the highest level in the country. Therefore, HPSEBL must abolish all the non-functional posts. It needs to take some tough decisions in the interest of the organisation. The integrity of the officers posted in the high revenue areas like industrial belts must be ensured.

2.23 Solar Power Generation in the State and status of implementation of net metering

2.23.1 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 rooftop solar power in its network.

2.23.2 HPSEBL informed that it has issued consent letter to 16 No. entrepreneurs (IPPs) for development of Solar Projects aggregating to 34.4 MW upto Dec., 2015 and no consent has been given thereafter as per the advice of HPERC. However HPSEBL is still receiving applications from the prospective developers to provide them with the consent letter and upto 15.03.2017 HPSEBL has received 171 applications from prospective Solar Developers aggregating to 337 MW.

2.23.3 Further, the present status with reference to the existing arrangements and tie ups were apprised by HPSEBL as under:

a)	Solar Power being purchased by HPSEBL (15 MW from Singrauli (NTPC) and 20 MW from SECI)	35 MW
b)	Consent issued to purchase Solar Power to SECI	50 MW with VGF Scheme as per policy.
c)	Consent issued to HPPCL	5 MW
d)	Proposed Solar Project (SECI + HPSEBL)	2.5 MW Joint Venture (Hybrid Solar +Wind)

e)	Consent issued to Solar Power Developers (IPP) upto 5 MW	34.4 MW
	Total	**126.9 MW**

3 Summary of the Mid-Term Performance Review Petition

True-up of Controllable Parameters of Second Control Period FY 2012 to FY 2014

3.1 Depreciation, Interest and Finance charges and Return on Equity

3.1.1 HPSEBL has submitted scheme-wise and source-wise details for Generation & Distribution for Second Control Period (FY12-14) and from FY15 to FY17 (6 months). The year-wise details of controllable parameters for FY 2012-14 is as below:

Table 2: Controllable Parameters (in Rs Cr.) of FY 2011-12

Particulars	Approved in True-Up Order dt. 30th Mar 2015 (Rs Cr.)	Audited (Rs Cr.)	Disallowed (Rs Cr.)
	1	**2**	**3=(2-1)**
Depreciation	178.07	213.00	34.93
Interest & Finance Charges	173.42	288.29	114.87
ROE	69.71	62.49	-7.22
Total	**351.49**	**501.29**	**149.80**

Table 3: Controllable Parameters (in Rs Cr.) of FY 2012-13

Particulars	Approved in 2nd APR dt. 25th May 2016	Audited (Rs Cr.)	Disallowed (Rs Cr.)
	1	**2**	**3=(2-1)**
Depreciation	97.11	208.99	111.88
Interest & Finance Charges	124.90	327.62	202.72
ROE	30.24	35.68	5.44
Total	**252.25**	**572.29**	**320.04**

Table 4: Controllable Parameters (Rs Cr.) of FY 2013-14

Particulars	Approved in 2nd APR dt. 25th May 2016	Audited (Rs Cr.)	Disallowed (Rs Cr.)
	1	**2**	**3=(2-1)**
Depreciation	109.02	206.2	97.18
Interest & Finance Charges	156.91	457.68	300.77
ROE	30.24	42.41	12.17
Total	**296.17**	**706.29**	**410.12**

3.1.2 Based on the submissions of detailed information of capital expenditure and capitalization, HPSEBL has requests the Hon'ble Commission to allow an amount of Rs 879.95 Cr of the controllable parameters as per audited accounts for second Control Period FY 2012-14. Therefore, the True-gap of Second Control Period FY 2012-14 of Rs 879.95 Cr. has been considered by HPSEBL in the projected ARR of FY 2017-18 as given below:

Table 5: Year-wise details of Disallowed Amount (Rs Cr.) of controllable parameters for FY 2012-14

Particular	Amount (Rs Cr.)
FY 2011-12	149.80
FY 2012-13	320.04
FY 2013-14	410.12
Total	**879.95**

True-up of FY15, Mid-Term Performance Review and ARR of FY18

3.2 Connected Load, Number of consumers and Energy Sales

3.2.1 HPSEBL has submitted that it has considered overall growth rate of 2.76% for projecting number of consumers in FY17, FY18 and FY19 based on previous growth in each category of consumers. The actual number of consumers in FY15 and FY16 as submitted by the Petitioner and projected for FY17, FY18 and FY19 are as given in the table below:

Table 6: HPSEBL Submission– Number of Consumers for FY15 to FY19

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Actual	Estimated	Projected	Projected
Domestic (Including Antodaya)	1858099	1902860	1953081	2004627	2057533

Non Domestic Non Commercial	25521	26449	28478	30662	33014
Commercial	244969	252476	258838	265360	272047
Temporary	5179	6068	6821	7668	8620
Small & Medium Industrial Power Supply	32898	32794	32835	32876	32916
Large Industrial Power Supply	2255	1837	1859	1882	1906
HT-I	1836	1611	1622	1633	1644
EHT/HT-II	419	226	237	249	262
Govt., Irrigation & Water Supply	6262	6096	6482	6893	7330
Public Lighting	1117	843	874	907	941
Agricultural	23357	25395	27579	29951	32527
Bulk Supply	313	287	280	273	266
Total	**2199970**	**2255105**	**2317128**	**2381100**	**2447101**

3.2.2 HPSEBL has submitted that it has considered overall growth rate of 6.32%, 6.51% and 6.69% for projecting connected load for FY17, FY18 and FY19. The actual connected load in FY15 and FY16 as submitted by the Petitioner and projected for FY17, FY18 and FY19 is given in the table below:

Table 7: HPSEBL Submission– Connected Load for FY15 to FY19 (MW)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Actual	Estimated	Projected	Projected
Domestic (Including Antodaya)	2952	3587	3893	4226	4586
Non Domestic Non Commercial	155	175	192	210	229
Commercial	607	642	673	706	741
Temporary	29	31	33	36	39
Small & Medium Industrial Power Supply	374	396	403	411	419
Large Industrial Power Supply	1448	1538	1584	1641	1710
HT-I	1023	687	648	612	577
EHT/HT-II	425	851	936	1030	1133
Govt., Irrigation & Water Supply	273	282	295	308	322
Public Lighting	7	4	4	4	3
Agricultural	90	100	108	116	126
Bulk Supply	119	122	125	129	132
Total	**6052**	**6877**	**7311**	**7787**	**8308**

3.2.3 The Petitioner has submitted the actual category-wise energy sales for FY15 and FY16, the estimated sales for FY17 based on first six months actual data and the projected energy sales for FY18 and FY19 as detailed in Table 8.

Table 8: HPSEBL Submission– Energy Sales for FY15 to FY19 (MUs)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Domestic Supply	1,891.35	1,939.69	2,002.41	2,152.33	2,302.99
Antodya	2.16	2.53	2.59	2.77	2.96
Non-Domestic Non Commercial	129.97	129.71	139.04	150.80	162.41
Commercial Supply	473.21	496.59	528.79	566.70	605.53
Temporary Metered Supply	25.63	29.76	29.6	30.02	30.02
Small Industrial Power	71.05	90.49	90.43	100.79	112.34
Medium Industrial Power	137.63	119.89	119.09	113.53	108.07
Large Industrial Power Supply					
HT-I	2,604.42	2,790.71	2,888.37	2,989.47	3,094.11
EHT	1,765.38	1,389.71	1,438.34	1,488.69	1,540.80
Govt. Irrigation & WPS	502.63	546.33	557.59	595.14	630.33
Street Lighting Supply	13.34	13.03	13.17	13.19	13.19
Agriculture Supply	45.10	51.65	61.90	67.93	73.37
Bulk Supply	157.76	144.54	136.99	127.00	117.77
Total	**7,819.62**	**7,744.61**	**8,008.31**	**8,398.37**	**8,793.89**

3.2.4 The Petitioner has also submitted that the first six months data used for estimation of energy sales for the entire year FY17 does not include the actual Mandi circle sales in the month of Sep '16 and therefore, later revised this to 8026 MUs for FY17.

3.3 Energy Balance

3.3.1 HPSEBL has submitted that it has achieved a loss level of 11.46% in FY15. The Petitioner has submitted that the actual T&D loss for FY15 is significantly lower than the T&D loss approved by the Commission in MYT Order. The actual losses for FY15 and FY16, the estimated loss for FY17 and the projected losses for FY18 and FY19 are shown in table below:

Table 9: HPSEBL Submission– Energy Balance for FY15 to FY19 (MUs)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Own Generation	1981.57	1455.34	1678.58	2148.86	2349.51

Particulars	FY15 Actual	FY16 Provisional	FY17 Estimated	FY18 Projected	FY19 Projected
Free Power	569.42	567.31	633.60	546.41	570.76
Central & Shared Stations	4845.03	5782.87	5838.82	5541.80	5541.80
Baspa-II	1093.31	1140.27	1181.83	1127.28	1127.28
IPPs (upto 25 MW)-including REC	1324.06	1459.88	1334.32	1587.37	1648.71
Banking Purchase	1814.25	1698.66	1636.79	1610.00	1855.00
Solar Power	2.66	51.56	63.44	58.25	58.25
Others (UI & Contingency)	402.52	471.21	428.17	50.75	52.58
Total Power Purchase	**12032.26**	**12626.52**	**12795.54**	**12670.73**	**13203.90**
Less: Inter-State losses	261.13	297.70	297.70	297.70	297.70
Total Energy availed at HPSEBL Periphery	**11771.13**	**12328.82**	**12497.84**	**12373.03**	**12906.21**
Sales within the state	7819.62	7744.61	8025.90	8398.37	8793.89
T&D Losses	**11.46%**	**12.00%**	**12.40%**	**12.20%**	**12.00%**
Power Required at HPSEBL Periphery for Intrastate Sale	**8831.62**	**8800.33**	**9161.99**	**9565.35**	**9993.05**
Banking sale/ return at discom periphery	1663.13	2189.24	1777.87	1610.00	1610.00
Interstate Sale at HP periphery	1276.38	1339.25	1557.98	1197.68	1303.15
Power required at HP Periphery	**11771.13**	**12328.82**	**12497.84**	**12373.03**	**12906.21**

3.4 Power Purchase Quantum

Purchase from HPSEBL's own stations

3.4.1 HPSEBL has submitted that the actual purchase of power from own generating stations for FY15 was 1981.57 MUs as compared to the approved 2087.18 MUs.

3.4.2 The actual power purchase quantum from own generating stations for FY15 and FY16, the estimation for FY17 and the projection for FY18 and FY19 as submitted by the Petitioner is provided in the table below:

Table 10: HPSEBL Submission– Power Purchase from Own Generating Stations for FY15 to FY19

Particulars	FY15 Actual	FY16 Provisional	FY17 Estimated	FY18 Projected	FY19 Projected
Bhaba	521.19	0.00	189.82	542.33	580.00
Bassi	307.02	314.46	330.01	305.00	305.00
Giri	213.09	188.34	211.54	190.00	190.00

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Andhra	71.69	61.85	61.11	65.00	65.00
Ghanvi	75.49	86.58	83.35	78.30	78.30
Baner	40.51	42.59	36.36	34.80	34.80
Gaj	44.05	39.61	30.78	34.80	34.80
Larji	562.89	576.80	546.56	539.40	539.40
Khauli	44.88	43.20	35.14	40.02	40.02
Binwa	28.04	27.21	28.39	30.00	30.00
Thirot	8.09	6.29	15.51	12.00	12.00
Gumma	0.00	1.76	3.98	8.70	8.70
Holi	7.69	0.75	7.14	10.00	10.00
Bhaba Aug	1.52	11.82	17.69	16.50	16.50
Nogli	6.15	6.76	8.54	7.00	7.00
Rongtong	0.37	0.00	2.05	8.70	8.70
Sal-II	5.40	0.00	2.28	0.00	0.00
Chaba	7.79	6.80	6.11	6.70	6.70
Rukti	0.18	0.03	4.40	5.50	5.50
Chamba	1.26	0.68	1.28	1.00	1.00
Killar	0.47	0.43	0.92	0.40	0.40
Uhl III - BVPCL	0.00	0.00	0.00	177.91	340.89
Ghanvi II	33.81	39.36	55.61	34.80	34.80
Total	**1,981.57**	**1,455.34**	**1,678.58**	**2,148.86**	**2,349.51**

Purchase from GoHP Free Power

3.4.3 The actual power purchase quantum for FY15 and FY16, estimated for FY17 and projected for FY18 and FY19 from GoHP free power as submitted by the Petitioner is provided in the table below:

Table 11: HPSEBL Submission– Power Purchase from GoHP Free Power for FY15 to FY19

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Baira Siul	0.05	0.39	6.13	0.00	0.00
Chamera-I	0.12	4.79	22.14	0.00	0.00
Chamera-II	0.15	4.40	13.72	0.00	0.00
Chamera-III	15.26	3.15	8.72	0.00	0.00
Parbati-III	0.07	0.69	5.92	0.00	0.00
Kol Dam	0.00	3.62	9.11	0.00	0.00
Ranjeet Sagar Dam Share	83.78	87.88	58.47	70.26	70.26
Shanan Share	2.63	2.63	2.63	2.63	2.63
Malana	65.39	68.03	75.07	73.28	73.28
Baspa (Primary & Sec.)	149.09	155.49	161.16	143.19	143.19

Particulars	FY15 Actual	FY16 Provisional	FY17 Estimated	FY18 Projected	FY19 Projected
Nathpa Jhakri HEP	61.23	52.12	67.27	0.00	0.00
Rampur project	23.73	2.92	7.65	0.00	0.00
Larji	75.95	77.87	74.56	80.60	80.60
Ghanvi	10.29	11.81	10.39	11.70	11.70
Baner	5.52	5.81	4.20	5.20	5.20
Gaj	6.01	5.40	3.77	5.20	5.20
Khauli	6.12	5.89	4.33	5.98	5.98
Ghanvi II	4.61	5.37	5.07	5.20	5.20
Uhl-III	0.00	0.00	0.00	26.58	50.94
Small HEP/ Private Micro - Free	59.43	69.06	93.27	116.59	116.59
Total	**569.42**	**567.31**	**633.60**	**546.41**	**570.76**

Purchase from NTPC Stations

3.4.4 HPSEBL has submitted that NRPC vide its letter No: NRPC/ OPR/ 103/ 02/ 2016/1554-76 dated 17.02.2016 has made allocation revision 10/2015-16 dated 17.02.2016 w.e.f. 19.02.2016. There is allocation made to HP from Koldam HEP @ 28% i.e. 13% Free Power to GoHP + 15% unallocated share, out of which 15% unallocated share is mandatory as per the standard norms of Govt. of India.

3.4.5 The Petitioner has also submitted that the decision on surrendering of power from Anta, Auriya and Dadri has still not been made by Ministry of Power and therefore has requested the Hon'ble Commission to consider the same.

3.4.6 The actual power purchase quantum for FY15 and FY16, estimated for FY17 and projected for FY18 and FY19 from NTPC stations as submitted by the Petitioner is provided in the table below:

Table 12: HPSEBL Submission– Power Purchase from NTPC stations for FY15 to FY19

Particulars	FY15 Actual	FY16 Provisional	FY17 Estimated	FY18 Projected	FY19 Projected
Anta (G)	67.51	48.18	62.03	54.44	54.44
Anta (L)	0.00	0.00	0.05	0.00	0.00
Anta (LNG)	2.11	2.40	0.03	0.00	0.00
Auriya (G)	61.94	84.59	61.32	54.43	54.43
Auriya (L)	0.01	0.00	0.15	0.00	0.00
Auriya (LNG)	3.99	2.75	0.38	0.00	0.00
Dadri (G)	82.63	127.02	126.85	90.26	90.26
Dadri (L)	0.00	0.00	0.12	0.00	0.00
Dadri (LNG)	7.00	2.65	0.31	0.00	0.00

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Unchahar-I	51.99	69.09	70.97	50.92	50.92
Unchahar-II	92.37	124.22	115.96	86.55	86.55
Unchahar-III	60.38	65.95	73.27	57.69	57.69
Rihand-1 STPS	235.72	264.80	234.39	243.77	243.77
Rihand-2 STPS	236.67	262.58	246.05	242.94	242.94
Singrauli STPS	36.97	81.21	61.81	30.19	30.19
Kahalgaon – II	152.81	173.82	148.91	145.87	145.87
Rihand-3 Units-1,2	218.79	251.34	239.12	199.40	199.40
Dadri-II TPS	18.94	67.28	58.46	14.74	14.74
Jhajjar TPS	23.21	41.17	0.02	0.00	0.00
Koldam	0.00	17.44	465.90	453.64	453.64
Total	**1,353.04**	**1,686.50**	**1,966.12**	**1,724.83**	**1,724.83**

Purchase from NPCIL Stations

3.4.7 The actual power purchase quantum for FY15 and FY16, estimated for FY17 and projected for FY18 and FY19 from NPCIL stations as submitted by the Petitioner is provided in the table below:

Table 13: HPSEBL Submission– Power Purchase from NPCIL stations for FY15 to FY19

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
NAPP	93.59	119.62	83.39	85.73	85.73
RAPP (V & VI)	101.10	141.46	100.79	105.64	105.64
Total	**194.68**	**261.09**	**184.18**	**191.36**	**191.36**

Purchase from NHPC Stations

3.4.8 The actual power purchase quantum for FY15 and FY16 and projected for FY17, FY18 and FY19 from NHPC stations as submitted by the Petitioner is provided in the table below:

Table 14: HPSEBL Submission– Power Purchase from NHPC stations for FY15 to FY19

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Chamera I	68.47	66.44	61.98	66.95	66.95
Chamera II	58.13	56.71	53.60	52.89	52.89
Chamera III	29.61	0.37	0.00	0.00	0.00
Parbati III	20.65	0.52	0.00	0.00	0.00
Salal	33.61	33.88	33.51	33.17	33.17
Tanakpur	11.61	12.47	13.22	11.75	11.75

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Uri	81.59	86.50	75.64	78.03	78.03
Uri II	5.21	0.00	0.00	0.00	0.00
Dhauliganga	27.85	40.38	33.63	40.51	40.51
Dulhasti	8.62	11.15	0.00	0.00	0.00
Sewa II	3.63	3.11	0.00	0.00	0.00
Total	**348.98**	**311.51**	**271.59**	**283.31**	**283.31**

Purchase from THDC Stations

3.4.9 The actual power purchase quantum for FY15 and FY16 and projected for FY17, FY18 and FY19 from THDC stations as submitted by the Petitioner is provided in the table below:

Table 15: HPSEBL Submission– Power Purchase from THDC stations for FY15 to FY19

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Tehri	60.99	12.33	0.00	0.00	0.00
Koteshwar	23.27	5.16	0.00	0.00	0.00
Total	**84.26**	**17.49**	**0.00**	**0.00**	**0.00**

Purchase from BBMB and other Shared Stations

3.4.10 The actual power purchase quantum for FY15 and FY16, estimated for FY17 and projected for FY18 and FY19 from BBMB and other shared stations as submitted by the Petitioner is provided in the table below:

Table 16: HPSEBL Submission– Power Purchase from BBMB and other Shared stations for FY15 to FY19

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
BBMB Old	43.80	43.92	43.80	43.80	43.80
BBMB New	331.49	368.37	323.19	365.13	365.13
Dehar	178.17	188.66	209.33	181.63	181.63
Pong	38.92	50.88	40.49	47.23	47.23
Shanan (available to HPSEB)	5.26	5.26	5.26	5.26	5.26
Shanan Ext (available to HPSEB)	45.00	45.00	45.00	45.00	45.00
Yamuna	439.60	404.83	389.25	387.82	387.82
Khara	42.59	63.82	61.57	54.74	54.74
Total	**1,124.82**	**1,170.75**	**1,117.89**	**1,130.61**	**1,130.61**

Purchase from SJVNL and other Stations

3.4.11 HPSEBL has submitted capacity addition of 36.74 MW for FY18 and 19.40 MW for FY19 for private IPPs, the details of which have been provided below:

Table 17: HPSEBL Submission– Expected IPPs (upto 25MW) capacity (MW) addition during FY 2017-18

Hydro Project	Capacity (MW)
Haripur Nalla	3.00
Mannuni	3.50
Bagrood	0.24
Tangnu Romai II	6.00
Kut	24.00
Total	**36.74**

Table 18: HPSEBL Submission– Expected IPPs (upto 25MW) capacity (MW) addition during FY 2018-19

Name of HEP	Capacity (MW)
Kotagad	3.50
Jail	1.20
Rana	1.20
Kiunr	5.00
Kesta	4.50
Balh Padhar	4.00
Total	**19.40**

3.4.12 The actual power purchase quantum for FY15 and FY16, estimated for FY17 and projected for FY18 and FY19 from SJVNL and other stations as submitted by the Petitioner is provided in the table below:

Table 19: HPSEBL Submission– Power Purchase from SJVNL and other stations for FY15 to FY19

SJVNL & Other Stations	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Nathpa Jhakri SOR	178.63	194.93	177.07	163.32	163.32
Nathpa Jhakri Equity	1483.52	1585.72	1555.74	1505.42	1505.42
Rampur HEP SOR Share	32.14	51.86	51.65	52.77	52.77
Rampur HEP Equity Share	44.97	503.02	514.59	490.18	490.18
Total	**1,739.25**	**2,335.53**	**2,299.05**	**2,211.69**	**2,211.69**

Private IPPs	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected

Private IPPs	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Small HEP/ Private Micro	1070.18	1117.61	1032.43	1277.35	1338.69
Small HEP/ Private Micro - REC	253.88	342.27	301.88	310.02	310.02
Baspa - II - Primary	981.34	982.58	1001.27	1050.06	1050.06
Baspa - II Secondary Energy	111.98	157.69	180.56	77.22	77.22
Total	**2,417.37**	**2,600.15**	**2,516.14**	**2,714.65**	**2,775.99**

Purchase from Singrauli Solar Bundled Power

3.4.13 To meet the solar power obligation as per renewable power purchase obligation in line with the Regulation 4 of the HPERC (Renewable Power Purchase Obligation and its Compliance) Regulations, 2010, HPSEBL is procuring power from SECI & Singrauli Solar. In Singrauli Solar HPSEBL is buying bundled power of 30 MW out of which 15 MW is being procured from Singrauli Solar and remaining 15 MW from thermal stations – Singrauli STPS, Rihand-I, Rihand-II, Rihand-III, Unchahar-I, Unchahar-II, Unchahar-III & Dadri-II. The power projections taken for NTPC stations include the aforementioned bundled power purchase from these stations.

3.4.14 The details of bundled power are given as provided in the table given below:

Table 20: HPSEBL Submission– Energy Availability from Singrauli Solar Bundled Power

Name of Station	Capacity (MW)	SOR		UA		Total	
		%	MW	%	MW	%	MW
Singrauli STPS	2000	0.00	0.00	0.21	4.20	0.21	4.20
Rihand-I	1000	3.50	35.00	0.20	3.70	3.70	37.00
Rihand-II	1000	3.30	33.00	0.22	3.52	3.52	35.20
Rihand-III	1000	3.37	33.71	0.25	3.62	3.62	36.21
Unchahar-I	420	1.67	7.01	0.08	1.75	1.75	7.35
Unchahar-II	420	2.86	12.01	0.24	3.10	3.10	13.20
Unchahar-III	210	3.81	8.00	0.24	4.05	4.05	8.51
Dadri	980	0	0.00	0.23	0.23	0.23	2.25
Total (MW)			**128.74**		**15**		**143.74**
Singrauli Solar	15	100	15	Nil	Nil	100	15
Singrauli Unbundled		100	15	100	15	100	**30**

3.5 Renewable Purchase Obligation

3.5.1 While HPSEBL is meeting its Renewable Purchase Obligations of Non-Solar power from its existing sources itself, for Solar RPPO, it is procuring power from the following sources:

a) Singrauli Solar

b) SECI

3.5.2 The Petitioner has submitted the following compliance to the renewable power purchase obligation for FY15:

Table 21: HPSEBL Submission– Details of Solar RPO Achieved and Available for FY15 to FY19

Particulars	Solar RPO				
	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Solar (%)	0.25%	0.25%	0.25%	0.50%	0.75%
Solar (MUs)-obligation	22.08	22.00	22.90	47.83	74.95
July 2013 Order obligation-FY12 (0.74 MU) & FY13 (18.4 MU)		0.74	18.4		
Total Obligation	**22.08**	**22.74**	**41.30**	**47.83**	**74.95**
Available Solar (MUs) - Singrauli & SECI	2.66	51.56	63.44	58.25	58.25
surplus (+)/deficit (-)	-19.42	28.82	22.14	10.43	-16.69

3.5.3 HPSEBL has submitted that it has not been able to completely meet the solar purchase obligation of 22 MUs (0.25% of 8806.9 MUs) for FY15 and the shortfall in purchase was of 19.4 MUs. HPSEBL has further submitted that the aforesaid shortfall of 19.4 MUs is proposed to be met by surplus solar power of FY16 and FY17 even after meeting the obligation of respective years as well as those of FY12 and FY13.

3.5.4 Therefore, the shortfall of 19.4 MUs of FY15 is to be met by the following ways:

a) 13.6 MUs in FY16

b) 5.7 MUs in FY17

3.5.5 Further, the shortfall obligation of solar for FY 19 is proposed to be met by surplus of FY17 & FY18.

3.6 Banking Details

3.6.1 The Petitioner has submitted the following actuals for FY15 and FY16, estimated for FY17 and projections for FY18 and FY19 for banking:

Table 22: HPSEBL Submission– Details of Banking Purchase and Sale for FY15 to FY19

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Banking Purchase	1814.25	1698.66	1636.79	1610.00	1855.00
Banking Sale	1663.13	2189.24	1777.87	1610.00	1610.00

3.7 Power Procurement Cost

Actual and Revised Power Purchase Cost from HPSEBL's own stations

3.7.1 HPSEBL has submitted the revised estimate of power purchase cost from own generation plants for FY17, FY18 and FY19 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.

3.7.2 HPSEBL is in the process of filing petition for Ghanvi-II and as of now, power purchase cost as per MYT order has been considered. However, in case of variation in purchase cost of Ghanvi-II and UHL-III, the variation shall be considered during true-up at the time of final approval by the Hon'ble Commission.

Table 23: HPSEBL Submission– Power Purchase Cost from Own Generating Stations for FY15 to FY19 (in Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Bhaba	32.31	0.00	12.72	39.05	45.24
Bassi	22.11	22.96	24.75	23.18	24.10
Giri	17.90	13.37	16.08	15.77	17.10
Andhra	7.24	6.80	7.27	8.39	9.10
Ghanvi	16.99	19.48	18.75	17.62	17.62
Baner	5.87	6.52	5.89	5.99	6.33
Gaj	10.53	9.98	8.22	9.88	10.51

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Larji	142.97	141.32	129.54	118.67	120.83
Khauli	10.10	9.72	7.91	9.00	9.00
Binwa	4.54	4.82	5.48	6.30	6.90
Thirot	1.82	1.42	3.49	2.70	2.70
Gumma	0.00	0.40	0.90	1.96	1.96
Holi	1.73	0.17	1.61	2.25	2.25
Bhaba Aug	0.34	2.66	3.98	3.71	3.71
Nogli	1.59	1.91	2.65	2.37	2.60
Rongtong	0.09	0.00	0.59	2.70	2.92
Sal-II	1.21	0.00	0.51	0.00	0.00
Chaba	1.51	1.45	1.42	1.71	1.88
Rukti	0.02	0.00	0.59	0.81	0.89
Chamba	0.21	0.12	0.25	0.21	0.23
Killar	0.11	0.10	0.21	0.09	0.09
Uhl III - BVPCL	0.00	0.00	0.00	80.06	153.40
Ghanvi II	10.73	12.50	17.65	11.05	11.05
Total	**289.92**	**255.68**	**270.45**	**363.46**	**450.40**

Actual and Revised Power Purchase Cost from GoHP Free Power

3.7.3 HPSEBL has submitted that the actual power purchase cost from GoHP free power for FY 15 and FY16 has been considered at Rs. 2.87/unit and Rs. 2.80/unit respectively. The revised estimate for power purchase cost from GoHP free power for FY17, FY18 and FY19 has been considered at Rs. 2.92/unit as per HPERC Order dated 13th Apr 2016 on GoHP free power for FY17.

Table 24: HPSEBL Submission– Power Purchase Cost from GoHP Free Power for FY15 to FY19 (in Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Baira Siul	0.01	0.11	1.79	0.00	0.00
Chamera-I	0.03	1.34	6.47	0.00	0.00
Chamera-II	0.04	1.23	4.01	0.00	0.00
Chamera-III	4.38	0.88	2.55	0.00	0.00
Parbati-III	0.02	0.19	1.73	0.00	0.00
Kol Dam	0.00	1.01	2.66	0.00	0.00
Ranjeet Sagar Dam Share	24.04	24.61	17.07	20.51	20.51
Shanan Share	0.75	0.74	0.77	0.77	0.77
Malana	18.77	19.05	21.92	21.40	21.40
Baspa (Primary & Sec.)	42.79	43.54	47.06	41.81	41.81
Nathpa Jhakri HEP	17.57	14.59	19.64	0.00	0.00

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Rampur project	6.81	0.82	2.23	0.00	0.00
Larji	21.80	21.80	21.77	23.54	23.54
Ghanvi	2.95	3.31	3.03	3.42	3.42
Baner	1.59	1.63	1.23	1.52	1.52
Gaj	1.72	1.51	1.10	1.52	1.52
Khauli	1.76	1.65	1.26	1.75	1.75
Ghanvi II	1.32	1.50	1.48	1.52	1.52
Uhl-III	0.00	0.00	0.00	7.76	14.87
Small HEP/ Private Micro - Free	17.06	19.34	27.23	34.05	34.05
Total	**163.42**	**158.85**	**185.01**	**159.55**	**166.66**

Actual and Revised Power Purchase Cost from NTPC Stations

3.7.4 HPSEBL has revised the power purchase cost of NTPC Stations for FY17, FY18 and FY19 by considering the following:

a) For FY 2016-17, the power purchase cost upto Sep'16 has been taken as on actual basis and thereafter projection for the period from October, 2016 to March 2017 have been made based on the average rate upto Sep'16.

b) For FY 2017-18 & FY 2018-19, the Power Purchase cost projections have been made based on 5% escalation to power purchase cost of the previous year.

Table 25: HPSEBL Submission– Power Purchase Cost from NTPC stations for FY15 to FY19 (in Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Anta (G)	29.25	23.20	24.16	25.37	26.64
Anta (L)	0.00	0.00	0.04	0.00	0.00
Anta (LNG)	2.19	2.41	0.06	0.00	0.00
Auriya (G)	31.99	40.95	29.09	30.55	32.08
Auriya (L)	0.01	0.00	0.12	0.00	0.00
Auriya (LNG)	5.07	3.07	0.24	0.00	0.00
Dadri (G)	40.11	55.07	42.67	44.80	47.04
Dadri (L)	0.00	0.00	0.10	0.00	0.00
Dadri (LNG)	8.54	2.85	0.17	0.00	0.00
Unchahar-I	19.39	22.69	22.85	24.00	25.20
Unchahar-II	33.94	41.39	37.98	39.88	41.87
Unchahar-III	25.22	25.77	26.51	27.84	29.23
Rihand-1 STPS	60.54	67.04	57.12	59.98	62.98

Particulars	FY15 Actual	FY16 Provisional	FY17 Estimated	FY18 Projected	FY19 Projected
Rihand-2 STPS	63.69	66.92	59.89	62.88	66.03
Singrauli STPS	6.34	14.23	10.71	11.24	11.80
Kahalgaon – II	56.46	56.91	49.79	52.28	54.89
Rihand-3 Units-1,2	69.38	83.08	72.32	75.93	79.73
Dadri-II TPS	10.28	28.58	19.98	20.97	22.02
Jhajjar TPS	13.83	20.74	0.01	0.00	0.00
Koldam	0.00	16.92	212.07	222.65	233.79
Total	**476.25**	**571.81**	**665.89**	**698.38**	**733.29**

Actual and Revised Power Purchase Cost from NPCIL Stations

3.7.5 For power purchase cost of FY 15 and FY 16, HPSEBL has considered the actual costs from NPCIL stations and for FY 2016-17, the power purchase cost upto Sep'16 has been taken as on actual basis and thereafter projection for the period October 2016 to March 2017 have been made based on the average rate upto Sep'16.

3.7.6 For FY 2017-18 & FY 2018-19, the Power Purchase cost projections have been made based on 5% normative escalation on power purchase cost of the previous year.

Table 26: HPSEBL Submission– Power Purchase Cost from NPCIL stations for FY15 to FY19 (in Rs. Cr.)

Particulars	FY15 Actual	FY16 Provisional	FY17 Estimated	FY18 Projected	FY19 Projected
NAPP	23.28	29.98	21.43	22.50	23.62
RAPP (V & VI)	34.76	49.02	35.48	37.25	39.12
Total	**58.04**	**79.01**	**56.91**	**59.75**	**62.74**

Actual and Revised Power Purchase Cost from NHPC Stations

3.7.7 For power purchase cost of FY 15 and FY 16, HPSEBL has considered the actual costs from NHPC stations and for FY 2016-17, the power purchase cost upto Sep'16 has been taken as on actual basis and thereafter projection for the period October 2016 to March 2017 have been made based on the average rate upto Sep'16.

3.7.8 For FY 2017-18 & FY 2018-19, the power purchase cost projections have been made based on 5% normative escalation on power purchase cost of the previous year by taking into consideration the notified tariff orders of NHPC Stations for the Control Period 2014-19 based on CERC tariff regulation 2014-19.

Table 27: HPSEBL Submission– Power Purchase Cost from NHPC stations for FY15 to FY19 (in Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Chamera I	11.72	11.90	14.63	15.37	16.13
Chamera II	17.71	17.42	16.69	17.52	18.40
Chamera III	13.48	1.89	0.00	0.00	0.00
Parbati III	9.70	1.15	0.00	0.00	0.00
Salal	5.95	6.48	3.93	4.13	4.33
Tanakpur	3.32	4.53	5.28	5.55	5.82
Uri	15.28	16.16	12.13	12.74	13.38
Uri II	2.08	0.50	0.00	0.00	0.00
Dhauliganga	7.89	12.42	12.14	12.75	13.39
Dulhasti	5.94	7.85	0.00	0.00	0.00
Sewa II	1.54	1.67	0.00	0.00	0.00
Total	**94.61**	**81.98**	**64.81**	**68.05**	**71.45**

Actual and Revised Power Purchase Cost from THDC Stations

3.7.9 HPSEBL has not projected any power from THDC stations for FY17, FY18 and FY19 although, actual power purchase during FY 15 & FY16 has been taken.

Table 28: HPSEBL Submission– Power Purchase Cost from THDC stations for FY15 to FY19 (in Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Tehri	33.93	7.03	0.00	0.00	0.00
Koteshwar	8.96	2.08	0.00	0.00	0.00
Total	**42.88**	**9.11**	**0.00**	**0.00**	**0.00**

Actual and Revised Power Purchase Cost from BBMB and other Shared Stations

3.7.10 HPSEBL has revised the power purchase cost of BBMB & other Shared Stations for FY17, FY18 and FY19 by considering the following:

a) For FY 2016-17, the Power Purchase cost upto Sep'16 has been taken as on actual basis and thereafter projection for the period October 2016 to March 2017 have been made based on the average rate upto Sep'16.

b) For BBMB old Station (fixed 1.2 LU/day), the Power Purchase cost projections for FY 2017-18 & FY 2018-19 have been made based on 10% escalation on power purchase cost of previous year. The 10% escalation has been considered based on the past years trend of tariff increase for the station.

c) For BBMB other stations, the Power Purchase cost projections for FY 2017-18 & FY 2018-19 have been made based on 5% normative escalation on power purchase cost of the previous year.

d) For Shanan Stations, the Power Purchase cost projections for FY 2017-18 & FY 2018-19 have been made based on the tariff approved by the Punjab State Electricity Regulatory Commission.

e) For UJVNL (Yamuna) Stations, the Power Purchase cost projections for FY 2016-17, FY 2017-18 & FY 2018-19 have been made based on the tariff approved by the Uttarakhand State Electricity Regulatory Commission.

f) For UPJVNL (Khara), the Power Purchase cost projections for FY 2016-17, FY 2017-18 & FY 2018-19 have been made based on the Petition filed by UPJVNL in Uttar Pradesh State Electricity Regulatory Commission.

Table 29: HPSEBL Submission– Power Purchase Cost from BBMB and other Shared stations for FY15 to FY19 (in Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
BBMB Old	4.13	4.58	4.98	5.48	6.03
BBMB New	18.66	21.19	22.25	21.17	23.28
Dehar	14.28	15.32	10.85	15.37	16.91
Pong	1.71	2.07	1.73	1.80	1.98
Shanan (available to HPSEB)	0.00	0.21	0.00	0.28	0.28
Shanan Ext (available to HPSEB)	0.81	0.93	0.93	2.43	2.43

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Yamuna	31.42	33.05	39.66	44.78	49.95
Khara	3.08	4.60	7.14	8.83	8.93
Total	**74.09**	**81.94**	**87.55**	**100.14**	**109.79**

Actual and Revised Power Purchase Cost from SJVNL and other Stations

3.7.11 HPSEBL has revised the power purchase cost of SJVNL Stations for FY17, FY18 and FY19 by considering the following:

a) For FY 2016-17, the Power Purchase cost upto Sep'16 has been taken as on actual basis and thereafter projections for the period October 2016 to March 2017 have been made based on the 5% escalation to the average rate for the corresponding period of the previous year.

b) For FY 2017-18 & FY 2018-19, the Power Purchase cost projections have been made based on 5% normative escalation on power purchase cost of the previous year.

3.7.12 HPSEBL has revised the power purchase cost of Baspa-II station by considering the approved tariff by HPERC. Further, the Petitioner has submitted that every year Baspa-II has been generating power more than 1050 MUs and the power of quantum over and above 1050 MU is also being purchased by HPSEBL and hence, the power procurement cost of the secondary energy along with incentive on higher availability has also been considered.

3.7.13 HPSEBL has revised the power purchase cost of Other Stations (IPPs- less than 25 MW) for FY17, FY18 and FY19 by considering current tariff of the each stations while for APPC tariff stations, the tariff for FY18 & FY19 has been determined by considering the projected power purchase.

3.7.14 HPSEBL has also highlighted that SJVNL has filed NJHPS tariff revision petition before Hon'ble CERC for approval of revised AFC for the period FY 2004-09 on account of additional capitalization.

Table 30: HPSEBL Submission– Power Purchase Cost from SJVNL and other stations for FY15 to FY19 (in Rs. Cr.)

