Fourth Annual Performance Review Order

For 3rd MYT Control Period (FY15-FY19)

&

Determination of Tariff for FY19

&

True-up of FY16 of 3rd MYT Control Period

for

Himachal Pradesh State Electricity Board Limited (HPSEBL)

Himachal Pradesh Electricity Regulatory Commission

May 04, 2018

BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION AT SHIMLA

PETITION NO: 75/2017

CORAM

Sh. S.K.B.S. NEGI

Sh. BHANU PRATAP SINGH

IN THE MATTER OF:

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

AND

IN THE MATTER OF:

Himachal Pradesh State Electricity Board Limited

… APPLICANT

The Himachal Pradesh State Electricity Board Limited (hereinafter called the 'HPSEBL' or 'Petitioner') has filed a petition with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as 'the Commission' or 'HPERC') for Fourth Annual Performance Review (APR) of the Third MYT Control Period (FY15 - FY19) and approval of Aggregate Revenue Requirement (ARR) and determination of Wheeling and Retail Supply Tariff for FY19 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 FY16 and FY17.

The Commission having heard the applicant, interveners, consumers and consumer representatives of various consumer groups on 5th March, 2018 at Shimla and having had formal interactions with the officers of the HPSEBL and having considered the documents available on record, herewith accepts the application with modifications, conditions and directions specified in the following Tariff Order.

The Commission has determined the ARR of the distribution business of HPSEBL for FY19 under Third MYT Control Period (FY15-FY19) and approved the Wheeling and Retail Supply Tariff for FY19 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, 2018.

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, 2019. In the event of failure on the part of the licensee to file application for true-up for FY17 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, 2018, the tariff determined by the Commission shall cease to operate after March 31, 2019, 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	**(BHANU PRATAP SINGH)**	**(S. K.B.S. Negi)**
Dated: May 04, 2018	**Member**	**Chairman**

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1 Introduction

Background

1.1 Himachal Pradesh Electricity Regulatory Commission

1.1.1 The Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as 'HPERC' or 'the Commission') constituted under the Electricity Regulatory Commission Act, 1998 came into being in December 2000 and started functioning with effect from 6th January, 2001. After the enactment of the Electricity Act, 2003 on 26th May, 2003, the HPERC has been functioning as 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 99172 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 Fourth APR of 3rd MYT and Tariff Petition for FY19

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. The Commission also issued the Mid-Term Performance Review for the Third MYT Control Period on 17th April, 2017.

1.4.5 The HPSEBL has filed petition with the HPERC for Fourth Annual Performance Review (APR) of the Third MYT Control Period (FY15 - FY19) and approval of Aggregate Revenue Requirement (ARR) and determination of Wheeling and Retail Supply Tariff for FY19 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 Fourth APR Petition, HPSEBL has submitted truing-up of uncontrollable parameters of FY16 and FY17.

1.4.6 This is the fourth Annual Performance Review Order under the Third MYT Control Period. In this Order, Commission has undertaken determination of revised Aggregate Revenue Requirement of HPSEBL for FY19 under the Third Multi Year Tariff (MYT) Control Period based on actual values of FY17 and approval of Wheeling and the Retail Supply Tariffs for FY19 based on the updated information submitted by HPSEBL. Also, final truing-up of uncontrollable parameters for FY16 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. FY16 has also been considered for recovery along with the revised ARR for FY19.

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 fourth Annual Performance Review (APR) of the Third MYT Control Period (FY15-FY19) along with approval of ARR and determination of Wheeling and Retail Supply Tariff for FY19, with the Commission on 30th November, 2017. The petition also included true-up of uncontrollable parameters for FY16 and FY17. 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 29th December, 2017. 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/Annual Performance Review/HPSEBL/2017-18-2272-74 dated 14.12.2017.

(ii) HPERC/Annual Performance Review/HPSEBL/2017-18-2817-19 dated 09.02.2018.

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 140/2017 dated 30th November,2017
2	Filing No 34/2018 dated 28th February, 2018
3	Filing No 48/2018 dated 21st March, 2018
4	Filing No 58/2018 dated 29th March,2018

Public Hearings

1.5.7 The Commission issued an interim order to the HPSEBL on 29th December, 2017 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– 03rd January, 2018.

b. Divya Himachal – 03rd January, 2018.

c. Hindustan Times– 06th January, 2018

d. Punjab Kesari – 06th January, 2018.

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. Times of India (Chandigarh Edition) – 12th January, 2018.

b. Divya Himachal (Dharamshala & Shimla Edition) – 12th January, 2018.

1.5.9 The interested parties/stakeholders were asked to file their objections and suggestions on the petition by 01st February, 2018. The date of filing replies by HPSEBL was fixed on 15th February, 2018.

1.5.10 The Commission received objections from 20 stakeholders by the stipulated date. The HPSEBL filed its replies to the objections/ suggestions set out by various objectors vide letter No. HPSEBL/CE-(Comm.)/SERC-26(Vol-24)/2017-18352-64 dated 21.02.2018, 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 24th February, 2018. The Commission received rejoinders from 3 stakeholders by the stipulated date. HPSEBL filed its replies to the rejoinders vide letter No. HPSEBL/CE(Comm.)/SERC-26(Vol-24)2017-18694-97 dated 03.03.2018.

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 5th March, 2018 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 5 of this Order.

2 Interaction with Management of HPSEBL and Compliance of Decisions

2.1 Introduction

2.1.1 HP Electricity Regulatory Commission organized a consultative meeting with the management of HPSEB Ltd. on 03.04.2018 at HPERC office to discuss the issues pertaining to annual performance review/ true up petition filed by HPSEBL.

2.1.2 The following issues as per the agenda items circulated earlier were discussed during the meeting:-

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

2.2.1 Ujwal DISCOM Assurance Yojana (UDAY) is a financial turnaround and revival package for electricity distribution companies of India (DISCOMs) initiated by the Government of India with the intent to find a permanent solution to the financial mess that the power distribution is in. 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 Chairman, HPERC enquired about the position of Bonds to be issued by HPSEBL for the remaining 25 percent of their debt under UDAY scheme. It was informed by Director (Finance), HPSEBL that the rates offered by various banks are higher than the existing rates. However, they are still in negotiation with State Bank of India (SBI) and HP State Cooperative bank Ltd. (HPSCB). It was further conveyed that the deal with HPSCB is likely to be closed at a rate of 8.25% for Rs. 325 Crore. The following points, as highlighted in the UDAY MoU, were discussed in the meeting:-

a) Measures for Loss reduction taken by HPSEBL:-

The performance of a distribution utility is known by its AT&C losses. It was informed by HPSEBL management that T&D losses are very much on the lower side of the target fixed by HPERC. AT&C losses have also been reduced over the years. These losses are primarily due to non-payment by Government departments especially I&PH department. The annual electricity bill of I&PH department is around Rs. 475 crore. It was informed that the past arrears of I&PH department has been recovered. This year's budget allocation is around Rs. 500 crore. Therefore, collection efficiency is likely to be 100%. Billing efficiency is also good except for some Electrical Divisions there also situation will be improved very soon. Central billing is being introduced in phased manner for consumers having connected load more than 100kVA. All APDRP towns have already been covered. Some towns will be covered under IPDS scheme and balance will be covered as per scheme of GoI for which the work has been awarded to M/s REC.

The following points were discussed regarding loss reduction initiatives taken by HPSEBL:-

- ***Defective DT Meters and other defective meters replacement-***

  HPSEBL informed that as of 31.12.2017 there are 30,162 number of installed DTR meters in HP out of which 8140 DTR meters are defective. In case of consumers' metering there are 43502 single phase meters and 978 three-phase meters found to be defective. The same are targeted to be replaced within six months. Chairman directed the HPSEBL to replace all the defective meters on war footing.

- **Identification of loss prone areas and reasons and remedial measures-**

  It was informed by HPSEBL that their T&D losses are among the lowest in the country. However, the loss level in three circles of HPSEBL namely – Rohru, Rampur and Kullu are on the higher side as compared to other circles. Meters using Electro-mechanical Meters supplemented by Dead-stop/ Defective meters are the main reasons for this. The problem is further aggravated by presence of long distance distribution network in these circles. Also, the majority of the consumers, around 90%, are domestic in these circles which aid to increase in losses. To ensure that losses are reduced, HPSEBL is making sure that electro-mechanical/ Dead-stop/ Defective meters are replaced by Electronic meters. Further, under the

Capex works, General Service Connection and System Improvement Schemes are under execution. This will result in reduction of technical losses of HPSEBL in general and in these circles in particular. Effective monitoring is being done for circle-wise and division-wise targets are fixed for the units through monthly Key Performance Indicators (KPI) in the meetings.

- **Undertaking name and shame campaign to control power theft from time to time-**

  Chairman, HPERC emphasized the need for publishing in newspapers the name along with photographs of the habitual defaulters and theft of energy cases. HPSEBL informed that at present there are no big habitual consumers who are defaulting in making the payments. As such there is a no need felt at present for undertaking such campaigns. Chairman, HPERC enquired about the recent cases of defaults in making electricity bill payments by an industry in Baddi area. HPSEBL clarified that the amount involved is around Rs. 6 crore which has been accumulated in a period of two months as billing is done after a period of one month and also there is 15 days' notice period as well. The issue of billing fraud/ check bounce made by "Lok Mitra" was also enquired from HPSEBL. It was informed by HPSEBL that this matter is likely to be settled within a period of six months. Also, the cases are being persuaded aggressively in the court of law.

- **Area based incentives and disincentive scheme for field staff linked with efficiency and reduction in losses-**

  Chairman, HPERC emphasized the need for incentive/ disincentive scheme for employees linked with losses reduction targets. It was informed by HPSEBL that they are in a process of framing a comprehensive proposal for incentivizing/ disincentivizing the officer/ staff for their performance in achieving T&D/ AT&C targets. It has been proposed that some percentage of incentive provided by HPERC for over-achievement of T&D targets to HPSEBL should be passed on as incentives to employees of HPSEBL.

- **Preparing loss reduction targets at sub- division/ Division/ Circle/ Zonal level and making concerned officers responsible for achieving targets-**

  It was informed by HPSEBL that at present the targets for loss reduction are fixed up to the Circle Level by the Management. Thereafter the target at Sub-Division and Division level are fixed at Circle level in order to achieve overall T&D loss target for the Discom. The loss reduction is carefully monitored at all the levels. The annual appraisal of the officers does take care of this aspect in particular. Executive Director (Personnel), HPSEBL informed that the qualified ITI holders and other staff are being recruited based upon the requirement. Chairman, HPERC advised that the posts in Electrical Sub-Divisions must be filled up first so as to ensure proper billing and maintenance of the distribution system. He further advised that the technical staff should not be utilized for office works.

- **Implementing performance monitoring and management system MIS for tracking the meter replacement, loss reduction and day to day progress for reporting to top management-**

  It was informed by HPSEBL that a trial MIS for monitoring of performance related parameters like status of meter replacement, T&D losses, AT&C losses etc. is already functional. The results shall be shared after stabilization of the same.

- **Energy Audit-**
  It was informed by HPSEBL that Energy audit studies for 2016-17 has been completed for nine operation circles and reports have been sent back to them as well as to HPERC. The Electrical Divisions where the AT&C losses are on the higher side have been identified. All efforts are being made to reduce the T&D losses in these divisions. The high revenue earning divisions like Baddi, Nalagarh, Nahan, Poanta, Una and Gagret are being monitored very meticulously. The quantum of energy being consumed in these high revenue earning divisions is much more than other divisions. These high revenue earning divisions have been showing reducing trend in T&D losses.

- **Meter performance analysis-**
  It was informed that HPSEBL has a testing laboratory that is being utilized for checking the performance of the Meters. Meters from the firms are thoroughly tested and action is taken based on terms and conditions of the tender if the operation of the meters is found to be unsatisfactory. Also, HPSEBL has awarded an assignment to M/S YMPL for testing of meters, CT and PT of 1795 HT consumers pertaining to LIPS category is under progress. At present total of 153 number connections have been found to have some kind of abnormalities like wrong multiplying factor. Wrong polarity, CT/PT unit defective or slow, meter defective/ slow and meter not working properly etc. Further, HPSEBL has awarded separate tender to M/s Sai Engg. for

analyzing of MRI data of the industrial consumers. This has been done to ensure that the meters work in healthy conditions.

- **Undertaking Feeder improvement program for network strengthening and optimization-**

  It was informed that all the 12 operation circles have been asked to identify the distribution feeders with poor performance indices. These poor performing feeders shall be undertaken for their strengthening and improvement in order to have better services to the consumers.

b) Other issues:-

- **Installation and Position of Smart Meters-**

  The Tariff Policy, 2016 provides that:-

  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.

  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.
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.

It was informed by HPSEBL that AMR system has been installed for 612 consumers under R-APDRP and for 218 consumers under SAP-ISU billing (Total-830) to the consumers having connected load above 100 KW. Further 1252 Smart meters (914 Single phase & 338 three phase have been installed to the consumers under Smart Grid pilot project at Kala Amb. Further, it was informed that roll out of smart meters as per the provision of the Tariff Policy will take some more time as presently huge investment is required as cost of smart meter is a major issue. Besides, cost of the smart meter, associated infrastructure is four time costly to that of the normal electronic meters at present. Therefore, smart meters shall be implemented in a phased manner. In the first phase, smart meters may be placed in the cities like Shimla and Dharmshala under Smart City Project of GoI.

- **Implementing ERP System in HPSEBL-**
  It was informed that the implementation of ERP system was initiated in HPSEBL during the year 2012 and as on today stands implemented in 16 offices at Head Office, 51 offices of central zone (Op) (Hamirpur & Bilaspur Op. circles), 114 offices of South Zone (Op.), & 71 offices of Electrical System wing.

- **Consumer awareness program for DSM and Energy Efficiency-**
  It was informed that the HPSEBL through its Public Relation Cell is continuously organizing public awareness programmes at various locations in the State. Further with the help of print media, consumers of the state are being sensitized about the need for adopting energy saving measures. Further DSM action plan was prepared by M/S EESL and has been submitted to the HPSEBL, under which Energy saving potential was identified for different category of consumers and action plan has been further submitted to the HPERC and in-principle approval had also been accorded for the same. Domestic Efficient Lighting Program (DELP)/ Unnat Jyoti by Affordable LEDs for All (UJALA) Programme in the State had also been implemented through M/S EESL. During the implementation of this scheme, awareness campaigns were initiated by EESL among the consumers of the state. Trainings on DSM were also imparted by FICCI Delhi, organised by BEE, Ministry of Power, GoI to the field officials/ officers of HPSEBL to strengthen the Demand Side Management.

- **Preparation of Annual Accounts-**

  HPSEBL needs to take prompt action to finalize its annual accounts so as to have timely submissions of the true-up tariff petitions. It was informed by HPSEBL that the annual accounts of the Company are being prepared on accrual basis in accordance with the Generally Accepted Accounting Principles in India (Indian GAAP) to comply with the Indian AS notified the

Companies (Indian Accounting Standards) Rules, 2015. The Accounts for the FY 2015-16 were finalized and adopted by the Board of Directors /AGM in its meeting held on 07-03-2018. The process for finalization of Annual Accounts for the FY 2016-2017 is in final stages and shall be submitted to Statutory Auditor for audit before 15.4.2018. The main reason for delay in finalization of accounts is changes/ submission to Statutory Auditor for FY 2013-14 in the middle of year and delay in finalization of 1st Accounts of the HPSEBL. Efforts are being made to stream line/ finalize the accounts on scheduled date as per requirement of Companies Acts.

- **Capacity Building-**
  Capacity building is an important parameter for improving the skills of its employees. Therefore, HPSEBL needs to give due emphasis for capacity building of its officers and employees. It was informed that HPSEBL has a dedicated Training cell that organizes various types of training for all categories of staff throughout the year. Further trainings are also tied-up with reputed national institutes within as well as outside the state, from time to time to acquaint the employees with the latest trends in Power sector. 2647 officers/ officials have been imparted training during 2017-18 with an expenditure of approx. Rs. 1.85 Cr.

- **HPSEBL Call Centre-**
  It is very important for a service providing organization to have a prompt complaint resolution mechanism in place. HPSEBL needs to improve the working of its Customer Call Centre. It was informed that HPSEBL is providing the best services to its consumers and has established a 24X7 Customer Complaint Centre wherein consumers can register their complaints any time. Further, HPSEBL is in a process of establishing a fully computerized Call Centre within six months.

- **Power purchase through transparent bidding-**
  HPSEBL must forecast its power demand requirement in future and accordingly go for power procurement through competitive bidding process as mandated in the tariff policy as well. HPSEBL management informed that they already have enough long term arrangement with the power producers to meet the demands of the consumers of the state and as such all power is being procured in transparent manner with approval of the Commission.

2.3 Action plan to reduce expenditure and to increase revenue of HPSEBL

2.3.1 It was emphasized that there is an urgent need for HPSEBL to reduce its wasteful expenditure and try to increase the revenue by undertaking suitable efficiency improvement measures. HPSEBL management informed that Power Purchase cost constitute approx. 64% of total ARR of HPSEBL followed by Employee Cost that forms approx. 29% of Total ARR. The Power procurement is being done very judiciously with an aim to ensure that cheapest and most reliable power is procured. Further, under UDAY Scheme the cash flow of HPSEBL has also improved and thereby the Late Payment Surcharge has reduced drastically and HPSEBL has been able to claim rebates from the generators on timely payments. HPSEBL is also selling its RE power outside the state that has direct implication on reducing the ARR of HPSEBL as it forms part of the Non-Tariff income and further helps in improving the cash flow of HPSEBL.

2.3.2 Further to address the problem of higher expense under Employee Cost HPSEBL has started implementation of many IT based schemes so as to reduce the staff requirement. However the reduction in employee expenses due to automation of all its offices by implementation of SAP will bear results once the exercise is completed. Further, recruitment is being done strictly where there is acute shortage of staff and that too on contract basis. It was advised that excepting technical staff no other staff be recruited in future. HPSEBL must outsource all services as far as possible in order to reduce employee cost.

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

2.4.1 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. HPSEBL informed that the following reform initiatives were taken by it during last five years to reduce its losses:-

a. All efforts such as IT initiatives, training to staff etc. are being made to increase the staff productivity so as to cut down its financial losses.
b. HPSEBL has reduced its man force and new recruitments are being carried out on contractual basis.
c. HPSEBL is doing the billing for industrial consumers through AMR which has increased its billing & collection efficiency.

d. Against the T&D target of 12.40% for FY 2016-17 HPSEBL has been able to achieve reduction up to 11.43% for FY 2016-17. The same is among the lowest in the country and is on a very lower side in comparison to 22.44% in 2004-05.
e. 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.
f. RAO audit paras of HPSEBL have also been reduced by 40%.
g. With the implementation of UDAY Scheme of GOI the cash flow of HPSEBL has improved and Late Payment Surcharge has reduced considerably.

2.5 Organizational structure reforms

2.5.1 It was informed that HPSEBL has taken lead by recruiting ITI trained persons as Junior T-mates to cope with the requirements of present day technical know-how in maintenance of equipment and lines. Similarly induction of qualified Junior Office Assistants with good knowledge of computers and accounting IT tools has helped in better and efficient working in the offices. The HPSEBL has also adopted New Pension Scheme which in turn will result in reduced terminal liabilities in coming years. Most of the recruitments are being done on contractual/ out-sourced basis so as to have some financial relief.

2.6 Strict implementation of transfer policy

2.6.1 It was emphasized that HPSEBL must adopt some prudent transfer policy as it is essential for overall growth of an organization. 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. HPSEBL management informed that the transfer policy approved by the management of HPSEBL is being implemented in letter and spirit.

2.7 Fixing of employee cost norms

2.7.1 The issue of higher employee cost of HPSEBL was discussed in the meeting. The per unit employee cost of HPSEBL is one of the highest in the country. The neighbouring state Uttarakhand with similar geographical conditions has much lesser workforce. It was stressed that HPSEBL needs to fix the prudent employee cost norms. HPSEBL informed that a committee has already been constituted for rationalization of post/ staff. The Committee is likely to submit its report in next two months and the Commission shall be informed accordingly.

2.8 Separation of generation cadre

2.8.1 Chairman, HPERC stressed the need for separation of the generation cadre of employees from the distribution as each function requires distinct expertise. Also, it was advised by the Chairman, HPSEBL that the Civil Engineering cadre be transferred to HPPCL. As per the existing practice, the monthly accounts of Generation Wing are being prepared by RE Divisions which include more than one or two Generating Plants/ Power station. Therefore, the practice of maintaining account as per Generating plant-wise is yet to be introduced in Generation Wing of HPSEB Ltd. However, separate accounts of Generation wing (Balance Sheet and Profit & Loss Statements) 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.

2.9 Standardization of processes, SOPs for Power Houses and its strict compliance

2.9.1 It was emphasized that HPSEBL needs to make standard of performance parameters for its power houses and the same must be strictly complied with so as to improve the efficiency. HPSEBL informed that SOPs for major Power Plants (Larji, Bhaba, Giri, Ghanvi, Giri-Dam) have been finalized and are under implementation.

2.10 Procedural amendments required to make HPSEBL work in an efficient, transparent and citizen friendly manner

2.10.1 Chairman, HPERC stressed upon the need for the amendments required in various procedures of distribution function to make it more efficient and consumer’s friendly. HPSEBL informed that they have already made many provisions so as to make the process efficient, transparent and citizen friendly. The details of these initiatives undertaken by HPSEBL were submitted as given below:

1) Reduction in number of documents required for obtaining the electricity connection to only two i.e. proof of ownership/occupancy and authorization document (in case of firm/company).

2) Submission of application for a new electrical connection online by consumers.

3) Time frame for release of connection up to 150 kVA has been revised to 7 days (where no extension of distribution mains up to 30 meters service wires) and to 15 days (where minor works are involved and service wire up to 200 meters) from 20 days.

4) Payment of electricity bills through online mode with internet banking/debit card/credit card/Lokmitra Kendra is already in place in respect of 191 Sub-Divisions and is under process in respect of 42 sub-divisions and remaining 10 subdivisions due to various issues like connectivity to remote areas.

5) Publication of Reliability Indices (with details of tripping and duration of sustained interruption of supply) on public domain, quarterly and yearly basis.

6) The information on effective tariffs is available online and customers are notified of a change in tariff ahead of the billing cycle.

7) Allowed third party inspection of internal installations up to 440 Volts by authorized Chartered Electricity Safety Engineer approved by Chief Electrical Inspector, HP.

2.10.2 Further, HPSEBL informed that all the future steps to be taken by HPSEBL for ensuring that its process becomes efficient, transparent and citizen friendly shall be communicated to the Commission from time to time.

2.11 Procurement of best quality conductors and equipment for efficient working and reduction of losses

2.11.1 It was informed by HPSEBL that all procurement of material and equipment by HPSEBL is done in accordance with the latest specifications and standards. To minimize the losses, a Quality Control Order for Distribution Transformers has been implemented by Ministry of Heavy Industries and Public Enterprises and the procurement is done strictly in accordance with this order and only Bureau of Energy Efficiency (Star rating) & Bureau of Indian Standards (ISI Marked) certified transformers are being procured. The quality of materials and equipment is ensured by deputing third party professionals for carrying out the inspections as per the laid down standards only. Further, randomly selected sample from the inspected material is got type tested at NABL approved laboratories before dispatch.

2.12 **Progress of computerization and online billing status**

2.12.1 Chairman, HPERC enquired about the status of Computerization and online billing by HPSEBL. 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. It was informed by HPSEBL that the computerized billing was implemented in 10 sub divisions of Operation Circle Shimla during 2008-09. After stabilization of computerized bills in these subdivisions and independent third party testing by Standardization Testing and Quality Certification (STQC), it was further rolled out in 122 Electrical Sub Divisions covering more than 12 lakh consumers. The aforesaid billing application was designed on non-standard platform. Therefore, there was an issue of support of the application from other IT companies. Since SAP based Enterprise Resource Planning (ERP) was already under implementation in HPSEBL, accordingly, it was decided to adopt SAP based computerized billing for additional 61 Electrical Subdivisions. The implementation of SAP-ISU billing in 59 subdivisions consists of many key features i.e. New Connection, Disconnection, Metering, Automatic Meter Reading (AMR), Billing, Spot Billing; Collection was implemented in 2015-16. The billing could not be implemented in two subdivisions due to non-availability of connectivity. Further it was decided to transfer the customized billing in 132 subdivisions to SAP- ISU billing. The work has been awarded to M/s TCS and SAP-ISU billing has been rolled out in 22 subdivisions of electrical division Rampur, Kumarsain, Parwanoo, Nalagarh and Nadaun and expected to be rolled out in all 132 subdivisions by the end of 2018. In addition to the above 42 more subdivisions are considered for implementation of computerized billing and necessary action has been initiated for the same.

2.13 **Steps taken to improve reliability and quality of power supply to the consumers**

2.13.1 HPERC while approving the ARR of HPSEBL has allowed all its power procurement for supplying 24x7 power supply to the consumers of the state. But, it has been learnt through newspaper items that the power supply position in the state has been deteriorating especially in the rural areas.

2.13.2 HPSEBL management informed that they continuously monitor the reliability indices as per Standard of Performance regulations for the entire state. Further, large number of system augmentation as well as improvement schemes as per approved Capex Plan is under execution to ensure that reliable and quality power could be provided for catering the growing demand in the state.

2.14 Customer Care and grievances redressal issues

2.14.1 Chairman, HPERC stressed the need to ensure that the grievances of customers are timely and effectively addressed. A large number of customer complaints are reported in the media which are related to low voltage, frequent tripping, power failures etc.

2.14.2 It was informed by HPSEBL that the Consumer Complaint Handling Mechanism is already in place. Further, the instructions has been issued to Consumer Grievances Redressal Forum for disposing of the cases in time bound manner and to conduct its sitting in industrial areas also as per the provisions of Himachal Pradesh Electricity Regulatory Commission (Consumer Grievances Redressal Forum and Ombudsman) Regulations, 2013. Further directions have also been given to field units to ensure that all the relevant documents and details sought by the CGRF be provided in time bound manner.

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

2.15.1 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."

2.15.2 HPSEBL is submitting its power procurement plan but without appropriate load forecasting studies based on scientific techniques. It was informed by HPSEBL that the load forecasting is being done. Also, new software for load forecasting is likely to be made available in a very near future.

2.16 **Power Procurement strategy and planning**

2.16.1 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. 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. Presently, HPSEBL is having 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.

2.16.2 HPSEBL submitted the following with regard to power procurement/sale of power:-

a) **Power Availability in FY2018-19:** Power Availability for FY2018-19 from various sources i.e. NTPC, NHPC, SJVNL, UJVNL, UPJVNL, BBMB, PSPCL, IPP owned, HPSEBL's own projects & GoHP free power in directly connected / intra projects has been considered. The summary of Summer & Winter power availability & requirement along with surpluses / deficits is given below:

Table 2: HPSEBL Submission- Availability during summer and winter months of FY19

FY2018-19			
Total	Summer	Winter	Total
Total Availability	8196	3429	11625
Requirement within the State	4908	4889	9796
Surplus (+) / Deficit (-)	3288	(-)1460	1828

The power requirement within State is expected to be 9796 MUs & Net Surpluses of 1828 MUs.

The above power availability includes following sources which have been considered:

i. 453 MUs from Koldam HEP.
ii. 450 MUs from Anta (Gas), Auraiya (Gas) & Dadri (Gas).

iii. GoHP Equity in Nathpa Jhakri HPS (1562MUs) & Rampur HPS (490MUs).
iv. 25 MUs from Upcoming Energy Projects under Solid Waste Management.
v. 36 MUs from Upcoming Solar Projects.
vi. 520 MUs from Bhaba HEP.
vii. 335 MUs from Uhl III.
viii. 558 MUs from GoHP free power in directly connected/intra projects.

In addition, HPSEBL has made firm arrangements for disposal of its summer surpluses anticipating good winters. However, due to mild winters, it is apprehended that the power availability may not as per anticipations, therefore intends to buy 170 MUs from Kashang HEP of HPPCL in order to meet summer shortfall, if any. If there is no requirement of this power to HPSEBL, the equivalent quantum will be sold outside the State under RE sale arrangements.

b) <u>Disposal of surplus power FY 2018-19:</u> Disposal of anticipated surplus power of 3288 MUs in summer/monsoon months as under:

i. HPSEBL has issued Letter of Intent (LOIs) for Sale of Renewable power to the tune of 1536 MUs on RTC basis.
ii. HPSEBL has issued Letter of Intent (LOIs) for banking of power to the tune of 1517 MUs to the neighboring Discoms (HPPC, BYPL, BRPL, NPCL).
iii. RE Sale with 25% additional sale condition in Letter of Intent if power is available during Real Time Operations.
iv. HPSEBL has kept 300 MUs as contingent surplus.

2.17 Status of capital works in progress and status of Capitalization thereof

2.17.1 It has been noticed that HPSEBL's distribution network has deteriorated over the years and immediate attention 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. But, the physical progress on this front seems to be lacking. HPSEBL submitted the details of capital Expenditure & capitalization details for FY 2016-17 & 2017-18(Up to 6 Months) and also ensured that every effort will be made to achieve the CAPEX target.

2.18 Restoration works of Bhaba Power House and Completion status of Uhl Hydroelectric Station

2.18.1 Bhaba Power House was 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 since then. It may be ensured that the Unit No. 1 shall be ready by April, 2018. Further, regarding commissioning of Uhl-III HEP, it was informed that Unit 1of UHL-III is projected to be commissioned on 31/05/2018, Unit-2 on 30/06/2018 and Unit-3 on 31/07/2018.

2.19 Non-filing of mid-term/ annual performance review petition for generation function and Ghanvi-II HEP

2.19.1 Mid Term/annual 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. HPSEBL informed that there were no substantial issues for seeking the review in the mid-term of 3rd MYT Control period for Generation Business therefore no petition was filed by the HPSEBL. Further, the filing of petition for approving the capital cost of Ghanvi-II HEP was delayed due to delay in capitalization of the project. Now the same has been completed and HPSEBL shall file the petition within two months.

2.20 Preparation of Accounting Manual

2.20.1 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.

2.20.2 Director (Finance), HPSEBL informs that Accounting Manual has been prepared and chapter to comply the HPERC Regulation, 2014 has been incorporated in the Accounting Manual. The Annual Accounts of the Company for FY 2014-15 has been prepared as per HPERC regulation through the Retainer Consultants (CAs) of HPSEB Ltd. and methodology for allocation of depreciation, grants, loan to each segments are made on proportionate basis which is being finalized after consultation with Auditors. After finalizing the same, these accounts shall be audited by the

Chartered Accountants appointed by the Company (CAs) and thereafter, the same will be submitted to HPERC for the 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 In this regards, HPSEBL informed that they have identified five strategic Business Units i.e. Generation, Transmission, ALDC, Projects & Distribution as per direction of HPERC and 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 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.

2.22 Issues relating to working of HPSLDC

2.22.1 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.

2.22.2 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.

2.22.3 During the management meeting with HPSEBL on dated 24-03-2017, the HPSEBL officials had indicated that the construction of control rooms for their Area Load Despatch Centre are underway and shall be completed by June 2018 post which it shall transfer all assets relating to SLDC function to HPLDS. Accordingly, The Commission in its Mid-Term Review order dated 10th April, 2017 for HPSLDS has directed HPSEBL to ensure timely completion of all activities relating to operationalization of control room and transfer the SLDC assets to HPLDS for effective implementation of SLDC functions in the State of Himachal Pradesh in line with the requirements of Electricity Act, 2003 at the earliest but not later than 30th June, 2018.

2.22.4 **The Issues related to working of SLDC were discussed at length in the State Advisory Committee meeting wherein it was decided that the overall administrative control of the HPLDS shall be transferred to the State Transmission Utility i.e. M/s HPPTCL as HPLDS is not able to create required infrastructure and deploy the adequate staff for performing its duty as laid down in Electricity Act, 2003, and the process may be expedited.**

3 Summary of the True-up Petition for FY16

3.1 Sales Projections

3.1.1 The Petitioner has submitted that the actual Category-wise energy sales for FY16 as detailed in the table below:

Table 3: HPSEBL Submission- Energy Sales for FY16 (MU)

Category (MU)	Approved in 1st APR Order	Actual
Domestic	2070	1942.22
Non Domestic Non Commercial	135	129.71
Commercial	527	496.59
Temporary	27	29.76
Small Industry	63	90.49
Medium Industry	154	119.89
Large Industry	4738	4180.42
Govt. Irrigation & Water Pumping	508	546.33
Public Lighting	14	13.03
Agriculture	45	51.65
Bulk Supply	157	144.54
Total Sales	**8438**	**7744.61**

3.2 Power Purchase Cost

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

Table 4: HPSEBL Submission- Summary of Power Purchase from all Generating Stations in FY16

Particulars	MUs	Amount (Rs Cr.)
Own Generation		
Bhaba	0.00	22.58
Bassi	314.46	22.96
Giri	188.34	13.37
Andhra	61.85	6.80
Ghanvi	86.58	19.48
Ghanvi II	39.36	12.50
Baner	42.59	6.52

Particulars	MUs	Amount (Rs Cr.)
Gaj	39.61	9.98
Larji	577.59	141.51
Khauli	43.33	9.75
Binwa	27.21	4.82
Thirot	5.34	1.20
Gumma	2.32	0.52
Holi	1.14	0.26
Bhaba Aug	11.83	2.66
Nogli	6.76	1.91
Rongtong	0.00	0.00
Sal-II	0.00	0.00
Chaba	6.80	1.45
Rukti	0.03	0.00
Chamba	0.68	0.12
Killar	0.43	0.10
Sub-total – (1)	**1456.27**	**278.49**
NTPC		
Anta (G)	48.18	22.97
Anta (L)	0.00	0.00
Anta (LNG)	2.40	2.41
Auriya (G)	84.59	39.63
Auriya (L)	0.00	0.00
Auriya (LNG)	2.75	3.07
Dadri (G)	127.02	52.28
Dadri (L)	0.00	0.00
Dadri (LNG)	2.65	2.85
Unchahar-I	69.09	22.34
Unchahar-II	124.22	40.90
Unchahar-III	65.95	25.64
Rihand-1 STPS	264.46	62.87
Rihand-2 STPS	262.15	65.22
Singrauli STPS	81.21	13.88
Kahalgaon – II	173.82	69.18
Rihand-3 Units-1,2	251.34	80.51
Dadri-II TPS	67.28	28.74
Jhajjar TPS	41.17	21.63
Koldam	17.44	16.92
Sub-total – (2)	**1685.74**	**571.04**
Solar		
Singrauli Solar	18.43	14.55
SECI	33.12	19.59
Sub-total – (3)	**51.56**	**34.14**
Nuclear		
NAPP	119.46	30.28
RAPP	141.36	48.91
Sub-total – (4)	**260.82**	**79.19**
NHPC		
Chamera I	66.20	15.06
Chamera II	56.61	20.59
Chamera III	0.31	6.20
Parbati III	0.50	-0.25
Salal	33.88	8.74
Tanakpur	12.47	5.35
Uri	86.50	18.56
Uri II	0.00	1.26
Dhauliganga	40.38	16.73
Dulhasti	11.15	8.22

Particulars	MUs	Amount (Rs Cr.)
Sewa II	3.16	1.71
Sub-total – (5)	**311.15**	**102.16**
THDC		
Tehri	12.33	36.69
Koteshwar	5.16	2.14
Sub-total – (6)	**17.49**	**38.84**
Other CG & Shared Stations		
BBMB Old	43.92	24.16
BBMB New	368.41	
Dehar	188.08	
Pong	50.87	
Shanan (available to HPSEB) - 1 MW	5.26	0.00
Shanan Ext (available to HPSEB)-45 MUs	45.00	0.92
Yamuna	404.83	32.85
Khara	63.70	5.21
Sub-total – (7)	**1170.07**	**63.15**
SJVNL		
Nathpa Jhakri SOR	194.85	58.93
Nathpa Jhakri Equity	1585.72	462.25
Rampur HEP SOR Share	51.77	20.19
Rampur HEP Equity Share	503.02	176.54
Sub-total – (8)	**2335.36**	**717.91**
GoHP Power		
Larji	77.87	21.80
Khauli	5.89	1.65
Ghanvi	11.81	3.31
Gaj	5.40	1.51
Baner	5.81	1.63
Ghanvi-II	5.37	1.50
Baira Siul	0.39	0.11
Chamera-I	4.79	1.34
Chamera-II	4.40	1.23
Chamera-III	3.15	0.88
Parbati-III	0.69	0.19
Kol Dam	3.62	1.01
Ranjeet Sagar Dam	87.21	24.61
Shanan Share	2.64	0.74
Malana	68.03	19.05
Baspa (Primary & Sec.)	155.49	43.54
Nathpa Jhakri HEP	52.12	14.59
Rampur project	2.92	0.82
Small HEP/Private Micro	74.18	5.73
Sub-total – (9)	**571.77**	**151.75**
Private IPPs		
Small HEP/ Private Micro	1116.68	390.97
Small HEP/ Private Micro -REC	349.12	
Baspa - II - Primary	982.58	285.83
Baspa - II Secondary Energy	157.69	
Sub-total – (10)	**2590.52**	**676.80**
Others		
Unschedule Interchange (UI)	301.00	87.81
Banking Purchase	1698.66	0.00
Contingency (IEX)	170.21	47.72
Sub-total – (11)	**2169.87**	**135.53**
Grand Total-(1+2+3+4+5+6+7+8+9+10+11)	**12636.16**	**2848.99**

3.3 Transmission Charges

3.3.1 The Petitioner has submitted that during FY16 it has paid PGCIL charges, HPPTCL Charges, open access charges etc. to the tune of Rs 271.57 Cr. The detail of the same is given in table below:

Table 5: HPSEBL Submission-Transmission & Other Charges for FY16 (Rs Cr.)

Particulars	Amount (Rs Cr.)
Transmission Charges	
PGCIL	207.25
HPPTCL	3.47
STOA	50.74
Sub-total- (1)	**261.46**
Other Charges	
System/Marketing operation charges	2.50
UI (Malana)	1.46
LADF (DoE)	2.71
Trading Margin	2.08
Reactive Power (UPCL)	1.29
UPCL (Field Unit)	0.07
Sub-total- (2)	**10.10**
Grand Total- (1+2)	**271.57**

3.3.2 The total power purchase cost for FY16 has been summarized in the table below:

Table 6: HPSEBL Submission-Total Power Purchase Cost for FY16 (Rs Cr.)

Particulars	Amount (Rs Cr.)
Power Purchase Cost (Interstate)	2570.50
PGCIL	207.25
HPPTCL	3.47
STOA charges	50.74
Other Cost (System/Marketing operation charges, UI (Malana), LADF (DoE), Trading Margin, Reactive Power (UPCL) & UPCL (Field Unit)	10.10
Power Purchase Cost (including transmission & other charges)	**2842.06**
Add: Own Generation	278.49
Total Power Purchase Cost (including Own Generation)	**3120.55**

3.3.3 Accordingly, the Petitioner has requested the Hon'ble Commission to approve the power purchase cost of Rs 3120.55 Cr. for FY16.

3.3.4 The Petitioner submitted that it has also reconciled the power purchase cost (excluding own generation) with the audited accounts and provided the following reconciliation:

Table 7: HPSEBL Submission- Reconciliation of Power Purchase Cost with Audited Accounts for FY16 (Rs Cr.)

Particulars	As per Audited Accounts (Rs Cr.)	As submitted in Table 6 (Rs Cr.)
Power Purchase Cost (including transmission & other charges)	3733.69	2842.06
less: Banking power purchase	891.63	-
Power Purchase Cost	**2842.06**	**2842.06**

3.4 Energy Balance

3.4.1 HPSEBL has submitted that it has achieved a loss level of 12.09% in FY16. The Petitioner has submitted that the actual T&D loss for FY16 is lower than the approved loss and the Energy Balance is shown in table below:

Table 8: HPSEBL Submission- Energy Balance for FY16 (MU)

S.No.	Particulars	FY16
A	Units Procured from Interstate- Generating Stations (including GoHP power stations connected to ISTS)	7357.90
B	Banking Purchase at ISTS	1698.66
C	Interstate Transmission Loss (%)	3.29%
D	Transmission Loss (MUs)	297.84
E	**Net Energy Available at Periphery**	**8758.72**
F	**Power Available within the state (i+ii+iii)**	**3108.39**
	(i) State Generating Stations	*1456.27*
	(ii) GoHP Power (own generation & IPPs)	*186.32*
	(iii) IPPs	*1465.80*
G	**Power from Other Sources (i+ii)**	**471.21**
	(i) UI Power	*301.00*
	(ii) IEX	*170.21*
H	**Total Energy Available at HP periphery (E+F+G)**	**12338.32**
I	Energy Sales Within the state	7744.61
J	**Inter-State Sale of Power (i+ii)**	**3528.49**
	(i) Sale of Power (including UI & IEX)	*1339.24*
	(ii) Banking	*2189.24*
K	**Total Energy Available for sale within the state (H-J)**	**8809.83**
L	**Total Energy Sale (I+J)**	**11273.10**
M	T&D loss (in MUs) (K-I)	1065.22
N	**T&D loss (%)=** ***(1-I/(K)) x 100***	**12.09%**

3.5 Incentive for Over-achievement of T&D Loss

3.5.1 The Petitioner has submitted the savings resulting from the over-achievement of T&D loss for FY16 as shown in the table below:

Table 9: HPSEBL Submission- Saving on account of over-achievement of T&D Loss for FY16 (MUs)

S.No.	Particulars	FY16
A	Energy Sales within state (MU)	7744.61
B	T&D Losses (%)	12.60%
C	**Power Purchase requirement to meet state requirement (MU)**	**8861.11**
D	**Inter-State Sale (MU)**	**3528.49**
	(i) Banking Arrangement (MU)	2189.24
	(ii) Sale Outside the state (MU)	1339.24
E	Total Power Purchase Quantum approved at State Periphery (MU) (C+D)	12389.60
F	Actual Power Purchase Quantum at State Periphery (MU)	12338.32
G	**No. of units saved (MU) (E-F)**	**51.28**

3.5.2 Based on this saving, HPSEBL has computed the incentive for over-achievement of T&D loss as detailed in table below:

Table 10: HPSEBL Submission-Incentive for over-achievement of T&D Loss for FY16 (Rs Cr.)

S.No.	Particulars	Unit	Amount
A	**No. of Units**	**MU**	**51.28**
	(i) Cost of Power Purchase from Other than own resource	Rs Cr.	2570.50
	(ii) Power purchased from other than own sources	MU	9481.23
	(iii) Less: PGCIL losses	MU	297.84
	(iv) Net Power Purchase (ii-iii)	MU	9183.39
C	**Cost of Power Purchase from Other than own sources (i x 10 / iv)**	**Rs/kWh**	**2.80**
D	Total Incentive (A X C / 10)	Rs Cr.	14.35
E	HPSEBL's Share	%	60%
F	**HPSEBL's Incentive on account of T&D loss overachievement (D X E)**	**Rs Cr.**	**8.61**

3.5.3 Accordingly, HPSEBL requests Hon'ble Commission to approve power purchase cost to Rs 3129.16 Cr. for FY16 which also includes incentive of Rs 8.61 Cr.

3.6 Renewable Purchase Obligation

3.6.1 The Petitioner has submitted that it has already filed a Petition No. 25/2017 for RPPO compliance for FY16 and provided the summary in this tariff petition again:

Table 11: HPSEBL Submission- Details of RPPO Compliance (non-solar) by HPSEBL

S. No.	Description	FY16
1	Total energy procured for supply with in state	8800.33
2	RE Obligation (Non-solar) (%)	11.00%
3	RE Obligation(Non-solar)(MUs)	968.04
4	**Total R.E (Non- Solar) purchased**	
a)	HPSEBL's own generation from 25 MW & below projects	375.52
b)	Power Purchase from IPP (25 MW & below)	1115.36
c)	Free power of GoHP from IPP less than 25 MW	74.18
d)	Free power of GoHP from own generation	34.28
	Total R.E (Non- Solar) purchased	**1599.33**
5	R.E (Non- Solar) sold outside its area of supply	795.89
6	Total R.E (Non- Solar) purchased for supply(5-6)	803.44
7	**Total surplus(+)/Deficit(-) (6-3)**	**-164.59**
8	**Surplus R.E (Non- Solar) eligible for REC**	**-**

3.6.2 The Petitioner has requested in the petition that the shortfall of 164.59 MUs shall be met with the RE certificates issued by nodal agency (NLDC) for the surplus quantum of FY14.

3.6.3 For Solar RPPO, the Petitioner has reproduced the decision of the Hon'ble Commission in Order dt. 5th Sep'17 against Petition No. 26 of 2017. The relevant extract of the Order is given below:

"In light of the above discussion, the Commission is of the view that to ascertain the eligibility of distribution license i.e. HPSEBL for recommending their case, for issuance of Solar Renewable Energy Certificates (Solar RECs) for Solar Energy purchased beyond Renewable Power Purchase Obligation target for FY 2015-16, as per the condition (iii) of para 23, the HPSEBL shall be eligible for solar RECs of (27.42 MUs-18.40 MUs) 9.02 MUs, after adjusting the shortfall of FY 2012-13. The Order dated 29.07.2013 in Suo-Moto Case No. 93(A)/2013 stands to be modified

to the extent that the carry forward of 18.40 MUs of solar RPPO which are to be met during FY 2016-17, adjusted in FY 2015-16."

3.7 Employee Cost

3.7.1 The employee cost submitted by HPSEBL for the FY16 is summarized in the table below.

Table 12: HPSEBL Submission- Employee Cost for FY16 (Rs. Cr.)

Particulars	Approved in 1st APR (Rs Cr.)	Actual (Rs Cr.)
Salaries & Allowances		
Salaries (Basic) + Dearness Pay		273.70
Grade pay		63.64
DA		377.90
Other Allowances		29.77
Overtime		3.57
Bonus		1.77
Salaries – sub-total (1)		**750.35**
Other Staff Cost		
Medical Expense Reimbursement		8.29
Fee & Honorarium		0.01
Earned Leave Encashment		76.59
Salary/Wages of Outsourced/Contractor.		17.16
Leave Salary Contribution		0.00
Payment under Workmen's Compensation		0.98
LTC		0.16
Staff Welfare Expenses		0.48
Other Staff Cost – sub- total (2)		**103.67**
Total Employee Cost (1 +2)	**927.71**	**854.02**
Terminal Benefits	**384.92**	**613.38**
Gross Employee Cost		**1,467.40**
Less : Employee Cost Capitalization	46.36	55.73
Net Employee Cost	**1266.27**	**1,411.67**

3.8 Administrative and General Expenses

3.8.1 The Administrative and General Expenses submitted by HPSEBL for the FY16 is summarized in the table below.

Table 13: HPSEBL Submission- Administrative and General Expenses for FY16 (Rs. Cr.)

Particulars	Approved in 1st APR (Rs Cr.)	Actual (Rs Cr.)
Administration Charges		
Rent, Rates & Taxes		1.50

Particulars	Approved in 1st APR (Rs Cr.)	Actual (Rs Cr.)
Telephone, Postage & Telegrams		2.64
Consultancy Charges		0.53
Conveyance & Travel		14.99
Regulatory Expenses		1.02
Licensee fee Distribution & Transmission payable to HPERC		0.25
Income Tax Updating Charges		0.08
Consumer Redressal Forum		0.52
Insurance		0.02
Purchase Related Expenses & Other Charges		2.47
IT and other Initiatives		0.00
Administration Charges- Sub Total (A)		**24.02**
Other Charges		
Fees & Subscriptions, Books & Periodicals		0.30
Printing & Stationery		1.13
Advertisement Expenses		0.49
Electricity Charges		5.60
Water Charges / Cold weather expenses		0.33
Legal Charges		2.48
Audit Fee		0.19
Statutory Audit Fee		0.02
Internal Audit Fee		0.01
Entertainment Charges		0.04
Training to Staff		0.39
Fees for SAS Examination		0.02
Public Interaction Program		0.16
Exp. Incurred on capacity building for Poverty Reduction		0.00
Public Expenses / Other professional charges		0.67
GIS / GPS expenses related to High level Committee		1.20
Transaction Charges to SCAs for collection of energy bills		1.32
TA/DA Internal Auditor		0.04
TA/DA Statutory Auditor		0.08
Charges on a/c of service rendered by central board keeping agency under new pension scheme		0.03
Exp. On IPAVAST Connectivity Charges etc.		1.75
Publicity expenses		0.03
Technical fees		0.00
Freight Material related Expenses		0.10
Misc. Expenses		0.98
Other Charges - Sub Total (B)		**17.36**
A&G - Grand Total (A+B)		**41.38**
Less: Capitalization		1.58
Net A&G Costs	**39.48**	**39.80**

3.9 Repairs and Maintenance Expenses

3.9.1 The Repairs and Maintenance Expenses submitted by HPSEBL for the FY16 is summarized in the table below:

Table 14: HPSEBL Submission- Repairs and Maintenance Expenses for FY16 (Rs. Cr.)