SJVNL & Other Stations	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Nathpa Jhakri SOR	56.34	58.96	55.03	57.78	60.67

SJVNL & Other Stations	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Nathpa Jhakri Equity	453.45	461.80	478.71	502.65	527.78
Rampur HEP SOR Share	12.81	20.04	11.66	12.24	12.85
Rampur HEP Equity Share	13.36	176.54	113.90	119.59	125.57
Total	**535.95**	**717.33**	**659.30**	**692.26**	**726.88**

<table>
<tr><th rowspan="2">Private IPPs</th><th>FY15</th><th>FY16</th><th>FY17</th><th>FY18</th><th>FY19</th></tr>
<tr><th>Actual</th><th>Provisional</th><th>Estimated</th><th>Projected</th><th>Projected</th></tr>
<tr><td>Small HEP/ Private Micro</td><td>295.64</td><td>313.45</td><td>284.95</td><td>352.55</td><td>369.48</td></tr>
<tr><td>Small HEP/ Private Micro - REC</td><td>57.86</td><td>78.65</td><td>75.47</td><td>72.85</td><td>76.26</td></tr>
<tr><td>Baspa - II - Primary</td><td>287.02</td><td rowspan="2">270.76</td><td rowspan="2">184.06</td><td rowspan="2">179.57</td><td rowspan="2">179.62</td></tr>
<tr><td>Baspa - II Secondary Energy</td><td>32.75</td></tr>
<tr><td>Total</td><td>673.27</td><td>662.87</td><td>544.48</td><td>604.98</td><td>625.37</td></tr>
</table>

Actual and Revised Power Purchase Quantum and Cost

3.7.15 The summary of power purchase cost for FY15 to FY19 from different stations and as submitted by HPSEBL has been provided below:

Table 31: HPSEBL Submission–Total Power Purchase Cost from for FY15 to FY19 (in Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Own generation	289.92	255.68	270.45	363.46	450.40
GoHP Free Power	163.42	158.85	185.01	159.55	166.66
NTPC	476.25	571.81	665.89	698.38	733.29
Solar Power	2.28	34.40	40.09	37.97	37.97
NPCIL	58.04	79.01	56.91	59.75	62.74
NHPC	94.61	81.98	64.81	68.05	71.45
THDC	42.88	9.11	0.00	0.00	0.00
BBMB & Share Stations	74.09	81.94	87.55	100.14	109.79
SJVNL & Other Stations	1209.22	1380.20	1203.78	1297.24	1352.25
Banking availed	0.00	0.00	0.00	0.00	0.00
UI	102.79	66.79	41.67	0.00	0.00
Contingency	29.29	45.61	51.93	12.13	12.57
Total	**2749.38***	**2818.48****	**2668.09**	**2796.66**	**2997.12**

**For FY15, total power purchase cost includes Rs 206.59 Cr. of past year arrears*

***For FY16, total power purchase cost includes Rs 53.10 Cr. of past year arrears*

3.8 Transmission & SLDC Charges

3.8.1 The summary of transmission charges and other power purchase related charges as submitted by the Petitioner FY15 to FY19 from different stations has been provided below:

Table 32: HPSEBL Submission–Transmission Charges and other power purchase related charges from for FY15 to FY19 (in Rs. Cr.)

Particulars	Actual	Provisional	Estimated	Projected	Projected
	FY15	FY16	FY17	FY18	FY19
PGCIL Charges	264.44*	148.92*	189.77	213.43	234.77
STU Charges	3.45	3.48	5.90	5.95	6.07
Open Access Charges	51.88	54.23	56.18	61.80	67.98
ULDC Charges	0.00	0.00	11.32	8.89	7.34
NRLDC Charges	2.63	2.50			
Total	**322.40**	**209.13**	**263.17**	**290.07**	**316.15**

**ULDC Charges for FY15 & F16 are included in PGCIL charges*

3.9 Employee Cost

3.9.1 A summary of the employee expenses for the distribution business of HPSEBL for FY15 to FY19 as submitted by the Petitioner as given below:

Table 33: HPSEBL Submission– Employee Cost for Distribution for FY15 to FY19 (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Salaries & Allowances					
Salaries (Basic) + Dearness Pay	285.03	273.09	294.47	317.57	431.17
Merger of DA with Basic (Proposed)	-	-	-	-	-
Grade pay	58.44	63.20	68.15	73.49	99.78
DA	359.83	376.97	406.49	438.37	595.18
Other Allowances	30.66	29.66	31.98	34.49	46.83
Overtime	3.20	3.48	3.75	4.05	5.49
Bonus	0.15	1.66	1.79	1.93	2.62
Salaries - Total	**737.31**	**748.06**	**806.64**	**869.89**	**1,181.08**
Other Staff Cost					
Leave Travel Assistance	0.29	0.39	0.42	0.45	0.62
Fee & Honorarium	0.02	0.01	0.01	0.01	0.02
Earned Leave Encashment	39.00	75.76	81.69	88.10	119.61
Medical Expense Re-Imbursement	8.70	8.23	8.87	9.57	12.99
Leave Salary Contribution	-	-	-	-	-

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Payment Under Workman'S Compensation And Gratuity	1.74	1.14	1.23	1.33	1.80
Salary/Wages of Outsouced/Contractor.	8.60	16.87	18.19	19.62	26.64
Staff Welfare Expenses	0.67	0.49	0.53	0.57	0.77
Gross Other Staff Cost	**59.02**	**102.89**	**110.95**	**119.65**	**162.45**
Terminal Benefits	**478.75**	**632.50**	**680.03**	**748.03**	**822.84**
Gross Employee Cost	**1,275.08**	**1,483.45**	**1,597.61**	**1,737.58**	**2,166.37**
Less : Chargeable To Construction Works	52.25	55.78	60.15	64.86	88.07
Net Employee Cost	**1,222.83**	**1,427.67**	**1,537.47**	**1,672.71**	**2078.30**
Add: Additional liability in account of 7th Pay commission				**243.04**	
Arrears of Previous Year(Impact of 7th Pay Commission) w.e.f 01.01.2016				**225.66**	
Interim relief-5% of basic + Grade Pay			**18.13**		
Grand Total	**1,222.83**	**1,427.67**	**1,555.60**	**2,141.41**	**2,078.30**

3.9.2 HPSEBL has also submitted the segregated Terminal Benefits for FY15 and FY16. As per Annual Budget Plan of FY17, the Terminal Benefits for Distribution Business for FY17 comes out to be Rs. 680.03 Cr. which is an increase of 7.51% over FY16. The Petitioner has thus considered a growth of 10% for projecting Terminal Benefits for FY18 and FY19.

Table 34: HPSEBL Submission– Computation of Terminal Benefits for Distribution Business in FY15 and FY16 (Rs. Cr.)

Particulars	HPSEBL	Generation	Distribution
Terminal Benefits- FY 15	479.32	0.57	478.75
Terminal Benefits- FY 16	640.80	8.30	632.50

3.9.3 The Petitioner has also 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 actual revision in the salary is expected to be around 20%. The Hon'ble Commission has already approved 10% increase in Salaries and Gratuities in FY 2016-17. However, the actual impact of 7th Pay Commission would come in FY18 and hence the Petitioner has considered Interim relief of 5% of Basic Pay, Grade Pay in FY 17.

3.9.4 The Petitioner has made a provision of 15% of the salaries and gratuity as the additional liability on account of salary revision due to implementation of 7th Pay Commission's recommendations in FY 2017-18. Further, the arrears of previous years with effect from 1st Jan'16 has also been considered in FY 2017-18 which amounts to around Rs.224.62 Cr.

3.10 Administrative and General Expenses

3.10.1 The Administrative and General Expenses submitted by HPSEBL for FY15 to FY19 is summarized in the table below.

Table 35: HPSEBL Submission- Administrative and General Expenses for FY15 to FY19 (Rs. Cr.)

Particulars	FY15 Actual	FY16 Provisional	FY17 Estimated	FY18 Projected	FY19 Projected
Administration Charges					
Rent, Rates & Taxes	2.0	1.3	1.4	2.0	2.0
Telephone, Postage & Telegrams	2.5	2.6	2.8	2.9	3.1
Consultancy Charges	0.6	0.5	0.6	0.6	0.6
Consultancy charges towards Digitization of Consumer and Employee data				2.0	2.0
Consultancy charges towards Accounting Manual				2.0	
Meter Data & Meter Performance Analysis				2.0	
Consultancy charges towards Voltage Wise CoS				0.7	
Conveyance & Travel	16.8	15.0	15.8	16.7	17.7
Regulatory Expenses	0.9	1.0	1.1	1.1	1.2
Licence fee Distribution & Transmision payble to HPERC	0.25	0.3	0.3	0.3	0.3
Income Tax Updating Charges	0.1	0.1	0.1	0.1	0.1
Consumer Redressal Forum	0.5	0.5	0.5	0.6	0.6
Insurance	0.0	0.0	0.0	0.0	0.0

Particulars	FY15 Actual	FY16 Provisional	FY17 Estimated	FY18 Projected	FY19 Projected
Purchase Related Expenses & Other Charges	2.6	0.0	0.0	0.0	0.0
Administration Charges - Total	**26.1**	**21.4**	**22.6**	**31.0**	**27.6**
Other Charges					
Fees & Subscriptions, Books & Periodicals	1.7	0.30	0.3	0.3	0.4
Printing & Stationery	2.4	1.13	1.2	1.3	1.3
Exp. Under RTI and processing fee			0.0	0.0	0.0
Advertisement Expenses	0.6	0.48	0.5	0.5	0.6
Donation/ Contribution			0.0	0.0	0.0
Electricity Charges	3.6	5.59	5.9	6.2	6.6
Water Charges / Cold weather expenses	0.3	0.32	0.3	0.4	0.4
Miscellaneous Expenses	1.09	2.90	3.1	3.2	3.4
Legal Charges	0.9	2.47	2.6	2.8	2.9
Audit Fee/Statutory Audit Fee	0.6	0.21	0.2	0.2	0.2
Freight Material related Expenses		2.56	2.7	2.9	3.0
Entertainment Charges	0.1	0.06	0.1	0.1	0.1
Training to Staff	0.0	0.40	1.0	5.0	5.0
Public Interaction Program	0.2	0.16	0.2	0.2	0.2
Public Expenses / Other Professional charges	0.6	0.67	0.7	0.7	0.8
GIS / GPS expenses related to High level Committee	0.4	1.20	1.3	1.3	1.4
Connectivity charges for computer related data centre expenses			4.1	4.6	5.0
Expense of collection of energy bill through agency	0.7	1.31	1.4	1.5	1.5
Fee for SSA Examination	0.0	0.02	0.0	0.0	0.0
Compensation paid for non-compliance of Renewable Power	5.0	12.23		0.0	0.0
A&G – Total	**44.14**	**53.37**	**48.08**	**62.28**	**60.42**
Less: Capitalisation	1.35	1.58	1.76	1.76	1.86
Net A&G Costs	**42.73**	**51.79**	**46.41**	**60.52**	**58.56**

3.10.2 HPSEBL has submitted that it has considered historical data to project expenses under different sub-heads. Also, the following additional provisions have been made by HPSEBL in A&G expenses:

a) Consultancy for Meter Data and Meter Performance Analysis for checking the entire metering system of all large consumers and thereafter do a regular analytics of the AMR data to check theft and revenue leakage.

b) Preparation of Accounting and Consultancy for Digitization of Employees and Consumers Data is already in the initial stages and is to be awarded soon to the most eligible Consultant.

c) Consultancy for carrying out voltage wise cost of supply study has also been considered.

d) Connectivity Charges for the computer network linking the data centre to all the field units to form a WAN is a recurring expense required to ensure implementation of the various IT initiatives.

e) Projections for training to Staff has been increased to Rs. 1 Cr for FY 17 and has been increased to Rs. 5 Cr each for FY18 and FY19. The Petitioner has submitted that this is required for skill upgradation considering the dynamic scenario of the distribution business.

3.11 Repairs and Maintenance Expenses

3.11.1 HPSEBL has submitted that it has commissioned two data centres under R-APDRP schemes and has also introduced computerized billing, MDAS, AMR etc. across the State. Further, ERP and billing is being rolled out to all units of the Board. This has necessitated regular AMC of the total hardware, support of the various applications and ATS charges of the different licenses against which the Petitioner has requested an additional amount under the sub-head IT systems.

3.11.2 The Repairs and Maintenance Expenses submitted by HPSEBL for FY15 to FY19 is summarized in the table below:

Table 36: HPSEBL Submission- Repairs and Maintenance Expenses for FY15 to FY19 (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Plant & Machinery	0.05	0.13	0.18	0.20	0.22
Buildings	1.93	2.12	5.00	10.00	10.00
Civil Works	0.22	0.35	1.50	6.00	6.00
Hydraulic Works	0.21	0.00	0.00	0.00	0.00
Lines, Cables Networks & DTR Repair	46.94	46.39	66.00	72.13	80.68
Vehicles	17.96	17.81	24.83	27.13	30.35
Furniture & Fixtures	0.04	0.06	0.50	0.50	0.50
Office Equipment	3.58	3.40	4.74	5.18	5.79
IT Systems			23.04	25.25	30.00
R&M Cost - Total	**70.93**	**70.26**	**125.79**	**146.39**	**163.55**
R&M Costs after Capitalisation	70.93	70.26	125.79	146.39	163.55

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Less: Cost Reallocated to Depreciation & Recovery of cost of vehicle from O&M and other units	35.10	36.14	50.38	55.06	61.59
Net R&M Expenses	**35.53**	**34.12**	**75.41**	**91.33**	**101.96**

3.12 Total O&M Expenses

3.12.1 The total O&M Expenses submitted by HPSEBL for FY15 to FY19 is summarized in the table below.

Table 37: HPSEBL Submission- Total O&M Expenses for FY15 to FY19 (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Employee expenses	1,222.83	1,427.67	1555.6	2141.41	2078.30
R&M expenses	35.53	34.12	75.41	91.63	100.59
A&G expenses	44.14	53.37	48.1	62.28	60.42
Total O&M expenses	**1,302.50**	**1,515.16**	**1,679.08**	**2,295.31**	**2,239.31**

3.13 Depreciation

3.13.1 For the purpose of projection of depreciation charges for FY17, FY18 and FY19, HPSEBL has considered the opening GFA for FY17 and the GFA proposed to be added during FY17, FY18 and FY19.

Table 38: HPSEBL Submission- Asset Details for FY15 to FY19 (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Land & Land Rights	62.91	70.51	78.16	85.31	95.27
Buildings	133.81	130.73	145.38	158.98	178.02
Hydraulic Works	17.39	18.26	20.25	22.1	24.69
Lines & Cable Net	2360.89	2668.36	2931.25	3176.93	3519.64
Plant & Machinery	1484.67	1581.72	1739.94	1887.79	2094.05
Vehicles	14.78	15.80	17.46	19.00	21.16
Furniture & Fixtures	9.75	9.86	10.90	11.86	13.21
Office Equipment	108.06	108.77	116.36	123.46	133.36
Other Civil Works	166.99	174.65	193.84	211.77	236.78
Data Processing Equipment	11.60	-	-	-	-
Total	**4,370.85**	**4,778.67**	**5,253.61**	**5,841.66**	**6,316.60**

3.13.2 Based on the above, the depreciation expenses submitted by HPSEBL for FY15 to FY19 is summarized in the table below.

Table 39: HPSEBL Submission- Depreciation for FY15 to FY19 (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Depreciation	165.9	187.5	177.8	193.9	212.6

3.14 Working Capital Requirements

3.14.1 The Petitioner has considered rate of 13.21% for calculating the interest on working capital. The working capital requirement calculated by the Petitioner for FY15 to FY19 is as below:

Table 40: HPSEBL Submission- Working Capital Requirement for FY15 to FY19 (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
1/12th of total O&M Expenses	108.42	126.13	136.64	148.57	183.01
Receivables equivalent to 2 months average billing	686.77	690.45	795.57	830.61	868.45
Maintenance Spares 40% of the R&M expense for one month	1.18	1.14	1.59	1.74	1.89
Less: Consumer Security Deposit	297.23	304.68	313.06	321.70	330.62
Less: One Month Power Purchase	-	-	-	-	-
Total Working Capital Requirement	499.15	513.04	620.74	659.22	722.73
Interest on Working Capital @ 13.21% per Annum	**65.95**	**67.79**	**82.02**	**87.10**	**95.49**

3.15 Interest on Consumer Security Deposit

3.15.1 The Petitioner has paid interest on security deposit at the rate of 8.5% per annum in the current year and retained the same rate for projections of FY17, FY18 and FY19. The interest on consumer security deposit has been summarized below:

Table 41: HPSEBL Submission- Details of Consumer Security Deposit for FY15 to FY19 (Rs. Cr.)

Financial Year	Interest on Consumer Security Deposit (Rs. Cr.)	No. of consumers
31st March 15 (Actual)	16.89	2199970
31st March 16 (Provisional)	17.64	2255105
31st March 17 (Estimated)	25.90	2317128

Financial Year	Interest on Consumer Security Deposit (Rs. Cr.)	No. of consumers
31st March 18(Projected)	26.61	2381100
31st March 19 (Projected)	27.34	2447101

3.16 Interest Expenses

3.16.1 The break-up of actual interest & finance expenses for FY15 and FY16 has been submitted by the Petitioner as below:

Table 42: HPSEBL Submission- Interest Expense for FY15 to FY19 (Rs. Cr.)

Particulars	FY15	FY16
	Actual	Provisional
RGGVY	3.32	3.21
LIC	9.32	7.58
REC	94.78	102.50
PFC	51.00	37.65
Bonds	33.53	29.91
Bank Loans	91.18	79.46
Interest on State Govt. Loan	0.00	0.00
Non SLR Bonds	0.00	0.00
Other Negotiated Loan	24.31	31.78
Interest on Overdraft	126.47	134.24
Interest on GPF & CPF	13.71	24.88
Cost of Raising Finances	1.23	1.25
Other Charges	0.00	0.00
Interest on Consumer Security Deposits	16.89	17.64
Charges payable to CTU / NLDC	0.00	0.00
Surcharge of delayed payment of POP	111.89	113.11
Rebate allowed for Timely Payment	0.00	0.00
Interest on WC Borrowing & Other Charges (As per Regulations)	65.95	67.79
Interest & Finance Charges - Total	**643.58**	**651.30**
Less: Interest Capitalisation	45.72	70.54
Net Interest & Financing Costs	**531.91**	**512.67**

3.16.2 For FY17, FY18 and FY19, the Petitioner has estimated the interest and financing charges for the distribution business and submitted that a substantial component of it consists of interest on new capital expenditure. The revised estimates of Interest Expenses from FY17 to FY19 has been summarized below:

Table 43: HPSEBL Submission- Interest Expense for FY17 to FY19 (Rs. Cr.)

Particulars	FY17	FY18	FY19
	Estimated	Projected	Projected
RGGVY - Existing loans as on 31 March 2015	3.21	2.90	2.80
REC - Existing loans as on 31 March 2015	85.92	84.67	79.92
PFC - Existing loans as on 31 March 2015	18.15	15.73	14.94
ADB - Existing loans as on 31 March 2015	0.76	0.80	0.80
Short Term Bank Loans as per FRP Restructuring Plan converted to Long term loans	105.61	89.36	72.14
Interest on State Govt. Loan	-	-	-
Non SLR Bonds	75.81	75.81	75.81
Cost of Raising Finances	8.55	7.99	11.14
Interest on Consumer Security Deposits	25.90	26.61	27.34
Interest on new CAPEX loans	44.58	41.67	58.12
Interest on WC Borrowing & Other Charges	81.94	86.93	95.22
Interest towards Kurthala Sub-Station & Line	8.30	6.20	4.10
Interest & Finance Charges - Total	**458.73**	**438.67**	**442.35**
Less: Interest Capitalization	58.13	64.34	61.23
Net Interest & Financing Costs	**400.60**	**374.33**	**381.11**

Additional Interest amount towards Kurthala substation & line

3.16.3 HPSEBL has taken a loan of Rs. 62.69 Cr. from REC to save the interest cost due to M/s Tissa Power Transmission Private Limited against the construction of 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. In favour of this, the Petitioner has claimed an additional interest of Rs 9.34 Cr. in FY17 (which includes Rs 1.91 Cr. of FY16 and Rs 7.43 Cr. of FY17), Rs 7.43 Cr. in FY18 and Rs 7.43 in FY19 which has been considered as a part of projected Interest & Finance Charges.

3.17 Return on Equity

3.17.1 HPSEBL has requested the Commission to allow Return on Equity of Rs. 84.28 Cr. considering a rate of return at 16% for FY15. For projections of FY17, FY18 and FY19, it has considered the opening equity for the distribution business for FY17 as Rs.616.26 Cr.. A summarized table of Petitioner's submission of return on equity is given below:

Table 44: HPSEBL Submission- Return on Equity for FY15 to FY19 (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Opening Equity	490.80	553.30	616.26	663.75	708.13
Equity Infusion	71.96	62.96	47.49	44.38	61.92
Closing Equity	562.76	616.26	663.75	708.13	770.05
Rate of Return on Equity	16.00%	16.00%	16.00%	16.00%	16.00%
Return on Equity	**84.28**	**93.56**	**102.40**	**109.75**	**118.25**

3.18 Provision for Bad and Doubtful Debt

3.18.1 HPSEBL has submitted that the provision for bad and doubtful debt for FY15 is Rs. 1.54 Cr. and has requested the Commission to approve the same.

Table 45: HPSEBL Submission- Provision for Bad & Doubtful Debt for FY15 to FY19 (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Provision for Bad & Doubtful Debt	1.54	3.43	3.27	3.4	3.6

3.19 Impact of Local Area Development Fund (LADF)

3.19.1 HPSEBL has calculated the financial impact of additional 1% free power towards Local Area Development Fund (LADF) from Own Generating stations (Dec '09 to Mar '17), IPPs (Dec '09 to Mar '19) including Baspa-II. The Petitioner has claimed Rs.64.82 Cr.. in FY17, Rs. 7.93 Cr. in FY18 and Rs.8.11 Cr. in FY19. The following table provides break-up of each year starting from FY10:

Table 46: HPSEBL Submission- Local Area Development Fund (Rs. Cr.)

Particulars	Amount (Rs Cr.)
FY 2009-10	1.00
FY 2010-11	9.20
FY 2011-12	9.31
FY 2012-13	8.60
FY 2013-14	9.14
FY 2014-15	7.72
FY 2015-16	9.92
FY 2016-17	9.94
Sub-total (a)	**64.82**
FY 2017-18	7.93
FY 2018-19	8.11
Sub-total (b)	**16.03**
Grand Total (a+b)	**80.86**

3.20 Additional amount for safety measures

3.20.1 HPSEBL has taken a review of the status of safety equipment available at field level and it has observed that out of 1100 sections in HPSEBL, only about 200 sections have safety devices which are not in very good conditions. Therefore, the Petitioner has requested the Commission to approve Rs.10 Cr. each for FY18 and FY19 to introduce best safety equipment for all 1100 sections as well as for EHV sub-station besides providing regular training to the field staff, Junior Engineers etc.

Table 47: HPSEBL Submission- Additional amount for safety measures for FY15 to FY19 (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Additional amount for safety measures	-	1	1	10	10

3.21 Non-Tariff Income

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

Table 48: HPSEBL Submission- Non-Tariff Income for FY15 to FY19 (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	R.E.	Projected	Projected
Meter Rent/Service Line Rentals	44.03	46.59	51.75	57.48	63.85
Recovery for theft of Power / Malpractices	0.05	0.04	0.04	0.05	0.06
Wheeling Charges Recovery	136.67	97.99	109.77	122.96	137.73
Peak Load Violation Charges	35.49	41.58	0.00	0.00	0.00
Miscellaneous Charges from Consumers	5.35	22.02	24.67	27.63	30.95
Non-Tariff Income - Total	**221.59**	**208.22**	**186.22**	**208.12**	**232.59**
Other Income					
Interest on Staff loans & Advances	0.31	0.35	0.35	0.35	0.35
Income from Investments	0.09	0.37	0.40	0.43	0.47
Interest on Loans & Advances to Licensees	0.00	0.00	0.00	1.00	2.00
Delayed Payment Charges from Consumers	73.60	92.36	106.42	111.11	116.17
Interest on Advances to Suppliers / Contractors	0.71	0.42	0.37	0.35	0.29
Interest on Banks (other than on Fixed Deposits)	0.00	0.00	0.00	1.00	2.00
Income from Trading	1.06	2.09	2.17	2.27	2.37
Income fee collected against Staff Welfare Activities	0.13	0.11	0.11	0.11	0.11
Miscellaneous Receipts	37.50	19.07	19.07	19.07	19.07
O&M Charges Recovery from HPPTCL	0.00	0.00	0.00	0.00	0.00
Recovery of Investigation & Survey Charges	0.00	0.00	0.00	0.00	0.00
Amortization of Govt. grants	53.18	58.59			
Prior period Income	212.59	4.21			
Other Income - Total	**379.17**	**177.57**	**128.89**	**135.68**	**142.83**
Total Non-Tariff Income & Other Income	**379.17**	**177.57**	**128.89**	**135.68**	**142.83**

3.22 Aggregate Revenue Requirement

3.22.1 Based on the values determined by HPSEBL for the various parameters, the ARR for the FY15 to FY19 is submitted as below:

Table 49: HPSEBL Submission- Aggregate Revenue Requirement for FY15 to FY19 (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Estimated	Projected	Projected
Power Purchase cost (including Own Generation)	2,749.38	2818.48	2,668.09	2,796.66	2,997.12
Transmission Charges (including PGCIL, HPPTCL, Open Access Charges & SLDC Charges)	322.40	209.13	263.17	290.07	316.15
Local Area Development Fund			64.82	7.93	8.11
R&M Expense	35.53	34.12	75.41	91.63	100.59
Employee Expenses	1,275.08	1427.67	1,555.60	2,141.41	2,078.30
A&G Expense	44.14	53.37	48.08	62.28	60.42
Additional amount for safety measures			1.00	10.00	10.00
Depreciation	165.89	187.53	177.77	193.91	212.59
Interest & Finance Charges	643.98	651.00	459.85	440.06	445.94
Less: Interest & Other Expenses Capitalized	(99.38)	(127.90)	(119.95)	(130.96)	(151.16)
Provision for bad & doubtful debt	1.54	3.43	3.27	3.41	3.57
True-up Gap for Second Control Period (FY 12- FY 14)	-			879.95	
True Gap for FY15	-			160.83	
Prior Period Expenses	118.34	11.73			
Return on Equity	84.3	93.56	102.40	109.75	118.25
Surplus power purchase as per PPA obligation	-				
Less: Non-Tariff Income	(600.77)	(385.79)	(315.11)	(343.80)	(375.42)
Total ARR	**4,740.02**	**4,976.33**	**4,984.40**	**6,713.14**	**5,824. 46**

3.23 Revenue from Sale of Power

3.23.1 HPSEBL has submitted the projected revenue from sale of power to the consumers at existing tariff for FY17, FY18 and FY19. The same has been summarized below:

Table 50: HPSEBL Submission- Revenue from Sale within the State for FY17 to FY19

Categories	FY 2016-17			FY 2017-18			FY 2018-19		
	Sales (MUs)	Revenue (Rs. Cr.)	Average tariff (Rs./ kWh)	Sales (MUs)	Revenue (Rs. Cr.)	Average tariff (Rs./kWh)	Sales (MUs)	Revenue (Rs. Cr.)	Average tariff (Rs./kWh)

Categories	FY 2016-17			FY 2017-18			FY 2018-19		
	Sales (MUs)	Revenue (Rs. Cr.)	Average tariff (Rs./kWh)	Sales (MUs)	Revenue (Rs. Cr.)	Average tariff (Rs./kWh)	Sales (MUs)	Revenue (Rs. Cr.)	Average tariff (Rs./kWh)
Domestic (inc. Antodya)	2014	878	4.4	2155	935	4.3	2306	996	4.3
Non Domestic Non Commercial	140	90	6.4	151	97	6.4	162	105	6.5
Commercial	530	329	6.2	567	349	6.2	606	371	6.1
Small Industrial	90	59	6.5	101	64	6.3	112	70	6.2
Medium Industrial	119	92	7.8	114	90	7.9	108	88	8.2
Large Industrial – HT	2888	1655	5.7	2989	1685	5.6	3094	1717	5.6
Large Industrial – EHT	1438	1154	8.0	1489	1228	8.3	1541	1307	8.5
WIPS	625	368	5.9	663	390	5.9	704	413	5.9
Bulk Supply	137	111	8.1	127	108	8.5	118	104	8.8
Street Light	13	7	5.1	13	7	5.1	13	7	5.1
Temporary	30	31	10.2	30	31	10.4	30	32	10.7
Total	**8026**	**4773**	**6.0**	**8398**	**4984**	**5.9**	**8794**	**5211**	**5.9**

3.23.2 HPSEBL has also submitted the projected of revenue from interstate sale of power for FY17, FY18 and FY19. The same has been summarized below:

Table 51: HPSEBL Submission- Revenue from Inter-State Sales for FY15 to FY19 (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Provisional	Revised	Projected	Projected
Interstate Sales (Mus)	1276.38	1339.25	1557.98	1197.68	1303.15
Revenue from Interstate Sales (Rs Cr.)	259.6	423.9	372.36	286.25	311.45

3.24 Revenue Surplus/ (Gap) from FY15 to FY19

3.24.1 Based on the projection of ARR and revenue from sale within the State at existing tariff and outside the State, the revenue surplus/ (gap) from Fy15 to FY19 is provided below:

Table 52: HPSEBL Submission- Revenue Surplus/(Gap) for FY15 to FY19 (Rs. Cr.)

Category	FY15	FY16	FY17	FY18	FY19
	Actuals	Provisional	Estimated	Projected	Projected
Projected ARR	4740.02	4976.33	4984.40	6713.14	5824.46
Revenue at Existing Tariff	4120.64	4142.72	4773.43	4983.66	5210.72
Revenue from sale outside state	458.55	510.66	372.36	286.25	311.45
Total Revenue	**4579.19**	**4653.38**	**5145.79**	**5269.90**	**5522.17**
Surplus(+) / Shortfall(-)	**-160.83**	**-322.95**	**161.39**	**-1443.24**	**-302.29**

3.24.2 HPSEBL has prayed to the Commission to approve the above gap during FY18.

3.25 Proposed Tariff for FY 2017-18

3.25.1 After repeated reminders from the Commission, the Petitioner has submitted the tariff proposal for FY 2017-18. The revenue gap as submitted by the Petitioner at existing tariff is Rs 1443.24 Cr. as shown in table below:

Table 53: Projected Revenue Gap based on Revised ARR for FY18 (Rs. Cr.)

Particulars	FY 2017-18	FY 2017-18
	Approved	Projected at existing tariff
Annual Revenue Requirement	**5,196.15**	**5,672.35**
Revenue Surplus / (Gap) for FY 2014-15		160.83
Revenue Surplus / (Gap) for Second Control Period FY 2012 to FY 2014		879.95
Total Annual Revenue Requirement	**5,196.15**	**6,713.14**
Revenue at Existing Tariff to consumers within state	4,946.11	4,983.66
Revenue from Interstate-Sale	425.37	286.25
Revenue at Existing Tariff	**5,371.48**	**5,269.90**
Revenue Surplus / (Gap)	**175.33**	**(1,443.24)**

3.25.2 HPSEBL has proposed to recover Rs. 6,713.14 Cr. i.e. ARR for FY 2017-18 which includes True-Up of FY 2014-15 and True-Up of controllable parameters of Second Control Period FY 2012 to FY 2014 by increasing tariff and to generate additional revenue to recover the total ARR.

3.25.3 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 54: 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	934.71	1,142.40	207.69	22.22%
Non Domestic Non Commercial Supply	96.90	142.60	45.70	47.16%
Commercial Supply	349.48	512.16	162.68	46.55%
Small Industrial Power Supply	63.96	84.44	20.48	32.02%
Medium Industrial Power Supply	90.29	114.44	24.15	26.75%
Large Industrial Power Supply	2,912.74	3,718.99	806.26	27.68%
Irrigation & Drinking Water Pumping Supply	389.94	520.63	130.69	33.52%
Bulk Supply	107.68	147.14	39.46	36.65%
Street Lighting Supply	6.64	8.07	1.44	21.68%
Railway Supply	-	-	-	0.00%
Temporary Metered Supply	31.32	36.04	4.72	15.09%
Total	**4,983.66**	**6,426.93**	**1,443.28**	**28.96%**

3.25.4 Based on the proposed tariff, the revenue gap analysis for FY 2017-18 is provided in the table given below:

Table 55: Revenue Gap analysis at Proposed Tariff

Revenue Gap Analysis @ Proposed Tariff		
Particulars	FY 2017-18 Approved	FY 2017-18 Projected at proposed tariff
Annual Revenue Requirement	**5,196.15**	**5,672.35**
Revenue Surplus / (Gap) for FY 2014-15		160.83
Revenue Surplus / (Gap) for Second Control Period FY 12-14		879.95
Total Annual Revenue Requirement	**5,196.15**	**6,713.14**
Revenue at Proposed Tariff to consumers within state	4,946.11	6,426.93
Revenue from Sale Outside State	425.37	286.25
Revenue at Existing Tariff	**5,371.48**	**6,713.18**
Revenue Surplus / (Gap) after proposed tariff	**175.33**	**0.04**

3.25.5 HPSEBL has submitted that after the proposed overall tariff hike of around 28.96%, the overall estimated revenue gap of Rs. 1443.24 Cr. would be completely met and the Petitioner would be left with the revenue surplus of Rs. 4.13 Lakh.

3.26 Proposed Tariff Schedule for FY 2017-18

3.26.1 Based on the proposed tariff hike, HPSEBL has submitted revised tariff for each category. The proposed tariff versus existing tariff is summarized in the tables given below:

Table 56: Existing and Proposed Energy Charge

FY 2017-18	Existing Energy Charges			Proposed Energy Charges		
Category	**Normal**	**PLC**	**Night**	**Normal**	**PLC**	**Night**
Domestic						
Lifeline	2.85	NA	NA	3.30	NA	NA
0-125	3.70	NA	NA	4.40	NA	NA
126-300	4.60	NA	NA	5.30	NA	NA
Above 300	5.10	NA	NA	5.80	NA	NA
Prepaid Consumers	4.60	NA	NA	5.30	NA	NA
Non Domestic Non Commercial Supply						
0 - 20 KVA	4.95	NA	NA	7.00	NA	NA
Above 20 KVA	4.65	NA	NA	6.70	NA	NA
Commercial Supply						
0 - 20 KVA	5.05	NA	NA	7.15	NA	NA
20 - 100 KVA	4.80	NA	NA	6.90	NA	NA
Above 100 KVA	4.70	NA	NA	6.80	NA	NA
Small Industrial Power Supply						
0 - 20 KVA	4.70	1.5 times the normal	NA	6.25	1.5 times the normal	NA
20-50 KVA	4.50	6.40	3.70 (For June, July & Aug) 4.10 (For other months)	6.05	8.00	5.25 (For June, July & Aug) 5.65 (For other months)
Medium Industrial						

FY 2017-18	Existing Energy Charges			Proposed Energy Charges		
Category	**Normal**	**PLC**	**Night**	**Normal**	**PLC**	**Night**
Power Supply						
50-100 KVA (Medium)	4.50	6.20	3.70 (For June, July & Aug) 4.10 (For other months)	6.05	8.00	5.25 (For June, July & Aug) 5.65 (For other months)
Large Industrial Power Supply						
HT1	4.50	6.20	3.70 (For June, July & Aug) 4.10 (For other months)	6.05	8.00	5.25 (For June, July & Aug) 5.65 (For other months)
HT 2	4.20	6.20	3.80 (For June, July & Aug) 4.00 (For other months)	5.75	8.00	5.35 (For June, July & Aug) 5.55 (For other months)
EHT	4.10	6.00	3.70 (For June, July & Aug) 3.90 (For other months)	5.45	8.00	5.05 (For June, July & Aug) 5.25 (For other months)
Irrigation & Drinking Water Pumping Supply						
0-20 KVA	3.70	NA	NA	5.25	NA	NA
> 20 KVA – LT	4.85	6.40	4.45 (For June, July & Aug) 4.65 (For other months)	6.40	8.00	6.00 (For June, July & Aug) 6.20 (For other months)
> 20 KVA – HT	4.45	6.20	4.05 (For June, July & Aug) 4.25 (For other months)	6.00	8.00	5.60 (For June, July & Aug) 5.80 (For other months)

FY 2017-18	Existing Energy Charges			Proposed Energy Charges		
Category	**Normal**	**PLC**	**Night**	**Normal**	**PLC**	**Night**
> 20 KVA – EHT	4.10	6.00	3.70 (For June, July & Aug) 3.90 (For other months)	5.65	8.00	5.25 (For June, July & Aug) 5.45 (For other months)
Bulk Supply						
LT	5.00	NA	NA	6.55	NA	NA
HT	4.50	NA	NA	6.05	NA	NA
EHT	4.10	NA	NA	5.65	NA	NA
Street Lighting Supply	4.95	NA	NA	6.00	NA	NA
Railway Supply	4.70	NA	NA	5.50	NA	NA
Temporary Metered Supply						
TM I (Single Part)	7.80	NA	NA	8.90	NA	NA
TM II (Two part)	6.30	NA	NA	7.40	NA	NA

3.26.2 HPSEBL has submitted that the additional energy charge revenue due to tariff hike is expected to be Rs. 1182.23 Cr.

Table 57 Existing and Proposed Consumer Service/ Demand Charge

FY 2017-18	Existing Tariff			Proposed Tariff		
Category	**Consumer Service Charges**	**Demand Charges**		**Consumer Service Charges**	**Demand Charges**	
		Normal	**PLC**		**Normal**	**PLC**
	Rs/ month	**(Rs/ kVA/M)**		**Rs/ month**	**(Rs/ kVA/M)**	
Domestic (DS)						
Lifeline	30.00			50.00		
0-125	50.00			80.00		
126-250	50.00			80.00		
251 & above	50.00			80.00		
Non Domestic Non Commercial Supply						
0 - 20 KVA	100.00			180.00		
Above 20 KVA		140.00			220.00	
Commercial Supply						

FY 2017-18	Existing Tariff			Proposed Tariff		
Category	Consumer Service Charges	Demand Charges		Consumer Service Charges	Demand Charges	
		Normal	PLC		Normal	PLC
	Rs/ month	(Rs/ kVA/M)		Rs/ month	(Rs/ kVA/M)	
0 - 20 KVA	100.00			180.00		
20 - 100 KVA		110.00			170.00	
Above 100 KVA		170.00			230.00	
Small Industrial Power Supply						
0 - 20 KVA	110.00			140.00		
20-50 KVA		100.00	100.00		150.00	
Medium Industrial Power Supply						
50-100 KVA		120.00	100.00		150.00	
Large Industrial Power Supply						
HT1		250.00	100.00		300.00	
HT 2		400.00	100.00		450.00	
EHT		425.00	100.00		475.00	
Irrigation & Drinking Water Pumping Supply						
0-20 KVA	70.00			120.00		
> 20 KVA - LT		50.00	100.00		110.00	
> 20 KVA - HT		400.00	100.00		450.00	
> 20 KVA - EHT		400.00	100.00		450.00	
Bulk Supply						
LT		250.00			370.00	
HT		350.00			390.00	
EHT		350.00			390.00	
Street Lighting Supply	100.00			150.00		
Railway Supply		400.00			450.00	
Temporary Metered Supply						
TM I (Single Part)	200.00			250.00		
TM II (Two part)		400.00			450.00	

3.26.3 HPSEBL has submitted that the additional revenue from consumer service charges and Demand charges is expected to be Rs. 261.05 Cr.

3.27 Additional Submissions

3.27.1 Introduction of Prepaid Metering

As has been approved under the domestic supply category and in line with the Financial Restructuring Plan of GoHP, HPSEBL requests the Hon'ble Commission to fix the prepaid tariff for all categories of consumers as this would improve the cash flow of the HPSEBL.

3.27.2 Inclusion of Electric Buses, Government Bus Stands (including Bus Stands under PPP mode) in Non-Domestic Non-Commercial Category

It is prayed that the Electric Buses, Government Bus Stands (including Bus Stands under PPP mode) be included in Non-Domestic Non-Commercial Supply of Schedule of Tariff as they are providing services to general public.

3.27.3 Inclusion of Tunnel Construction activity in Bulk Supply

It is prayed that as already intimated by Hon'ble Commission the Tunnel Construction activity may also be included in Bulk Supply Category of Schedule of Tariff.

3.27.4 Inclusion of Pond Fish culture in farmer's own agriculture land in Irrigation and Drinking Water Pumping Supply (IDWPS)

It is prayed to the Hon'ble Commission that the Pond Fish culture in farmer's own agriculture land may be included in Irrigation and Drinking Water Pumping Supply (IDWPS) category of Schedule of Tariff.

4 Objections filed and Issues raised by Stakeholders during Public Hearing

4.1 Introduction

4.1.1 Nine stakeholders have filed written objections to the Petition for Mid-Term Performance Review for the Third Control Period FY15-19 and True-up of uncontrollable parameters of FY15 and controllable parameters of 2nd MYT Control Period (FY12-14) filed by HPSEBL along with objections raised by general public. The list of the stakeholders are as follows:

Table 58: Details of Objectors

Sl.	Objector	Address
1	Chamba Welfare Association	Diwan House, Chamba, Distt. Chamba
2	Himachal Pradesh Pensioners Kalyan Sangh	C/o H.No. 77, Inner Sarwari, Kullu(HP)
3	BBNIA,NIA,PIA,HCCI & KACCI	Rakesh Bansal, R/o HIG-279, Sector-4, Parwanoo, Distt. Solan, H.P.
4	HP Steel Industries Association	Rakesh Bansal, R/o HIG-279, Sector-4, Parwanoo, Distt. Solan, H.P
5	M/S Vardhman Textiles Ltd.	Sai-Road, Baddi, Tehsil Nalagarh, Distt. Solan, H.P.-173205
6	Ambuja Cement	P.O. Darlaghat, Tehsil Arki, Distt. Solan, H.P., Navagraon, P.O. Jajhra, Tehsil Nalagarh, Distt. Solan, H.P.- 174101
7	M/s Birla Textile Mills, Baddi	Sai Road, Baddi, Distt. Solan, H.P.- 173205
8	INOX Air Products Ltd.	Vill. Kunjhal, Industrial Area, Barotilwala, Distt. Solan, H.P. -174103
9	Pasupati Spinning & Weaving Mills Ltd.	Vill. Kheri, Trilokpur Road, Kala Amb, Distt. Sirmour, H.P.-173030

4.1.2 The public hearing was held on 1st March, 2017 at the Commission's Court Room in Shimla. The representatives of the stakeholders presented their case before the Commission during the public hearing.

4.1.3 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:

4.2 True-up of Controllable Parameters for FY12-14

Stakeholder's Submission

4.2.1 HPSEBL has proposed true-up of controllable parameters for FY12-FY14 i.e. for the second MYT control period. HPSEB Ltd has claimed revenue deficit of Rs.879.95 crore in true up of FY 2012-14 in which a large part of the revenue gap is on account of expenses disallowed by the Commission and mainly belongs to higher employee cost, interest cost, higher depreciation and return on equity.

Table 59: Objectors Submission–Excess amount claimed on controllable parameters

Excess amount claimed on controllable parameters				
Particulars	**FY12**	**FY13**	**FY14**	**Total**
Depreciation	34.93	111.88	97.18	243.99
Interest and Financing charges	114.87	202.72	300.77	618.36
Return on capital employed	0.72	5.44	12.17	18.33
Total	**150.52**	**320.04**	**410.12**	**880.68**
Total as per HPSEBL				880

4.2.2 Therefore, the petition for true-up of controllable parameters of the Second Control Period (FY 12-14) must not be admitted by the Hon'ble Commission.

Petitioner's Response

4.2.3 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."

4.2.4 Also,

Direction of Hon'ble Commission in 2nd APR:

"…..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…..”

4.2.5 Accordingly, as per the provisions of these regulations, HPSEBL has filed true-up petition for Second Control Period considering controllable parameters for complete Second Control Period from FY 2011-12 to FY 2013-14 and uncontrollable parameters for FY 2014-15.

Commission’s Observations

4.2.6 The Commission in this Order has reviewed the various submissions of the Petitioner in Chapter 5 and 6 and exercised prudence while allowing each parameter in line with the provisions of the MYT Regulations, 2011 and its amendments from time to time.

4.3 Power Purchase for True-up of FY15

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

Stakeholder’s Submission

4.3.2 HPSEBL has submitted an increase in Power Purchase cost by almost Rs. 500 Cr. during FY15 which is alarming and the reasons for the same require an in-depth study and analysis. The choice of purchasing power from cheaper sources must be explored so as to ascertain the power purchase cost.

Petitioner’s Response

4.3.3 HPSEBL has submitted that power purchase cost has increased mainly due to revision of Tariff Orders of central stations like NTPC, NHPC etc. based on CERC regulation on control period FY15 to FY19 in which Himachal has its firm allocation to cater to reliable and quality power to its consumers.

Commission’s Observations

4.3.4 The Commission has undertaken prudence check while truing-up the uncontrollable parameters such as power purchase for FY15. The Commission has reconciled the Petitioner's submission with source-wise power purchase cost as per audited accounts of FY15 and disallowed any additional claims made by the petitioner. The considerations for the approved power purchase cost for FY15 is detailed in Chapter 6.

Stakeholder's Submission

4.3.5 In its true-up petition, HPSEBL has submitted that the power purchase quantum of 7820 MUs is less than the approved power purchase quantum of 8217 MUs by 397 MUs while the differential in Power Purchase cost for the same period is higher by Rs. 201.98 crores as submitted by the petitioner. This seems to be inconsistent and needs to be analysed by the Hon'ble Commission.

Petitioner's Response

4.3.6 The approved 8217 MUs and 7820 MUs are for Energy Sales and not for power purchase. HPSEBL has submitted that the energy sales declined due to the following reasons:

a) Decrease in industrial sales due to procurement of power by the consumers through open access;
b) Closure of certain industries (Mainly Steel Industries) in the state;
c) (Demand Side Measures) initiatives by municipal corporations and Nagar Panchayats.

4.3.7 Further, HPSEBL has signed long term PPA with various generators to provide reliable and quality power to consumers and after meeting the demand the remaining power, if any, is either sold to other states utilities or is surrendered. During FY15, the revenue received from surplus power is Rs 458.55 Cr. and the same has been factored while determining the actual revenue gap.

Commission's Observations

4.3.8 The Commission concurs with the response provided by the Petitioner for sales and power purchase being independent and any excess after meeting the requirement within the state is sold outside the State. On the power purchase front, the Commission has approved the power purchase cost for FY15 after conducting adequate prudence check and validation with the audited accounts of FY15 as detailed out in Chapter 6.

4.4 Power Purchase for ARR of FY18

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

Stakeholder's Submission

4.4.2 HPSEBL has submitted an ad-hoc price escalation of 5% to the previous year tariff without giving any documentation for the proposed escalation. For example, UERC has assumed an escalation of 3% in the tariff from power supply from the same sources as HPSEBL. The petitioner is requested to supply summary of the tariff from various sources for the last 5 years to locate the trend of the proposed price increase. In some cases escalation is provided in anticipation of CERC / SERC tariff order. This may be included in the true up petition, if need be.

Petitioner's Response

4.4.3 During filing of previous year's ARR petition, HPSEBL had already submitted power purchase data of last years and in this Mid Term review filing HPSEBL has provided actual power purchase data of FY15, FY16 and FY17 (six months) along with petition. Therefore, the petitioner can refer previous year Orders and petitions for last five years tariff. Further, HPSEBL has also considered the impact of 7th Pay Commission on purchase of power.

Commission's Observations

4.4.4 For the purpose of approval of power purchase cost, the Commission has undertaken detailed review of the actual power purchase cost of FY 2014-15, FY 2015-16 and ten months of FY 2016-17. Also, recent CERC Tariff Orders for the central generating stations has been considered for approving the power purchase cost. After considerable due diligence the Commission has projected station-wise power purchase quantum and cost for FY18 and disallowed any additional claims made by the petitioner as detailed out in Chapter 8.

Stakeholder's Submission

4.4.5 Escalation of 10% over the last year rates has been made in the petition in addition to the POC charges and reliability charges, etc. without documentary evidence. The petitioner is requested to provide proper evidence for the same.

Petitioner's Response

4.4.6 10% escalation on composite sum of POC, HVDC and Reliability charges has been considered which is based on the previous quarter's data. The same has been shown below:

Table 60: Objectors Submission–POC, HVDC and Reliability Charges

Quarter	POC (Rs/MW/month)	Reliability Charge (Rs/MW/month)	HVDC (Rs/MW/month)
Apr'16-June'16	73234	23671	20905
July'16-Sep'16	79664	26062	20376
Oct'16-Dec'16	88362	25321	18423

Commission's Observations

4.4.7 The Commission has analysed historic as well as recent transmission and reliability charges applicable on HPSEBL for projection purpose.

4.5 Energy Sales

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

Stakeholder's Submission

4.5.2 In FY 14, FY 15 and FY 16, the actual consumption in all the categories are less than the approved by the Hon'ble Commission. Despite this, the projections for FY17 made by HPSEBL are on the higher side and based on CAGR rather than actual consumption trends.

4.5.3 Moreover, the actual consumption of second half (Oct-March) is lower than 1st half (Apr-Sep) in the preceding years. However the petitioner has projected higher consumption in the 2nd half for FY 17-18 in comparison to the consumption of the first half. This projection need to be relooked in the light of actual consumption trends in the preceding years.

4.5.4 Moreover, Licensee has admitted that there has been sharp reduction in the number of consumers in the Large Industrial Power Supply Industry comprising of HT-I and EHT/HT-II, which recorded a decline of 22.75% during the FY 2015-16 compared FY 2014-15. The corresponding approved energy sales and actual energy sales to the Large Industries recorded reduction as under:

Table 61: Objectors Submission–Variation in Energy Sales

Year	Energy Sales approved (MUs)	Actual energy sales (MUs)	Difference (MUs)
2014-15	4688	4369.80	318.20
2015-16	4876	4180.42	685.58
Variation (MUs)	188	-189.38	377.38
Variation (%)	4.00	-4.33	-8.33

4.5.5 On the contrary the sanctioned load of these consumers increased from 1448 MW in FY 15 to 1538 MW in FY 16 i.e. an increase of 8.22%. The net result is that the actual revenue realization is reducing, thereby distorting the approved ARR figures. Therefore, the energy sales projections should be as accurate as possible so that further determination of ARR is not adversely affected. In this background, it is requested that the sales growth @ 3.5% per annum may be examined before accepting the projections.

Petitioner's Response

4.5.6 HPSEBL has projected the sales figures on CAGR for all categories based on the same approach as adopted by Hon'ble Commission in its previous year's tariff orders. Further, CAGR is the best way for the projections as it is based on the actual past trend of the previous years.

4.5.7 As per the sales figures submitted by HPSEBL, the summary of sales (MUs) figure for 1st half (Apr-Sep) and 2nd half (Oct-Mar) is given below:

Table 62: Objectors Submission–Variation in six monthly sales

Financial Year	1st Half (Apr-Sep)	2nd Half (Oct-Mar)	Total
FY 2012-13	3555	3668	7224
FY 2013-14	3744	3791	7536
FY 2014-15	3905	3915	7820
FY 2015-16	3902	3843	7745

4.5.8 As per the above table, the sales of second half is more than first half except in FY 2015-16. Based on the previous year's trend HPSEBL has projected sales of second half of FY 2017-18.

Commission's Observations

4.5.9 The Commission concurs with the view of the stakeholder that the Petitioner must ensure that the sales projections are as accurate as possible. The Commission has found several inconsistencies in the submission of the petitioner with respect to the number of consumers, connected load and energy sales. In its responses to the queries of the Commission, the petitioner has re-submitted the number of consumers for FY16 and energy sales for first six months of FY17. However, there are issues over consistency and accuracy of category-wise data provided by the petitioner. In absence of reliable information, the Commission is constrained to use assumptions for projecting energy sales for FY18 as also detailed out in Chapter 8. For the purpose of future APR/ MYT filings, the Petitioner is required to prepare and submit proper data for category-wise number of consumers, contracted demand and sales for past five years.

4.6 T&D Losses

Stakeholder's Submission

4.6.1 HPSEBL has stated that they have already achieved a level of 11.46% and 12.00% during FY 15 and FY 16 against the target of 12.80% and 12.60%, which is commendable. While calculating the revenue gap, the T & D loss approved by the Commission has been taken into account. As per Regulation 15(1)(a)(i) of the MYT Regulations, the 40% share of this overachievement has to accounted for in the ARR and the balance 60% is to the discretion of the utility. This difference works out to Rs. 40 Crores in FY15 and about Rs. 20.00 Cr in the year FY16. It is also prayed to the Hon'ble Commission that loss trajectory be reviewed during the mid-term review as the present targets are very liberal. We suggest that the targets be reduced in each year of the remaining part of the 3rd Control Period.

Petitioner's Response

4.6.2 HPSEBL has provided the reasons for keeping T&D losses for FY17, FY18 and FY19 to the level as approved in the MYT Order, i.e. 12.40%, 12.20% and 12.00% respectively in the petition. The reasons are cited again as below:

a) Growth of HT industries is lower than expected;

b) Consumers are shifting to open access; and

c) Greater investment in rural areas

Commission's Observations

4.6.3 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 against which the Commission has computed incentive as detailed in Chapter 6 'True-up of FY15'. The Commission has observed that the T&D loss of HPSEBL for FY16 are increasing and the Petitioner has submitted provisional T&D loss figure of 12.00% for FY16. 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 down their loss level. For the balance years of the Control Period, the Commission has analysed the submission of the Petitioner. The Commission has covered the review of T&D loss trajectory in detail under Chapter 7 of this Order.

4.7 Employee Cost

4.7.1 The objections raised were as follows:

Stakeholder's Submission

4.7.2 The employee cost for FY15 to FY19 as submitted by the petitioner has been growing continuously. The instant proposal of the petitioner contains an expenditure increase of 27% in 2 years, on the employees cost. It is requested that this should be controlled and only increase in employee cost linked with increase in inflation should be allowed.

Petitioner's Response

4.7.3 HPSEBL has projected employee cost as per HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 as amended from time to time. During notification of MYT Order, the impact of 7th Pay Commission had not been considered while HPSEBL has considered impact of 7th Pay Commission for projecting employee cost for FY18. The variations are due the following reasons:

i. HPSEBL has considered provisioning of 15% of the salaries and gratuity as the additional liability on account of salary revision due to implementation of

7th Pay Commission recommendations in FY 2017-18 which amounts to Rs. 243.04 crores.

ii. The arrears of previous years with effect from 1st January, 2016 has also been considered in FY 2017-18 which amounts to Rs.225.66 crores.

Commission's Observations

4.7.4 In the MYT Order, the Commission had approved the employee cost in line with the provisions of the MYT Regulations 2011 and its amendments. However, it is observed that under the transfer scheme the pension liabilities have been retained with HPSEBL resulting in increased employee cost. Any revision on account of pay commission recommendations therefore has a larger impact on the employee cost. In order to partially offset the high level of pension liabilities, the Commission had notified 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. Further, the Commission has provided its detailed analysis and approval of the employee cost for each year of the Control Period in Chapter 7: Mid-Term Performance Review and has made additional provisions for meeting the requirement of arrears for 7th Pay Commission.

Stakeholder's Submission

4.7.5 The cost of employee / unit of electricity sold in HP is Rs. 1.55, which is the highest in the country. The stakeholders opine that the number of staff is large while the productivity is low, in comparison to salary and wages.

Petitioner's Response

4.7.6 The cost of employee per unit for FY15 & FY16 is given below:

Table 63: HPSEBL's Submission–Cost of Employee per unit

Financial Year	Units Sold	Employee Cost (Rs Cr.)	Cost of employee per unit
FY 2014-15	7820	1222.83	1.55
FY 2015-16	7745	1427.67	1.84

4.7.7 HPSEBL has submitted that the main reason for cost of employee per unit is higher because in other States like Uttarakhand the terminal benefits is the liability of the State Govt. while in Himachal Pradesh the same is the liability of

HPSEBL. Further, employee cost of HPSEBL can't be compared with other states since other factors like electrification, AT&C losses, quality of supply etc. have also a direct bearing on the employee cost.

4.7.8 Further, below is the comparison table of approved vs. actual employee cost during FY15 and FY16:

Table 64: HPSEBL's Submission–Variation in Total Employee Cost (Rs. Cr.)

Financial Year	Approved	Actual	Variation
FY 2014-15	1166.37	1222.83	-56.46
FY 2015-16	1284.81	1427.67	-142.86

4.7.9 As shown in the table above, the variation is not much higher as pointed by stakeholders. The marginal variation is mainly due to terminal benefits which as stated earlier, is borne by the State Govt. in other States. Below is the comparison of approved vs. actual terminal benefits:

Table 65: HPSEBL's Submission–Variation in Terminal Benefits (Rs. Cr.)

Financial Year	Approved	Actual	Variation
FY 2014-15	410.87	478.75	-67.88
FY 2015-16	450.97	632.50	-181.53

4.7.10 Further, HPSEBL always endeavours to limit its expenses and therefore one objective to outsource its works to private agencies is to reduce the employee cost. The productivity of HPEBL can be ascertained from the fact that only 20927 nos. of employees are working against sanctioned manpower of 24930 as on 31.03.2016.

Commission's Observations

4.7.11 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 & Post-Transfer Scheme and the return approved on GoHP equity share as well as recovery of terminal benefit contribution of employees on deputation to commissioned projects, new projects, SPV like BVPCL, etc. to be adjusted against the terminal benefits component (Pre-Transfer Scheme) of the employee cost of HPSEBL. In light of these Regulations, the Commission has undertaken a revision exercise in this Mid-Term Performance Review Order to incorporate the changes for the remaining Control Period and conduct a prudence check on the submissions of the Petitioner.

4.7.12 HPSEBL should also explore the possibilities of allocating the employee cost to the capital works in a more realistic way so that the per unit employee cost of the distribution utility can get reduced. Moreover, it should take progressive steps to increase the sales by providing quality and reliable power to the consumers.

4.8 Capital Expenditure

Stakeholder's Submission

4.8.1 The Utility has proposed major amendments in the approved provisions for the control period. Therefore, it is requested that the Hon'ble Commission studies the actual performance of the Licensee, the benefits achieved by making capital expenditure in the past and the capability of the Licensee to incur such capital expenditure.

Petitioner's Response

4.8.2 HPSEBL has proposed the revision in capital expenditure as per sub regulation 6 of Regulation 9 of HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) (Second Amendment) Regulations, 2013. The detailed information on capital expenditure of previous years has been provided with petition.

Commission's Observations

4.8.3 As part of the Mid-Term Performance Review, the Commission has reviewed the actual progress of various schemes submitted by the Petitioner against the capital expenditure works approved in the MYT Order for the years FY15, FY16 and first six months of FY17.

Stakeholder's Submission

4.8.4 HPSEBL has submitted that all capital works are funded by REC / KfW or PFC while some of them are funded through grants from various agencies. Also, the request for addition of 48 schemes do not bear the approval of the Hon'ble commission and therefore, requires a prudency check.

Petitioner's Response

4.8.5 HPSEBL after review of certain schemes has decided to abandon certain schemes while at the same time include certain new schemes for reliable and quality 24x7 power to the consumer of Himachal Pradesh. In the Mid-Term Performance Review petition HPSEBL requested Hon'ble Commission to approve the revised CAPEX for EHV & RGGVY Schemes as per HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 amended from time to time. The details of the scheme were provided to the Hon'ble Commission as part of Annexure VIII of the petition.

Commission's Observations

4.8.6 As part of the Mid-Term Performance Review, the Petitioner has submitted its request for review of certain schemes, including abandoning 4 RGGVY schemes, revising capital expenditure of 73 schemes and adding 49 new EHV and 19 new RGGVY schemes. In view of the five year period for the current Control Period, the Regulations provide for such review of approved schemes that may have undergone changes or have become redundant and also approve new schemes as per the technical requirements. Therefore, the Commission has reviewed the revised proposal of the capital expenditure plan of the petitioner as part of the Mid-Term Performance Review process.

Stakeholder's Submission

4.8.7 The stakeholders opined that the EHV schemes submitted by HPSEBL may be made part of the transmission petition in place of distribution. As per the Recovery of Expenditure Regulations 2012, the entire capital spent on EHV schemes is recovered from consumers / prospective consumers by way of IDC (Infrastructure Development Charges) on per KVA basis. In such an instance, there is little reason for allowing this expenditure on this account through the ARR. Moreover no accounts of recovery through IDC are indicated in the filing.

Petitioner's Response

4.8.8 HPSEBL submits that partial funding of schemes are borne through the IDC charges recovered from the consumers and rest from availing loans from REC, PFC etc. Therefore the same forms part of the ARR of HPSEBL.

Commission's Observations

4.8.9 As also highlighted by the Petitioner, all the capital expenditure undertaken is funded from a mix of sources including debt, equity, grants and consumer contribution. The Commission while approving the tariff undertakes detailed review of the sources and allows interest cost, depreciation and Return on equity only towards those assets which are not funded from consumer contribution or grants.

Stakeholder's Submission

4.8.10 The RGGVY schemes are mainly related to LT distribution system and the expenditure on these projects should not be passed on to the industrial consumers.

Petitioner's Response

4.8.11 HPSEBL also submits that though the major works under RGGVY schemes are related to LT distribution system, rest of the major capital expenditure and power purchases aim to fulfil the industrial demands which are borne by rest of the consumers as well. Further, HPSEBL always seeks prior approval from the Hon'ble Commission for inclusion of any scheme in the approved Capex plan.

Commission's Observations

4.8.12 In addition to the response of the Petitioner, it is highlighted that 90% of the expenditure on RGGVY is funded as grant from Central Government and therefore there is no major impact on the tariff of the various consumer categories.

4.9 Depreciation

Stakeholder's Submission

4.9.1 HPSEBL has claimed high depreciation charges for FY 14-15, FY 16-17 and FY 17-18 and FY 18-19 based on incremental increase in fixed assets. It is requested that depreciation must be allowed based on actual capacity added/assets created.

Petitioner's Response

4.9.2 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.

Commission's Observations

4.9.3 As per the MYT Regulations, 2011 and its amendments, the controllable parameters shall not be revised until there are major variations in the approved and actual capital expenditure and capitalization figures during the Control Period. Further, it is observed that the claim of the Petitioner is generally not aligned with the Regulations and therefore, the Commission has to compute the depreciation as per the provisions of the Regulations. The review of depreciation for the balance Control Period is detailed in Chapter 7.

4.10 Additional amount towards safety measures

Stakeholder's Submission

4.10.1 The stakeholders share the view that purchase of safety equipment should form a part of capital works and repair and should therefore be a part of R&M expenses. Therefore, no separate provision is needed to be made on this account.

Petitioner's Response

4.10.2 In the MYT Order safety measures is a part of O&M expenses, therefore HPSEBL has considered the same under O&M expenses.

Commission's Observations

4.10.3 In view of the high number of accidents reported at the HPSEBL substations due to lack of safety equipment and to meet the immediate requirement for funding of such safety equipment, which may not have been financed by funding agencies, the Commission had approved a nominal amount of Rs. 1 Cr. each year to maintain safety of the employees while working at the substations.

4.11 R&M Expenses

Stakeholder's Submission

4.11.1 The projections for R&M expenditure by HPSEBL exceed the approved figures. Also, the actual performance in the year FY15 has been far less (-22.46%) than the approved provision. The GFA has increased by Rs. 400 Crore which has not been mentioned in the petition. The provisions of IT (in R&M) to the extent of 23 Crore has not been supported by any documentary evidence. The amount should be instead reflected in capital expenditure.

Petitioner's Response

4.11.2 HPSEBL has commissioned two data centres under R-APDRP schemes and has also introduced computerized billing, MDAS, AMR etc. across the State. Further, ERP and billing is being rolled out to all units of the Board. This has necessitated regular AMC of the total hardware, support of the various applications and ATS charges of the different licenses essentially required to run and maintain the IT systems. This expenditure is now being met through R&M of the IT system. Accordingly, IT system expenses have been added as part of R&M Expenses which is necessary for upkeep and maintenance of IT systems.

4.11.3 Further, Repair & Maintenance Expenses for Buildings, Civil Works, Lines, Cable Networks & DTR Repair has been increased for FY17, FY18 and FY19 owing to increase in projected expenditure due to repairs of old buildings, maintenance of HPSEBL Colonies, repairs of Old DTRs etc. This increase in expenses is also essential for ensuring 24×7 supply to the consumers in the State.

4.11.4 Further, the increase in GFA is due to the revised CAPEX submitted by HPSEBL to provide reliable and quality 24x7 power to consumer of Himachal Pradesh.

Commission's Observations

4.11.5 The Commission has observed that the R&M expenses incurred during the year FY 15 are less than the approved figures and therefore concurs with the view of the stakeholder. While approving R&M expenses for truing-up for FY15 as well as revised projections for the balance years, the Commission has reviewed the submissions of the Petitioner which is also detailed in the respective Chapters.

4.12 Interest Charges

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

Stakeholder's Submission

4.12.2 HPSEBL has submitted that the interest costs are expected to exceed the MYT approved figures by an amount of approximately Rs.550 crores during the control period (FY 15-19). It is not clear that loan raised/proposed have been in favour of capital works in progress or works that have already been commissioned. It is requested therefore, that the Hon'ble Commission approves the interest and financing charges after a prudency check on the details of loans provided by the petitioner.

Petitioner's Response

4.12.3 HPSEBL submits that the details of interest and financing charges along with documentary proof have already been submitted to Hon'ble Commission on subsequent queries received after filing the petition. It is also to be noted that the approved figures are on the lower side and therefore, requests the Hon'ble Commission to reconsider these during the Mid-Term Review since HPSEBL is no longer availing short-term borrowing.

Commission's Observations

4.12.4 The Commission has approved interest on loans with adequate due-diligence and with due cognizance to past practices. Detailed analysis regarding the same for the Third Control Period (FY15-19) had been provided in the MYT Order dated 12th June, 2014. However, the Commission concurs with the view of the stakeholder that while analysing the truing-up for the controllable parameters of Second MYT Control Period it 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.

Stakeholder's Submission

4.12.5 The stakeholders have opined that after April, 2015 the interest charges by the banks have been reduced repeatedly which makes the interest rate of 13.21% considered by HPSEBL very high. HPSEBL should take efforts to secure cheaper loans and restructure the existing loans.

Petitioner's Response

4.12.6 The interest rate of 13.21% considered for calculating the interest on working capital is as per regulation 22 of HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) (Second Amendment) Regulations, 2013.

Regulation 22:

"Rate of interest on working capital shall be on normative basis and shall be equal to the average base rate of the last six months prior to the filing of the MYT petition plus 350 basis points. The interest on working capital shall be payable on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures. The Commission shall calculate working capital requirement for wheeling and retail supply business in accordance with these regulations to arrive at working capital requirement of distribution licensee."

4.12.7 Further, the interest & finance charges approved in the MYT Order is on the lower side and the Hon'ble Commission is be requested to re-consider this in mid-term review as the HPSEBL is no longer availing short term borrowing.

Commission's Observations

4.12.8 Provisions of MYT Regulation 2011 and its amendments clearly provide for interest rate to be used for computing interest on working capital.

Stakeholder's Submission

4.12.9 HPSEBL in its present petition has not provided details of the change in its interest costs after the State of Himachal Pradesh signed the financial restructuring scheme of UDAY (Ujwal Discom Assurance Yojana). The State became the 18th State to join UDAY on 08.12.2016 by signing a MoU with Government of India. It has been stated in the press that a benefit of Rs. 823 Crore is likely to accrue on account of this scheme. Under the scheme the State Government would take over Rs. 2891 crores of HPSEBL's debt as on 30.09.2015 and the balance debt of Rs. 963 crores to be repriced through financial restructuring. The estimates of UDAY scheme if incorporated in the ARR, will definitely make a case for reduction in tariffs. The ARR should be put in revised form before approval of the Hon'ble Commission. It may be pointed here that PSERC last year had postponed the hearings on ARR until and unless the estimates were revised in view of effects on account of Punjab's opting in for UDAY.

Petitioner's Response

4.12.10 Under the UDAY scheme bonds are to be released on 28th February and its impact on the ARR for FY18 can be ascertained only after that and the same shall be intimated to the Hon'ble Commission accordingly. The positive impact of UDAY will be transparently brought out and its benefit shall be passed on the consumers of the state.

Commission's Observation

4.12.11 As part of the clarification and additional information, the Petitioner has submitted some details of the loans eligible under UDAY and has computed marginal impact on interest cost. The Commission has not been approving any interest cost on the large quantum of short-term loans undertaken by the Petitioner in the past towards working capital shortages, revenue gap, etc. It is observed that the Petitioner is adjusting majority of these loans under UDAY scheme and proposing no major changes in the interest cost. Therefore, the Commission shall consider the impact of UDAY at the time of truing-up for the respective years based on the audited accounts which would help in ascertaining the actual loans which have been covered under the UDAY scheme and the impact on interest for the respective years.

4.13 Return on Equity

Stakeholder's Submission

4.13.1 HPSEBL has projected an increase in Return on Equity (RoE) over approved amount by Rs. 293.74 crores. However, it is not clear as to how this equity will be infused and where the cash generated will be used. As per HPERC (Terms and Conditions for determination of Wheeling Tariff and Retail supply tariff) Regulations, 2013, the equity invested in the projects, which are yet to start commercial production cannot be provided. It is requested that RoE should only be allowed if such equity is actually invested and used in creation of tangible asset which can be used for the benefit of the consumers.

Petitioner's Response

4.13.2 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 as amended from time to time. The year-wise variation of ROE (Rs cr.) in comparison to MYT approved is below:

Table 66: HPSEBL's Submission–Variation in RoE

Financial Year	Approved	Submitted	Variation
FY 2014-15	30.24	84.28	54.04
FY 2015-16	30.24	93.56	63.32
FY 2016-17	30.24	102.40	72.16
FY 2017-18	30.24	109.75	79.51
FY 2018-19	30.24	118.25	88.01
Total	**151.20**	**357.05**	**205.85**

4.13.3 Therefore, the actual variation for FY15 to FY19 is Rs 205.85 Cr not Rs 293.74 cr. HPSEBL requests Hon'ble Commission to approve the RoE as submitted. HPSEBL has also submitted that equity infused by GoHP in the various schemes is for strengthening the HPSEBL's network and the details of the same have already been supplied to the Hon'ble Commission along with the petition.

Commission's Observations

4.13.4 The Commission has reviewed the detailed capital expenditure and capitalization for the period FY12-FY14 under the Truing-up of controllable parameters of Second Control Period. Further, the Commission has also reviewed the capitalization of HPSEBL for FY15 and FY16 based on the submissions and has found the same to be broadly in line with the approved capitalization under the Third Control Period. The Commission shall further review the details of actual funding for capital expenditure and capitalization at the time of final truing-up at the end of the Control Period as per the provisions of the MYT Regulations 2011 and its amendments.

4.14 Consumer Security Deposit

Stakeholder's Submission

4.14.1 The Hon'ble Commission on the demand from Industries Association had passed orders on 28th November, 2015 with respect to Himachal Pradesh Electricity Regulatory Commission (Security Deposit) (Second Amendment) Regulations, 2015 and had directed HPSEBL that the details of the security amount should be furnished in the energy bills issued for the sake of transparency. These directions of the Commission have not been complied with. HPSEBL should have complied with these orders as more than one year has passed.

Petitioner's Response

4.14.2 The provision of Security Deposit has already been provided in SAP ISU billing. Since the implementation is still under process, after implementation the security deposit amount would be reflected in the energy bills.

Commission's Observations

4.14.3 The Commission has advised HPSEBL in HPERC (Security Deposit) (Second Amendment) Regulations, 2015 dated 28.11.2015 that HPSEBL should furnish details of security deposits in case of HT and EHT consumers along with monthly electricity bills. The Commission takes cognizance of the objection raised by the stakeholder and directs the Petitioner to comply with the requirements stated in the Regulations within two months of issuance of this Order and report the compliance to the Commission as well.

4.15 Inter State Sale of Power

4.15.1 The stakeholders in their submissions cited various observations on inter-state sale of surplus power:

Stakeholder's Submission

4.15.2 HPSEBL's average rate of sale of power across the state boundary remains at less than Rs. 3.00 per unit and the overall recovery per unit from sales within state, particularly the industry remains above Rs. 5.50 per unit, thus providing a pricing difference of approximately Rs. 2.50 towards extra contribution to the revenue. Also, it is known that the expenses of HPSEBL cannot be met out if the entire power is sold outside the state in place of selling it to the local industry. Therefore, a reasonable mark-up on the inter-state rates of power is a key to the ultimate success of the utility.

Petitioner's Response

4.15.3 HPSEBL has signed long term agreements with various Central generating stations like NTPC, NHPC, NPCIL, etc. to cater to reliable and quality power to its consumers. The power which remains surplus after meeting the demand of consumers (including industries) has been sold to other state utilities or in power exchange at the most economical and competitive rate. Further, while selling the surplus power outside the state, HPSEBL explores the best option in the market before finalisation so that the revenue can be maximized. Since market prices vary with demand and supply, such rates are not predictable.

Commission’s Observations

4.15.4 The Commission agrees with the view of the Petitioner and directs it to continue to explore the most competitive rate at which the surplus power available with HPSEBL can be sold outside the State to maximize revenue. The Commission also expects that HPSEBL to increase its sales by providing quality and reliable power to the consumers in order to reduce the quantum of surplus power.

Stakeholder’s Submission

4.15.5 The revenue from interstate sale has been provisionally estimated at Rs. 423.90 Cr for 1339.25 MUs which works out to Rs. 3.16 per unit on an average during FY16. In the subsequent years the revenue has been calculated @ Rs. 2.39 per unit for FY17, FY18 and FY19. This has resulted in lowering the projected revenue from interstate sales, thus increasing the revenue gap.

Petitioner’s Response

4.15.6 HPSEBL has considered rate Rs. 2.39/kWh which is the average Market Clearing Price discovered at Indian Energy Exchange for the period Apr’16 to Sep’16 for projecting the revenue from interstate sale. The reason for considering IEX rate for interstate sale is that HPSEBL is selling a part of its surplus power to the exchange. Therefore, for projections a nominal rate of IEX has been considered.

Commission’s Observations

4.15.7 The Commission has independently determined the average rate for sale of surplus power for FY18 based on the Merit Order as detailed in Chapter 8.

4.16 Cross-Subsidy Surcharge and Additional Surcharge

Stakeholder’s Submission

4.16.1 The Licensee has indicated non-tariff income from various sources but some of the income from important sources like Cross Subsidy Surcharge and Additional Surcharge have not been included. Hon'ble Commission may kindly direct the Licensee to indicate those revenue sources also.

Petitioner's Response

4.16.2 HPSEBL submits that the revenue received from cross subsidy surcharge and additional surcharge from open access consumers is a part of sales revenue and the same for FY15 & FY16 is submitted in balance sheet.

Commission's Observations

4.16.3 The non-tariff income of the petitioner includes all incomes incidental to the distribution business and the cross-subsidy surcharge and additional surcharge recovered would be part of the same. The Commission during truing-up considers all revenue and non-tariff income for the purpose of meeting the ARR of the Petitioner. Going forward, the Petitioner is required to provide the information with respect to break-up of revenue recovered from Cross Subsidy Surcharge and Additional Surcharge separately as part of its Annual Performance Review Petition for the future years.

4.17 Cost of supply/ Voltage-wise Cost of Supply

4.17.1 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:

Stakeholder's Submission

4.17.2 Tariff should be based on voltage wise cost of supply rather than average cost of supply. The voltage of supply largely affects the cost of supply as the T&D losses are in inverse relation with the supply voltage.

Petitioner's Response

4.17.3 HPSEBL submits that the tender for "Appointment of Consultants for Voltage Wise Cost of Supply Study in Himachal Pradesh" was floated online dated 5.11.2016.

The Techno-commercial bids were opened on the scheduled date of 7.1.2017. The Techno-commercial evaluation of bids is currently under process.

Commission's Observations

4.17.4 The Tariff Regulations of the Commission as well as the National Tariff Policy envisage average cost supply for tariff determination purposes. However, the Commission for indicative works out a voltage-level cost of supply under Tariff Policy & Design Chapter. For aligning the tariff more accurately to the actual cost of supply, the HPSEBL has already initiated activity towards working out the voltage wise cost of supply as per the directions of the Commission. However, the delay in appointment of consultant for the study is unwarranted and HPSEBL should ensure that the findings of the study are available to the Commission along with the petition for the next Control Period.

Stakeholder's Submission

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

4.17.6 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 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.

4.17.7 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.

Petitioner's Response

4.17.8 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):

"…indicates 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%".

Commission's Observations

4.17.9 It has already been able to achieve the (+)/(-) 20% of Average Cost of Supply benchmark provided in the National Tariff Policy. In fact it has set out for itself a better milestone of reducing the cross subsidy to -15% / +10% which is to be achieved by the end of the Control Period. This improved target has also been met to a large extent. As such the Commission continues to reduce the cross-subsidy in the tariff of various consumer categories in the State of HP.

4.18 Tariff Related Aspects

4.18.1 The following objections were raised:

Stakeholder's Submission

4.18.2 The stakeholders 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. Moreover, HP having a surplus in energy must ensure cheaper electricity rates for its consumers within the State.