Particulars	Approved in 1st APR (Rs Cr.)	Actual (Rs Cr.)
Plant & Machinery		0.13
Buildings		1.97
Civil Works		0.34
Hydraulic Works		0.00
Lines, Cables Networks		43.73
Vehicles		20.24
Furniture & Fixtures		0.06
Office Equipment		7.44
Other i.e. cost of vehicle other than vehicle		-2.37
R&M expense : Sub-Total		**71.54**
Less: Cost Reallocated to Employee Cost and A&G Expenses		0.98
Less: other cost reallocated such as depreciation		32.43
Net R&M expenses	**46.79**	**38.13**

3.10 O&M Expenses

3.10.1 The O&M Expenses submitted by HPSEBL for the FY16 is summarized in the table below.

Table 15: HPSEBL Submission- O&M Expenses for FY16 (Rs. Cr.)

Particulars	Actual submitted by Petitioner
Net Employee expenses	1,411.67
R&M expenses	38.13
Net A&G expenses	39.80
Total O&M expenses	**1,489.60**

3.11 Interest on Working Capital

3.11.1 The working capital requirement calculated by the petitioner for FY16 is as below:

Table 16: HPSEBL Submission- Working Capital Requirement for FY16 (Rs. Cr.)

Particulars	Approved in 1st APR (Rs Cr.)	Actual (Rs Cr.)
O&M expenses for 1 month	114.34	124.13
Receivables equivalent to 2 months average billing	761.32	690.46

Particulars	Approved in 1st APR (Rs Cr.)	Actual (Rs Cr.)
Maintenance Spares (40% of R&M Expense of 1 Month)	1.56	1.27
Less: one month power purchase	230.21	245.04
Less: Consumer Security Deposit	319.71	314.63
Total Working Capital	**327.30**	**256.19**
Rate of Interest on Working Capital		13.12%
Interest on Working Capital	**43.42**	**33.60**

3.12 Interest and Finance Charges

3.12.1 The actual interest expenses submitted by the petitioner for FY16 is as below:

Table 17: HPSEBL Submission- Interest and Finance Charges for FY16 (Rs. Cr.)

Particulars	Approved in 1st APR (Rs Cr.)	Actual (Rs Cr.)
Interest on Long Term Loan	125.69	125.69
Interest on Working Capital	43.42	33.60
Interest on Consumer Security Deposit	27.77	17.93
Total Interest & Finance Charges	**196.88**	**177.22**

3.13 Other Controllable Parameters

3.13.1 The depreciation and return on equity claimed by the Petitioner for FY16 are summarized in the table below.

Table 18: HPSEBL Submission- Depreciation and Return on Equity for FY16 (Rs. Cr.)

Particulars	MYT Approved (Rs Cr.)	Amount (Rs Cr.)
Depreciation	70.27	70.27
Return on Equity	30.24	30.24

3.14 Non-Tariff Income

3.14.1 The details of non-tariff income submitted by the Petitioner for true up of FY16 is summarised in the table below.

Table 19: HPSEBL Submission- Non-Tariff Income for FY16 (Rs. Cr.)

Particulars	Approved in 1st APR (Rs Cr.)	Actual (Rs Cr.)
Meter Rent/Service Line Rentals		46.59
Recovery for theft of Power / Malpractices		0.04
Wheeling Charges Recovery		114.92
Peak Load Violation Charges		41.92
Miscellaneous Charges from Consumers		4.37

Particulars	Approved in 1st APR (Rs Cr.)	Actual (Rs Cr.)
Non-Tariff Income – Total		**207.84**
Other Income		
Interest on Staff loans & Advances		0.35
Income from Investments		0.36
Interest on Loans & Advances to Licensees		0.00
Delayed Payment Charges from Consumers		0.00
Interest on Advances to Suppliers / Contractors		0.42
Interest on Banks (other than on Fixed Deposits)		0.00
Income from Trading		1.97
Income fee collected against Staff Welfare Activities		0.11
Miscellaneous Receipts		19.57
Recovery of Investigation & Survey Charges		0.53
Other Income – Total		**23.31**
Total Non-Tariff Income & Other Income	**197.53**	**231.15**

3.15 Carrying Cost on Arrears paid on account of 5th Pay Commission revision

3.15.1 The Petitioner has requested the Commission to allow carrying cost on arrears paid on account of 5th pay commission revision during FY13 and FY11 amounting to Rs. 111.93 Cr. in the ARR of FY16.

3.16 Aggregate Revenue Requirement

3.16.1 Based on the values determined by HPSEBL for the various parameters, the ARR for the FY16 is submitted as below for true-up against approved ARR of Rs. 4655.63 Crores in the APR Order for FY16.

Table 20: HPSEBL Submission- Aggregate Revenue Requirement for FY16 (Rs. Cr.)

Particulars	Approved in 1st APR	True-Up
Power Purchase Expenses for Supply in the State	2941.61	3129.16
(i) Cost of electricity purchase including own generation	*2588.62*	*2848.99*
(ii) PGCIL Charges	*275.88*	*207.25*
(iii) HPPTCL Charges	*3.47*	*3.47*
(iv) STOA charges	*62.75*	*50.74*
(v) SLDC Charges	*10.88*	
(v) Other Charges (system/ Marketing operation Charges, UI(malana), LADF (DoE), Trading Margin, Reactive Power (UPCL), UPCL (field unit))		*10.10*
(vi) Incentive for over-achievement of T&D loss		*8.61*
Operation & Maintenance Costs	1353.55	1489.60

Particulars	Approved in 1st APR	True-Up
(i) Employee Cost	*1266.27*	*1411.67*
(ii) R&M Cost	*46.79*	*38.13*
(iii) A&G Cost	*39.48*	*39.80*
(iv) Additional amount for safety measure	*1.00*	
Interest & Financing Charges	196.88	177.22
(i) Interest on Long term loan	*125.69*	*125.69*
(ii) Interest on Working Capital	*43.42*	*33.60*
(iii) Interest on Consumer Security Deposit	*27.77*	*17.93*
Additional Interest amount towards Kurthala substation & line	10.00	10.00
Depreciation	70.27	70.27
Return on Equity	30.24	30.24
Carrying cost on arrears paid on account of 5th pay commission		111.93
Provision for Bad & Doubtful Debtors		3.44
Net Prior Period Expense/ Credit		-22.45
Less: Non-Tariff & Other Income	197.53	231.15
Aggregate Revenue Requirement (ARR)	**4405.02**	**4768.26**
Add: Past period Cost	**250.61**	**250.61**
(i) Impact of Final Truing-up for FY11 & FY12	*56.51*	*56.51*
(ii) Impact of BASPA-II Truing-up	*2.94*	*2.94*
(iii) Impact of Review Order (MYT 3rd Control Period)	*45.94*	*45.94*
(iii) Consumer Contribution towards RPPO Compensation Fund (as per HPERC order dated 10th November 2014)	*12.23*	*12.23*
(iv) Payment of arrears of Nathpa Jhakri plants as per the order of CERC	*97.15*	*97.15*
(v) Payment of arrears of Khara Power plants as per the order of UPERC	*35.83*	*35.83*
Total ARR including adjustments	**4655.63**	**5018.87**

3.17 Revenue from Sale of Power

3.17.1 Revenue from Sale of Power within state for FY16 submitted by the Petitioner is as below:

Table 21: HPSEBL Submission- Revenue from sale of power within the State for FY16 (Rs. Cr.)

Category	Approved in 1st APR Order (Rs Cr.)	Revenue (Rs Cr.)
Domestic	856.41	781.74
Non Domestic Non Commercial	72.64	80.77
Commercial	295.36	281.49
Temporary	23.95	16.43
Small Industry	87.64	38.28

Category	Approved in 1st APR Order (Rs Cr.)	Revenue (Rs Cr.)
Medium Industry	30.40	89.36
Large Industry	2584.53	2339.42
Govt. Irrigation & Water Pumping	283.98	415.25
Public Lighting	6.66	12.11
Bulk Supply	95.60	87.88
Total	**4337.18**	**4142.73**

3.17.2 Banking being a cashless transaction, notional cost of the banked power considered in the accounts has been excluded from the revenue from sale of power outside the state. Accordingly, the revenue from sale of power for FY16 as submitted by the Petitioner is given in the table below:

Table 22: HPSEBL Submission- Revenue from sale of power outside State for FY16 (Rs. Cr.)

Particulars	Approved in 1st APR Order (Rs Cr.)	Actual Revenue (Rs Cr.)
Revenue from sale of power outside State	243.55	1629.10
Less: Banking Sale		1118.43
Net Revenue from sale of power outside state	**243.55**	**510.67**

3.18 Revenue (Gap)/Surplus

3.18.1 HPSEBL has prayed to the Commission to approve the True up gap of Rs 365.47 Cr. for FY16 as detailed in table below:

Table 23: HPSEBL Submission- Revenue (Gap)/ Surplus for FY16 (Rs. Cr.)

Particulars	Approved in 1st APR (Rs Cr.)	Amount (Rs Cr.)
Annual Revenue Requirement (ARR)	**4655.63**	**5018.87**
Revenue		
Revenue at existing tariff	4337.18	4142.73
Revenue from sale outside state	243.35	510.67
Grant available from 13th Finance Commission	132.99	-
Total Revenue	**4713.52**	**4653.40**
Revenue Surplus (+) / Gap (-)	**57.89**	**(365.47)**

4 Summary of the APR Petition

4.1 Introduction

4.1.1 This chapter summarizes the highlights of the Annual Performance Review (APR) Petition filed by the HPSEBL for review of Aggregate Revenue Requirement (ARR) approved for FY19 in the MYT Order for the 3rd Control Period.

4.1.2 HPSEBL had filed the APR application on 30th November, 2017 and clarifications were submitted in response to the deficiency notes issued by the Commission.

4.1.3 The Annual Performance Review (APR) petition filed by HPSEBL constitutes revised estimates of HPSEBL distribution business for FY18 based on six months actual and revised projections for FY19 for the purpose of determination of the Aggregate Revenue Requirement (ARR) and revision in Distribution & Retail Supply Tariff for FY19.

4.2 Projection of consumers and connected load

4.2.1 The Petitioner has considered an overall growth rate for number of consumers as 2.72% and 2.73% for FY18 and FY19 respectively and projected consumers for FY18 and FY19 as provided in the table given below:

Table 24: HPSEBL Submission- Projected number of consumers for FY18 and FY19

Consumer Category	FY17	FY18	FY19
	Actual	R.E	Projected
Domestic	1953211	2003594	2055278
Non Domestic Non Commercial	27098	28997	31030
Commercial	260372	267634	275099
Temporary	6550	7332	8206
Small Industrial Power Supply	30692	30817	30942
Medium Industrial Power Supply	1987	1877	1774
Large Industrial Power Supply	1822	1859	1897
HT-1	*1627*	*1660*	*1694*
EHT/ HT-2	*195*	*199*	*203*
Irrigation & Drinking Water			
Govt., Irrigation & Water Supply	*6389*	*6768*	*7169*

Consumer Category	FY17	FY18	FY19
	Actual	R.E	Projected
Agricultural	*27197*	*29475*	*31945*
Public Lighting	905	938	973
Bulk Supply	292	303	314
Total	**2316515**	**2379595**	**2444626**

4.2.2 For connected load, the Petitioner has considered an overall growth rate of 5.31%, and 5.35% for FY18 and FY19 respectively and connected load for FY18 and FY19 as provided in the table given below:

Table 25: HPSEBL Submission- Projected connected load for FY18 and FY19

Consumer Category	FY17	FY18	FY19
	Actual	R.E	Projected
Domestic	3294	3482	3680
Non Domestic Non Commercial	187	203	222
Commercial	674	707	743
Temporary	33	35	37
Small Industrial Power Supply	248	260	272
Medium Industrial Power Supply	141	136	132
Large Industrial Power Supply	1538	1621	1710
HT-1	*684*	*724*	*763*
EHT/ HT-2	*853*	*897*	*946*
Irrigation & Drinking Water			
Govt., Irrigation & Water Supply	*292*	*304*	*316*
Agricultural	*105*	*114*	*123*
Public Lighting	5	5	4
Bulk Supply	126	129	131
Total	**6642**	**6995**	**7369**

4.3 Sales Projections

Projections for category-wise Sales

4.3.1 The petitioner has used the Compounded Average Growth Rate (CAGR) as recorded over the last few years to project the category-wise sales for the future years. The petitioner has taken into account the first six months sales as a basis for projecting the sales over the balance period of FY 2017-18. The breakup of the category-wise sales for the first six months of the current year, as submitted by the Petitioner is summarized below:

Table 26: HPSEBL Submission- Actual monthly category-wise sales for 6 months of FY18 (MUs)

Category	Apr'17	May'17	Jun'17	Jul'17	Aug'17	Sep'17
Domestic	140.39	160.06	168.50	174.86	164.26	164.32
Non Domestic Non Commercial	12.90	10.86	10.32	9.92	10.29	9.98
Commercial	41.97	46.22	50.91	50.12	46.03	45.46
Temporary	2.81	3.04	10.87	2.71	2.99	2.76
Small Industrial Power Supply	6.65	7.84	7.49	10.37	9.70	10.28
Medium Industrial Power Supply	9.55	9.33	11.51	9.94	9.03	9.10
Large Industry Supply						
HT-I	*105.41*	*124.23*	*126.83*	*130.04*	*118.03*	*128.52*
EHT/HT-II	*259.15*	*259.34*	*251.19*	*242.67*	*235.94*	*254.59*
Irrigation & Drinking Water						
Govt., Irrigation & Water Supply	*57.12*	*55.58*	*48.72*	*48.69*	*44.41*	*42.10*
Agriculture Supply	*4.81*	*5.37*	*4.83*	*4.13*	*4.68*	*3.09*
Public Lighting	1.02	0.91	0.86	0.79	0.78	0.89
Bulk Supply	14.06	12.70	10.96	10.97	10.19	9.62
Total	**655.84**	**695.46**	**703.00**	**695.21**	**656.33**	**680.71**

4.3.2 Based on the above sales figures, the estimated sales for the full year of FY18 has been assessed as 8245 MUs by the petitioner. Further, CAGR as per the below tables have been applied to arrive at the category-wise sales projection for the FY19.

Table 27: HPSEBL Submission- CAGR & Growth Rate Considered for Sale Projection for FY19

Category	1 yr CAGR	3 yr CAGR	5 yr CAGR	Growth Rate Considered
Domestic	-0.22%	0.78%	6.61%	6.31%
Non Domestic Non Commercial	0.56%	0.12%	5.77%	5.77%
Commercial	6.37%	3.73%	6.41%	6.41%
Temporary	0.72%	5.36%	0.97%	5.36%
Small Industrial Power Supply	-7.08%	5.77%	7.55%	7.55%
Medium Industrial Power Supply	3.47%	-3.41%	-2.34%	3.47%
Large Industrial Power Supply	4.14%	-0.13%	1.13%	4.14%
Govt., Irrigation & Water Supply	0.87%	3.11%	4.61%	4.61%
Public Lighting	-0.29%	-0.87%	0.16%	0.00%

Category	1 yr CAGR	3 yr CAGR	5 yr CAGR	Growth Rate Considered
Agricultural	10.91%	8.30%	9.63%	9.63%
Bulk Supply	3.95%	-1.61%	-4.87%	3.95%

4.3.3 The revised category-wise sales projected by HPSEBL for FY18 and FY19 is as provided in the table below:

Table 28: HPSEBL Submission- Sales Projections for FY18 and FY19 (MUs)

Category	FY18	FY19
	R.E	Projected
Domestic	2013.97	2140.86
Non Domestic Non Commercial	142.07	151.18
Commercial	560.13	590.13
Temporary	41.20	41.20
Small Industrial Power Supply	98.82	106.28
Medium Industrial Power Supply	120.81	125.00
Large Industrial Power Supply	4436.13	4619.67
HT-1	*1420.99*	*1479.78*
EHT/ HT-2	*3015.14*	*3139.88*
Irrigation & Drinking Water		
Govt., Irrigation & Water Supply	*600.83*	*625.69*
Agricultural	*53.33*	*53.33*
Public Lighting	12.52	13.10
Bulk Supply	165.33	181.26
Total	**8245.14**	**8647.70**

4.3.4 The Petitioner submitted that the revised sales for FY18 and projected sales for FY19 is lower in comparison to that approved by the Hon'ble Commission in the MYT Order as well as in the Mid Term Review tariff order.

4.3.5 The projected energy sale is lower in comparison to the approved sales in MYT Order and Mid Term Review tariff order on account of the following reasons:

a) Power Consumed by industrial consumer 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.

4.4 Power Purchase

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

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

Table 29: HPSEBL Submission- Revised Estimate of power procurement from own generating stations (MUs)

Station	FY18	FY19
	R.E	Projected
Bhaba	438.52	520.00
Bassi	351.38	310.00
Giri	216.52	200.00
Andhra	68.20	72.00
Ghanvi	70.95	68.64
Ghanvi II	36.94	34.32
Baner	39.59	30.80
Gaj	31.01	35.20
Larji	544.64	516.56
Khauli	38.12	40.48
Binwa	32.83	30.00
Thirot	13.76	15.00
Gumma	15.23	8.50
Holi	8.48	11.10
Bhaba Aug	18.20	12.84
Nogli	6.59	7.00
Rongtong	1.79	1.09
Sal-II	2.52	0.00
Chaba	6.10	6.80
Rukti	5.60	6.15
Chamba	2.10	1.77
Killar	0.76	0.40
Uhl III - BVPCL	12.27	335.46
Total	**1962.11**	**2264.11**

Revised Estimates for Power Purchase from GoHP free power

4.4.3 The petitioner has also revised the power availability from GoHP free power based on the actual power purchase till FY17 and in the first six months of FY18. The same is summarized in the table below:

Table 30: HPSEBL Submission-Revised estimate of power procurement from GoHP free power (MUs)

Station	FY18	FY19
	R.E	Projected
Baira Siul	0.00	0.00
Chamera-I	0.00	0.00
Chamera-II	0.00	0.00
Chamera-III	0.00	0.00
Parbati-III	0.00	0.00
Koldam	2.11	0.00
Ranjeet Sagar Dam Share	73.06	70.26
Shanan Share	2.63	2.63
Malana	69.65	73.28
Baspa (Primary & Sec.)	155.70	143.19
Nathpa Jhakri HEP	3.55	0.00
Rampur project	0.00	0.00
Kasang	24.29	0.00
Chanju	17.47	24.56
Larji	73.17	70.44
Ghanvi	9.67	9.36
Baner	5.40	4.20
Gaj	4.23	4.80
Khauli	5.20	5.52
Ghanvi II	3.49	4.68
Uhl-III	2.68	45.75
Small HEP/ Private Micro - Free	86.68	98.97
Total	**538.97**	**557.63**

Revised Estimates for Power Purchase from NTPC power plants

4.4.4 The revised availability from NTPC plants for FY19, as submitted by the petitioner, has been projected based on the normative PLF of the respective generating station while for revision of estimates for FY18 (including Koldam), actual generation upto Sep'17 and thereby onwards the approved quantum in Mid Term Review Order has been considered. For Koldam, design energy has been considered for projections of FY19.

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

Table 31: HPSEBL Submission- Revised estimate of power procurement from NTPC power plants (MUs)

Station	FY18	FY19
	R.E	Projected
Anta (G)	30.53	108.98
Anta (L)	0.17	-
Anta (LNG)	22.36	-
Auriya (G)	28.68	159.89
Auriya (L)	0.35	-
Auriya (LNG)	12.19	-
Dadri (G)	82.82	181.32
Dadri (L)	5.08	0.00
Dadri (LNG)	20.30	0.00
Unchahar-I	83.16	48.35
Unchahar-II	109.31	85.87
Unchahar-III	62.25	56.13
Unchahar-IV	4.98	157.95
Rihand-1 STPS	219.99	247.50
Rihand-2 STPS	200.25	240.53
Singrauli STPS	38.63	25.73
Kahalgaon - II	138.10	157.27
Rihand-3 Units-1,2	205.84	247.95
Dadri-II TPS	51.76	14.18
Jhajjar TPS	-	-
Koldam	439.80	453.64
Total	**1756.55**	**2185.29**

Revised Estimates for Power Purchase from NPCIL power plants

4.4.6 HPSEBL has revised the power availability from NPCIL stations based on the average PLF achieved by respective generating stations during the last 3 years i.e. FY15, FY16 & FY17 while for FY18 actual generation upto Sep'17 and there onwards the approved quantum in Mid Term Review Order has been considered.

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

Table 32: HPSEBL Submission- Revised estimate of power procurement from NPCIL power plants (MUs)

Stations	FY18	FY19
	R.E	Projected
NAPP	91.96	82.94
RAPP (V & VI)	107.41	83.17
Total	**199.38**	**166.11**

Revised Estimates for Power Purchase from NHPC power plants

4.4.8 HPSEBL has revised the power availability from NHPC stations based on the average energy generated by respective stations during the last 3 years i.e. FY15, FY16 & FY17 while for FY18 actual generation upto Sep'17 and thereby onwards the approved quantum in Mid Term Review Order has been considered.

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

Table 33: HPSEBL Submission- Revised estimate of power procurement from NHPC power plants (MUs)

Stations	FY18	FY19
	R.E	Projected
Chamera I	65.89	63.37
Chamera II	54.25	51.23
Salal	33.92	33.17
Tanakpur	14.18	11.57
Uri	77.68	80.71
Dhauliganga	38.03	32.97
Total	**283.95**	**273.02**

Revised Estimates for Power Purchase from BBMB & Other Shared Stations

4.4.10 The Petitioner has considered power availability for FY19 based on the average energy generated by respective stations during the last 3 years (FY15, FY16 & FY17) while for Shanan & Shanan extension the fixed share of 1LU per day and 1MW at 60% PLF respectively have been considered. For UJVNL, the approved share for Himachal Pradesh i.e 387.82 MUs has been considered.

4.4.11 Additionally, for revision of power availability for FY18 actual generation upto Sep'17 and thereby onwards the approved quantum in Mid Term Review Order has been considered by the Petitioner.

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

Table 34: HPSEBL Submission- Revised estimate of power procurement from BBMB & Other Shared Stations (MUs)

Stations	FY18	FY19
	R.E	Projected
BBMB Old	43.82	43.80
BBMB New	315.93	340.18
Dehar	180.02	195.80
Pong	40.92	43.16
Shanan (available to HPSEB)	5.26	5.26
Shanan Ext (available to HPSEB)	45.00	45.00
Yamuna	384.56	387.82
Khara	57.36	53.76
Total	**1072.85**	**1114.78**

Revised Estimates for Power Purchase from SJVNL & Other Stations

4.4.13 The Petitioner has revised the power availability from Nathpa Jhakri Hydro Station for FY19 based on the average energy generated during the last 3 years (FY15, FY16 & FY17) while for Rampur design energy of the station has been considered. For Baspa-II, HPSEBL has considered secondary energy also along with primary energy as secondary energy has been generating from the last many years against which HPSEBL is regularly paying the purchase cost along with incentive for higher plant availability at the rates defined under PPA. The Primary energy has been considered as approved in the Baspa-II Order while secondary energy has been considered to the tune of 77.22 MUs as projected by Baspa-II.

4.4.14 For revision of power availability for FY18, actual generation upto Sep’17 and thereby onwards the approved quantum in Mid Term Review Order has been considered by the Petitioner.

4.4.15 Similarly, for private IPPs, power projections have been done considering capacity addition of 13.54 MW for FY18 and 55.50 MW for FY19 by the Petitioner.

4.4.16 Further, the Petitioner has submitted that two municipal solid waste to energy projects with total capacity 3.5 MW (2.5+1) are expected to be commissioned during FY19. The projections from the same have been calculated at 80% PLF.

4.4.17 The revised estimates for FY18 and projections for FY19 as submitted by the Petitioner are as follows:

Table 35: HPSEBL Submission- Revised estimate for power procurement from SJVNL & Other Stations (MUs)

Stations	FY18	FY19
	R.E	Projected
Nathpa Jhakri SOR	204.77	177.07
Nathpa Jhakri Equity	1557.50	1561.82
Rampur HEP SOR Share	41.41	52.77
Rampur HEP Equity Share	447.69	490.18
Baspa - II – Primary	988.57	1050.06
Baspa - II Secondary Energy	161.87	77.22
Kasang HEP	165.94	-
Small HEP/ Private Micro	1191.49	1300.43
Small HEP/ Private Micro -REC	329.81	423.15
Municipal Solid Waste to Energy Project	-	24.53
Total	**5089.05**	**5157.23**

Revised Estimates for Power Purchase from Solar projects (MUs)

4.4.18 The Petitioner has revised the power availability from Solar Projects for FY19 at CUF 19% while for FY18 actual generation upto Sep'17 and thereby onwards the approved quantum in Mid Term Review Order has been considered.

4.4.19 Further, the Petitioner has also considered solar capacity of 22 MW which is expected to be commissioned by private developers during FY19 in Himachal Pradesh as given below.

Table 36: HPSEBL Submission- Revised estimate for power procurement from Solar Projects (MUs)

Stations	FY18	FY19
	R.E	Projected
Singrauli Solar	22.65	24.97
SECI	39.14	33.29
Private Solar Projects	-	36.62
Total	**61.79**	**94.87**

Banking

4.4.20 HPSEBL has submitted that it is undertaking banking agreements with other state utilities for utilizing its surplus during summer and meeting its deficit during winter months. HPSEBL has planned to bank 1715.88 MUs and 1560 MUs of power during summer and the same is planned to be taken back in winter in order to meet the deficit during winter in FY18 and FY19 respectively. The details of month-wise banking purchase and sale projected by the Petitioner have been given below.

Table 37: HPSEBL Submission-Details of Banking for FY18 and FY19 (MUs)

	FY18		FY19	
	R.E		Projected	
Months	**Banking Purchase**	**Banking Sale**	**Banking Purchase**	**Banking Sale**
April	54.00	39.42	-	-
May	3.39	212.04	-	200.00
June	-	293.75	-	390.00
July	1.53	423.34	-	390.00
Aug	8.33	489.13	-	390.00
Sep	12.00	258.20	-	190.00
Oct	205.33	-	40.00	-
Nov	365.33	-	250.00	-
Dec	235.33	-	265.00	-
Jan	265.33	-	350.00	-
Feb	365.33	-	395.00	-
Mar	200.00	-	260.00	-
Total	**1715.88**	**1715.88**	**1560.00**	**1560.00**

Revised Estimate for Total Power Purchase

4.4.21 Based on the methodology detailed in the petition, HPSEBL has submitted the revised estimates for FY18 and FY19 as summarized in table below:

Table 38: HPSEBL Submission- Revised estimated of total power procurement (MUs)

Stations	**FY18**	**FY19**
	R.E	**Projected**
Own generation	1962.11	2264.11
GoHP Power	538.97	557.63
NTPC	1756.55	2185.29
Solar Power	61.79	94.87
NPCIL	199.38	166.11
NHPC	283.95	273.02
Kasang	165.94	0.00
BBMB & Share Stations	1072.85	1114.78
SJVNL	2251.37	2281.84
Baspa II	1150.44	1127.28
IPPs	1521.30	1723.58
Municipal Solid Waste to Energy Project	-	24.53

Stations	FY18	FY19
	R.E	Projected
Banking Purchase	1715.88	1560.00
UI	103.00*	-
Contingency	263.09	174.64
Total	**13046.61**	**13547.69**

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

Renewable Purchase Obligations

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

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

Table 39: HPSEBL Submission- Revised estimates of meeting solar RPPO

Particulars	FY18	FY19
Total Purchase (including banking)	12766.93	13261.58
Total Sale (including outside sale & banking sale)	3376.12	3434.65
Energy requirement of the State	9390.82	9826.93
Energy purchased/generated from Hydro Sources	9386.73	9795.89
% age of Hydel share in total requirement	88.63%	88.63%
Requirement met from Hydro sources	8323.08	8709.60
Requirement met from non-hydro sources for working out RPPO	1067.74	1117.32
Non solar (%)	9.50%	10.25%
Non-Solar RPO	**101.43**	**114.53**
Solar (%)	4.75%	6.75%
Solar RPO	**50.72**	**75.42**
Solar Available	**61.79**	**94.87**

4.5 Transmission and Distribution (T&D) Losses

4.5.1 The T&D loss trajectory as approved by the Commission and retained by the Commission in the MTR Order for the Third Control Period is shown in the table below:

Table 40: MYT Approved T&D Loss (%) Trajectory from FY15 to FY19

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

4.5.2 The Petitioner has requested to approve the same T&D losses of 12.20% and 12.00% for FY 18 and FY 19 respectively.

4.6 Energy Balance

4.6.1 Based on the approved loss levels and the sales projections as above, the Petitioner has submitted the revised energy balance for FY18 and FY19. The summary of the annual energy balance as proposed by the Petitioner is reproduced below:

Table 41: HPSEBL Submission- Summary of Energy Balance for FY18 and FY19 (MUs)

Particulars	FY18	FY19
	R.E	Actual
Own Generation	1962.11	2264.11
GoHP Power	538.97	557.63
Central & Shared Stations	5730.04	6021.04
Baspa-II	1150.44	1127.28
IPPs (upto 25 MW)-including REC	1521.30	1723.58
Municipal Solid Waste to Energy Project	-	24.53
Banking Purchase	1715.88	1560.00
Solar Power	61.79	94.87
Others (UI & Contingency)	366.09	174.64
Total Power Purchase	**13046.61**	**13547.69**
Inter State Losses	3.12%	3.16%
Less: Inter-State losses	279.67	286.11
Total Energy availed at HP Periphery	**12766.93**	**13261.58**
Sales within the state	8245.14	8647.70
T&D Losses	12.20%	12.00%
Power Required at HP Periphery for Intrastate Sale	**9390.82**	**9826.93**
Banking sale at discom periphery	1715.88	1560.00
Interstate Sale at HP periphery	1660.24	1874.65
Power required at HP Periphery	**12766.93**	**13261.58**

4.7 Power Purchase Cost

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

Revised Power Purchase Cost from Own Generating Stations

4.7.2 The petitioner has revised the power purchase cost from own sources and brought out the following points based on which the revised power purchase cost for FY18 and FY19 has been projected in the current petition:

- HPSEBL has considered revised estimate for power purchase cost from own generation plants for FY18 & 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

- Petitioner is in the process of filing petition for Ghanvi-II and Uhl-III, and therefore, as of now power purchase cost as per MYT Order has been considered.

4.7.3 Revised estimate for power purchase cost from own generation plants for FY18 and FY19, as submitted by the petitioner is as follows:-

Table 42: HPSEBL Submission- Revised estimates of power purchase cost from Own Generating Stations

Stations	FY18			FY19		
	R.E			Projected		
	MUs	Rs Cr.	Rs/kWh	MUs	Rs Cr.	Rs/kWh
Bhaba	438.52	31.57	0.72	520.00	40.56	0.78
Bassi	351.38	26.70	0.76	310.00	24.49	0.79
Giri	216.52	17.97	0.83	200.00	18.00	0.90
Andhra	68.20	8.80	1.29	72.00	10.08	1.40
Ghanvi	70.95	15.96	2.25	68.64	15.44	2.25
Ghanvi II	36.94	11.73	3.17	34.32	10.90	3.17
Baner	39.59	6.81	1.72	30.80	5.61	1.82
Gaj	31.01	8.81	2.84	35.20	10.63	3.02
Larji	544.64	119.82	2.20	516.56	115.71	2.24
Khauli	38.12	8.58	2.25	40.48	9.11	2.25
Binwa	32.83	6.89	2.10	30.00	6.90	2.30
Thirot	13.76	3.10	2.25	15.00	3.38	2.25
Gumma	15.23	3.43	2.25	8.50	1.91	2.25
Holi	8.48	1.91	2.25	11.10	2.50	2.25

Stations	FY18			FY19		
	R.E			Projected		
	MUs	Rs Cr.	Rs/kWh	MUs	Rs Cr.	Rs/kWh
Bhaba Aug	18.20	4.09	2.25	12.84	2.89	2.25
Nogli	6.59	2.23	3.39	7.00	2.60	3.71
Rongtong	1.79	0.56	3.10	1.09	0.37	3.36
Sal-II	2.52	0.57	2.25	0.00	0.00	0.00
Chaba	6.10	1.56	2.55	6.80	1.90	2.80
Rukti	5.60	0.82	1.47	6.15	0.99	1.61
Chamba	2.10	0.45	2.14	1.77	0.41	2.34
Killar	0.76	0.17	2.25	0.40	0.09	2.25
Uhl III - BVPCL	12.27	5.52	4.50	335.46	150.96	4.50
Total	**1962.11**	**288.05**	**1.47**	**2264.11**	**435.42**	**1.92**

Revised Power Purchase Cost from GoHP free power

4.7.4 Revised estimate for power purchase cost from GoHP free power for FY18 and FY19 has been considered at the rate of Rs. 2.63/unit as per HPERC Order dated 10th Apr'17 on GoHP free power for FY18. The power purchase cost projected for FY18 and FY19 as submitted by the petitioner is as follows:-

Table 43: HPSEBL Submission- Revised estimate of power purchase from GoHP free power

Stations	FY18			FY19		
	R.E			Projected		
	MUs	Rs Cr.	Rs/kWh	MUs	Rs Cr.	Rs/kWh
Baira Siul	-	-	-	-	-	-
Chamera-I	-	-	-	-	-	-
Chamera-II	-	-	-	-	-	-
Chamera-III	-	-	-	-	-	-
Parbati-III	-	-	-	-	-	-
Kol Dam	2.11	0.56	2.63	-	-	-
Ranjeet Sagar Dam Share	73.06	19.22	2.63	70.26	18.48	2.63
Shanan Share	2.63	0.69	2.63	2.63	0.69	2.63
Malana	69.65	18.32	2.63	73.28	19.27	2.63
Baspa (Primary & Sec.)	155.70	40.95	2.63	143.19	37.66	2.63
Nathpa Jhakri HEP	3.55	0.93	2.63	-	-	-
Rampur project	-	-	-	-	-	-
Kashang	24.29	6.39	2.63	-	-	-
Chanju	17.47	4.59	2.63	24.56	6.46	2.63
Larji	73.17	19.24	2.63	70.44	18.53	2.63
Ghanvi	9.67	2.54	2.63	9.36	2.46	2.63

Stations	FY18			FY19		
	R.E			Projected		
	MUs	Rs Cr.	Rs/kWh	MUs	Rs Cr.	Rs/kWh
Baner	5.40	1.42	2.63	4.20	1.10	2.63
Gaj	4.23	1.11	2.63	4.80	1.26	2.63
Khauli	5.20	1.37	2.63	5.52	1.45	2.63
Ghanvi II	3.49	0.92	2.63	4.68	1.23	2.63
Uhl-III	2.68	0.71	2.63	45.75	12.03	2.63
Small HEP/ Private Micro - Free	86.68	22.80	2.63	98.97	26.03	2.63
Total	**538.97**	**141.75**	**2.63**	**557.63**	**146.66**	**2.63**

Revised Power Purchase Cost from NTPC plants

4.7.5 In the petition, HPSEBL has revised the power purchase cost of NTPC plants for FY18 & FY19 using the following basis:

Table 44: HPSEBL Submission- Basis for projection of power purchase cost from NTPC stations

Financial Year	Basis of Projections
FY 2017-18	The fixed cost of NTPC stations (in proportion to HPSEBL share) has been considered as per the notified CERC Order of the respective plant while variable cost has been derived by increasing variable charge of Sep'17 by 2%.
	Unchahar IV- fixed cost has been projected (in proportion to HPSEBL share) at the current billing and variable cost has been derived by increasing variable charge of Sep'17 by 2%
	Koldam HEP- Tariff Order of Koldam for FY18 still has not been notified. Therefore, the fixed & variable charge has been calculated based on the current billing rate. Further, HPSEBL has also considered average NAPAF from date of commissioning of plant while determining fixed cost of plants. *(normative: 90%, average: 106.48%)*
FY 2018-19	The fixed cost of NTPC Stations (in proportion to HPSEBL share) has been considered as per the notified CERC Order of the respective plant while variable cost has been derived by increasing variable charge of Sep'17 by 5%.
	Unchahar IV- Projections has been made based on the fixed cost & variable cost considered by NTPC in their petition.
	Koldam HEP- Tariff Order of Koldam for FY19 still has not been notified. Therefore, the fixed & variable charge has been calculated based on the current billing rate. Further, HPSEBL has also considered average NAPAF from date of commissioning of plant while determining fixed cost of plants. *(normative: 90%, average: 106.48%)*

4.7.6 Revised estimate for power purchase cost from NTPC plants for FY18 and FY19 as submitted by the Petitioner is as follows:

Table 45: HPSEBL Submission- Revised estimated of power purchase cost from NTPC plants

Stations	FY18			FY19		
	R.E			Projected		
	MUs	Rs Cr.	Rs/kWh	MUs	Rs Cr.	Rs/kWh
Anta (G)	30.53	22.18	7.26	108.98	38.53	3.54
Anta (L)	0.17	0.15	8.99	0.00	0.00	0.00
Anta (LNG)	22.36	12.02	5.38	0.00	0.00	0.00
Auriya (G)	28.68	19.70	6.87	159.89	48.96	3.06
Auriya (L)	0.35	0.31	8.80	0.00	0.00	0.00
Auriya (LNG)	12.19	8.27	6.79	0.00	0.00	0.00
Dadri (G)	82.82	52.70	6.36	181.32	84.01	4.63
Dadri (L)	5.08	4.28	8.43	0.00	0.00	0.00
Dadri (LNG)	20.30	12.57	6.19	0.00	0.00	0.00
Unchahar-I	83.16	30.49	3.67	48.35	19.99	4.13
Unchahar-II	109.31	39.59	3.62	85.87	34.74	4.05
Unchahar-III	62.25	26.73	4.29	56.13	24.74	4.41
Unchahar-IV	4.98	14.36	28.81	157.95	73.91	4.68
Rihand-1 STPS	219.99	49.38	2.24	247.50	54.30	2.19
Rihand-2 STPS	200.25	46.55	2.32	240.53	49.05	2.04
Singrauli STPS	38.63	7.49	1.94	25.73	5.73	2.23
Kahalgaon - II	138.10	49.50	3.58	157.27	54.77	3.48
Rihand-3 Units-1,2	205.84	63.82	3.10	247.95	69.62	2.81
Dadri-II TPS	51.76	18.92	3.65	14.18	6.68	4.71
Jhajjar TPS	0.00	0.00	0.00	0.00	0.00	0.00
Koldam	439.80	212.00	4.82	453.64	217.96	4.80
Total	**1756.55**	**691.00**	**3.93**	**2185.29**	**782.99**	**3.58**

Revised Power Purchase Cost from NPCIL plants

4.7.7 The Petitioner has submitted that it has revised the power purchase cost of NPCIL plants for FY18 & FY19 by normative escalation of 2% and 5% on the average power purchase rate upto Sep’17 respectively. Revised estimates for power purchase cost from NPCIL plants for FY18 and FY19 as submitted by the petitioner is as follows:-

Table 46: HPSEBL Submission- Revised estimates of power purchase cost from NPCIL plants

Stations	FY18			FY19		
	R.E			Projected		
	MUs	Rs Cr.	Rs/kWh	Rs Cr.	MUs	Rs/kWh
NAPP	91.96	24.23	2.63	82.94	22.50	2.71
RAPP (V & VI)	107.41	38.75	3.61	83.17	30.89	3.71
Total	**199.38**	**62.98**	**3.16**	**166.11**	**53.38**	**3.21**

Revised Power Purchase Cost from NHPC plants

4.7.8 For determining the power purchase cost from NHPC stations for FY18 & FY19, the Petitioner has used the following basis:

Table 47: HPSEBL Submission- Basis for projection of power purchase cost from NHPC stations

<table>
<tr><th>Financial Year</th><th>Basis of Projections</th></tr>
<tr><td>FY 2017-18</td><td>The fixed cost (in proportion to HPSEBL share) & variable cost of NHPC Stations has been considered as per the notified CERC Order of the respective plant. Further, HPSEBL has also considered average NAPAF of last 3 yrs while determining fixed cost of plants.
<table>
<tr><th>Station</th><th>Normative NAPAF</th><th>Actual (3 yrs avg.)</th></tr>
<tr><td>Chamera I</td><td>90%</td><td>96.85%</td></tr>
<tr><td>Chamera II</td><td>90%</td><td>96.07%</td></tr>
<tr><td>Salal</td><td>60%</td><td>69.60%</td></tr>
<tr><td>Tanakpur</td><td>55%</td><td>66.12%</td></tr>
<tr><td>Uri</td><td>70%</td><td>81.63%</td></tr>
<tr><td>Dhauliganga</td><td>90%</td><td>72.69%</td></tr>
</table></td></tr>
<tr><td>FY 2018-19</td><td>The fixed cost (in proportion to HPSEBL share) & variable cost has been considered as per the notified CERC Order of the respective plant. Further, HPSEBL has also considered average NAPAF of last 3 yrs while determining fixed cost of plants.
<table>
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</table></td></tr>
</table>

4.7.9 Revised estimates for power purchase cost from NHPC plants for FY18 and FY19 as submitted by the petitioner is as follows:

Table 48: HPSEBL Submission- Revised estimate of power purchase cost from NHPC plants

Stations	FY18			FY19		
	R.E			Projected		
	MUs	Rs Cr.	Rs/kWh	MUs	Rs Cr.	Rs/kWh
Chamera I	65.89	12.99	1.97	63.37	13.07	2.06
Chamera II	54.25	11.12	2.05	51.23	10.97	2.14
Salal	33.92	7.62	2.25	33.17	7.80	2.35
Tanakpur	14.18	5.47	3.85	11.57	5.30	4.58
Uri	77.68	16.18	2.08	80.71	16.49	2.04
Dhauliganga	38.03	10.62	2.79	32.97	7.93	2.40
Total	**283.95**	**63.99**	**2.25**	**273.02**	**61.56**	**2.25**

Revised Power Purchase Cost from BBMB & other shared plants

4.7.10 The Petitioner has revised the power purchase cost of BBMB for FY18 & FY19 based on the cost approved by the BBMB Board. For Shanan stations and UJVNL, revision has been made based on tariff approved by PSERC and UERC respectively. In case of Khara, power purchase cost for FY18 and FY19 has been made based on the petition filed by UPJVNL.

4.7.11 Revised estimates for power purchase cost from BBMB & other shared plants for FY18 and FY19 as submitted by the petitioner is as follows:-

Table 49: HPSEBL Submission- Revised estimate of power purchase cost from BBMB & other shared plants

Stations	FY18			FY19		
	R.E			Projected		
	MUs	Rs Cr.	Rs/kWh	MUs	Rs Cr.	Rs/kWh
BBMB Old	43.82	5.87	1.34	43.80	6.01	1.37
BBMB New	315.93	34.76	1.10	340.18	34.76	1.02
Dehar	180.02	0.00	0.00	195.80	0.00	0.00
Pong	40.92	0.00	0.00	43.16	0.00	0.00
Shanan (available to HPSEB)	5.26	0.43	0.81	5.26	0.43	0.81
Shanan Ext (available to HPSEB)	45.00	3.66	0.81	45.00	3.66	0.81
Yamuna	384.56	44.22	1.15	387.82	49.95	1.29
Khara	57.36	9.23	1.61	53.76	8.77	1.63
Total	**1072.85**	**98.17**	**0.92**	**1114.78**	**103.57**	**0.93**

Revised Power Purchase Cost from SJVNL and other stations

4.7.12 The Petitioner has revised the power purchase cost of Nathpa Jhakri SOR, Nathpa Jhakri Equity share, Rampur SOR, Rampur Equity share plants for FY18 and FY19 based on the notified CERC order of the respective plant and the average NAPAF of last 3 years.

4.7.13 The Petitioner has submitted that it has considered the approved tariff of Baspa-II HEP as approved by the Commission for revising the power purchase cost for FY18 and FY19.

4.7.14 For projections of other stations (IPPs –less than 25MW), the Petitioner has considered the current tariff of the each station while for APPC tariff stations, the notified APPC tariff of FY18 has been considered. For Municipal Solid Waste to Energy Project, the tariff has been considered Rs.7.90/kWh for FY19 as per the signed PPA.

4.7.15 Revised estimates for power purchase cost from these stations for FY18 and FY19 as submitted by the petitioner are as follows:

Table 50: HPSEBL Submission- Revised estimate of power purchase from SJVNL and other stations

Stations	FY18			FY19		
	R.E			Projected		
	MUs	Rs Cr.	Rs/kWh	MUs	Rs Cr.	Rs/kWh
Nathpa Jhakri SOR	204.77	46.76	2.28	177.07	44.31	2.50
Nathpa Jhakri Equity	1557.50	384.76	2.47	1561.82	392.78	2.51
Rampur HEP SOR Share	41.41	16.45	3.97	52.77	18.40	3.49
Rampur HEP Equity Share	447.69	163.01	3.64	490.18	170.90	3.49
Small HEP/ Private Micro	1191.49	328.69	2.76	1300.43	361.62	2.78
Small HEP/ Private Micro -REC	329.81	80.14	2.43	423.15	102.98	2.43
Baspa - II - Primary	988.57	179.47	1.56	1050.06	187.13	1.66
Baspa - II Secondary Energy	161.87			77.22		
Waste to Energy Project	-	-	-	24.53	19.38	7.90
Total	**2251.37**	**610.98**	**2.71**	**2281.84**	**626.38**	**2.75**

Revised Power Purchase Cost from Solar Projects

4.7.16 The Petitioner has considered the average power purchase rate upto Sep '17 for projecting the power purchase cost for Singrauli Solar while in case of SECI, the

Petitioner has considered an escalation of 5% over the average power purchase rate upto Sep '17.

4.7.17 For projections of additional private solar projects that would be commissioned in Himachal Pradesh during FY19, the Petitioner has considered the tariff as per their PPA.

4.7.18 The revised power purchase cost from solar projects, as submitted by the petitioner, for FY18 and FY19 is as follows:

Stations	FY18			FY19		
	R.E			Projected		
	MUs	Rs Cr.	Rs/kWh	MUs	Rs Cr.	Rs/kWh
Singrauli Solar	22.65	17.83	7.87	24.97	19.66	7.87
SECI	39.14	22.60	5.78	33.29	19.22	5.78
Private Solar Projects	-	-	-	36.62	19.25	5.26
Total	**61.79**	**40.43**	**6.54**	**94.87**	**58.14**	**6.13**

Revised Overall Power Purchase Cost

4.7.19 The overall revised power purchase cost, as submitted by the petitioner, for FY18 and FY19 is as follows:

Table 51: HPSEBL Submission- Revised estimate of overall power purchase cost

Stations	FY18			FY19		
	R.E			Projected		
	MUs	Rs Cr.	Rs/kWh	MUs	Rs Cr.	Rs/kWh
Own generation	1962.11	288.05	1.47	2264.11	435.42	1.92
GoHP Free Power	538.97	141.75	2.63	557.63	146.66	2.63
NTPC	1756.55	691.00	3.93	2185.29	782.99	3.58
Solar Power	61.79	40.43	6.54	94.87	58.14	6.13
NPCIL	199.38	62.98	3.16	166.11	53.38	3.21
NHPC	283.95	63.99	2.25	273.02	61.56	2.25
Kasang	165.94	36.51	2.20	0.00	0.00	
BBMB & Share Stations	1072.85	98.17	0.92	1114.78	103.57	0.93
SJVNL	2251.37	610.98	2.71	2281.84	626.38	2.75
Baspa II	1150.44	179.47	1.56	1127.28	187.13	1.66
IPPs	1521.30	408.83	2.69	1723.58	464.60	2.70
Waste to energy Plant	-	-	-	24.53	19.38	7.90
Banking Purchase	1715.88	0.00	-	1560.00	0.00	-
UI	103.00	33.25	3.23	-	-	-

Stations	FY18			FY19		
	R.E			Projected		
	MUs	Rs Cr.	Rs/kWh	MUs	Rs Cr.	Rs/kWh
Contingency	263.09	93.66	3.56	174.64	62.17	3.56
Total	**13046.61**	**2749.07**	**2.43**	**13547.69**	**3001.38**	**2.50**

Transmission and Other charges

4.7.20 The Petitioner has submitted that the projections for transmission charges (PGCIL & HPPTCL) and other power purchase related charges for FY18 & FY19 in the tariff petition have been made by considering the following points:

- PGCIL charges for FY18 have been considered as approved in the Mid Term Review Order while for FY19, charges paid upto Sep'17 have been pro-rated for 12 months and an escalation of 10% has been considered.
- HPPTCL charges for FY18 & FY19 have been considered as approved in the Mid Term Review Order & MYT Order respectively.
- Open Access Charges (OA) for FY18 & FY19 have been considered as approved in the Mid Term Review Order & MYT Order respectively.
- SLDC charges for FY18 & FY19 have been considered as approved in Mid Term Review Order & Tariff Order of HPSLDC dt. 10th Apr'17 respectively.