Petitioner's Response

4.18.3 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. HPSEBL's own generation capacity is only around 2000 MUs whereas State demand is roughly 8000 MUs. HPSEBL is required to purchase power from various other central sector projects to meet this demand. Further although GoHP gets free power from the projects commissioned in the State but the same power is given to HPSEBL at a fixed cost of Rs. 2.92/Unit. However, it is clarified that HP Govt. is also providing subsidy in the State.

Commission's Observations

4.18.4 The Commission has considered the various submissions of the petitioner on different financial parameters and determined the revenue gap/surplus for FY18 in line with the MYT Regulations, 2011 and its amendments from time to time. The tariff proposal approved in this Order is in line with the findings of the Commission.

Stakeholder's Submission

4.18.5 HPSEBL is raising bimonthly bills which is resulting in calculation at an increased rate. It is requested that the bills be raised on a monthly basis. In addition, meter rent is being collected by the Licensee on a lifelong basis. Consumer should be informed as to how much rent has been recovered till date.

Petitioner's Response

4.18.6 HPSEBL submits that wherever bi-monthly billing is being carried out, the tariff is being charges after considering the increased slab quantum, i.e. if the tariff is charges at lower rates upto 125 units in a month then in case of bi-monthly billing the tariff is charges at lower rates upto 250 units. Further, it is submitted that meter rent is not just for the recovery cost of the meter supplied by HPSEBL, but also to recover other expenses incurred by HPSEBL such as testing, keeping it in healthy and working condition etc. Moreover, consumers are free to purchase their own energy meters and as such no meter charges are levied on such consumers.

Commission's Observations

4.18.7 The Commission concurs with the view of the Petitioner. The revenue earned by the Petitioner against meter rent is covered under Non-Tariff Income which is also reflected in the audited accounts and is considered towards reduction of ARR for each year.

Stakeholder's Submission

4.18.8 The present rate of demand charges for HT/EHT consumers @ Rs 400/kVA and Rs 425/ 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 and these be reduced in lieu of higher energy charges.

Petitioner's Response

4.18.9 Major CAPEX and bulk of power purchase 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 HT2/EHT consumers.

Commission's Observations

4.18.10 Demand charges are meant to recover the fixed cost of the utility and have necessarily to be fixed keeping in view the nature of supply and the typical load curves for the various categories. The consumers with lower demand normally provide more diversity to the system. This is also 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. In view of such peculiar characteristics of supply for various categories, it may not be fair to fix the demand charges for all the consumer categories. The Commission would also like to mention here that the consumers are being allowed to temporarily reduce their demand upto 50% and also such demand charges are levied on 90% of the contracted demand or the actual demand whichever is higher. As such the demand charges are already being fixed in a fair and equitable manner and the Commission does not find any merit in the suggestion to reduce the demand charges.

Stakeholder's Submission

4.18.11 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.

Petitioner's Response

4.18.12 In response to objection/suggestion regarding domestic connection to industrial colonies, HPSEBL submitted that if the industries applied for a separate connection for its Housing Colonies then there is already a provision for single point supply to residential colonies in Domestic Supply Category. The same has been quoted below:

"***Note:***
(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......"

Commission's Observations

4.18.13 The Commission is of the view that since such industrial housing colonies can apply for a separate connection under the domestic category for catering to its workers residing inside these colonies, even under the existing provisions, a separate category for such consumers is not required. However, the suggestion for carrying out the adjustments for differential tariffs against the supply for industrial connection is not acceptable as this would only complicate the things.

Stakeholder's Submission

4.18.14 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.

Petitioner's Response

4.18.15 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.

Commission's Observations

4.18.16 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 particularly when the sufficient flexibility is also available to the consumer under the provision for temporary reduction of its demand up to 50% twice a year. As such, the Commission does not find any merit in this suggestion.

Stakeholder's Submission

4.18.17 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.

Petitioner's Response

4.18.18 To carry out a voltage wise cost of supply in HP a tender for "Appointment of Consultants for Voltage Wise Cost of Supply Study in Himachal Pradesh" was floated online dated 5.11.2016. The Techno-commercial bids were opened on the scheduled date of 7.1.2017. The Techno-commercial evaluation of bids is currently under process. Once the studies are complete Voltage wise tariff can be determined in HP.

Commission's Observations

4.18.19 A separate EHT category already exist for industrial consumers. As regards the suggestion to fix the tariff based on the voltage wise cost of supply, the matter has been discussed under Chapter 9.

Stakeholder's Submission

4.18.20 The night tariff concession in the State should be uniform across the board irrespective of the voltage level and must be increased to 100 paisa per unit from the present 40 paise per 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.

4.18.21 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.

Petitioner's Response

4.18.22 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.

Commission's Observations

4.18.23 The Commission agrees with the views of HPSEBL in this regard. 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 major surpluses during night time in a large part of the year. For summer months, the Commission has already allowed for higher night time concession to the consumers.

Stakeholder's Submission

4.18.24 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. This concept has already been implemented by some other States like Maharashtra, Madhya Pradesh and Punjab Electricity Boards.

Petitioner's Response

4.18.25 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.

Commission's Observations

4.18.26 The tariff categories have already been linked with the contract demand and kVA. Connected load is used as one of the factors for identifying the standard supply voltages and this provision cannot be dispensed away particularly keeping in view the apprehensions expressed by HPSEBL about the adverse impact which it can have on the system. In fact the matter was discussed in a greater detail with the industrial association in 2014 when the tariff provisions were considerably rationalized after taking into account the views of the HPSEBL and the industrial consumers.

Stakeholder's Submission

4.18.27 Demand charges are being collected from consumers who have installed the motors of capacity 20kW or above, while those with lesser capacity are exempted from it although the very purpose of both is to irrigate their fields. Therefore, it is requested that the demand charges levied on agricultural pump motors of capacity 20kW and above should not be increased.

Petitioner's Response

4.18.28 No response has been submitted by the petitioner.

Commission's Observations

4.18.29 The Commission shall keep in consideration the request made by stakeholders to not increase the tariff for the respective category under this Tariff Order.

Stakeholder's Submission

4.18.30 It is requested that HPSEBL may increase the late payment surcharge from present 2% to 10-15% so that people deposit their electricity bills within due date. The Licensee may also explore other mechanisms like introducing pre-paid metering to avoid late payments.

Petitioner's Response

4.18.31 HPSEBL has already requested Hon'ble Commission to fix the pre-paid tariff for consumers. HPERC is requested to take appropriate decision on the suggestion of consumer.

Commission's Observations

4.18.32 The Commission is of the view that the late payment surcharge which is currently at 2% p.m. compounds to 24% per annum and is appropriate to incentivize consumers to make timely payments.

Stakeholder's Submission

4.18.33 It is highly appreciable that HP Govt. provides subsidy to its consumers but the same does not percolate down to 80% of its consumers due to procedural difficulties. Presently no subsidy is being transferred to the consumer in case they cross the lower slab limits of monthly electricity consumption. The objectors suggest that subsidy provided in each slab category should be transferred to all consumers as and when they cross the lower limits of each slab.

Petitioner's Response

4.18.34 No response has been submitted by the petitioner.

Commission's Observations

4.18.35 The intention is to provide higher subsidy in the lower consumption slabs and lesser subsidy for higher consumption slabs. The tariff with and without subsidy are being fixed in a transparent manner and the consumers are not deprived of subsidy due to procedural difficulties.

Stakeholder's Submission

4.18.36 The proposed increase to the tune of 60-70% i.e. Rs 30.00 as per connection/ month in the form of consumer service charge is unjustified as number of charges in the form of Meter rent, Service Charge, Elect. Duty, Elect. Tax, Elect. Allowance, PF Surcharge, Sundry Charge, Sundry Allowance, Board allowances and many more are already being charged from every consumer every month.

Petitioner's Response

4.18.37 No response has been provided by the Petitioner.

Commission's Observations

4.18.38 The connection charges are part of the fixed charges which is payable to the utility as part of the tariff while the service charge, Elect. Duty, Elect. Tax, Elect. Allowance, etc. are government levied duties and taxes which are levied by the Govt of HP. The Tariff for respective category is covered under Chapter 9 of this Order.

Stakeholder's Submission

4.18.39 Due to principles of economy of bulk, a discount based tariff must be introduced for power intensive industry such as steel industry. This will result in optimum use of the infrastructure of both the industry as well as HPSEBL. We suggest that a discount of 50 paise per unit in the energy charges be given for higher consumption beyond a particular level i.e. 300 units per kVAh in a month.

Petitioner's Response

4.18.40 HPSEBL is a commercial entity and it recovers expenditure borne on various accounts like power purchases etc. from its consumers by way of electricity tariff. Any such concession would result in less recovery as power generators do not give any such concession to HPSEBL on excess purchase as long term PPA have already been signed with them.

Commission's Observations

4.18.41 The Commission does not intend to provide a separate treatment to power intensive units at present. It is worth mentioning that the supply to power intensive units also involves system requirement of higher level resulting in higher costs. For argument sake, even if the request of the stakeholder were to be considered, this would automatically necessitate substantial increase in demand charges.

Stakeholder's Submission

4.18.42 Delegation from Lahaul & Spiti visited the Commission office on the day of public hearing and had requested the Commission to rationalize their tariff in view of the complete shutdown of their hotels during winter months.

Petitioner's Response

4.18.43 No response has been submitted by the Petitioner.

Commission's Observations

4.18.44 The Commission has considered the submission of the stakeholders and shall rationalize the existing provisions relating to seasonal industries so as to take care of their legitimate concerns.

4.19 Other/ General Objections or suggestions

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

Stakeholder's Submission

4.19.2 The growing number of consumers opting for Open-access is an indication that the increase in tariff requested by HPSEBL is misplaced when the trading rates of power across the energy exchanges continue to fall. The huge difference in the tariffs charged by HPSEBL and the energy rate across power exchanges is building up a situation where more consumers are moving towards open-access. This is also because peak hour tariffs in HP are exceptionally high (with differential between normal hours and peak hours being as high as Rs. 1.70 per kVAh to Rs.1.90 per kVAh for HT2 and EHT consumers respectively). There is a further surcharge in the name of PLADC, which works out to Rs. 0.95 Paise per kVAh. The peak hour tariff needs to be rationalized.

Petitioner's Response

4.19.3 HPSEBL submits that STOA consumers are opting for open access only in those time blocks in which IEX rates are less and for rest of the time blocks they are buying power from HPSEBL. Further, the additional surcharge on open access consumers in Himachal Pradesh is only 49 paisa/unit which is very less in comparison to other states like Punjab (Rs 1.25/unit), Haryana (87 paisa/unit) Rajasthan (80 paisa/ unit).

Commission's Observations

4.19.4 The Commission has neither increased the tariff for peak load hours for last 2-3 years nor intends to increase the same in this Tariff Order.

Stakeholder's Submission

4.19.5 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.

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

Petitioner's Response

4.19.7 The matter regarding duplicity of recovery of Periodic inspection charges has already been taken up by HPSEBL with Chief Electrical Inspector and HPSEBL requests the Hon'ble Commission to take appropriate decision on this.

Commission's Observations

4.19.8 The Commission restates its advice and expects HPSEBL to sort out the matter with Chief Electrical Inspector expeditiously.

Stakeholder's Submission

4.19.9 HPSEBL must take steps to stop theft of electricity. It is requested to either legalize the registration of Sub-meters or stop it completely as the Building owners are charging a higher rate from the tenants by the virtue of installation of sub-meters.

Petitioner's Response

4.19.10 HPSEBL already has a dedicated Flying Squad to check the theft of electricity in the State and is trying its best to limit the theft of electricity.

4.19.11 Further, it is requested to supply the complete details of the premises where it is being alleged that resale of electricity is being done so that necessary action can be taken on the same.

Commission's Observations

4.19.12 The Commission directs the Petitioner to take cognizance of the matter and take necessary steps in this regard. In case any provisions are required to be introduced or rationalized, the petitioner may submit a suitable proposal. The petitioner should also study how the issue of sub-meters is dealt in other States and submit a proposal to overcome such issues.

Stakeholder's Submission

4.19.13 The continuity of supply is still a cause of concern particularly at the voltage levels of 11 kV and below. The various continuity indices defined in the Standards of Performance Regulations need to be continuously monitored and there should be some sort of linkage with the fixed charges. This will on one hand compensate the consumer to some extent for the non-supply period and on the other hand inculcate the sense of accountability and performance in the field staff. We suggest that the applicability of demand charges be made proportional to the hours of supply or linked with the continuity indices.

Petitioner's Response

4.19.14 HPSEBL for its distribution business has incurred a huge amount in its asset base to ensure a continuous supply to its consumers. And these costs incurred by HPSEBL on its system have been created to supply power on demand by the consumer. Therefore, this cost has to be borne by the consumer even if there is no consumption due to any reason.

Commission's Observations

4.19.15 The distribution licensee has to provide reliable and quality power supply to its customers. HPSEBL should work towards achieving the benchmarks of Standards of Performance set for various services provided by it. 'Quality of Supply & Services' is an important aspect which was also envisaged under Regulation 34 as amendment to MYT Tariff Regulations, 2011. The Petitioner is directed to maintain the data with regard to Standard of Performance and submit to the Commission on quarterly basis.

Stakeholder's Submission

4.19.16 It is not clear whether the consumers who want to set up a captive hydro plant in the State, will be entitled to get RECs in addition to concessional wheeling charges. HPSEBL is required to provide a clarification on the same.

"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".

Petitioner's Response

4.19.17 HPSEBL has requested the Hon'ble Commission to take an appropriate decision on the REC benefit to captive embedded consumers.

Commission's Observations

4.19.18 The provisions are clear in this regard, both the concessions cannot be given simultaneously.

Stakeholder's Submission

4.19.19 Presently mass induction heating load is allowed only up to a level of 750 kVA for 11 kV Supply voltage as a special category voltage. We suggest and pray that the limit of mass induction heating load be increase to 1500 kVA at 11 kV, if not to a level of 2200 kVA allowed to other than steel industries.

Petitioner's Response

4.19.20 HPSEBL submits that at present consumer can avail special category loads up to 750 KW at 11 KV. Hon'ble Commission in amended supply code has kept the limits upto 750 KW after considering all the factors like Harmonics injections, Reliability of Supply, High initial currents at low lagging power factor and system stability etc. It is further submitted that this load is generally released from common feeders through which all other consumers are also connected and in order to ensure reliable supply, in accordance with Supply code, the limits should not be revised.

Commission's Observations

4.19.21 The Commission has fixed the limit of 750kVA for mass induction heating load at 11kV after considering the technical constraints as well as the interest of the consumers. The Commission concurs with the view of the Petitioner that since this load is generally released from common feeders, raising the ceiling of permissible load for mass induction heating can adversely affect the reliability of supply.

Stakeholder's Submission

4.19.22 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.

Petitioner's Response

4.19.23 HPSEBL is already providing the best services to its consumers and has established a 24X7 Customer Complaint Centre wherein consumers can register their complaint on a toll free No.1800-180-8060 and 1912.

4.19.24 Further, there is a plan for dedicated complaint cell for Industrial areas as well. Further Complaint handling mechanism has been submitted before the Hon'ble Commission for its approval.

Commission's Observations

4.19.25 Regarding 24x7 centralized complaint handling system for industrial consumers, HPSEBL is directed to ensure 24X7 availability of manpower in key industrial areas to ensure resolution of common/ small complaints within a short timeframe. The Petitioner should realize that delays in addressing the outages at the consumer end not only leads to losses in the manufacturing / industrial unit but also impacts the revenue realization of HPSEBL. The Petitioner is advised to take steps to ensure that the complaints of the industrial consumers are attended expeditiously and at least the small complaints of the industrial consumers in industrial areas are attended on round the clock basis.

Stakeholder's Submission

4.19.26 HPSEBL should consider the further simplification of application procedures in respect of load changes. Online Application Process requires a mandatory field as K number. The new consumers do not have a K number. Therefore, they find it difficult to proceed. Self-certification nowadays is being accepted by the field officers and has reduced some of the problems of the applicants. There has been slight reduction in the number of NoCs required but the field officers still demand additional papers such as NoC from the industries department. The need for papers required for getting a power connection needs to be simplified and the formalities need to be reduced. The affidavit should simply be in the form of an undertaking that the customer will abide by the rules and regulations framed by HPERC. IT enabled application and approvals must be enforced.

Petitioner's Response

4.19.27 The Application process has already been simplified to a great extent and only NoC from local bodies is required along with identity proof of the consumer. Further, online application is already available on HPSEBL website under citizen interface for new connections.

Commission's Observations

4.19.28 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.

Stakeholder's Submission

4.19.29 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

Petitioner's Response

4.19.30 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.

Commission's Observations

4.19.31 The Commission feels that in case the existing industrial connection has surrendered its load, the consumer may apply for a separate connection for meeting their lighting demand. However, if the industrial consumer has not surrendered his connection, such requirements have to be met from the industrial connection only. HPSEBL may examine the matter in detail and if any other issues are involved, it may come up to the Commission with a detailed proposal.

Stakeholder's Submission

4.19.32 It has been suggested that power cuts, if unavoidable should be imposed uniformly across all categories of consumers without any discrimination towards industrial consumers.

Petitioner's Response

4.19.33 Connected load of domestic consumers is very less as compared to industrial consumers 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.

Commission's Observations

4.19.34 Whereas the Petitioner response also has some merit, it shall only be fair to impose cut in an equitable manner duly keeping in view the system requirements and the time of the day in which such cuts are required to be imposed.

Stakeholder's Submission

4.19.35 After many representations before the Hon'ble Commission, revised guidelines were issued by HPSEBL to ignore the detection of excess connected load in the cases where the contract demand was being adhered to. The Hon'ble Commission had even amended the provisions of the Supply Code, 2009 in this respect but the provisions of the Supply Code, are either not clear or are being misunderstood. It is requested that the 'unauthorized use' be re-defined in the Supply Code, very clearly and consumers who limit their use within the sanctioned contract demand do not be termed as un-authorized users.

Petitioner's Response

4.19.36 HPSEBL has requested the Commission to take decision on cases under section 126 for unauthorized use.

Commission's Observations

4.19.37 The Petitioner should evolve a detailed proposal for changes, if any, required to be made in the supply Code.

Stakeholder's Submission

4.19.38 Regular maintenance of transformers, conductors & other equipment reduce losses. HPSEBL should make an attempt to avoid tripping/ fluctuations by improving quality of equipment installed at sub-stations.

Petitioner's Response

4.19.39 Maintenance of transformers, conductors & other equipment are being done on regular basis by HPSEBL. By this very reason, HPSEBL has been able to record losses for FY15 at 11.46% against the approved losses of 12.80%.

Commission's Observations

4.19.40 While the overall losses of HPSEBL has reduced to 11.46% for FY15, the provisional data for FY16 indicates an increase in T&D losses. Therefore, it is important that the Petitioner is not only able to maintain the losses within permissible limits but also improve losses across the states even at LT level. It is also observed that the overall R&M expense approved by the Commission has not been met and is lower than the previous years, which is an indication of the lack of focus on R&M activities by HPSEBL and which would have a long term impact rather than an immediate impact on the overall health of distribution network. The Petitioner should also submit the reliability indices as per the provisions of the SOP regulations.

4.19.41 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.

5 True-up of Controllable Parameters for Second Control Period (FY12-14)

5.1 Background

5.1.1 HPSEBL has submitted a petition for true up of the controllable parameters for the Second MYT Control Period (FY12–FY14) on the basis of difference between the audited accounts and approved controllable parameters in the MYT Order for the Second Control Period (FY12-FY14) dated 19th July 2011. The submission for truing-up is based on consolidated numbers without providing break-up of generation and distribution parameters i.e. depreciation, interest & finance charges and return on equity.

5.1.2 Since the Petitioner has submitted the truing-up for the Second Control Period as part of distribution business Mid-Term Performance Review Petition, the Commission has considered the truing-up of the controllable parameters for the distribution business only and shall separately take up the truing up of controllable parameters for the MYT Control Period FY12-FY14 along with the tariff determination of various generating stations for the subsequent Control Period based on availability of information.

5.1.3 As per Regulation 11 (1) (b) of the HPERC MYT Regulations, 2011

"(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."

5.1.4 The truing–up of uncontrollable parameters has been already undertaken by the Commission in the previous Tariff Orders along with truing-up on account of O&M expenses for the period of FY12-FY14. However, the Commission has not undertaken any true up of controllable parameters like depreciation, interest & finance charges, return on equity etc. due to absence of adequate information with regard to the capitalization and provisions of the MYT Regulations, 2011 that specify that these parameters would be trued up only at the end of the Control Period.

5.1.5 Accordingly, in this Order, the Commission is truing up the controllable parameters for the distribution business of HPSEBL for the Second MYT Control Period.

5.1.6 The Petitioner had also submitted for truing-up of Controllable parameters for the second Control Period along with the petition for 2nd APR for the Third Control Period. Based on the submissions 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.

5.1.7 In view of the unsatisfactory and invalidated information, the Commission did not undertake truing-up of controllable parameters for the second Control Period in the previous Order. Also, the Commission had taken serious note on non-maintenance of proper records of various schemes and their capitalization in the past years. Also, the Commission had directed 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 Performance Review petition.

5.1.8 With respect to the truing-up of controllable parameters for the Second Control Period incorporated in the Mid-Term Performance Review Petition filed by HPSEBL, it is observed that while the Petitioner has not been able to provide detailed information for the schemes and works commissioned during the Second Control Period, the details provided are broadly sufficient to conclude the truing-up which is pending since long. Therefore, the Commission feels that there is no reason for further delay in truing-up of the Controllable parameters of the Second Control Period.

5.1.9 The Commission has reviewed the capital investment, capitalisation, depreciation, interest cost and return on equity for each year of the Second MYT Period (FY12–FY14) for the distribution business of the HPSEBL and has finalised the true up based on the MYT Regulations 2011, information submissions, necessary clarifications submitted by the licensee and views expressed by stakeholders.

5.2 Capital Investment and Capitalization

5.2.1 The details of actual capital expenditure submitted by the Petitioner as against the approved capital expenditure for the distribution business for the period FY12-FY14 is summarized below:

Table 67: Approved vs Actual Capital Investment submitted by the Petitioner for Second Control Period (Rs. Cr.)

Particulars	FY12	FY13	FY14
MYT Approved Capital Expenditure	554.91	761.78	515.44
Actual Capital Expenditure	459.67	563.29	665.42

5.2.2 Further, the actual capitalization as submitted by the Petitioner for the Control Period FY12-FY14 as compared with the approved capitalization is summarized in table below:

Table 68: Approved vs Actual Capitalization submitted by the Petitioner for Second Control Period (Rs. Cr.)

Particulars	FY12	FY13	FY14
MYT Approved Capitalization	225.98	406.08	547.25
Actual Capitalization	565.97	609.22	286.58

5.2.3 The actual capitalization figure for the distribution business could be verified with the audited accounts for each year after excluding the capitalization on account of generation business. Therefore, the total capitalization of Rs. 1461.77 Cr. is approved by the Commission for the truing-up of the Second Control Period.

5.2.4 Further, based on the direction in the previous Tariff Order for submission of scheme wise details of capitalization, the Petitioner has also provided summary of the various schemes / works which have been capitalized during the Control Period FY12-FY14 which is summarized below:

Table 69: Scheme-wise Actual Capitalization submitted by the Petitioner for Second Control Period (Rs. Cr.)

Schemes	FY12	FY13	FY14
REC - Trans	4.74	0.63	8.39
BADP - Trans	-	6.70	0.00
Kutir Jyoti	0.18	0.05	-
Natural Calamity	15.88	1.48	18.74
BASP	0.41	1.05	0.01
RE State Plan	74.97	48.56	52.54
SCSP (HP Govt)	4.73	4.58	4.41
APDRP	119.69	18.02	9.98
R-APDRP Part A	3.39	1.29	6.27
R-APDRP Part B	-	1.92	8.68
RGGVY	91.73	147.58	43.86
IT R-APDRP	1.26	1.09	11.38
IT not covered in R-APDRP	1.05	0.22	0.60
Minor / Civil works / Board Building / Misc. Works	4.39	3.75	20.80
Other Schemes	151.63	113.01	79.90
Deposit Work	91.93	259.30	21.02
Total Capitalization	**565.97**	**609.22**	**286.58**

5.2.5 The Commission has also observed various paras from the HPSEBL's auditor with respect to improper accounting practices particularly for capital works. The auditor has commented absence of appropriate maintenance of Fixed Asset Register (FAR) registers at division level as one of the primary reasons which also do not tally with the sub-head wise accounts of Fixed Assets maintained in the account statements. Few of the comments of Auditors raise concerns over the capitalization policy of the HPSEBL and the authenticity of the gross fixed asset and CWIP.

5.2.6 The Commission takes serious concern over the accounting practices being followed by the utility and directs HPSEBL to adopt appropriate mechanisms and procedures for proper accounting. However, in order to avoid any further delays in the truing-up of controllable parameters of the previous Control Period, the Commission is constrained to approve the capitalization provided in the audited accounts and scheme-wise break up submitted by the HPSEBL.

5.3 Funding of Capitalization

5.3.1 The Petitioner submission with respect to funding of the above schemes are also summarized below:

Table 70: Funding of Scheme-wise Capitalization as submitted by the Petitioner for Second Control Period (Rs. Cr.)

Schemes	Debt	Equity	Grant	Consumer Contribution
REC - Trans	90%	10%		
BADP - Trans			100%	
Kutir Jyoti			100%	
Natural Calamity			100%	
BASP			100%	
RE State Plan		100%		
SCSP (HP Govt)			100%	
APDRP			100%	
R-APDRP Part A	90%	10%		
R-APDRP Part B	75%	25%		
RGGVY	90%	10%		
IT R-APDRP	90%	10%		
IT not covered in R-APDRP	90%	10%		
Minor / Civil works / Board Building / Misc. Works		100%		
Other Schemes	90%	10%		
Deposit Work				100%

5.3.2 Based on the subsequent submissions, the Petitioner has submitted the following details of equity, debt, grants and consumer contribution added against the capitalized works:

Table 71: Funding of Scheme-wise Capitalization as submitted by the Petitioner for Second Control Period (Rs. Cr.)

Schemes	FY12	FY13	FY14	Total
Equity	104.73	79.85	90.56	275.13
Debt	228.42	244.90	141.87	615.20
Grant	140.88	25.18	33.14	199.20
Consumer Contribution	91.93	259.30	21.02	372.25
Total Funding against Capitalized works	**565.97**	**609.22**	**286.58**	**1,461.78**

5.3.3 In its queries/ clarifications, the Commission had asked the Petitioner to provide details of various works capitalized under each scheme during the Control Period along with the funding pattern of each work and validate the same with the audited accounts. The Petitioner in its response had submitted the broad scheme wise details of the capitalization without much detailing on the works executed under each scheme. Also, the Petitioner has not been able to provide complete details under each scheme/ work i.e. cost, funding, IDC, etc.

5.3.4 In absence of complete details and considering the auditors' para with regard to inappropriate record keeping of the various capital works lead to concerns over the reported numbers by HPSEBL. The observations of the auditor also hint at diversion of funds available for deposit works. Therefore, the Commission has used scheme-wise funding pattern applicable for each scheme as per the information supplied by the Petitioner and prudence check.

5.3.5 It is observed that the Petitioner had shown a number of central government schemes to be funded from debt while the underlying condition of such schemes are that the loan is convertible to grant in case the utility is able to achieve the milestones. During the technical validation sessions, HPSEBL officials had indicated that the original fund has come as loans from PFC/REC and are therefore accounted as loan in the accounts of HPSEBL. In some of the cases, the officials also indicated the balance amount to be funded from loans from other agencies for meeting the remaining 10% of the funding requirement.

5.3.6 The Commission has already communicated its stand clearly with respect to the Central Government funded schemes in its previous tariff orders:

"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."

5.3.7 The Commission has therefore considered the loan component of such central government funded schemes as grant and the balance 10% has been considered to be funded from normative loan.

5.3.8 Based on the response to the queries of the Commission, the Petitioner has submitted the details of the equity infused by the Government of HP against the equity portion of the capitalized works along with documentary evidence. As per the submission, the details of equity component infused by the GoHP is as follows:

Table 72: Details of Equity Contribution received from GoHP (Rs. Cr.)

Year	Distribution	Generation	Total

Year	Distribution	Generation	Total
2009-10	14.3	10	24.3
2010-11	0.01	-	0.01
2011-12	-	-	-
2012-13	40	10	50
2013-14	44.25	-	44.25
Total	**98.56**	**20**	**118.56**

5.3.9 The Petitioner has utilized the entire amount of equity received from the GoHP upto FY 2013-14 towards the assets capitalized during FY12-FY14. Further, the Petitioner has submitted that the difference in equity component reflected in the various schemes and actual equity received from the GoHP has been met through internal accruals.

5.3.10 Based on the review of various documentary submission of equity released by GoHP to HPSEBL for capital investment, it is observed that the part of the equity i.e. Rs. 25 Cr. released by the GoHP is from the grant provided from 13th Finance Commission Grants toward strengthening of electricity infrastructure in border blocks of the State. Therefore, this amount cannot be considered towards meeting the equity portion of the capitalized schemes. The balance amount has been considered towards meeting the equity contribution of various schemes capitalized during FY12-FY14 provided that 50% of the equity contribution received has been utilized in the same year of receipt and balance 50% has been utilized in the subsequent year.

5.3.11 With respect to equity shown through internal accruals, the Commission is of the opinion that in accordance with the provisions of Tariff Policy, additional equity can be invested only if there is any surplus income generated in business or if there is any equity infusion by the GoHP. The audited accounts of HPSEBL do not reflect any surplus or positive net worth during the Control Period and therefore consideration of equity from internal accruals does not arise.

5.3.12 Accordingly, the total equity addition considered by the Commission during the Second Control Period is as below:

Table 73: Total Equity Addition Approved by the Commission for Truing-up (Rs. Cr.)

Year	Distribution
2009-10	14.3
2010-11	0.01

Year	Distribution
2011-12	-
2012-13	27.50
2013-14	15.88
Total Equity	**57.69**

5.3.13 Post considering the fund available from grants, deposit works and equity, the balance amount has been considered to be funded from loans in absence of appropriate data.

5.3.14 The approved funding for the capitalization of schemes during the Second Control Period is shown below:

Table 74: Funding Requirement and Approved Sources of Funding for Second Control Period (Rs. Cr.)

Particulars	FY12	FY13	FY14
Funding Requirement	**565.97**	**609.22**	**286.58**
Funding Break-up			
Grants	238.63	176.77	102.11
Consumer Contribution	91.93	259.30	21.02
Equity	24.14	16.99	16.55
Debt	211.27	156.16	146.90
Total	**565.97**	**609.22**	**286.58**

5.4 Depreciation

5.4.1 The summary of the GFA and depreciation approved by the Commission in the MYT Order for the second Control Period (FY12-FY14) is shown below:

Table 75: Approved GFA & Depreciation for the Second Control Period (Rs. Cr.)

Particulars	FY12	FY13	FY14
Opening GFA	3455.27	3681.25	4087.32
Addition	225.98	406.08	547.25
Reduction	-	-	-
Closing GFA	3681.25	4087.32	4634.58
Depreciation Rate	2.50%	2.50%	2.50%
Depreciation	89.21	97.11	109.02

5.4.2 It is observed that the Commission had trued-up the GFA for the First Control Period (FY09-FY11) in the Order for First APR of the Second MYT Control Period (FY12-FY14) dated 24.04.2012. The Commission has therefore considered the transmission and distribution assets as per the approved closing GFA for FY11. Adjustment on account of assets transferred to HPPTCL has been considered to arrive at the opening GFA for FY12.

5.4.3 The Commission has revised the depreciation for each year of the Second Control Period based on the approved year-wise capitalization and the depreciation rate as considered in the Second MYT Order. Further, the depreciation on assets created out of grants and deposit works have been reduced as per Regulation 23 of the MYT Tariff Regulations, 2011.

5.4.4 The revised depreciation now approved by the Commission is as below:

Table 76: Trued-up GFA & Depreciation for the Second Control Period (Rs. Cr.)

Particulars	FY12	FY13	FY14
Opening GFA	2,503.31	3,069.28	3,678.50
Addition	565.97	609.22	286.58
Closing GFA	3,069.28	3,678.50	3,965.08
Depreciation on Total Assets @2.50%	69.66	84.35	95.54
Less: Depreciation on Assets created out of grants/ deposit works	19.61	29.20	36.19
Approved Depreciation	**50.04**	**55.15**	**59.36**

5.5 Interest Cost

5.5.1 The Commission had approved interest on new loans towards capitalization for First and Second Control Period in the MYT Order for Second Control Period as below:

Table 77: Approved Interest on Capital Loans in the MYT Order (Rs. Cr.)

Particulars	FY12	FY13	FY14
Interest on New loans for capex (FY09-11)	34.17	28.45	23.85
Interest on New loans for capex (FY12-14)	9.33	31.94	69.46
Interest Expense on New Loans	**43.5**	**60.39**	**93.31**

5.5.2 The revised interest on new loans towards capitalization approved for First Control Period (FY09-FY11) has been computed as per the closing loan balance approved in the truing-up of controllable parameters as per the First APR of the Second MYT Control Period (FY12-FY14) dated 24.04.2012.

5.5.3 With respect to the approved capitalization for the Second Control Period, the Commission has considered the loan component of funding requirement each year. The Commission analysed the details of new loans taken by HPSEBL during the FY12-FY14 and observed that interest rates on these loans varied from 7%-12.5% for PFC and REC loans. The Commission therefore has retained the interest rate on new loans at 12% as approved in the MYT Order for Second Control Period.

5.5.4 The revised interest on loans for funding capitalization for First and Second Control Period is provided below:

Table 78: Trued-up Interest on Capital Loans for Second Control Period (Rs. Cr.)

Particulars	FY12	FY13	FY14
Loans for Capitalization (FY09-FY11)			
Opening	86.60	75.42	64.25
Addition	-	-	-
Repayment	11.18	11.18	11.18
Closing	75.42	64.25	53.07
Interest Rate	10.25%	10.25%	10.25%
Interest	**8.30**	**7.16**	**6.01**
Loans for Capitalization (FY12-FY14)			
Opening	-	190.14	309.55
Addition	211.27	156.16	146.90
Repayment	21.13	36.74	51.43
Closing	190.14	309.55	405.02
Interest Rate	12.00%	12.00%	12.00%
Interest	11.41	29.98	42.87
Approved Total Interest Cost	**19.71**	**37.14**	**48.89**

5.6 Return on Equity

5.6.1 The Commission had not considered equity addition during the Second Control Period in the MYT Order. As per the funding pattern approved for the capitalization discussed in the previous section, the Commission has recomputed the return on equity towards the distribution business of HPSEBL which is as below:

Table 79: Approved Return on Equity for the Second Control Period (Rs. Cr.)

Particulars	FY12	FY13	FY14
Opening Equity	189.00	213.14	230.13

Particulars	FY12	FY13	FY14
Addition	24.14	16.99	16.55
Closing Equity	213.14	230.13	246.69
Rate of Return	16%	16%	16%
RoE	**32.17**	**35.46**	**38.15**

5.7 Summary

5.7.1 The Commission has reviewed capitalization, depreciation, interest and return on equity for each year of the Second MYT Control Period (FY12-FY14). The table below summarizes the change in depreciation, interest and return on equity between the approved amount in the MYT Order for the Second Control Period and now trued-up amount:

Table 80: Trued-up Controllable Parameters for the Second Control Period (Rs. Cr.)

Particulars	FY12		FY13		FY14	
	Earlier Approved	Trued-Up	Earlier Approved	Trued-Up	Earlier Approved	Trued-Up
Depreciation	89.21	50.04	97.11	55.15	109.02	59.36
Interest on Loans for First & Second Control Period	43.50	19.71	60.39	37.14	93.31	48.89
Return on Equity	30.24	32.17	30.24	35.46	30.24	38.15
Total	**162.95**	**101.93**	**187.74**	**127.75**	**232.57**	**146.39**
Reduction in ARR		**(61.02)**		**(59.99)**		**(86.18)**
Total Reduction	**(207.19)**					

5.7.2 The above revenue surplus required to be adjusted in the ARR of FY18 has been treated along with the revenue deficit determined based on the truing-up of the uncontrollable parameters for FY15 in the subsequent Chapter.

6 True-up of uncontrollable parameters for FY15 under the Third MYT Control Period

6.1 Background

6.1.1 HPSEBL has submitted a petition for true-up of uncontrollable parameters for FY15 on the basis of variation in actual expenses and revenue in FY15 vis-à-vis the expenses and revenue approved for FY15 in the MYT Order dated June 12, 2014. After repeated reminders from the Commission, the Petitioner has submitted the audited accounts for the period April 1, 2014 to March 31, 2015 to support the actual expense and revenue for FY15.

6.1.2 The Commission has reviewed the operational and financial performance of HPSEBL for FY15 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 and amendments thereof (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. The Commission has undertaken prudence check of the various expenses and revenue on the basis of the audited accounts submitted by HPSEBL.

6.1.3 The relevant extract stated in the amended Regulation 11 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) (Second Amendment) Regulations, 2013 has been described below:

*"11. **True Up***
(1) The true up across various parameters shall be conducted by the Commission, for the previous years for which the actual/ audited accounts are made available by the distribution licensee, at the times and as per principles stated below:-
(B) as per principles -

(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 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…;

(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."

6.1.4 The following sections details the methodology adopted by the Commission for truing-up of uncontrollable parameters for FY15 based on the final audited accounts of HPSEBL for FY 15.

6.2 Energy Sales and Revenue

6.2.1 HPSEBL in its true up petition for FY15 has submitted the actual sales for FY15 as 7820 MUs as compared with the approved sales of 8217 MUs in the MYT Order for FY15, which is lower by 397 MUs. The Commission accepts the actual sales figures given by the utility.

6.2.2 The following table shows the sales approved by the Commission in the MYT Order for FY15, sales submitted as actual by HPSEBL in its petition for FY15, and trued up (approved) sales for FY15.

Table 81: Category-wise Trued-up Sales for FY15 (MUs)

Category (MU)	Approved in MYT Order	HPSEBL's Submission	Now Approved (Trued up)
Domestic	1,934	1,894	1,894
Non Domestic Non Commercial	122	130	130
Commercial	492	473	473

Category (MU)	Approved in MYT Order	HPSEBL's Submission	Now Approved (Trued up)
Temporary	27	26	26
Small Power	68	71	71
Medium Power	162	138	138
Large Supply	4,688	4,370	4,370
Govt. Irrigation & Water Pumping	510	503	503
Public Lighting	13	13	13
Irrigation & Agriculture	44	45	45
Bulk Supply	157	158	158
Total Energy Sales	**8,217**	**7,820**	**7,820**

6.3 Revenue from Sale of Power

6.3.1 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 FY15, the Commission approves the amount of Rs. 4120.64 Cr. as revenue billed during FY15 as presented in the table below:

Table 82: Category-wise Trued-up Revenue from Sale of Power for FY15 (Rs. Cr.)

Particulars	Now Approved (Trued up)
Domestic	766.19
Non Domestic Non Commercial	83.79
Commercial	268.23
Small Power	34.74
Medium Power	88.98
Large supply	2,389.65
Govt. Irrigation & Water Pumping	337.22
Public Lighting	7.44
Irrigation & Agriculture	29.38
Bulk and Grid supply	100.41
Temporary Metered Supply	14.61
Total	**4,120.64**

6.3.2 The Commission has also reviewed the submission by the Petitioner for revenue from sale of power outside state and approves the revenue of Rs. 458.55 Cr. against the previously approved revenue of Rs. 255.15 Cr. in the MYT Order for FY15. 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 FY15 considered for true-up for FY15 is as detailed in table below:

Table 83: Trued-up Revenue from Sale of Power outside State for FY15 (Rs. Cr.)

Particulars	Now Approved (Trued-up)
Revenue from sale of power outside State	1242.10
Less: Banking Sale	783.56
Net Revenue from sale of power outside State	**458.55**

6.4 Transmission and Distribution Loss

6.4.1 The Commission had approved T&D loss level at 12.80% for FY15 in the MYT Order with 0.2% reduction each year for the remaining years of the Third Control Period. As per the Petitioner's submission, it has achieved T&D loss level of 11.46% during FY15.

6.4.2 Based on the submission of actual sales and power purchase quantum, the T&D loss of 11.46% for FY15 is approved by the Commission for truing-up. The T&D loss achieved by HPSEBL has resulted in a overachievement of 1.36% which is eligible for incentive as per Regulation 15 of Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) (Second Amendment) Regulations, 2013 and has been separately dealt in Para 6.7.

Table 84: Approved Transmission and Distribution Loss for FY15 (Rs. Cr.)

Particulars	MYT Order	HPSEBL's Submission	Trued-up
T&D Loss	12.80%	11.46%	11.46%

6.5 Power Purchase

6.5.1 HPSEBL has submitted actual total power purchase cost of Rs. 3071.77 Cr. for FY15 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 FY15 is as below:

Table 85: Total Power Purchase Cost Submitted by the Petitioner for FY15

Particulars	Units (MU)	Amount (Rs. Cr.)	Rate (Rs. /kWh)
Gross Power Purchase	12032.87	2749.38*	2.28
Less: Banking	1814.25	-	
Net Power Purchase Excluding Banking	10218.62	2749.38*	2.69
Other Costs	-	322.40	
Total Power Purchase Excluding Banking	**10218.62**	**3071.77**	**3.01**

** including Rs.206.59 Cr. of past year arrears*

6.5.2 The Commission has scrutinised the submission made by the Petitioner along with the break-up of past arrears of Rs. 206.59 Cr. and reconciliation table provided in the petition against the audited accounts for FY15 and observed that the initial submission by the Petitioner did not reconcile with the accounts. HPSEBL was asked to clarify the difference between the amount claimed by the Petitioner and the actual power purchase cost as per the audited accounts.

6.5.3 In response to the queries of the Commission, HPSEBL submitted the following:

a) ***IPPs:*** The Petitioner has claimed Rs. 673.27 Cr. against IPPs (including SHPs and Baspa). The reconciliation sheet for power purchase cost of FY15 provided by the Petitioner clarifies that this cost has been calculated by adding the account heads 70.801 to 70.899 (except 70.818, 70.819, 70.826, 70.829, 70.846, 70.875) against IPPs and 70.818 against Baspa.

b) ***Jugni HEP and Kurmi HEP:*** The account heads 70.898 and 70.899 in the power purchase sheet in accounts for FY14-15 has been claimed by the Petitioner without any description of the source of power. The Petitioner clarified during the Technical Validation Session that these amounts of Rs. 10.72 Cr. and Rs. 2.25 Cr. are against Jugni and Kurmi HEPs respectively and have been claimed by the Petitioner under power purchase of IPPs.

c) ***BBMB:*** The Petitioner has submitted cost of power purchase from BBMB in FY 15 as Rs. 38.78 Cr. as against Rs. 25.11 Cr. in the accounts. The Petitioner, during the Technical Validation Session submitted that the amount of Rs. 38.78 Cr. was inadvertently considered by the Petitioner.

d) ***Free Power:*** The Petitioner has claimed an amount of Rs. 177.83 Cr. (including past arrears of Rs. 14.42 Cr.) on account of cost of GoHP free power in FY15. This includes an additional amount of Rs. 5.77 Cr. which is not reflected in the balance sheet. The Petitioner clarified during the Technical Validation Session that the bill for Rs. 5.77 Cr. has not been submitted by PTC to HPSEBL and therefore, is not reflected in accounts.

e) ***IEX:*** The Petitioner has submitted a claim of Rs. 29.29 Cr. in favour of power purchased from IEX while this amount is Rs. 5.03 Cr. as per accounts. HPSEBL clarified that it 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. 5.03 Cr. as appearing in balance sheet is net power purchase during the year 2014-15.

f) ***UI:*** The account head 70.12 named Malana HEP amounting to Rs. 9.69 lakhs was against UI power received from Malana HEP and was inadvertently not considered by HPSEBL

g) ***Reactive Energy Charges:*** The account head 70.102 under HVPNL was against HVPNL Reactive Energy and was inadvertently not considered by HPSEBL.

h) ***GoHP and Malana Deviation:*** An additional amount of Rs.14.53 Cr. against the account head 70.13 of NREB in the accounts was against UI Deviation Settlement of GoHP and Malana and has not been considered by the Petitioner.

6.5.4 Besides the above deviations, the Commission observed minor variations in the power purchase cost from the remaining stations and various account heads which have been disallowed. Based on the written clarifications and discussion during technical validation session, the Commission has been able to reconcile the Petitioner's submission with the audited accounts of FY15 with the following observations:

a) ***IPPs:*** The difference of Rs. 0.10 Cr. could not be reconciled by the Petitioner and therefore, the Commission has disallowed this amount and approved Rs. 673.17 Cr. against cost of power purchase from IPPs (including Baspa) as per the audited accounts.

b) ***Jugmi and Kurmi HEPs:*** After seeking clarification, the Commission has allowed the power purchase cost from both these stations under the total power purchase cost from IPPs.

c) ***BBMB:*** The Petitioner submitted that the differential of Rs. 13.67 Cr. was inadvertently claimed by the Petitioner. Therefore, the Commission has approved a figure of Rs. 25.11 Cr. as per audited accounts against the power purchase cost of Rs. 38.78 Cr. from BBMB claimed by the Petitioner.

d) ***Free Power:*** Since the Commission has observed that the power purchase cost in procuring GoHP free power in FY 2014-15 includes an additional claim of Rs. 5.77 Cr. by the Petitioner against which no bill has been raised by PTC to HPSEBL, the Commission has disallowed this amount. The Commission approves Rs.172.06 Cr. against power purchase from GoHP free power in FY15.

e) ***IEX:*** The Commission has considered the netted off amount of Rs. 5.03 Cr. as per the accounts as against HPSEBL's submission of Rs. 29.29 Cr.

f) ***UI:*** The Commission has noted the differential of Rs. 9.69 lakhs which was not claimed by the Petitioner and added this amount to the overall UI charges accordingly.

g) ***Reactive Energy Charges:*** The Commission has allowed an amount of Rs. 0.34 Cr. against Reactive Energy under a separate head for other charges.

h) ***GoHP & Malana Deviation:*** The Petitioner clarified that this amount of Rs. 14.53 Cr. is against UI Deviation Settlement of GoHP and Malana. The Commission has therefore, approved this amount under a separate head for other charges.

i) ***Banking:*** Banking being a cashless transaction is considered zero in petition under total power purchase cost, however the same is considered as Rs. 844.77 Cr. in Balance Sheet. The Commission has reduced this amount from the total power purchase cost as reflected in the audited accounts.

6.5.5 It is observed that the Petitioner has considered additional power purchase expense in case of few sources which have not been reflected in the FY15 audited accounts and shall be considered in the subsequent year accounts. In order to align the trued-up power purchase cost with the audited accounts and prevent any errors in later years, the Commission feels it prudent to consider the power purchase cost as per the audited accounts and has therefore disapproved any excess amount claimed against by the Petitioner in the power purchase cost for FY15.

6.5.6 It is to be noted that as per the MYT Tariff Regulations 2011, final truing-up is required to be undertaken based on the audited accounts. Therefore, for FY15, the Commission has reconciled source wise power purchase cost for truing-up after adjustments on account of banking. A summary table of the approved power purchase cost as per accounts after reconciling it with the Petitioner's submission has been provided below:

Table 86: Power Purchase Cost (excluding PGCIL and Other Costs) for FY15 (Rs. Cr.)

S. No.	Particulars	Now Approved (Trued-up)
A	**Total Power Purchase Cost as per audited accounts**	**3706.99**
	Less:	
B	**Banking Power Purchase (i)+(ii)+(iii)+(iv)**	**844.77**
(i)	HPPC	204.62
(ii)	PSEB	349.18
(iii)	UPPCL	76.37
(iv)	BRPL/BYPL	214.59
C	**PGCIL**	**335.86**
D	**HPPTCL**	**3.45**
E	**Open Access**	**100.98**
F	**Other Charges (NRLDC, Reactive Energy Charges, GoHP & Malana Deviation)**	**17.52**
	Power Purchase Cost (excluding PGCIL and other Charges) A-(B+C+D+E+F)	**2404.41**

6.5.7 For power purchased cost from own generating stations, the Petitioner has considered the fixed and variable cost of each of the generating station as approved by the Commission in the MYT Order for FY15 dated 12th June, 2014. However, in case of Ghanvi-II, the Petitioner has considered the provisional tariff approved by the Commission in the MYT Order for computing the power purchase cost. It is observed that the Petitioner is yet to file a tariff petition for Ghanvi-II in spite of its submission that the plant has achieved COD on 3rd April 2014. In response to the query of the Commission, the Petitioner has submitted the break-up of infirm and firm power for FY15 which has been considered for the purpose of approving the power purchase cost for Ghanvi II. In absence of any tariff petition for Ghanvi II, the Commission has considered the net generation after adjusting for infirm power, free power and auxiliary consumption and has retained the energy charges of Rs.3.17/unit as approved in the MYT Order. The Petitioner is however directed to file a separate petition for determination of tariff for Ghanvi II within three months from issue of this Order. In absence of tariff for Ghanvi II, the Commission shall consider tariff similar to the tariff approved for HPSEBL's small hydro stations (less than 25MW) for the subsequent truing-up exercises.

6.6 Transmission and Other Charges

6.6.1 The Commission has approved the transmission charges, open access charges, etc. based on the amount recorded in the audited accounts after adjustment on account of share of GoHP for the sale of free power.

6.6.2 The Commission has observed that the Petitioner has claimed an amount of Rs. 264.44 Cr. under PGCIL Charges as against Rs. 276.45 Cr. (including ULDC Charges). In response to the query of Commission, the Petitioner has clarified that the past arrears towards PGCIL Charges is Rs. 12.01 Cr. which have been additionally claimed under overall arrears of Rs. 206.59 Cr. and the share of Rs. 59.41 Cr. towards GoHP sale of free power has been adjusted. The Commission has thus, allowed an amount of Rs. 276.45 Cr. towards PGCIL Charges for FY15 which is in line with the audited accounts.

6.6.3 Based on the submissions of the Petitioner, the Commission has also observed that the open access charges of Rs. 100.98 Cr. reflecting in the accounts includes an amount of Rs. 49.11 Cr. recovered from other States. The Commission has thus, netted off this amount from the overall open access charges provided in the accounts and approved Rs. 51.88 Cr. as net open access charges.

6.6.4 In response to the Commission's queries the Petitioner has submitted that the SLDC charges have not been raised till date and the same shall be recorded when the bills are raised. Besides the above, the Commission has approved NRLDC charges of Rs. 2.63 Cr. as reflected in the audited accounts along with other charges such as Reactive energy charges and GoHP & Malana Deviation Settlement which were inadvertently not considered by the Petitioner as explained in the section above.

6.6.5 The total power purchase cost after incorporating all the responses of the Petitioner has been summarized below:

Table 87: Total Power Purchase Cost approved for FY 15 (Rs. Cr.)

S. No.	Description	HPSEBL's Submission	Now Approved (Trued-up)
A.	**Power Purchase Cost (exc. PGCIL Charges and Other Costs)**	**2,447.44***	**2,404.41**
B.	**Own Generation**	**289.92**	**288.91**
C.	Inter-State Charges		
	PGCIL	276.45**	276.45
	OA	51.88	51.87
D.	Intra-State Charges		
	HPPTCL	3.45	3.45
	SLDC	2.63	-
E.	Other Charges		
	NRLDC	-	2.63
	Reactive Charges	-	0.37
	GoHP & Malana Deviation	-	14.53
F.	**Total Power Purchase Cost (inc. Own Gen.) (A+B+C+D+E)**	**3,071.77**	**3,042.61**

**including past arrears of Rs. 194. 58 Cr.*

***including past arrears of Rs. 12.01 Cr.*

6.6.6 Accordingly, the Commission has approved the total power purchase cost (including Own Generation) as Rs. 3,042.61 Cr. as against the Petitioner's submission of Rs. 3,071.77 Cr. for true-up of Power Purchase cost for FY15.

6.7 Incentive for Over-achievement of T&D Loss

6.7.1 The Petitioner has submitted that it has been able to achieve an overall T&D loss level of 11.46% for FY15 as against the approved T&D loss of 12.80% for FY15 in the MYT Order. As per Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) (Second Amendment) Regulations, 2013, Regulation 15 was amended to include a mechanism for pass-through of gains or losses on account of variations in the distribution loss. The amended regulation states:

"(a) The approved aggregate gain to the distribution licensee on account of controllable factor of distribution loss shall be dealt with in the following manner:-
(i) 40% of the amount of such gains shall be adjusted in ARR over such period as may be stipulated in the Order of the Commission;
(ii) The balance 60% of such gains, may be utilized at the discretion of the distribution licensee;"

6.7.2 The savings resulting from the over-achievement of T&D loss for FY15 is as below:

Table 88: Savings on account of Over-achievement of T&D loss for FY15

S. No.	Particulars	Now Approved (Trued-up)
A	Energy Sales within state (MU)	7819.63
B	T&D Losses (%)	12.80%
C	**Power Purchase Requirement to meet state requirement (MU)**	**8967.47**
D	**Inter – State Sale (MU) (i+ii)**	**2939.51**
(i)	For Banking arrangements (MU)	1663.13
(ii)	Sale outside state (MU)	1276.38
E	**Total Power Purchase Quantum Approved at State Periphery (MU) (C+D)**	**11,906.98**
F	Actual Power Purchase Quantum at State Periphery (MU)	**11771.74**
G	**No. of units saved (MU) (E-F)**	**135.23**

6.7.3 Based on the savings computed as per the above table, Commission has computed the incentive for over-achievement of T&D loss as detailed in table below:

Table 89: Incentive for over-achievement of T&D Loss for FY15

S. No.	Particulars	Unit	Amount
A	**No. of units**	**MU**	**135.23**
B	**Cost of Power for over-achievement**		
(i)	Cost of power purchase from Other than own sources (inc. past arrears)	Rs. Cr.	2,404.41
(ii)	Past Arrears	Rs. Cr.	206.59
(iii)	**Cost of Power Purchase from Other than own**	**Rs. Cr.**	**2,197.82**

	sources (i)-(ii)		
(iv)	Power purchased from other than own sources	MU	8,237.04
(v)	Less: PGCIL Losses	MU	261.13
(vi)	Net Power Purchase (iv-v)	MU	**7,975.91**
C	**Cost of Power Purchase from Other than own sources (iii / vi)**	**Rs. /Kwh**	**2.76**
D	**Incentive on account of T&D loss over-achievement (A X C X 60%/10)**	**Rs. Cr.**	**22.36**

6.7.4 The total power purchase cost (excluding own generation, other charges and arrears) is Rs 2,197.82 Cr. The total power purchase quantum at state periphery (excluding own generation) is 7,975.91 MU. The average rate of this power purchased is Rs 2.76/unit. The Commission, therefore, allows an incentive of Rs. 22.36 Cr. as computed above on account of overachievement of T&D losses as per Regulation 15(1) of the MYT Regulations, 2011.

6.7.5 The approved total power purchase cost in comparison with the approved MYT Order figures and HPSEBL's Submission for the final true-up of FY15 is summarized in table below:

Table 90: Trued-up Total Power Purchase Cost for FY15 (Rs. Cr.)

Particulars	MYT Approved	Petition	Now Approved (Trued-up)
Power Purchase Expenses	2,258.72	2,542.78	2,693.32
PGCIL Charges	230.51	264.44	276.45
Short Term Open Access Charges	53.12	51.88	51.87
HPPTCL Charges	3.45	3.45	3.45
SLDC Charges	8.37	2.63	-
Prior Period Expenses	-	206.59*	-
Other Charges (NRLDC, Reactive Energy Charges, GoHP & Malana Deviation)	-	-	17.52
Total Power Purchase	**2554.17**	**3071.77**	**3042.61**
Less/Add: Adjustment in PP cost on account of underachievement/overachievement	**-**	**-**	22.36
Net Power Purchase Expense	**2,554.17**	**3,071.77**	**3,064.97**

**Rs. 206.59 Cr. includes past arrears of Rs. 12.01 Cr. against PGCIL Charges and Rs. 194.58 Cr. against other firm sources*

6.8 Renewable Purchase Obligation

6.8.1 The Commission has observed that HPSEBL has not been able to meet its Solar RPO targets for FY15. Out of the total Solar RPO target of 22.02 MUs, it has been able to purchase only 2.7 MUs which leaves a deficit of 19.32 MUs in FY15.

6.8.2 In response to the queries raised by the Commission, the Petitioner has submitted that it had initially signed a PPA on 21.11.2011 with NTPC for their Anta Solar PV Project (15 MW) to meet its solar renewable power purchase obligation. However, due to certain roadblocks faced by NTPC for commissioning of Anta Solar PV Plant, NTPC offered to provide solar power from another plant to be set up at Singrauli.

6.8.3 Therefore, HPSEBL signed a supplementary agreement with NTPC dated 19.12.2012 for purchase of power from Singrauli Solar Plant instead of Anta Solar Plant. However, the commissioning of this project has also witnessed commissioning delays and was finally commissioned on 31.12.2014 with the entire capacity being procured by HPSEBL.

6.8.4 The Petitioner has also submitted that due to delay in commissioning of Singrauli Solar PV Project and also delay in allocation of solar power by MNRE, Govt. of India to HPSEBL which has been dealt in para 8.7.23, the purchase of power from open market was also explored by HPSEBL by floating tenders. However, no bidder offered solar power in spite of several extensions in the last date of receipt of tenders.

6.8.5 In consideration of the above factors and the decision taken on 14.02.2017 in the case HPERC vs. Directorate of Energy in Petition No. 30 of 2016, the Commission has imposed a penalty of Rs. 6.762 Cr. on HPSEBL for shortfall of Solar RPPOs for FY2014-15. In its Order, the Commission has stated:

"…the Commission is of the view that the HPSEBL should deposit the compensation amount of Rs. 6.762 Cr., for shortfall of Solar RPPOs for FY 2014-15, in the fund already created by the HPSEBL in its accounts as RPPO Compensation Fund, for non-compliance of Solar RPPOs in FY 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 renewable. The HPSEBL is facing liquidity problems and creation of such infrastructure does not find desired impetus. Therefore, the Commission directs *that 80% of the compensation amount i.e. Rs. 5.410 Cr. shall be utilised as the HPSEBL's share in project financing (10% share) to create sub-transmission infrastructure (11 kV and 33kV) during the next two years. Further 20% of the compensation amount i.e. Rs. 1.352 Cr. shall be utilized before 31st March, 2017 for purchase of Solar RECs at the rate of floor price determined by the Central Commission. The fund amounting Rs. 5.410 Cr. will be treated as grant/consumers contribution and, therefore, will not be admissible for depreciation and any other interest/return. Financial implication on purchase of Solar RECs as well as further utilization of compensation fund for renewable energy infrastructure, if prudently incurred, may be allowed as pass through in the ARR of FY 2017-18 and FY 2018-19 respectively."*

6.8.6 The Petitioner is therefore, directed to deposit the compensation amount of Rs. 6.762 Cr., for shortfall of RPPOs for FY 2014-15 in the separate RPPO Compensation Fund already created by the HPSEBL. The Petitioner is also directed to keep this account separate and provide the details of the schemes and amount utilized from this fund along with each tariff filing. In line with its Order, the Commission shall allow for this amount of Rs. 6.762 Cr. as a pass through at the time of truing-up for the respective years where this amount is required to be adjusted in the ARR.

Other ARR Parameters

6.9 Employee Expense

6.9.1 HPSEBL has submitted actual net employee cost of Rs. 1222.83 Cr. towards distribution business as against the approved employee cost of Rs. 1166.37 Cr. for FY15 in the MYT Order for FY15. HPSEBL has claimed higher employee cost and has not provided the break-up of Terminal Benefits as required by 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.

6.9.2 Also, during the APR of FY16 and FY17, the Commission had stated,

"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."

6.9.3 The Commission had therefore, sought clarification from the Petitioner about the break-up of pension contribution and leave salary that was received from other departments during FY15. The Petitioner in its response has stated that an amount of Rs. 1.68 Cr. was received on account of pension contribution and leave salary of employee on deputation with various Departments and the same has been netted off in the terminal benefits submitted by the Petitioner during the year as per the accounting policy of the Company. Further, the Petitioner submitted that the Pension Contribution and Leave Salary of generation, BVPCL, Project and S&I have not been assessed separately by HPSEBL as all of these employees are part of HPSEBL. As per 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, HPSEBL is required to separately maintain information with respect to the pension contribution of employees on deputation in commissioned projects and in BVPCL, Projects and S&I. The Commission accordingly directs to maintain such information separately and provide details from the subsequent years.

6.9.4 In absence of the details of pension contribution for of employees on deputation in commissioned projects and in BVPCL, Projects and S&I for FY15, the Commission has considered the approved amounts in the MYT Order and has adjusted the amount from the total employee cost for FY15. Also, other adjustments undertaken in the employee cost of HPSEBL is detailed is subsequent paragraphs.

6.9.5 Based on the submissions of actual employee cost for FY15, it is also 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 as was provisioned under the approved figures for employee cost under the MYT Order for FY15 and 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. Accordingly, the amount of Rs. 47.50 Cr. towards RoE on GoHP equity has been adjusted towards the terminal benefits expense of HPSEBL.

6.9.6 Further, the Commission has used the overall terminal benefits of Rs. 479.31 Cr. as per audited accounts and reduced the following components of pension contribution as below:

a) Pension Contribution of employee on deputation: The Commission has not adjusted the pension contribution of employee on deputation as the Petitioner has submitted that the amount of Rs. 1.68 Cr. has already been netted off in the terminal benefits reflected in the accounts. The Commission observed that the amount of Rs. 1.68 Cr. was very less as compared to past years. In response to the query of the Commission, the Petitioner responded mentioning that the previous amounts included past arrears which were earlier not being recorded and therefore the amount for FY15 is lower than the past year amounts.

b) Pension Contribution of generation employees: The Commission has adjusted the amount of Rs. 6.69 Cr. towards pension contribution of generation employees which was earlier approved under the Non-Tariff Income in the MYT Order and had been included in the tariff approved for the HPSEBL's own generating stations.

c) Pension Contribution of BVPCL, Projects and S&I employees: The Commission has adjusted the amount of Rs. 2.56 Cr. towards pension contribution of BVPCL, Projects and S&I employees since this was earlier approved under the Non-Tariff Income in the MYT Order and the Petitioner has not provided any assessment on this amount.

6.9.7 In line with the methodology followed in the First and Second APR for the Third Control Period as well as the discussion with respect to adjustments in the employee cost and terminal benefits detailed above, the Commission has reviewed the employee cost for FY15 in the current truing up for FY15. After considering the adjustments towards employee cost, the actual amount of employee cost for FY15 is broadly in line with the approved employee cost in the MYT Order for FY15 which is also detailed in the table below:

Table 91: Comparison of Employee Cost for FY15 after Adjustments (Rs. Cr.)

S. No.	Particulars	MYT Approved	Petition	Adjusted as per Regulations
A	**Employee Cost**			**796.33**
B	**Pension and Terminal benefits**			**479.31**

S. No.	Particulars	MYT Approved	Petition	Adjusted as per Regulations
	Less:			
	Annual Share of State Government (Return on GoHP Equity approved for Generation and Distribution)			(47.50)
	Pension contribution of employee on deputation			-
	Pension contribution of generation employees			(6.69)
	Pension contribution of BVPCL, Projects and S&I employees			(2.56)
C	**Gross Employee Cost (A+B)**			**1218.89**
D	Less: Capitalization			52.25
E	**Net Employee Cost (C-D)**	**1166.37**	**1222.83**	**1166.64**

6.9.8 After the aforementioned adjustments, the Commission has observed that the overall employee cost of Rs. 1166.64 Cr. is broadly in line with the MYT approved figures for FY15 of Rs. 1166.37 Cr. As per the MYT Regulations 2011, employee expense is a controllable parameter and variation between approved and actual (after adjustments) employee cost being insignificant, the Commission has decided to retain the amount of Rs. 1166.37 Cr. towards employee expense in the MYT Order for true-up of FY15.

6.10 Repairs & Maintenance Expenses and Administrative & General Expenses

6.10.1 As per the amended 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 parameters 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 unless treated as uncontrollable by the Commission.

6.10.2 Based on submission of the petition, it is observed that the claim of the Petitioner towards R&M expense is lower by an amount of Rs. 7.98 Cr. than the approved value while the amount of A&G expense towards distribution business is higher by an amount of Rs. 6.38 Cr. as compared with the approved values for FY15. Also, it has been observed that the A&G expense claimed by the Petitioner includes an amount of Rs. 5 Cr. against RPPO Compensation Fund which has already been approved by the Commission during true-up of FY14 and has therefore resulted in higher A&G expense proposed by the Petitioner for FY15.

6.10.3 In line with the provisions of MYT Regulations, 2011, the Commission has approved R&M and A&G expense at the same level for the distribution business as approved in the MYT Order for FY15.

Table 92: R&M and A&G Expenses Approved for FY15 (Rs. Cr.)

Particulars	MYT Approved	Petition	Now Approved (Trued-up)
R&M Expenses	43.51	35.53	43.51
A&G Expense	36.35	42.73	36.35

6.11 Additional Amount towards Safety Measures

6.11.1 The Commission had provisionally approved additional amount of Rs. 1 Cr. towards safety measures for FY15 in the MYT Order. However, in absence of any expense undertaken by the Petitioner towards this head and claim in the true-up of FY15, the Commission has approved nil expense towards the additional amount for safety measures for true-up of FY15.

6.12 Total O&M Charges

6.12.1 Accordingly, the Commission approves the total O&M expense for FY15 as provided in the table below:

Table 93: Total O&M Expenses Approved for FY15 (Rs. Cr.)

Particulars	MYT Approved	Petition	Now Approved (Trued-up)
Net Employee Cost	1,166.37	1,222.83	1,166.37
R&M Expenses	43.51	35.53	43.51
Net A&G Expense	36.35	42.73	36.35
Additional Amount towards safety measures	1.00	-	-
Total O&M Expenses	**1,247.23**	**1,301.09**	**1,246.23**

6.13 Interest and Finance Charges

6.13.1 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 FY15. The interest on capital loans shall be trued-up based on the true-up of capital expenditure and capitalization at the end of the Control Period FY15-19.

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

Table 94: Trued-up Interest on Working Capital for FY15 (Rs. Cr.)

Particulars	MYT Approved	Petition	Now Approved (Trued-up)
O&M Expenses for one month	103.94	108.42	103.85
Receivables equivalent to 2 months	727.42	686.77	686.77
Maintenance Spares 40% of the R&M expense for one month	1.45	1.18	1.45
Less: Consumer Security Deposit	297.48	297.23	292.84

Particulars	MYT Approved	Petition	Now Approved (Trued-up)
Less: One Month Power Purchase	212.85		255.41
Working Capital Requirement	**322.48**	**499.14**	**243.82**
Interest on Working Capital (@13.50%)	**42.78**	**65.94**	**32.92**

6.13.3 Further the interest on consumer security deposit has been considered as per the audited accounts of FY15 and is approved as below:

Table 95: Trued-up Interest on Consumer Security Deposit for FY15 (Rs. Cr.)

Particulars	Now Approved (Trued-up)
Opening	267.59
Additions	25.25
Closing	292.84
Interest on Consumer security deposit	**16.89**

6.13.4 Based on the revision in interest on working capital and consumer security deposit, the total interest expense approved for final truing-up for FY15 is as below.

Table 96: Trued up Interest and Finance Charges for FY15 (Rs. Cr.)

Particulars	Approved in MYT Order	Now Approved (Trued-up)
Interest on Long term loans	108.06	108.06
Interest on Working Capital	42.78	32.92
Interest on Consumer security deposit	25.77	16.89
Total Interest & Finance Charges	**176.61**	**157.86**

6.14 Other Controllable Parameters

6.14.1 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.

6.14.2 Therefore, the Commission has considered the depreciation and return on equity at the same level as approved in the MYT Order for FY15.

Table 97: Depreciation and Return on Equity approved for FY15 (Rs. Cr.)

Particulars	MYT Approved	Petition	Now Approved (Trued-up)
Depreciation	62.73	165.89	62.73
Return on Equity	30.24	84.28	30.24

6.15 Non-Tariff Income

6.15.1 The non-tariff income is required to be deducted from the ARR of the Petitioner. The Petitioner has claimed non-tariff income of Rs. 600.76 Cr. towards distribution business for true-up of FY15.

6.15.2 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.

6.15.3 It is observed that the Petitioner has considered entire prior period income of Rs. 212.59 Cr. without going into merits. Based on the response to the Commission's query, the Petitioner provided the break-up of prior period income as given below.

6.15.4 The Commission has compared the Petitioner's submission with the audited accounts and observed that out of the total amount of Rs. 212.59 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.

6.15.5 Therefore, the Commission has found merit for considering Rs. 10.54 Cr. towards prior period income after excluding the accounting adjustments as provided in table below:

Table 98: Prior Period Income considered under Non-Tariff Income for FY15 (Rs. Cr.)

Particulars	Account Code	Amount
Receipt from consumers relating to prior period	65.2	0.66
Interest income for prior period	65.4	4.02
Excess prov. for income tax p/year	65.5	-
Excess prov. of depreciation in prior period	65.6	201.39
Excess prov. of Interest & Finance charges	65.7	0.29
Other excess prov. in prior period	65.8	0.37
Other income relating to prior period	65.9	5.86
Total Prior Period income	**65**	**212.59**

6.15.6 In the MYT Order for FY15, the Commission had included Rs. 25 Cr. towards S&I works done in the past by HPSEBL. In response to a query of the Commission, HPSEBL has submitted that it has been able to recover Rs. 9.11 Cr. under S&I receivables during FY15 which has been considered as part of non-tariff income.

6.15.7 Also, an amount of Rs. 136.67 Cr. is observed as Wheeling Charges Recovery in the audited accounts. Despite several reminders to Commission's queries, the Petitioner has not provided the detailed break-up of this amount. However, based on the discussion during technical validation session, it was submitted by HPSEBL that an amount of Rs. 49.11 Cr. towards recovery of open access charges from other States with which HPSEBL has banking arrangements. Also, this amount included Rs. 59.41 Cr. on account of recovery by HPSEBL from PTC on account of PGCIL charges for sale of GoHP free power. Since the above amounts has already been adjusted by the Commission in the HPSEBL's PGCIL charges and Open Access charges approved under the power purchase cost, these amounts have been adjusted an amount of Rs. 28.15 Cr. has been considered as per the clarifications submitted by the Petitioner.

6.15.8 The Commission has not considered the delayed payment charges from consumers as part of the non-tariff income in line with amendment to Regulation 25 which states,

"All incomes being incidental to electricity business and derived by the licensee from sources, including but not limited to profit derived from disposal of assets,

rents, meter rent (if any), income from investments other than contingency reserves, miscellaneous receipts from the consumers ***but excluding delayed payment surcharge*** *and income to licensed business from the other business of the distribution licensee shall constitute non-tariff income of the licensee."*

6.15.9 The Commission therefore, approves the Non-Tariff income for FY15 as summarised below:

Table 99: Trued-up Non-Tariff Income for FY15 (Rs. Cr.)

Particulars	Now Approved (Trued-up)
Meter Rent/Service Line Rentals	44.03
Recovery for theft of Power / Malpractices	0.05
Wheeling Charges Recovery	28.15
Miscellaneous Charges from Consumers	5.35
Sub-Total	**77.58**
Interest on Staff loans & Advances	0.32
Income from Investments	0.09
Delayed Payment Charges from Consumers	-
Interest on Advances to Suppliers / Contractors	0.71
Income fee collected against Staff Welfare Activities	0.14
Miscellaneous Receipts	40.70
PLVC charges	35.49
Sub-Total	**77.46**
S&I Activity	9.11
Income from Trading	1.08
Prior Period Income	10.54
Sub-Total	**20.73**
Total Non-Tariff Income	**175.76**

6.16 Annual Revenue Requirement

6.16.1 The ARR approved by the Commission in the MYT Order, as submitted by the Petitioner in its true-up petition and now approved by the Commission for FY15 are shown in the table below:

Table 100: Trued-up Annual Revenue Requirement for FY15 (Rs. Cr.)

Particulars	MYT Order	Petition	Now Approved (Trued-up)

Particulars	MYT Order	Petition	Now Approved (Trued-up)
Power Purchase Expenses	2554.17	3071.77	3064.97
Operation & Maintenance Costs	1246.23	1301.09	1246.23
Employee Cost	*1166.37*	*1222.83*	*1166.37*
R&M Cost	*43.51*	*35.53*	*43.51*
A&G Cost	*36.35*	*42.73*	*36.35*
Additional amount for Safety Measures	1.00	-	-
Interest & Financing Charges	176.61	315.15	157.86
Depreciation	62.73	165.89	62.73
Return on Equity	30.24	84.28	30.24
Provision for Bad & Doubtful Debtors	-	1.54	-
Surplus Power Purchase as per PPA Obligation	135.31		
Less: Non-Tariff & Other Income	(207.14)	(600.76)	(175.76)
Net Prior Period Expenses	-	118.34	-
Aggregate Revenue Requirement	**3999.16**	**4740.02**	**4386.27**

6.17 Adjustments to ARR

6.17.1 In the MYT Order for FY15, the Commission had also undertaken true-up of past years and approved the following amounts:

a) Provisional true-up of FY13 and considered an amount of Rs. 401.77 Cr. along with carrying cost of Rs. 63.90 Cr.

b) Provisional amount of Rs. 63.18 towards truing-up of FY11 and FY12

c) Impact of Rs. 14.55 Cr. as decided in the Review Order no. 88/2013 decided on 26.11.2013

6.17.2 The above amounts have been included along with the approved ARR for FY15 for recovery during FY15. However, it is observed that the Petitioner has not considered this amount in its true-up claim for FY15 resulting in an incorrect claim. During the technical validation session the same was confirmed with the utility officials, to which they indicated that was an inadvertent error.

6.17.3 The trued-up ARR for FY15 as approved by the Commission after considering the approved adjustments for provisional true-up of FY13 along with carrying cost, provisional amount towards truing-up of FY11 and FY12 and impact of review order, is as below:

Table 101: Final Approved ARR after Adjustments for FY15 (Rs. Cr.)

Particulars	Approved MYT Order
Aggregate Revenue Requirement	**4,386.27**
Add :	
Trued-up Gap for FY13	401.77
Carrying Cost on Revenue Gap for FY13	63.90
Provisional amount towards true-up of FY11 & FY12	63.18
Gap approved in Review Order	14.55
Total ARR including adjustments	**4,929.67**

6.18 Revenue Gap

6.18.1 The Revenue Gap/Surplus for FY 2014-15 based on the approved trued-up costs and revenues of HPSEBL is as determined below:

Table 102: Trued-up Revenue Gap for FY15 (Rs. Cr.)

Particulars	Now Trued-up Surplus/(Gap)

Aggregate Revenue Requirement	**4,386.27**
Add :	
Trued-up Gap for FY13	401.77
Carrying Cost on Revenue Gap for FY13	63.90
Provisional amount towards true-up of FY11 & FY12	63.18
Gap approved in Review Order	14.55
Total ARR including adjustments	**4,929.67**
Revenue	
Revenue from sale of power within state	4,120.64
Revenue from sale of power outside state	458.55
Total Revenue	**4,579.19**
Revenue Surplus/(Gap)	**(350.48)**

6.19 Carrying Cost

6.19.1 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.

6.19.2 The Commission has undertaken final true-up of uncontrollable parameters for FY15 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 FY15:

Table 103: Approved Revenue Surplus / (Gap) for FY15 (Rs. Cr.)

Particulars	Amount
Revenue Surplus / (Gap) for FY15	(350.48)

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

"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."

6.19.4 Further, the Commission has also considered the revenue surplus on account of truing-up of controllable parameters for Second Control Period (FY12-FY14) and has computed the total revenue surplus/ gap to be considered in the ARR for FY18.

6.19.5 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 FY18 in the subsequent Chapter. The computation of carrying cost and cumulative revenue surplus/ (gap) is summarized in table below:

Table 104: Approved Carrying Cost for Revenue Surplus/ (Gap) (Rs. Cr.)

Particulars	FY12	FY13	FY14	FY15	FY16	FY17
Opening Gap	-	64.61	137.36	247.37	(93.37)	(105.98)
Surplus/ (Gap) on account of truing-up of controllable parameters for FY15	-	-	-	(350.48)	-	-
Surplus/(Gap) from true-up of controllable FY12-FY14	61.02	59.99	86.18	-		
Closing	61.02	124.59	223.55	(103.11)	(93.37)	(105.98)
Interest Rate for Carrying Cost	*11.75%*	*13.50%*	*13.20%*	13.5%	13.5%	12.8%
Carrying Cost	3.58	12.77	23.82	9.74	(12.61)	(13.57)
Total (Gap)/Surplus	64.61	137.36	247.37	(93.37)	(105.98)	(119.54)

7 Analysis of Mid-Term Performance Review (MPR) Petition

7.1 Background

7.1.1 As per the MYT Order for the Third Control Period i.e. FY15-FY19, the Commission had projected the controllable and uncontrollable parameters and had approved the ARR for each year of the Third Control Period along with Tariff for the first year i.e. FY15. Subsequently, the Commission had undertaken Annual Performance Review (APR) in the APR Orders for the subsequent years i.e. FY16 and FY17 wherein the uncontrollable parameters for the subsequent year were review and any variations were accounted for in the revised ARR and corresponding revision in tariff.