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

Table 52: HPSEBL Submission- Summary of Transmission Charges (Rs. Cr.)

Particulars	FY18	FY19
	R.E.	Projected
PGCIL Charges	243.69	215.94
HPPTCL Charges	3.36	3.46
SLDC Charges	0.92	2.12
Open Access Charges	59.79	77.78
Total	**307.76**	**299.30**

4.8 Operation & Maintenance Expenses (O&M)

Employee Expenses

4.8.1 Petitioner has followed a similar methodology as provided in the MYT Regulations for projection of employee cost for FY18 and FY19. The 3 year and 5 year $CPI_{inflation}$ rate calculated by the Petitioner is as per the following table:

Table 53: HPSEBL Submission- CPI Calculation

Year	CPI	% Increase
FY 2016-17	275.92	4.12%
FY 2015-16	265.00	7.32%
FY 2014-15	246.92	4.63%
FY 2013-14	236.00	9.68%
FY 2012-13	215.17	10.44%
5 Yr Average Inflation		**7.43%**
3 Yr Average Inflation		**5.36%**

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

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

Table 54: HPSEBL Submission- Projected Growth Factor for Employee Costs

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Actual	Actual	R.E	Projected
Number of Employees	17448	18302	17934	17886	17839
Growth (G) % in Employees on Account of Consumer connections		4.89%	-2.01%	-0.27%	-0.26%

Computation of Terminal Benefits

4.8.4 As per the annual budget prepared by the Petitioner, the terminal benefits liability proposed for FY18 and FY19 is Rs. 537.88 Cr. & Rs 590.55 respectively for the entire board. The segregated terminal benefit liability for the distribution & generation employees, as proposed by the Petitioner, is given in the table given below:

Table 55: HPSEBL Submission- Provisional segregated terminal benefits for FY18 and FY19 (Rs. Cr.)

Particulars	HPSEBL	Distribution	Generation
Terminal Benefits- FY18	537.88	529.04	8.84
Terminal Benefits- FY19	590.55	580.85	9.70

Additional Liability on account of 7th Pay Commission

4.8.5 The Petitioner has submitted that the salary revision of Government employees on account of the recommendations of the 7th Pay Commission is due w.e.f. 01st January 2016. HPSEBL 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 FY19.

4.8.6 Further, the Petitioner has submitted that the arrears of previous years with effect from 1st Jan'16 have also been considered in FY19 which amounts Rs. 377.54 Cr. This has been adjusted with Rs. 115 Cr. provisionally approved by the Commission in its previous Orders on account of 7th Pay Commission.

4.8.7 As per the projected values of terminal benefits, additional liability, arrears, G_n and $CPI_{inflation}$, the Petitioner has projected the employee expenses calculated for the FY18 and FY19 as under:

Table 56: HPSEBL Submission- Projected Employee Cost

Particulars	FY18	FY19
	R.E	Projected
Employee's Cost		
Salaries (Basic) +DP	322.82	345.89
Grade pay	62.68	67.16
DA	430.02	460.75
Other Allowances	35.00	37.51
Overtime	4.11	4.41
Bonus	1.06	1.14
Total Salaries	**855.69**	**916.85**
Other Staff Cost		
Leave Travel Assistance	0.16	0.17
Fee & Honorarium	0.43	0.46
Earned Leave Encashment	84.14	90.15
Medical Expense Re-Imbursement	8.69	9.31
Payment Under Workman's Compensation And Gratuity	1.37	1.47

Particulars	FY18	FY19
	R.E	Projected
Salary/Wages of Outsourced/Contractor	27.05	28.99
Staff Welfare Expenses	0.18	0.20
Gross Other Staff Cost	**122.02**	**130.75**
Terminal Benefits	**529.04**	**580.85**
Gross Employee Cost	**1506.76**	**1628.45**
Less: Expenses capitalized	34.39	36.85
Net Employee Cost	**1472.36**	**1591.60**
Add: Additional liability in account of 7th Pay commission		294.63
Arrears of Previous Years(Impact of 7th Pay Commission)		377.54
Grand Total	**1472.36**	**2263.77**

Repair and Maintenance Expenses

4.8.8 For projections of R&M expenses, the Petitioner has computed the K factor for FY18 and FY19 as the K factor for the last financial years i.e. FY17. The Petitioner has also submitted that during FY17, the R&M expense of HPSEBL is Rs 70.25 Cr which is 84.24% higher than the expense of FY16. The same increase in R&M expense is expected in the subsequent years due to maintenance cost of IT system & other R&M works.

4.8.9 The Petitioner has submitted that it has computed the K factor for FY18 and FY19 as the K factor of the last financial year i.e. FY17. The computation of the same, as considered by the Petitioner, is given below:

Table 57: K Factor calculation (%)

Particulars	FY17
Opening GFA	4852.14
R&M Expenses	70.25
R&M Costs as % of GFA	1.45%
K Factor	**1.45%**

4.8.10 The Petitioner 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. The Petitioner has submitted that 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.

4.8.11 Accordingly, the Petitioner has added IT system expenses as part of R&M Expenses which is necessary for the upkeep and maintenance of IT systems and has requested Hon'ble Commission to allow it as a special expense under R&M expense.

4.8.12 The sub-heads of R&M cost have been projected on the basis of historical proportion of these sub-heads in the total R&M cost. Table below summarizes the revised estimates of R&M expenses projected by the Petitioner for FY18 and FY19:

Table 58: HPSEBL Submission- Proposed R&M Expenses for FY18 and FY19 (Rs. Cr.)

Particulars	FY18	FY19
	R.E	Projected
Plant & Machinery	0.30	0.33
Buildings	1.39	1.51
Civil Works	2.12	2.30
Hydraulic Works	0.03	0.04
Lines, Cables Networks & DTR Repair	60.32	65.44
Vehicles	13.72	14.88
Furniture & Fixtures	0.05	0.06
Office Equipments	20.39	22.11
IT systems	30.00	35.00
R&M Cost - Total	***128.33***	***141.67***
Any other Items (Reallocated to Capital Works)	-2.06	-2.23
R&M Costs after Capitalization	***126.27***	***139.44***
Less: Cost Reallocated to Employee Cost & A&G Expenses	0.85	0.92
Less: Cost Reallocated to Depreciation & Recovery of cost of vehicle from O&M and other units	19.65	21.32
Overall R&M Expenses	**105.77**	**117.20**

Administrative and General Expenses

4.8.13 The Petitioner has projected A&G expenses based on the methodology laid down in the MYT Regulations. The WPI inflation computed by the Petitioner is shown below:

Table 59: HPSEBL Submission- Details of Historical WPI

Year	WPI	% Increase
FY 2016-17	111.62	1.73%
FY 2015-16	109.72	-3.65%
FY 2014-15	113.88	1.26%
FY 2013-14	112.46	5.20%

Year	WPI	% Increase
FY 2012-13	106.90	6.88%
5 Yr Average Inflation		**2.28%**
3 Yr Average Inflation		**-0.22%**

4.8.14 The Petitioner has considered the WPI inflation of 2.28% for projection of A&G expenses. Besides, these the norms calculated by the Petitioner are shown in the table below:

Table 60: HPSEBL Submission- A&G Norms

Norms	FY17
	Actual
No. of employees	17934
A&G cost (Rs Cr.)	51.12
A&G / employee (Rs '000 / employee)	**28.50**
No. of consumers	23,16,515
A&G cost (Rs. Cr.)	51.12
A&G / 1000 consumers (Rs '000 / 1000 consumers)	**22.07**

4.8.15 The projections for number of employees and consumers as estimated by the Petitioner is presented in the table below. These projections, along with the WPI inflation as calculated have been used to estimate the A&G costs for FY18 and FY19:

Table 61: HPSEBL Submission- Basis for A&G Norms

Particulars	FY15	FY16	FY17	FY18	FY19
	Actual	Actual	Actual	R.E	Projected
No. of employees	17448	18302	17934	17886	17839
No. of consumers	21,99,970	22,55,105	23,16,515	23,79,595	24,44,626
Weightage of A&G/ Employee	50%				
Weightage of A&G/ 1000 Consumers	50%				
WPI	2.28%				

4.8.16 Considering the A&G Norms, WPI and weightage of number of employees and consumers as shown in above table, the Petitioner has calculated the A&G expenses as shown in the following table. The sub-heads of A&G cost have been projected by the Petitioner on the basis of historical proportion of these sub-heads in the total A&G cost:

Table 62: HPSEBL Submission- Projected A&G Expenses for FY18 and FY19 (Rs. Cr.)

Particulars	FY18	FY19
	R.E	Projected
Administration Charges		
Rent, Rates & Taxes	3.05	3.91
Telephone, Postage & Telegrams	2.69	3.44
Consultancy Charges	0.63	0.81
Consultancy charges towards Digitization of Consumers and Employees	2.00	2.00
Consultancy charges towards Accounting Manual	2.00	
Meter Data & Meter Performance Analysis	2.00	
Consultancy charges towards Voltage Wise CoS	0.70	
Conveyance & Travel	12.50	12.94
Regulatory Expenses	0.98	1.02
Licensee fee Distribution & Transmission payable to HPERC	0.25	0.25
Income Tax Updating Charges	0.14	0.15
Consumer Redressal Forum	0.50	0.51
Insurance	0.03	0.03
Purchase Related Expenses & Other Charges	0.77	0.79
Administration Charges - Total	**28.25**	**25.86**
Other Charges		
Fees & Subscriptions, Books & Periodicals	12.49	12.93
Printing & Stationery	3.83	3.97
Exp. Under RTI and processing fee	0.00	0.00
Advertisement Expenses	0.63	0.65
Donation/ Contribution	0.00	0.00
Electricity Charges	5.37	5.57
Water Charges / Cold weather expenses	0.29	0.30
Miscellaneous Expenses	1.69	1.75
Exp. On IPAVAST Connectivity Charges etc.	3.11	3.22
Legal Charges	3.52	6.65
Audit Fee/Statutory & Internal Audit Fee	0.35	0.76
Vehicles repair & replacement		2.00
CUG Charges	2.50	2.50
Freight Material related Expenses	0.00	0.00
Entertainment Charges	0.09	0.10
Training to Staff	5.00	5.00
Public Interaction Program	0.166	0.172
Public Expenses / Other professional charges	0.51	0.53
Online Transaction Charges on electricity bill payment	0.04	0.24
GIS / GPS expenses related to High level Committee	0.155	0.161
Connectivity charges for computer related data centre expenses	4.63	5.00
Expense of collection of energy bill through agency	1.13	1.17

Particulars	FY18	FY19
	R.E	Projected
Fee for SSA Examination	0.02	0.02
A&G – Total	**73.77**	**78.54**
Less: Capitalization	(0.10)	(0.10)
Net A&G Costs	**73.67**	**78.44**

4.8.17 Additionally, the Petitioner has submitted that it has made additional provisions for FY19 in A&G expenses for the following purposes:

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

b) Most of the Vehicles of HPSEBL are not in good condition and need to be replaced & repaired in phased manner, initially Rs 2 Cr. is required for this activity, therefore amount Rs 2 Cr. has been considered for FY19.

c) As per Ministry of Power letter dt. 23rd Oct'17, all Discoms have been directed to onboard BBPS developed by National Payments Corporation of India (NPCI) and with implementation of this consumer shall be charged Rs. 2.45/- (including taxes) per transaction in addition to the bill amount. Presently consumers of HPSEBL are not paying any charges for online transaction and it is proposed that in future also no transaction charges to be paid by consumer. However, HPSEBL will bear the cost of each transaction, therefore, the Petitioner has requested to approve the projected transaction charges for online payment of consumers.

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

e) HPSEBL has already conducted several training programs in the current financial year FY18 for its employees like junior team mates, JEs, WAOs etc. and is planning to conduct more trainings for its employees in the next financial year FY19. The same is required for skill up-gradation considering the dynamic scenario of distribution business. Therefore, the Petitioner has requested the Hon'ble Commission to approve Rs 5 Cr. for FY19 also.

4.8.18 The total O&M expense proposed by the Petitioner for the FY18 and FY19 is shown as below:

Table 63: HPSEBL Submission- Projected O&M Cost for FY18 and FY19 (Rs. Cr.)

Particulars	FY18	FY19
	R.E.	Projected
Employee Expenses	1472.36	2263.77
R&M Expense	105.77	117.20

Particulars	FY18	FY19
	R.E.	Projected
A&G Expenses	73.67	78.44
Total O&M Expenses	**1651.81**	**2459.41**

4.9 Additional amount for safety measures

4.9.1 The Petitioner has submitted that for FY19, the management has again taken a review of the status of safety equipment available at field level and it has been seen 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 decided 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. These measures are required for minimizing the fatalities/injuries to the field staff and creating greater awareness about safety. Further, HPSEBL has also submitted that it has decided to provide GI conductor for approximately 1 lakh km lines. Moreover, to avoid road accident, clearance, guarding etc. some more safety measures are required to be taken. Therefore, the Petitioner has requested the Hon'ble Commission to approve Rs. 15 Cr. for additional safety measures for FY19.

4.10 Depreciation

4.10.1 For the purpose of projection of depreciation charges for FY18 and FY19 in the current petition, the Petitioner has considered the opening GFA for FY17 and the GFA proposed to the added during FY18 and FY19. HPSEBL has projected the GFA addition for FY18 and FY19 to Rs 443.84 Cr. & Rs 619.15 Cr.

4.10.2 The proposed break-up of assets, as submitted by the Petitioner is given in the table below:

Table 64: HPSEBL Submission- Proposed GFA for depreciation calculation for FY18 and FY19 (Rs. Cr.)

Particulars	FY16	FY17	FY18	FY19
	Actual	Actual	Projected	
Land & Land Rights	70.92	75.55	82.69	92.66
Building & civil works	130.97	135.06	148.71	167.74
Hydraulic Works	65.25	64.98	66.84	69.43
Lines, Cables, Networking etc. (including Towers, poles, Fixtures, switchgears, Control gears, Batteries & Others)	2673.72	2866.65	3112.32	3455.04
Plants & Machinery	1576.41	1748.76	1896.61	2102.87

Particulars	FY16	FY17	FY18	FY19
	Actual	Actual	Projected	
Vehicles	15.65	16.14	17.68	19.84
Furniture Fixture	9.87	9.93	10.89	12.24
Office equipment including intangibles	108.77	109.41	116.51	126.40
Assets not belonging to the Board	-	-	0.12	0.28
Others civil works	200.58	206.92	224.85	249.86
Date Processing Equipment				
Grand Total	**4852.14**	**5233.40**	**5677.23**	**6296.39**

4.10.3 Based on the aforementioned projected asset schedule, the Petitioner has computed the depreciation. The depreciation rates have been considered in accordance with the HPERC MYT Tariff regulations. The estimated depreciation for FY18 & FY19 as submitted by the Petitioner is given in the table below:

Table 65: HPSEBL Submission- Details of depreciation projected for FY18 and FY19 (Rs. Cr.)

Particulars	FY18			FY19	
	Approved in MYT Order	Approved in Mid Term Review Order	Submitted Now	Approved in MYT Order	Submitted Now
Depreciation	93.90	93.90	193.60	107.91	212.28

4.11 Interest on Working Capital

4.11.1 The Normative Working Capital requirement as well as the Interest on Normative Working Capital for FY18 and FY19 has been computed by the Petitioner as per the methodology provided in the MYT Tariff Regulations. The interest on Normative Working Capital has been considered to be 12.55%.

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

Table 66: HPSEBL Submission- Proposed Interest on Working Capital for FY18 and FY19 (Rs. Cr.)

Particulars	FY18	FY19
	R.E	Projected
O&M expenses	1651.81	1787.23
R&M expenses	105.77	117.20
A&G expenses	73.67	78.44

Particulars	FY18	FY19
	R.E	Projected
Employee expenses	1,472.36	1,591.60
O&M expenses for 1 month	137.65	148.94
Annual revenues from tariffs and charges	4846.48	5081.31
Receivables equivalent to 2 months average billing	807.75	846.88
Maintenance Spares (40% of R&M Expense of 1 Month)	3.53	3.91
Less: one month power purchase	229.09	250.11
Less: Consumer Security Deposit	344.85	354.27
Total Working Capital	**374.99**	**395.34**
Interest on Working Capital	**47.06**	**49.62**

4.12 **Interest and Finance charges**

4.12.1 For the current petition, HPSEBL has estimated the Interest & Finance charges for FY18 and FY19 as per the following:

a. *Interest Charges on the loans outstanding as on 31st March 17* – Refers to the interest charge payable by the Petitioner on the outstanding loans at the end of FY17. The said loans have been raised from REC, RGGVY, ADB, Non SLR Bonds, state government, Loans as per the FRP restructuring, etc.

b. *Interest on new Capex* – Interest charges payable for the loans projected to be raised for the capital investment projected for FY18 and FY19. For the purpose of projecting the ARR for the petition, the petitioner has considered the proposed capital investment as submitted and thus, the interest charges for FY18 and FY19 on account of new loans.

c. *Interest on Normative Working Capital* – Interest on working capital has been projected in accordance with the MYT Regulations 2011 and its subsequent amendments from time to time.

d. *Cost of raising finances* – These include the expenses incurred by the Petitioner while raising the debt for the capital investment during the year. The cost of raising finances has been considered at 2% of the loans proposed to be raised during FY18 and FY19.

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

4.12.2 The Petitioner has paid interest on security deposit @ 6.89% per annum in the current year and has considered the same for projecting the interest on consumer security deposit for FY18 and FY19:

Table 67: HPSEBL Submission- Projection of Consumer Security Deposit FY18 and FY19 (Rs. Cr.)

Financial Year	Interest on Consumer Security Deposit (Rs. Cr.)	No. of consumers
FY 2015-16 (actual)	17.93	22,55,105
FY 2016-17 (provisional)	10.72	23,16,515
FY 2017-18 (R.E)	23.13	23,79,595
FY 2018-19 (projected)	23.76	24,44,626

4.12.3 The Petitioner has also added the interest to be borne on UDAY bonds to the interest and finance charges for FY18 and FY19 based on the following computation:

Table 68: HPSEBL Submission- Savings due to UDAY (Rs. Cr.)

Year	Cash outflow due to effect of UDAY (75% of total debt)			Cash outflow without UDAY's effect (75% of total debt)			Saving (in outflow of cash)
	Interest	Redemption	Total cash outflow	Interest	Redemption	Total cash outflow	
2018	227.78	0	227.78	252.06	293.95	546.01	318.23
2019	227.78	0	227.78	228.51	180.84	409.35	181.56
2020	227.78	0	227.78	212.82	178.84	391.66	163.88
2021	227.78	0	227.78	197.24	175.58	370.82	143.04
2022	227.78	0	227.78	182.17	173.05	355.22	127.44
Total Savings (Rs Cr.)							**934.15**

The summary of the proposed interest and finance charges for FY18 and FY19 is provided in table below:

Table 69: HPSEBL Submission- Summary of the Proposed Interest and Finance Charges for FY18 and FY19 (Rs. Cr.)

Particulars	FY18	FY19
	R.E	Projected
RGGVY - Existing loans as on 31 March 2017	0.08	0.08
REC - Existing loans as on 31 March 2017	59.00	61.00
PFC - Existing loans as on 31 March 2017	26.50	27.00
ADB - Existing loans as on 31 March 2017	1.50	1.50
Non SLR Bonds	75.81	75.81
UDAY Bonds	227.76	227.76
Cost of Raising Finances	7.99	11.14
Interest on Consumer Security Deposits	23.13	23.76
Interest on new CAPEX loans	41.67	58.12
Interest on working capital	47.06	49.62
Interest & Finance Charges – Total	**510.50**	**535.98**
Less: Interest Capitalization	53.90	45.58
Net Interest & Financing Costs	**456.60**	**490.21**

4.13 Return on equity

4.13.1 For the purpose of computation of RoE, the Petitioner has considered the opening equity for the distribution business for FY18 as Rs. 449.69 Cr.

4.13.2 The return on equity as proposed by the Petitioner for FY18 and FY19 is summarized below:

Table 70: HPSEBL Submission- Proposed Return on Equity for FY18 and FY19 (Rs.Cr.)

Particulars	FY18 R.E	FY19 Projected
Opening Equity	449.69	494.07
Equity Infusion	44.38	61.92
Closing Equity	494.07	555.99
Rate of Return on Equity	16.00%	16.00%
Return on Equity	**75.50**	**84.00**

4.14 Provision for Bad and Doubtful Debt

4.14.1 The Petitioner has submitted provision for bad and doubtful debt as follows:

Table 71: HPSEBL Submission- Provision for Bad and Doubtful Debt for FY18 and FY19 (Rs. Cr.)

Particulars	FY18 R.E	FY19 Projected
Receivable from customers as at the beginning of the year	1243.74	1016.01
Revenue billed for the year	4846	5081
Collection for the year		
Against current dues	4701.09	4674.80
Against arrears upto previous year	373.12	812.81
Gross receivables from customers at the end of the year	1016.01	609.71
Receivables against permanently disconnected consumers	20.47	20.47
Receivables	995.54	589.24
% of provision	0.02%	0.02%
Provision for bad and doubtful debts	**0.17**	**0.10**

4.15 Non-tariff Income

4.15.1 The Petitioner has estimated non-tariff and other Income for the FY18 and FY19 as shown in the table below:

Table 72: HPSEBL Submission- Non-Tariff Income for FY18 and FY19 (Rs. Cr.)

Particulars	FY18 R.E	FY19 Projected
Meter Rent/Service Line Rentals	56.02	61.82
Recovery for theft of Power / Malpractices	0.01	0.01
Wheeling Charges Recovery	103.70	116.85

Particulars	FY18 R.E	FY19 Projected
Peak Load Charges	0.00	0.00
Miscellaneous Charges from Consumers	3.61	3.99
Non-Tariff Income - sub-total	**163.34**	**182.67**
Other Income		
Interest on Staff loans & Advances	0.46	0.46
Income from Investments	0.48	0.52
Interest on Loans & Advances to Licensees	1.00	2.00
Delayed Payment Charges from Consumers	0.00	0.00
Interest on Advances to Suppliers / Contractors	1.28	1.08
Interest on Banks (other than on Fixed Deposits)	1.00	2.00
Income from Trading	2.40	2.40
Income fee collected against Staff Welfare Activities	0.08	0.08
Miscellaneous Receipts	23.62	23.62
O&M Charges Recovery from HPPTCL	8.69	9.19
Recovery of Investigation & Survey Charges	0.47	0.47
Other Income - sub-total	**39.48**	**41.81**
Total Non-Tariff Income & Other Income	**202.82**	**224.48**

4.16 Revenue from Sale of Power

4.16.1 The revenue from sale of power to the consumers within the state for FY18 and FY19 at existing tariff as estimated by HPSEBL is summarized below:

Table 73: HPSEBL Submission- Revenue at existing tariff for FY18 and FY19 (Rs. Cr.)

Particulars	FY18			FY19		
	Sales (MUs)	Revenue (Rs Cr.)	Average Tariff (Rs/kWh)	Sales	Revenue	Average Tariff (Rs/kWh)
Domestic	2013.97	880.41	4.37	2140.86	931.92	4.35
Non Domestic Non Commercial	142.07	91.86	6.47	151.18	98.23	6.50
Commercial	560.13	346.48	6.19	590.13	364.13	6.17
Temporary	41.20	39.24	9.53	41.20	39.91	9.69
Small Industrial Power Supply	98.82	63.84	6.46	106.28	68.08	6.41
Medium Industrial Power Supply	120.81	87.31	7.23	125.00	88.42	7.07
HT-1	1420.99	1217.51	8.57	1479.78	1265.49	8.55
EHT/ HT-2	3,015.14	1602.53	5.31	3139.88	1683.40	5.36
Govt., Irrigation & Water Supply	654.16	384.44	5.88	679.02	399.92	5.89
Public Lighting	12.52	6.31	5.04	13.10	6.60	5.04
Agricultural						
Bulk Supply	165.33	126.56	7.65	181.26	135.21	7.46
Total	**8245.14**	**4846.48**	**5.88**	**8647.70**	**5081.31**	**5.88**

4.17 Revenue from Inter-state sale of power

4.17.1 Petitioner has submitted that surplus power to be available for FY18 and FY19 would be 1660.24 MUs & 1874.65 MUs respectively which is projected to be sold as interstate power.

4.17.2 The average sale rate of interstate power for FY18 & FY 19 has been considered to be Rs. 2.96/kWh which is the average Market Clearing Price discovered at Indian Energy Exchange for the period Jan'17 to Oct'17. Revenue projected from interstate sale of power is as provided in the table given below:

Table 74: HPSEBL Submission- Revenue from sale of Interstate Sale of Power for FY18 and FY19 (Rs. Cr.)

Particulars	FY18	FY19
	R.E	Projected
Interstate Sales (MUs)	1660.24	1874.65
Revenue from Interstate Sales (Rs Cr.)	491.43	554.90

4.18 Aggregate Revenue Requirement

4.18.1 The Petitioner's submission of ARR for the FY18 and FY19 has been summarised below:

Table 75: HPSEBL Submission- Details of ARR proposed for FY18 (Rs. Cr.)

Particulars	ARR for FY18		
	Approved in MYT Order	Approved in Mid Term Review Order	Submitted Now
Power Purchase cost (including Own Generation)	2685.08	2631.82	2749.07
Transmission Charges (including PGCIL, HPPTCL, Open Access Charges & SLDC Charges)	409.94	307.76	307.76
R&M Expense	58.02	58.02	105.77
Employee Expenses	1557.50	1543.27	1472.36
A&G Expense	46.58	62.28	73.67
Additional amount for safety measures	1.00	10.00	10.00
Depreciation	93.90	93.90	193.60
Interest & Finance Charges	266.97	257.70	456.60
Provision for bad & doubtful debt			0.17
Return on Equity	30.24	30.24	75.50
Surplus power purchase as per PPA obligation	282.27		
Less: Non-Tariff Income	(235.36)	(185.26)	(202.82)

Particulars	ARR for FY18		
	Approved in MYT Order	Approved in Mid Term Review Order	Submitted Now
Total ARR	**5196.15**	**4809.75**	**5241.69**
Add: Past adjustment			
Impact of Final Truing-up for FY12-14 and FY15		119.55	119.55
Arrears of 7th Pay Commission Revision		85.00	85.00
Truing up of Second Control Period for HPPTCL		0.23	0.23
Truing up of Second Control Period for HPSLDC		1.21	1.21
ARR after adjustment	**5196.15**	**5015.75**	**5447.68**

Table 76: HPSEBL Submission- Details of ARR proposed for FY19 (Rs. Cr.)

Particulars	ARR for FY19	
	Approved in MYT Order	Submitted Now
Power Purchase cost (including Own Generation)	2,901.05	3001.38
Transmission Charges (including PGCIL, HPPTCL, Open Access Charges & SLDC Charges	454.03	299.30
R&M Expense	65.09	117.20
Employee Expenses	1,714.12	2263.77
A&G Expense	50.60	78.44
Additional amount for safety measures	1.00	15.00
Depreciation	107.91	212.28
Interest & Finance Charges	302.53	490.21
Provision for bad & doubtful debt		0.10
Return on Equity	30.24	84.00
Surplus power purchase as per PPA obligation	325.73	
Less: Non-Tariff Income	(245.77)	(224.48)
Total ARR	**5,706.52**	**6337.20**
Add:		
True-Up of FY16		365.47
True-Up of FY17		252.03
Total ARR after adjustment		**6954.71**

4.19 Revenue Surplus/ (Gap) for FY18 & FY19

4.19.1 Based on the projection of ARR and Revenue, the revenue surplus / (gap) projected by HPSEBL for FY18 and FY19 is provided below:

Table 77: HPSEBL Submission- Projected Revenue Surplus/ Gap for FY18 and FY19 (Rs. Cr.)

Particulars	FY18	FY19
	R.E	Projected
Projected ARR	**5447.68**	**6954.71**
Revenue at existing Tariff	4846.48	5081.31
Revenue from sale outside state	491.43	554.90
Total Revenue	**5337.91**	**5636.20**
Surplus(+) / Gap(-)	**-109.76**	**-1318.50**

4.20 Allocation of ARR into wheeling and retail supply

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

Table 78: HPSEBL Submission- Basis for ARR allocation in Wheeling and Retail Supply

Particulars	Wheeling allocation	Retail Supply allocation
Power Purchase Expenses	0%	100%
Transmission Charges	0%	100%
Employee Expenses	70%	30%
R&M Expenses	90%	10%
A&G Expenses	60%	40%
Additional Amount for safety measures	90%	10%
Interest & Financing Charges (other than interest on working capital)	95%	5%
Interest on Working Capital	10%	90%
Depreciation	95%	5%
Other Debits (incl. Prov for Bad debts)	0%	100%
Return on Equity on Wheeling Business	100%	0%
Non-Tariff Income	0%	100%
Addition items (Past adjustment/ true up,)	50%	50%

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

Table 79: HPSEBL Submission- Wheeling ARR for FY18 and FY19 (Rs. Cr.)

Particulars	FY18	FY19
Power Purchase Expenses	-	-
Transmission Charges	-	-
Employee Expenses	1030.65	1584.64
R&M Expenses	95.19	105.48
A&G Expenses	44.20	47.06
Additional Amount for safety measures	9.00	13.50
Interest & Financing Charges (other than interest on working capital)	389.06	418.57
Interest on Working Capital	4.71	4.96
Depreciation	183.92	201.67
Other Debits (incl. Prov for Bad debts)	-	-
Return on Equity on Wheeling Business	75.50	84.00
Non-Tariff Income (excluding wheeling charges received from other states)	-	-
Wheeling charges received from other states	103.70	116.85
True-up for FY16	-	182.74
True-up for FY17		126.01
ARR Requirement	**1935.94**	**2885.48**

Table 80: HPSEBL Submission- Retail Supply ARR for FY18 and FY19 (Rs. Cr.)

Particulars	FY18	FY19
Power Purchase Expenses	2749.1	3001.4
Transmission Charges	307.8	299.3
Employee Expenses	441.7	679.1
R&M Expenses	10.6	11.7
A&G Expenses	29.5	31.4
Additional Amount for safety measures	1.00	1.50
Interest & Financing Charges (other than interest on working capital)	20.5	22.0
Interest on Working Capital	42.4	44.7
Depreciation	9.7	10.6
Other Debits (incl. Provision for Bad debts)	0.2	0.1
Return on Equity on Wheeling Business	0.0	0.0
Non-Tariff Income (excluding wheeling charges received from other states)	99.1	107.6
Wheeling charges received from other states	0.0	0.0
True-up for FY16	0.0	182.74
True-up for FY17		126.01
ARR Requirement	**3711.38**	**4518.19**

4.21 **Tariff Proposal**

4.21.1 Despite repeated reminders from the Commission, the Petitioner has not submitted the tariff proposal for FY19.

4.22 **Additional Submissions**

4.22.1 The Petitioner has proposed certain new proposals for FY19 which have been listed as below:

- Prepaid Metering for Domestic, NDNC, Commercial, Temporary & Street Light (optional)
    - No Consumer Security deposit as per Section 47(5) of the Electricity Act, 2003.
    - Rebate of 3% on energy charge.
    - Government Offices to be covered in the initial phase.
- Late Payment surcharge to be increased from 2% to 2.5%.
- Electric Vehicles to be charged under separate category, however, tariff remains same as under Non-Domestic Non-Commercial Category.
- For Industrial Consumers, rebate of 10% on energy charge for additional consumption beyond the level of FY 2017-18; and in case of new industrial units coming into production after 01.04.2018, the energy charges may be fixed @10% lower than the notified tariff for the respective categories of industries for a period of three years beginning with FY 2018-19
- For Cement Industry, Rs 30/KVA/month additional demand charge than the normal.

4.23 **Additional Surcharge**

4.23.1 The Petitioner has filed a revised application for determination of additional surcharge under the provisions of the Sub-regulation 3 of Regulation 6 of HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulation, 2006.

4.23.2 The average rate of fixed cost per kWh, based on the fixed charges for the projects considered for computing additional surcharge as per Merit Order Dispatch, as submitted by the Petitioner has been given in the table below:

Table 81: HPSEBL's Submission-Fixed Cost relating to Generating Capacity (at injection point)

Name of Station	Capacity (MW)	Expected Net Annual Generation (MUs)	Annual Fixed Cost (Rs Cr.) for FY 18	Annual Fixed Charges (Paise/unit)	Power Purchase (MUs) during FY18	Total Fixed Cost of Power Purchase (Rs Cr.)
I	II	III	IV	V={(IV×1000/III}	VI	VII={V×VI/1000}
Rihand-I	1000	6536.29	567.82	86.87	219.99	19.11
Rihand-II	1000	6679.16	593.02	88.79	200.25	17.78
Rihand-III	1000	6968.24	1026.33	147.29	172.46	25.40
Total	**3000**	**20183.69**	**2187.16**		**592.71**	**62.29**
Average rate of Fixed Cost at Injection Point (Paise/unit)				**105.10**		

4.23.3 HPSEBL has calculated applicable average rate of POC charges, reliability charges and HVDC charges of Power Grid (actual up to Dec'17 thereafter rate corresponding to the same period during last financial year has been considered) and Transmission Charges of HPPTCL. The fixed costs relating to stranded transmission capacity, as submitted by the Petitioner have been given in table below:

Table 82: Fixed Cost relating to Power Grid & HPPTCL Transmission System (at injection point)

Month	Power Grid System			HPPTCL System
	POC Slab Rate (Rs/MW/month)	Reliability Support Charges Rate (Rs/MW/month)	HVDC Charge Rate for NR (Rs/MW/month)	Transmission Charges (Rs/MW/month)
April, 2017	92701	27764	40468	8367
May, 2017	92701	27764	40468	8367
June, 2017	92701	27764	40468	8367
July, 2017	66040	27284	39840	8367
Aug, 2017	66040	27284	39840	8367
Sep, 2017	66040	27284	39840	8367
Oct, 2017	72811	24271	36093	8367
Nov, 2017	72811	24271	36093	8367
Dec, 2017	72811	24271	36093	8367
Jan, 2018	83787	26182	19712	8367
Feb, 2018	83787	26182	19712	8367

Month	Power Grid System			HPPTCL System
	POC Slab Rate (Rs/MW/month)	Reliability Support Charges Rate (Rs/MW/month)	HVDC Charge Rate for NR (Rs/MW/month)	Transmission Charges (Rs/MW/month)
Mar, 2018	83787	26182	19712	8367
Average/month	**82723**	**26638**	**29611**	**8367**
Average Fixed Cost @76.80% load Factor at injection point (paise/kWh)	**24.83**			**1.49**

4.23.4 Based on the above, the Petitioner has submitted an additional surcharge of 72.78 paise/kWh for FY19 as given in the table below:

S.No.	Description	Fixed Cost at Injection point in paise/kWh	Fixed Cost at Consumer end in paise/kWh
(A)	Generation Capacity	105.10	114.58
(B)	Transmission Capacity		
	(i) Power Grid system	24.83	27.07
	(ii) HPPTCL system	1.49	1.57
(C)	Total Fixed Cost payable to Generator (A+B)		143.22
(D)	Recovery of Fixed Charge as Demand Charge from EHT Consumers		100.44
(E)	50% of wheeling charges for EHT consumers		30.00
(F)	Net Recovery through Demand charges eligible for adjustment (Paise /kWh)		70.44
(E)	**Balance payable in shape of Additional Surcharge in Paise/kWh (C-F)**		**72.78**

4.24 Infrastructure Development Charges (IDC)

4.24.1 The Petitioner has requested the Commission to approve IDC charges at the same level as approved by the Hon'ble Commission for FY18.

5 Objection filed and Issues raised by Stakeholders during Public Hearing

5.1 Introduction

5.1.1 Fourteen stakeholders filed written objections to the Petition for Fourth Annual Performance Review for the Third Control Period FY15-19 and True-up of uncontrollable parameters of FY16 & FY17 filed by HPSEBL along with objections raised by general public. The list of the stakeholders are as follows:

Table 83: Details of Objectors

S.No.	Objector	Address
1.	M/s Ultratech Cement Ltd.	Baga, Tehsil Arki, Distt. Solan (H.P.)
2.	M/s INOX Air Products Ltd.	Village Kunjhal, Industrial Area, Barotiwala, Distt. Solan (H.P.)-174103
3.	M/S Vardhman Textiles Ltd.	Sai-Road, Baddi, Tehsil Nalagarh, Distt. Solan, H.P.-173205
4.	M/s Winsome Textile Industries Ltd.	Sai-Road, Baddi, Tehsil Nalagarh, Distt. Solan, H.P.-173205
5.	M/s Ambuja Cement Ltd.	P.O. Darlaghat, Tehsil Arki, Distt. Solan also at Navagraon, P.O. Jajhra, Tehsil Nalagarh, Distt. Solan (H.P.)-174101
6.	M/s Birla Textile Mills	Baddi, Distt. Solan (H.P.)-173025
7.	Directorate of Energy	Phase-III, Sector-VI, Kangnadhar, New Shimla
8.	ACC Limited, Gagal Cement Works	Gagal Cement Works, P.O. Barmana, Distt. Bilaspur(H.P.)-174013
9.	M/s Amba Shakti Ispat Limited	6&6-A, Kala Amb Industrial Area-II, Kala Amb, Sirmour(H.P.)

S.No.	Objector	Address
10.	M/s Kundlas Loh Udyog	Village Balyana, P.O. Barotiwala, Tehsil Baddi, Distt. Solan (H.P.)
11.	B.B.N. Industries Association	EPIP-Jharmajri Road, EPIP Phase-I, Jharmajri, Baddi, Distt. Solan (H.P.)-174103
12.	Himachal Chamber of Commerce and Industry	Chamber House, Industrial Area, Gondpur, Paonta Sahib. Distt. Sirmour (H.P.)-173025
13.	Nalagarh Industries Association	O/o Member Secretary, S.W.C.A. Peersthan, opp. Amtek Company, Nalagarh, Distt. Solan(H.P.)-174101
14.	Parwanoo Industries Association	HPCED Building, Dept. of Industries Complex, Sector-1, Parwanoo(H.P.)-173220
15.	Kala Amb Chamber of Commerce and Industry	Trilokpur Road, Kala Amb, Distt. Sirmour(H.P.)-173030
16.	Confederation of Indian Industry	Block No.3, Dakshin Marg, Sector-31A, Chandigarh-160030
17.	Shri Siddi Vinayak Forging Pvt. Ltd.	Village Nangaluparia, Near Chiknipul, Swarghat Road, Nalagarh-174101
18.	Shri Devi Ram	Vill. Ruaadu, P.O. Piplage,Teh. Bhuntar, Distt. Kullu(H.P.)-175125
19.	Shri Dola Ram	Vill. Bhatgran, P.O. Piplage,Teh. Bhuntar, Distt. Kullu(H.P.)-175125
20.	Shri Tek Chand	Vill. Bhatgran, P.O. Piplage, Teh. Bhuntar, Distt. Kullu (H.P.)-175125

5.1.2 The public hearing was held on 5th March, 2018 at the Commission's Court Room in Shimla. The representatives of the stakeholders presented their cases before the Commission during public hearing.

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

Objections Raised on True up of uncontrollable parameters for FY16

5.2 Energy Sales for FY16

Stakeholders' Submission

5.2.1 It is pertinent to note that the actual sales for FY 16 have been stated to be 7744.61 MUs as against 8438 MUs as approved by the Commission. HPSEBL has claimed that the major reasons for decrease in actual sales is due to open access consumers & closure of steel industries. The Hon'ble Commission may approve this figure only after prudence check.

5.2.2 The stakeholder has submitted that for the year FY16 energy actually sold (as per Table 1, page 14 of the Tariff Petition) is about 700 MUs less than the approved figures for the same in the initial ARR. Similarly revenue generated (as per Table 3 from sale of power outside the State is Rs. 510 cr against Rs. 243 core approved. As per Table 8 of the Tariff petition, the transmission and the distribution losses as per actual figure is 12.09% as against 12.06% approved. It shows that all the factors have remained in favour of the Board and there should have been in net saving in the True-up petition for the FY16. However, it is difficult to understand that a revenue gap is still being projected and consequently, a tariff hike is proposed by the Utility. The only fallacy appears to be rise in controllable expenditure.

Petitioner's Response

5.2.3 All the submissions made by the HPSEBL before the Hon'ble HPERC are for the prudent check by the Hon'ble Commission and HPSEBL has no objection in this regard.

5.2.4 As there has been substantial decrease in sale of power against the approved numbers, therefore, revenue realisation has also been on the lower side. Further, the details of all the expenses of the ARR and various reasons for deviations, if any, stands supplied to the Hon'ble Commission for the prudent check. HPSEBL has filed the true-up for FY16 only for uncontrollable parameters and therefore contention of the stakeholder is wrong.

Commission's Observations

5.2.5 The Commission concurs with the view of the stakeholder that the Petitioner must ensure that the actual sales 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 the past years. The Commission has approved the energy sales for FY16 after prudence check as detailed out in Chapter 6.

5.2.6 The Commission has observed that although the Petitioner has submitted overachievement of T&D losses, there has been considerable slowdown in the sales growth leading to lower revenue realisation for FY16. However, the Commission agrees with the view of the stakeholder that there has been a rise on account of O&M expenses as against the approved O&M expenses approved for FY16. As a result, the Commission has allowed a pass-through of only such expenditure as was found to be reasonable and in line with the provisions of the MYT Regulations. The details of amount approved against each parameter has been detailed in Chapter 6.

5.3 Power Purchase Cost for FY16

Stakeholders' Submission

5.3.1 The Petitioner in paragraph 2.7.6 of the Petition has claimed a Net Power Purchase Cost of Rs. 3129.16 Crores against the previously allowed power purchase cost of Rs. 2941.61 Crores in the First APR Order. The Petitioner has stated that the costly power purchase from Gas Plants such as Anta, Auriya, Dadri and Kodlam HEP is the reason for increase in power purchase cost for FY 2016.

5.3.2 It is to be noted that the Commission had directed HPSEBL to approach Government of India for surrender of the aforesaid costly power. It is submitted that HPSEBL however appears to have not made any attempts to expressly arrange a meeting or follow-up with Ministry of Power regarding the status of the request for surrender. In the absence of any real effort made for surrendering of costly power, the cost of said power purchase cannot be passed on to the consumer.

Petitioner's Response

5.3.3 HPSEBL submits that it has made concerted efforts for de-allocation of the costly power from stations like Anta, Auriya, Dadri & Koldam and regularly follows up with the Ministry of Power but even after that the same still has not been deallocated. Further, as per the obligation of long term power purchase agreement HPSEBL is bound to purchase power from these plants. Moreover, HPSEBL has been making the best possible efforts to optimize the power purchase cost to reduce burden on its consumers. Therefore the same needs to be passed on in the ARR.

Commission's Observations

5.3.4 The Commission has reconciled the Petitioner's submission with source-wise power purchase cost as per audited accounts of FY16 and disallowed any additional claims made by the Petitioner. The considerations for the approved power purchase cost for FY16 is detailed in Chapter 6. Additionally, the Commission concurs with the view of the stakeholder that the Petitioner must make consistent effort to surrender power from costly sources and regularly follow up with the Ministry of Power regarding de-allocation of power from costly stations like Anta, Auriya, Dadri and Koldam. As the allocation from the central generating stations in done by Ministry of Power over which HPSEBL has no control, it would be incorrect to disallow power procurement cost from these generating stations until a final decision is taken on this matter by Ministry of Power.

5.4 **Employee Cost for FY16**

Stakeholders' Submission

5.4.1 HPSEBL in paragraph 2.9.1 of the Petition has claimed actual employee cost of Rs. 1411.67 Cr. against the previously approved cost of Rs. 1266.27 Cr. in the First APR Order. HPSEBL has claimed that the said increase is due to higher terminal benefits owing to large number of retirements during FY16. Almost double expenses on account of terminal benefits at Rs. 613.38 crore are claimed by the Board against Rs.384.92 crore approved by the Commission. The same is the case with FY17. Terminal benefits claimed in excess of those approved by the Commission work out to be Rs. 303 crore.

5.4.2 It is submitted that the said claim is against the observation of this Hon'ble Commission in paragraph 4.7.6 of the First APR Order wherein it was noted that the number of employees retiring in FY 2016-17 would be lesser than that retiring in FY 2015-16. HPSEBL should provide the relevant data to support its claim.

Petitioner's Response

5.4.3 HPSEBL submits that high employee cost is mainly on account of terminal benefits which are a statutory requirement of HPSEBL. In States like Uttarakhand, the terminal benefits are the liability of the State Govt. while in Himachal Pradesh the same is the liability of HPSEBL. HPSEBL has already provided the relevant information regarding employee cost to the Hon'ble HPERC.

Commission's Observations

5.4.4 The Commission agrees with HPSEBL regarding the high amount of terminal benefits liability of which has been retained with HPSEBL at the time of unbundling, The Commission has approved 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 order to reduce the burden of such expenditure on the consumers by adjusting the RoE approved towards HPSEBL generating station with the total terminal expenses. Still the expenditure towards terminal benefits is very high. For FY16, the Commission has reconciled the Petitioner’s submission with the audited accounts of FY16 and observed that the Petitioner has made certain provisions against gross employee and terminal liabilities arising in the future. The Commission has sought these details from the Petitioner during the technical validation sessions and has approved the employee expenses for FY16 after prudency check as detailed out in Chapter 6.

5.5 Other Issues on True-up of FY16

Stakeholders’ Submission

5.5.1 True-up for the FY 2016-17 should be based on Audited and reconciled accounts.

5.5.2 As the name suggests the tariff fixation was made from yearly to multi-year only with a view to reduce effort energy and time in fixing the tariff so that the tariff once fixed shall continue to hold good for a period of three/ five years. The Hon'ble Commission may re-visit the regulations governing the multiyear tariff fixation to amend the same by providing filing of True-up petition and a new petition together at the end of the three years or five years, whichever may be the case.

5.5.3 The objector has observed from the filing made by the petitioner that true up is sought for controllable expenditure. It appears that whatever is disallowed by the Hon'ble Commission at the initial stage is sought to be approved in the True-up and in the next filing along with the carrying cost. Carrying cost further adds to the revenue requirement meaning additional burden on the consumers.

5.5.4 The Utility has approached the Hon’ble Commission to allow a true up of a gap of Rs.365.47 Crore for FY 2015-16 and Rs.252.03 Crore for FY 2016-17 against approved surplus of Rs.57.89 Crore and Rs.3.49 Crore respectively. These are besides the achievement of lower T&D losses by the Utility. It needs to be appreciated that if such huge variations are to be allowed, then the very purpose of detailed exercise of approving ARR and other performance parameters becomes infructuous. Ultimately the consumers have to bear the difference by way of successive tariff increases. We would request the Hon’ble Commission to scrutinize the variations in depth and only those variations be allowed which were genuinely not controllable.

Petitioner’s Response

5.5.5 HPSEBL submits that accounts for FY 2016-17 are provisional till date and the final audit of the same is under process. Hon’ble Commission is requested to kindly consider the true-up of FY 2016-17 so that the revenue gap of Rs 252.03 Cr. may be met in the ARR of FY 2018-19.

5.5.6 HPSEBL submits that it has filed the petition as per HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 along with amendment 1 & amendment 2. Moreover, as per these regulations HPSEBL has filed true-ups based on uncontrollable parameters only.

5.5.7 HPSEBL submits that true-up for FY16 & FY17 were filed based on uncontrollable parameters only as per Regulation 11 of HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 along with amendment 1 & amendment 2. Therefore, the contention of the stakeholder is incorrect that HPSEBL has filed true up for controllable parameters. The Hon’ble Commission checks for the prudency of the expenditure on account of controllable parameters only at the end of the control period under the provision of regulations. Therefore, contention of the Petitioner is unfounded that whatever is disallowed by the Hon’ble Commission in the initial is sought to be approved in the later stage. Since, the expenses on account of true ups are provided by the Hon’ble Commission at the later stage. Therefore, Hon’ble Commission as per the requirement of the regulation provides the same to HPSEBL along with the carrying cost.