7.1.2 HPSEBL has now filed for a Mid-Term Performance Review (MPR) along with review of the ARR for FY18 and for the corresponding revision of tariff for FY18 in accordance with the provisions of the MYT Regulations, 2011 and its amendments.

7.1.3 The Commission has analyzed the Mid-Term Performance Review Petition based on the submissions of the Petitioner for the past years and actual information for current year as per availability.

7.1.4 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.

7.1.5 This chapter contains detailed analysis of the HPSEBL's Mid-Term Performance Review for the distribution business of HPSEBL.

7.2 Approach of the Mid-Term Performance Review (MPR)

7.2.1 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 petition for Mid-Term Performance Review and Determination of ARR for FY18.

7.2.2 The Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) (Second Amendment) Regulations, 2013 inserted clause (dd) to Regulation 4 which provides for a Mid-Term Performance Review for the year after the mid-year of the Control Period to assess the variations,

*"(dd) **mid-term performance review (MPR)** shall be conducted for the year after the mid-year of the control period and shall comprise the annual performance review for that year on account of uncontrollable parameters and for the variations in performance on account of controllable parameters for the control period vis-à-vis the ARR approved in the first year of the control period;"*

7.2.3 In addition to this, the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) (Second Amendment) Regulations, 2013 also included the following proviso to Regulation 7,

"Provided further that, based upon abnormal variations in controllable parameters (distribution losses, operation and maintenance expenditure, financing cost and depreciation) and for reasons beyond the control of the distribution licensee, the Commission may, at the time of mid-term performance review, review the approved expenditure vis-à-vis the actual expenditure for these controllable parameters and revise the targets set for the balance years of the control period."

7.2.4 The Commission in its Third MYT Order (FY15 to FY19) dated 12th June, 2014 had fixed the targets for controllable parameters for the Third Control Period (FY15-19). As a result, the Commission in this order, has undertaken a review of the actual performance as compared with the approved numbers in the MYT Order for the controllable parameters for the balance years of the Third Control Period as detailed in sections below:

7.3 Transmission and Distribution Losses

7.3.1 In the MYT Order for the Third Control Period, the Commission had approved a trajectory for T&D losses considering the provisional T&D losses for first nine months of FY14 at 13.00% as submitted by the Petitioner and 0.2% reduction each year. The approved T&D loss for the third Control Period is provided in table below:

Table 105: Approved T&D loss for Third Control Period in MYT Order

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%

7.3.2 It is observed that the Petitioner has claimed actual T&D loss figure of 11.46% for FY15 as against the approved T&D loss of 12.80% resulting in an overachievement of 1.34% for the first year itself.

7.3.3 Despite the substantial achievement of T&D loss in the first year of the Third Control Period, the Petitioner has submitted actual T&D losses of 12.00% for FY16 and T&D loss of 15.58% for the six months of FY17 based on the provisional data. Further, the Petitioner has retained the T&D loss as approved in the MYT Order for the period FY17 to FY19 as given below:

Table 106: HPSEBL's Submission–T&D loss for Third Control Period

Particulars	FY15 (Actual)	FY16 (Provisional)	FY17 (Projected)	FY18 (Projected)	FY19 (Projected)
T&D loss	**11.46%**	**12.00%**	**12.40%**	**12.20%**	**12.00%**

7.3.4 The Petitioner was asked to support the projections of T&D loss for the future years in view of the actual losses for FY15 and FY16. In response to the queries of the Commission, the Petitioner clarified that the losses are expected to increase in the subsequent years of the Control Period due to considerable decline in the EHT sales in FY16 and overall stagnation in industrial growth. HPSEBL has stated the following reasons for continuation of MYT Order approved T&D loss trajectory:

a. Decrease in industrial sales due to procurement of power by the consumers through open access;
b. Closure of certain industries (mainly steel industries) in the State;
c. Reduced consumption owing to effective implementation of DSM (Demand Side Measures) initiatives by municipal corporations and Nagar Panchayats

7.3.5 The Commission has analyzed the submission of the petitioner and has observed that there has been a decline in the EHT sales during FY16 and the overall industrial sales have also remained range bound over the last 4-5 years with a decline of 4.33% in FY16 as observed from the table below:

Table 107: Actual Industrial Sales for Past Three Years (MUs)

Particulars	FY14	FY15	FY16
Large Industrial Power Supply	**4,287.58**	**4,369.79**	**4,180.41**
LT/HT	2,527.32	2,604.42	2790.71
EHT	1,760.26	1,765.37	1,389.70
Year-on-Year Growth (%)	2.74%	1.92%	-4.33%

7.3.6 Therefore, in view of the decline in sales for industrial consumers which contribute significantly to the overall sales of the Petitioner, the Commission feels that the revision in T&D loss trajectory merely on the basis of single year performance may not be prudent and retains the T&D loss trajectory as approved in the MYT Order.

Table 108: Mid-Term Performance Review-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%

7.4 Capital Expenditure

7.4.1 The Commission had approved total capital expenditure of Rs. 2220.41 Cr. for the Third Control Period in the MYT Order. The summary of the approved capital expenditure in the MYT Order is as provided in table below:

Table 109: MYT Order Approved Capital Expenditure for Third Control Period (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19	Total
MYT Order	429.88	592.56	480.78	412.00	305.20	2220.41

7.4.2 In the MPR Petition, HPSEBL has provided scheme-wise details of capital expenditure for the distribution business with actual expenditure incurred for FY15, FY16 and first six months of FY17. The details of actual capital expenditure during FY15, FY16 and six months of FY17 as submitted by the Petitioner are summarized below:

Table 110: HPSEBL Submission– Actual Capital Expenditure for FY15-FY17 (first 6 months)

Name of Scheme	FY15	FY16	FY17 (first 6 months)
EHV	94.46	102.36	12.35
RE State Plan	38.45	44.04	-
REC Schemes	36.30	42.29	0.03
Kutir Jyoti	-	-	-
BASP	2.46	3.56	-
APDRP	-	-	-
R-APDRP Part A	11.41	17.70	2.71
R-APDRP Part B	69.92	87.79	2.22
RGGVY	1.28	2.15	0.07
IT	8.31	8.50	1.99
IT not covered in R-APDRP	0.23	-	-
DDUGJY	0.00	1.76	0.75
Others	120.67	204.96	7.74
Total	**383.49**	**515.10**	**27.86**
Deposit Work	67.90	67.20	3.23
G Total	**451.39**	**582.30**	**31.09**

7.4.3 As part of the Mid-Term Performance Review (MPR), the Commission has analyzed the actual capital expenditure undertaken by the Petitioner for FY15, FY16 and six months of FY17 and observes that the same is broadly in line with the approved capital expenditure for the respective years in the MYT Order for the Third Control Period. The approved and actual capital expenditure is as provided in the table below:

Table 111: Approved and Actual Capital Expenditure for FY15 to FY17 (Rs. Cr.)

Particulars	FY15	FY16	FY17
MYT Order	429.88	592.56	480.78
HPSEBL's Submission (Actual)	451.39	582.30	31.09*

**upto first six months of FY17*

7.4.4 Further, the Petitioner has submitted its request to review certain schemes, including abandoning 4 RGGVY schemes, revising capital expenditure of 73 EHV schemes and addition of 48 new EHV schemes & 19 new RGGVY schemes for the balance years of the Control Period FY17-FY19. The revised additional capital expenditure on account of the proposed changes in the capital expenditure as submitted by HSPEBL is as below:

Table 112: Revised Capital Expenditure Proposed by HPSEBL for FY17 to FY19 (Rs. Cr.)

Proposed Schemes	Scheme Cost	FY17	FY18	FY19
Revised 73 EHV Schemes	1572.58	334.82	336.39	204.4
48 New EHV Schemes	596.19	145.22	47.26	27.00
19 New RGGVY Schemes	77.80	25.93	25.93	25.93
Revised Capex for Existing RGGVY Schemes	15.59	5.20	5.20	5.20
Other additions	-	0.60	24.00	22.50
Capex not required	13.95	4.65	4.65	4.65
G. Total	**1209.63**	**507.12**	**428.13**	**274.38**

7.4.5 The provisions of the MYT Regulations, 2011 state:

"(2) The distribution licensee shall be required to take scheme wise approval for capital investment for creation of new assets at 33 kV and above, but for creation of new assets below 33 kV and network augmentation approval will be required as block of scheme."

7.4.6 While the Petitioner is required to undertake scheme wise approval for all schemes above 33kV, in view to maintain the timely execution of the various EHV and distribution schemes, the Commission provisionally approves the additional schemes and revision of schemes as proposed by the Petitioner. The details of new EHV schemes approved are as below:

Table 113: Revised Capital Expenditure for 48 New EHV Schemes submitted by HPSEBL for FY17 to FY19 (Rs. Cr.)

S.No.	Name of the Scheme	Scheme Cost (Rs. Cr.)
1	C/O addl. 66/22 KV 1x25/31.5 MVA S/Stn at Andhra and 22 kV Controlling S/Stn at Gumma a/w 22 kV D/C Line from Gumma to Andhra.	19.30
2	Aug. of Kotla-Ghanvi, 66 KV Line with HTLS conductor.	2.18
3	Aug. of 66Kv D/C Line between Kotla-Nogli- Andhra Line with HTLS conductor.	19.62
4	Scheme for providing additional 1x10 MVA 66/22 KV Power Transformer alongwith spare bay at 66/22 KV Nogli for evacuation of power from small HEP's of **Andhra Nogli Zone** amounting to Rs.561.71 Lacs only.	5.93
5	Aug. of 66/22KV, 10 MVA T/F to 20 MVA transformation capacity at 66/22Kv S/Stn, Samoli	2.70
6	C/O 66/22 KV, 1x6.3 MVA S/Stn at Ruktl (Shaung) a/w 66KV S/C Trans Line from existing tower No.110	15.47

S.No.	Name of the Scheme	Scheme Cost (Rs. Cr.)
7	Scheme for C/O 66 KV S/C line form D/C Tower from 66/22 KV Nathpa Sub-Station to proposed 400/220/66 KV Sub-Station at **Wangto** alongwith terminal bay at both end and providing 2 Nos VCB's at Nathpa Sub-Station amounting to Rs.576 Lacs only.	10.04
8	Aug. of 2x6.3 MVA 66/22KV to 2x10 MVA Trf. at 66 KV S/Stn. Kumarsain	3.64
9	Prov. 132/33/11kV, (1x16+1x16) MVA S/Stn. at Gagret a/w 132kV S/C line from Amb to Gagret. **(REC CODE 60439)**	13.89
10	C/O 66/22KV, 1x20MVA, S/Stn at **Mashobra** by LILO of existing 66KV jutogh Gumma line from craignano.	7.63
11	Aug. of 66/11KV , 2x6.3 MVA to 1x20 MVA Transformer at **Totu** Sub-Station.	20.31
12	Addition of 66/33KV 1x20MVA Transformer at **Totu (GIS S/Stn.)**	5.97
13	Addition of 66/11KV, 1x20MVA Transformer at Himuda **Bhatolikalan**.	3.95
14	C/O 66/11KV, 3x20 MVA S/Stn. at **Malpur** with 66KV line from 220/66KV S/Stn. Uperla Nangal to Malpur and extension of 66KV vardhman feeder to malpur.	12.62
15	Aug. of 66KV, 2x10 MVA to 2x20 MVA Transformer at **Davni.**	3.80
16	Addition of 66/11KV, 1x20 MVA & 66/33KV, 1x20MVA at **Akanwali** a/w LILO of 2nd ckt. to Baddi-Nalagarh line.	10.71
17	Replacement of MOCBs at 132KV S/Stn. at Jutogh	1.20
18	Replacement of CTs at 132KV S/Stn. at Jutogh	
19	Addition of 3 nos. 33 kV bays at Maliana	0.99
20	C/O 66KV D/C line on 132KV towers from Totu to Jutogh and 66KV bays at 132KV S/Stn. Jutogh	1.24
21	Project on renovation and up-gradation of Protection and Control system in HP	55.44
22	Construction of 220/66kV, 1x80/100MVA & 66/11kV, 4x20MVA sub-station at Mandhala by LILOing of the one circuit of 220kV D/C Uperla Nangal - Baddi Transmission line.	54.31
23	C/O 132/33 KV, 1X25/31.5 MVA Sub-Station at Pandoga along with 132 KV Line from 132/33 KV Sub-Station Gagret to Pandoga (Deposit-75%+ Board Share-25%)	43.37
24	Augumentation of existing 33/11 KV, 2x3.15 MVA to 66/33/11 KV(66/33KV, 1x10MVA+66/11 KV 1x10MVA) Sub-Station Baglehar	20.16
25	Scheme for replacement of old and obsolete switchgear equipment installed at various Sub-Stations under ES Division Shimla	1.46
26	Augmentation of 25/31.5MVA, 220/66kV 3-ø transformer to 80/100MVA, 220/66kV 1-ø Bank at 220/66kV sub-station Kotla.	11.10
27	Scheme for replacement of old and obsolete switchgear equipment installed at various Sub-Stations under ES Division Solan	0.74
28	Scheme for replacement of old and obsolete switchgear equipment installed at various Sub-Stations under ES Division Nahan	0.86
29	Scheme for replacement of old and obsolete switchgear equipment installed at various Sub-Stations under ES Division Nalagarh	5.67
30	Scheme for replacement of old and obsolete switchgear equipment installed at various Sub-Stations under ES Division Kunihar	5.07
31	Scheme for replacement of old and obsolete switchgear equipment installed at various Sub-Stations under ES Division Kotla	2.24
32	Scheme for replacement of old and obsolete switchgear equipment installed at various Sub-Stations under ES Division Bhabanagar	0.20
33	Scheme for providing additional 1x10 MVA, 66/33KV Transformer a/w 66KV & 33KV equipment at 66/22KV Sub-Station Anni (Nagan)	2.00
34	Prop. of C/O 220/132/33KV, 1X80/100 MVA & 1X50/63 MVA S/Stn. at Oachghat along with augmentation of 132 KV S/C Solan Kunihar Tr. Line	100.00

S.No.	Name of the Scheme	Scheme Cost (Rs. Cr.)
	to 220 KV D/C Line.	
35	Re-routing of 66KV Nathpa-Kotla-Nogli Line at Rampur	0.65
36	Estimate for providing additional 1 No. Tower between strcture No. 257 to 258 Kotla to Nathpa line near Badhal.	0.52
37	C/O 132 KV Line to proposed 220 KV Sub-Station Patti (HPPTCL) by LILOing 132 KV Bassi-Dehan Line	12.00
38	Scheme for C/O 220KV Line between Mattansidh and Kangoo.	65.23
39	Scheme for providing Spare equipments for various Divisions under ES Wing, HPSEBL, Hamirpur	5.87
40	Repair/Re-conditioning of 3 Nos. 220/132KV, 26.67/33.33 MVA Single Phase and 4 Nos. 132/33 KV, 16 MVA, 3 ϕ Transformers at various Sub-Stations under ES Wing, HPSEBL, Hamirpur	6.20
41	Scheme for replacement of old and obsolete switchgear equipment installed at various Sub-Stations under ES Division Hamirpur	4.42
42	Scheme for replacement of old and obsolete switchgear equipment installed at various Sub-Stations under ES Division Bilaspur	2.60
43	Scheme for replacement of old and obsolete switchgear equipment installed at various Sub-Stations under ES Division Jassure	9.53
44	Scheme for replacement of old and obsolete switchgear equipment installed at various Sub-Stations under ES Division Una	4.06
45	Providing 21.6 MVAR New Capacitor Bank at 132/33 KV Sub-Station Tahliwala, Gagret, Kandrori & Fatehpur.	2.10
46	Scheme for the augmentation of exisitng 33/11kV, 2x6.3 MVA Power Transformer to 33/11kV, 2x10 MVA at 132/33/11kV sub-station Kandrori HPSEBL.	2.30
47	Scheme for the augmentation of exisitng 33/11kV, 2x6.3 MVA Power Transformer to 33/11kV, 2x10 MVA at 132/33/11kV sub-station Rakkar (Una) HPSEBL.	2.86
48	C/O 132/33KV, 1X25/31.5MVA S/Stn Nadaun by LILoing of 132KV Hamirpur-Dehra Line (Deposit)	14.00
	Total Scheme Cost	**596.19**

7.4.7 It is however, clarified that any revision in scheme cost on account of time and cost over-run due to factors under the control of the Petitioner shall not be considered at the time of truing-up of at the end of the Control Period.

7.4.8 In the current MPR Petition, the Petitioner has not provided any details of the deviation between the approved and actual capital expenditure under the various schemes/ works. Further, no revision has been proposed for the balance years of the Control Period and only additional amount of capital expenditure has been claimed with respect to new schemes without providing any details for revision of cost for the already approved schemes.

7.4.9 In absence of proper details of the total capital expenditure submitted by the Petitioner in the MPR and the actual capital expenditure during FY15 and FY16 being in line with the approved numbers, the Commission decides to retain the approved capital expenditure for the purpose of tariff determination. Any variation on account of higher or lower expenditure shall be undertaken at the time of truing-up at the end of the Control Period.

7.4.10 Therefore, as a part of MPR exercise, the Commission decides to retain the capital expenditure for the balance years of FY18 and FY19 for the Third Control Period as approved in the MYT Order. Any further deviations shall be considered during the truing up of controllable parameters at the end of the Control Period.

Table 114: Mid-Term Performance Review (MPR)-Capital Expenditure for the Control Period (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
MYT Order	429.88	592.56	480.78	412.00	305.20
Additional Claim of HPSEBL over and above the approved capex	-	-	507.12	428.13	274.38
Commission Approved (Revised)	429.88	592.56	480.78	412.00	305.20

7.4.11 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.

7.4.12 Additionally, the Commission has come across various paras of the auditor of HPSEBL which clearly indicate non-maintenance of adequate details of the capital expenditure at the field level. The Petitioner is directed to maintain proper books of records at the field level for the various schemes under implementation. A list of activities undertaken by HPSEBL in this regard should be submitted along with the subsequent tariff filing.

7.5 Asset Capitalization

7.5.1 HPSEBL has provided details of assets capitalized for the distribution business along with their funding pattern for FY15, FY16 and first six months of FY17. The details have been provided below:

Table 115: HPSEBL Submission– Actual Capitalization for FY15-FY17 (first 6 months)

Name of Scheme	FY15	FY16	FY17 (first 6 months)
EHV	43.93	115.64	180.03
RE State Plan	35.64	8.95	-
REC Schemes	28.02	46.93	0.40
Kutir Jyoti	-	-	-
BASP	-	0.07	-
APDRP	6.61	6.70	-
R-APDRP Part A	0.55	10.48	-
R-APDRP Part B	60.24	63.46	18.36
RGGVY	8.65	19.74	-
IT	0.23	-	-
IT not covered in R-APDRP	0.97	0.23	-
DDUGJY	-	-	-
Others	106.85	117.28	11.62
Total	**291.71**	**389.48**	**210.41**
Deposit Work	94.61	26.36	8.59
G Total	**386.32**	**415.84**	**219.00**

7.5.2 The Commission observes that while the actual capitalization during the first year of FY15 is higher than the approved by approximately by Rs. 100 Cr, the major increase is primarily on account of deposit works which are broadly corresponds to the higher amount. Further, the capitalization proposed by the Petitioner for FY16 is in line with the approved figures and similarly the estimates for six months also indicate that the capitalization will remain within the Commission approved figures for FY17. Accordingly, the Commission has decided to retain the trajectory for capitalization as approved in the MYT Order and shall consider any further variations at the end of the Control Period.

7.5.3 The Petitioner has not provided any proposal for change in the capitalization plan for the balance years of the Third Control Period i.e. FY18 and FY19. The actual capitalization figures for the first half of the Control Period have been found to be broadly in line with the Commission's approved numbers and therefore, the Commission finds no merit for a review of the capitalization figures approved for the balance years of the Third Control Period. Accordingly, the Commission retains the approved capitalization for FY18 and FY19 as per the MYT Order.

Table 116: MYT Approved, Actual and Revised Approved Capitalization for Third Control Period (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
MYT Order	285.54	425.54	551.33	614.78	637.16
HPSEBL's Submission	386.02	415.84	219.03*	-	-
Commission Approved (Revised)	285.54	425.54	551.33	614.78	637.16

**upto first six months of FY17*

7.6 Depreciation, Interest Cost and Return on Equity

7.6.1 Controllable parameters such as Depreciation, Return on Equity and Interest and Financing Charges which are dependent on capitalization have been retained as per the MYT Order as the Commission has not revised the approved capitalization for the Third Control Period. Any changes shall be affected at the time of final truing-up of the controllable parameters at the end of the Control Period as per the audited accounts.

O&M Expenses

7.7 Employee Expenses

7.7.1 HPSEBL has submitted employee expenses for the Third Control Period which are significantly higher than the approved employee expenses in the MYT Order.

7.7.2 Based on the submissions of actual employee cost for FY15 and FY16, it is observed that the Petitioner has not made adjustments to the employee cost 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. IN the APR Order for FY17, the Commission had noted that:

"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."

7.7.3 The Commission has already reviewed the employee cost for FY15 as part of truing-up for FY15 in the previous Chapter. Based on the review, it was observed that the actual employee cost after adjusting for the return on equity, pension contribution of generation, BVPCL, Projects & S&I employees computes to the approved employee cost as provided in the MYT Order for FY15. Similarly the provisional accounts for FY16 indicate significant increase in the gross employee cost as well as the terminal benefits, for which no explanation has been provided by the Petitioner. The provisional figures of FY16 seems to be on the higher side considering no major change during FY16 and the Commission feels it prudent to continue with the approved employee cost with regard to FY16 until the audited accounts are made available for the respective year. The adjusted employee cost for FY15 and FY16 vis-à-vis the approved employee cost is provided in the table below:

Table 117: Actual Employee Expenses for FY15 and FY16 after adjusting HPSEBL's Submission (Rs. Cr.)

Particulars	FY15	FY16
	Actual	Prov.
Employee Cost	**796.33**	**850.95**
Terminal Benefits	**479.31**	**632.50**
Less: Return on Equity approved for Generation and Distribution	*(47.50)*	*(47.50)*
Less: Pension contribution of employee on deputation	-	-
Less: Pension Contribution of generation employees (tentative)	*(6.69)*	*(7.34)*
Less: Pension Contribution of BVPCL, Projects & S&I employees	*(2.56)*	*(2.81)*
Less: Capitalization	52.25	55.78
Total Employee Cost	**1166.64**	**1370.02**
MYT Approved	**1166.37**	**1284.81**

7.7.4 In absence of audited accounts, the employee expense for FY16 cannot be ascertained conclusively. Therefore, the Commission as part of the Mid-term Performance Review feels that the employee cost approved as part of the MYT Order for each year of FY15-FY19 is adequate to meet the employee cost in the balance years for FY18 and FY19 and therefore retains the projections of employee cost. The Commission has been providing additional relief on account of Pay Commission revisions in its past Orders to HPSEBL. For FY18 also, based on the submission of the Petitioner with respect to the impact on account of 7th Pay Commission Revision, the Commission has provided for an additional amount in FY18 as detailed in subsequent paras.

7.7.5 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.

7.7.6 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 Third Control Period has now been adjusted in the employee cost for FY18 and FY19. In view of the reduced amount of pension contribution from employees on deputation to other departments, the Commission has revised the same to Rs. 2 Cr. each year. Accordingly, the approved employee cost for FY18 and FY19 in the MYT Order for the Third Control Period has been apportioned as below:

Table 118: Revised Employee Cost Approved for FY18 and FY19 (Rs. Cr.)

S. No.	Particulars	FY18 Approved	FY19 Approved
A	**Employee Cost**	**1117.59**	**1226.64**
B	**Pension and Terminal benefits**	**543.27**	**596.28**
	Less:		
	Annual Share of State Government (Return on GoHP Equity approved for Generation and Distribution)	*(47.50)*	*(47.50)*
	Pension contribution of employee on deputation	*(2.00)*	*(2.00)*
	Pension contribution of generation employees	*(8.84)*	*(9.71)*
	Pension contribution of BVPCL, Projects and S&I	*(3.39)*	*(3.72)*

S. No.	Particulars	FY18	FY19
		Approved	Approved
	employees		
C	**Gross Employee Cost (A+B)**	**1599.12**	**1759.99**
D	Less: Capitalization	55.85	61.30
E	**Net Employee Cost approved (C-D)**	**1543.27**	**1698.69**

7.7.7 In its petition, HSPEBL has also submitted additional liability of Rs. 243.04 Cr. on account of salary revision as per 7th Pay Commission recommendations for FY18 and Rs. 225.66 Cr. on account of arrears of previous years in the light of 20% salary revision w.e.f. 1st January 2016.

7.7.8 While a notification for the 7th Pay Commission revision is still to be issued by GoHP, a provisional amount of Rs. 85 Cr. has been considered by the Commission towards any liability arising during FY18. With regard to the revision in salaries, the Commission has already considered an annual increase of approx. 10% each year in the MYT Order for projection of employee expense as well as terminal benefits which should be adequate. However, any significant variation arising from impact of 7th Pay Commission recommendations shall be reviewed at the time of truing-up based on the actual impact in the audited accounts.

7.8 Administrative and General Expenses

7.8.1 HPSEBL has provided details of A&G expenses along with significant increase claimed against the approved figures for the balance years of the Third MYT Order. The Commission has observed that the claim of the Petitioner for FY15 and FY16 is higher due to inclusion of an amount of Rs. 5 Cr. and Rs. 12.23 Cr. against compensation paid for non-compliance of renewable power during FY15 and FY16, respectively. This amount has already been approved by the Commission in the true-up of FY14 and APR for FY16 under a separate head in the total ARR for the respective year. Accordingly, the adjustments have been provided in the table below:

Table 119: Actual A&G Expenses for FY15 and FY16 after adjusting HPSEBL's Submission (Rs. Cr.)

Particulars	FY15 Actual	FY16 Prov.
Net A&G Expenses	42.73	51.79
Less: Compensation paid for non-compliance of Renewable Power	5.00	12.23
Total A&G (after adjustment)	**37.73**	**39.56**
MYT Approved	**36.35**	**39.48**
Difference (Actual – Approved)	**1.38**	**0.08**

7.8.2 As observed from the above table, the variation in actual and approved A&G expense is marginal for FY15 and FY16. However, HPSEBL has submitted very high projection of A&G expense for FY18 and FY19. This significant increase is due to additional amount claimed towards a number of heads which are primarily on account of activities / improvements being emphasized by the Commission in the previous orders i.e. Preparation of Accounting Manual, Training of Staff, Voltage wise Cost of Supply, etc.

7.8.3 Exclusion of these elements from the claim of the Petitioner for A&G expense for FY18 and FY19 indicate projections in line with the approved figures in the MYT Order for the respective years.

7.8.4 However, the Commission feels the necessity of several of the activities proposed under the A&G expense like preparation of Accounting Manual, Digitization of consumer and employee data, Voltage wise Cost of Supply, Training to Staff, etc. In the overall interest of the proper functioning of the utility, the Commission allows the additional expenditure of Rs. 15.70 Cr. proposed by HPSEBL for FY18 on provisional basis. The Petitioner is required to submit the progress under each of the additional heads at the time of subsequent tariff filing based on which the Commission may consider the any additional amount in FY19. Further, the additional amount of Rs. 15.70 Cr. shall be trued-up based on the actual expenditure undertaken by the Petitioner during FY18 along with details of the benefits/ results on account of the each activity.

Table 120: A&G Expense Approved for FY18 and FY19 (Rs. Cr.)

Particulars	FY18	FY19
MYT Approved	**46.58**	**50.60**
Add:		
Additional amount towards A&G expense	15.70	-
A&G Expense Approved	**62.28**	**50.60**

7.8.5 Based on the revised A&G expense approved for FY18, the summary of the A&G expense approved in the MYT Order, claim of the Petitioner and Revised Approved for the Third Control Period is summarized in the table below:

Table 121: MPR - A&G Expenses for the Third Control Period (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
MYT Order	36.35	39.48	42.89	46.58	50.60
HPSEBL's Submission	42.73	51.79	46.41	60.52	58.56
Commission Approved (Revised)	36.35	39.48	42.89	46.58	50.60

7.9 Repair and Maintenance Expenses

7.9.1 The Commission has observed that the Petitioner has not been able to utilize the entire R&M expense approved under the MYT Order in the previous years i.e. FY15 and FY16 as given in the table below:

Table 122: HPSEBL's Submission– Actual R&M Expenses for FY15 and FY16 (Rs. Cr.)

Particulars	FY15 Actual	FY16 Prov.
R&M Expenses	**35.53**	**34.12**
MYT Approved	**36.35**	**39.48**

7.9.2 Despite this, the Petitioner has claimed higher R&M expense for FY18 and FY19, mainly on account of maintenance of IT systems. While the Commission had asked the Petitioner to provide the details of the various expenditure it has undertaken on account of IT systems in the past five years, the Petitioner has submitted consolidated expenditure in this regard which is as below:

Table 123: HPSEBL's Submission–Expenditure of R/M work under O/o Superintending Engineer (IT) (in Rs. Cr.)

S. No.	Particulars	FY14	FY15	FY16	FY17
		Actuals	Actuals	Prov.	Estimated
1.	R/M of Hardware and software in Vidyut Bhawan Complex, Shimla	3.41	4.42	11.28	17.11
2.	R/M of Disaster Recovery Centre at Paonta Sahib				
3.	R/M of Data and Call Centre at Vidyut Bhawan Complex, Shimla				

7.9.3 It is observed that a target for R&M expense is already approved in the MYT Order for each year of the Third Control Period based on the actual R&M expense for past years. Further, the Petitioner has not been able to spend the R&M expenses approved for FY15 and FY16 which has resulted in a net saving for the Petitioner. This amount can be utilised in the future years to meet the higher expense for future years and in case of any variations, the Commission may evaluated the same at the time of truing-up for the respective years of FY18 and FY19 based on the audited accounts and submission of the Petitioner.

7.9.4 Therefore, the Commission has retained the approved R&M expense as approved under the MYT Order for FY18 as well as FY19 as given below:

Table 124: MPR - R&M Expenses for the Control Period (Rs. Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
MYT Order	43.51	46.79	51.69	58.02	65.09
HPSEBL's Submission	35.53	34.12	75.41	91.63	100.59
Commission Approved (Revised)	43.51	46.79	51.69	58.02	65.09

7.9.5 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 FY16 and six months of FY17. The Petitioner has requested Rs. 10 Cr. against additional amount for safety measures for FY18 and FY19. As the Petitioner has not been able to spend the entire amount in the past years and has assessed a need to augment / replace the safety equipment at its substation which is of high priority considering the safety of the employees, the Commission approves an amount of Rs. 10 cr. in FY18 for procurement of safety equipment. 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.

7.9.6 Accordingly, the Commission approves the O&M expense for FY18 and FY19 as provided in table below:

Table 125: O&M Expense Approved for FY18 and FY19 (Rs. Cr.)

Approved	FY18		FY19	
	Approved in MYT	Approved Now	Approved in MYT	Approved Now
Employee Cost	1,557.50	1543.27	1,714.12	1698.69

Approved	FY18		FY19	
	Approved in MYT	Approved Now	Approved in MYT	Approved Now
R&M Expense	58.02	58.02	65.09	65.09
A&G Expense	46.58	62.28	50.60	50.60
Additional amount for Safety measures	1.00	10.00	1.00	-
Total O&M Expense	**1,663.11**	**1,673.57**	**1,830.80**	**1,814.38**
Additional amount towards arrears of 7th Pay Commission	**-**	**85.00**	**-**	**-**

8 Analysis of the Annual Performance Review (APR) and ARR for FY18

8.1 Background

8.1.1 In addition to the Mid-Term Performance Review (MPR) Petition, the HPSEBL has also filed for a review of the ARR for FY18 and for the corresponding revision of tariff for FY18 in accordance with the provisions of the MYT Regulations, 2011 and its amendments.

8.1.2 The Commission has analyzed the Annual Performance Review (APR) Petition and revised the Aggregate Revenue Requirement (ARR) for FY18 based on the submissions of the Petitioner for the past years and actual information for current year as per availability.

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 FY18.

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 126: Approved ARR for the Third Control Period as per MYT Order (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
Inter-State Charges					
Power Grid Charges	230.51	258.53	288.29	326.97	365.45

Particulars	FY15	FY16	FY17	FY18	FY19
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 127: Revenue Surplus/ (Gap) for the Control Period as per MYT Order (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 Third APR under Third 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 FY18.

8.3.2 The Commission in its Third MYT Order (FY15 to FY19) dated 12th June, 2014 has fixed the targets for controllable parameters i.e. O&M expense, depreciation, return on equity, interest on loans, etc. and conducted a review of these parameters under the current Order for Mid-Term Performance Review (MPR) exercise in Chapter 7, as detailed above. Any variation on these controllable parameters like depreciation, return on equity, interest and finance charges shall be considered at the time of final truing-up. However, any variation on account of factors deemed uncontrollable such as power purchase cost and energy sales is subject to revision in the Annual Performance Review exercise after due diligence by the Commission.

8.3.3 HPSEBL has filed for a review of the ARR for FY18 and for the corresponding revision of tariff for FY18 in accordance with the variation of the revised ARR vis-s-vis the ARR approved in the MYT Order/ APR Order.

8.3.4 In this section of the Order, the Commission has reviewed the ARR for FY18 on account of changes in the uncontrollable parameters as per the provisions of MYT Regulations, 2011 and amendments thereof. Also, any review undertaken as part of the Mid-term Performance Review for the controllable components of costs i.e. O&M expense, depreciation, return on equity, interest on loans, etc. has been considered as per the discussions in the previous Chapter.

8.4 Sales Forecast

8.4.1 For projecting the energy sales of HPSEBL for the FY18, 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 medium and short-term trend of sales under each category, appropriate CAGR has been selected for sales projection for the specific category.

8.4.2 The Commission has undertaken a detailed analysis of the sales projected by the HPSEBL. The Commission analyzed the year-on-year (y-o-y) 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.

8.4.3 HPSEBL has projected energy sales by applying the appropriate category-wise CAGR of 1, 3 or 5 years as well as keeping in mind the actual sales for first six months of FY17. The Commission observed inconsistency in the provisional data submitted by HPSEBL for FY16, first six months of FY17 and the estimated sales for FY17 for the entire year for few categories. In response to the Commission's query, the Petitioner clarified that for FY17 the first six months data used for estimation of energy sales for the entire year did not include the actual Mandi circle sales for the month of Sep '16 and were later added to arrive at total energy sales of 8025.90 MUs for FY17.

8.4.4 The Commission approves sale for each category of consumer as detailed below.

Domestic Supply

8.4.5 The energy sales to domestic category till FY14 had shown a significant increase with annual growth of over 10% year on year. However, it has been observed that the growth has been slowing down. The y-o-y growth in sales declined significantly during FY16 to 2.6% after an initial decline to 6.7% during FY15 over the past year 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.

8.4.6 The long term analysis of growth presents that the CAGR of sales has been in the range of 3% to 10% for a period of 1 year to 10 year respectively.

8.4.7 Considering the long term CAGR of sales as well as recent lower growth rates, which are expected to have an impact on the energy offtake in this category, the Commission has adopted a growth rate of 5% for sales projections in domestic category for FY18.

Non Domestic Non Commercial Supply (NDNCS)

8.4.8 The energy sales to non-domestic non-commercial category till FY15 had shown a significant increase with annual growth of over 10% year on year. However, after a stagnant sales in FY16, the energy sales to this category during first six months of FY17 show some positive growth.

8.4.9 Thus, the Commission has adopted a conservative growth of 3% as the growth rate for projections of energy sales to non-domestic non-commercial category for FY18.

Commercial Supply

8.4.10 The sales to commercial category have seen consistent growth of approximately 5% over the last few years. HPSEBL has projected the sales growth at 5% per annum in line with the year-on-year growth of last few year for projecting energy sales in this category for FY18.

Industrial Power Supply

8.4.11 Based on the actual sales data for FY16 and six months of FY17, the Commission has projected the sales to the industrial categories as below:

Small and Medium Industrial Power Supply

8.4.12 An assessment of year on year growth of sales to this category indicates wide variations ranging from -3% to 15%, which could be attributed to the changes in economic cycle and conditions prevalent in the country.

8.4.13 The actual sales in FY16 to this category increased by 0.8% over FY15 after witnessing a growth of 2.8% in FY15. Therefore, an increase of 2% has been considered which is also in line with the 2 year CAGR.

8.4.14 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 small industrial consumers and medium industrial consumers.

Large Industrial Power Supply

8.4.15 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 over last five years and even started declining in the recent past, primarily due to completion of tax holiday period which was offered to the industries. The actual sales in this category during FY15 had increased by 1.9% which later witnesses a negative growth of 4.3% in FY16.

8.4.16 While the overall sales to the industrial category have reduced during FY16, the Commission has noticed number of inconsistencies in the data furnished by the Petitioner for this category with no details of segregated connected load, number of consumers and sales for the various categories within Large Industries i.e. HT-1, HT-2 and EHT. It is observed that the details of contracted demand is also not being submitted along with the petition. The Petitioner is directed to maintain proper records and provide category-wise break-up of industrial contracted demand, number of consumers and sales in future tariff filings.

8.4.17 While a decline in the actual sales to large industrial consumer is observed during FY16, the actual six months information indicate a positive growth for FY17. Therefore, keeping in view the last six month actual sales data the Commission has considered the sales projection in this category to grow at 4.0% each year for projecting energy sales for FY18.

Irrigation and Drinking Water Pumping Supply (IDWPS)

8.4.18 The sales to this category have been steady with CAGR ranging from 6% to 9% for last five years. The Commission has projected sales for FY18 considering a growth rate of 6.4%, which is in line with the CAGR of last three years.

8.4.19 Sales to private agriculture irrigation within this category have witnessed large variations with year on year growth ranging from -11% to 29%, owing to the variations in average recorded rainfall. In FY16 actual sales in this category has increased by 15% as against an increase of 9% in FY15. Therefore, the Commission has considered sales projections equal to 8%, which is in line with the CAGR for last 5 years for projection of FY18.

Public Lighting

8.4.20 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 FY18.

Bulk Supply

8.4.21 While the sales in this category for FY16 has witnessed a negative growth of -8.4% over FY15, over a longer period sales in this category have varied from a CAGR of -8.4% to 3.5% as majority of the load in this category is taken by small hydro plants for construction work. Therefore, the Commission has considered no growth in sales projection for this category for FY18.

Temporary Supply

8.4.22 The analysis of sales in this category indicates an increase of 16% in FY16 over FY15. Over a longer period, the sales in this category have varied from a CAGR of 16.1% to 1.0% during last five to six years. Therefore, the Commission has considered the temporary supply sales to continue to grow at a rate of 5.0% which is in line with the CAGR of 3 years for projections of FY18.

8.4.23 After detailed scrutiny of the consumer category wise sales, the Commission estimates the following sales to retail consumers within the State for FY18:

Table 128: Revised Approved Sales for FY18 (MUs)

S. No.	Consumer Category	MYT Approved	HPSEBL's Submission	Revised Approved
1.	**Industrial Power Supply**			
a.	Small Industries	75	101	164
b.	Medium Industries	180	114	55
c.	Large Industries (HT)	2,945	2,989	3018
d.	Large Industries (EHT)	2,329	1,489	1503
2.	Domestic	2,437	2,155	2141
3.	**Irrigation and Drinking Water**			
a.	Govt., Irrigation & Water Supply	595	595	618
b.	Private Agricultural Irrigation	48	68	60
4.	Commercial	658	567	547
5.	Bulk Supply	157	127	145
6.	Non Domestic Non Commercial	148	151	138
7.	Public Lighting	14	13	13
8.	Temporary	27	30	33
	Total	**9,612**	**8,398**	**8,436**

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 The Commission has retained the T&D loss trajectory approved in the MYT Order based on the Mid-Term Performance Review (MPR) as detailed in the Chapter on Mid-Term Performance Review: Para 7.3. Accordingly, the approved T&D loss for FY18 is as provided in the table below:

Table 129: Approved T&D loss for FY18

Particulars	FY18
Approved T&D loss	12.20%

8.6 Energy Requirement

8.6.1 The Commission's estimates of energy requirement at state periphery for FY18 is based on the revised sales and T&D loss target approved by the Commission. The Commission's estimates for power requirement is tabulated as follows:

Table 130: Approved Energy Requirement for FY18

Particulars	MYT	Petitioner	Revised Approved
Sales (MU)	9,612	8,398	8,436
Approved Loss (%)	12.20%	12.20%	12.20%
Energy Requirement at State Periphery for own consumption (MU)	**10,947**	**9,565**	**9,608**

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 actuals. 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 analysis of ARR of FY18, the Commission has updated the station-wise projection of energy availability and power purchase cost for FY18 taking into consideration the actual normative parameters achieved by generating stations in FY15, FY16 and ten months of FY17 as well as change in allocation, if any.

8.7.3 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, 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;

8.7.4 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

8.7.5 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.

8.7.6 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 FY18 whereas the generation from power projects below 25 MW has been considered under renewable power (non-solar).

Table 131: Allocation and Energy Availability from Own Generating Stations for FY18*

Generating Station	Capacity (MW)	Generation (MUs)	HPSEBL Share	Annual Energy available to HPSEBL
Larji	126	586.82	88%	515.37
Bhaba	120	438.16	100%	437.29
Bassi	60	346.83	100%	346.14
Giri	60	289.55	100%	288.97
Uhl-III	100	204.49	88%	179.05
Total Energy Available				**1766.81***

**Excluding own generating stations with capacity of less than 25MW*

8.7.7 Based on the submission of the Petitioner, the Commission has revised power availability from Uhl-III for FY18 as its first unit is expected to be commissioned in July '17, second unit in Aug '17 and third unit in Sep '17. Also, the Petitioner has submitted that Bhabha Project which had witnessed an accident in Jan '15 has started generating power from its one unit from July '16 while the second unit and third units shall commission in Apr '17 and June '17, respectively. For the remaining plants, 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.

Allocation and Energy Availability from Shared Generating Stations

8.7.8 HP has fixed allocation from Shanan and Shanan (Extension) at 1 MW at 60% PLF and 45 MU respectively. The Commission has revised the energy availability from Yamuna as per the power generation in the MYT Order of UJVNL Hydro Stations for Second Control Period (FY17 to FY19). In case of energy available from Khara, the Commission has considered the average of the energy generated during last three years.

Table 132: Allocation and Energy Availability from Shared Generating Stations for FY18

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%	387.83
Khara		1%	20%	67.74
Total Available from Shared Generating Stations				**505.82**

Allocation and Energy Availability from IPP with Long-term PPA

8.7.9 The total energy available from Baspa-II HEP during FY18 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 FY18.

Allocation and Energy Availability from Free Power

8.7.10 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.

8.7.11 In line with the methodology followed in the MYT Order for 3rd Control Period and the First and Second APR Orders, 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.

8.7.12 Free power availability from Small HEP/Private Micro is determined based on the actual allocation of free power from such station available during FY16 and first 10 months of FY17 along with additional power from share of GoHP free power to be available from IPPs which are expected to be commissioned during FY18.

8.7.13 The table summarizes the stations and quantum of free power available to HPSEBL during FY18:

Table 133: Energy Availability from Free Power (MU) for FY18

Free Power	Petition	Now Approved
Shanan Share	2.63	2.63
Ranjeet Sagar Dam Share	70.26	68.72
Malana	73.28	65.25
Baspa (Primary & Sec.)	143.19	143.16
Ghanvi	11.7	11.07
Baner	5.2	7.21
Gaj	5.2	4.55
Larji	80.6	70.28
Khauli	5.98	5.95
Uhl-III	26.58	21.49
Ghanvi II	5.2	6.27
Small HEP/ Private Micro – Free	116.59	88.67
Total	**546.41**	**495.25**

Allocation and Energy Availability from BBMB

8.7.14 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 for FY18.

Table 134: HPSEBL Share and Energy Availability from BBMB for FY18

Name of Generating Station	Energy (ex-bus)	HPSEB Share	Energy available to HPSEBL (MUs)
BBMB Old		Fixed 1.2LU/day	43.8
BBMB New	4893.61	7.19%	351.85
Dehar	2573.03	7.19%	185.00

Name of Generating Station	Energy (ex-bus)	HPSEB Share	Energy available to HPSEBL (MUs)
Pong	1287.77	2.97%	38.25
Total			**618.90**

Energy Availability from Renewable Power (Non-Solar and Solar)

8.7.15 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 FY18 is detailed below:

Table 135: 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
FY18	13.50	13	0.50

Renewable Power (Non-solar)

8.7.16 The Petitioner has own 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 FY18:

Table 136: Allocation, HPSEBL share and Energy Availability from Own Generating Stations for FY18

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
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

Name of Generating Station	Capacity (MW)	Generation (MUs)	HPSEBL Share	Auxiliary Consumption (MUs)	Annual Energy available to HPSEBL (MUs)
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
Ghanvi II	10.00	52.27	88%	0.50%	45.77
Total					**472.93**

8.7.17 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.

8.7.18 The Petitioner has submitted the details of new IPP projects which have been commissioned during FY17 and those which are expected to be commissioned during FY18 the details of which are as follows:

Table 137: Projects to be commissioned during FY18

Name of Project	Capacity (MW)	Date of Commissioning
Shaung	3.00	FY17
Kurhed	4.50	FY17
Brua	9.00	FY17
Total	**16.50**	
Projects to be Commissioned during FY18		
Haripur Nalla	3.00	FY18
Mannuni	3.50	FY18
Bagrood	0.24	FY18
Tangnu Romai II	6.00	FY18
Kut	24.00	FY18
Total	**36.74**	

8.7.19 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 FY18 as per the submission of the Petitioner have also been considered for projecting the energy available in FY18.

8.7.20 The table below summarizes energy availability for HPSEBL from own and private small and micro hydel projects:

Table 138: Energy Availability from Small Hydro Own and IPPs/ Private Stations for FY18

Particulars	Energy Available (MUs)
Small Hydro Own Generation	472.93
Small HEP/ Private Micro <5MW	993.54
Small HEP/ Private Micro >5MW	284.56
Total Non-solar Renewable Power	**1751.03**

8.7.21 Further, power procured by HPSEBL from any other renewable source i.e. municipal solid waste, refuse derived fuel, etc. during FY 18, for which the Commission has approved generic tariff, shall be considered at the time of truing up based on the actuals.

Renewable Power (Solar)

8.7.22 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.

8.7.23 Along with the above, HPSEBL had also requisitioned 20 MW solar power under Batch I, Phase II of JNNSM scheme of the Govt. of India vide letter dated 01.11.2013, 12.03.2014 & 10.07.2014. HPSEBL was allocated 20 MW solar power under Batch I, Phase II of the JNNSM scheme of MNRE, GoI w.e.f. 05.06.2015.

8.7.24 The Commission has provisionally considered the submission of the Petitioner in this regard and has approved the following solar power purchase for FY18:

Table 139: Energy Availability from Solar Power in FY18

Particulars	FY18

Particulars	FY18
Sales (in MUs)	8435.53
T&D Loss (%)	12.20%
Total Energy Requirement (in MUs)	9607.66
Solar RPO (%)	**0.50%**
Solar RPPO (in MUs)	48.04
Energy Availability from Solar (in MUs)	
Singrauli Solar	24.97
SECI	33.29
Total solar power available to HPSEBL	**58.25**
Excess / (gap) availability of solar power (in MUs)	10.22

8.7.25 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 and FY18. The Petitioner has submitted that excess procurement of solar power during FY17 shall be considered towards meeting the solar RPPO deficit of 18.4 MUs for FY13 and 5.82 MUs out of the total shortfall of 19.42 MUs for FY15 in line with the Commission's Order against suo-moto case no. 93(A)/2013 dated 29th July 2013.

8.7.26 However, the Commission while disallowing the shortfall of FY15 to be carried forward in its Order dated 17.02.2017 has imposed a penalty of Rs. 6.762 Cr. under Regulation 9 of the RPPO Regulations for the shortfall of 19.32 MUs in FY15. The Commission has also observed in the Order that HPSEBL could have purchased RECs available in the market by the end of March, 2015 based on the floor price fixed by the Hon'ble CERC.

8.7.27 Therefore, the Commission provisionally approves the excess procurement of solar power in FY17 and FY18 and shall consider the adjustments, if any, at the time of truing-up for the respective year.

8.7.28 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)

8.7.29 The Petitioner also purchases power at Average Power Purchase Cost (APPC) rate from small and micro hydel projects which are under the REC framework.

8.7.30 The Commission has determined the availability of power from this source after taking into consideration the power purchase data in FY15, FY16 and ten months of FY17 submitted by the Petitioner. The power purchase quantum of FY17 was considered to arrive at the Power Purchase Quantum for FY18 from Small and Micro HEPs (under REC Framework).

8.7.31 The details of power available from micro hydro projects under REC mechanism during FY18 is provided below:

Table 140: Energy Availability from IPPs and Private SHPs for FY18

Particulars	FY18
Small HEP/ Private Micro - REC	306.51

Energy Availability from Equity Share in Generating Plants

8.7.32 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 FY18 based on actual energy generated during the last three years. In case of Rampur HEP, the actual generation 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 141: HPSEBL share and Energy Availability from NJPS and Rampur for FY18

Name of Generating Station	HPSEBL Share	Annual Energy available to HPSEBL (MUs)
Rampur Equity	26.1%	491.79
Nathpa Jhakri Equity	22%	1,486.81
Total from Equity share		**1,978.60**

Allocation and Energy Availability from firm Share in Central Generating Stations (CGS)

8.7.33 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.

8.7.34 The Commission has considered allocation of firm power from CGS in accordance with latest allocations issued by the Northern Regional Power Committee.

8.7.35 In the previous APR Orders, 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 FY18. 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.

8.7.36 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.

8.7.37 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 15 MW 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 142: 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-Ill	1000	0.25	3.62
Unchahar-I	420	0.08	1.75
Unchahar-ll	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**

8.7.38 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.

8.7.39 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 FY18.

8.7.40 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.

8.7.41 As part of the APR Order for FY16, HPSEBL had submitted regarding surrender of SOR share to HPSEBL from the Koldam station 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 has been 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.

8.7.42 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 reiterates its previous advice to the Petitioner to take up the matter with MoP for surrender of this 15% unallocated power from Koldam for a suitable period.

8.7.43 The table below summarizes the allocation as well as energy available from CGS during FY18.

Table 143: 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	7,113.94	2.47%	166.93
Rampur SOR	1,983.41	2.80%	52.76
Total			**219.69**
NPCIL			
NAPP	2,719.54	3.2%	87.03
RAPP (V & VI)	3,017.67	3.4%	102.60
Total			**189.63**
NTPC – Thermal			
Anta (G)	1475.03	3.60%	53.10
Auriya (G)	1606.11	3.30%	53.00
Dadri (G)	2893.33	3.00%	86.80
Unchahar-I	2733.48	1.70%	46.47
Unchahar-II	2733.48	2.90%	79.27
Unchahar-III	1366.74	3.80%	51.94
Rihand-1 STPS	6536.29	3.50%	228.77
Rihand-2 STPS	6679.16	3.30%	220.41
Kahalgaon - II	132.28	1.50%	132.28
Rihand-3 Units-1,2	222.23	3.40%	222.23
Kol dam HEP	403.23	15.00%	403.23
Singrauli Bundled	101.64		101.64
Total			**1679.15**
NHPC			
Salal	3439.20	1.00%	34.39
Tanakpur	427.75	3.80%	16.25
Chamera I	2505.46	2.90%	72.66
Chamera II	1472.93	3.70%	54.50
Uri	2960.12	2.70%	79.92
Dhauliganga	1089.63	3.60%	39.23
Total			**296.95**

Name of Generating Station	Expected PLF/ Energy at Ex Bus	HPSEBL Share (%)	Energy available to HPSEBL
Grand Total			**2385.41**

Energy Availability from Unallocated Power from CGS

8.7.44 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. As per the recent firm share and unallocated share allocation by CEA as on 31.01.2017, the State of HP is getting 15MW of bundled solar power under JNNSM which is the only unallocated share. The Commission has considered this under Singrauli Bundled Power for FY18.

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 FY18.

8.7.46 For FY18, 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 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 FY18 is shown in the tables as follows:

Table 144: Monthly Demand Supply Position – FY18

Power Purchase	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Sales (MU)	621	680	719	731	715	754	725	685	675	689	693	747	8,436
Losses	12.20%	12.20%	12.20%	12.20%	12.20%	12.20%	12.20%	12.20%	12.20%	12.20%	12.20%	12.20%	
Monthly Demand (MU) State Periphery	708	775	819	832	814	859	826	780	769	785	789	851	9,608
Monthly Availability (MU) State Periphery	724	1069	1195	1358	1418	1368	695	488	575	522	508	732	10,652
Deficit Power (MU) State Periphery	0	0	0	0	0	0	(132)	(293)	(195)	(263)	(281)	(119)	(1,282)
Deficit Power (MU) Ex Bus	0	0	0	0	0	0	(137)	(305)	(203)	(274)	(293)	(124)	(1,335)
Surplus Power (MU) State Periphery	17	294	376	525	604	509	0	0	0	0	0	0	2,325
Surplus Power (MU) Ex Bus	17	307	392	547	629	530	0	0	0	0	0	0	2,423
Net Surplus/(Deficit) (Ex Bus)	**17**	**307**	**392**	**547**	**629**	**530**	**(137)**	**(305)**	**(203)**	**(274)**	**(293)**	**(124)**	**1,088**

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 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 FY18.

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 10.04.2017, the purchase rate of free power available to the HPSEBL from GoHP has been fixed at 263 paise/unit (inclusive of trading margin, if any) for FY18. Therefore, in order to project the power purchase cost for FY18 the Commission has considered 263 paise/unit as the rate of free power available to the HPSEBL from GoHP for FY18.

Cost of Power from NPCIL Stations

8.8.5 The cost of power for NPCIL plants for FY18 has been considered based on the actual rate of power for ten months of FY17 submitted by the Petitioner with an escalation of 3%.

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 for ten months of FY17.

Cost of Power from SJVN Plant

8.8.7 For projecting the cost of power from Rampur station for FY18, the Commission has considered the actual fixed and variable charges considering the AFC and design energy as per the ad-hoc tariff granted by CERC vide order dated 27.1.2015. For NJPS stations, the Commission has considered the actual fixed and variable charges considering the AFC and design energy for FY17 for projections for FY18. Any additional changes in tariff from NJPS or Rampur station on account of revised tariff for FY18 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 FY18.

8.8.9 The average rate of power from private SHP during ten months of FY17 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. 2.50 per unit through order dated 28.10.2016. The same has been considered by the Petitioner in the ten months data provided for FY17 as the rate of power procurement from Small HEP/ Private Micro under REC. Therefore, the Commission has retained this rate for projection of FY18.

Cost of Additional Solar Power

8.8.11 For projecting the power purchase cost from NTPC Singrauli solar plant for FY18, an average rate of power purchase as per the actual values of power purchase cost for 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 which is in line with the actual six and ten months data submitted by the Petitioner for FY17.

Cost of Power from NTPC stations

8.8.12 The tariff for NTPC stations is required to be determined as per the tariff approved by the Hon'ble CERC for the respective central generating stations for the Control Period FY15-19. As the tariff Orders for all central generating stations for the Period FY15-19 are unavailable, the Commission has considered the fixed cost approved as per the fixed charges payable by HSPEBL during FY15. In case of approval of tariff for CGS, the Commission has applied the allocation to HPSEBL for allowing the fixed cost from the respective CGS plants for FY18. 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 FY18.

8.8.13 The variable cost for existing NTPC thermal generating stations, including Fuel Price Adjustment (FPA) for FY18 has been based upon the actual power purchase data 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 FY18. Other Charges (per unit) have been considered to be at the same level as incurred during FY16 and six months of FY17 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 has been considered for determining the power purchase cost from NHPC stations based on the allocation of HPSEBL. Therefore, the Commission has considered the fixed and variable charge for these stations in line with the approved annual charges for FY18. The other charges payable to NHPC are considered to be at the level as actually paid by HPSEBL during FY16.

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 FY18.

Table 145: Source wise Power Purchase Cost for Own Generating Stations for FY18

Particulars	Units (MUs)	Cost (Rs.Cr.)
Own Generating Stations		
Bhaba	437.29	33.06
Bassi	346.14	26.31
Giri	288.97	23.79

Particulars	Units (MUs)	Cost (Rs.Cr.)
Andhra	86.43	11.27
Ghanvi	81.15	18.26
Baner	52.86	10.41
Gaj	33.38	10.87
Larji	515.37	112.43
Khauli	43.65	9.82
Binwa	29.05	6.11
Thirot	17.58	3.96
Gumma	11.71	2.64
Holi	11.71	2.64
Bhaba Aug	17.58	3.96
Nogli	9.75	3.31
Rongtong	7.56	2.37
Sal-II	7.79	1.75
Chaba	6.47	1.94
Rukti	7.59	0.95
Chamba	1.75	0.38
Killar	1.15	0.26
Uhl III - BVPCL	179.05	80.57
Ghanvi II	45.77	14.53
Total - Own Generation	**2,239.75**	**381.57**

Table 146: Source wise Power Purchase Cost for GoHP Free Power for FY18

Particulars	Units (MUs)	Cost (Rs.Cr.)
Shanan Share	2.63	0.69
Ranjeet Sagar Dam Share	68.72	18.07
Malana	65.25	17.16
Baspa (Primary & Sec.)	143.16	37.65
Nathpa Jhakri HEP	-	-
Ghanvi	11.07	2.91
Baner	7.21	1.90
Gaj	4.55	1.20
Larji	70.28	18.48
Khauli	5.95	1.56
Uhl-III	21.49	5.65
Ghanvi II	6.27	1.65
Small HEP/ Private Micro - Free	88.67	23.32
Total Free Power	**495.25**	**130.25**

Table 147: Source wise Power Purchase Cost for NPCIL stations for FY18

Particulars	Units (MUs)	Cost (Rs.Cr.)
NAPP	87.03	23.04
RAPP (V & VI)	102.60	37.20
Total NPCIL	**189.63**	**60.24**

Table 148: Source wise Power Purchase Cost for Shared stations for FY18

Particulars	Units (MUs)	Cost (Rs.Cr.)
BBMB Old	43.80	4.91
BBMB New	351.85	20.24
Dehar	185.00	15.28
Pong	38.25	1.62
Shanan (available to HPSEB)	5.26	0.21
Shanan Ext (available to HPSEB)	45.00	0.93
Yamuna	387.83	44.79
Khara	67.74	4.88
Total Shared Stations	**1,124.72**	**92.85**

Table 149: Source wise Power Purchase Cost for SJVNL and Other stations for FY18

Particulars	Units (MUs)	Cost (Rs.Cr.)
Nathpa Jhakri SOR	166.93	51.39
Nathpa Jhakri Equity	1,486.81	457.67
Rampur	52.76	15.62
Rampur Equity	491.79	146.88
Small HEP/ Private Micro <5MW	993.54	278.19
Small HEP/ Private Micro >5MW	284.56	71.14
Small HEP/ Private Micro – under REC framework	306.51	76.63
Baspa - II	1,050.06	145.46
Total SJVNL & Other Plants	**4,832.96**	**1,242.98**

Table 150: Source wise Power Purchase Cost for Solar Power for FY18

Particulars	Units (MUs)	Cost (Rs.Cr.)
Singrauli Solar	24.97	20.26
SECI	33.29	18.31
Total Solar Power	**58.25**	**38.57**

Table 151: Source wise Power Purchase Cost for NTPC stations for FY18

Particulars	Units (MUs)	Fixed Cost (Rs. Cr.)	Variable Cost (Rs. Cr.)	Other Cost (Rs. Cr.)	Total Cost (Rs. Cr.)
Anta (G)	53.10	7.69	19.52	0.02	27.24
Auriya (G)	53.00	8.02	23.22	0.01	31.26
Dadri (G)	86.80	9.38	35.01	0.03	44.42
Unchahar-I	46.47	4.02	13.59	-	17.61
Unchahar-II	79.27	7.19	23.14	-	30.34
Unchahar-III	51.94	7.32	15.00	0.07	22.39
Rihand-1 STPS	228.77	19.78	43.80	0.11	63.68

Particulars	Units (MUs)	Fixed Cost (Rs. Cr.)	Variable Cost (Rs. Cr.)	Other Cost (Rs. Cr.)	Total Cost (Rs. Cr.)
Rihand-2 STPS	220.41	19.57	39.66	0.03	59.26
Kahalgaon - II	132.28	17.33	32.19	-	49.52
Rihand-3 Units-1,2	222.23	30.90	38.75	2.68	72.33
Kol dam HEP	403.23	85.68	86.54	0.42	172.64
Singrauli Bundled	101.64	-	35.57	-	35.57
Total	**1679.15**	**216.89**	**405.99**	**3.38**	**626.26**

Table 152: Source wise Power Purchase Cost for NHPC stations for FY18

Particulars	Units (MUs)	Cost (Rs.Cr.)
Salal	34.39	6.43
Tanakpur	16.25	4.91
Chamera I	72.66	12.72
Chamera II	54.50	10.21
Uri	79.92	13.52
Dhauliganga	39.23	11.32
Total NHPC	**296.95**	**59.11**

Table 153: Summary of Total Power Purchase Cost for FY18

Particulars	Units (MUs)	Cost (Rs.Cr.)
Own Generation	2,239.75	381.57
Free Power	495.25	129.76
NTPC	1,679.15	626.26
NPCIL	189.63	60.24
NHPC	296.95	59.11
BBMB & Shared Stations	1,124.72	92.85
SJVNL & Other Plants	4,832.96	1,242.98
Solar	58.25	38.57
Grand Total	**10,916.66**	**2,631.82**

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 Third 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 FY18. 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 FY18 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 FY18 is summarized in table below; keeping in view the Commission's policy of 100% clean energy supply in the State:

Table 154: Merit Order for FY18

Sr. No.	Source	Units (MUs)	Cost (Rs. Cr.)	Rate (Rs. Per unit)
	Power Procurement for Supply in State	**9,873**	**2,189.09**	**2.22**
I	**Clean Energy**	**9,238**	**2,005.56**	**2.17**
(A)	**Green (Renewable) Energy**	**1,809**	**493.31**	**2.73**
(i)	SHP own generation	472.93	105.41	2.23
(ii)	SHP PPAs Preferential Tariff (Excluding on APPC under REC)	1,278.10	349.33	2.73
(iii)	Solar	-	-	
(a)	NTPC Singrauli	24.97	20.26	8.11
(b)	SECI	33.29	18.31	5.50
c)	Solar Net Metering			
(B)	**Green Energy Hydel Sources**	**7,239**	**1,452.02**	**2.01**
(i)	Own generation	1,767	276.16	1.56

Sr. No.	Source	Units (MUs)	Cost (Rs. Cr.)	Rate (Rs. Per unit)
(ii)	BBMB and other shared projects			-
a)	BBMB	619	42.05	0.68
b)	Shanan & Shanan Ext.	50	1.14	0.23
c)	Yamuna & Khara	456	49.67	1.09
(iii)	Baspa -IPP	1,050	145.46	1.39
(iv)	NJPS equity share	1,487	457.67	3.08
(v)	On APPC under REC framework	307	76.63	2.50
(vi)	GoHP Free Power in Projects directly connected to HPSEBL	495	130.25	2.63
(vii)	SoR Share NHPC	297	59.11	1.99
(viii)	SoR Share NJPS	167	51.39	3.08
(ix)	SoR Share Rampur	53	15.62	2.96
(x)	Equity Power Rampur	492	146.88	2.99
(xi)	Additional Free Power (including additional availability from (A) & (B))			-
(xii)	Unallocated share	-	-	-
(C)	**Clean Energy Nuclear**	**190**	**60.24**	**3.18**
	NPCIL	190	60.24	3.18
II	**Conventional Thermal Sources**	**635**	**183.52**	**2.89**
(i)	Rihand-2 STPS	220	59.26	2.69
(ii)	Rihand-1 STPS	229	63.68	2.78
(iii)	Rihand-3 Units-1,2	186	60.58	3.25
	Total (I + II)	**9,873**	**2,189.09**	**2.22**
	Disposal of Seasonal Surpluses for inter-state sale/ Banking, for procurement during winter (only for benchmarking purchase cost at the margin)			
	Surplus purchases under PPA obligation for disposal/ trading in addition to I & II above	**1,044**	**442.74**	**4.24**
A	**Contingent Purchase if required in case of shortfall in availability or increase in demand**	**225**	**79.99**	**3.56**
(a)	**Green Energy Hydel sources**	**-**	**-**	-
(b)	**Conventional Thermal Sources**	**225**	**79.99**	**3.56**
(i)	Rihand-3 Units-1,2	36	11.75	3.25
(ii)	Singrauli Bundled	102	35.57	3.50
(iii)	Kahalgaon - II	87	32.66	3.74
B	**Surpluses for Trading due to PPA obligation**	**819**	**362.75**	**4.43**
(a)	**Green energy Hydel**	**-**	**-**	-

Sr. No.	Source	Units (MUs)	Cost (Rs. Cr.)	Rate (Rs. Per unit)
(b)	**Conventional Thermal Sources**	**819**	**362.75**	**4.43**
(i)	Kahalgaon - II	45	16.86	3.74
(ii)	Unchahar-I	46	17.61	3.79
(iii)	Unchahar-II	79	30.34	3.83
(iv)	Kol dam HEP	403	172.64	4.28
(v)	Unchahar-III	52	22.39	4.31
(vi)	Dadri (G)	87	44.42	5.12
(vii)	Anta (G)	53	27.24	5.13
(viii)	Auriya (G)	53	31.26	5.90
	Grand Total	**10,917**	**2,631.82**	**2.41**

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 during FY18, 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 FY18 is Rs. 2.22/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:

8.8.24 *"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."***

8.8.25 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

8.8.26 The cost of the surplus power is the most expensive which ranges from Rs. 3.74/kWh to Rs. 5.90/kWh during FY18. 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.

8.8.27 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.

8.8.28 Even though with the recommissioning of Bhabha station in July 2016 and commissioning of Uhl III plants in July 2017, the Commission has considered a contingency quantum of 225 MU in FY18 respectively 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.

8.8.29 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.

8.8.30 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 155: Power Purchase Approved for FY18

Power Purchase Summary	Units (MUs)	Cost (Rs. Cr.)	Per Unit (Paisa per unit)
Total own generation	2,240	382	1.70
Total free Power	495	130	2.63
Total NTPC	860	264	3.06
Total NPCIL	190	60	3.18
Total NHPC	297	59	1.99
Total SJVNL & Others	2,198	672	3.05

Power Purchase Summary	Units (MUs)	Cost (Rs. Cr.)	Per Unit (Paisa per unit)
IPPs & Others	3,759	664	1.77
Total Solar	58	39	6.62
Total Unallocated power	-	-	-
Total Power purchase for meeting State demand (including contingency reserve)	**10,098**	**2,269**	**2.25**
Total Surpluses Power Purchase for Trading due to PPA obligation	819	363	4.43
Grand Total Power Purchase	**10,917**	**2,632**	**2.41**

8.9 PGCIL & HPPTCL Charges

8.9.1 It is observed that the actual PGCIL charges of HPSEBL for FY16 has been Rs. 139.63 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. 184.61 Cr. for 10 months of FY17 (after netting off amount recoverable from PTC on account of PGCIL charges).

8.9.2 For approving the PGCIL charges for FY18, the 10 months PGCIL charges for FY17 has been pro-rated for 12 months and an escalation of 10% has been considered for projecting the PGCIL charges for FY18.

8.9.3 The Petitioner has submitted HPPTCL charges as per the MYT Order along with Annual Fixed Charges approved by Hon'ble CERC vide Order dated 16.05.2016 for three inter-state transmission lines of HPPTCL.

8.9.4 HPPTCL charges for FY18 have been considered as approved by the Commission in the MYT Order for the Third Control Period. The additional charges claimed by HPSEBL towards the three inter-state HPPTCL lines shall form part of the PoC mechanism in future years and therefore shall be included in the PGCIL charges. Therefore, no additional amount for the AFC for the three inter-state HPPTCL lines is required to be accounted under HPPTCL charges. The summary of the PGCIL and HPPTCL transmission charges approved for FY18 are summarized in table below:

Table 156: Approved PGCIL & HPPTCL Charges for FY18 (Rs. Cr.)

Particulars	Petition	Now Approved

Particulars	Petition	Now Approved
PGCIL Charges	213.43	243.69
HPPTCL Charges	5.95	3.36

8.10 Other Power Purchase Related Charges

8.10.1 The SLDC charges are considered as approved in the Mid-Term Performance Review Order of HPSLDC for FY18.

8.10.2 With respect to short-term open access charges, the Petitioner has claimed Rs. 61.80 Cr. and Rs. 67.98 for FY18, respectively. Based on the actual short-term open access charges (PTC) of Rs. 54.23 Cr. submitted by the HPSEBL for FY16, an annual escalation of 5% has been considered for approving the short-term open access charges for FY18. The same would be trued up along with other power purchase cost, based on actual amount paid for FY18. The summary of SLDC charges and open access charges are provided in table below:

Table 157: Approved SLDC & Short-term Open Access Charges for FY18 (Rs. Cr.)

Particulars	Petition	Now Approved
SLDC Charges	8.89	0.92
Open Access charges	61.80	59.79
Total	**73.12**	**60.71**

8.11 Operation and Maintenance (O&M) Expenses

8.11.1 As per the detailed discussion with respect to the O&M expenses under the Mid-Term Review section, the Hon'ble Commission retains the approved O&M expenses for as approved in the MYT Order. However, an additional amount of Rs. 15.70 Cr. as approved by the Commission for specific tasks including Preparation of Accounting Manual, Digitization of consumer and employee data, Voltage wise Cost of Supply, Training to Staff, Connectivity charges for data centre, Meter Data & Meter Performance Analysis, etc. has been provisionally approved under A&G which shall be trued-up based on actual at the time of truing-up. The Petitioner is required to provide adequate details of output under each of these tasks along with the benefits for prudence check of the Commission.

8.11.2 The provisional amount of Rs. 1 Cr. towards safety measures and equipment is being increased to Rs. 10 Cr. and is being provided in the ARR for FY18 towards safety equipment at the substations based on the submission of the Petitioner. The amount has been increased based on assessment undertaken by the Petitioner of the safety equipment at the various substations. The Petitioner is directed to provide complete details of the procurement undertaken for safety equipment along with the number of substations which comply with the safety standards post procurement of the equipment. In absence of the details, the amount may not be admitted by the Commission in truing-up for the respective year.

8.11.3 The details of the O&M expenditure approved by the Commission for FY18 is detailed below:

Table 158: O&M Expense Approved for FY18 (Rs. Cr.)

Particulars	Approved in MYT	Approved Now
Employee Cost	1,557.50	1543.27
R&M Expense	58.02	58.02
A&G Expense	46.58	62.28
Additional amount for Safety measures	1.00	10.00
Total O&M Expense	**1,663.11**	**1,673.58**

8.11.4 An additional amount of Rs. 85 Cr. is being provisionally allowed towards the arrears arising from impact of 7th Pay Commission revision. This amount shall be trued-up based on the actual at the time of truing-up for the respective year.

8.12 Depreciation

8.12.1 Depreciation for each year of the 3rd Control Period in the MYT Order dated 12th June, 2014 has been approved by the Commission. As discussed under the Mid-Term Performance Review, the Commission has retained the capitalization approved in the MYT Order for the remaining Control Period. Being a controllable parameter dependent on capitalization, depreciation shall now be revised only at the end of the Control Period.

8.12.2 Therefore, the Commission approves the depreciation for FY18 as approved in the MYT Order for the 3rd Control Period.

8.13 Working Capital Requirement

8.13.1 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.

8.13.2 The Commission has observed that the Petitioner has not considered one month power purchase and thus, erroneously calculated the interest on working capital leading to a higher claim for FY18. The previously approved working capital requirement for FY18 is therefore revised in line with the revision of uncontrollable parameters approved by the Commission in this Order and is given below:

Table 159: Working Capital Requirement Approved for FY18 (Rs. Cr.)

Particulars	Approved in MYT Order	Now Approved
O&M Expense for one month	138.59	138.63
Receivables equivalent to 2 months average billing	840.90	801.63
Maintenance Spares 40% of the R&M expense for one month	1.93	1.93
Less: Consumer Security Deposit	364.16	317.31
Less: One Month Power Purchase	257.92	244.97
Working Capital Requirement	**359.35**	**379.92**

8.14 Interest and Financing Charges

8.14.1 The Commission has approved a capital investment plan as well as the capitalization schedule, source of funding and financing for the third MYT Control Period. Based on the Mid-Term Performance Review as detailed in section above, the Commission has decided to retain the interest and financing charges towards capital assets as approved in the MYT Order. The approved capitalization plan shall be trued-up at the end of the Third Control Period based on the audited accounts and any variations in interest and financing charges shall be considered based on same.

8.14.2 The interest on working capital requirement and consumer security deposit has been revised for FY18. Interest on the revised normative working requirement 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 160: Approved Interest on Working Capital for FY18 (Rs. Cr.)

Particulars	Approved in MYT Order	Now Approved
O&M Expense for one month	138.59	138.63
Receivables equivalent to 2 months average billing	840.90	801.63
Maintenance Spares 40% of the R&M expense for one month	1.93	1.93
Less: Consumer Security Deposit	364.16	317.31
Less: One Month Power Purchase	257.92	244.97
Working Capital Requirement	**359.35**	**379.92**
Rate of Interest on Working Capital	13.27%	12.80%
Interest on Working Capital	**47.67**	**48.63**

8.14.3 The Commission has referred to the Himachal Pradesh Electricity Regulatory Commission (Security Deposit) (Second Amendment) Regulations, 2015 which prescribes the use of weighted average of actual Bank Rate(s) for the previous year to calculate the interest rate on consumer security deposit for FY18. Further, the revised interest on consumer security deposit is determined as provided in table below:

Table 161: Approved Interest on Consumer Contribution for FY18 (Rs. Cr.)

Particulars	Approved in MYT Order	Now Approved
Opening consumer security deposit	341.93	308.67
Additions	22.23	8.64
Closing consumer security deposit	364.16	317.31
Rate of Interest for Consumer Security Deposit	9.00%	6.89%
Interest on Consumer security deposit	**31.77**	**21.55**

Additional Interest amount towards Kurthala substation & line

8.14.4 HPSEBL in its petition has now submitted that the loan of Rs. 62.69 Cr. has been taken from REC to save the interest cost due to M/s Tissa Power Transmission Private Limited against the construction of 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. The Petitioner has now claimed an additional interest of Rs 9.34 Cr. in FY17 (which includes Rs 1.91 Cr. of FY16 and Rs 7.43 Cr. of FY17), Rs 7.43 Cr. in FY18 and Rs 7.43 in FY19 which has been considered as a part of projected Interest & Finance Charges.

8.14.5 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 Performance Review or review at the end of the 3rd MYT Control Period."

8.14.6 Based on the submission of the Petitioner, the 'Kurthala substation & line' would now form part of the capitalization for the respective year in which it shall be capitalized and shall be eligible for depreciation, interest cost, etc. Therefore, the same shall be considered along with the final truing-up at the end of the Control Period and no additional amount is required to be provided separately.

8.14.7 Based on the details of interest and financing charges discussed above, the revised approved Interest and Finance charges for FY18 are as below:

Table 162: Revised Interest and Finance Charges for FY18 (Rs. Cr.)

Particulars	Approved in MYT Order	Now Approved
Interest on Long Term Loans	187.52	187.52
Interest on Working Capital	47.67	48.63
Interest on Consumer Deposit	31.77	21.55
Total	**266.97**	**257.70**

8.15 Return on Equity

8.15.1 Based on the RoE approved for FY18 in the MYT Order for the Third Control Period, the Commission has considered the same RoE as no revision has been envisaged for capitalization as discussed above under Mid-term Performance Review.

8.16 Non-tariff and Other Income

8.16.1 Based on the actual non-tariff income considered as part of truing-up of uncontrollable parameters for FY15, actual non-tariff income for FY16 and six months of FY17 as submitted by the Petitioner, the non-tariff income for FY18 has been revised.

8.16.2 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, generation and in BVPCL, projects and S&I which was allowed under NTI as per the MYT Order is to be adjusted against the terminal benefits component of employee of HPSEBL. Therefore, these heads have been adjusted in the employee expenses as discussed earlier against being considered in the Non-Tariff Income. It is to be noted that such an adjustment shall have no impact on the overall approved ARR of FY18 of HPSEBL.

8.16.3 In a response to the query raised by the Commission for truing-up of FY15, the Petitioner has submitted an income of Rs. 9.11 Cr. during FY15 from different parties under S&I charges as against Rs. 25 Cr. approved in the MYT Order for each year of the Third Control Period (FY15-19). In accordance with the actual recovery, the Commission has reduce the amount of S&I income to Rs. 5 Cr. for FY18.

8.16.4 The revised non-tariff income after adjusting for the above mentioned components is as below:

Table 163: Revised Approved Non-Tariff Income for FY18 (Rs. Cr.)