5.5.8 The entire exercise of true-up is always subjected to an intense prudency check by the Hon’ble Commission and thereby only such costs are allowed as a pass through which had been incurred to provide reliable and quality power to the consumer. HPSEBL has filed true up for FY 2015-16 & FY 2016-17 only for the uncontrollable parameters as per the provision of the regulation. Therefore, it is requested to Hon’ble Commission to approve the expenses as submitted in the petition.

Commission’s Observations

5.5.9 The Petitioner has submitted the true up petition for the uncontrollable parameters of FY16 in compliance with the MYT Regulations set forth by the Commission. The Commission in this Order has conducted a detailed review of the various submissions of the Petitioner and undertaken prudence check while allowing expenses against each parameter in line with the provisions of the MYT Regulations, 2011. The detailed review of the various elements are detailed in Chapter 6 based on which the revenue gap approved by the Commission has been arrived. During the detailed review various expenditures which were not in line with the provisions of the Regulations and were claimed incorrected. Based on the revised calculations and prudence check the revised revenue gap approved by the Commission is substantially lower than that proposed in the Petition.

Objections Raised on ARR of FY18

5.6 Power Purchase

Stakeholders' Submission

5.6.1 HPSEBL has considered the power purchase from Anta, Auriya, Dadri and Koldam while claiming the APR for FY 2018 and ARR for FY 2019, despite the Hon'ble Commission's direction to surrender the costly power from the aforesaid generating stations. In terms of paragraph 8.8.18 of the Second APR Order and, the costly power from Anta, Auriya, Dadri, Unchahar, Kahalgaon, etc. during FY 2017 was required to be disposed of by HPSEBL.

5.6.2 Some methodology needs to be worked out for getting out of the long term commitments with the central level power utilities and other states, from which the price of power works out to be very high in view of the drastic change in the energy market.

5.6.3 The rates of purchase of free power must be brought down seeing the overall scenario in the energy market. Electricity can be used as a tool for larger industrialization and growth of the State. So, there is no harm in approaching the State Government for subsidy as the State Government stands to gain multi fold in the tax and other revenue. This rate should not be over Rs. 2.50 per unit in any case.

5.6.4 Moreover, on the orders of the Supreme Court of India, HP has to get accounting arrears towards BBMB share from Punjab Government. The Punjab Government has agreed to pay in terms of electricity to be valued @ Rs. 2.50 per unit. This will make more power available with the State and this should be targeted for use in industry.

5.6.5 Energy units of free power share of GoHP considered by HPSEBL need to be corrected to a figure of 558.78 MUs against 571.77 MUs for the FY 2015-16.

Petitioner's Response

5.6.6 HPSEBL submits that it has made its best efforts to deallocate the costly power from stations like Anta, Auriya, Dadri & Koldam and regularly following with Ministry of Power but even after that the same still has not been deallocated. Further, as per the obligation of long term power purchase agreement HPSEBL is bound to purchase power from these plants. Moreover, HPSEBL has been making the best possible efforts to optimize the power purchase cost to reduce burden on its consumers.

5.6.7 HPSEBL has been making the best possible efforts to optimize the power purchase cost to reduce burden on its consumers.

5.6.8 HPSEBL submits that for each financial year free power rate fixed by Hon'ble Commission is based on its methodology of previous years. The rate determined by Hon'ble Commission for FY18 is Rs 2.63/ unit and it may be possible that the same may further come down to the rate suggested by the Petitioner.

5.6.9 No response has been submitted by the Petitioner.

5.6.10 HPSEBL has considered the free power units as per the actual bills.

Commission's Observations

5.6.11 The Commission has observed that despite its direction to de-allocate costly power from Anta, Auriya, Dadri and Koldam, the Petitioner has firm share from these plants in FY 2017-18. Since the Petitioner has submitted that the decision to surrender power from these stations is still pending, the Commission has considered power from these stations for projections of FY19. However, the Commission directs the Petitioner to continue to follow-up on the matter with the Ministry of Power.

5.6.12 Since, the power purchased from Central Generating Stations is based on firm share and unallocated share from each station as notified by the CEA, the Commission has used these for projecting the power from these stations under long-term commitments which is also in line with the actual power purchased in the previous years.

5.6.13 The Commission has laid down the methodology for computation of free power rate each year based on the actuals of the previous year. For FY 2018-19, the Commission has determined the rate of free power as Rs. 2.48/unit vide order dated 13.04.2018.

5.6.14 The matter of arrears towards BBMB to be received from Punjab Government is still pending and is to be mutually agreed by the State Governments of HP and Punjab. The Petitioner may pursue the matter with the Government of HP.

5.6.15 The Commission has approved the free power units after verifying the station-wise units provided by the Petitioner as per Form-4a for FY16 and approved the same after a prudency check as detailed in Chapter 6.

5.7 **Energy Sales**

Stakeholders' Submission

5.7.1 It has been observed that every year, the energy sales are exaggerated by the Utility to enhance their revenue requirement projections. Since industrial consumers contribute major proportion of the revenue to the Utility, the sales estimate for this category warrants special attention.

5.7.2 The Petitioner has submitted the requirement of power for future years on the basis of CAGR and other assumption as per table 50. It appears that for each category different norms have been adopted by him as explained in para 4.3.3 to suit his projections. For the year 2016 and 2017, the actual consumption has remained far below than what got approved by the Utility from the Hon'ble commission for these years. As such its projections are totally unreliable and are only meant to artificially jack up the energy requirement, cost of purchase and the amount of ARR which would result in fixation of higher tariff. For example large industrial power supply, three year CAGR is negative and five year CAGR is 1.3%. In spite of that, the Utility has assumed a growth rate of 4.14%. This is the case for other category of consumers too. This should not be allowed by the Hon'ble Commission and the realistic figures may result in requirement of energy to be less by 1000 MUs thereby reducing the cost of power purchase drastically.

5.7.3 Himachal Pradesh being a power surplus state gains a lot if most of the power available is sold within the state as it fetches better price than the sales outside the state. The difference between the average price realization from sales outside the State and the price at which the State Government sells its free power to HPSEBL, must be reduced or nullified. The approach of fixing the price of free power purchased from state government should now be based on average market price of the exchange rather than the average power purchase rate of HPSEBL. The benefit so derived if passed on to the consumers through tariff, the State can attract large power intensive industries in the state, which in turn will create employment as well as increase revenue of the state.

Petitioner's Response

5.7.4 HPSEBL has projected the sales figures based 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. Therefore, the contention of the objector is wrong that sales projection of energy is highly exaggerated. Further, the regulator had projected sales on higher side which was rectified later in APRs. Further, the industrial sales during FY 2016-17 have increased 4.14% over FY 2015-16. The same percentage increased has been considered while projecting industrial sales for FY 2018-19.

5.7.5 Projections have not been made for jacking up the ARR, the same have been made considering the tariff rates approved by the Hon'ble CERC. 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. Therefore, the contention of the petitioner is wrong that sales projection of energy is incorrect. The Large industries have shown a growth rate of 4.14% during FY17 and is expecting to growth at the same rate in the ensuing year. Therefore, 1 year CAGR has been considered. For Medium Industry, 1 year CAGR has been considered as it has shown a considerable growth during FY17 and is expected to grow at the same level. For Small Industry, 5 year CAGR has been considered as it has shown a negative growth during FY17 which may be an exceptional case.

5.7.6 HPSEBL submits that average market price at the exchange is more than the average power purchase rate of HPSEBL. The power purchase rate of HPSEBL for FY17 is Rs 2.51/kWh while average market price from Apr'17 to Dec'17 is Rs 3.18/kWh. Therefore, by linking price of free power with market rate is not beneficial for the consumer of the state. Further, for Industrial Consumers, HPSEBL has proposed a rebate of 5% on energy charges for excess consumption of more than their average consumption of last 2 years.

Commission's Observations

5.7.7 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 the past years. During the technical validation session, the Commission has verified the actual sales of EHT consumers with the submissions of the Petitioner and used CAGR method while keeping in mind the recent slowdown to project sales for FY19 as also detailed in Chapter 7.

5.8 T&D Losses

Stakeholders' Submission

5.8.1 The Licensee has confirmed to have recorded T&D losses much lesser than Trajectory approved in the MYT Tariff Order for FY15 to FY19;

Table 84: T&D Losses approved by the Commission, actual losses incurred and losses projected by the Utility

T&D losses (%)	FY15	FY16	FY17	FY18	FY19
Approved in MYT Tariff Order	12.80	12.60	12.40	12.20	12.00
Actual/projected	11.46	12.09	11.43	12.20	12.00

Therefore, the new targets have to be modified taking the actual level achieved as the base and further reduction by 1.0% in subsequent years thereafter.

5.8.2 The overachievement of target in Transmission and Distribution Losses has not come as a result of the efforts of the utility. It is because of the large share of industry in the total sales that the overall T & D losses appear to be less. In industrial areas the T & D losses are at a very low level and as such this brings the overall average down to a level of 10-11%. Simple arithmetic would reveal that the losses in all non-industrial categories as an aggregate will work out to about 15%. The losses of domestic category alone will work out no less than 20%. Efforts are lacking in the improvement in losses in domestic areas.

Petitioner's Response:

5.8.3 The issue shall be taken up at the time of finalization of Tariff Order of 4th Control Period.

5.8.4 HPSEBL agree that larger share of industrial sales helps in achieving the lower T&D losses. However, HPSEBL is trying its best to improve the losses in domestic areas also for that the system needs to be upgraded to higher voltages for which additional investment would be required that would result in increased ARR for future years. However, HPSEBL is already executing many schemes for ensuring that losses are under limits imposed by the Hon'ble Commission.

Commission's Observations

5.8.5 Based on the information submitted by the Petitioner, it is observed that the Petitioner has been able to meet the T&D losses for FY16 and FY17 and should be in a position to meet the loss targets in the rest of the Control Period. The matter of revising the T&D loss trajectory was dealt in detail during the Mid-Term Performance Review Order and the Commission had decided to retain the trajectory for the 3rd Control Period. However, the continued high losses in some circles are a cause for concern. The Petitioner should focus its efforts on these areas and strive to bring their loss level at par with that of the entire state.

5.9 Employee Costs

Stakeholders' Submission

5.9.1 The Petitioner has assumed the escalation of 3% to 5% in the energy bills for the purchase of power from NTPC and other sources outside the State which is not proved by any documentary evidence. The petitioner is buying power @ Rs.2.80 per unit for the year 2016, Rs.2.78 for the year 2017 but still selling power at more than Rs.5 per unit. Making a clear income of more than Rs.2 per unit. This only goes to prove that the R&M, A&G, funding cost and employees cost is very high in comparison to other States which needs to be thoroughly examined and analyzed before it is considered by the Hon'ble Commission. There appears to be no improvement or effort in reducing the employee expenditure. The employees cost has gone up phenomenally from 1472 crores in 2018 to 2263 crores in 2019. The impact of 7th Pay Commission is calculated about 675 crores over the net cost of 1591 crores (Table 114) which is not correct. The net impact of 7th Pay Commission has been 15% only on the overall wages but in this case the projection has been made @ 40%. In Table 141 the deficit in 2018 is shown as 109 crores whereas in 2019 it is shown as 1319 crores. This is not acceptable to the consumers.

5.9.2 The Licensee has asked for manifold increase in the Employees' cost over the provision approved in MYT Tariff order. Even the expenditures booked during FY 2015 and FY 2016 have been much higher than the expenses approved by the Hon'ble Commission as given in the table below.

Table 85: Employee expenses approved in the MYT Tariff Order and actual expenses claimed by the Petitioner

Employee Cost (Rs. Cr.)	FY16	FY17	FY18	FY19
Approved in MYT Tariff Order	1284.81	1414.82	1557.50	1714.12
Actual	1411.67	1611.21	1472.36	2263.77

The Licensee needs to be directed to check the revised figures for FY18, which show a sharp variation and take measures to reduce the Employees expenses and plan for outsourcing some of the activities and economize on these expenses.

5.9.3 The employee cost surprisingly holds a major share of about 30% in the overall cost. This is a very alarming situation. Most of the utilities such PSPCL, UHBVN, DHBVN etc. have only 5% of the ARR as employee cost as against 30% in case of HPSEBL. The current petition also, considering the Pay Commission arrears etc. revolves around employee cost only. The following points need specific mention;

i. The causes for a very high share of terminal benefits in the total employee cost should be examined. There is a need to create a trust for such liabilities on the pattern of other states. The various offshoots of the erstwhile HPSEB, should contribute in the ratio decided by the Hon'ble Commission to this common pool as per requirement every year

ii. It needs to be examined that the terminal liabilities of the employees of the distribution function of the HPSEBL if transferred to the other offshoots which have resulted as a result of unbundling, whenever an employee is absorbed / transferred between these utilities.

iii. The employee cost should have come down, had the IT initiatives been utilized properly. The progress in IT initiatives is very slow.

iv. A voluntary retirement scheme should be put in place. The scheme should be such that attracts the employees. In the past such schemes had very poor results.

v. The 7th Pay Commission arrears after prudent evaluation, may be separately shown as a surcharge, so that it goes away after some time when the arrears are recovered.

vi. The 7th Pay Commission pay out as projected by the petitioner if allowed is likely to pose tariff shock to the consumers. Most of this cost must be taken by this Hon'ble Commission as regulatory asset, so that its impact is spread over a longer period of time.

vii. We request the Hon'ble Commission to order a study on how to reduce the manpower cost to be conducted by a consultant having national exposure and expertise in HR area.

Petitioner's Response

5.9.4 HPSEBL is making continuous efforts to reduce the burden of employee cost in its ARR. However, it is submitted that expenditure on terminal benefits which is a statutory requirement of HPSEBL and has been allowed by Hon'ble Commission as per actual, in States like Uttarakhand, is the liability of the state govt. while in Himachal Pradesh the same is liability of HPSEBL. Further, during notification of MYT tariff Order the impact of 7th Pay Commission had not been considered by Hon'ble Commission while HPSEBL has considered impact of 7th pay commission for projecting employee cost for FY19 and due to which variation is larger as compared to the approved. Below are the impact considered by HPSEBL:

i. 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 FY9 which amounts to Rs 294.63 Cr.

ii. The arrears of previous years with effect from 1st Jan'16 have also been considered in FY19 which amounts to Rs 377.54 Cr.

5.9.5 HPSEBL submits that employee cost is a parameter which cannot be controlled to a great extent and mainly increased due to large number of retirements during FY16 & FY17. However, HPSEBL is making continuous efforts to reduce the burden of employee cost in its ARR as stated above.

5.9.6 With regard to the suggestions of the stakeholder, HPSEBL welcomes the suggestions given by Petitioner and will try to implement them to reduce the employee cost.

Commission's Observations

5.9.7 It has been observed that the Petitioner has not been furnishing the break-up of employee expenses as required under 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 despite the Commission's directive every year. The Commission welcomes the suggestions of the stakeholders and also agrees that the Petitioner has over-projected the impact of 7th Pay Commission by considering an escalation on net employee expenses projected for FY18 and FY19. As a result, the Commission asked the Petitioner to furnish the details of Government Orders notified from time-to-time from the Petitioner during the technical validation sessions to independently determine the impact of 7th Pay Commission. After evaluating the claim of the Petitioner in light of the Government Orders the Commission has allowed a provisional amount against the impact of 7th Pay Commission in the ARR of FY19, subject to truing up. The overall employee expenses for FY19 have been approved after computing this impact as detailed out in Chapter 7.

5.10 **R&M Expenses**

Stakeholders' Submission

5.10.1 The R&M costs in fact reflect the efforts made by the Licensee to improve the system. The actual performance in the year FY 2015 and FY 2016 has been (-22.46%) and (-18.51%) respectively i.e. far less than the approved provision.

Table 86: R&M expenses approved in the MYT Tariff Order and actual expenses claimed by the Petitioner

R&M Expenses (Rs.Cr.)	FY15	FY16	FY17	FY18	FY19
Approved in MYT Tariff Order	43.51	46.79	51.69	58.02	65.09
Actual/Projected	35.53	38.13	70.25	105.77	117.20

Although Utility has claimed to have achieved a far better performance during FY17 but the past record has not been encouraging. The proposed increase in R&M cost in FY18 and FY19 is very sharp (nearly double) and needs to be examined on actual achievement and capability of the Utility.

5.10.2 IT Expenditure should be treated as capital expenditure as is considered in the balance sheets as per normal accounting procedures.

Petitioner's Response

5.10.3 HPSEBL submits that as per the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 along with amendment 1, 2012 and amendment 2, 2013, the R&M cost has to be calculated as:

"R&Mn = K x GFAn-1"

Where k is a % factor of GFA. The K factor for FY17 is 1.45% and HPSEBL is expecting better performance in the ensuing year, hence K factor of 1.45% has been considered while projecting R&M for FY19. Further, HPSEBL has considered additional IT system R&M expense amount to Rs 35 Cr for FY19 as it is a necessitate for upkeep and maintenance of IT systems. Therefore, HPSEBL requests Hon'ble Commission to approve R&M expenses as submitted in the petition.

5.10.4 The main reason for increase in R&M expenses is due to the additional provisions. The detail of each provision is given in point 4.45.9 to 4.45.14 of the petition. Further, the expenses against the IT are recurring in nature as they are for the Annual Maintenance Cost (AMC) of the IT infrastructure and therefore need to be booked under R&M only.

Commission's Observations

5.10.5 The Commission has gone through the submissions of the Petitioner and the objections raised by the stakeholder and finds merit in the objections raised. The Commission has also directed the Petitioner to maintain separate heads for expenditure on IT systems in the past. The Commission has taken a detailed view on the matter in Chapter 7.

5.11 **A&G Expenses**

Stakeholders' Submission

5.11.1 The A&G expenses have been enhanced at a very high rate. Even the actual growth in expenses in the past has been very nominal and enhanced provisions are not justified. The A&G expenses do not have significant increase over the years. Hence the proposed expenses need to be restricted to the already approved levels.

Table 87: A&G expenses approved by the Commission, actual expenses incurred and expenses projected by the Utility

A&G Expenses (Rs. Cr.)	FY15	FY16	FY17	FY18	FY19
Approved in MYT Tariff Order	36.35	39.48	42.89	46.58	50.60
Actual/Projected		39.80	51.04	73.67	78.44

Petitioner's Response

5.11.2 HPSEBL has projected A&G expenses as per HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 as amended from time to time. The main reason for increase in A&G expenses is due to the additional provisions. The detail of each provision is given in point 4.45.9 to 4.45.14 of the petition.

Commission's Observations

5.11.3 The Commission has gone through the submissions of the Petitioner and observed that for projection purpose the Petitioner has erroneously considered certain heads of R&M under A&G leading to a higher claim. The Commission has also studied the objections raised by the stakeholder and finds merit in the objections raised. The Commission has taken a detailed view on the matter in Chapter 7.

5.12 Capital Expenditure

Stakeholders' Submission

5.12.1 No details of Capital works proposed to be carried out in the year 2019 have been given for want of which the expenditure on various schemes could not be examined. Similarly details of program under RGGVY and EHV schemes have not been given.

Petitioner's Response

5.12.2 Hon'ble Commission has already approved CAPEX upto FY19 in the 3rd MYT Order in 12th June 2014. Further, any new schemes added in the CAPEX during the control period for the ensuing as well as for the future years are already being supplied to the Hon'ble Commission from time to time.

Commission's Observations

5.12.3 The Commission agrees with the point raised by the stakeholder regarding necessity of submission of information regarding capital expenditure undertaken at the time of filing of APR. While some details in this regard has been submitted by the Petitioner in response to the queries raised by the Commission, it has been observed that despite previous directives on the same, the Petitioner is not been including the details of such capital expenditure vis-à-vis the approved expenditure in its APR filings. The Petitioner is directed to comply with the same for future tariff filings.

5.13 **Depreciation**

Stakeholders' Submission

5.13.1 The Licensee has proposed sharp and abrupt increase in provision for depreciation.

Table 88: Depreciation approved by the Commission, actual depreciated charges and projected by the Utility

Depreciation (Rs. Cr.)	FY15	FY16	FY17	FY18	FY19
Approved in MYT Tariff Order	62.74	70.27	80.90	93.90	107.91
Actual	62.74	70.27	80.90	193.60	212.28

This provision needs to be related to the new asset put in service and the capital expenses incurred over the years. There is no justification for such a sharp increase in provision for depreciation over the years. Hon'ble Commission may kindly examine the details and approve the minimum required provision.

Petitioner's Response

5.13.2 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

5.13.3 The Commission has gone through the submissions of the Petitioner and the objections raised by the stakeholder. 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. The matter has been dealt in Chapter 7 of this order.

5.14 **Interest Charges**

Stakeholders' Submission

5.14.1 The licensee has projected interest & finance charges which are 50 to 100% higher than approved in the MYT Tariff order.

Table 89: Interest and Finance charges approved by the Commission, charges incurred and projected by the Petitioner

Interest & Finance Expenses (Rs. Cr.)	FY15	FY16	FY17	FY18	FY19
Approved in MYT Tariff Order	176.61	196.88	229.76	266.97	302.53
Actual/Projected		177.22	208.37	456.60	490.21

There is also a provision of over 2% as cost of raising funds, which should not be allowed as there is no such costs as many financial institutions are vying with each other to provide loans.

5.14.2 The interest cost is estimated to grow above approved cost by Rs.199 crore as shown in table 139 of the ARR for FY18 and Rs.188 crore for FY19(Table 140). However, it is not clear that how much interest was paid for availing loans, which were not approved by the Commission. It is also not clear that loan raised/proposed to be raised strictly belong to those assets, which are commissioned or are work-in-progress. Therefore, it is submitted that the Commission may look into the details of the loans before approving the interest charges.

5.14.3 Interest and Finance Charges might include the interest on overdue receivables from government departments. Such overdue charges should not form part of the ARR.

Petitioner's Response

5.14.4 HPSEBL submits that the interest & finance charges approved in the MYT Order are on the lower side and Hon'ble Commission is requested to re-consider the revised figures. Further, HPSEBL has considered minimum percentage of finance raising charges which is a compulsory charge and need to be paid while raising the debt. Therefore, HPSEBL requests Hon'ble Commission to consider finance raising charges

5.14.5 The details of interest charges have already been submitted to Hon'ble Commission along with petition. Further, the interest charges approved is on the lower side and Hon'ble Commission is requested to reconsider the revised amount.

5.14.6 HPSEBL submits that interest and finance charges are as per the audited accounts. There is no overdue interest charges received from government departments.

Commission's Observations

5.14.7 The Commission concurs with the view of the Petitioner that there is considerable increase in the claim of the Petitioner for interest and financing charges in FY18 and FY19. The Commission furnished clarification from the Petitioner during the technical validation session to understand the reasons for the higher claim against this head. It was observed that the Petitioner has incorrectly added the interest being paid on UDAY bonds to the interest charges approved by the Commission for the 3rd Control Period, despite restructuring of the outstanding debt under UDAY scheme. Keeping this in view, the Commission has approved interest and financing charges for FY19 as detailed out in Chapter 7.

5.15 **Return on Equity**

Stakeholders' Submission

5.15.1 The Licensee has proposed return on equity which is almost three times that of the amount approved by the Hon'ble Commission through MYT Tariff order.

Table 90: RoE approved by the Commission and projected by the Utility

RoE (Rs. Cr.)	FY15	FY16	FY17	FY18	FY19
Approved in MYT Tariff Order	30.24	30.24	30.24	30.24	30.24
Actual	30.24	30.24	30.24	75.50	84.00

It is an established practice that if any company has a negative balance sheet then no provision for return on equity is made. Otherwise also this being a Govt. Owned Company, as long as it does not become a revenue surplus Company, no return on equity may kindly be allowed.

5.15.2 As per HPERC (Terms and Conditions for determination of Wheeling Tariff and Retail Supply Tariff) Regulations , 2013, para 20 (1) return on equity shall be computed on paid up equity capital determined provided (2) that return on equity invested in work in progress shall be allowed from the date of commercial production. Therefore, the burden of the return on equity, which may be invested in coming years, cannot be passed on to the present consumers in the State. Further, as per the regulations, the equity invested in projects, which are yet to start commercial production cannot be provided. In this background, it is submitted that return on equity may not be approved.

5.15.3 The board has projected an increase in return on equity over approved amount by Rs.45 crore for FY 18 and Rs.53.76 crore for FY 19. However, it is not cleared that how this equity will be infused and where the cash generated will be used. It is our submission that return on equity should be allowed only if such equity is actually invested and used in creation of tangible asset which can be used for the benefits of the consumers.

Petitioner's Response

5.15.4 HPSEBL has projected return on equity based on the regulation 20 of HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 amended from time to time. The same has been quoted below:

Regulation 20: "Return on equity for the distribution licensee (sum of return on equity for wheeling business and return on retail supply business) shall be computed on the paid up equity capital determined in accordance with regulation 19 and shall be 16% per annum (post tax):
Provided that return on equity invested in works in progress shall be allowed from the date of commercial operation."

5.15.5 HPSEBL has projected return on equity as per HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 amended from time to time. Therefore, HPSEBL requests Hon'ble Commission to approve the RoE as submitted.

5.15.6 Further, HPSEBL submits that equity infused by GoHP in the past against various schemes is for strengthening the HPSEBL's network and the details of the same had already been supplied to the Hon'ble Commission.

Commission's Observations

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

5.16 **Non-Tariff Income**

Stakeholders' Submission

5.16.1 HPSEBL has indicated non-tariff income from various sources but some of the income from important sources like Cross Subsidy Surcharge ("CSS") and Additional Surcharge has not been included. This Hon'ble Commission in paragraph 4.16.3 of the 2017 Tariff Order has noted that 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. Going forward, HPSEBL was 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.

The revenue recovered from CSS and Additional Surcharge has to be deducted from the tariff being allowed to HPSEBL. Therefore, it is pertinent that HPSEBL provide a break-up of revenue recovered from Additional Surcharge and Cross-subsidy Surcharge.

Petitioner's Response

5.16.2 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 FY16 & FY17 has been given in accounts. Further, as per direction of Hon'ble Commission HPSEBL has separated the account head for CSS and additional surcharge, the revenue collected from these two sources shall be provided separately in the future years.

Commission's Observations

5.16.3 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. The Commission concurs with the views of the stakeholder, in line with its directions in the past that the Petitioner is required to separately maintain details of revenue recovered on account of CSS and additional surcharge. The Petitioner has submitted during the technical validation sessions that it has initiated the process of segregating the account heads and shall furnish the details in future years.

5.17 Open Access related issues

Stakeholders' Submission

5.17.1 The number of consumers opting for open access is increasing. It is painfully noted that so many charges have been loaded on to the open access consumers in order to discourage them from availing power in open access. In the case of Kalyani Steel Ltd. vs. Karnataka Power Transmission Commission (2007ELR985) Hon'ble APTEL has held that no wheeling charges are to be recovered from the open access consumers connected directly on transmission voltages. Similarly transmission system charges are being recovered through the demand charges and IDC. No transmission charges are therefore required to be levied on the EHT consumers.

5.17.2 The OA consumer has to pay several charges some of which are listed below:

i. Cross Subsidy charges
ii. Additional charges
iii. Wheeling Charges
iv. Scheduling Charges
v. Loss component
vi. POC charges
vii. Reliability Charges
viii. Transmission Charges

Coupled with the above listed charges, the landed cost of open access power at consumer’s door step becomes totally unviable. Transmission charges stand already recovered through demand charges and IDC. So the transmission charges should also not be levied upon the EHT consumers.

5.17.3 There is multiple charging of the fixed cost from the open access consumers, such as;

i. As a part of the cost of power purchase allowed in the ARR,
ii. As a part of the True-up exercise on year to year basis;
iii. As a part of recovery of Fixed Demand Charges;

Thus the open access consumer is being burdened repeatedly on same account.

Petitioner’s Response

5.17.4 HPSEBL submits that it is already providing power at competitive rates in comparison to the other States. In case of open access, the charges loaded to the consumer are as per the HPERC regulation. The contention of the objector is unfounded that discoms are levying various charges on the OA consumers for discouraging the open access. Like the industrial consumers, HPSEBL is also a commercial organisation and only those charges are recovered from the OA consumers which are borne by HPSEBL on account of providing supply to these consumers.

Further, it is stated that HPSEBL is paying PGCIL & transmission network charges as it has entered into long term open access agreement with Power Grid for transfer of its share in power projects outside the State and thus paying charges per MW of booked corridor. The quantum of energy, receivable on this booked corridor gets reduced on surrendering of ISGS shares by HPSEBL. This surrender of power results in increase in per unit transmission cost for import of power. As the surrender of power is also attributed to power purchase by Open Access consumers through Open Access, the Open Access consumers are also liable for bearing this impact. Hon'ble Commission was also agreed on this view of HPSEBL in point 8.29.3 of Order dt. 28th Oct 2016.

5.17.5 HPSEBL submits that only following three additional charges are levied on OA consumers:

i. Cross subsidy charges
ii. Additional charges
iii. Wheeling charges

The other charges mentioned by the objector are part of determination of additional surcharge. Further, it is submitted that only 50% wheeling charges are levied on OA consumers and the remaining 50% are adjusted from the demand charges before finalizing additional surcharge to be paid by the OA consumer on account of stranding of power arranged by HPSEBL for these consumers. As far as cross subsidy surcharge is concerned the same is levied as per national tariff policy.

5.17.6 HPSEBL submits that there is no multiple charging of fixed cost and the additional charge to be paid by the open access consumers is only to recover the fixed charges paid by HPSEBL against the surrendered power and the same has been applicable as per HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulation, 2006.

Commission's Observations

5.17.7 The open access charges for consumers availing open access has been levied as per the provisions of the Electricity Act, 2003 and accordingly, the Commission has determined these charges from time-to-time based upon its regulations.

5.18 **Additional Surcharge**

Stakeholders' Submission

5.18.1 HPSEBL has considered the station wise fixed cost on per unit basis i.e., in Rs/kWh basis. CERC as well as HPERC Tariff Regulations provide for payment of full annual fixed charges at target availability irrespective of quantum of energy drawn from each station. As the fixed charges are payable towards the capacity tied up for the system, the fixed charges need to be considered towards the capacity available in terms of Rs /MW of capacity tied up instead of considering fixed charges in Rs/kWh for the energy availed. Therefore, it will be more appropriate to consider the total Fixed Charges payable by HPSEBL during the period and total capacity available during the corresponding period to arrive at Fixed Charges of per MW Capacity available to HPSEBL. Accordingly, the cost of stranded capacity needs to be determined on the basis of Fixed Charges per MW of Capacity Available and not in terms of per unit of energy.

Petitioner's Response

5.18.2 The per unit fixed cost of stations considered by HPSEBL has already been clarified in point No. 8.19.3 of Hon'ble Commission Order dt. 28th Oct 2016. The same has been quoted below:

"Since the short term open access consumers avail different quantum in different time slots, the Commission finds it not appropriate to convert all the changes into per kWh rate. This will be much simpler for billing purposes. The Annual fixed charges as well as the energy quantum have been computed on the assumption that target availability shall be available. In case, the average capacity is less than the targeted availability then the energy quantum shall also reduce correspondingly. The net effective rate shall however be the same or may be even higher in case of shortfall in generation capacity.

In this case, it is also worth mentioning that in case the per unit charges were to be computed on the basis of the fixed charges actually payable and the energy actually drawn i.e. excluding the energy surrendered, the per unit rate shall obviously be higher than that as per the methodology adopted by the Commission, keeping in view, the fact that in such cases, the fixed charges shall remain unchanged but energy quantum of energy shall reduce."

Commission's Observations

5.18.3 The Commission has already clarified this point in its earlier order dated 28th

October, 2016 as reproduced by HPSEBL in the preceding sub-paragraph. The views expressed by the Commission are quite clear in this regard.

Stakeholders' Submission

5.18.4 The Hon'ble Commission, while approving MYT order for the period 2014-15 to 2018-19 had approved total power purchase from various sources. The statistics show that the actual power purchase volume during 2015-16 to 2016-17 remained quite low as compared to the projections. The power procurement needs to be properly projected so that the open access consumers are not unnecessarily burdened on account of inflated backing down shown by the Utility.

Petitioner's Response

5.18.5 Open Access Consumers are charged additional surcharge to recover the fixed charges paid by HPSEBL on account of surrender of power due to non-availing of power by embedded consumers.

Commission's Observations

5.18.6 The Commission has approved the power purchase quantum for FY19 based on the actual units procured from each station in the previous years along with nine month actuals of FY18. The additional surcharge for FY19 has been computed based on the merit order of the previous year, i.e. FY18 and therefore ensures that the power procurement needs projected by the Petitioner are not inflated.

Stakeholders' Submission

5.18.7 HPSEBL has considered the transmission charges and losses as well as distribution losses for computing the stranded fixed costs. Keeping in view of the Regulation 6 of the Himachal Pradesh Electricity Regulatory Commission (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulations, 2006, it is submitted that the proposed increase on Additional Surcharge on Short Term Open Access should be kept at reasonable level to promote competition in the energy market and to boost the growth of Industries in the State.

Petitioner's Response

5.18.8 HPSEBL has shown the continuous surrender of power from power stations due to open access consumer in Table 145 of the Petition and fulfilling the criteria of filing the Petition as per regulation 6(3) of HPERC (Cross Subsidy Surcharge, Additional

Surcharge and Phasing of Cross Subsidy) Regulations, 2006. The same has been quoted below:

"(3) The additional surcharge for obligation to supply as per sub-section 4 of section 42 of the Act shall become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges."

Further, HPSEBL is paying PGCIL & transmission network charges as it has entered into long term open access agreement with Power Grid for transfer of its share in power projects outside the State and thus paying charges per MW of booked corridor. The quantum of energy, receivable on this booked corridor gets reduced on surrendering of ISGS shares by HPSEBL. This surrender of power results in increase in per unit transmission cost for import of power. As the surrender of power is also attributed to power purchase by Open Access consumers through Open Access, the Open Access consumers are also liable for bearing this impact. Hon'ble Commission was also agreed on this view of HPSEBL in point 8.29.3 of Order dt. 28th Oct 2016.

Commission's Observations

5.18.9 The Commission reiterates its earlier stand as stipulated and reproduced in the reply of HPSEBL as above.

Stakeholders' Submission

5.18.10 Order issued by Hon'ble Commission on 18.02.2016 in Petition No. 103/2015 as well as Order dated 28.10.2016 in Petition No. 27/2016 on determination of additional surcharge have been challenged by certain consumers before the Hon'ble Appellate Tribunal for Electricity ("APTEL") in Appeal No. 154 of 2016 and Appeal No. 115 of 2017 respectively. It is important to note that apart from the various legal issues, the basic issue of methodology to be adopted for determination of additional surcharge has been challenged in the said Appeals. The said Appeals are subjudice and Hon'ble APTEL is yet to issue judgment on the said Appeals. Accordingly, it will not be appropriate to proceed with the determination of Additional Surcharge for FY 2019 till Hon'ble APTEL issues its judgment in the said Appeals.

Petitioner's Response

5.18.11 At present there is no stay by the Hon'ble APTEL on the methodology being followed by the Hon'ble HPERC. Therefore, HPSEBL requests the Hon'ble Commission to kindly determine the additional surcharge as per the methodology followed in its previous Order as HPSEBL has also adopted the same in the current petition.

Commission's Observations

5.18.12 The Electricity Act, 2003 provides for recovery of additional surcharge from open access consumers to ensure that the fixed cost of a distribution licensee arising out of its obligation to supply are recovered. The aforementioned cases are subjudice and no stay has been given by Hon'ble APTEL on the methodology followed by the Commission for determination of additional surcharge. Therefore, the Commission has continued with its previous methodology and decided on the matter in line with the HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulations, 2006.

Stakeholders' Submission

5.18.13 The data and information with respect to determination of Additional Surcharge in the Petition submitted by HPSEBL is too broad. From the limited data, it cannot be established that the capacity has become stranded and will continue to remain stranded due to open access, which is the basic requirement for levying additional surcharge. It is pertinent that HPSEBL is directed to provide the complete data regarding backing down including backing down due to transmission constraints, details of fixed cost, terms and conditions of power purchase agreements with power generators, export of power, etc. Due to inadequacy of data, we are unable to present our detailed analysis and hence request the Hon'ble Commission to direct HPSEBL to provide the following information and data at the earliest:

i. Hourly availability declared by the generator in MW.

ii. Hourly schedules given by the petitioner in MW.

iii. Hourly schedules of Open Access transactions by the Open Access consumers in MW.

iv. Copy of all the Power Purchase Agreements.

v. List of Power Purchases under Bilateral contracts, long term contracts, and Medium term contracts with all relevant details such as Price, Quantum and Period for the period considered for calculation of Additional Surcharge.

vi. Details of all the Generators with their average PLF during the period under consideration.

vii. Data regarding backing down due to distribution & transmission constraints.

viii. Details of energy banked and return banked energy received for each 15 minute time block for whole year.

ix. Details of stranded power for each 15 min time block for whole year. This information has not been made available to the Objector even though it forms part of the petition.

x. Total approved fixed charges paid by the Petitioner for each station.

xi. Total transmission charges paid by the Petitioner.

xii. Total energy scheduled by the Petitioner in MUs.

xiii. Total energy consumed by the Open Access consumers from HPSEB in MUs supported by data.

xiv. Total demand charges paid by the HT/EHT consumers and total sale of energy to the HT/EHT consumers supported by data.

xv. Total demand charges paid by the Open Access consumers having contracted demand with the licensees supported by data.

Petitioner's Response

5.18.14 Point wise reply is given below:

i. Generators always declare availability in 15 minutes time block. The same is provided in soft copy.
ii. Power Schedule of HPSEBL in 15 minutes time block is provided in soft copy.
iii. Scheduling is always in 15 minutes block. The open access scheduling in 15 minutes time block has already been provided in soft copy along with petition.
iv. HPSEBL has already provided the copy of Power Purchase Agreement during the processing of last petition filed for additional surcharge.
v. List of power purchase agreement is provided in soft copy. The Tariff of the generating stations is already available in MYT tariff Order dt. 12th June 2014.
vi. M/s Winsome Textile Industries Ltd. can easily assess PLF for each station from Regional Energy Account (REA) Report which is available in Northern

Regional Power Committee website. (www.nrpc.gov.in) under commercial activity head.

vii. There was no backing down due to distribution & transmission constraints.

viii. The detail of banked energy is provided in soft copy.

ix. The detail of stranded power has already been provided along with petition in soft copy.

x. HPSEBL has already provided 6 months (upto Sep'17) data in soft copy along with petition. The fixed charges paid for each station can be referred from it.

xi. HPSEBL has already provided 6 months (upto Sep'17) data in soft copy along with petition. The transmission charges paid can be referred from it.

xii. Energy Scheduled is provided in soft copy

xiii. Total energy consumed by OA consumers is provided in soft copy

xiv. Total demand charges paid by the HT/EHT consumers and total sale of energy to the HT/EHT consumers is provided in soft copy.

xv. Total demand charges paid by the Open Access consumers having contracted demand with the licensees is provided in soft copy.

Commission's Observations

5.18.15 The Commission agrees to the concerns raised by objectors regarding availability of appropriate information/ data. The general information about available capacities and consumption etc. of HPSEBL is available in the Tariff Order which is already in public domain. The Commission considers it appropriate to proceed on the basis of the available facts. The Commission has analyzed the information and details provided by HPSEBL and have also taken additional information required before finalizing the additional surcharge as detailed in Chapter 9.

Stakeholders' Submission

5.18.16 It is pertinent that HPSEBL should provide clearly the detailed break up of backing down done, explaining the various reasons for which backing down was done. However, HPSEBL has made no attempts to provide concrete reasons for surrendering power. HPSEBL is required to provide the reason for stranding of power so that it is established that open access is responsible for surrendering of power by the licensee. HPSEBL has further failed to provide a break-up of the reasons for backing down when backing-down could have been due to variation in the demand of retail consumers, short term power purchase, return power available through banking, over drawl from NR region, drawl of power by consumers under Short Term Open Access, etc.

Petitioner's Response

5.18.17 HPSEBL has already provided the surrendered power data in the soft copy along with the Petition in which it can be very easily seen that data has been surrendered due to OA consumers. Further, there are many reasons other than open access for backing down of power. Hon'ble Commission in its Order dt. 27.10.2017 against petition no. 28/2017 has already clarified this issue in point 9.7.3.

Commission's Observations

5.18.18 The STOA consumers avail open access mostly during the conditions when the power is available in the grid at cheaper rates i.e. when grid is by and large, surplus in power. The grid conditions vary every minute i.e. on real time basis and the contention that there should not be any excess energy in certain times slots, if it has faced shortages over a certain period (say month) may not be correct. During the shortage conditions in the grid i.e. when there is no surplus power in grid, the power shall not be available at cheaper rates. The open access consumers obviously shall not prefer to draw power through open access during such conditions, keeping in view option available to them to draw continuously the power from the HPSEBL. The HPSEBL has submitted, as a part of the petition, the quantum of power stranded during 2016-17 which is substantially higher than the power drawn through open access. This establishes that power is stranded due to various reasons in addition to STOA. Even otherwise also, the additional surcharge is recoverable only when the energy under STOA is actually scheduled which happens virtually during the surplus conditions only. In such situations power gets stranded due to open access and as such the open access consumers are liable to pay for the fixed cost of the stranded power to the extent of their consumption through open access. The STOA consumers cannot escape the payment of additional surcharge simply because power may be stranded due to reason other than STOA also.

5.18.19 The Commission would also like to highlight that the Ministry of Power, Govt. of India has notified a draft "Consultation Paper on issues pertaining to Open Access" in which issue of "frequent switching by open access consumers" has also been discussed. It has been highlighted in this paper that,

"2.1 Grid frequency is an important indicator of the health of the grid. Progressive tightening of the frequency band, enforcing limits on volume of deviation along with other deterrents and enforcement of Central Electricity Regulatory Commission (CERC) Deviation Settlement Mechanism (DSM) Regulations have contributed to maintain a stable frequency profile and secure system operation.

2.2 As per the prevailing regulatory framework, the DISCOMs are required to provide their energy drawal schedule at their periphery on the day ahead basis to the SLDC of its state in order to facilitate latter to maintain secure grid operations.

2.3 Many DISCOMs regularly deviate from their schedule, primarily due to uncertain load forecasts as the scheduling is undertaken on the basis of DISCOMs forecast for energy requirement for the following day. With open access consumers revising / deviating from schedule, it becomes more difficult for the DISCOMs to accurately predict the requirement for the following day.

2.4 Particularly for short term open access consumers who procure energy from collective market or power exchanges, there is high degree of uncertainty in their power procurement from Power Exchange and DISCOMs. Considerable variation in schedule and actual energy drawl is observed on regular basis for short term open access consumers. Also, based on the market clearing price determined in exchanges for each block, the energy drawal of open access consumer fluctuates significantly within a day. Despite of such uneven drawl throughout the day, the Open Access consumers continue to enjoy the freedom of rescheduling their energy drawal on the basis of their daily load requirement and the price at which energy is available in the power exchange markets. Such variations in energy drawal make it difficult for the DISCOM to forecast time block wise energy requirement for the following day.

2.5 DISCOMs incur heavy penalties for deviation from their schedule in the form of applicable DSM charges.

2.6 SERCs also disallow a large share of short term power procurement costs incurred by DISCOMs for meeting demand variation by capping purchase price.

2.7 A part of this deviation is attributed to the variation in energy drawal by open access consumer purchasing power from sources other than DISCOM, which results in underdrawl/over-drawal in particular time blocks.

2.8 Whereas open access consumers are allowed to re-schedule their energy drawal based on the daily energy requirement, DISCOMs irrespective of the drawal pattern of the open access consumers, under universal service obligation is required to keep its entire generation and transmission capacity available for the consumers. In such a scenario forecasting demand for the ensuing day becomes challenging for the DISCOMs.

2.9 Considering the immense growth in number of open access consumers and the fluctuation in the energy drawal from open access, it is now imperative that frequency of switching is modulated in such a way that DISCOMs are not unduly burdened by their obligation to provide supply."

Stakeholders' Submission

5.18.20 HPSEBL has erred in considering the transmission charges for computing the stranded costs when Regulation 6 of Himachal Pradesh Electricity Regulatory

Commission (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulations, 2006 explicitly provides that the stranded cost of power purchase commitments is to be considered for additional surcharge. The power purchase commitments mean only the amount payable to Generation Companies based on Power Purchase Agreements with them and by no imagination transmission charges can be considered as part of power purchase commitments.

Petitioner's Response

5.18.21 HPSEBL is paying PGCIL & transmission network charges as it has entered into long term open access agreement with Power Grid for transfer of its share in power projects outside the State and thus paying charges per MW of booked corridor. The quantum of energy, receivable on this booked corridor gets reduced on surrendering of ISGS shares by HPSEBL. This surrender of power results in increase in per unit transmission cost for import of power. As the surrender of power is also attributed to power purchase by Open Access consumers through Open Access, the Open Access consumers are also liable for bearing this impact. Hon'ble Commission was also agreed on this view of HPSEBL in point 8.29.3 of Order dt. 28th Oct 2016. The same has been quoted below:

"....the Commission agrees with the view of HPSEBL and finds that since the transmission charges are payable to the Power Grid and also to HPPTCL on per MW per month basis, the amount payable does not get reduced even if some power is stranded. As such, these charges shall have to be accounted for as fixed costs for determining the additional surcharge even if the STOA consumers are otherwise required to pay similar charges to Power Grid and HPPTCL for their open access drawls also."

5.18.22 HPSEBL has filed additional surcharge under the provisions of the Sub-regulation 3 of regulation 6 of HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulation, 2006 and as per sub-section (2) of Section 42 of EA'03. Further, Power has been surrendered due to open access consumers and detail of the same has already been provided in the soft copy along with petition.

Commission's Observations

5.18.23 The Commission reiterates its earlier stand as stipulated and reproduced in the reply of HPSEBL as above.

Stakeholders' Submission

5.18.24 The Licensee has recommended for levy of Additional Surcharge on short-term open access consumers @ 72.78Ps/kWh for FY19. The main argument given is that the Licensee has to surrender power due to open access consumers. This statement is totally wrong. Firstly, there are hardly 10-12 open access consumers in the State and even the energy purchased through short-term open access by these consumers does not make more than 5% of the energy consumption of Industrial Consumers. Thus the impact of such small segment of consumers cannot be assumed so large which calls for levy of such high Additional Surcharge.

Petitioner's Response

5.18.25 HPSEBL has filed additional surcharge under the provisions of the Sub-regulation 3 of regulation 6 of HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulation, 2006 and as per sub-section (2) of Section 42 of EA'03. Further, power has been surrendered due to open access consumers and detail of the same has already been provided in the soft copy along with Petition.

Commission's Observations

5.18.26 The Commission considers it appropriate to proceed on the basis of the available facts. The Commission has analyzed the information and details provided by HPSEBL and have also taken additional information required before finalizing the additional surcharge as detailed in Chapter 9.

Stakeholders' Submission

5.18.27 According to the Electricity Act, 2003, Tariff Policy notified by the Govt. of India and the Regulations notified by the State Electricity Regulatory Commission, there are following major requirements to determine quantum of additional surcharge;

i. As per S.42(2) & 42(4) of EA, 2003 there is difference in Cross Subsidy Surcharge and the addl. Surcharge. While Cross Subsidy Surcharge is in addition to the wheeling charges, Additional Surcharge is on the wheeling charges;

ii. If the obligation of the licensee in terms of power purchase commitments has been and continues to be stranded or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract.

iii. The Tariff Policy clearly lays down that the impact of cross subsidy surcharge, additional surcharge and wheeling charges etc. should not be so onerous that it eliminates competition. Further the Policy envisages a scenario where every electricity consumer pays for the cost of service or cost to serve to the distribution licensee.

iv. The fixed costs related to network assets would be recovered through wheeling charges.

v. The distribution licensee shall submit to the Commission, on six monthly basis the details regarding the quantum of such stranded costs and the period over which these remained stranded.

vi. The Commission shall scrutinize the statement of calculation of such stranded fixed costs submitted by the distribution licensee and determine the amount of additional surcharge.

vii. Any additional surcharge so determined shall be applicable to all the open access customers availing open access from the date of determination of same by the Commission.

These mandatory requirements are not fulfilled by the proposal submitted by the Licensee. The Licensee has to establish that the power remained stranded and will continue to remain stranded in future as well. This is evident from the data furnished by the License that there is steep decline in the power purchased through open access from August 2017 onwards. Thus it is not established that the consumers would continue to avail all the power based on the figures of the period April-July 2017.

Petitioner's Response

5.18.28 HPSEBL has clearly demonstrated that power has been surrendered due to open access consumers also and detail of the same has already been provided in the soft copy along with petition.

HPSEBL has filed additional surcharge under the provisions of the Sub-regulation 3 of regulation 6 of HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulation, 2006 and as per sub-section (2) of Section 42 of EA'03.

Commission's Observations

5.18.29 The Commission considers it appropriate to proceed on the basis of the available facts. The Commission has analyzed the information and details provided by HPSEBL and have also taken additional information required before finalizing the additional surcharge as detailed in Chapter 9.

Stakeholders' Submission

5.18.30 The backing down of power is not only on account of the open access consumers but depends on various other factors such as, seasonal variation in power demand in the State due to rains, agriculture requirement, festival/gazette holidays, etc. Moreover there could be other reasons such as;

i. Out of the power drawn over IEX and PXIL, there is power purchased by the Licensee also.
ii. Power surrendered/backed down is based on the PLF of the specific generating station.
iii. Petitioner needs to certify that the backing down was as per their instructions and not a fait accompli.
iv. It has to be certified that the backing down was done on merit order basis and not by pick and choose method.

Thus the basis submitted by the Licensee to calculate Addl. Surcharge is erroneous and cannot be accepted.

Petitioner's Response

5.18.31 Hon'ble Commission has already clarified this comment in point 9.7.3 in its Order dt. 28.10.2017 against Petition 28/2017.

Commission's Observations

5.18.32 The Commission has already clarified this point in Para 5.18.8

Stakeholders' Submission

5.18.33 The computation of additional surcharge proposed in table 149 of the submission requires a detailed study and analysis and this may be taken up by the Hon'ble Commission separately after comprehensive data like source wise payment of fixed charges, POC charges, energy availed or projected to be availed through open access is made available by the petitioner and wheeling charges determined the Hon'ble Commission, otherwise this exercise will have to be done again by the petitioned & the consumers.

Petitioner's Response

5.18.34 Earlier, the petition for determination of additional surcharge was used to be filed separately. However, the same was made part of the tariff petition based on the request from various stakeholders only. As far as analysis of the same is concerned, HPSEBL has supplied all the data desired by the Hon'ble Commission in line with the past Orders of the Hon'ble Commission.

Commission's Observations

5.18.35 The Commission has approved the cross subsidy surcharge, additional surcharge in line with the methodology laid down under HPERC (Cross Subsidy Surcharge, Addl. Surcharge and Phasing of Cross Subsidy) Regulations, 2006 after analysing the submissions of the Petitioner as covered in Chapter 9.

5.19 Cross-Subsidy

Stakeholders' Submission

5.19.1 The level of cross subsidy should not be increased from the present level and should be progressively reduced.

Petitioner's Response

5.19.2 Hon'ble Commission may take decision on this. However, the revenue gap can be met through increase in tariff only.

Commission's Observations

5.19.3 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 FY19 as discussed in detail in Chapter 8.

Stakeholders' Submission

5.19.4 There is a large amount of cross subsidy within the industrial categories of consumers. The larger categories are cross subsidizing the smaller categories. Also, as a whole the industrial category consumers are cross subsidizing the domestic, agriculture and some other categories of consumers.

Petitioner's Response

5.19.5 The cross-subsidization is as per tariff policy and HPERC Regulation HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 and its amendments from time to time.

Commission's Observations

5.19.6 The State 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.

Stakeholders' Submission

5.19.7 Over the last few years there has been increase in the quantum of cross subsidy in terms of value even though the cross subsidy in terms of percentage may not have gone up. The data related to cross subsidy over the last few years have not been published by the Hon'ble Commission in the past few years. A detailed calculation on this aspect must be highlighted in the tariff order in order to establish the converging trend of tariffs and the reduction of inter category cross subsidy.

We also request this Hon'ble Commission to calculate the cross subsidy loaded on Large Industrial Consumers, specifically the HT2 and EHT Category. Only then it will be possible to move towards the reduction of cross subsidy. The target of the Hon'ble Commission to reduce the cross subsidy to +10/-15% of Average Cost of

Supply by the end of the Control period FY15 to FY19 has to be achieved as this is the last year of the control period.

Petitioner's Response

5.19.8 The tariff of Himachal Pradesh has is already between ±20% of average cost of supply as mandated under the National Tariff Policy and the current tariff is as per the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 along with amendment 1 & amendment 2 which states tariff for the consumer should be within (-)15% to (+) 10% of the average cost of supply. The relevant extract is quoted below:

"indicate a roadmap for reduction and/or rationalization of cross subsidies in the MYT Orders for the Control Periods starting from 1.4.2014 and thereafter. The road map shall be based on the approach of a gradual reduction/rationalization in cross subsidy, guided by the principles laid down in the National Tariff Policy, with a target that by the end of the control period starting from 1.4.2014 tariffs for the consumer categories, other than the life line category, are within (-)15% to (+) 10% of the average cost of supply and by the end of the subsequent control period, the same are within (-)10% to (+) 5%;"

However, for indicative purpose HPSEBL had awarded the "Voltage Wise Cost of Supply" study to M/s CRISIL in the month of Sep'17 as per the direction of Hon'ble Commission. It is expected that the same shall be completed by this financial year. HPSEBL would share the study with Hon'ble Commission on completion of the same.

Commission's Observations

5.19.9 Response is same as Para 5.19.6. The Commission has been providing the percentage of cross-subsidy for different categories in its previous tariff orders. The Commission has taken some additional measures for tariff rationalization in this Tariff Order as described in detail in Chapter 8.

Stakeholders' Submission

5.19.10 The present level of Cross Subsidy Surcharge in the State is already very high with the CSS varying from 36 Ps to 79 Ps for Off-Peak and Peak load hours. There is strong recommendation from Planning Commission in its recent Draft Energy Policy. The Planning Commission has recommended that the Power Utilities should realize full market price from all consumers. Even the Hon'ble Power Minister recently gave a statement to Press which said that 'Large power consumers may not have to bear cross-subsidy charges.' We would urge the Hon'ble Commission to address this issue and reduce the cross subsidy surcharge so as to make open access route of power purchase viable.

Petitioner's Response

5.19.11 Hon'ble Commission may take its decision on this.

Commission's Observations

5.19.12 Response is same as Para 5.19.6. The Commission has taken some additional measures for tariff rationalization in this Tariff Order as described in detail in Chapter 8.

Stakeholders' Submission

5.19.13 The open access initiative in the country was meant for promoting competition in the energy market and Short Term Open Access System was designed to meet the adhoc demand of power of the industrial unit. This is being done keeping in view under developed power market and necessary infrastructure as whereas technical competencies with consumer to trade under Open access. The provision of open access in the Electricity Act, 2003 was made for promoting competition in the energy market. The industry is reeling under recession and heavy input cost. Any move to put additional burden on the industry is likely to give a severe blow to its very existence in the state.

Petitioner's Response:

5.19.14 HPSEBL has filed additional surcharge under the provisions of the Sub-regulation 3 of regulation 6 of HPERC (Cross Subsidy Surcharge, Additional Surcharge and Phasing of Cross Subsidy) Regulation, 2006 and as per sub-section (2) of Section 42 of EA'03. At present, the consumers are undergoing purchase of power under such 15 minutes blocks when the power is cheaper in market and at the same time provides false schedule to the HPSEBL that they would be procuring power from market for full day. Under such circumstances HPSEBL has no option but to surrender its power arrangements and moreover when the consumer does not stick to its schedule HPSEBL is forced to buy the costly power from the market for the consumer. In this way consumers in the state are misusing the provisions of the OA and HPSEBL requests Hon'ble Commission to restrict the OA consumers to avail power from the market for at least 24 hours.

Commission's Observations

5.19.15 The Commission has approved the cross subsidy surcharge, additional surcharge in line with the methodology laid down under HPERC (Cross Subsidy Surcharge, Addl. Surcharge and Phasing of Cross Subsidy) Regulations, 2006 after analysing the submissions of the Petitioner as covered in Chapter 9.

5.20 **Tariff Related Aspects**

Stakeholders' Submission

5.20.1 It is pertinent to note that the following principles have to be kept in mind by HPSEBL, at the time of filing of the Tariff Petition:

i. Truing Up is not a stage to lay down a new principle or deviate from the principle laid down in the original tariff order:
NDPL v DERC (Judgment dated 23.5.2007 in Appeal No. 265 of 2006)

ii. Truing up is not a mechanical exercise of simply taking the audited accounts and allowing all costs to the Distribution Company.
West Bengal Electricity Regulatory Commission v. CESC Ltd. (2002) (8) SCC 715
Kerala State Electricity Board v. Kerala State Electricity Regulatory Commission 2011 ELR (APTEL) 149

iii. If an error has been committed in the main tariff order, it need not be perpetuated and can be corrected in truing up.
Madhya Pradesh Power Generation Company v. Madhya Pradesh State Electricity Regulatory Commission (Judgment dated 21.4.2011 in Appeal No. 24 of 2010)

iv. Once targets and performance parameters have been approved in the main tariff order, the same will prevail and cannot be changed in truing up
Maharashtra State Power Generation Co. Ltd. v. Maharashtra Electricity Regulatory Commission, Mumbai and Ors. (Judgment dated 10.4.2008 in Appeal No. 86 & 87 of 2007)

HPSEBL has failed to comply with the aforesaid Tariff Principles.

Petitioner's Response

5.20.2 There are no deviations from the regulations, so far as the filing of petition by HPSEBL is concerned the same is in accordance with the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 read along with amendment 1 and amendment 2.

Commission's Observations

5.20.3 The Commission has determined the tariff for FY19 after scrutinizing the submissions of the Petitioner and analysing the Petitioner's claims against different financial parameters, keeping in line with the MYT Regulations as given in Chapter 7.

Stakeholders' Submission

5.20.4 It is suggested that separate tariff should be evolved and made applicable for 66 KV, 132 KV and 220 KV consumers as different T&D loss matrix is there at each voltage. This tariff is available in other states also. It implies voltage wise tariff and is justified on the ground that system is beneficial to both the consumers and Licensee by transmitting the power at High voltage.

Petitioner's Response

5.20.5 The tariff of Himachal Pradesh has is already between ±20% of average cost of supply as mandated under the National Tariff Policy and the current tariff is as per the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 along with amendment 1 & amendment 2 which states tariff for the consumer should be within (-)15% to (+) 10% of the average cost of supply. The relevant extract is quoted below:

"*indicate a roadmap for reduction and/or rationalization of cross subsidies in the MYT Orders for the Control Periods starting from 1.4.2014 and thereafter. The road map shall be based on the approach of a gradual reduction/rationalization in cross subsidy, guided by the principles laid down in the National Tariff Policy, with a target that by the end of the control period starting from 1.4.2014 tariffs for the consumer categories, other than the life line category, are within (-)15% to (+) 10% of the average cost of supply and by the end of the subsequent control period, the same are within (-)10% to (+) 5%;*

However, for indicative purpose HPSEBL had awarded the "Voltage Wise Cost of Supply" study to M/s CRISIL in the month of Sep'17 as per the direction of Hon'ble Commission. It is expected that the same shall be completed by this financial year.

HPSEBL would share the study with Hon'ble Commission on completion of the same.

Commission's Observations

5.20.6 Despite several directions to conduct a study for voltage wise cost of supply to the Petitioner, the Commission has observed that the Petitioner has not been able to successively submit such a report. **The Commission takes a strict view on the non-compliance of this directive and once again directs the Petitioner to submit the report at the earliest and positively before 30th June 2018**. In the absence of such a report, the Commission has been computing the average cost to serve at different voltage levels as detailed out in Chapter 8.

Stakeholders' Submission

5.20.7 Since, all the motors, heaters, lighting and other electrical appliances draw Current in Amperes and consumption is recorded in KVAH and accordingly the billing is also made in KVAH & KVA only. Also a contract demand is sanctioned by HPSEBL which is entered in A & A form. Since, we cannot draw more load than sanctioned contract demand without violation of an agreement entered between consumer & state utility, there is no significance of load getting sanctioned in KW. It is merely a handle with utility officials to harass the consumers and as well as it is a totally non-productive work leading to inefficiency. This concept has already been implemented by some other States like Maharashtra, Madhya Pradesh and Punjab Electricity Boards. Therefore, the connected load built up in the industry should be relaxed without any binding of connected load in KWs, in case the contract demand in KVA is agreed upon.

Petitioner's Response

5.20.8 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

5.20.9 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.

Stakeholders' Submission

5.20.10 The night time tariff concession should be uniform across the board irrespective of the voltage level and must be increased to 100 Paisa from present 40 Paisa 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. Our submission, here is that when we talk of encouraging night usage by the industry, we are actually substituting the power consumption in day by more consumption during night hours, irrespective of the seasons. Usage in any season or month remains the same. So, there is no question of surplus or short availability. The basis of night concession is the fluctuation of price of power during day and night hours across the country over the energy exchanges.

Therefore, the night concession should be fixed at a single rate throughout the year, the concession being based on the 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

5.20.11 HPSEBL is already providing night-time concession to industrial consumers. 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. Further, anymore increase in NTC will impact the revenue collection of HPSEBL and would be required to be counter balanced by increase in other charges. Therefore, HPSEBL does not find any merit in further changing the same.

Commission's Observations

5.20.12 The Commission in this tariff order has taken certain measures for tariff rationalization including increase in night time concession for industrial consumers, as described in Chapter 8.

Stakeholders' Submission

5.20.13 The demand charges, which are attributed to the fixed cost of the power utility has been fixed in a manner that the demand charge rates go up as the category progresses upward. From Rs. 100 per kVA for small industry, the rates go up to Rs. 425 per kVA for EHT supply to industry. As a consumer progresses to the higher voltage, the consumer stops using the lower voltage distribution/ transmission system, thus reducing the T & D losses. Other costs such as manpower required for servicing, cost of metering etc. to serve the larger consumer also go down for the same quantum of energy supplied as compared to the smaller category consumers who uses more infrastructure at different voltage levels and also suffer more fault occurrences. Practically, if cost to serve approach is adopted the demand charges should be in the inverse order. The only way such high demand charges to the large industry can be justified is by charging cross subsidy.

Petitioner's Response

5.20.14 The concept of demand charge has already been clarified by Hon'ble Commission in additional surcharge order of previous years. HPSEBL has proposed increase in demand charge to recover the revenue gap. Moreover, major CAPEX and power purchase from various sources aim to fulfil the industrial demands which are borne by all other consumers as well. Further, any reduction in demand charges would result in increase in energy charges.

Commission's Observations

5.20.15 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.

Stakeholders' Submission

5.20.16 Lower rates of energy charges are applicable to the higher category Rs. 4.10 to the highest category and Rs. 4.50 to the lowest category, Rs. 0.40 being the overall range. This advantage/concession of lesser rate of energy charges to the higher categories are partly nullified on account of lower night concession available to them. There is a contradicting approach in tariff as on one side the lower rates of energy charges have been fixed for HT2 and EHT category but on the other side the night concession available to these categories has been reduced to 50%.

Petitioner's Response

5.20.17 HPSEBL submits that there is no contradicting approach in tariff fixed by Hon'ble Commission. The advantage/concession of lesser rate of energy charges are not nullified on account of lower night concession available to them It can be easily assessed from the net tariff payable. The weighted average discount during night hours for whole year for HT1, HT2 & EHT is 0.50/unit, Rs 0.25/unit and Rs 0.25/unit respectively. Therefore, the tariff of HT1, HT2 & EHT during night hours is Rs 4.00/unit, Rs 3.95/unit and Rs 3.85/unit respectively.

Commission's Observations

5.20.18 The Commission agrees with the views of HPSEBL in this regard that there is no contradiction in the tariff fixed by the Commission. While the energy charges are lower for consumers connected at higher voltage levels due to lower loss levels, 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.

Stakeholders' Submission

5.20.19 In the past the demand charges have been fixed arbitrarily without any rationale, simply to take back the advantage given to the consumers in energy charges, which ultimately results in the same overall tariff to HT1, HT2 and EHT consumers. The voltages and cost to serve being different for each of this category, it is far from reflecting the actual cost to serve. The overall tariff works out to a constant value at 100% load factor in all of these categories.

The demand charges are abnormally high as compared to all other states, out of which some of the examples are given below:

i. In Punjab the fixed charges for industrial category are in the range of Rs. 85/kVA to 295/kVA.
ii. In Haryana the fixed charges are at Rs. 160/kVA to Rs. 190/ kVA
iii. In Assam, the fixed charges are Rs. 160/kVA
iv. Uttarakhand Rs. 140/kVA to Rs. 345/kVA
v. Maharashtra Rs. 290/kVAh

Petitioner's Response

5.20.20 HPSEBL submits that overall tariff in Himachal Pradesh is on the lower side in comparison to the other states during FY18:

Table 91: Tariff for Industrial Category

State	Rs/kVAh
Himachal Pradesh	5.67
Uttarakhand	5.41
Haryana	6.88
Punjab	5.00
Andhra Pradesh	7.35
Gujarat	6.41
Madhya Pradesh	7.87

As seen in above table, Himachal have lowest Industrial tariff except Uttarakhand where the terminal benefits is the liability of the state govt. not of the electricity board while the same is reversed in Himachal Pradesh whereas in Punjab the government is giving subsidy. Further, any reduction in demand charges would result in increase in energy charges.

Commission's Observations

5.20.21 The Commission concurs with the views of the Petitioner as is also substantiated by the table provided above and has therefore, continued with the same demand charges for industrial consumers as approved in the previous tariff order issued by the Commission.

Stakeholders' Submission

5.20.22 It is requested not to increase demand charges levied on agricultural Motors of capacity above 20kW. Demand charges are levied on motors of capacity above 20kW only, whereas the motors having capacity less than 20kW are exempted. This is not right as the purpose of both is to irrigate fields. The demand charges should be levied on all agricultural motors irrespective of capacity, and no discrimination should be done to any consumer.

Petitioner's Response

5.20.23 HPSEBL submits that GoHP is already providing subsidised tariff to the agriculture consumer. However, the demand charges are charged based on the two part tariff principle and as such exemption to consumers would result in implementation issue.

Commission's Observations

5.20.24 The Commission has kept in consideration the request made by stakeholders not to increase the tariff for the respective category under this Tariff Order.

Stakeholders' Submission

5.20.25 The peak load energy charges differential of Rs. 1.70 to Rs. 2.00 over and above the normal rate of energy charges is very high. There is another loading in the terms of PLADC i.e. Peak Load Average Demand Charges. The overall impact on peak load usage works out to about Rs. 2.80 per unit extra as compared to use during normal hours.

We suggest that in view of comfortable availability of power during peak hours, the peak load tariff be slashed. The energy rate differential must be done away with. Also, since the demand charges are already very high, they may be looked at as demand charges for entire 24 hours in the day. The peak load average demand charge (PLADC) must be abolished. If at all it becomes necessary to charge some extra for use in peak load hours, it should be nominal and only charged to about 10% extra on the applicable energy charges to all category of consumers. This will go a large way in terms of simplification of tariff.

Petitioner's Response

5.20.26 The basic objective for levying higher charges during peak hour on one hand and simultaneously providing power at concessional rates during night hours is to keep the load curve flat by shifting load from peak to off peak hours, which eventually helps in reducing the purchase of costly power during the peak hours and reduces the overall power purchase cost and thereby the tariff. The Night time concession is already being provided to the consumers by the Hon'ble HPERC. The remarks of the Hon'ble Commission regarding NTC in the Tariff order are reproduced below:

"......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."

Further, Hon'ble Commission has not increased energy charges for peak/ off- peak load hours for the last 2-3 years and the same if compared with neighbouring states is on lower side.

Commission's Observations

5.20.27 The Commission has considered the objection raised by the stakeholder and has consequently rationalized the tariff for industrial consumers by increasing the night-time concession for them in this tariff order. This shall reduce the price differential between the peak charges and night-time charges while keeping the load curve flat.

Stakeholders' Submission

5.20.28 We submit that minimum chargeable demand should be 80% of the contract demand because it is difficult to control the fluctuating load so as to keep it within the sanctioned contract demand. In cases of high sanctioned contract demand the consumer is generally not in a position to utilize the full contract demand while he has to pay the higher charges. However, if by any chance he draws more power than the contract demand he pays penal charges. He is thus a loser either way. Moreover, in case the chargeable demand is based on 80% of the contract demand the frequency of revision of contract demand would be much less say once or twice in a year. Whereas, 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 this is necessitated due to various reasons such as additions, modernizations, diversifications, process improvements etc. and in order to avoid penalties. So it becomes necessary to give consumers a cushion of 20% (100-80) to accommodate changes in demand due to these various reasons as mentioned and we therefore, request the commission that, the minimum chargeable demand should be at the level of 80% as against 90%.

Petitioner’s Response

5.20.29 HPSEBL submits that the reduction in demand charges will impact the revenue requirement of HPSEBL and the same can only be compensated by higher rate of energy charges. Hence, HPSEBL is not in favour that the billable demand should be made at 80% of the contract demand or the actual demand whichever is higher.

Commission’s Observations

5.20.30 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.

Stakeholders’ Submission

5.20.31 The present rate of demand charges for EHT consumers @ 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.

Petitioner’s Response

5.20.32 Major CAPEX as well as bulk of power purchase aims to fulfil the industrial demands which are borne by all other consumers as well. Moreover, reduction of demand charges can only be compensated by higher energy charge from EHT consumers.

Commission’s Observations

5.20.33 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.

Stakeholders' Submission

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

Petitioner's Response

5.20.35 The tariff of Himachal Pradesh has is already between ±20% of average cost of supply as mandated under the National Tariff Policy and the current tariff is as per the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 along with amendment 1 & amendment 2 which states tariff for the consumer should be within (-)15% to (+) 10% of the average cost of supply. The relevant extract is quoted below:

"indicate a roadmap for reduction and/or rationalization of cross subsidies in the MYT Orders for the Control Periods starting from 1.4.2014 and thereafter. The road map shall be based on the approach of a gradual reduction/rationalization in cross subsidy, guided by the principles laid down in the National Tariff Policy, with a target that by the end of the control period starting from 1.4.2014 tariffs for the consumer categories, other than the life line category, are within (-)15% to (+) 10% of the average cost of supply and by the end of the subsequent control period, the same are within (-)10% to (+) 5%;"

However, for indicative purpose HPSEBL had awarded the "Voltage Wise Cost of Supply" study to M/s CRISIL in the month of Sep'17 as per the direction of Hon'ble Commission. It is expected that the same shall be completed by this financial year. HPSEBL would share the study with Hon'ble Commission on completion of the same.

Commission's Observations

5.20.36 Despite several directions to conduct a study for voltage wise cost of supply to the Petitioner, the Commission has observed that the Petitioner has not been able to successively submit such a report. **The Commission takes a strict view on the non-compliance of this directive and once again directs the Petitioner to submit the report at the earliest and positively before 30th June 2018**. In the absence of such a report, the Commission has been computing the average cost to serve at different voltage levels as detailed out in Chapter 8.

Stakeholders' Submission

5.20.37 There is an urgent need for the Hon'ble Commission to help the industrial units to revive by giving suitable reduction in the electricity tariffs. This sector is highly cross subsidizing the subsidized sector of consumers. According to the national Electricity Policy and the Tariff Policy of the Govt. of India, it is the duty of the Appropriate Commission to reduce the cross subsidies and to achieve a scenario where every electricity consumer is required to pay the actual cost of service.

Petitioner's Response

5.20.38 HPSEBL submits that the Industrial tariff in Himachal Pradesh is on the lower side in comparison to the other states during FY 2017-18.

Table 92: Industrial Tariff for various States in India

State	Rs/kVAh
Himachal Pradesh	5.67
Uttarakhand	5.41
Haryana	6.88
Punjab	5.00
Andhra Pradesh	7.35
Gujarat	6.41
Madhya Pradesh	7.87

As seen in above table, Himachal Pradesh has the lowest industrial tariff except Uttarakhand where the terminal benefits is the liability of the state govt. not of the electricity board while the same is reversed in Himachal Pradesh whereas in Punjab the Government is giving subsidy. Therefore, the point mentioned by the stakeholder that electricity tariff is very high in Himachal Pradesh is incorrect. However, revenue gap shall be met through tariff increase only.

Commission's Observations

5.20.39 The State 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.

Stakeholders' Submission

5.20.40 A concession of 20 paisa per unit is provided in the tariff to such industry that opts to operate during night hours as surplus power is available during this period. This point has been highlighted from last many years to increase this concession to at least Rs.1.0 per unit as prevalent in state of Punjab, although the supply of power is largely thermal based in that state. The meagre concession of 20 paise per unit is not enough to motivate the industry to shift to night operation because during night hours the manpower is costlier and productivity is lower. Moreover night operation increases the consumption for lighting the working area which generally uses sun light in the day time.

Petitioner's Response

5.20.41 HPSEBL is already providing night-time concession to industrial consumers. 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. Further, anymore increase in NTC will impact the revenue collection of HPSEBL and would be required to be counter balanced by increase in other charges. Therefore, HPSEBL does not find any merit in further changing the same.

Commission's Observations

5.20.42 Response is same as discussed in Para 5.20.27

Stakeholders' Submission

5.20.43 Demand charge is in lieu of the capital investment made by the utility for supplying power to the consumer. This amount remains fixed for a particular consumer and hence this amount should not be subjected to change. Secondly this amount is also recovered through IDC from the consumer & thirdly for open access consumers, the demand charges also make a part for calculating the wheeling charges. Therefore there is no justification for increasing the demand charges which is being recovered more than once.

Peak restrictions remain in force around the year when the consumer is forced to buy the costlier power from the Petitioner and is compelled to keep his industrial operations shut. The consumer contracts with the Petitioner a particular demand on 24X7 basis. So while restricting our operations to 20 hours, the industry should be suitably compensated instead of charging higher rates. It is suggested that the demand charges may be adjusted by the multiplication factor of 20/24.

Petitioner's Response

5.20.44 Demand charges include the fixed cost components of ARR such as employee costs, R&M, A&G, depreciation etc. HPSEBL submits that the reduction in demand charges will impact the revenue requirement of HPSEBL and the same can only be compensated by higher rate of energy charges.

Open access consumers are subject to pay demand charge till they remain embedded consumers of HPSEBL. Further, while calculating additional surcharge this fact is also taken into consideration and the demand charge already recovered from the embedded consumer is reduced before arriving at final additional surcharge rate.

The basic objective for levying higher charges during peak hour on one hand and simultaneously providing power at concessional rates during night hours is to keep the load curve flat by shifting load from peak to off peak hours, which eventually helps in reducing the purchase of costly power during the peak hours and reduces the overall power purchase cost and thereby the tariff.

Commission's Observations

5.20.45 The Commission is of the view that the demand charges not only captures the capex incurred by the utility for supplying power to the consumer but also includes a portion of the other fixed costs like O&M etc. Therefore, the contention that fixed cost should not be subjected to change is not tenable. Regarding the high rate of peak charges, the Commission has not increased the same during the last 2-3 years and has rationalized the same by increasing the night time concession in this tariff order.

Stakeholders' Submission

5.20.46 The discrimination in fixation of night concession rates for HT2 and EHT category at 50% of what is being given to small, medium and HT1 category, is highly unjustified and the same should be given at equal rates to all categories covered under time of the day tariff.

The basic reason for introduction of night-time concession is the demand management. The consumption during night hours being low causes system unbalance and as such has impacts on the frequency and voltage of the supply. The demand being less during night hours there is an overall dip in the market rates during night hours. In any case, the surplus power is being sold outside the state during night hours at a much lower price. There is no logic in discriminating in fixation of rates based on the scale of consumption. Same rate of night concession should be applicable to all categories of consumers.

Petitioner's Response

5.20.47 Response is same as in Para 5.20.41.

Commission's Observations

5.20.48 The Commission has rationalized the night time concession in this tariff order and has reduced the gap of night time concession rates for HT-2 and EHT categories vis-à-vis other industrial category consumers.

Stakeholders' Submission

5.20.49 Condition H of the Part-I of Annexure-I of the current tariff schedule for the year FY 2017-18 deals with the applicability of Low Voltage Supply Surcharge (LVSS) and specifies the conditions under which such charge becomes chargeable. Para 1) of the Explanation of this condition reads as follows:

"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."*

Illustration:

If a consumer is availing actual supply at 33 kV, whereas his Standard Supply Voltage based on his connected load as well as the contract demand works out to 66 kV or higher, such consumer is being charged LVSS over and above the normal tariff. As per Para 1) reproduced above such consumer will be charged the tariff applicable to 33 kV as the energy charges at 33kV are Rs. 4.20 per kVAh as against energy charges of EHT fixed at Rs. 4.10 per kVA. In other words, the transmission and distribution charges are being recovered from such consumers twice, once as a part of energy charges of Rs. 4.20/ kVAh and secondly in shape of LVSS which is again on account of transmission and distribution charges.

In the interest of fairness one of the following two approaches for levying Low Voltage Supply Surcharge (LVSS) must be adopted:

i. the tariff applicability be fixed on standard supply voltage i.e. Re. 4.10 / kVAh. A surcharge can be levied as LVSS for supply at lower voltage in addition to Rs. 4.10/ kVAh.
ii. the tariff of actual supply voltage be charged from the consumers without any surcharge i.e. Rs. 4.20 be charged without LVSS.

In most of the States one of the two options has been adopted. In Himachal Pradesh also, a few years ago, option a) was adopted.

Petitioner's Response

5.20.50 HPSEBL's submits that proposal given by Petitioner is not possible due to implementation issues because it suggests different rates for charging of LVSS and energy charges. However, Hon'ble Commission may take decision on this.

5.20.51 LVSS should not be dropped as it will encourage all the consumer to avail power at lower voltage resulting in system losses and deterioration of quality of supply of power.

Commission's Observations

5.20.52 The Commission agrees with the views of the Petitioner that LVSS is a surcharge that is imposed to encourage discipline and ensure that consumers draw power at the standard supply voltage. Energy charges, on the other hand, are based on the actual voltage at which the consumer is drawing power since the distribution utility has to bear system losses due to power being drawn at a lower voltage as against the standard supply voltage. Therefore, the Commission is of the view that the current provisions for LVSS are reasonable and decides to continue with the same.

Stakeholders' Submission

5.20.53 With regard to the Supply Code, objector submitted the following:

The load limit for 33 kV is

i. 15MW/ 12MVA if 66 kV level exists in the relevant distribution system
ii. 18MW/ 14 MVA if 66 kV level does not exist in the relevant distribution system

The load limit for 66 kV is

i. 15MW/ 12MVA through a common or dedicated or joint through a common or dedicated or joint dedicated feeder
ii. 18MW/ 14 MVA through a dedicated or joint dedicated feeder

It may be noted here that in the case of 66 KV Supply Voltage dedicated and joint dedicated feeder appears in both the cases a) or b). It is quite confusing. This could be clerical mistake and in that case it is possible to assume that the limits in 4(a) are applicable to supply on common feeder and 4(b) are applicable to dedicated and joint dedicated feeder. This anomaly needs to be addressed in the future tariffs and the Supply Code.

From the table it can be concluded that higher loads can be allowed in case of dedicated feeders and joint dedicated feeders. Such relaxation has been built in because there is lesser risk of disturbance to other consumers who are being fed by other feeders on the same system. Therefore, a similar category on the lines of 66 kV Supply Voltage, based on dedicated feeder should also be created at (c) in Sr. 3 of the table. Logically as in 66 kV, such category be allowed higher loads than a) and b).

We suggest that 24 MW/ 18 MVA may kindly be allowed at 33 kV on dedicated and joint dedicated feeders. Under the LVSS administered tariff, the petitioner has nothing to lose in such proposals as 33 kV systems, wherever existing can be utilized up to their capacity by creating such enabling rules.

Petitioner's Response

5.20.54 HPSEBL's submits that provision 4(a) & 4(b) are not confusing since the maximum limits of connected load & contract demand for release of quantum of load at 4(a) & 4(b) are clearly differentiated. However, in both cases LVSS charges are applicable.

Commission's Observations

5.20.55 The Commission has noted the observations of the stakeholder and the anomaly as pointed out in the Supply Code shall be rectified as the Supply Code is under revision. In the meanwhile, the load limit for 66kV is 15MW/ 12MVA through a common feeder.

Stakeholders' Submission

5.20.56 It is possible that the LVSS recovered by the Petitioner is taken under the head Tariff Income. As LVSS is purely created to compensate the utility on account of higher transmission and distribution losses, the entire recovery from LVSS must be accounted under the head Transmission and Distribution losses. This will reflect a better picture of the T&D loss figures as well as reflect the recovery through tariff more effectively.

Petitioner's Response:

5.20.57 HPSEBL doesn't find merit in showing LVSS recovery under separate head as ultimately the same being deducted from the overall ARR and pass through to all the consumers.

Commission's Observations

5.20.58 The Commission concurs with the view of the Petitioner that the recovery from LVSS is already being allowed as a pass-through to all the consumers.

5.21 New Proposals

Stakeholders' Submission

5.21.1 The proposal of the petitioner to provide rebate of 5% on energy charges for excess consumption is a welcome step. However, there are implementation issues with regard to calculations involved in respect of past consumption and incremental consumption as it is might discourage the consumers from increasing their loads, even if they actually connect the load. There will be issue with regard to consumer discipline. Rather we suggest that irrespective of load increase, any consumption above a level of 300 kVAh per kVA of load may be treated as excess consumption. Such a system was earlier in force and is easy to implement.

5.21.2 Proposal to give incentive to of 5% to industrial consumers for extra consumption over the last two years' average will encourage industrial consumers to increase their production and use more grid power than their captive power or open access power. However, instead of considering two year's average, last calendar/ financial year should be considered.

5.21.3 HPSEBL has suggested an increase in late payment surcharge form 2% to 2.5%. It is submitted that we are opposed to such a proposal. Any increase in levy of late payment surcharge can only be done though an amendment of appropriate Regulations. No increase in late payment surcharge can be done through the present tariff order by the State Commission without following the necessary protocols that have been put in place for carrying out an amendment of Regulations.

5.21.4 The cement industry in Himachal Pradesh has to bear high cost of input materials due to the geographic location and topography of the region. Increase in electricity tariff will further burden the sector making it economically unviable in comparison to the cement industry in other states. Further, HP government is levying 17% electricity duty on cement plants while on remaining industries the same is 13% taking away the competitive advantage of the industry in HP.

5.21.5 The Fixed Demand Charges are one of the highest in Himachal Pradesh compared to other States. In fact there is urgent need to reduce these charges so that the industrial consumers can get ultimately power at most competitive and reasonable rates. We can compare the existing demand charges in neighbouring States, which are as under:

Table 93: Fixed Demand Charges for Industrial Category

State	Fixed Demand Charges (Rs./kVA)
Haryana	170
Rajasthan	170
Himachal Pradesh	425
Punjab	188
Delhi	125

Such levy will discourage the Cement Industry which is already reeling under serious recession.

5.21.6 No justification has been given for loading additional demand charge of Rs.30 per KVA per month on the cement industry. It is necessary to recall the provision of Electricity Act at this Stage. Section 62 of the Electricity Act provides as follows:

"The Appropriate Commission shall not, while determining the tariff under this Act, show undue performance to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required".

Therefore no industry can be singled out for levy of additional demand charge. The Act does not provide any tariff differentiation on account of end product of any industry. As such the move of the petitioner to levy additional demand charge on cement industry being illegal and may be rejected straightaway. The objector also submits that a levy of Rs.50 per KVA additional demand charge in peak hours is also questionable and unjustified. In order to settle the issue of demand charge once for all, it is proposed that demand charged may be linked with the hours of supply. In fact the wheeling charge is being recovered from all consumers which reflects only the wire charges and there is no justification for any separate demand charges. The petitioner may be asked to prepare a comprehensive proposal and submit the same.

5.21.7 The proposal for pre-paid meters and discounted tariff thereof suggested by the petitioner must also be extended to the industrial consumers on optional basis. However, before implementing this provision, the procedural issues need to be considered. There has to be provision for going back to the post-paid, and the consumer must be allowed this choice both ways as in mobile phones nowadays.

5.21.8 Introduction of optional prepaid metering for some consumer categories would help in earlier revenue receipts for the Licensee. However, an incentive may be given to such consumers by way of rebate of 3%-5% on the advance payment made by them.

Petitioner's Response

5.21.9 HPSEBL submits that in the initial stage excess consumption of more than their average of last 2 years to be considered. However, in case of any difficulty in implementation, the suggestion of stakeholder may also be considered.

5.21.10 Response is same as above.

5.21.11 Due to untimely payment of dues by the consumers HPSEBL has to either avail short term loans or has to bear late payment surcharge of generators which is outrightly rejected by the Hon'ble Commission, therefore, in order to ensure that consumers make timely payments HPSEBL requests the Hon'ble Commission to increase the late payment surcharge on the consumers as the same is on the much lower side in comparison to states like Punjab.

5.21.12 HPSEBL submits that the Industrial tariff in Himachal Pradesh is already on the lower side in comparison to the neighbouring states as is evident from the chart below for current financial. Only exceptions are Uttrakhand and Punjab. In case of Uttarakhand the terminal benefits are the liability of the State govt. while the same is a liability of HPSEBL in Himachal Pradesh. In case of Punjab the tariff has been kept at Rs.5.00/ Unit for industrial consumers by way of subsidy being provided by the Government of Punjab, otherwise actual per unit tariff in Punjab is Rs. 6.24/Unit.

Table 94: Tariff for Industry category in various States of India

State	Rs./kVAh
Himachal Pradesh	**5.67**
Uttarakhand	5.41
Haryana	6.88
Punjab	Rs. 6.24 (Non- subsidised) and Rs 5.00(Subsidised)
Andhra Pradesh	7.35
Gujarat	6.41
Madhya Pradesh	7.87

The objector has highlighted the matter of higher Electricity duty (ED) for cement industries in the State in comparison to other industries. In this regard it is informed that the Electricity duty is the tax levied by GoHP as per Himachal Pradesh Electricity (Duty) Act, 2009 and HPSEBL merely collects ED on behalf of GoHP and the same is transferred to the Government. Therefore M/s ACC may approach the State Govt. with their grievances related to Electricity Duty.

5.21.13 HPSEBL submits that Hon'ble Commission in Tariff Order for FY16 dt. 10th Apr'15 against serial no. 6.2.2 had stated that the actual fixed cost component, recovery of which is done by way of demand charges, works out to be of the Order of Rs 1100/kVA/month. However, at present not even one-third of the same is being charged. Further, it is stated that cement industry being a load intensive industry with round the clock consumption has a high load factor and therefore the per unit demand charges are least in comparison to other industries. Therefore, HPSEBL has proposed an increase in demand charges of cement industry so as to make it on par with other industries.

5.21.14 Response is same as above.

5.21.15 HPSEBL submits that in the initial stage prepaid meter scheme is to be implemented on Domestic, NDNC, Commercial, Temporary & Street Light categories. However, based on the response of the consumers the same shall be implemented for the other categories.

5.21.16 The proposal of rebate of 3% on energy charge is appropriate in the initial stage of implementation. However, the same may be increased in the future based on the response of consumers.

Commission's Observations

5.21.17 The Commission has observed that the Petitioner has not provided a concrete plan/readiness for implementation of the new provisions as proposed in the tariff petition of FY19. During the technical validation session, the Commission directed the Petitioner to submit the preparedness for implementation of these provisions based on which the Commission has taken a detailed view on each of the aforementioned proposals, as described in Chapter 8.

5.22 **Other/ General Objections or suggestions**

Stakeholders' Submission

5.22.1 The present petition filed by the petitioner is seeking increase in the normative rates of Infrastructural Development Charges (IDC) on the basis of the increase in cost data. The increase in normative rates of IDC has been sought by the petitioner on the basis and in proportion to the increase in cost data over a period of time. The petitioner has erred in assuming that the normative rates of IDC are not in direct relation with the cost data. Increase in normative rates of IDC will have negative impact on the growth of the industry in the State.

While fixing the normative rates of IDC, the prevailing rates in neighbouring and other States must be kept in mind as a large difference can result in negative impact on the growth potential of the industry in the State. The objector is making this suggestion to reduce the IDC charges on the basis that the balance cost may be capitalized to form a part of the tariff by way of interest and depreciation cost in the ARR, thereby not incurring overall loss to the petitioner. However, a high normative rate of IDC is detrimental to the growth of the licensee's own business.

Petitioner's Response

5.22.2 HPSEBL would like to highlight that it has not proposed any increase in Infrastructural Development Charges (IDC) for FY19. The objector can verify the same in point 6.1.4 of the petition. For reference, the same has been quoted below:

"6.1.4: HPSEBL requests Hon'ble Commission to approve IDC charges at the same level as approved by the Hon'ble Commission for FY18."

Commission's Observations

5.22.3 The Commission has independently dealt the issues pertaining to IDC in Chapter 9 in line with HPERC (Recovery of Expenditure for supply of Electricity) Regulations, 2012.

Stakeholders' Submission

5.22.4 We submit that the power cuts if it becomes essential to avoid any Grid failure or to maintain the substation equipment healthy by avoiding over loading etc. The Board may please be directed to impose power cuts uniformly across all Category of consumers without any discrimination to industrial consumers.

Petitioner's Response

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

Commission's Observations

5.22.6 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.

Stakeholders' Submission

5.22.7 Presently, the consumers have to submit the physical proof of payments made online, in the cases where the payments are not made through the online payment portal of HPSEBL. This needs to be looked into and the matter needs to be sorted out in a manner that the consumers are not required to physically visit the offices of the petitioner for this purpose. An intimation on email with proof of payment must be considered sufficient.

Petitioner's Response

5.22.8 HPSEBL submits that it has already provided procedure to pay online bill in its website http://www.hpseb.com/whatsnew/RTGS-EFT_procedure.pdf. In the procedure it is very clearly mentioned that the consumer has to generate challan for payment of bill through the bank. The generated challan shall be valid for 24.00 Hrs and hence the bill payment is required to be initiated within 24 Hrs. The payment shall be automatically updated in Consumer's account and Consumer has no need to visit subdivision to produce/submit any payment proof.

Commission's Observations

5.22.9 HPSEBL should look into any issues/ concerns faced by the consumer with respect to the online payment mechanism and get it resolved at the earliest.

Stakeholders' Submission

5.22.10 As per the provision of Electricity Act, the Petitioner owes responsibility to create and maintain power system and distribution system in the State. The Section 46 of the Act, further mandates recovery of actual expenditure to reasonable extent for grant of electrical connection. As such recovery of a fixed amount per KVA as IDC charge is neither legally justified nor authorized. The 2012 regulation on IDC therefore need to be revisited by the Hon'ble Commission and the regulations amended to make it in consonance with the legal provisions. The Act does not permit levy of a uniform rate of IDC of all connection seekers in the State.

Petitioner's Response

5.22.11 The present petition has been filed for determination of various charges not for the amendment of Regulation, the same may be taken up with Hon'ble Commission separately.

Commission's Observations

5.22.12 The Commission has independently dealt the issues pertaining to IDC in Chapter 9 in line with HPERC (Recovery of Expenditure for supply of Electricity) Regulations, 2012.

Stakeholders' Submission

5.22.13 At the outset it is submitted that HPSEBL has not filed relevant data at the time of filing of the present Petition. HPSEBL has failed to comply with the directives and advisories issued by this Hon'ble Commission in the 2017 Tariff Order. The following directives have not been complied with by HPSEBL:

i. Details of Capital Expenditure and Capital Schemes: HPSEBL has failed to provide the work wise details of Capital Expenditure/ Capitalization. HPSEBL in annexure V has merely stated that the work wise capital expenditure/capitalization will be submitted in due course of time and that the matter has already been discussed in KPI meeting dated 23.11.2017.

   Further, HPSEBL has failed to provide a half-yearly reporting of its capital schemes and works. HPSEBL has merely provided a vague report on the progress of its various schemes without providing adequate supporting documents.

   It is pertinent to note that in terms of Regulation 11(1)(b) of the Tariff Regulations, the Hon'ble Commission is required to review actual capital investment vis-a-cis approved capital investment.

ii. Filing of separate Tariff Petitions for Ghanvi-II HEP and UHL-III HEP: HPSEBL has failed to file separate petitions for determination of capital expenditure and approval of tariff for Ghanvi II HEP, which is operational since April 2014 and UHL III HEP which is expected to be commissioned in 2018.

iii. Maintenance and assessment of the details of pension contribution and leave salary of generating stations, BVPCL Project and S&I: HPSEBL has failed to maintain and produce the aforesaid details pertinent for determination of the Employee Cost. HPSEBL has merely stated that letters have been written to all the entities, requesting for the aforesaid information, but no reply has been received till date. As noted in para 2.22.2 of the 2017 Tariff Order, the per unit employee cost of HPSEBL is at the highest level in the country, therefore it is pertinent that all relevant information regarding the employee cost be provided to the Hon'ble Commission before such a high cost is allowed to HPSEBL.

iv. 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: HPSEBL has failed to determine voltage-wise cost of supply despite the Hon'ble Commission's directions in the 2017 Tariff Order. In terms of Regulation 15(3) and 37 of the Tariff Regulations, it is pertinent that HPSEBL propose energy based wheeling tariff and indicate the distribution losses voltage-wise to provide for adjustment of losses in the system.

Petitioner's Response

5.22.14 Pointwise reply is given below:

i. The Capital Expenditure/ Capitalization data of some units still has to be received by HPSEBL. It is expected that full data is to be received by feb end and same will be shared with Hon'ble Commission.
ii. HPSEBL is in the process of filing petition for Ghanvi-II & UHL III and the same shall be filed at the earliest.
iii. Maintenance and assessment of the details of pension contribution and leave salary of generating stations, BVPCL Project and S&I is under process and will take some more time as data from all the units has not been received till date. Further, high employee cost is mainly due to terminal benefits which is a statutory requirement of HPSBL. In States like Uttarakhand, the terminal benefit is the liability of the state govt. while in Himachal Pradesh the same is liability of HPSEBL. For the assessment of Hon'ble Commission, HPSEBL has already provided the relevant information regarding employee cost.
iv. The tariff of Himachal Pradesh has is already between ±20% of average cost of supply as mandated under the National Tariff Policy and the current tariff is as per the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 along with amendment 1 & amendment 2 which states tariff for the consumer should be within (-) 15% to (+) 10% of the average cost of supply.

Commission's Observations

5.22.15 The Commission concurs with the views of the stakeholder that the Petitioner has not been complying with its previous directives. Since this is the last year of the 3rd Control Period, the Commission takes a strict view on the non-compliance of the

Commission's directives and warrant immediate action on the part of the Petitioner. The revised timelines for compliance of the Commission's directives have been detailed out in Chapter 10, failing which the Commission may impose penalty on the Petitioner.

Stakeholders' Submission

5.22.16 The Licensee has worked out the amount of IDC through Service Connection Charges in pursuance to HPERC Regulations, 2012. In fact the infrastructure charges are already built in the transmission charges and as such these are not required to be added separately.

Petitioner's Response

5.22.17 HPSEBL has filed Infrastructure Development charges (IDC) as per HPERC (Recovery of Expenditure for supply of Electricity) Regulations 2012 vide Notification No. HPERC/419 dated 18.5.2012. However no increase has been proposed in the current IDC charges.

Commission's Observations

5.22.18 The Commission has independently dealt the issues pertaining to IDC in Chapter 9 in line with HPERC (Recovery of Expenditure for supply of Electricity) Regulations, 2012.

6 True-up of uncontrollable parameters for FY16 under the Third MYT Control Period

6.1 Background

6.1.1 HPSEBL has submitted a petition for true-up of uncontrollable parameters for FY16 on the basis of variation in actual expenses and revenue in FY16 vis-à-vis the expenses and revenue approved for FY16 in the 1st APR Order dated April 10, 2015 along with the audited accounts for the period April 1, 2015 to March 31, 2016 to support the actual expense and revenue for FY16.

6.1.2 The Commission has reviewed the operational and financial performance of HPSEBL for FY16 based on 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 FY16 based on the final audited accounts of HPSEBL for FY16.

6.2 Energy Sales and Revenue

6.2.1 HPSEBL in its true up petition for FY16 has submitted the actual sales for FY16 as 7745 MUs as compared with the approved sales of 8438 MUs in the 1st APR Order for FY16, which is lower by 693 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 1st APR Order for FY16, sales submitted as actual by HPSEBL in its petition for FY16, and trued up (approved) sales for FY16.