Particulars	Now Approved
Total Non-Tariff Income	**185.26**

8.17 Aggregate Revenue Requirement

8.17.1 The table given as follows provides a summary view of the Aggregate Revenue Requirement of Distribution business as approved by the Commission for FY18:

Table 164: Aggregate Revenue Requirement for FY18 (Rs. Cr.)

Particulars	MYT Approved	Petitioner Submission	Revised ARR
Power Purchase Expenses for Supply in the State	**3,095.01**	**3,086.73**	**2,939.58**
Cost of electricity purchase including own generation	*2,685.08*	*2,796.66*	*2,631.82*
Inter-State Charges			
Power Grid Charges	*326.97*	*213.43*	*243.69*
Open Access Charges	*70.71*	*61.80*	*59.79*
Intra-State Charges			
HPPTCL Charges	*3.36*	*5.95*	*3.36*
SLDC Charges	*8.89*	*8.89*	*0.92*
Operation & Maintenance Costs	**1,663.11**	**2,305.31**	**1,673.58**
Employee Cost	*1,557.50*	*2,141.41*	*1,543.27*
R&M Cost	*58.02*	*91.63*	*58.02*
A&G Cost	*46.58*	*62.28*	*62.28*
Additional amount for Safety measures	*1.00*	*10.00*	*10.00*
Interest & Financing Charges	266.97	440.06	257.70
Depreciation	93.90	193.91	93.90
Return on Equity	30.24	109.75	30.24
Provision for Bad & Doubtful Debtors	-	3.41	-
Local Area Development Fund		7.93	
Surplus Power Purchase as per PPA Obligation	282.27	-	-
Less: Non-Tariff & Other Income	235.36	343.81	185.26
Less: Interest and other expenses capitalized		130.96	
Aggregate Revenue Requirement	**5,196.14**	**5,672.34**	**4,809.75**

8.17.2 In addition to the Distribution ARR of Rs. 4,809.75 Cr. approved for FY18, the Commission has considered the following adjustments in the ARR:

a. Impact of Final True up of Controllable Parameters of Second Control Period (FY12-14)

In accordance with Chapter 5, the Commission has considered the impact of approved reversal of Rs. 207.19 Cr. against the true-up of controllable parameters of Second Control Period to be adjusted in the ARR for FY18.

b. Impact of Final True-up of FY15

The Commission has undertaken final true-up of uncontrollable parameters for FY15 based on the audited accounts of the respective years in Chapter 6 of this Order. As per the true-up, the Commission has calculated a revenue gap of Rs. 350.48 Cr. As per the Regulation 11(2), carrying cost is to be provided as following:

After providing for carrying cost as per the provisions of the MYT Regulations 2011, a cumulative revenue gap of Rs. 119.55 Cr. as calculated in Chapter 6 has been adjusted in the ARR for FY18.

c. Impact of Truing-up for HPPTCL & HPLDS

An amount of Rs. 0.23 Cr. has been provided towards the revenue gap approved in the truing-up of Second Control Period for HPPTCL along with an additional revenue gap of Rs. 1.21 Cr. approved by the Commission towards truing-up for the Second Control Period of HPLDS.

d. Provisional amount towards arrears of 7th Pay Commission revision

A provisional amount of Rs. 85 Cr. has been provided towards arrears on account of 7th Pay Commission revision in FY18 which shall be trued-up as per the actual.

8.17.3 Based on the above adjustments, the revenue requirement is summarized in table below:

Table 165: Total Revenue Requirement for FY18 including Past Adjustments (Rs. Cr.)

Particulars	Amount Approved
Annual Revenue Requirement for FY18	**4,809.75**
Add:	
Impact of Final Truing-up for FY12-14 and FY15	119.55
Arrears of 7th Pay Commission Revision	85.00
Truing up of Second Control Period for HPPTCL	0.23
Truing up of Second Control Period for HPSLDC	1.21
Total Revenue Requirement for FY18	**5,015.75**

8.18 Allocation of Distribution ARR into Wheeling and Retail Supply

8.18.1 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.

8.18.2 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 Third Control Period, the Commission had continued with the segregation approved in the MYT Order for the Second Control Period with certain modifications.

8.18.3 The revised allocation statement approved by the Commission in the MYT Order for Third Control Period is as under:

Table 166: 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%

8.18.4 The summary of Wheeling and Retail Supply ARR for the Control Period is shown as follows:

Table 167: Approved ARR of Wheeling Business for FY18 (Rs. Cr.)

Particulars	Amount
Operation & Maintenance Costs	1,179.88
Interest & Financing Charges	244.82
Depreciation	89.21
Return on Equity	30.24
Aggregate Revenue Requirement	**1,544.15**

Table 168: Approved ARR of Retail Supply Business for FY18 (Rs. Cr.)

Particulars	Amount
Power Purchase Expenses for Supply in the State	2,939.58
Operation & Maintenance Costs	493.70
Interest & Financing Charges	12.86
Depreciation	4.70
Less: Non-Tariff & Other Income	185.26
Aggregate Revenue Requirement	**3,265.61**

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 FY18.

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 169: Sales at different Voltage Levels for FY18 (MUs)

Category	FY18

	Total Sales	EHT (>=66 kV)	HT (>=11 kV & <66kV)	LT (< 11 kV)
Domestic	2,141	-	-	2,141
NDNCS	138	-	41	96
Commercial (CS)	547	-	82	465
Small & Medium Industrial Power (SMS)	219	-	-	219
Large Power Supply (LS)	4,522	1,583	2,939	-
Irrigation and Drinking Water Pumping (IDWP)	678	-	183	495
Street Lighting	13	-	-	13
Bulk supply	145	-	101	43
Temporary Supply	33	-	-	33
Total (within State)	**8,436**	**1,583**	**3,347**	**3,506**

9.1.5 The cost to serve at different voltage level as calculated on this basis is indicated in the following table:

Table 170: Cost to Serve for FY18

Particulars	Generation bus bar	>= 66 kV	>=11 kV & <66kV	< 11 kV	Total
Energy Input (MU)	9,607.7	9,607.7	8,025.1	4,678.4	
Loss (MU)		-	-	-	-
Sales at respective level (MU)		1,582.5	3,346.7	3,506.3	8,435.5
Cost at respective level (Rs. Cr.)	2,496.8	617.2	602.2	590.9	4,307.0
Cost Allocation (Rs. Per unit)					
Power Purchase Cost		2.91	2.71	1.88	
Cost of Losses		0.14	0.21	0.42	
Transmission & Open Access Charges		0.36	0.36	0.36	
Distribution Cost (> 66kV)		0.86	0.73	0.73	
Distribution Cost (> 11 kV)			1.00	0.88	
Distribution Cost (< 11 kV)				1.69	
Cost of Serve Model		**4.28**	**5.01**	**5.96**	**5.18**

**Rs 5.18 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. 205.99 Cr. on account of Impact of Final truing-up of controllable parameters of Second Control Period (FY12-14), final truing-up of FY15 along with carrying cost, arrears of 7th Pay Commission revision, truing-up of Second Control Period for HPPTCL and truing-up of Second Control Period for HPSLDC considered in this 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 24 paise per unit. The total average cost of supply including these provisions adds up to Rs. 5.42 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 fourth year of the Third Control Period i.e. FY18.

9.1.9 The average cost of supply computed for FY18 is provided in table below:

Table 171: Average Cost of Supply for FY 2017-18 based on Approved ARR

Particulars	FY18
Approved Aggregate Revenue Requirement (Rs. Cr.)	4,809.75
Less: Sale of Surplus Power (Rs. Cr.)	442.74
Net Aggregate Revenue Requirement (Rs. Cr.)	**4,367.02**
Projected Sales (MU)	8,435.53
Average Cost of Supply (Rs./unit)	**5.18**

9.1.10 The average cost of supply for FY 2017-18 works out to be Rs. 5.18 per unit which does not include the prior period and other adjustments as detailed in Para 9.1.6. Taking into account the past gap, the average cost of supply comes out to be Rs. 5.42 per unit.

Revenue from Existing Tariff

9.1.11 The Commission has computed the revenue from various categories as per the sales approved for FY18 and the existing applicable tariff in the respective categories. The summary of the estimated revenue for the FY18 is summarized in table below:

Table 172: Revenue for FY18 based on Existing Tariff

Consumer Category	Sales (MUs)	Revenue (Rs. Cr.)
Industrial Power Supply	**4740**	**2,685.29**
Small Industries	164	90.15
Medium Industries	55	31.12
Large Industries	4522	2,564.01
Domestic	2141	968.02
Irrigation and Drinking Water	678	385.74
Commercial	547	326.70
Bulk Supply	145	92.43
Non Domestic Non Commercial	138	79.78
Public Lighting	13	6.56
Temporary	33	31.67
Total	**8,436**	**4,576.18**

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 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 173: Revenue from Sale of Power outside the State for FY18

Parameters	Units (MUs)	Revenue (Rs. Cr.)	Cost (Paisa per unit)
Sale of Contingent Purchase	225	79.99	3.56
Sale of Surpluses for Trading due to PPA obligation	819	362.75	4.43
Total	**1,044**	**442.74**	**4.24**

Revenue Surplus/Gap at Existing Tariff for FY18

9.1.15 Taking into account the revenue from sale within state at existing tariffs, revenue estimated from sale of power outside state for FY18 is as follows:

Table 174: Revenue Surplus/ Gap for FY18 based on Existing Tariff (Rs. Cr.)

Parameters	FY18
Approved Annual Revenue Requirement	**4,809.75**
Add:	
Impact of Final Truing-up of Controllable parameters of Second Control period and truing-up of uncontrollable parameters of FY15	119.55
Arrears of 7th Pay Commission Revision	85.00
Truing up of Second Control Period for HPPTCL	0.23
Truing up of Second Control Period for HPSLDC	1.21
Total Revenue Requirement for FY18	**5,015.75**
Less: Revenue from Sale of Power within State at Tariff of FY17	4,576.18
Less: Revenue from sale of Power Outside State	442.74
Revenue Surplus / (Gap)	**3.17**

9.1.16 The above estimated revenue surplus of Rs. 3.17 Cr. for FY18 also takes into account the adjustments on account of final true-up of controllable parameters of Second Control Period (FY12-14), revenue gap for final true-up of FY15 along with carrying cost, impact of 7th Pay Commission revision, truing-up of Second Control Period for HPPTCL and truing-up of Second Control Period for HPSLDC.

9.1.17 Accordingly, the Commission in this Tariff Order hereby continues the tariff approved in FY17. The category-wise tariff approved for FY18 is detailed as follows:

9.2 Changes in Tariff Structure

9.2.1 Based on the additional submission of the Petitioner, the Commission has modified the applicable tariff to various categories by making the following changes to the tariff schedule:

Tariff Applicability for Electric Charging Stations for Electric Buses

9.2.2 The Petitioner has submitted its request to include Electric Buses, Government Bus Stands (including Bus Stands under PPP mode) in Non-Domestic Non-Commercial Supply of Schedule of Tariff as they are providing services to general public, as described earlier in para 3.27.2. The Commission in its letter No. HPERC/MYT3APR2/HPSEBL/2016-17/1468 dated 30-08-2016 has already approved the applicability of Non-Domestic Non Commercial Supply (NDNC) Tariff category for the Electric Charging Stations for the Electric buses.

Construction Activities to be charged under Bulk Supply Tariff

9.2.3 The Commission has already approved the Petitioner's proposal vide letter no. HPERC/MYT3APR2/HPSEBL/2016-17/1170 dated 17.08.2016 on inclusion of construction activities like tunnel construction, etc. under Bulk Supply category in line with the construction power to hydro-electric projects as against Temporary Metered Supply earlier.

Rationalized Tariff Applicability on Hotels in Lahaul Spiti area

9.2.4 In view of the complete shut down of the hotels in the Lahaul Spiti area and representation in regard to provisioning of adequate relief from the high charges during the winter periods, the Commission has allowed applicability of seasonal tariff for hotels in the tribal areas of Lahaul Spiti, Kinnaur and Pangi.

Pond Fish Culture in farmer's own agricultural land to be charged under Irrigation and Drinking Water Pumping Supply (IDWPS) category

9.2.5 The Commission has approved inclusion of Pond Fish culture in farmer's own agriculture land in Irrigation and Drinking Water Pumping Supply (IDWPS) category of Schedule of Tariff.

Charging of Domestic Tariff for lighting of Garage used for parking of personal light motor vehicle

9.2.6 The Commission vide letter no. HPERC/MYT3APR2/HPEBL/2016-17/1469 dated 20.09.16 has allowed for consideration of lighting of garage used for parking of personal light motor vehicle under the Domestic category if the can be proved with documentary evidence.

Applicability of NDNC Category Tariff for Lifts in Group Housing Society, Apartments, etc.

9.2.7 The Commission approves for charging of Non-Domestic Non-Commercial Supply of Tariff Schedule from lifts operating in group housing societies, apartments, etc.

However, it is clarified that lifts operated in own residential premises shall continue to be charged under the domestic category.

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 not been revised since the licensee has recorded revenue surplus for FY18 as per approved ARR. The existing 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, garage used for personal light motor vehicle 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. (40x10).*

9.3.3 The Commission, after a detailed analysis, approves the tariff for Domestic category as under:

Table 175: Existing and 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	3.70	50.00	3.70	50.00
126-300	4.60	50.00	4.60	50.00
301 & above	5.10	50.00	5.10	50.00
Pre-paid meter	4.60	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; Office of Lawyers and Government recognized Non-Government Organizations (NGOs); Electric Charging Stations for electric buses; lifts operating under group housing societies, apartments, etc.

Note:

(1) 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.

(2) Lifts in residential premises shall be charged at the 'Domestic tariff'

9.3.7 The Commission has retained the existing tariff for NDNCS category as shown in the table below:

Table 176: 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	4.95	100.00	4.95	100.00

Table 177: 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	4.65	-	140	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 retained the existing tariff for the Commercial Supply category as shown in the tables below:

Table 178: 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	5.05	100.00	5.05	100.00

Table 179: 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	4.80	-	110	4.80	-	110
Above 100kVA	4.70	-	170	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 retained the existing tariff for the SIP category as shown in the tables below:

Table 180: 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)	110	-	4.70 (Rs./kWh)	110	-
Above 20kVA - 50kVA	4.50 (Rs/kVAh)	-	100	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 181: 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	-	120	4.50	-	120

9.3.18 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

9.3.19 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".

9.3.20 The Commission, after a detailed analysis, has retained the existing tariff for the Large Industrial Power Supply category as shown in the tables below:

Table 182: 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	-	425.00	4.10	-	425.00
HT-1 (up to 1 MVA)	4.50	-	250.00	4.50	-	250.00
HT-2 (More than 1 MVA)	4.20	-	400.00	4.20	-	400.00

9.3.21 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

BS: Bulk Supply

9.3.22 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, tunnel construction 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.

9.3.23 The Commission has retained the existing tariff for the Bulk Supply category as shown in the tables below:

Table 183: 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	5.00	-	250.00	5.00	-	250.00
HT	4.50	-	350.00	4.50	-	350.00
EHT	4.10	-	350.00	4.10	-	350.00

9.3.24 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

SLS: Street Lighting Supply

9.3.25 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.

9.3.26 The Commission has retained the existing tariff for Street Lighting category as shown in the table below.

Table 184: 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)
4.95	100.00	4.95	100.00

9.3.27 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

TS: Temporary Metered Supply

9.3.28 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.

9.3.29 The Commission has retained the existing tariff for the Temporary Supply category as shown in the tables below:

Table 185: 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	7.80	200.00	7.80	200.00

Table 186: 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	6.30	-	400.00	6.30	-	400.00

9.3.30 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

9.3.31 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, pond fish culture in farmer’s own agriculture land, 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.

9.3.32 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.

9.3.33 The Commission has retained the existing tariff for this category as shown in the tables below:

Table 187: 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	3.70	70.00	3.70	70.00

9.3.34 The two-part tariff applicable for IDWPS for connected load above 20 kVA shall be as shown in the table as follows:

Table 188: 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	4.85	-	50.00	4.85	-	50.00
HT	4.45	-	400.00	4.45	-	400.00
EHT	4.10	-	400.00	4.10	-	400.00

9.3.35 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

RT: Railway Traction

9.3.36 The Commission has retained the existing tariff for Railway Traction as shown in the table below:

Table 189: 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)
4.70	-	400.00	4.70	-	400.00

9.3.37 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

9.3.38 The average revenue realization as percentage of average cost based on the tariff approved for FY18 is provided below:

Table 190: Average Realization as % of Average CoS for FY18

Consumer Category	FY18 (Approved Tariff)
Industrial Power Supply	105%
Domestic *	88%
Irrigation and Drinking Water	107%
Commercial	110%
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*

9.4 Overall Revenue–Expenditure Position of HPSEBL at Approved Tariff

9.4.1 The Commission has computed the revenue surplus/ gap for FY18 based on the approved ARR and approved tariff which is given in the table below:

Table 191: Revenue Surplus/ (Gap) for FY18 (Rs. Cr.)

Parameters	FY18
Total Approved ARR (including prior period adjustments)	**5,015.75**
Less: Revenue from Sale of Power within State at Existing Tariff for FY18	4,576.18
Less: Revenue from sale of Power Outside State	442.74
Revenue Surplus / (Gap)	**3.17**

9.4.2 Based on the above table it is observed that the Petitioner would have a revenue surplus for FY18 which can be considered at the time of truing-up for the respective year. Further, any amount received by HPSEBL during FY18 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.

9.4.3 The Commission directs the Petitioner to transfer any surplus revenue realised in FY18 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.

9.5 Subsidy by Government of Himachal Pradesh

9.5.1 The Govt. of Himachal Pradesh has made a provision of Rs. 450 Cr. in the financial budget for 2017-18, for providing rollback subsidy to electricity consumers of domestic and agriculture categories during the year.

9.5.2 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 192: Subsidized tariff for Domestic category

Particulars	Units/month	Approved Tariff for FY18 (Rs/kWh)	GoHP Subsidy for FY18 (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, 2017. 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.

9.5.3 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 Introduction

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 Control Period.

10.1.2 Based on the wheeling ARR approved in Para 8.18.4, the average wheeling charges for FY18 are as below:

Table 193: Wheeling Charges for FY18

Particulars	Amount
Total ARR for Wheeling Business approved for FY18 (Rs. Cr.)	1,544.15
Approved Energy Sales (MU)	8436
Average Wheeling Charge (paisa per unit)	**183**

10.1.3 The above computed average wheeling charge of 183 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 FY18 have been segregated into wheeling and retail supply businesses in accordance with the allocation statement as detailed in para 8.18.3. 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. In the absence of actual voltage wise assets of HPSEBL, the Commission has apportioned the cost of HPSEBL's wheeling business of Rs. 1,544.15 Cr. as determined in the para 8.18.4, 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 194: Estimated Sales at Different Voltage Levels for FY18 (MU)

Category	Total Sales	EHT (>=66 kV)	HT (33kV)	HT (>=11 kV & <33kV)	LT (< 11kV)
Domestic Supply	2,141	-	-	-	2,141
NDNCS	138	-	17	25	96
Commercial	547	-	33	49	465
Small & Medium Industrial Power	219	-	-	-	219
Large Power Supply	4,522	1,583	1,469	1,469	-
Irrigation & Drinking Water Pumping	678	-	73	110	495
Street Lighting	13	-	-	-	13
Bulk supply	145	-	20	81	43
Temporary Supply	33	-	-	-	33

Category	Total Sales	EHT (>=66 kV)	HT (33kV)	HT (>=11 kV & <33kV)	LT (< 11kV)
Total (within State)	**8,436**	**1,583**	**1,612**	**1,734**	**3,506**

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 509.57 Cr. based on EHV component of the GFA. The same has been apportioned to sales at all voltage level.

(b) 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 195: Approved Wheeling Charges for Open Access Consumers for FY18

Sr. No.	Description	EHT (≥66kV)	HT (33kV)	HT (>=11kV & <33kV)	LT (<11 kV)
(i)	Total cost apportioned (Rs in Cr.)	509.57	243.41	261.83	529.33
(ii)	Cost allocation brought forward from the next higher voltage block) {(i)-(v)*vi)/1000}[Rs. In Cr.]		413.97	502.72	511.52
(iii)	Total allocation (i) + (ii) (Rs. In Cr.)	**509.57**	**657.38**	**764.55**	**1,040.85**
(iv)	Total Energy Quantum (Sales relevant to determination of per unit rate) in MU	8,436	6,853	5,241	3,506
(v)	Energy Sales	1,583	1,612	1,734	3,506
(vi)	**Rate of wheeling Charges in Paisa/unit (iii)/iv) of previous column**	**60**	**96**	**146**	**297**

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. 60 paise/ unit for FY18. 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 28th October, 2016 against Petition No. 27/2016. An additional surcharge of 49 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

10.6.4 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 FY18 is tabulated below:

Table 196: 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	1.80	0.36	1.05	0.36
2	Large Industrial Power Supply HT 2 Consumers	1.89	0.38	1.17	0.38
3	Irrigation & Drinking Water Supply Category - EHT Consumers	2.23	0.45	1.14	0.45
4	Irrigation & Drinking Water Supply Category - HT Consumers	1.41	0.28	1.18	0.28
5	Bulk Supply Category - EHT Consumers	2.47	0.49	1.19	0.49
6	Bulk Supply Category - HT Consumers	1.80	0.36	1.26	0.36

Cross-subsidy Surcharge for Short-term Open Access Consumers

10.6.5 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 FY18 based on the above formula are lower than the approved cross-subsidy surcharge for peak hours during FY17. 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 197: 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	0.36	0.79
2	Large Industrial Power Supply HT 2 Consumers	0.38	0.74
3	Irrigation & Drinking Water Supply Category - EHT Consumers	0.45	0.78
4	Irrigation & Drinking Water Supply Category - HT Consumers	0.28	0.61
5	Bulk Supply Category - EHT Consumers	0.49	0.49
6	Bulk Supply Category - HT Consumers	0.36	0.36

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.

10.6.6 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.

10.6.7 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 198: 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.

10.8.2 The Commission has also issued Draft Himachal Pradesh Electricity Regulatory Commission (Renewable Power Purchase Obligation and its Compliance) (Third Amendment) Regulations, 2016 dt. 11.08.2016 which proposes amendment to the minimum percentage of RPPO requirement. As the RPPO Regulations are still in the draft stage, the Commission has continued with the RPPO targets provided in the earlier RPPO Regulations, 2010 and its amendments.

10.8.3 Accordingly the minimum RPPO of the distribution licensee for solar and non-solar energy for FY18 is as under:

Table 199: Minimum quantum of Purchase from Renewable Sources & Projected RPO Obligation for FY18

Particular	Minimum RPPO %age of the gross requirement	Minimum RPPO quantum in MUs
Non-Solar	13%	1250.00
Solar	0.50%	48.04
Total RPPO	**13.50%**	**1237.97**

10.8.4 Accordingly, in this Order the Commission has approved the total purchase of renewable power by HPSEBL for FY18 as under:

Table 200: Approved Quantum of Renewable Power Purchase for FY18

Source	Units (MUs)	Amount (Rs. Cr.)
Solar	**58.25**	**38.57**
Singrauli Solar*	24.97	20.26
SECI	33.29	18.31
Non-Solar	**1751.03**	**454.74**
SHP Own Generation	472.93	105.41
SHP PPAs Preferential Tariff (Excluding on APPC under REC)	1278.10	349.33

**Cost from Singrauli solar excluding bundled thermal power.*

10.8.5 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.

10.8.6 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.

10.8.7 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 Third Control Period. In response to the directives and compliances submitted by the Petitioner during the processing of the Second 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 also directs the Petitioner to undertake an category-wise and age-wise analysis of the arrears with breakup of the arrears into: • Principal outstanding	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.	HPSEB Ltd. is making regular efforts to recover the outstanding amount from I& PH Department. The category wise and age – wise arrear of I&PH details is as per **"Annexure-IX"**. On our continued request Govt. of HP has given additional budget of Rs. 250 Cr. to I& PH Deptt. During the current year for liquidation of arrear of I&PH Deptt.	Compliance noted. Since the amount has now been budgeted, the Petitioner should take up the matter I&PH department for timely recovery of its dues. Also, with respect to the balance dues as well, the Petitioner is required to take up with the I&PH department for timely recovery of the complete dues. Further, the Petitioner is still to provide information with respect to the category-wise and age-wise analysis of the arrears for all the categories. The Petitioner should provide the same along with next APR filing.

Direction	Commission's observation	Compliance status	Additional Observation
• Surcharge outstanding • Arrears of less than one years • Arrears of one to five years • Arrears older than five years The Commission also directs the 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 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	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. .

Direction	Commission's observation	Compliance status	Additional Observation
The Petitioner is directed to consider the commercial principles and merit order before procuring power from the unallocated quota.			
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 that HPSEBL avoids buying costly power from new thermal stations in future.**	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 direction and instructs the Petitioner to provide tangible proof of any actions taken in this regard.	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.
Clause 7.15.2: a) The Petitioner is directed to submit the complete details of the proposed	As per the claim of the petitioner all schemes are formulated / prepared on the basis of cost benefit analysis. The Commission	The cost benefit analysis of each scheme is provided / available with the concerned CEs being executing agency of the work. The funding patterns of these schemes are as per REC guidelines. Besides, this fully	As per the MYT Regulations. 2011, HPSEBL is required to take approval of each 33kV scheme separately along with supporting documents. However, in the

Direction	Commission's observation	Compliance status	Additional Observation
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	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.	efforts are being made to achieve the loss reduction target as per RGGVY/ R-APDRP norms. The detail of schemes wise/ work wise capital expenditure & capitalization for the year 2011-12 to FY 2015-16 are enclosed as "**Annexure-III**"	current Mid-term Review Petition, HPSEBL has proposed 48 new EHV schemes without providing any details. The Petitioner is required to provide the requisite information of all the schemes within three months from issue of this Order. It is also observed that the Petitioner is unable to provide complete 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 undertake adequate steps in this regard and a compliance report for the steps undertaken to be submitted along with the subsequent petition.

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			

Direction	Commission's observation	Compliance status	Additional Observation
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 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	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	**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	Compliance Noted. However, the Commission as provided a fresh directive for submission of half-yearly progress report of the various capital works

Direction	Commission's observation	Compliance status	Additional Observation
Petitioner would undertake appropriate measures for timely execution of the various projects covered under the R-APDRP / RGGVY schemes.	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 the Petitioner deems fit. The Petitioner is directed to provide the above report within three months from the issue of this order.	departmentally. The case is under consideration in arbitration so the exact date of completion could not be intimated. **<u>District wise completion status of RGGVY XIth Plan:</u>** In respect of RGGVY XIth plan all districts have been completed & closure reports of 11 districts have been submitted to M/s REC Ltd. District wise status of RGGVY Xth&XIth plan is enclosed herewith as "**Annexure-X"** on desired parameter. **R-APDRP (Part- A):** Status of R-APDRP Part-A Project is as under:- **Original timeline for completion:**3rd September, 2012 (Copy enclosed) **Timeline extended for completion:** 31st March, 2017 (copies enclosed) **Actual completion date:** 25th June, 2015 (copy ofletter requesting TPIEA-IT inspection/ deputation is enclosed). TPIEA-IT (i.e. M/s NTPC Ltd. has completed the inspection/ verification work and submitted the report to M/s PFC Ltd. during October, 2016. Now, acceptance/ approval of Ministry of Power (MoP) isawaited to convert the loan into grant. **Reasons for delays:** HPSEB Ltd. had	under implementation.

Direction	Commission's observation	Compliance status	Additional Observation
		almost completed R-APDRP Part-A project in June, 2015 and accordingly requested the Ministry of Power (MoP), Govt. of India (GoI) to depute the TPIEA-IT for verification on dated 25th June, 2015. TPIEA-IT has started their work since August, 2015 and submitted the report to M/s PFC during October, 2016. Since, the project completion timelines for R-APDRP Part-A in Himachal Pradesh has now been extended up to 31st March, 2017; so there is no time delay for completion of R-APDRP Part-A in Himachal Pradesh. **Benefits achieved after implementation of the scheme**: The main benefit of the scheme is that there is actual demonstration of performance in terms of sustained loss reduction and established reliable and automated systems for sustained collection of accurate base line data through adoption of information technology in the area of energy accounting. Supporting Documents are attached as "**Annexure-XI**" **R-APDRP (Part-B) :** In respect of 14 No. R-APDRP (Part-B) towns viz. Chamba, Kullu, Una&Mandi have been completed (only financial part remaining) & 2 No. towns (i.e. Hamirpur&Nahan) are almost completed. 8	

Direction	Commission's observation	Compliance status	Additional Observation
		No. towns (i.e. Baddi, Bilaspur, Dharamshala, Paontasahib, 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-XII"** as per desired parameters.	
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.**	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	The detail of scheme wise/ work wise capital expenditure & capitalization and its source of funding for the year 2011-12 to FY 2015-16 is enclosed as "**Annexure-III"**	As per the audit paras under the audited accounts, there seems to be no improvement in account keeping with respect to capital schemes at the field as well as head office level. The Petitioner should undertake adequate steps in this regard and a compliance report for the steps undertaken to be submitted along with the subsequent petition.

Direction	Commission's observation	Compliance status	Additional Observation
	monitoring thus ensuring better project management practices.		
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	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. The petitioner is directed to expedite the decision on the	The Detailed status of compliance of this direction is attached in "**Annexure XIII"**	The Petitioner is directed to keep pursuing with the various developers/ agencies for recovery of the balance amount booked under S&I.

Direction	Commission's observation	Compliance status	Additional Observation
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 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.**	same and take necessary action for recovery of the balance amount from the IPPs.		

11.1.3 It is further observed that the Petitioner has not submitted the compliance towards the fresh directives issued by the Commission in the 2nd APR Order for the Third Control Period. The Commission takes serious note on the non-submission of the complete compliances and directs the Petitioner to ensure full compliance to the directives/ advisories issued by the Commission. The previous year fresh directions have also been included hereunder:

Fresh Directives

Half-Yearly Reporting of Capital Schemes and Works

11.1.4 The Commission also arranged a Management meeting with the senior officials of HPSEBL on 1st April 2016 to discuss and 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.

Tariff Petitions for New Generating Stations

11.1.5 It is observed that the Ghanvi-II HEP is operational since April 2014 while Uhl-III HEP is expected to commission during FY18. HPSEBL is directed to file separate petition for determination of capital expenditure and approval of tariff for these hydro power stations at the earliest.

Steps to implement Accounting Procedures for Maintenance of data for Capital Works at Field-level

11.1.6 The Commission has undertaken truing-up of the Controllable Parameters for the Second Control Period i.e. FY12-FY14 wherein the Commission has reviewed the capital expenditure and capitalization undertaken during the Second Control Period. However, the information provided is basic and lacks details on scheme-wise and work-wise funding, IDC, etc. Also, the Commission takes serious concern over the accounting practices being followed by the utility as highlighted in the Paras of the Auditor's report and directs HPSEBL to adopt prudent accounting practices and develop suitable mechanisms and procedures for proper accounting. HPSEBL is required to undertake adequate steps for maintenance of data with regard to capital works and schemes both at field-level and headquarter level. The details regarding steps proposed and undertaken by the HPSEBL is required to be submitted with subsequent APR filing.

Details of Contract Demand and Sales

11.1.7 The Commission directs the petitioner to maintain details of contract demand, number of consumers and sales to each category and sub-category (particularly with respect to HT-1, HT-2 and EHV categories) and submit the same along with the subsequent tariff petitions.

Promote awareness for Electric Appliances

11.1.8 In order to reduce the carbon footprints in the State and promote consumption of clean hydro power, the Petitioner is advised to run campaigns to educate the consumers for usage of energy efficient electric appliances for daily activities i.e. use of induction plates for cooking, water heating, etc.

Issuance of New Connection

11.1.9 The petitioner must ensure that a new connection is released only after the completion certification for construction has been awarded during which the site must avail electricity at the temporary tariff.

Maintenance of Pension Contribution for Employees shared with Generation, BVPCL, Projects and S&I

11.1.10 It is observed that the Petitioner is not maintaining or assessing the details of pension contribution and leave salary of generating stations, BVPCL, Project and S&I. As per 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, HPSEBL is required to separately maintain information with respect to the pension contribution of employees on deputation in commissioned projects and in BVPCL, Projects and S&I. The Commission accordingly directs to maintain such information separately and provide details from the subsequent tariff filings.

Voltage-wise Cost of Supply Study

11.1.11 HPSEBL is directed to carry out a study of the voltage-wise demand and coincident demand at various voltage levels as well as cost of power purchased linked with the load factors associated with such supplies at different voltages and submit along with the tariff petition for subsequent year.

Online Payments

11.1.12 The Commission advises the HPSEBL to exempt consumers making online payments from paying transaction charges to promote digitization in billing and payment system. Similar to the arrangement with HDFC Bank, the Petitioner should pursue waiver of transaction fees with other banks and financial institutions. This will also help in reducing efforts for consumers making payments at HPSEBL's office. In spite of the best efforts of HPSEBL if there is any incidence of transaction fees on HPSEBL, the Commission may allow for such amount as pass-through on submission of proper records by HPSEBL in the future years.

Details of Security Deposits on Bills

11.1.13 The Commission has advised HPSEBL in HPERC (Security Deposit) (Second Amendment) Regulations, 2015 dated 28.11.2015 that HPSEBL should furnish details of security deposits in case of HT and EHT consumers along with monthly electricity bills. The Commission takes cognizance of the objection raised by the stakeholder and directs the Petitioner to comply with the requirements stated in the Regulations within two months of issuance of this Order and report the compliance to the Commission along with the subsequent APR filing.

11.1.14 HPSEBL is advised to continue its effort towards the implementation of various key reform measures which includes 24x7 reliable and quality power supply to the consumers, reduction in losses, compliance with the standards of performance and improvement in overall efficiency in its working.

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, 2017** 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, 2017** that was in force with effect from 1st April, 2016 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	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, shall be 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. <u>Lower Voltage Metering Surcharge (LVMS):</u> 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. The provisions under this clause shall also be applicable for such hotels in the Lahaul Spiti area which remain closed for most of the winter months. 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) and the contract demand not exceeding 20 kVA which shall be availed by him during such period for maintenance and overhauling of its plant and lighting, etc.

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 the rates under the relevant category of "commercial supply" tariff depending on the contract demand to be availed by him during such period as per item (i) above.

iv) The consumer service charge, demand charge or any other fixed charge shall be levied as per the respective tariff applicable for seasonal period and off-seasonal period. However, no such fixed charges shall be levied if the consumer totally closes down its installation during the off-season and doesn't draw any load.

Note: The provisions relating to temporary revision of contract demand as per item S shall not be applicable in case of consumers claiming relief under this clause

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:

Power Factor = kWh / kVAh

In case of defective tri-vector meter/bi-vector meter/two part tariff meter, power factor will be assessed on the basis of average power factor recorded during last three consecutive months when the meter was in order. In case no such readings are available then the monthly average power factor of three months obtained after installation of correct tri-vector meter/ bi-vector meter/ two part tariff meter shall be taken for the purpose of power factor surcharge during the period the tri-vector meter/ bi-vector meter/ two part tariff meter remained defective.

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 thereof or;

(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. 01.04.2017 under this mechanism but gets his sanctioned contract demand permanently reduced to 8 MVA w.e.f. 01.05.2017, he shall have to pay charges based on 6 MVA contract demand till 30.06.2017 (i.e. till the expiry of 3 months period from the date at which the contract demand was last revised i.e. from 01.04.2017). However, if the contract demand is to be reduced permanently to lesser than 6 MVA (say 4 MVA as on 01.05.2017), the demand charges would have been based on a contract demand of 4 MVA during the period upto 30.06.2017.

T. <u>Sanction of Contract Demand:</u>

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 exceed750 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	5MVA
		(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.	18MW	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.

(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 itsimpact 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.

l) Personal Garage for parking of personal light motor vehicle

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*M*MERCIAL 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) Office of Lawyers and Government recognized Non-Government Organizations (NGOs)

j) Electric Charging Stations for the Electric buses

k) Lifts operating in group housing societies, apartments, etc.

Note: (1) *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) Lifts in residential premises shall be charged at the 'Domestic tariff'

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 theseconsumers 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.*

SCHEDULE – COMMERCIAL SUPPLY (CS)

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.

Note: *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 INDUSTRIA*L 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 AverageDemand * (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): (1) *Applicable as per provisions under 'Part-1 General Conditions of Tariff' for the consumers covered under single part tariff.*

(2) Not applicable for consumers covered under two-part 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 AverageDemand	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):** *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 - 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 AverageDemand	Energy Charge (Rs./kVAh)

	(Rs/kVA/month)	
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, pond fish culture in farmer's own agricultural land, 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
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 AverageDemand (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 provision sunder 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 threephase 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

S. No.	Description		Approved by the Commission
(VI)	General		
(a)	Dielectric strength of oil of various equipment		Rs. 220/- per sample
(b)	Earth test of substation		Rs. 220/- per earth
(c)	Insulation resistance of cables/insulation of various equipment /installations		Rs. 220/- per cable/ equipment
C. Testing charges at the time of routine periodical inspections or first test and inspection of new installationwhich includes protectionand 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).			
(i)	11/22 kV	**Substations**	Rs. 10,000/-
(ii)	33 kV		Rs. 15,000/-
(iii)	66 kV		Rs. 50,000/-
(iv)	132 kV		Rs. 1,00,000/-
(v)	220 kV		Rs. 3,00,000/-
(vi)	SHP Capacity (up to 2.5 MW)	**Small Hydro Plants**	Rs. 25,000/-
(vii)	SHP Capacity (greater than 2.5 MW)		Rs. 50,000/-
D.	Visiting charges		
	Visiting charges for Officers and staff to Consumers premises for testing of equipments(other than C above)		Rs. 3500/- per day for complete team PLUS actual journey charges as per out turn of vehicle
Remarks: -			
(i) The charges mentioned under 'C' above shall be charged for the actual Periodical Inspection done and shall be on per inspection basis only.			
(ii) Visiting charges mentioned under D above include the visiting charges of M&T staff as well.			
(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.			
(iv) Complete testing of 11kV, 22kV and 33 kV connections as per item C above shall be conducted before the release of HT connection.			
(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.			
(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.			
vii) The requests for testing shall be entertained by the concerned operation sub-division which will be responsible for arrangingall tests including tests by the M&T Lab and also for the recoveries of all thecharges, including those of M&T Lab			
viii) The amount recovered from consumers for testing carried out by theM&T Lab shall be adjusted through inter divisional adjustment between the operation divisions and the M&T divisions.			

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
5. Reconnection of supply		

S. No.	Description	Approved by the Commission
(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 installationor of an extension to the existing installation	Nil
(ii)	For everysubsequent 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.	
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	

S. No.	Description	Approved by the Commission
(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. CostofApplication/Agreement Form and wiring Contractor's test report forms:		
	For allcategories	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