Table 95: Category-wise Trued-up Sales for FY16 (MUs)

Category (MU)	Approved in 1st APR Order	HPSEBL's Submission	Now Approved (Trued up)
Domestic	2,070	1942	1942
Non Domestic Non Commercial	135	130	130
Commercial	527	497	497
Temporary	27	30	30
Small Power	63	90	90
Medium Power	154	120	120

Category (MU)	Approved in 1st APR Order	HPSEBL's Submission	Now Approved (Trued up)
Large Supply	4738	4180	4180
Govt. Irrigation & Water Pumping	508	546	546
Public Lighting	14	13	13
Irrigation & Agriculture	45	52	52
Bulk Supply	157	145	145
Total Energy Sales	**8,438**	**7,745**	**7,745**

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 FY16, the Commission approves the amount of Rs. 4142.73 Cr. as revenue billed during FY16 as presented in the table below:

Table 96: Category-wise Trued-up Revenue from Sale of Power for FY16 (Rs. Cr.)

Particulars	Now Approved (Trued up)
Domestic	781.74
Non Domestic Non Commercial	80.77
Commercial	281.49
Small Power	38.28
Medium Power	89.36
Large supply	2339.42
Govt. Irrigation & Water Pumping	377.60
Public Lighting	12.11
Irrigation & Agriculture	37.65
Bulk and Grid supply	87.88
Temporary Metered Supply	16.43
Total	**4,142.73**

6.3.2 The Commission has also reviewed the submission of the Petitioner for revenue from sale of power outside state and approves the revenue of Rs. 510.74 Cr. against the previously approved revenue of Rs. 243.35 Cr. in the 1st APR Order for FY16. Banking being a cashless transaction, notional cost of the banked power considered in the accounts have been excluded while considering the revenue from sale of power outside the state. Accordingly, the revenue from sale of power for FY16 considered for true-up of FY16 is as detailed in table below:

Table 97: Trued-up Revenue from Sale of Power outside State for FY16 (Rs. Cr.)

Particulars	Now Approved (Trued-up)
Revenue from sale of power outside State	1,629.10

Particulars	Now Approved (Trued-up)
Less: Banking Sale	1,118.36
Net Revenue from sale of power outside State	**510.74**

6.4 Transmission and Distribution Loss

6.4.1 The Commission had approved T&D loss level at 12.60% for FY16 in the 1st APR 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 12.09% during FY16.

6.4.2 Based on the submission of actual sales and power purchase quantum, the T&D loss of 12.09% for FY16 is approved by the Commission for truing-up. The T&D loss achieved by HPSEBL has resulted in a overachievement of 0.51% 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 98: Approved Transmission and Distribution Loss for FY16 (Rs. Cr.)

Particulars	1st APR Order	HPSEBL's Submission	Trued-up
T&D Loss	12.60%	12.09%	12.09%

6.5 Power Purchase

6.5.1 HPSEBL has submitted total power purchase cost (including transmission and other charges) of Rs. 3120.55 Cr. for FY16 for truing-up. The Petitioner has submitted the actual cost as recorded in the audited accounts after excluding the notional cost booked in the accounts towards banking from the claim of the power purchase cost. Additionally, cost of power procurement from own-generation sources has been considered by the Petitioner in the total power purchase cost for FY16. The claimed power purchase cost for true-up of FY16 is as below:

Table 99: Total Power Purchase Cost Submitted by the Petitioner for FY16

Particulars	Units (MU)	Amount (Rs. Cr.)	Rate (Rs. /kWh)
Power Purchase (Inter-state)	11179.89	2570.50	2.30
Add: Own Generation	1456.27	278.49	1.91
Gross Power Purchase	12636.16	2848.99*	2.25
Less: Banking purchase	1698.66	-	-
Net Power Purchase Excluding Banking	10937.50	2848.99*	2.60

Particulars	Units (MU)	Amount (Rs. Cr.)	Rate (Rs. /kWh)
Total Power Purchase Excluding Banking	**10937.50**	**2848.99***	**2.60**

** including Rs. 6.50 Cr. of past year arrears*

6.5.2 The Commission has scrutinised the submission made by the Petitioner and observed that the reconciliation table between the power purchase cost and audited accounts was broadly in line. However, HPSEBL was asked to clarify the nature of few expenses occurring in the claim towards power purchase cost.

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

a) ***LADF:*** The account heads named Director Energy in the power purchase sheet in accounts for FY16 has been claimed by the Petitioner as the amount paid towards Local Area Development Fund. The Petitioner clarified during the Technical Validation Session that this amount of Rs. 2.71 Cr. has been provisioned in the power purchase cost and has not been paid. As a result, the Commission has disallowed this amount while approving the power purchase cost for FY16.

b) ***Free Power:*** The Petitioner has claimed an amount of Rs. 6.50 Cr. against past arrears (bills of FY15) on account of cost of GoHP free power in FY16. This amount is also reflected in the audited accounts under the account head 70.826 and has therefore, been allowed by the Commission.

c) ***Banking:*** Banking being a cashless transaction is considered at zero cost in petition under total power purchase cost. An amount of Rs. 891.62 Cr. was reflected towards cost from banking procurement during FY16 in the audited accounts. The Commission has reduced this amount from the total power purchase cost for approving the trued-up power purchase cost for FY16.

6.5.4 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 FY16, 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 100: Power Purchase Cost (excluding PGCIL and Other Costs) for FY16 (Rs. Cr.)

S. No.	Particulars	Now Approved (Trued-up)
A	**Total Power Purchase Cost as per audited accounts**	**3733.69**

S. No.	Particulars	Now Approved (Trued-up)
	Less:	
B	**Banking Power Purchase (i)+(ii)+(iii)+(iv)**	**891.62**
(i)	HPPC	0.57
(ii)	PSEB	228.32
(iii)	UPCL	453.97
(iv)	BRPL/BYPL	58.87
(v)	Chattisgarh	32.58
(vi)	MPPL	6.24
(vii)	Other Banking	111.08
C	**PGCIL**	**207.25**
D	**HPPTCL**	**3.47**
E	**Open Access**	**50.73**
F	**Other Charges (NRLDC, Reactive Energy Charges, GoHP & Malana Deviation)**	**10.10**
	Power Purchase Cost (excluding transmission and other Charges) A-(B+C+D+E+F)	**2570.49**

6.5.5 For units purchased from own generating stations, it was observed that there was a minor variation between month-wise, station-wise generation units provided and the units claimed in the petition. During the technical validation session, the Petitioner submitted revised units purchased from Larji, Thirot, Gumma and Holi. The revised units have been considered by the Commission.

6.5.6 It was also observed that the Petitioner had claimed power purchase cost from own generating stations based on the average rate of saleable energy as approved by the Commission for FY16 in the MYT Order for Generation business. During the Technical Validation Session, it was pointed out that this approach is inconsistent with the MYT Regulations which provides for charging of tariff based on fixed and energy charges. As a result, the Petitioner revised its submission for power purchase cost from own generating stations as follows:

Table 101: Revised Submission of power purchased from own generating stations

Name of Station	Submission as per Tariff Petition		Revised Submission	
	Net Generation (MUs)	Amount (Rs. Cr.)	Net Generation (MUs)	Amount (Rs. Cr.)
Bhaba	-	22.58	-	22.58
Bassi	314.46	22.96	314.46	24.26
Giri	188.34	13.37	188.34	16.78
Andhra	61.85	6.80	61.85	8.19
Ghanvi	86.58	19.48	86.58	20.11

Name of Station	Submission as per Tariff Petition		Revised Submission	
	Net Generation (MUs)	Amount (Rs. Cr.)	Net Generation (MUs)	Amount (Rs. Cr.)
Ghanvi II	39.36	12.50	39.36	12.48
Baner	42.59	6.52	42.59	8.38
Gaj	39.61	9.98	39.61	11.29
Larji	577.59	141.51	576.80	140.50
Khauli	43.33	9.75	43.35	9.75
Binwa	27.21	4.82	27.21	4.96
Thirot	5.34	1.20	6.29	1.42
Gumma	2.32	0.52	1.76	0.40
Holi	1.14	0.26	0.75	0.17
Bhaba Aug	11.83	2.66	11.83	2.66
Nogli	6.76	1.91	6.76	2.35
Rongtong	-	-	-	1.01
Sal-II	-	-	-	-
Chaba	6.80	1.45	6.80	0.72
Rukti	0.03	-	0.03	0.40
Chamba	0.68	0.12	0.68	0.22
Killar	0.43	0.10	0.43	0.10
Total	**1456.27**	**278.49**	**1,455.50**	**288.72**

6.5.7 As observed from the above table, the Petitioner has claimed an additional Rs. 22.58 Cr. for Bhabha HEP and Rs. 1.01 Cr. for Rongtong HEP where the generation was nil due to plant shutdown during FY16. However, the Petitioner has claimed an amount towards O&M expenses for FY16. The Commission has reviewed the revised submissions of the Petitioner and computed cost of own generation based on the provisions of MYT Regulations for generation business.

6.5.8 The Commission has considered the fixed and energy charge of each of the generating station as approved in the MYT Order for FY16 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 the interaction meeting with the Board, the Petitioner has agreed to file the tariff petition for Ghanvi-II in three months from the date of this Order** and therefore, the Commission has decided to continue with the provisional tariff of Rs. 3.17 per unit for true-up of FY16.

6.5.9 As against the O&M charges additionally claimed for Bhabha and Rongtong HEP, justification for passing on such burden to the consumer was sought from the Petitioner. In response, the Petitioner submitted that although the power houses remained under forced shutdown during FY16, expenses towards salaries, A&G

expenses, etc. were paid by the Petitioner. It is observed that the reasons for the forced shut-down of the plants have not been submitted by the Petitioner. Also, any relief if required to be provided can be considered after detailed review and prudency check by the Commission and therefore the same shall be undertaken at the time of truing-up for the generation business at the end of the Control Period based on audited accounts. Therefore, the Commission has not approved any amount towards these plants in the truing-up for the distribution business of HPSEBL. Based on the above considerations and in line with the MYT Regulations for generation business, the Commission has approved units and cost for own generating stations as summarised below:

Table 102: Power Purchase from Own Generating Stations for FY16 as approved by the Commission

Name of Station	Net Generation (MUs)	Amount (Rs. Cr.)
Bhaba	-	-
Bassi	314.46	24.14
Giri	188.34	16.86
Andhra	61.85	8.21
Ghanvi	86.58	19.48
Ghanvi II	39.36	12.48
Baner	42.59	8.37
Gaj	39.61	10.39
Larji	576.80	132.65
Khauli	43.33	9.75
Binwa	27.21	4.98
Thirot	6.29	1.42
Gumma	1.76	0.40
Holi	0.75	0.17
Bhaba Aug	11.83	2.66
Nogli	6.76	2.34
Rongtong	-	-
Sal-II	-	-
Chaba	6.80	1.54
Rukti	0.03	0.40
Chamba	0.68	0.22
Killar	0.43	0.10
Total	**1,455.48**	**256.54**

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. 207.25 Cr. under PGCIL Charges. In response to the query of Commission, the Petitioner has clarified that an amount of Rs. 58.33 Cr. towards PGCIL charges for GoHP sale of free power has been recorded as part of non-tariff income. The Commission has thus, approved an amount of Rs. 148.92 Cr. towards PGCIL Charges for FY16 after adjustment of the share of PGCIL charges towards sale of GoHP free power share.

6.6.3 Further, based on the submissions of the Petitioner and the audited accounts, the Commission has also considered open access charges of Rs. 50.73 Cr. as net open access charges during FY16.

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. 2.50 Cr. as reflected in the audited accounts along with other charges such as Reactive energy charges and GoHP & Malana Deviation Settlement as also claimed by the Petitioner. As also mentioned earlier, the amount of Rs. 2.71 Cr. recorded under the power purchase cost in the audited accounts is towards provisioning against LADF and no amount has been paid, the Commission has not approved this amount as part of trued-up power purchase cost for FY16.

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

Table 103: Total Power Purchase Cost approved for FY 16 (Rs. Cr.)

S. No.	Description	HPSEBL's Submission	Now Approved (Trued-up)
A.	**Power Purchase Cost (exc. PGCIL Charges and Other Costs)**	**2,570.49$**	**2,570.49$**
B.	**Own Generation**	**278.49***	**256.54**
C.	Inter-State Charges		
	PGCIL	207.25**	148.92
	OA	50.74	50.73
D.	Intra-State Charges		
	HPPTCL	3.47	3.47

S. No.	Description	HPSEBL's Submission	Now Approved (Trued-up)
	SLDC	-	-
E.	Other Charges		
	NRLDC	2.50	2.50
	Reactive Charges	1.29	1.29
	GoHP & Malana Deviation	1.46	1.46
	UPCL (Field Unit)	0.07	0.07
	Trading Margin	2.08	2.08
	LADF	2.71	-
F.	**Total Power Purchase Cost (inc. Own Gen.) (A+B+C+D+E)**	**3,120.55**	**3,037.55**

$ includes Rs. 6.5 Cr. against past bills of FY15

** revised to Rs. 288.72 Cr. in the subsequent submissions*

*** includes PGCIL charges of Rs. 58.33 Cr. recovered from GoHP against free power*

6.6.6 Accordingly, the Commission has approved the total power purchase cost (including Own Generation) as Rs. 3,037.55 Cr. as against the Petitioner's submission of Rs. 3,120.55 Cr. for true-up of power purchase cost for FY16.

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 12.09% for FY16 as against the approved T&D loss of 12.60% for FY16 in the 1st APR 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 FY16 is as below:

Table 104: Savings on account of Over-achievement of T&D loss for FY16

S. No.	Particulars	Now Approved (Trued-up)
A	Energy Sales within state (MU)	7744.63
B	T&D Losses (%)	12.60%
C	**Power Purchase Requirement to meet state requirement (MU)**	**8861.13**

S. No.	Particulars	Now Approved (Trued-up)
D	**Inter – State Sale (MU) (i+ii)**	**3528.48**
(i)	For Banking arrangements (MU)	2189.24
(ii)	Sale outside state (MU)	1339.24
E	**Total Power Purchase Quantum Approved at State Periphery (MU) (C+D)**	**12,389.62**
F	Actual Power Purchase Quantum at State Periphery (MU)	12,338.33
G	**No. of units saved (MU) (E-F)**	**51.28**

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

Table 105: Incentive for over-achievement of T&D Loss for FY16

S. No.	Particulars	Unit	Amount
A	**No. of units**	**MU**	**51.28**
B	**Cost of Power for over-achievement**		
(i)	Cost of power purchase from Other than own sources (inc. past arrears)	Rs. Cr.	2,570.49
(ii)	Past Arrears	Rs. Cr.	6.50
(iii)	**Cost of Power Purchase from Other than own sources (i)-(ii)**	**Rs. Cr.**	**2,563.99**
(iv)	Power purchased from other than own sources	MU	9,482.03
(v)	Less: PGCIL Losses	MU	297.84
(vi)	Net Power Purchase (iv-v)	MU	**9,184.19**
C	**Cost of Power Purchase from Other than own sources (iii / vi)**	**Rs. /Kwh**	**2.79**
D	**Incentive on account of T&D loss over-achievement (A X C X 60%/10)**	**Rs. Cr.**	**8.59**

6.7.4 The total power purchase cost (excluding own generation, other charges and arrears) is Rs 2,563.99 Cr. The total power purchase quantum at state periphery (excluding own generation) is 9,184.19 MU. The average rate of this power purchased is Rs 2.79/unit. The Commission, therefore, allows an incentive of Rs. 8.59 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 1st APR Order figures and HPSEBL's Submission for the final true-up of FY16 is summarized in table below:

Table 106: Trued-up Total Power Purchase Cost for FY16 (Rs. Cr.)

Particulars	1st APR Order	Petition	Now Approved (Trued-up)
Power Purchase Expenses	2,418.74	2,842.48	2,820.53
PGCIL Charges	275.88	207.25	148.92
Short Term Open Access Charges	62.75	50.74	50.73
HPPTCL Charges	3.47	3.45	3.45
SLDC Charges	10.88	-	-
Prior Period Expenses	-	6.50*	6.50*
Other Charges (NRLDC, Reactive Energy Charges, GoHP & Malana Deviation)	-	10.11	7.40
Total Power Purchase	**2,771.72**	**3,120.55**	**3,037.55**
Less/Add: Adjustment in PP cost on account of underachievement/overachievement	**-**	8.61	8.59
Net Power Purchase Expense	**2,771.72**	**3,129.16**	**3,046.14**

**Rs. 6.50 Cr. includes bills paid for FY15*

6.8 Renewable Purchase Obligation

6.8.1 The Petitioner has submitted that it has already filed Petition No. 25/2017 for RPPO of FY16. The Commission observed that the total energy procured for supply within the State was not in line with the energy balance now submitted by the Petitioner. During the technical validation session, the Petitioner revised these figures as follows:

Table 107: Revised RPO Compliance for FY 16 as submitted by the Petitioner

S. No.	Description	Quantum (MUs) submitted in Petition	Revised Quantum (MUs)
1	Total energy procured for supply with in state	8800.33	8809.83
2	RE Obligation (Non-solar) (%)	11.00%	11.00%
3	RE Obligation(Non-solar)(MUs)	968.04	969.08
4	**Total R.E (Non- Solar) purchased**		
a)	HPSEBL 's own generation from 25 MW & below projects	375.52	375.88
b)	Power Purchase from IPP (25 MW & below)	1115.36	1116.68
c)	Free power of GoHP from IPP less than 25 MW	74.18	74.18
d)	Free power of GoHP from own generation	34.28	34.29

S. No.	Description	Quantum (MUs) submitted in Petition	Revised Quantum (MUs)
	Total R.E (Non- Solar) purchased	**1599.33**	**1601.04**
5	R.E (Non- Solar) sold outside its area of supply	795.89	795.89
6	Total R.E (Non- Solar) purchased for supply	803.44	805.15
7	**Total surplus(+)/Deficit(-) (6-3)**	**-164.59**	**-163.93**
8	**Surplus R.E (Non- Solar) eligible for REC**	**0.00**	**0.00**

6.8.2 The Commission has observed that while HPSEBL has procured surplus power against the solar RPO target, it has not been able to meet its non-solar RPO targets for FY16. In the Petition No. 25/2017, the Petitioner has requested that the shortfall in non-solar RPPO shall be met with the RE Certificates issued by the nodal agency (NLDC) for the surplus quantum procured during FY14. Since the matter is part of a separate petition before the Commission, the decision shall be made after reviewing the details submitted by the Petitioner and prudence check by the Commission in the Order on the above mentioned petition separately.

Other ARR Parameters

6.9 Employee Expense

6.9.1 HPSEBL has submitted actual net employee cost of Rs. 1411.67 Cr. towards distribution business as against the approved employee cost of Rs. 1266.28 Cr. for FY16 in the 1st APR Order for FY16. It is observed that HPSEBL has claimed higher than approved employee cost and has not provided the break-up of Terminal Benefits as required under 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 During the discussions with the HPSEBL officials, it has been brought to the notice of the Commission that the employee cost for FY16 as per audited accounts includes a provisioning of Rs. 58.23 Cr. (Rs. 13.99 Cr. towards gratuity, Rs. 33.95 Cr. towards pension and Rs. 10.29 Cr. towards other employee cost i.e. leave encashment) towards future employee cost. The actual employee expense of HPSEBL for FY16 is therefore lower than the claim of the Petitioner. The Commission has not allowed the amount of provision created in the employee cost and the same has been reduced from the respective heads of employee expense.

6.9.3 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."*

6.9.4 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 FY16. The Petitioner in its response has stated that an amount of Rs. 4.95 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, despite previous directives, the Petitioner has not submitted separate information with respect to the pension contribution of employees in BVPCL, Projects and S&I as required under 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 Petitioner has submitted that the Pension Contribution and Leave Salary of BVPCL, Project and S&I have not been assessed separately by HPSEBL as all of these employees are part of HPSEBL.

6.9.5 In absence of the details of pension contribution of employees in BVPCL, Projects and S&I for FY16, the Commission has considered the approved amounts in the 1st APR Order and has adjusted the amount from the total employee cost for FY16. Also, other adjustments undertaken in the employee cost of HPSEBL is detailed in subsequent paragraphs.

6.9.6 Based on the submissions of actual employee cost for FY16, 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 1st APR Order for FY16 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. Accordingly, the amount of Rs. 47.50 Cr. towards RoE on GoHP equity has been adjusted towards the terminal benefits expense of HPSEBL.

6.9.7 Accordingly, the Commission has considered the overall terminal benefits of Rs. 621.72 Cr. as per audited accounts and adjusted the following components:

a) Provisioning of Rs. 47.94 Cr: The Commission has reduced the provision of Rs. 47.94 Cr. (Rs. 13.99 Cr. towards gratuity, Rs. 33.95 Cr. towards pension) from the overall terminal benefits as the amount has not been paid by the Petitioner during FY16.

b) 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. 4.95 Cr. has already been netted off in the terminal benefits reflected in the accounts.

c) Pension Contribution of generation employees: The Petitioner submitted that a sum of Rs. 8.34 Crore was paid by the Generation wing towards Terminal Liabilities of generation employees who retired during FY 2015-16. The Commission has adjusted the amount of Rs. 8.34 Cr. towards pension contribution of generation employees.

d) Pension Contribution of BVPCL, Projects and S&I employees: The Commission has adjusted the amount of Rs. 2.81 Cr. towards pension contribution of BVPCL, Projects and S&I employees since this was earlier approved in the 1st APR Order and the Petitioner has not provided any assessment on this amount.

6.9.8 In line with the methodology followed in the previous orders 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 FY16 in the current truing up for FY16 as given below:

Table 108: Comparison of Employee Cost for FY16 after Adjustments (Rs. Cr.)

S. No.	Particulars	1st APR Order	Petition	Adjusted as per Regulations
A	**Employee Cost**	**927.71**	**854.02**	**843.73***
B	**Pension and Terminal benefits**	**450.97**	**613.38**	**573.78#**
	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	(8.39)		-
	Pension contribution of generation employees	(7.34)		(8.34)

S. No.	Particulars	1st APR Order	Petition	Adjusted as per Regulations
	Pension contribution of BVPCL, Projects and S&I employees	(2.81)		(2.81)
C	**Gross Employee Cost (A+B)**	**1,312.63**	**1467.40**	**1358.86**
D	Less: Capitalization	46.36	55.73	55.73
E	**Net Employee Cost (C-D)**	**1,266.27**	**1411.67**	**1303.13**

**after reducing the employee cost with the provision of Rs. 10.29 Cr. against leave encashment*

#after reducing the terminal benefits with the provision of Rs. 47.94 Cr. against pension and gratuity

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. 8.66 Cr. than the approved value while the amount of A&G expense towards distribution business is higher by an amount of Rs. 0.32 Cr. as compared with the approved values for FY16. In its revised ARR for FY19, the Petitioner has submitted additional amount of R&M expenses in view of the annual maintenance charges, annual software license fees, etc. of the works undertaken under R-APDRP scheme. The Commission is of the view that the surplus approved as part of R&M scheme during FY16 should be utilized by the Petitioner to offset the estimated increase towards R&M expense during FY19.

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 1st APR Order for FY16.

Table 109: R&M and A&G Expenses Approved for FY16 (Rs. Cr.)

Particulars	1st APR Order	Petition	Now Approved (Trued-up)
R&M Expenses	46.79	38.13	46.79
A&G Expense	39.48	39.80	39.48

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 FY16 in the 1st APR Order. However, in absence of any expense undertaken by the Petitioner towards this head and claim in the true-up of FY16, the Commission has approved nil expense towards the additional amount for safety measures for true-up of FY16.

6.12 **Total O&M Charges**

6.12.1 Accordingly, the Commission approves the total O&M expense for FY16 as provided in the table below:

Table 110: Total O&M Expenses Approved for FY16 (Rs. Cr.)

Particulars	1st APR Order	Petition	Now Approved (Trued-up)
Net Employee Cost	1,266.28	1,411.67	1,303.13
R&M Expenses	46.79	38.13	46.79
Net A&G Expense	39.48	39.80	39.48
Additional Amount towards safety measures	1.00	-	-
Total O&M Expenses	**1,353.55**	**1,489.60**	**1,389.40**

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 FY16. 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 111: Trued-up Interest on Working Capital for FY16 (Rs. Cr.)

Particulars	1st APR Order	Petition	Now Approved (Trued-up)
O&M Expenses for one month	114.34	124.13	115.78
Receivables equivalent to 2 months	761.32	690.46	690.46
Maintenance Spares 40% of the R&M expense for one month	1.56	1.27	1.56
Less: Consumer Security Deposit	319.71	314.63	314.63
Less: One Month Power Purchase	230.21	245.04	253.84

Particulars	1st APR Order	Petition	Now Approved (Trued-up)
Working Capital Requirement	**327.30**	**256.19**	**239.32**
Interest on Working Capital (@13.04%)	**43.42**	**33.60**	**31.20**

6.13.3 Further the interest on consumer security deposit has been considered as per the audited accounts of FY16 and is approved as below:

Table 112: Trued-up Interest on Consumer Security Deposit for FY16 (Rs. Cr.)

Particulars	Now Approved (Trued-up)
Opening	292.84
Additions	21.79
Closing	314.63
Interest on Consumer security deposit	**17.93**

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 FY16 is as below.

Table 113: Trued up Interest and Finance Charges for FY16 (Rs. Cr.)

Particulars	Approved in 1st APR Order	Petition	Now Approved (Trued-up)
Interest on Long term loans	125.69	125.69	125.69
Interest on Working Capital	43.42	33.60	31.20
Interest on Consumer security deposit	27.77	17.93	17.93
Total Interest & Finance Charges	**196.88**	**177.22**	**174.81**

6.14 Additional Interest Amount towards Kurthala sub-station and Line

6.14.1 It has been observed that the Petitioner has submitted a claim of Rs. 10 Cr. as additional interest amount towards Kurthala sub-station and line without providing any supporting documents against this amount.

6.14.2 While the amount of Rs. 10 Cr. was provisionally allowed by the Commission based on the submissions of the Petitioner during the 1st APR Order for FY16, the Commission in the subsequent Order for Mid-Term Review, had reviewed the revised financing mechanism of the scheme and had stated the following:

"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 also 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."

6.14.3 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 has been 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.

6.15 **Other Controllable Parameters**

6.15.1 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.

6.15.2 Therefore, the Commission has considered the depreciation and return on equity at the same level as approved in the MYT and 1st APR Order for FY16.

Table 114: Depreciation and Return on Equity approved for FY16 (Rs. Cr.)

Particulars	1st APR Approved	Petition	Now Approved (Trued-up)
Depreciation	70.27	70.27	70.27
Return on Equity	30.24	30.24	30.24

6.16 **Non-Tariff Income**

6.16.1 The non-tariff income is required to be deducted from the ARR of the Petitioner. The Petitioner has claimed non-tariff income of Rs. 231.15 Cr. towards distribution business for true-up of FY16.

6.16.2 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.

6.16.3 In the 1st APR Order for FY16, the Commission had included Rs. 25 Cr. towards S&I works done in the past by HPSEBL. In the tariff petition, the Petitioner has claimed Rs. 0.53 Cr. in FY16 against the approved amount. However, in response to a query of the Commission, HPSEBL has submitted that the amount of Rs. 0.53 Cr. is a net expense against Sai-Koti I & II projects which shall form part of preliminary expenses for this power house and has been wrongly claimed under Non-Tariff Income. Therefore, the Commission has excluded the amount while approving the non-tariff income for FY16.

6.16.4 Also, an amount of Rs. 115.26 Cr. is observed as Wheeling Charges Recovery in the audited accounts. In response to a query of the Commission, the Petitioner has provided the detailed break-up of this amount as shown below:

Table 115: Break-up of Wheeling Charges Recovery in FY16 (Rs. Cr.)

Particulars	Amount (Rs Cr.)
MPCL	6.53
HVPNL	0.20
PTC	58.33
GoHP	12.72
MPPL	0.08
BRPL	9.53
BYPL	11.16
IEX	7.28
Total	**105.83**
O&M Charges	
Transmission	7.10*
Operation	2.33
Grand Total	**115.26**

**Rs.7.10 Cr. includes an assessment of Rs. 4,71,55,929/- on a/c of O&M Expenses recoverable from HPPTCL for providing O&M towards transmission lines*

6.16.5 As can be seen from the table above, this amount included Rs. 58.33 Cr. on account of recovery by HPSEBL from PTC on account of PGCIL charges for sale of GoHP free power. Since the above amount has already been adjusted by the Commission in the HPSEBL's PGCIL charges approved under the power purchase cost, Rs. 58.33 Cr. has been reduced from the overall wheeling charges recovery.

6.16.6 Additionally, the Petitioner has considered an income of Rs. 7.10 Cr. against O&M charges recovered from HPPTCL in FY16 which has been credited to wheeling charges in the audited accounts. This has been approved as a separate head and adjusted in the wheeling charges as per audited accounts for FY16.

6.16.7 The Commission therefore, approves the Non-Tariff income for FY16 as summarised below:

Table 116: Trued-up Non-Tariff Income for FY16 (Rs. Cr.)

Particulars	Now Approved (Trued-up)
Meter Rent/Service Line Rentals	46.59
Recovery for theft of Power / Malpractices	0.04
Wheeling Charges Recovery	52.22
Miscellaneous Charges from Consumers	4.37
Sub-Total	**103.22**
Interest on Staff loans & Advances	0.35
Income from Investments	0.37
Delayed Payment Charges from Consumers	-
Interest on Advances to Suppliers / Contractors	0.44
Income fee collected against Staff Welfare Activities	0.12
Miscellaneous Receipts	22.01
PLVC charges	41.92
Sub-Total	**65.21**
S&I Activity	-
Income from Trading	2.00
O&M Charges Recovery from HPPTCL	4.72
Sub-Total	**6.72**
Total Non-Tariff Income	**175.15**

6.17 **Prior Period Income/ Expense**

6.17.1 It is observed that the Petitioner has considered entire prior period income/ expense of Rs. 22.45 Cr. as per audited accounts without going into merits. The Commission has considered the break-up of this amount as per audited accounts.

6.17.2 The Commission has observed that out of the total amount of Rs. 22.45 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.

6.17.3 Therefore, the Commission has found merit for considering Rs. 27.25 Cr. towards prior period income after excluding the accounting adjustments as provided in table below:

Table 117: Prior Period Expenses/Income considered under Non-Tariff Income for FY16 (Rs. Cr.)

Particulars	Account Code	As per accounts	Trued-up
Receipt from consumers relating to prior period	65.2	(26.04)	(26.04)
Interest income for prior period	65.4	-	-
Excess prov. for income tax p/year	65.5	(0.04)	-
Excess prov. of depreciation in prior period	65.6	(0.16)	-
Excess prov. of Interest & Finance charges	65.7	-	-
Other excess prov. in prior period	65.8	(6.00)	-
Other income relating to prior period	65.9	(1.21)	(1.21)
Total Prior Period income	**65**	**(33.45)**	**(27.25)**
Short provision for power purchase previous year	83.1	0.00	-
Operating expense of previous year	83.3	0.28	-
Employee cost relating to previous year	83.5	6.36	-
Deprecation under provided in previous year	83.6	0.00	-
Interest and other finance charges relating previous year	83.7	0.00	-
Other charges relating to previous year	83.8	4.37	-
Total Prior Period Expenses	**83**	**11.01**	-
Net Prior Period Expenses/(Income)		**(22.45)**	**(27.25)**

6.18 Carrying Cost of arrears paid on account of 5th Pay Commission

6.18.1 The Petitioner has claimed an amount of Rs. 111.93 Cr. on account of carrying cost of arrears paid on account of 5th Pay Commission. HPSEBL has submitted that it had taken up the matter of bearing the carrying cost of 5th Pay Commission arrears with Government of Himachal Pradesh (GoHP). However, GoHP has declined to do so and therefore, the Petitioner has considered the impact of carrying cost of Rs. 201.81 Cr. which was excluded by the Commission while approving the carrying cost on account of true-up for FY13 in the MYT Tariff Order for FY15.

6.18.2 During the analysis, it has been observed that the Petitioner has erroneously considered carrying cost on the entire amount of arrears (Rs.201.81 Cr.) on account of 5th Pay Commission until FY16 despite the fact that the amount was already provided for in the ARR for FY15 and the carrying cost for this amount remained unpaid. Therefore, the Commission has re-computed the impact of carrying cost and approved an amount of Rs. 61.36 Cr. in FY16.

6.19 **Annual Revenue Requirement**

6.19.1 The ARR approved by the Commission in the 1st APR Order, as submitted by the Petitioner in its true-up petition and now approved by the Commission for FY16 are shown in the table below:

Table 118: Trued-up Annual Revenue Requirement for FY16 (Rs. Cr.)

Particulars	1st APR Order	Petition	Now Approved (Trued-up)
Power Purchase Expenses	2,771.72	3,129.16	3,046.14
Operation & Maintenance Costs	**1,352.55**	**1,489.60**	**1,389.40**
Employee Cost	*1,266.28*	*1,411.67*	*1,303.13*
R&M Cost	*46.79*	*38.13*	*46.79*
A&G Cost	*39.48*	*39.80*	*39.48*
Additional amount for Safety Measures	1.00	-	-
Interest & Financing Charges	196.88	177.23	174.81
Additional Interest amount towards Kurthala sub-station & line	10.00	10.00	-
Depreciation	70.27	70.27	70.27
Return on Equity	30.24	30.24	30.24
Provision for Bad & Doubtful Debtors		3.44	-
Surplus Power Purchase as per PPA Obligation	169.88	-	-
Less: Non-Tariff & Other Income	(197.53)	(231.15)	(175.15)
Less: Net Prior Period Expenses	-	(22.45)	(27.25)
Add: Carrying Cost of arrears paid on account of 5th Pay Commission	-	111.93	61.36
Aggregate Revenue Requirement	**4,405.02**	**4,768.27**	**4,569.83**

6.20 **Adjustments to ARR**

6.20.1 In the 1st APR Order for FY16, the Commission had also undertaken true-up of past years and approved the following amounts:

a) Impact of Final Truing up for FY11 and FY12 dated 30.03.2015 and an amount of Rs. 56.51 Cr. to be adjusted in the ARR of FY16

b) Impact of Review Order (MYT 3rd Control Period) No. 153/2014 decided on 31.12.2014, the approved gap of Rs. 45.94 Cr. to be adjusted in the ARR for FY16

c) Consumer Contribution towards RPPO Compensation Fund of Rs. 12.23 Cr. as per the Order dated 10th November 2014 in the Petition no. 129/2013

d) Impact of BASPA-II Truing up of Rs. 2.94 Cr. as per the true-up order for BASPA-II HEP for FY12-FY14 on 30.03.2015

e) Payment of arrears prior to FY15 of Nathpa Jhakri plants as per the order of CERC of an amount Rs. 97.15 Cr was provisionally allowed.

f) Payment of arrears of Khara plants for the period upto FY14 as per the order of UPERC of an amount of Rs. 35.83 Cr was provisionally allowed.

6.20.2 The Petitioner has considered all the above adjustments in the true-up for FY16 without going into the merits of each component. The Commission has observed that the actual power purchase cost incurred for FY16 has been approved as per the audited accounts and therefore any additional expenditure undertaken towards Baspa, NJPS and Khara has already been considered. Therefore, provisions towards power purchased from these plants as approved in the ARR for FY16 should not be reconsidered for the purpose of true-up. The officials of the utility during the technical validation session also agreed that the provisions towards power purchase cost approved in the first APR Order for FY16 have already been claimed in the power purchase cost and therefore are not required to be considered separately. Accordingly, the Commission has excluded the adjustments towards power purchase cost and has considered other adjustments in the truing-up for FY16.

6.20.3 The trued-up ARR for FY16 as approved by the Commission after considering the approved adjustments is as below:

Table 119: Final Approved ARR after Adjustments for FY16 (Rs. Cr.)

Particulars	Approved
Aggregate Revenue Requirement	**4,569.83**
Add :	
Impact of Final Truing up for FY11 & FY12	56.51
Impact of Review Order (MYT 3rd Control Period)	45.94

Particulars	Approved
Consumer Contribution towards RPPO Compensation Fund (as per HPERC order dated 10th November 2014)	12.23
Total ARR including adjustments	**4,684.51**

6.20.4 It is observed that the Commission had approved an amount of Rs. 12.23 Cr. as per the Order dated 10th November 2014 in the Petition no. 129/2013 on account of RPPO Compensation Fund in the First APR for FY16. The amount has been retained as part of the truing-up for FY16. However, it is observed that no details of the RPPO Compensation Fund has been provided. **The Petitioner is directed to provide the details of the RPPO Compensation Fund and the balance available in the fund along with the next tariff filing. In absence of such details, the Commission shall be constrained to reverse the amount allowed in the subsequent ARR along with carrying cost.**

6.21 **Revenue Gap**

6.21.1 The Revenue Gap/Surplus for FY 2015-16 based on the approved trued-up costs and revenues of HPSEBL is as determined below:

Table 120: Trued-up Revenue Gap for FY16 (Rs. Cr.)

Particulars	Now Trued-up Surplus/(Gap)
Aggregate Revenue Requirement	**4,569.83**
Add:	
Impact of Final Truing up for FY11 & FY12	56.51
Impact of Review Order (MYT 3rd Control Period)	45.94
Consumer Contribution towards RPPO Compensation Fund (as per HPERC order dated 10th November 2014)	12.23
Total ARR including adjustments	**4,684.51**
Revenue	
Revenue from sale of power within state	4,142.73
Revenue from sale of power outside state	510.74
Total Revenue	**4,653.47**
Revenue Surplus/(Gap)	**(31.03)**

6.21.2 In addition to the revenue from sale of power, the Commission has not considered the adjustment of Rs. 132.99 Cr. under revenue as was approved in the Tariff Order for FY16. The Commission had considered this amount to be received as an incentive grant from Government of India to the State of Himachal Pradesh in line with the recommendations of 13th Finance Commission for development of renewable energy. However, based on the submission of the Petitioner during the processing of the Second APR for the Third Control Period dated May 25, 2016, it was observed that this amount was released to the Government and the same was not transferred to HPSEBL. Therefore, the Commission had reversed the adjustment and considered the amount as part of the FY17 ARR. Since the revenue provided towards 13th Finance Commission is not being considered in the true-up for FY16, it is clarified no adjustment would be required at the time of truing-up for FY17.

6.22 **Carrying Cost**

6.22.1 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.

6.22.2 The Commission has undertaken final true-up of uncontrollable parameters for FY16 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 FY16:

Table 121: Approved Revenue Surplus / (Gap) for FY16 (Rs. Cr.)

Particulars	Amount
Revenue Surplus / (Gap) for FY15	(31.03)

6.22.3 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."

6.22.4 Accordingly, carrying cost is determined based on the opening and closing amount of revenue surplus/ (gap) and the cumulative amount has been adjusted in the ARR for FY19 in the subsequent Chapter. The computation of carrying cost and cumulative revenue surplus/ (gap) is summarized in table below:

Table 122: Approved Carrying Cost for Revenue Surplus/ (Gap) (Rs. Cr.)

Particulars	FY16	FY17	FY18
Opening Gap	-	(33.06)	(37.28)
Surplus/ (Gap) on account of truing-up of uncontrollable parameters for FY16	(31.03)	-	-
Closing	(31.03)	(33.06)	(37.28)

Particulars	FY16	FY17	FY18
Interest Rate for Carrying Cost	13.0%	12.8%	12.4%
Carrying Cost	(2.02)	(4.23)	(4.63)
Total (Gap)/Surplus	**(33.06)**	**(37.28)**	**(41.92)**

7 Analysis of the Annual Performance Review (APR) and ARR for FY19

7.1 Background

7.1.1 The Commission has analyzed the Annual Performance Review (APR) Petition for FY18 and revised the Aggregate Revenue Requirement (ARR) for FY19 based on the submissions of the Petitioner for the past years and actual information for current year as per availability.

7.1.2 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 FY19.

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

7.2.1 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 123: 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
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

Particulars	FY15	FY16	FY17	FY18	FY19
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**

7.2.2 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 124: 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

7.3 Approach of the Fourth APR under 3rd MYT Control Period

7.3.1 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 FY19.

7.3.2 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 in the Order on Mid-Term Performance Review (MPR) dated April 17, 2017. 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.

7.3.3 HPSEBL has filed for a review of the ARR for FY19 and for the corresponding revision of tariff for FY19 in accordance with the variation of the revised ARR vis-à-vis the ARR approved in the MYT Order.

7.3.4 In this section of the Order, the Commission has reviewed the ARR for FY19 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 (MTR) Order for the controllable components of costs i.e. O&M expense, depreciation, return on equity, interest on loans, etc. has also been considered, if applicable.

7.4 **Sales Forecast**

7.4.1 For projecting the energy sales of HPSEBL for the FY19, 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.

7.4.2 HPSEBL has projected energy sales by applying the appropriate category-wise CAGR of 1, 3 or 5 years, average growth rate in last 2 years as well as keeping in mind the actual sales for first six months of FY18. HPSEBL has estimated sales for FY18 at 8245 MUs as the base and projected energy sales within the State at 8648 for FY19.

7.4.3 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.

7.4.4 The Commission has estimated the revised sales for FY19 based on actual sales of six months of FY18 and past CAGRs witnessed across various categories of consumers. The revised estimate for FY18 has been considered as the base for the purpose of projections of sales for various categories of the consumers for FY19 after applying the category-wise growth factors.

7.4.5 On the basis of such analysis, the Commission approves total sales of 8638 MUs for FY19. The Commission approves sale for each category of consumer as detailed below.

Domestic Supply

7.4.6 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 in this category has been slowing down with a decrease in overall sales in FY17. The y-o-y growth in sales declined significantly with 2.6% decline in FY16 and a negative growth of 0.2% in FY17 over the past year as compared to 9.6% growth in FY14. The decline in FY17 has been observed across States and can be attributed to external reasons i.e. Central Government policies and decisions. Further, energy efficiency schemes like distribution of LED to domestic consumers is expected to have a controlling effect on the domestic consumption.

7.4.7 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.

7.4.8 Considering the long term CAGR of sales as well as recent revival in first six months of FY18, 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 FY19.

Non Domestic Non Commercial Supply (NDNCS)

7.4.9 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 and FY17, the energy sales to this category during first six months of FY18 show some positive growth.

7.4.10 Thus, the Commission has adopted the 3 year CAGR of 3.5% as the growth rate for projections of energy sales to non-domestic non-commercial category for FY19.

Commercial Supply

7.4.11 The sales to commercial category have seen consistent growth of approximately 5% over the last few years. The Commission has projected the sales growth at 5.4% per annum in line with the 3 year CAGR for projecting energy sales in this category for FY19.

Industrial Power Supply

7.4.12 Based on the actual sales data for FY17 and six months of FY18, the Commission has projected the sales to the industrial categories as below:

Small and Medium Industrial Power Supply

7.4.13 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.

7.4.14 The actual sales in FY17 to this category decreased by 1.1% over FY16 after witnessing a growth of 0.8% in FY16. Therefore, an increase of 5% has been considered which is also in line with the growth rate in first six months of FY18.

7.4.15 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

7.4.16 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. While the actual sales in this category declined by 4.3% during FY16, an increase of 4.1% was reported during FY17.

7.4.17 Inconsistencies in information regarding sales, connected load and number of consumers are observed with the large industrial category (i.e. HT-1, Ht-2 and EHT). **The Petitioner is directed to maintain proper records and provide break-up of industrial contracted demand, number of consumers and sales for each sub-category for past five years in future tariff filings.**

7.4.18 Therefore, keeping in view the last six month actual sales data and the growth in FY17, the Commission has considered the sales projection in this category to grow at 3.0% each year for projecting energy sales for FY19.

Irrigation and Drinking Water Pumping Supply (IDWPS)

7.4.19 The sales to this category have been steady with CAGR ranging from 5% to 6% for last five years, except a slowdown during FY17. The Commission has projected sales for FY19 considering a growth rate of 8%, based on the higher sales reported by the Petitioner during first six months of FY18.

7.4.20 Sales to private agriculture irrigation within this category have witnessed large variations with year on year growth ranging from 5% to 13%, owing to the variations in average recorded rainfall. In FY17 actual sales in this category has increased by 11% as against an increase of 15% in FY16. Therefore, the Commission has considered sales projections equal to 9.6%, which is in line with the CAGR for last 5 years for projection of FY19.

Public Lighting

7.4.21 No specific trend is observed in the year on year growth of sales to public lighting. However, it is observed that the sales in this category have remained range bound between 12 MUs to 14 MUs. Therefore, the Commission has considered no growth in sales projections for this category for FY19.

Bulk Supply

7.4.22 While the sales in this category for FY16 has witnessed a negative growth of -8.4% over FY15, the sales for this category has been showing signs of improvement in FY17 and first six months of FY18 with a growth rate of 4% and 11% respectively. Therefore, the Commission has considered 7% growth in sales projection for this category for FY19.

Temporary Supply

7.4.23 The analysis of sales in this category indicates that the sales has been range bound between 25-30 MUs in the last 5 years. Therefore, the Commission has not considered any growth in the temporary supply sales for projections of FY19.

7.4.24 After detailed scrutiny of the consumer category wise sales, the Commission estimates the following sales to retail consumers within the State for FY19:

Table 125: Revised Approved Sales for FY19 (MUs)

S. No.	Consumer Category	MYT Approved	HPSEBL's Submission	Revised Approved
1.	**Industrial Power Supply**			
a.	Small Industries	78	106	93
b.	Medium Industries	186	125	137
c.	Large Industries (HT)	3,063	1480	2946
d.	Large Industries (EHT)	2,422	3140	1673
2.	Domestic	2,632	2141	2137
3.	**Irrigation and Drinking Water**			
a.	Govt., Irrigation & Water Supply	626	626	643
b.	Private Agricultural Irrigation	49	53	69
4.	Commercial	725	590	587
5.	Bulk Supply	157	181	172
6.	Non Domestic Non Commercial	158	151	140
7.	Public Lighting	14	13	13
8.	Temporary	27	41	30
	Total	**10,137**	**8,648**	**8638**

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.

7.5 Transmission and Distribution Losses

7.5.1 The Commission had approved a T&D loss trajectory in the MYT Order which was retained during the Mid-Term Performance Review (MPR) of the Petitioner. Accordingly, the approved T&D loss for FY19 is as provided in the table below:

Table 126: Approved T&D loss for FY19

Particulars	FY19
Approved T&D loss	12.00%

7.6 Energy Requirement

7.6.1 The Commission's estimates of energy requirement at state periphery for FY19 is based on the revised sales and T&D loss target approved by the Commission. The Commission's estimate for power requirement is tabulated as follows:

Table 127: Approved Energy Requirement for FY19

Particulars	MYT	Petitioner	Revised Approved

Sales (MU)	10,137	8,648	8638
Approved Loss (%)	12.00%	12.00%	12.00%
Energy Requirement at State Periphery for own consumption (MU)	**11519**	**9827**	**9816**

7.7 Power Purchase

7.7.1 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.

7.7.2 For the analysis of ARR of FY19, the Commission has updated the station-wise projection of energy availability and power purchase cost for FY19 taking into consideration the actual normative parameters achieved by generating stations in FY16, FY17 and nine months of FY18 as well as change in allocation, if any.

7.7.3 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 FY18 and FY19;

7.7.4 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

7.7.5 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.

7.7.6 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 FY19 whereas the generation from power projects below 25 MW has been considered under renewable power (non-solar).

Table 128: Allocation and Energy Availability from Own Generating Stations for FY19*

Generating Station	Capacity (MW)	Generation (MUs)	HPSEBL Share	Annual Energy available to HPSEBL (MUs)
Larji	126	586.82	88%	515.37
Bhaba	120	464.70	100%	463.77
Bassi	60	346.83	100%	346.14
Giri	60	289.55	100%	288.97
Uhl-III	100	315.42	88%	276.18
Total Energy Available				**1890.43***

**Excluding own generating stations with capacity of less than 25MW*

7.7.7 Based on the responses of the Petitioner during the technical validation session, the Commission has revised power availability from Uhl-III for FY19 as its first unit is expected to be commissioned in May '18, second unit in June '18 and third unit in July '18. Also, the Petitioner has submitted that Bhabha Project which had witnessed an accident in Jan '15 has started generating power from two units during FY18 and all three units are expected to start generating power in FY19. Therefore, the Commission has considered all three units projections of FY19. 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

7.7.8 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 Tariff Order of UJVNL Hydro Stations for FY19. In case of energy available from Khara, the Commission has considered the average of the energy generated during last three years.

Table 129: Allocation and Energy Availability from Shared Generating Stations for FY19

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%	62.53
Total Available from Shared Generating Stations				**505.82**

Allocation and Energy Availability from IPP with Long-term PPA

7.7.9 The total energy available from Baspa-II HEP during FY19 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 FY19.

Allocation and Energy Availability from Free Power

7.7.10 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.

7.7.11 In line with the methodology followed in the MYT Order and subsequent orders for 3rd Control Period, 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.

7.7.12 Free power availability from Small HEP/Private Micro is determined based on the actual allocation of free power from such stations available during FY17 and first nine months of FY18 along with additional power from share of GoHP free power to be available from IPPs which are expected to be commissioned during FY19.

7.7.13 During the technical validation session, the Petitioner had brought to the notice of the Commission that Kashang HEP (HPPCL) has been commissioned on

24.06.2017 and the Petitioner has been procuring power from it FY17 onwards. In response to queries dated 09.02.2018, the Petitioner mentioned that the Commission vide letter no. 1506 dated 22.09.2016 had already provided an in-principle approval for procuring power from the plant. The Petitioner has additionally stated that it shall continue to procure power from Kashang in FY19 at a rate of Rs. 2.20 per unit and shall be utilized for meeting the shortfall in availability (due to lower snowfall) during FY19. Considering that the Commission on previous occasion had also approved procurement of power from this plant and the rationale provided by the Petitioner, the Commission has considered power availability from this station along with the free power share for projections of FY19.

7.7.14 Additionally, the Petitioner, during the technical validation session, submitted that Chanju-I HEP, owned and operated by M/s IA Energy (IA Hydro Energy Pvt. Ltd.) with an installed capacity of 36MW is expected to run at its full capacity during FY19. Since the energy generated from the station is sold outside the State, the Commission has considered only free power share of 16.23% from the station for projections of FY19.

7.7.15 The table summarizes the stations and quantum of free power available to HPSEBL during FY19:

Table 130: Energy Availability from Free Power (MU) for FY19

Free Power	Petition	Now Approved
Shanan Share	2.63	2.63
Ranjeet Sagar Dam Share	70.26	77.51
Malana	73.28	51.08
Baspa (Primary & Sec.)	143.19	143.19
Ghanvi	9.36	11.07
Baner	4.20	7.21
Gaj	4.80	4.55
Larji	70.44	70.28
Khauli	5.52	5.95
Uhl-III	45.75	37.85
Ghanvi II	4.68	6.24
Kashang	-	22.10
Chanju	24.56	24.56
Small HEP/ Private Micro – Free	98.97	114.57
Total	**557.64**	**578.80**

Allocation and Energy Availability from BBMB

7.7.16 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 FY19.

Table 131: HPSEBL Share and Energy Availability from BBMB for FY19

Name of Generating Station	Energy (ex-bus)	HPSEB Share	Energy available to HPSEBL (MUs)
BBMB Old		Fixed 1.2LU/day	43.8
BBMB New	4599.00	7.19%	330.67
Dehar	2579.96	7.19%	185.50
Pong	1182.01	2.97%	35.11
Total			**595.07**

Energy Availability from Renewable Power (Non-Solar and Solar)

7.7.17 The Petitioner is required to comply with the HPERC (Renewable Power Purchase obligation and its Compliance) (Third Amendment) Regulations, 2017 wherein the Commission has 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 FY19 is detailed below:

Table 132: 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
FY19	17.00	10.25%	6.75

Renewable Power (Non-solar)

7.7.18 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 FY19:

Table 133: Allocation, HPSEBL share and Energy Availability from Own Generating Stations for FY19

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
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**

7.7.19 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.

7.7.20 The Petitioner has submitted the details of new IPP projects which have been commissioned during FY18 and those which are expected to be commissioned during FY19. The details of new IPP plants expected to commission during FY18 and FY19 as submitted by the Petitioner are as below:

Table 134: HPSEBL's Submission- Projects to be commissioned during FY18

Name of Hydro Project	Capacity (MW)	Anticipated COD
Under Preferential Tariff		
Gaj Top	3.80	Oct'17
Bagrood	0.24	Feb'18

Name of Hydro Project	Capacity (MW)	Anticipated COD
Behna	5.00	Feb'18
Sarwari-III	2.00	Feb'18
Sub-Total (1)	**11.04**	
Under APPC Tariff		
Lower Aleo (2)	2.50	Sep'17
Grand Total (1+2)	**13.54**	

Table 135: HPSEBL's Submission- Projects to be commissioned during FY19

Name of Hydro Project	Capacity (MW)	Anticipated COD
Under Preferential Tariff		
Luni	4.50	June'18
Leond	2.00	June'18
Ani	5.00	June'18
Kesta	4.50	June'18
Bahl Padhar	4.00	Dec'18
Kut	24.00	June'18
Sub-Total (1)	**44.00**	
Under APPC Tariff		
Kiunr	5.00	Apr'18
Hysrund	3.00	Apr'18
Kotagad	3.50	Dec'18
Sub-Total (2)	**11.50**	
Grand-Total (1+2)	**55.50**	

7.7.21 The Commission has taken into consideration the above mentioned inputs, along with the revised commissioning status of these plants to determine the availability of power from small hydro plants. Additional projects which are expected to be commissioned during FY19 as per the submission of the Petitioner have also been considered for projecting the energy available in FY19.

7.7.22 The table below summarizes energy availability for HPSEBL from own and private small and micro hydel projects:

Table 136: Energy Availability from Small Hydro Own and IPPs/ Private Stations for FY19

Particulars	Energy Available (MUs)
Small Hydro Own Generation	472.93
Small HEP/ Private Micro <5MW	994.05
Small HEP/ Private Micro >5MW	277.30
Total Non-solar Renewable Power	**1744.28**

7.7.23 Further, HPSEBL has submitted procurement of power from two municipal solid waste to energy projects with total capacity 3.5 MW (2.5+1) which are expected to be commissioned during FY19. The energy availability from these two stations has been considered based on the submission of the Petitioner as provided in the table below:

Table 137: Energy Availability from Municipal Solid Waste Projects for FY19

Particulars	FY19
Municipal Solid Waste (MSW) projects	24.53

7.7.24 The power procured by HPSEBL from any other renewable source during FY19, for which the Commission has approved generic tariff, shall be considered at the time of truing up based on the actuals.

Renewable Power (Solar)

7.7.25 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.

7.7.26 Further, the Petitioner has also considered additional power from SECI under MNRE. HPSEBL had 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.

7.7.27 In addition to above mentioned solar power, HPSEBL has also submitted procurement of additional solar power from private developers with cumulative installed capacity of 22MW which is expected to be commissioned during FY19. The details of these solar projects are given in the table below:

Table 138: HPSEBL' Submission- Solar Projects to be commissioned during FY19

Name of Project	Capacity (MW)	Tariff (Rs/kWh)
Jahu Solar PV	4.00	5.25
Nand Solar PV	5.00	5.25
Berra Dol	5.00	5.25
Haryana Powertech Project-I	1.00	5.31
Haryana Powertech Project-II	1.00	5.31
GR Enterprises	1.00	5.31
Surya Ushma	5.00	5.25
Total	**22.00**	

7.7.28 The Commission has considered the revised commissioning status of these plants and has considered the solar power available from the various sources towards meeting the Solar RPPO specified as per the HPERC (Renewable Power Purchase obligation and its Compliance) (Third Amendment) Regulations, 2017. The details of RPPO obligation and availability of solar power from various sources during FY19 is provided in the table below:

Table 139: RPPO Obligation and Energy Availability from Solar Power in FY19

Particulars	FY19
Sales (in MUs)	8637.87
T&D Loss (%)	12.00%
Total Energy Requirement (in MUs)	9815.76
Availability from Hydro sources (in MUs)	9221.02
Total consumption exc. Hydro (in MUs)	594.75
Solar RPO (%)	**6.75%**
Solar RPPO (in MUs)	40.15
Energy Availability from Solar (in MUs)	
Singrauli Solar	24.97
SECI	33.29
Private Solar	36.62
Surplus/(Gap)	**54.73**

7.7.29 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 FY19.

7.7.30 While the Commission provisionally approves the excess procurement of solar power in FY19, the Petitioner is directed to avail RECs and take timely steps for sale of these RECs against the surplus solar power procured in order to ensure that the burden of higher tariff is not passed onto the consumer. The Commission shall consider the adjustments, if any, at the time of truing-up for the respective year.

Energy Availability from Private Micro Hydel Projects (Purchase at APPC under REC Framework)

7.7.31 The Petitioner also purchases power at Average Power Purchase Cost (APPC) rate from small and micro hydel projects which are under the REC framework.

7.7.32 The Commission has estimated the availability of power in FY18 from these sources after taking into consideration the power purchase data in FY16, FY17 and nine months of FY18 as submitted by the Petitioner. The estimated power purchase quantum from these sources for FY18 has been used along with any additional capacity expected to be commissioned during FY19 to arrive at the Power Purchase Quantum for FY19 from Small and Micro HEPs (under REC Framework).

7.7.33 The details of power available from micro hydro projects under REC mechanism during FY19 is provided below:

Table 140: Energy Availability from IPPs and Private SHPs for FY19 (MUs)

Particulars	FY19
Small HEP/ Private Micro – REC	353.98

Energy Availability from Equity Share in Generating Plants

7.7.34 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 FY19 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 FY19

Name of Generating Station	HPSEBL Share	Annual Energy available to HPSEBL (MUs)
Rampur Equity	26.1%	491.79
Nathpa Jhakri Equity	22%	1,477.26
Total from Equity share		**1,969.04**

Allocation and Energy Availability from firm Share in Central Generating Stations (CGS)

7.7.35 The Commission has considered allocation of firm power from CGS in accordance with latest allocations issued by the Northern Regional Power Committee.

7.7.36 In the previous Orders, the Commission had directed the Petitioner to surrender the costly power from central generating stations. The Petitioner in its previous submissions had submitted that it had already written to the Government of India for surrendering the costly power available from the gas stations of Anta, Auraiya & Dadri and the decision is still awaited in this regard. Therefore, the Commission has considered power from these sources for the projections of energy availability for FY19. The Petitioner is directed to pursue with the MoP for surrender of its share in these stations as the cost per unit from these stations is significantly higher than the alternate power procurement options available.

7.7.37 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. It is observed that the Petitioner has considered normative PLF of 85% from the costly gas based stations which is substantially higher than the actual PLF of last three years resulting in very high projections of power purchase cost and higher quantum of surplus power. The Commission has considered average of last three year PLF of these plants for projecting the power availability from these stations.

7.7.38 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	0.19	3.80
Rihand-I	1000	0.19	1.90
Rihand-II	1000	0.21	2.10
Rihand-III	1000	0.23	2.30
Unchahar-I	420	0.07	0.29
Unchahar-Il	420	0.23	0.97
Unchahar-III	210	0.23	0.48
Unchahar-IV	500	0.22	1.10
Dadri	980	0.21	2.06
Total Thermal (Bundled)			**15.00**
Singrauli Solar	15	100	15.00
Total			**30.00**

7.7.39 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.

7.7.40 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 FY19.

7.7.41 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.

7.7.42 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.

7.7.43 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.

7.7.44 The table below summarizes the allocation as well as energy available from CGS during FY19.

Table 143: Approved Energy Availability from firm Share in Central Generating Stations

Name of Generating Station	Expected PLF/ Energy at Ex Bus (MUs)	HPSEBL Share (%)	Energy available to HPSEBL (MUs)
SJVNL			
Nathpa Jhakri SOR	6,714.80	2.47%	165.86
Rampur SOR	1,884.24	2.80%	52.95
Total			**218.80**
NPCIL			

Name of Generating Station	Expected PLF/ Energy at Ex Bus (MUs)	HPSEBL Share (%)	Energy available to HPSEBL (MUs)
NAPP	2,923.84	3.2%	92.98
RAPP (V & VI)	2,897.07	3.4%	98.50
Total			**191.48**
NTPC – Thermal			
Anta (G)	1064.34	3.58%	38.10
Auriya (G)	1199.87	3.32%	39.84
Dadri (G)	2517.44	3.01%	75.77
Unchahar-I	2621.88	1.70%	44.57
Unchahar-II	2621.88	2.90%	76.03
Unchahar-III	1310.94	3.81%	49.95
Unchahar-IV	3030.40	4.22%	127.94
Rihand-1 STPS	6529.88	3.50%	228.55
Rihand-2 STPS	6672.61	3.30%	220.20
Kahalgaon – II	9085.63	1.53%	139.01
Rihand-3 Units-1,2	6529.88	3.37%	220.12
Kol dam HEP	3024.24	15.00%	453.64
Singrauli Bundled	101.64	100%	101.64
Total			**1815.36**
NHPC			
Salal	3502.04	1.00%	35.02
Tanakpur	443.14	3.84%	17.02
Chamera I	2466.65	2.90%	71.53
Chamera II	1488.88	3.67%	54.64
Uri	3054.22	2.70%	82.46
Dhauliganga	1089.63	3.57%	38.90
Total			**299.58**
Grand Total			**2525.22**

Energy Availability from Unallocated Power from CGS

7.7.45 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 NRPC as on 07.03.2018, the State of HP is getting 15MW of unallocated power which is in lieu of bundled solar power from Singrauli under JNNSM. The Commission has considered this under Singrauli Bundled Power for FY19.

Allocation and Energy Availability from Other Sources, Bilateral and Short Term Arrangements

7.7.46 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 FY19.

7.7.47 For FY19, 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 FY19 is shown in the tables as follows:

Table 144: Monthly Demand Supply Position – FY19

Power Purchase	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Sales (MU)	650	703	728	735	733	754	726	701	702	722	723	761	8,638
Losses	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%
Monthly Demand (MU) State Periphery	738	799	828	835	833	857	825	796	798	820	822	865	9,816
Monthly Availability (MU) State Periphery	783	1,263	1,376	1,570	1,630	1,428	761	527	462	430	439	616	11,284
Deficit Power (MU) State Periphery	-	-	-	-	-	-	(64)	(269)	(336)	(390)	(382)	(249)	(1,692)
Deficit Power (MU) Ex Bus	-	-	-	-	-	-	(67)	(278)	(348)	(403)	(395)	(258)	(1,748)
Surplus Power (MU) State Periphery	45	464	549	735	797	570	-	-	-	-	-	-	3,160
Surplus Power (MU) Ex Bus	47	480	567	759	823	589	-	-	-	-	-	-	3,265
Net Surplus/(Deficit) (Ex Bus)	**47**	**480**	**567**	**759**	**823**	**589**	**(67)**	**(278)**	**(348)**	**(403)**	**(395)**	**(258)**	**1,517**

7.7.48 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 FY19.

7.8 Power Purchase Cost

7.8.1 The cost of power purchase from various sources has been considered based on the following:

Generation cost of HPSEBL own stations

7.8.2 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.

7.8.3 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

7.8.4 As per the Commission's Order dated 13.04.2018, the purchase rate of free power available to the HPSEBL from GoHP has been fixed at 248 paise/unit (inclusive of trading margin, if any) for FY19. Therefore, in order to project the power purchase cost for FY19, the Commission has considered 248 paise/unit as the rate of free power available to the HPSEBL from GoHP for FY19.

Cost of Power from NPCIL Stations

7.8.5 The cost of power for NPCIL plants for FY19 has been considered based on the actual rate of power for nine months of FY18 submitted by the Petitioner with an escalation of 3%.

Cost of Power from BBMB and Other Plants

7.8.6 The cost of power from BBMB, Dehar, Pong, Shanan and Khara has been considered based on the actual power purchase cost as submitted by HPSEBL for nine months of FY18. In case of Yamuna, the rate has been considered based on the Tariff Order of UJVNL for FY19.

Cost of Power from SJVN Plant

7.8.7 For projecting the cost of power from Rampur station and NJPS stations for FY19, the Commission has considered the actual power purchase cost as submitted by HPSEBL for nine months of FY18 as well as the provisional tariff approved by the CERC for these stations. Any additional changes in tariff from NJPS or Rampur station on account of revised tariff for FY19 shall be considered at the time of truing-up.

Cost of Power from IPPs and Private SHPs

7.8.8 The Commission has considered the Annual Fixed Cost from Baspa-II plant for FY19 as per the MYT Tariff Order for Baspa-II issued by the Commission.

7.8.9 The average rate of power from private SHP during nine months of FY18 has been considered for the existing quantum of power being available from various private SHPs.

7.8.10 APPC for purchase of power from SHP generators in the State availing REC facility has been re-determined by the Commission and fixed at Rs. 2.43 per unit through the Order dated 04.08.2017. The same has been considered by the Petitioner in the nine months data provided for FY18 as the rate of power procurement from Small HEP/ Private Micro under REC. Therefore, the Commission has retained this rate for projection of FY19.

7.8.11 The power procurement from Kashang has been considered at Rs. 2.20 per unit for FY19 as mentioned by the Petitioner in its submissions.

Cost of Additional Solar Power

7.8.12 For projecting the power purchase cost from NTPC Singrauli solar plant and solar quantum from SECI for FY19, an average rate of power purchase as per the actual power purchase cost for nine months of FY18 has been considered. In case of solar power procurement from the already and upcoming private solar stations in the State during FY19, tariff has been approved by the Commission vide its Order on Generic Levellized Tariff for Solar PV Projects for FY2016-17 dated 06.07.2016 and for FY2017-18 dated 12.02.2018 has been considered.

Cost of Power from NTPC stations

7.8.13 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, except Koldam for the Period FY15-19 are now available, the Commission has considered the fixed cost approved as per the respective tariff orders and payable by HPSEBL for FY19. In case of Koldam HEP, the Commission has considered the provisional tariff approved by CERC for FY19.

7.8.14 The variable cost for existing NTPC thermal generating stations, including Fuel Price Adjustment (FPA) for FY19 has been based upon the actual power purchase data of FY18, 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 FY19. Other Charges (per unit) have been considered to be at the same level as incurred during FY17 and nine months of FY18 by HPSEBL based on the power purchase information submitted by the Petitioner.

Cost of Power from NHPC Plants

7.8.15 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 along with allocation of power to HPSEBL from the respective stations. Therefore, the Commission has considered the fixed and variable charge for these stations in line with the approved annual charges for FY19. 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

7.8.16 Based on the principles discussed above, the table below summarizes power purchase cost of each plant for FY19.

Table 145: Source wise Power Purchase Cost for Own Generating Stations for FY19

Particulars	Units (MUs)	Cost (Rs.Cr.)
Own Generating Stations		
Bhaba	463.77	35.76
Bassi	346.14	27.05
Giri	288.97	26.01
Andhra	86.43	12.24
Ghanvi	81.15	18.26
Baner	52.86	11.07

Particulars	Units (MUs)	Cost (Rs.Cr.)
Gaj	33.38	11.55
Larji	515.37	114.21
Khauli	43.65	9.82
Binwa	29.05	6.67
Thirot	17.58	3.96
Gumma	11.71	2.64
Holi	11.71	2.64
Bhaba Aug	17.58	3.96
Nogli	9.75	3.62
Rongtong	7.56	2.57
Sal-II	7.79	1.75
Chaba	6.47	2.12
Rukti	7.59	1.04
Chamba	1.75	0.41
Killar	1.15	0.26
Uhl III - BVPCL	276.18	124.28
Ghanvi II	45.77	14.53
Total - Own Generation	**2,363.36**	**436.40**

Table 146: Source wise Power Purchase Cost for GoHP Free Power for FY19

Particulars	Units (MUs)	Cost (Rs.Cr.)
Shanan Share	2.63	0.65
Ranjeet Sagar Dam Share	77.51	19.22
Malana	51.08	12.67
Baspa (Primary & Sec.)	143.19	35.51
Nathpa Jhakri HEP	-	-
Ghanvi	11.07	2.75
Baner	7.21	1.79
Gaj	4.55	1.13
Larji	70.28	17.43
Khauli	5.95	1.48
Uhl-III	37.85	9.39
Ghanvi II	6.24	1.55
Kashang	22.10	5.48
Chanju	24.56	6.09
Small HEP/ Private Micro - Free	88.67	28.41
Total Free Power	**578.80**	**143.54**

Table 147: Source wise Power Purchase Cost for NPCIL stations for FY19

Particulars	Units (MUs)	Cost (Rs.Cr.)
NAPP	92.98	24.74
RAPP (V & VI)	98.50	35.89
Total NPCIL	**191.48**	**60.63**

Table 148: Source wise Power Purchase Cost for Shared stations for FY19

Particulars	Units (MUs)	Cost (Rs.Cr.)
BBMB Old	43.80	5.34
BBMB New	330.67	23.39
Dehar	185.50	15.82
Pong	35.11	1.83
Shanan (available to HPSEB)	5.26	0.21
Shanan Ext (available to HPSEB)	45.00	0.93
Yamuna	387.83	40.31
Khara	62.53	4.50
Total Shared Stations	**1,095.69**	**92.33**

Table 149: Source wise Power Purchase Cost for SJVNL and Other stations for FY19

Particulars	Units (MUs)	Cost (Rs.Cr.)
Nathpa Jhakri SOR	165.86	41.41
Nathpa Jhakri Equity	1,477.26	368.79
Rampur SOR	52.95	19.55
Rampur Equity	491.79	181.20
Small HEP/ Private Micro <5MW	994.05	278.34
Small HEP/ Private Micro >5MW	277.30	69.33
Small HEP/ Private Micro – under REC framework	353.98	86.02
Baspa – II	1,050.00	145.51
Kashang (HPPCL)	170.00	37.40
Municipal Solid Waste (MSW) projects	24.53	19.38
Total SJVNL & Other Plants	**5,057.77**	**1,246.92**

Table 150: Source wise Power Purchase Cost for Solar Power for FY19

Particulars	Units (MUs)	Cost (Rs.Cr.)
Singrauli Solar	24.97	20.09
SECI	33.29	18.31
Additional Private Solar Power	36.62	19.25
Total Solar Power	**94.87**	**57.65**

Table 151: Source wise Power Purchase Cost for NTPC stations for FY19

Particulars	Units (MUs)	Fixed Cost (Rs. Cr.)	Variable Cost (Rs. Cr.)	Other Cost (Rs. Cr.)	Total Cost (Rs. Cr.)
Anta (G)	38.10	7.82	10.71	-	18.52
Auriya (G)	39.84	10.26	13.53	0.03	23.82
Dadri (G)	75.77	10.56	24.38	-	34.94
Unchahar-I	44.57	4.79	12.85	0.01	17.65
Unchahar-II	76.03	7.46	21.88	-	29.34

Particulars	Units (MUs)	Fixed Cost (Rs. Cr.)	Variable Cost (Rs. Cr.)	Other Cost (Rs. Cr.)	Total Cost (Rs. Cr.)
Unchahar-III	49.95	6.81	14.20	-	21.00
Unchahar-IV	127.94	23.36	33.18	-	56.54
Rihand-1 STPS	228.55	20.52	30.83	0.82	52.18
Rihand-2 STPS	220.20	16.39	29.64	-	46.03
Kahalgaon – II	139.01	17.59	33.48	-	51.07
Rihand-3 Units-1,2	220.12	34.35	29.92	0.07	64.34
Koldam HEP	453.64	85.68	98.48	0.10	184.27
Singrauli Bundled	101.64	-	35.57	-	35.57
Total	**1815.36**	**245.59**	**388.65**	**1.03**	**635.28**

Table 152: Source wise Power Purchase Cost for NHPC stations for FY19

Particulars	Units (MUs)	Cost (Rs.Cr.)
Salal	35.02	6.98
Tanakpur	17.02	5.63
Chamera I	71.53	13.62
Chamera II	54.64	10.97
Uri	82.46	14.99
Dhauliganga	38.90	9.61
Total NHPC	**299.58**	**61.80**

Table 153: Summary of Total Power Purchase Cost for FY19

Particulars	Petitioner's Submission		Approved	
	Units (MUs)	Cost (Rs.Cr.)	Units (MUs)	Cost (Rs.Cr.)
Own Generation	2,264.11	435.43	2,363.36	436.40
Free Power	557.64	146.65	578.80	143.54
NTPC	2,185.29	782.99	1,815.36	635.28
NPCIL	166.11	53.39	191.48	60.63
NHPC	273.02	61.56	299.58	61.80
BBMB & Shared Stations	1,114.78	103.58	1,095.69	92.33
SJVNL & Other Plants*	5,157.23	1,297.50	5,057.77	1,246.92
Solar	94.87	58.13	94.87	57.65
Short Term Purchase	174.64	62.17	-	-
Banking Purchase	1560.00	-	-	-
Grand Total	**13547.70**	**3001.40**	**11,496.90**	**2,734.55**

**includes IPPs*

Merit Order Purchase

7.8.17 As per the monthly demand supply analysis detailed in para 7.7.47, 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.

7.8.18 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.

7.8.19 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 FY19. 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.

7.8.20 The merit order for FY19 has been prepared based on the green energy and status of plant i.e. own generating station, must run stations, power purchase towards renewable power obligations, etc. The merit order for FY19 is summarized in table below; keeping in view the Commission’s policy of 100% clean energy supply in the State:

Table 154: Approved Merit Order for FY19

Sr. No.	Source	Units (MUs)	Cost (Rs. Cr.)	Rate (Rs. Per unit)
	Power Procurement for Supply in State	**10,032**	**2,181.84**	**2.17**
I	**Clean Energy**	**9,685**	**2,106.83**	**2.18**
(A)	**Green (Renewable) Energy**	**1,864**	**533.37**	**2.86**
(i)	SHP own generation	473	109.09	2.31
(ii)	SHP PPAs Preferential Tariff (Excluding on APPC under REC)	1,271	348	2.73
(iii)	Solar			
(a)	NTPC Singrauli	25	20.09	8.05
(b)	SECI	33	18.31	5.50
(c)	Additional Private Solar	37	19.25	5.26

Sr. No.	Source	Units (MUs)	Cost (Rs. Cr.)	Rate (Rs. Per unit)
(iv)	Municipal Solid Waste (MSW)	25	19.38	7.90
(B)	**Green Energy Hydel Sources**	**7,630**	**1,510.88**	**1.98**
(i)	Own generation	1,890	327.31	1.73
(ii)	BBMB and other shared projects			-
a)	BBMB	595	46.38	0.78
b)	Shanan & Shanan Ext.	50	1.14	0.23
c)	Yamuna & Khara	450	44.81	1.00
(iii)	Baspa –IPP	1,050	145.51	1.39
(iv)	SoR Share NHPC	300	61.80	2.06
(v)	Kashang-HPPCL	170	37.40	2.20
(vi)	NJPS equity share	1,477	368.79	2.50
(vii)	On APPC under REC framework	354	86.02	2.43
(viii)	GoHP Free Power in Projects directly connected to HPSEBL	579	143.54	2.48
(ix)	SoR Share NJPS	166	41.41	2.50
(x)	SoR Share Rampur	53	19.55	3.69
(xi)	Equity Power Rampur	492	181.20	3.68
(xii)	Unallocated share	-	-	-
(C)	**Clean Energy Nuclear**	**191**	**60.63**	**3.17**
	NPCIL	191	60.63	3.17
II	**Conventional Thermal Sources**	**347**	**75.01**	**2.16**
(i)	Rihand-2 STPS	220	46.03	2.09
(ii)	Rihand-1 STPS	130	29.77	2.28
	Total (I + II)	**10,032**	**2,175.07**	**2.17**
	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	**1,468**	**560.26**	**3.82**
A	**Contingent Purchase if required in case of shortfall in availability or increase in demand**	**200**	**51.96**	**2.60**
(a)	**Green Energy Hydel sources**	**-**	**-**	-
(b)	**Conventional Thermal Sources**	**200**	**51.96**	**2.61**
(i)	Rihand-1 STPS	98	22.41	2.28
(ii)	Rihand-3 Units-1,2	102	29.76	2.92
B	**Surpluses for Trading due to PPA obligation**	**1,265**	**507.30**	**4.01**
(a)	**Green energy Hydel**	**-**	**-**	-
(b)	**Conventional Thermal Sources**	**1,265**	**507.30**	**4.01**
(i)	Rihand-3 Units-1,2	118	34.58	2.92

Sr. No.	Source	Units (MUs)	Cost (Rs. Cr.)	Rate (Rs. Per unit)
(ii)	Singrauli Bundled	102	35.57	3.50
(iii)	Kahalgaon – II	139	51.07	3.67
(iv)	Unchahar-II	76	29.34	3.86
(v)	Unchahar-I	45	17.65	3.96
(vi)	Kol dam HEP	454	184.27	4.06
(vii)	Unchahar-III	50	21.00	4.21
(viii)	Unchahar IV	128	56.54	4.42
(ix)	Dadri (G)	76	34.94	4.61
(x)	Anta (G)	38	18.52	4.86
(xi)	Auriya (G)	40	23.82	5.98
	Grand Total	**11,497**	**2,734.55**	**2.38**

7.8.21 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 FY19, HPSEBL has sufficient green power to meet the requirement for supply within the State.

7.8.22 Further, it is observed from the merit order table above that the average power purchase cost for meeting the demand in the State during FY19 is Rs. 2.17/kWh.

7.8.23 Since the Petitioner 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

7.8.24 The Petitioner has been undertaking banking agreements as a matter of routine and without any commercial prudence with other state utilities for utilizing its surplus during summer and meeting its deficit during winter months. But it is important to note that the power banked by the Petitioner during summer is returned after a lag of four-six months which has carrying cost implications on the Petitioner. Also, it is important for the utility to understand that the cost of the power available for banking is at the marginal cost of power as per the merit order. In addition, since banking involves two inter-state transfer transactions, licensee has to pay transmission charges, including losses and system operation charges twice, as against once if direct purchase is involved. The Commission in its previous tariff orders had indicated the same to the Petitioner and had instructed to be cautious in its power purchase planning. In the APR Order for FY14, the Commission had stated:

"6.92 Moreover, the cost of power procured during summer months to be (forward) banked should be carefully strategized. Banking occurs when surplus available is lent to other entities for return during deficit times and such surplus comes at a cost. Such cost is the most expensive power at the margin in the merit order. ***The utility ought to avoid banking of costly power that is procured from thermal sources in summer, relying instead on buying economical power that is available for purchase during winter months.*** *For instance, the utility need not buy power at an average rate of above Rs 4.00/unit during summer months from CSGS, only to bank it with other states with the assurance of getting back the same quantum of power during winter months. Instead, the utility can find alternate buyers for this quantum of power during summer months when other states in the Northern Region face a power deficit. Once winter approaches, the utility should plan its power purchase in such a way that it is able to procure the same quantum of power for meeting its own demand at a lower rate, say, Rs 3.50 to Rs 4.00/unit.* ***However, if banking is considered prudent then the Petitioner should buy extra Free Power from GoHP, if available at cheaper rates or from any other cheaper source.****"*

7.8.25 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

7.8.26 The cost of the surplus power is the most expensive which ranges from Rs. 2.92/kWh to Rs. 5.98/kWh during FY19. 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.

7.8.27 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.

7.8.28 Even though with the re-commissioning of Bhabha station and expected commissioning of Uhl III plants in 2018, the Commission has considered a contingency quantum of 200 MU in FY19 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.

7.8.29 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 shall be considered to be disposed-off by way of inter-state sale without impacting the overall ARR of the Petitioner. In line with the Commission's view expressed above, HPSEBL should be prudent in purchase of energy and its banking arrangements.

7.8.30 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 FY19

Power Purchase Summary	Units (MUs)	Cost (Rs. Cr.)	Per Unit (Rs. per unit)
Total own generation	2,363	436	1.85
Total free Power	579	144	2.48
Total NTPC	551	128	2.16
Total NPCIL	191	61	3.17
Total NHPC	300	62	2.06
Total BBMB & other Shared Stations	1,096	92	0.84
Total SJVNL & Others	2,188	611	2.79
IPPs & Others*	2,870	636	2.22
Total Solar	95	58	6.08
Total Power purchase for meeting State demand (including contingency reserve)	**10,232**	**2,227**	**2.18**

Power Purchase Summary	Units (MUs)	Cost (Rs. Cr.)	Per Unit (Rs. per unit)
Total Surpluses Power Purchase for Trading due to PPA obligation	1,265	507	4.01
Grand Total Power Purchase	**11,497**	**2,735**	**2.38**

**includes Small HEPs, Baspa-II, Kashang, MSW Projects*

7.9 PGCIL & HPPTCL Charges

7.9.1 It is observed that the actual PGCIL charges of HPSEBL for FY17 has been Rs. 229.07 Cr. The Petitioner has also submitted actual PGCIL charges of Rs. 183.61 Cr. for 10 months of FY18 (after netting off amount recoverable from PTC on account of PGCIL charges).

7.9.2 For approving the PGCIL charges for FY19, the 10 months PGCIL charges for FY18 has been pro-rated for 12 months and an escalation of 10% has been considered for projecting the PGCIL charges for FY19.

7.9.3 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.

7.9.4 HPPTCL charges for FY19 have been considered as approved by the Commission in the Mid-Term Performance Review (MTR) 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 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 FY19 are summarized in table below:

Table 156: Approved PGCIL & HPPTCL Charges for FY19 (Rs. Cr.)

Particulars	Petitioner Submission	Now Approved
PGCIL Charges	215.94	242.36
HPPTCL Charges	3.46	6.04

7.10 Other Power Purchase Related Charges

7.10.1 The SLDC charges are considered as approved in the Mid-Term Performance Review Order of HPSLDC for FY19.

7.10.2 With respect to short-term open access charges, the Petitioner has claimed Rs. 77.78 Cr. for FY19. Based on the actual short-term open access charges of Rs. 57.56 Cr. submitted by the HPSEBL for FY17, an annual escalation of 10% has been considered for approving the short-term open access charges for FY19. The same would be trued up along with other power purchase cost, based on actual amount paid for FY19. The summary of SLDC charges and open access charges are provided in table below:

Table 157: Approved SLDC & Short-term Open Access Charges for FY19 (Rs. Cr.)

Particulars	Petitioner Submission	Now Approved
SLDC Charges	2.12	2.12
Open Access charges	77.78	69.65
Total	**79.90**	**71.77**

7.11 Operation and Maintenance (O&M) Expenses

7.11.1 In the APR Petition, HPSEBL has claimed higher employee cost, R&M expense and A&G expense for FY19 as against the approved amount for the respective year in the MYT Order for the 3rd Control Period. The Petitioner was asked to submit the break-up of O&M expenses for six months of FY18 and clarification on higher claim against various heads.

Table 158: Actual O&M expense for FY17 and 6 months of FY18 as submitted by Petitioner (Rs. Cr.)

Particulars	FY17	FY18 (6 months)
Employee Expense	1611.21	799.07
R&M expense	70.25	15.13
A&G expense	51.04	16.40
Total	**1732.50**	**830.60**

7.11.2 Under employee expenses, the Commission has observed that the total employee expenses of Rs. 1698.69 Cr. already approved in the MTR Order, after adjusting for return on GoHP equity share and pension contributions from other departments as required under 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 is adequate to support the employee expenses of FY19. Considering the claim of the Petitioner towards employee expense for FY19 (excluding impact of interim relief on account of 7th Pay Commission revision), the approved employee expense for FY19 is higher by approx. 100 Cr.

7.11.3 It was also observed that the Petitioner has claimed an additional amount of Rs. 672.18 Cr. (includes additional liability of Rs. 294.63 on account of 7th Pay Commission and arrears of Rs. 377.54 against previous years). In a clarification, it was observed that the Petitioner has erroneously computed the overall impact of interim relief allowed by the GoHP on the total employee cost leading to a higher claim. Therefore, the Commission has independently computed the impact of interim relief as per Government Orders dated 02.08.2016, 04.08.2017, 09.02.2018 and the budgetary provision made in FY19 and allowed an additional amount of Rs. 200 Cr. provisionally towards arrears arising from impact of 7th Pay Commission revision of previous years which has been dealt separately as an adjustment in the ARR as described in Para 7.17.2 b. This is in addition to the higher employee expenses being approved to cater to the additional liability on account of 7th Pay Commission in FY19. This amount shall be trued-up based on the actual at the time of truing-up. Therefore, the Commission has approved the employee expenses as given in the table below:

Table 159: Revised Employee Cost Approved for FY19 (Rs. Cr.)

S. No.	Particulars	Petitioner's Submission	Approved
A	**Employee Cost**	**1047.60**	**1226.64**
B	**Pension and Terminal benefits**	**580.85**	**596.28**
	Less:		
	Annual Share of State Government (Return on GoHP Equity approved for Generation and Distribution)	-	*(47.50)*
	Pension contribution of employee on deputation	-	*(2.00)*
	Pension contribution of generation employees	-	*(9.71)*
	Pension contribution of BVPCL, Projects and S&I employees	-	*(3.72)*
C	**Gross Employee Cost (A+B)**	**1628.45**	**1759.99**
D	Less: Capitalization	36.85	61.30
E	**Net Employee Cost approved (C-D)**	**1591.60**	**1698.69**

** the additional amount of Rs. 1698.69 Cr. on net employee cost being approved is adequate to support the additional liability on account of 7th Pay Commission in FY19*

7.11.4 The Petitioner has submitted that the R&M expense for HPSEBL has been increasing year-on-year with Rs.70.25 Cr. in FY17 which is 84.24% higher than the R&M expense of FY16. The same increase in R&M expense is expected in the subsequent years due to maintenance cost of IT system & other R&M works.

7.11.5 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 which would 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. The Petitioner has submitted that this expenditure is now being met under the R&M of the IT system.

7.11.6 It is observed as part of truing-up exercise for FY15 and FY16 that the actual R&M expense claimed by the Petitioner is lower than the approved R&M expenditure as shown in the table below.

Table 160: Excess amount allowed in previous years on account of R&M expenses (Rs. Cr.)

Particulars	Actual (A)	Approved (B)	Surplus (B-A)
FY 2014-15	35.53	43.51	7.98
FY 2015-16	28.50	36.45	7.95
Excess amount approved in previous years (Rs. Cr.)			**15.93**

7.11.7 Therefore, a surplus amount of approx. Rs. 16 Cr. is available towards R&M expenditure to the Petitioner which can be utilized towards higher R&M expenditure on account of higher IT related expenditure during FY17 and FY18. For FY19, the Commission has provisionally allowed an additional amount of Rs. 20 Cr. towards expenditure on IT systems. This provisional amount has been approved for any shortfall in the approved R&M expense and shall be trued-up based on actual expenditure under R&M expense for the respective year.

7.11.8 In case of A&G expense, the Petitioner has claimed additional amount on account of connectivity charges, repairs of vehicles, etc. It is observed that these expenses are already being allowed as part of R&M expense are also being booked by the Petitioner under R&M account heads. Therefore, no additional provisioning has been considered towards these expenses under A&G and the Commission has retained the A&G expense for FY19 as approved in the MYT Order.

7.11.9 The Petitioner has claimed an additional amount of Rs. 15 Cr. towards safety measures for FY19 mentioning additional requirement of safety equipment based on a revised review undertaken. It is observed that the Commission had already approved an amount of Rs. 10 Cr. towards safety equipment in the ARR for FY18 against with no update regarding procurement of safety equipment has been provided by HPSEBL. The Commission directs the Petitioner to prepare a detailed proposal in this regard and provide relevant details along with cost estimates for approval of the Commission. In absence of adequate details, no additional amount has been admitted by the Commission in ARR of FY19.

7.11.10 The details of the O&M expenditure approved by the Commission for FY19 is detailed below:

Table 161: O&M Expense Approved for FY19 (Rs. Cr.)

Particulars	Approved in MYT	Petitioner's Submission	Approved Now
Employee Cost	1,714.12	1,591.60	1,698.69
R&M Expense	65.09	117.20	85.09
A&G Expense	50.60	78.44	50.60
Additional amount for Safety measures	1.00	15.00	-
Total O&M Expense	**1,829.80**	**1,802.24**	**1,834.38**

7.12 Depreciation

7.12.1 Depreciation for each year of the 3rd Control Period in the MYT Order dated 12th June, 2014 has been approved by the Commission. Also, in the MTR Order, 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.

7.12.2 Therefore, the Commission approves the depreciation for FY19 as approved in the MYT Order for the 3rd Control Period.

7.13 Working Capital Requirement

7.13.1 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.

7.13.2 The previously approved working capital requirement for FY19 is therefore revised in line with the revision of uncontrollable parameters approved by the Commission in this Order and is given below:

Table 162: Working Capital Requirement Approved for FY19 (Rs. Cr.)

Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved
O&M Expense for one month	152.57	148.94	152.86
Receivables equivalent to 2 months average billing	884.40	846.88	857.89
Maintenance Spares 40% of the R&M expense for one month	2.17	3.91	2.17
Less: Consumer Security Deposit	386.38	354.27	368.55
Less: One Month Power Purchase	279.59	250.11	254.56
Working Capital Requirement	**373.16**	**395.35**	**389.82**

7.14 Interest and Financing Charges

7.14.1 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. In the MTR Order, 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.

7.14.2 The Commission has observed that the Petitioner has claimed the interest on existing capex loans approved for FY19 by the Commission in the MYT Order along with the interest required to be paid on UDAY bonds. As per UDAY MoU, the interest being borne on UDAY bonds is after refinancing of outstanding debt and not in addition to approved interest and financing charges on capital loans as already approved by the Commission. Therefore, the claim of the Petitioner is erroneous and shall result in double counting of the interest on capital loans.

7.14.3 In view to compute the impact of restructuring of the loans under the UDAY scheme, the Commission had sought details of various capital and short-term loans restructured as part of the UDAY scheme from the Petitioner. The details of loans restructured under the UDAY scheme were inadequate and could not be verified in absence of audited accounts for FY17 and FY18 when the bonds were issued and loans were actually repaid. In the absence of such details, the Commission has decided to take up the matter at the time of truing-up of controllable parameters at the end of the Third Control Period and retain the interest on capex loans for FY19 as approved in the MYT Order.

7.14.4 The interest on working capital requirement and consumer security deposit has been revised for FY19. 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 163: Approved Interest on Working Capital for FY19 (Rs. Cr.)

Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved
O&M Expense for one month	152.57	148.94	152.86
Receivables equivalent to 2 months average billing	884.40	846.88	857.89
Maintenance Spares 40% of the R&M expense for one month	2.17	3.91	2.17

Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved
Less: Consumer Security Deposit	386.38	354.27	368.55
Less: One Month Power Purchase	279.59	250.11	254.56
Working Capital Requirement	**373.16**	**395.35**	**389.82**
Rate of Interest on Working Capital	13.27%	12.55%	12.79%
Interest on Working Capital	**49.51**	**49.62**	**49.85**

7.14.5 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 FY19. Further, the revised interest on consumer security deposit is determined as provided in table below:

Table 164: Approved Interest on Consumer Contribution for FY19 (Rs. Cr.)

Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved
Opening consumer security deposit	364.16	-	349.70
Additions	22.23	-	18.84
Closing consumer security deposit	386.38	-	368.55
Rate of Interest for Consumer Security Deposit	9.00%	-	6.36%
Interest on Consumer security deposit	**33.77**	**23.76**	**22.84**

7.14.6 Based on the details of interest and financing charges discussed above, the revised approved Interest and Finance charges for FY19 are as below:

Table 165: Revised Interest and Finance Charges for FY19 (Rs. Cr.)

Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved
Interest on Long Term Loans	219.25	189.07	219.25
Interest on UDAY bonds	-	227.76	-
Interest on Working Capital	49.51	49.62	49.85
Interest on Consumer Deposit	33.77	23.76	22.84
Total	**266.97**	**490.21**	**291.93**

7.15 Return on Equity

7.15.1 Based on the RoE approved for FY19 in the MYT Order for the Third Control Period, the Commission has considered the same RoE as no revision has been envisaged for capitalization under Mid-term Performance Review.

7.16 **Non-tariff and Other Income**

7.16.1 Based on the actual non-tariff income considered as part of truing-up of uncontrollable parameters for FY16, actual non-tariff income for FY17 and six months of FY18 as submitted by the Petitioner, the non-tariff income for FY19 has been revised.

7.16.2 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 instead of Non-Tariff Income. It is to be noted that such an adjustment shall have no impact on the overall approved ARR of FY19 of HPSEBL.

7.16.3 The revised non-tariff income after adjusting for the above mentioned components is as below:

Table 166: Revised Approved Non-Tariff Income for FY19 (Rs. Cr.)

Particulars	Petitioner Submission	Now Approved
Total Non-Tariff Income	**224.48**	**171.83**

7.17 **Aggregate Revenue Requirement**

7.17.1 The table given as follows provides a summary view of the Aggregate Revenue Requirement of Distribution business as approved by the Commission for FY19:

Table 167: Aggregate Revenue Requirement for FY19 (Rs. Cr.)

Particulars	MYT Approved	Petitioner Submission	Revised ARR
Power Purchase Expenses for Supply in the State	**3,355.08**	**3,086.73**	**3,054.72**
Cost of electricity purchase including own generation	*2,901.05*	*2,796.66*	*2,734.55*
Inter-State Charges			
Power Grid Charges	*365.45*	*213.43*	*242.36*
Open Access Charges	*77.78*	*61.80*	*69.65*
Intra-State Charges			
HPPTCL Charges	*3.46*	*5.95*	*6.04*
SLDC Charges	*7.34*	*8.89*	*2.12*
Operation & Maintenance Costs	**1,829.80**	**2,459.41***	**1,834.38**

Particulars	MYT Approved	Petitioner Submission	Revised ARR
Employee Cost	*1,714.12*	*2,263.77**	*1,698.69*
R&M Cost	*65.09*	*117.20*	*85.09*
A&G Cost	*50.60*	*78.44*	*50.60*
Additional amount for Safety measures	*1.00*	*15.00*	*-*
Interest & Financing Charges	302.53	490.21	291.93
Depreciation	107.91	212.28	107.91
Return on Equity	30.24	84.00	30.24
Provision for Bad & Doubtful Debtors	-	0.10	-
Surplus Power Purchase as per PPA Obligation	325.73	-	-
Less: Non-Tariff & Other Income	245.77	224.48	171.83
Aggregate Revenue Requirement	**5,705.52**	**6,337.20**	**5,147.35**

** includes an additional amount of Rs. 672.18 Cr. (additional liability of Rs. 294.63 on account of 7th Pay Commission and arrears of Rs. 377.54 against previous years)*

7.17.2 In addition to the Distribution ARR of Rs. 5,147.35 Cr. approved for FY19, the Commission has considered the following adjustments in the ARR:

a. Impact of Final True-up of FY16

The Commission has undertaken final true-up of uncontrollable parameters for FY16 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. 31.03 Cr. After providing for carrying cost as per the provisions of the MYT Regulations 2011, a cumulative revenue gap of Rs. 41.92 Cr. as calculated in Chapter 6 has been adjusted in the ARR for FY19.

b. Provisional amount towards arrears of 7th Pay Commission

As discussed in Para 7.11.3, the Commission has independently computed the impact of interim relief as per Government Orders dated 02.08.2016, 04.08.2017, 09.02.2018 and the budgetary provision made in FY19 and provisionally allowed an amount of Rs. 200 Cr. towards arrears arising from impact of 7th Pay Commission revision of previous years the details of which are provided in the table below. This amount shall be trued-up based on the actual at the time of truing-up.

Table 168: Provisional amount towards arrears from impact of 7th Pay Commission revision (Rs. Cr.)

S.No.	Particulars	Petitioner's Submission	Approved
A	Additional Liability on account of 7th Pay Commission	294.63	-*
B	Arrears of Previous Years (Impact of 7th Pay Commission)	377.54	200.00

S.No.	Particulars	Petitioner's Submission	Approved
C	**Provisional amount towards arrears of 7th Pay Commission**	**672.18**	**200.00**

**the additional liability on account of 7th Pay Commission is included as a part of employee expenses approved for FY19*

7.17.3 Based on the above adjustments, the revenue requirement is summarized in table below:

Table 169: Total Revenue Requirement for FY19 including Past Adjustments (Rs. Cr.)

Particulars	Amount Approved
Annual Revenue Requirement for FY19	**5,147.35**
Add:	
Impact of Final Truing-up for FY16	41.92
Provisional amount towards arrears of 7th Pay Commission	200.00
Total Revenue Requirement for FY18	**5,389.26**

7.18 Allocation of Distribution ARR into Wheeling and Retail Supply

7.18.1 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.

7.18.2 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.

7.18.3 The revised allocation statement approved by the Commission in the MYT Order for Third Control Period is as under:

Table 170: 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%

Particulars	Wheeling	Retail Supply
Return on Equity	100%	0%
Non-tariff Income	0%	100%
Wheeling Charges	100%	0%

7.18.4 The summary of Wheeling and Retail Supply ARR for the Control Period is shown as follows:

Table 171: Approved ARR of Wheeling Business for FY19 (Rs. Cr.)

Particulars	Amount
Operation & Maintenance Costs	1,296.02
Interest & Financing Charges	277.33
Depreciation	102.51
Return on Equity	30.24
Aggregate Revenue Requirement	**1,706.11**

Table 172: Approved ARR of Retail Supply Business for FY19 (Rs. Cr.)

Particulars	Amount
Power Purchase Expenses for Supply in the State	3,054.72
Operation & Maintenance Costs	538.36
Interest & Financing Charges	14.60
Depreciation	5.40
Less: Non-Tariff & Other Income	171.83
Aggregate Revenue Requirement	**3,441.24**

8 Tariff Philosophy and Design

8.1 Tariff Principles

8.1.1 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.

8.1.2 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 FY19.

8.1.3 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

8.1.4 Accordingly sales at various voltage levels have been worked out and are presented in the table below:

Table 173: Sales at different Voltage Levels for FY19 (MUs)

Category	FY19			
	Total Sales	EHT (>=66 kV)	HT (>=11 kV & <66kV)	LT (< 11 kV)
Domestic	2,137	-	-	2,137
NDNCS	140	-	42	98
Commercial (CS)	587	-	88	499
Small & Medium Industrial Power (SMS)	229	-	-	229
Large Power Supply (LS)	4,618	1,673	2,946	-
Irrigation and Drinking Water Pumping (IDWP)	712	-	192	519
Street Lighting	13	-	-	13
Bulk supply	172	-	120	52
Temporary Supply	30	-	-	30
Total (within State)	**8,638**	**1,673**	**3,388**	**3,577**

8.1.5 The cost to serve at different voltage level as calculated on this basis is indicated in the following table:

Table 174: Cost to Serve for FY19

Particulars	Generation bus bar	>= 66 kV	>=11 kV & <66kV	< 11 kV	Total
Energy Input (MU)	9,815.8	9,815.8	8,143.1	4,754.7	
Loss (MU)		-	-	-	-
Sales at respective level (MU)		1,672.6	3,388.4	3,576.9	8,637.9
Cost at respective level (Rs. Cr.)	2,495.2	690.6	672.3	669.7	4,527.9
Cost Allocation (Rs. Per unit)					
Power Purchase Cost		2.80	2.61	1.86	
Cost of Losses		0.14	0.20	0.41	
Transmission & Open Access Charges		0.37	0.37	0.37	
Distribution Cost (> 66kV)		0.92	0.80	0.80	
Distribution Cost (> 11 kV)			1.08	0.97	
Distribution Cost (< 11 kV)				1.87	
Cost of Serve Model		**4.23**	**5.06**	**6.27**	**5.31**

**Rs 5.31 per unit is the average cost of supply without considering past gap and carrying cost*

8.1.6 The above cost does not include the impact of the expenses pertaining to the past periods which have been approved at Rs. 41.92 Cr. on account of final truing-up of FY16 along with carrying cost and Rs. 200 Cr. on account of arrears of 7th Pay Commission revision 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 28 paise per unit. The total average cost of supply including these provisions adds up to Rs. 5.59 per unit.

8.1.7 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.

8.1.8 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 last year of the Third Control Period i.e. FY19.

8.1.9 The average cost of supply computed for FY19 is provided in table below:

Table 175: Average Cost of Supply for FY 2018-19 based on Approved ARR

Particulars	FY19
Approved Aggregate Revenue Requirement (Rs. Cr.)	5,147.35
Less: Sale of Surplus Power (Rs. Cr.)	559.48
Net Aggregate Revenue Requirement (Rs. Cr.)	**4,587.87**
Projected Sales (MU)	8,637.87
Average Cost of Supply (Rs./unit)	**5.31**

8.1.10 The average cost of supply for FY 2018-19 works out to be Rs. 5.31 per unit which does not include the prior period and other adjustments as detailed in Para 8.1.6. Taking into account the past gap, the average cost of supply comes out to be Rs. 5.59 per unit.

Revenue from Existing Tariff

8.1.11 The Commission has computed the revenue from various categories as per the sales approved for FY19 and the existing applicable tariff in the respective categories. The summary of the estimated revenue for the FY19 is summarized in table below:

Table 176: Revenue for FY19 based on Existing Tariff

Consumer Category	Sales (MUs)	Revenue (Rs. Cr.)
Industrial Power Supply	**4,848**	**2,741.81**
Small Industries	172	93.96
Medium Industries	57	32.46
Large Industries	4,618	2,615.39
Domestic	2,137	969.38
Irrigation and Drinking Water	712	403.67
Commercial	587	348.64
Bulk Supply	172	109.33
Non Domestic Non Commercial	140	82.46
Public Lighting	13	6.55
Temporary	30	29.93
Total	**8,638**	**4,691.78**

Revenue from Sale of Power Outside State

8.1.12 The Commission in Chapter 7 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.

8.1.13 The Commission has also allowed for contingency buffer of 200 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.

8.1.14 The projected revenue from sale of power outside State is tabulated as follows:

Table 177: Revenue from Sale of Power outside the State for FY19

Parameters	Units (MUs)	Revenue (Rs. Cr.)	Cost (Paisa per unit)
Sale of Contingent Purchase	200	52.18	2.61
Sale of Surpluses for Trading due to PPA obligation	1,265	507.30	4.01
Total	**1,465**	**559.48**	**3.82**

Revenue Surplus/Gap at Existing Tariff for FY19

8.1.15 Taking into account the revenue from sale within state at existing tariffs, revenue estimated from sale of power outside state for FY19 is as follows:

Table 178: Revenue Surplus/ Gap for FY19 based on Existing Tariff (Rs. Cr.)

Parameters	FY18
Approved Annual Revenue Requirement	**5,147.35**
Add:	
Final Truing up of uncontrollable parameters of FY16	41.92
Arrears of 7th Pay Commission Revision	200.00
Total Revenue Requirement for FY19	**5,389.26**
Less: Revenue from Sale of Power within State at Tariff of FY18	4,691.78
Less: Revenue from sale of Power Outside State	559.48
Revenue Surplus / (Gap)	**(138.00)**

8.1.16 Considering the revenue from existing tariff, a revenue gap of Rs. 138.00 Cr. is observed for FY19. This revenue gap also takes into account the adjustments on account of revenue gap for final true-up of FY16 along with carrying cost and additional impact of 7th Pay Commission revision.

8.1.17 Accordingly, the Commission in this Tariff Order hereby increases tariff to recover the gap of Rs. 138.00 and so as to ensure that the entire revenue requirement of the utility is fulfilled. Additionally, the Commission has rationalized the tariff of few categories to align the same with average cost of supply as described below. The category-wise tariff approved for FY19 is detailed as follows:

8.2 Changes in Tariff Structure

8.2.1 In view of the revenue gap identified above and the submission of the Petitioner and other stakeholders with respect to changes in the tariff applicability and tariff structure, the proposed and approved tariff related changes are discussed as below:

Change in nomenclature of Consumer Service Charges to Fixed Charges

8.2.2 The Commission has renamed the consumer service charges to fixed charges. While the applicability of this charge shall remain the same, renaming has been done as these charges are meant to recover the fixed component of the Petitioner's expenditure.

Increase in Fixed Charges

8.2.3 Tariff Policy encourages charging of two-part tariff from the consumers by way of fixed and variable charge. The fixed charge are towards recovery of fixed expenditure of the distribution licensee which is payable irrespective of the actual usage of electricity by the consumers. Therefore, the Commission allows recovery of fixed charges (earlier consumer service charges in case of LT consumers) from various categories of consumers. It is observed that the existing fixed charges in case of LT consumers are low. In order to ensure that the utility is able to cater to reliable and quality supply, it is important to ensure that the Petitioner is ensured stable recovery of its fixed charges.

8.2.4 Accordingly, the Commission has increased the fixed charges for various categories as given below:

i. For domestic consumers and agriculture by Rs. 10/consumer/month

ii. for NDNC, Commercial (0-20 kVA), small industries and street lighting by Rs. 20/consumer/month

Increase in Night Time Concession

8.2.5 In view to encourage consumption of electricity during night hours by industrial consumers, the Commission has increased the night time concession for EHT and HT-2 industrial consumers as follows:

i. 40 p/kVAh for the month of June, July and August has been increased to 60 p/kVAh

ii. 20 p/kVAh for other months has been increased to 40 p/kVAh

Increase in Energy Charges

Domestic Category

8.2.6 As per the existing tariff, it is observed that the recovery from domestic consumers was below the average cost of supply resulting in higher requirement of cross-subsidy from the industrial and other HT consumers. Therefore, the Commission has increased the energy charges for domestic consumers which shall ensure better recovery of average cost of supply and reduce the requirement for tariff increase for HT consumers. Further, it is observed that the Government of HP has announced an amount of Rs. 475 Cr. towards subsidy for domestic and agricultural consumers in the budget announcement for FY 2018-19. The proposed increase in energy charge could be easily offset by the increased quantum of subsidy available from the Government of HP. Therefore the increased energy charge would not have any impact on the domestic consumers.

NDNC, Commercial, Industry & IDWPS Category

8.2.7 Further, the Commission has rationalized the tariff for the sub-categories within NDNC, Commercial and Irrigation and Drinking Water (LT and HT) by allowing for a marginal increase in energy charges for the respective categories. This has been done in view to align the recovery from each slab with the average cost of supply. The changes in the tariff structure for these categories is as given below:

i. The Commission has increased the energy charges for NDNC and Commercial by 5 p/unit.

ii. The Commission has increased the energy charges by 5 p/unit and 10 p/unit for small industries in 0-20 kVA slab and 20-50 kVA slab respectively.

iii. For medium and large industries, the Commission has approved a nominal increase in energy charges of 10 p/unit respectively.

iv. The Commission has increased the energy charges for Irrigation and Drinking Water (LT and HT) by 15 p/unit and 10 p/unit for EHT. However, for farmers using electricity for irrigation purpose (at LT level), the effective energy charge shall be 75 paisa per unit in line with the budget announcement by Government of HP for FY 2018-19.

Pre-paid tariff for NDNC

8.2.8 The Commission has reviewed the proposal of the Petitioner to introduce optional pre-paid metering for domestic, NDNC, Commercial, Temporary & street lighting. The Commission had requested the Petitioner to submit the preparedness for implementation of prepaid metering and the detailed proposal for implementation of prepaid meters in government offices in the initial phase. In response to the Commission's query, the Petitioner during the technical validation session has additionally submitted,

"*HPSEBL submits that as per National Tariff Policy and UDAY Memorandum of Understanding (MOU) among Ministry of Power and Government of Himachal Pradesh and Himachal Pradesh State Electricity Board, HPSEBL has to install prepaid meters. The same will be helpful to reduce the AT&C losses and to achieve the UDAY target of 12.75% by FY19. HPSEBL has placed the proposal for approval of the Hon'ble Commission so that HPSEBL may start with the additional processes for procuring/ installation of these meters*."

8.2.9 In the absence of a detailed implementation proposal for pre-paid metering and the preparedness of the Petitioner for replacing the meters in such large quantum, the Commission in this order has granted an in-principle approval for pre-paid metering for consumers under NDNC category. However, the same shall be optional at this point and the applicable tariff for such consumers has been determined as provided in Table 180.

Rebate on energy charge for excess consumption for existing industrial consumers and energy charges for new industries

8.2.10 The Petitioner in its tariff petition had submitted rebate of 5% on energy charge for excess consumption of more than their average of last 2 years, provided there is no increase in Contract Demand and Connected Load for industrial consumers. In its revised submission, the Petitioner amended the original proposal and proposed 10% discount on the notified energy charges of relevant year for additional power consumption beyond the level of FY 2017-18 for existing industrial consumers. In case of new industrial consumers coming into production after 01.04.2018, the Petitioner has proposed that the energy charges may be fixed at 10% lower than the notified tariff for the respective categories for industries for a period of three years beginning with FY 2018-19.

8.2.11 The Commission has reviewed the proposal of the Petitioner and in line with the budget announcement for FY19, the Commission finds merit in providing incentive in case of higher consumption by the existing industrial consumers. While the impact of such a change may not be computed in financial terms, the Commission approves the proposal of the Petitioner to allow a rebate of 10% discount on energy charges for additional power consumption beyond the level of FY 2017-18 for existing industrial units.

8.2.12 For new industrial consumers coming into production after 01.04.2018, the Commission finds merit in the proposal of the Petitioner and has approved energy charges at 10% lower than the notified tariff for the respective categories for a period of three years beginning with FY 2018-19.

Additional Demand Charge for Cement Industry

8.2.13 The Commission has studied the Petitioner's submission along with the submissions of the stakeholders during the public hearing and has decided not to impose any additional demand charges for cement industry.

Late Payment Surcharge

8.2.14 The Commission has observed that the Petitioner has requested increase in Late Payment Surcharge (LPS) from 2% to 2.5% in the tariff petition. During the technical validation session, the Commission had directed the Petitioner to submit the rationale for this proposal. However, the Petitioner has not been able to justify the reason for increase in LPS. Further, the Commission is of the view that the current level of 2% LPS is adequate for discouraging the consumers to pay within the time frame and therefore, has retained the Late Payment Surcharge at 2%.

Separate category for Electric Vehicles

8.2.15 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. In this Tariff Order, the Commission is allowing the same tariff for Electric Charging Stations for Electric Vehicles.

Applicability of Domestic Tariff for Bed-and-breakfast

8.2.16 The Commission has received a proposal from Kullu Manli Paryatan Vikas Mandal of including Incredible India Bed & Breakfast / Home stay establishments, as classified by the GoI under domestic tariff. The objector has submitted that while the State Home Stay Scheme is availing tariff under domestic supply category, GoI approved Incredible India Bed & Breakfast/ home stay are being charged commercial tariff. As the purpose of both the schemes are similar, the Commission has included Incredible India bed-and-breakfast consumers under the Domestic category in this Order.

Classification of applicable tariff for Bus Stands

8.2.17 The Commission has in its letter dated 04.05.2018 has provided clarification with respect to the classification of bus stands. In this regard, it is clarified that the applicability of a tariff category to a Bus-Stand has to be determined on a case-to-case basis. The bus stands, where there is only a single point connection for the whole complex which is further distributed to other amenities (establishments) within the bus-stand premises and not for resale to other consumers with or without profit, the tariff applicable shall be Bulk Supply category. However, where there are individual connections to the establishments i.e. Cineplex, shops, Govt./Private offices, street light etc., the relevant tariff category shall be applicable.

8.3 Approved Tariff

8.3.1 Apart from the proposed changes in tariff, the Commission has retained the tariff structure as per the MYT Order for the 3rd Control Period. The aforementioned tariff rationalization measures will lead to a minor 3% tariff hike. The existing tariff for each category is as under:

DS: Domestic Supply

8.3.2 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; heritage hotels; Incredible India bed-and-breakfast; "Home Stay Units" in rural areas duly registered with the District Tourism Development Officer; and Offices of the Himachal Pradesh Senior Citizen Forum.

<u>Note:</u>

(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).

8.3.3 The Commission, after a detailed analysis, approves the tariff for Domestic category as under:

Table 179: 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)	Fixed Charges (Rs. /con/month)
0-60 (Lifeline consumers including BPL)	2.85	30.00*	3.30	40.00*
0-125	3.70	50.00	3.90	60.00
126-300	4.60	50.00	4.80	60.00
301 & above	5.10	50.00	5.40#	60.00
Pre-paid meter	4.60	NIL	4.80	NIL

**fixed charge for tribal and difficult area is also fixed at Rs. 40/month irrespective of consumption*

#Heritage hotels, Incredible India bed-and-breakfast, homestay units in rural areas are to be charged under domestic category as per the HP Tourism Policy with energy charges for such consumers to be levied at 30% higher than the net energy charges payable (net off subsidy) by the consumers in the respective slab

8.3.4 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.

8.3.5 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

8.3.6 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 vehicles; 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'

8.3.7 The Commission has approved a nominal increase in the existing tariff for NDNCS category as shown in the table below:

Table 180: 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)	Fixed Charges (Rs. /con/month)
Up to 20kVA	4.95	100.00	5.00	120.00
Pre-paid meter	-	-	4.90	NIL

Table 181: 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)	Fixed Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)
Above 20kVA	4.65	-	140	4.70	-	140

8.3.8 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

CS: Commercial Supply

8.3.9 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.

8.3.10 The Commission has approved a nominal increase in the existing tariff for the Commercial Supply category as shown in the tables below:

Table 182: 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)	Fixed Charges (Rs. /con/month)
Up to 20kVA	5.05	100.00	5.10	120.00

Table 183: 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)	Fixed Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)
Above 20-100 kVA	4.80	-	110	4.85	-	110
Above 100kVA	4.70	-	170	4.75	-	170

8.3.11 In case of mobile welding sets, the consumer will pay Rs 200 per day, in addition to the energy charges.

8.3.12 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

8.3.13 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.

8.3.14 The Commission has approved a nominal increase in the existing tariff for the SIP category as shown in the tables below:

Table 184: 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	Fixed Charges (Rs. /con/ month)	Demand Charges (Rs./kVA /month)
Up to 20kVA	4.70 (Rs./kWh)	110	-	4.75 (Rs./kWh)	130	-
Above 20kVA - 50kVA	4.50 (Rs/kVAh)	-	100	4.60 (Rs/kVAh)	-	100

8.3.15 For existing industrial consumers, a rebate of 10% on energy charges shall be applicable for additional power consumption beyond the level of FY 2017-18.

8.3.16 For new industries coming into production after 01.04.2018 the energy charges shall be 10% lower than the approved energy charges for the respective category for a period of 3 years.

8.3.17 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

8.3.18 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.

8.3.19 The Commission, after a detailed analysis, has approved a nominal increase in the tariff for the MIP category as shown in the tables below:

Table 185: 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)	Fixed Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)
Above 50kVA-100kVA	4.50	-	120	4.60	-	120

8.3.20 For existing industrial consumers, a rebate of 10% on energy charges shall be applicable for additional power consumption beyond the level of FY 2017-18.

8.3.21 For new industries coming into production after 01.04.2018 the energy charges shall be 10% lower than the approved energy charges for the respective category for a period of 3 years.

8.3.22 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

8.3.23 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".

8.3.24 The Commission, after a detailed analysis, has approved a nominal increase in the existing tariff for the Large Industrial Power Supply category as shown in the tables below:

Table 186: 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)	Fixed Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)
EHT	4.10	-	425.00	4.20	-	425.00
HT-1 (up to 1 MVA)	4.50	-	250.00	4.60	-	250.00
HT-2 (More than 1 MVA)	4.20	-	400.00	4.30	-	400.00

8.3.25 For existing industrial consumers, a rebate of 10% on energy charges shall be applicable for additional power consumption beyond the level of FY 2017-18.

8.3.26 For new industries coming into production after 01.04.2018 the energy charges shall be 10% lower than the approved energy charges for the respective category for a period of 3 years.

8.3.27 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

BS: Bulk Supply

8.3.28 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, Bus Stands with single point connection, 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.

8.3.29 The Commission has retained the existing tariff for the Bulk Supply category as shown in the tables below:

Table 187: 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)	Fixed Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)
LT	5.00	-	250.00	5.00	-	250.00

Slab	Existing			Approved		
	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/ mth)	Energy Charges (Rs/kVAh)	Fixed Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)
HT	4.50	-	350.00	4.50	-	350.00
EHT	4.10	-	350.00	4.10	-	350.00

8.3.30 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

SLS: Street Lighting Supply

8.3.31 This schedule is applicable for Street Lighting system including traffic control signal systems on roads and Park lighting in Municipalities, Panchayats and Notified Committee areas.

8.3.32 The Commission has approved a nominal increase in the fixed charges in existing tariff for Street Lighting category as shown in the table below.

Table 188: 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)	Fixed Charges (Rs. /con/mth)
4.95	100.00	4.95	120.00

8.3.33 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

TS: Temporary Metered Supply

8.3.34 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.

8.3.35 The Commission has retained the existing tariff for the Temporary Supply category as shown in the tables below:

Table 189: 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)	Fixed Charges (Rs. /con/mth)
Up to 20kVA	7.80	200.00	7.80	200.00

Table 190: 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)	Fixed Charges (Rs/con/ mth)	Demand Charge (Rs/kVA/ mth)
Above 20kVA	6.30	-	400.00	6.30	-	400.00

8.3.36 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

8.3.37 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.

8.3.38 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.

8.3.39 The Commission has approved the tariff for this category as shown in the tables below:

Table 191: 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)	Fixed Charges (Rs. /con/mth)
Up to 20kVA	3.70	70.00	3.70	80.00

8.3.40 The two-part tariff applicable for IDWPS for connected load above 20 kVA shall be as shown in the table as follows:

Table 192: 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)	Fixed Charges (Rs/con/ mth)	Demand Charge (Rs/kVA/mth)
LT	4.85	-	50.00	5.00	-	50.00
HT	4.45	-	400.00	4.60	-	400.00
EHT	4.10	-	400.00	4.20	-	400.00

8.3.41 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

RT: Railway Traction

8.3.42 The Commission has retained the existing tariff for Railway Traction as shown in the table below:

Table 193: 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)	Fixed Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)
4.70	-	400.00	4.70	-	400.00

8.3.43 The applicable rebates and surcharges for this category have been detailed in Part III of Annexure I of this Order.

8.3.44 The average revenue realization as percentage of average cost based on the tariff approved for FY19 is provided below:

Table 194: Average Realization as % of Average CoS for FY19

Consumer Category	FY19 (Approved Tariff)
Industrial Power Supply	103%

Consumer Category	FY19 (Approved Tariff)
Domestic*	91%
Irrigation and Drinking Water	107%
Commercial	109%
Bulk Supply	114%
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*

8.4 Overall Revenue–Expenditure Position of HPSEBL at Approved Tariff

8.4.1 The Commission has computed the revenue surplus/ gap for FY19 based on the approved ARR and approved tariff which is given in the table below:

Table 195: Projected Revenue at Approved Tariff and Revenue Surplus/ (Gap) for FY19 (Rs. Cr.)

Parameters	FY19
Industrial Power Supply	
Small Industries	95.77
Medium Industries	33.03
Large Industries	2,658.88
Domestic	1,046.81
Irrigation and Drinking Water	414.39
Commercial	357.99
Bulk Supply	109.33
Non Domestic Non Commercial	83.81
Public Lighting	6.57
Temporary	29.93
Projected Revenue at Approved Tariff for FY19	**4,836.52**
Total Approved ARR (including prior period adjustments)	**5,389.26**
Less: Revenue from Sale of Power within State at Approved Tariff for FY19	4,836.52
Less: Revenue from sale of Power Outside State	559.48
Revenue Surplus / (Gap)	**6.73**

8.4.2 Based on the above table it is observed that the Petitioner would have a marginal revenue surplus for FY19 which can be considered at the time of truing-up for the respective year. Further, any amount received by HPSEBL during FY19 and subsequently on account of sale of renewable energy certificates for excess RPPO quantum (solar and non-solar) of power purchase by the Petitioner shall also be considered at the time of truing-up of the respective year.

8.4.3 The Commission directs the Petitioner to transfer any surplus revenue realised in FY19 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.

8.5 Subsidy by Government of Himachal Pradesh

8.5.1 The Govt. of Himachal Pradesh has made a provision of Rs. 475 Cr. in the financial budget for 2018-19, for providing rollback subsidy to electricity consumers of domestic and agriculture categories during the year.

8.5.2 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 196: Subsidized tariff for Domestic category

Particulars	Units/month	Approved Tariff for FY19 (Rs/kWh)	GoHP Subsidy for FY19 (Rs./kWh)	Effective Tariff after subsidy (Rs/kWh)
Lifeline consumers	0-60	3.30	2.30	1.00
Other consumers	0-125	3.90	2.40	1.50
	126-300	4.80	1.90	2.90
	Above 300	5.40	1.05	4.35
	Prepaid consumers	4.80	1.90	2.90

b. With respect to agricultural consumers under Irrigation and Drinking Water Pumping Supply (IDWPS) category, the energy charges shall be Rs 0.75 per kWh to the consumer category up to 20 kW under single part tariff and Rs.

0.75 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, 2018. 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.

8.5.3 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.

9 Open Access and Renewable Power Purchase Obligation

9.1 Introduction

9.1.1 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.

9.1.2 Based on the wheeling ARR approved in Para 7.18.4, the average wheeling charges for FY19 are as below:

Table 197: Wheeling Charges for FY19

Particulars	Amount
Total ARR for Wheeling Business approved for FY19 (Rs. Cr.)	1,706.11
Approved Energy Sales (MU)	8638
Average Wheeling Charge (paisa per unit)	**198**

9.1.3 The above computed average wheeling charge of 198 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.

9.1.4 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."

9.1.5 In the absence of separate accounts for wheeling and retail supply business, the ARR of HPSEBL for FY19 have been segregated into wheeling and retail supply businesses in accordance with the allocation statement as detailed in para 7.18.3. The various charges payable by the consumers availing open access have been determined in this chapter.

9.2 Wheeling Charges

9.2.1 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. 1,706.11 Cr. as determined in the para 7.18.4, 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:

9.2.2 The assumptions and methodologies used by the Commission for computing the voltage-wise wheeling cost is as below:

Assumptions

9.2.3 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

9.2.4 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.

9.2.5 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.

9.2.6 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

9.2.7 The sales at various voltage levels considered by the Commission are presented in the table as follows:

Table 198: Estimated Sales at Different Voltage Levels for FY19 (MU)

Category	FY19			
	Total Sales	EHT (>=66 kV)	HT (>=11 kV & <66kV)	LT (< 11 kV)
Domestic	2,137	-	-	2,137
NDNCS	140	-	42	98
Commercial (CS)	587	-	88	499
Small & Medium Industrial Power (SMS)	229	-	-	229
Large Power Supply (LS)	4,618	1,673	2,946	-
Irrigation and Drinking Water Pumping (IDWP)	712	-	192	519
Street Lighting	13	-	-	13
Bulk supply	172	-	120	52

Category	FY19			
	Total Sales	EHT (>=66 kV)	HT (>=11 kV & <66kV)	LT (< 11 kV)
Temporary Supply	30	-	-	30
Total (within State)	**8,638**	**1,673**	**3,388**	**3,577**

Cost Segregation

9.2.8 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.

9.2.9 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 563.02 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.

9.2.10 The approved CoS at different voltage levels for determination of tariff is shown in the table as follows:

9.2.11 Wheeling Charges as determined by Commission are tabulated in the following table:-

Table 199: Approved Wheeling Charges for Open Access Consumers for FY19

S. No.	Description	EHT (≥66kV)	HT (33kV)	HT (>=11kV & <33kV)	LT (<11 kV)
(i)	Total cost apportioned (Rs in Cr.)	563.02	266.83	289.26	587.01
(ii)	Cost allocation brought forward from the next higher voltage block) {(i)-(v)*vi)/1000}[Rs. In Cr.]		454.00	552.56	563.94
(iii)	Total allocation (i) + (ii) (Rs. In Cr.)	**563.02**	**720.82**	**841.82**	**1,150.95**
(iv)	Total Energy Quantum (Sales relevant to determination of per unit rate) in MU	8,638	6,965	5,339	3,577
(v)	Energy Sales	1,673	1,626	1,763	3,577
(vi)	**Rate of wheeling Charges in Paisa/unit (iii)/iv) of previous column**	**65**	**103**	**158**	**322**

9.2.12 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.

9.2.13 Wheeling charges shall be levied on the energy drawn at the delivery point in the distribution system.

9.2.14 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.

9.2.15 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.

9.2.16 In case of Generators these will be applicable on the energy injected into the system.

9.3 Wheeling Charges for Renewable Generator

9.3.1 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. 65 paise/ unit for FY19. 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.

9.4 Wheeling Charges for Embedded Consumers availing Short Term Open Access

9.4.1 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.

9.5 Additional Surcharge:

9.5.1 The Commission had determined the Additional Surcharge for the consumers availing short-term open access vide its Order dated 30th October, 2017 against Petition No. 28/2017. An additional surcharge of 51 paisa per kWh had been determined in the Order which was applicable w.e.f. 01.11.2017.

9.5.2 The Petitioner along with its tariff petition, has made a fresh application for determination of additional surcharge for FY19. The summary of the Petitioner's submission has already been covered in Chapter 4.

9.5.3 In line with the methodology adopted by the Commission in its previous orders for the reasons stated therein, the Commission has revised the additional surcharge for FY19. For the computation of additional surcharge, the overall annual fixed charges to be considered for the determination of additional surcharge at the injection point was worked out as 84.20 paise per unit in the following table:

Table 200: Fixed Cost relating to Generating Capacity (at Generating Stations)

Name of the Plant	Capacity in MW	Expected Annual Generation (Net) (MUs)	Annual Fixed Cost (Rs. Cr.) for FY17-18	Annual Fixed Cost (p/unit)	Power Purchase (MUs) during FY18	Total fixed cost of power purchase (Rs.Cr.) (7=5*6)
1	**2**	**3**	**4**	**5**	**6**	**7**
Rihand-I	1000	6813	567.82	83.34	221.6	18.47
Rihand-II	1000	6962	593.02	85.18	195.1	16.62
Total	**2000**	**13775**	**1161**		**416.65**	**35.08**
Average of fixed cost rate (paise/kWh)=(7/6)					**(35.08/416.65) =84.20**	

9.5.4 The Commission has worked out the per unit rate of the transmission charges of power grid and HPPTCL in the following table:

Table 201: Fixed Cost relating to Power Grid & HPPTCL Transmission System (at injection points)

	Power Grid System			HPPTCL System
Month	**POC Slab Rate (Rs/MW/month)**	**Reliability Support Charges Rate (Rs/MW/month)**	**HVDC Charge Rate (Rs/MW/month)**	**Transmission Charges (Rs/MW/month)**
Apr-17	92701	27764	40468	7373
May-17	92701	27764	40468	7373
Jun-17	92701	27764	40468	7373
Jul-17	66040	27284	39840	7373
Aug-17	66040	27284	39840	7373
Sep-17	66040	27284	39840	7373
Oct-17	72811	24271	36093	7373
Nov-17	72811	24271	36093	7373
Dec-17	72811	24271	36093	7373
Jan-18	79142	25899	37199	7373

	Power Grid System			HPPTCL System
Month	**POC Slab Rate (Rs/MW/month)**	**Reliability Support Charges Rate (Rs/MW/month)**	**HVDC Charge Rate (Rs/MW/month)**	**Transmission Charges (Rs/MW/month)**
Feb-18	79142	25899	37199	7373
Mar-18	79142	25899	37199	7373
Average/month	**77674**	**26305**	**38400**	**7373**
Average Fixed Cost@84.09 % Load Factor at injection point (paise/kWh)	**23.19**			**1.20**

9.5.5 The Commission has worked out the per unit basic rate of Power Grid charges and HPPTCL transmission charges as 23.19 paise per unit and 1.20 paise per unit respectively.

9.5.6 Based on the above details, the Commission has computed the rate of additional surcharge as 54 paise/kWh as per details given in the table below.

Table 202: Computation of Additional Surcharge as approved by the Commission for FY19

S.No.	Description	Fixed Cost at injection point	Fixed Cost at consumer end
1	**2**	**3**	**4**
A)	Fixed Cost of Stranded Capacity (**Paise/kWh**)	84.20	91.80
B)	Transmission Charges		
i	PGCIL (**Paise/kWh**)	23.19	25.29
ii	HPPTCL (**Paise/kWh**)	1.20	1.26
C)	Total Fixed Cost payable to Generator (A+B) (**Paise/kWh**)	-	118.34
D)	Recovery of Fixed Charges as demand charges from EHT consumers	-	97.33
E)	50% of wheeling charges for EHT consumers (**Paise/kWh**)	-	32.58
F)	Net Recovery through Demand Charges, eligible for adjustment (**Paise/kWh**)	-	64.75
G)	**Balance payable in shape of additional surcharge (Paise/kWh) (C-F)**	-	**53.59**

9.5.7 The additional surcharge being determined above shall be applicable prospectively from the date of issuance of this order 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.

9.6 Cross Subsidy Surcharge

9.6.1 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.

9.6.2 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.

9.6.3 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

9.6.4 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 FY19 is tabulated below:

Table 203: Approved Cross Subsidy Surcharge for Long-term & Medium-term Open Access Consumers

S. 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	1.98	0.40	1.09	0.40
2	Large Industrial Power Supply HT 2 Consumers	1.92	0.38	1.17	0.38
3	Irrigation & Drinking Water Supply Category - EHT Consumers	2.37	0.47	1.17	0.47
4	Irrigation & Drinking Water Supply Category - HT Consumers	1.48	0.30	1.21	0.30
5	Bulk Supply Category - EHT Consumers	2.33	0.47	1.16	0.47
6	Bulk Supply Category - HT Consumers	1.60	0.32	1.23	0.32

Cross-subsidy Surcharge for Short-term Open Access Consumers

9.6.5 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 FY19 based on the above formula are marginally lower than the approved cross-subsidy surcharge for peak hours during FY18. 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 204: 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	0.40	0.79
2	Large Industrial Power Supply HT 2 Consumers	0.38	0.73
3	Irrigation & Drinking Water Supply Category - EHT Consumers	0.47	0.78
4	Irrigation & Drinking Water Supply Category - HT Consumers	0.30	0.60
5	Bulk Supply Category - EHT Consumers	0.47	0.47
6	Bulk Supply Category - HT Consumers	0.32	0.32

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.

9.6.6 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.

9.6.7 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.

9.7 Infrastructure Development Charges

9.7.1 The Commission has notified HPERC (Recovery of Expenditure for supply of Electricity) Regulations 2012 vide Notification No. HPERC/419 dated 18.5.2012 which has been published in the Rajpatra, HP on 23.5.2012.

9.7.2 The Commission observes that HPSEBL has submitted a variation of 3.58% in the total normative rate as per Cost Data for FY 2016-17 over the previous year. However, the Petitioner not proposed an increase on the existing rates of IDC on the basis of increase in the procurement cost of equipment/ material as per Cost Data for FY 2016-17. This variation in normative rates may fetch nominal additional amount during current financial year, most of which shall be from the contribution from the new consumers. The incremental amount to be collected through this proposed hike may be very nominal as compared to the funds already available with HPSEBL for the CAPEX works. The Commission expects HPSEBL to carry on the CAPEX works expeditiously as there is no dearth of funds for the purpose and the Commission has been quite liberal in allowing funds for this purpose.

9.7.3 Taking into consideration above and other factors like energy load growth in the State, additional incremental revenue collection, available revenue with HPSEBL collected on account of normative IDC, the Commission decides to extend the normative IDC rates and associated conditions as decided vide its Order dated 10th October, 2016 for FY19.

9.8 Distribution Losses

9.8.1 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 205: 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

9.8.2 The losses at LT are for indicative purposes only as no open access may actually be availed on LT.

9.8.3 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.

9.9 Renewable Power Purchase Obligation (RPPO)

9.9.1 The Commission vide Regulation 4 of the HPERC (Renewable Power Purchase Obligation and its Compliance) Regulations, 2010 (read with amendments) had specified the minimum ceiling of solar and non-solar RPPO for the distribution licensee over a time span of ten years.

9.9.2 The Commission has also issued Himachal Pradesh Electricity Regulatory Commission (Renewable Power Purchase Obligation and its Compliance) (Third Amendment) Regulations, 2017 dated 24.03.2017 which proposes amendment to the minimum percentage of RPPO requirement.

9.9.3 Accordingly the minimum RPPO of the distribution licensee for solar and non-solar energy for FY19 is as under:

Table 206: Minimum quantum of Purchase from Renewable Sources & Projected RPO Obligation for FY19

Particular	Minimum RPPO %age of the gross requirement	Minimum RPPO quantum in MUs
Non-Solar	10.25%	60.96
Solar	6.75%	40.15
Total RPPO	**17.00%**	**101.11**

9.9.4 In line with the 3rd amendment dated 30.12.2014 of CERC (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, HPSEBL is eligible for RECs for the surplus quantum of power procured from renewable sources.

9.9.5 In accordance with Regulation 4 of the HPERC (Renewable Power Purchase Obligation and its Compliance) Regulations, 2010 (read with amendments), the minimum percentage of RPPO obligation is also applicable to captive generation/ open access consumers including DG sets above 1MW installed capacity. Since HPSEBL has surplus quantum of renewable power available after meeting its RPPO, these consumers can convert their conventional energy into renewable energy by payment of Rs. 1.50 per unit (i.e. floor price of the non-solar RECs as approved by CERC in order on Petition No.02/SM/2017 dated 28.02.2017) 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.

9.9.6 The surplus quantum of renewable power purchased by HPSEBL after meeting its RPPO, sale of renewable power outside the State and conversion of conventional energy to green energy by other obligated entities within the State shall be eligible for issuance of RECs or disposal in any other admissible mode.

10 Directions and Advisories

10.1.1 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.

10.1.2 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 Commission appreciates the efforts made by the Petitioner to recover outstanding dues. Further, the 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 Commission updated on the status where consumers are delaying payment of legitimate dues.** The Commission also directs the Petitioner to undertake category-wise and age-wise analysis of the arrears with breakup of the arrears into: • Principal outstanding • Surcharge outstanding	Since the amount has now been budgeted, 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 provided in soft copy-CD. Further as a result of our continued efforts, the GoHP has budgeted an amount of Rs. 450 Cr. for FY 2017-18 on account of outstanding energy charges of I&PH Department	Compliance noted. The Petitioner is required to provide details of all categories and the details of principal outstanding, surcharge outstanding etc. as required under the directive.

Direction	Commission's observation	Compliance status	Additional Observation
• 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 7.15.2: a) The Petitioner is directed to submit the complete details of the proposed schemes along with the cost benefit analysis and obtain the scheme wise approval (excluding the central sponsored schemes like R-APDRP and	As per the MYT Regulations. 2011, HPSEBL is required to take approval of each 33kV scheme separately along with supporting documents. However, in the current Midterm Review Petition, HPSEBL has proposed 48 new EHV schemes without providing any details. The Petitioner is required to provide the requisite	It is submitted that new EHV schemes proposed in the Mid-Term Review Petition are prospective schemes identified to be executed in the 3rd MYT Control Period. The detail of actual scheme whenever formulated are being submitted to HPERC for approval in accordance with the provisions of Regulations for CAPEX along with detailed note comprising of purpose of the investment, capital structure capitalization schedule, cost-benefit analysis and improvement in operation efficiency etc. In general, the schemes being undertaken for implementation are considered on commercial viability basis such as distribution schemes. In respect of Generation/EHV schemes, quite often, the decisions are taken based on the reliability of evacuation	As per the MYT Regulations, 2011, HPSEBL is required to take approval of each 33kV scheme separately along with supporting documents. The Petitioner is yet to file fresh application for approval of these schemes. Additionally, the Petitioner is required to

Direction	Commission's observation	Compliance status	Additional Observation
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 Commission has provisionally considered capital expenditure of Rs.2,220 Cr. for ARR projection. b) The licensee shall streamline its process for decision	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.	system/transmission of power to load centers using established criterion, that is, N-1 contingency criteria. The details of scheme wise / work wise Capital Expenditure /Capitalization for the Financial Year 2011-12 to 2016-17 is provided in soft copy-CD. Further, work wise Capital Expenditure /Capitalization will be submitted in due course of time and the matter has already been discussed in KPI meeting dated 23.11.2017.	submit the quarterly progress report of actual capital investment within one month of the respective quarter.

Direction	Commission's observation	Compliance status	Additional Observation
making, financing, tendering and contracting to enhance its capacities for speedy execution of schemes for cost efficiency and quality of service enhancement. c) The licensee shall undertake only such works as considered viable based on the cost benefit analysis. d) The licensee shall ensure the capital cost recoverable from the prospective consumer as per the relevant regulations. e) The licensee shall ensure timely completion and compliance of the loss reduction targets as well as various other conditions associated with R-APDRP and RGGVY schemes. In case the licensee fails to get any loan			

Direction	Commission's observation	Compliance status	Additional Observation
converted into grant as per the provision of R-APDRP due to non-compliance of any condition, the Commission shall not allow any such loan as pass through in the ARR. f) The Petitioner shall submit the quarterly progress report of actual capital investment within one month of the respective quarter.			
Clause 7.15.4: The Commission reiterates its direction of the previous Order and expects that the Petitioner would undertake appropriate measures for timely execution of the various projects covered under the R-APDRP / RGGVY schemes.	The Commission had provided a fresh directive in the MTR Order for submission of half-yearly progress report of the various capital works	**RGGVY:-** In respect of 12 Nos. RGGVY schemes, 11 Nos. schemes under XIth plan stand completed and closed. Whereas, the scheme of chamba district under Xth plan is not closed since the case for construction of 33 kV line work in pangi Block is under litigation. **Deendayal Upadhyaya Gram Jyoti Yojna (DDUGJY):-** The Ministry of Power, GoI launched Deendayal Upadhyaya Gram Jyoti (DDUGJY) on 3rd December, 2014 for the electrification of rural households, Separation of agriculture & non-agriculture feeders, strengthening & augmentation of Sub- Transmission & Distribution (ST&D) infrastructure in rural areas, including metering at distribution transformers, feeders and consumers end. The core	Compliance Noted.

Direction	Commission's observation	Compliance status	Additional Observation
		objective is to ensure reliable and quality power supply in rural areas. **Status of the Scheme:** HPSEBL formulated twelve (12) schemes for all Districts of Himachal Pradesh covering 35 Nos. un-electrified village, 1 SAGY (Sansad Adarsh Gram Yojna) village and 14088 rural households (including 3288 BPL households). The center level Monitoring Committee approved these schemes on 18th August, 2015 fro amounting to Rs. 158.31 Crore (Annexure-V) Till date, M/s REC Ltd has released 10% advance payment amounting to Rs.13.46 Crore. **Completion Target:** As per the guideline, the scheme has to be completed in 30 months (i.e. 6 months for tendering + 24 months for implementation) from the date of sanction conveyed by M/s REC Ltd. **Electrification Status of Un-Electrified Villages:-** Since the Government of India decided to electrify the Un- electrified Villages on Mission mode, HPSEBL had decided to electrify 28 Nos. inhabited un- electrified villages on departmental basis covered under DDUGJY scheme. Electrification of these 28 Nos. un –electrified villages have been achieved by HPSEBL on 30th September, 2016 well before the target fixed by MoP, Govt. of India for Himachal Pradesh. The physical achievement against above electrified villages is as under:- **Sr. No. Physical achievement**	

Direction	Commission's observation	Compliance status	Additional Observation
		1 Rural Household = 84 Nos. 2 HT Line = 27.835 Km. 3 LT Line = 58.825 Km. 4 DTR =23 Nos. Tendering Status: Bids for other works of all the 11 Districts were invited on 06 & 14.10.2016 and since then the bids were extended five times and scheduled for opening on dated 01.04.2017 & 03.04.2017. the tenders of 8 districts namely Kangra, Shimla, Una, Mandi, Solan, Chamba & Kullu have been opened and the evaluation for the same are under process. The tender of Bilaspur district is rejected due to disqualification of bidder and the tenders of remaining three (3) districts i.e. Sirmour, Kinnour & Hamirpur have been cancelled due to non- participation of bidders. Now, HPSEBL has decided to execute the work of these 4 districts on partial Turn Key basis. The work of Lahaul & Spiti district have been carried out departmentally. The achievement of Lahaul & Spiti District is as under:- Sr. No. Physical achievement 1 Rural Household = 45 Nos. 2 LT Line = 0.880 Km. 3 Consumer metering (New) = 45 Nos.	

Direction	Commission's observation	Compliance status	Additional Observation
		4 Consumer metering (Replaced)= 170Nos. **R-APDRP (Part –B)** The Government of India had launched centrally sponsored R-APDRP scheme on September, 2008 for unban towns which had population ≥ 10, 000 (special as per Census 2001. In Himachal Pradesh 14 towns namely Baddi, Bilaspur, Chamba, Dharamshala, Hamirpur, Kullu, Mandi, Nahan, Paonta Sahib, Solan, Shimla, Sundernagar, Una and Yol having population more than 10000 are covered under GoI sponsored grant-in-aid (initially loan) R-APDRP Scheme. The schemes for these towns under R-APDRP(Part_B) covers Renovation, Modernization & Strengthening of 11 kV & 22kV level substations, Transformers/ Transformer centers, Re-conductoring of 11 kV and LT lines, Load bifurcation, Feeder separation, Load Balancing, HVDS (11 kV), Ariel Bunched Conductoring, Replacement of electromagnetic energy meters with tamperproof electronic meters, Installation of capacitor banks, Mobile service centers and Strengthening at 33 kV or 66 kV system etc. The schemes for these 14 towns were sanctioned for Rs. 338.97 crores during FY 2011 and 2012. Out of these 14 towns, 6 towns namely Chamba, Hamirpur, Kullu, Mandi, Nahan & Una have been completed so far (only financial part remaining). The works in eight (8) towns namely Baddi, Bilaspur, Dharamshala, Paonta Sahib, Shimla, Solan, Sundernagar & Yol are ongoing and it is likely to be completed by March, 2018 for which extension in timeline for the completion of works up till March, 2018 has been sought from M/s PFC Ltd.	

Direction	Commission's observation	Compliance status	Additional Observation
		The delay in completion caused in these 8 towns is due to rescinding and re- awards of works, stay by National Green Tribunal (NGT), ROW issues, contractor issues and change in planned network due to public hindrances etc. The scheme wise report of each town is being enclosed herewith as "Annexure V" for ready reference. Till date, HPSEBL has received Rs. 217.20 crore as GOI loan and Rs. 30.490 crore as Counterpart loan from M/s PFC Ltd. **Integrated Power Development Scheme(IPDS):-** Government of India (GOI) has launched Integrated Power Development Scheme (IPDS) on 3rd December 2014 for urban towns as per Census 2011. The main objective of the scheme is: i. Strengthening of sub-transmission and distribution networks in the urban areas; ii. Metering of distribution transformers/ feeders/ consumers in the urban areas; iii. IT enablement of distribution sector and strengthening of distribution network, as per CCEA approval dated 21.03.2013 for completion of the targets laid down under R-APDRP for 12th and 13th plans by carrying forward the approval outlay for R-APDRP to IPDS. Status of Scheme: In Himachal Pradesh, total twelve (12) projects under IPDS scheme have been approved by the Centre Level Monitoring Committee in its 4th meeting held on	

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<tr><th>Direction</th><th>Commission’s observation</th><th>Compliance status</th><th>Additional Observation</th></tr>
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06.08.2015. The overall approved cost of these twelve projects is Rs. 110.60 crores and in addition this Committee also approved grant @ 0.5% of project cost (i.e. Rs. 0.55 crore) as Project Management Agency (PMA) cost. Subsequently, M/s PFC has issued sanction letter on 21.03.2016 wherein mentioning Rs. 93.94 crore (i.e. 85% of the projct cost) as Govt. of India (GoI)
Grant component and Rs. 0.55 crore as PMA component. To comply with the guideline of IPDS scheme, 10 % of the Project cost (i.e. Rs.11.06 crore) as Counterpart Loan has been tied up with M/s REC Ltd. on 17.10.2016 and remaining 5 % shall be contributed by HPSEBL. The circle-wise sanctioned cost of IPDS scheme is as follows:
<table>
<tr><th rowspan="2">S. No.</th><th rowspan="2">Name of Circle</th><th rowspan="2">No. of towns covered</th><th rowspan="2">Grant No.</th><th rowspan="2">GoI Grant</th><th colspan="2">FIs Loan/ Own fund (Rs. in Cr.)</th><th>Sanctioned Cost (Rs. in Cr.)</th></tr>
<tr><th>C/P Loan (10%)</th><th>Board Share (5%)</th><th></th></tr>
<tr><td>1</td><td>Bilaspur</td><td>5</td><td>04451001</td><td>7.50</td><td>0.88</td><td>0.45</td><td>8.83</td></tr>
<tr><td>2</td><td>Dalhousie</td><td>5</td><td>04451002</td><td>3.08</td><td>0.36</td><td>0.19</td><td>3.63</td></tr>
<tr><td>3</td><td>Hamirpur</td><td>5</td><td>04451003</td><td>3.36</td><td>0.4</td><td>0.2</td><td>3.96</td></tr>
<tr><td>4</td><td>Kangra</td><td>6</td><td>04451004</td><td>12.12</td><td>1.43</td><td>0.72</td><td>14.27</td></tr>
<tr><td>5</td><td>Kullu</td><td>4</td><td>04451005</td><td>11.97</td><td>1.43</td><td>0.71</td><td>14.09</td></tr>
</table>
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Direction	Commission's observation	Compliance status	Additional Observation

6	Mandi	4	04451006	4.15	0.49	0.25	4.89
7	Nahan	3	04451007	2.55	0.3	0.15	3.00
8	Rampur	2	04451008	9.18	1.08	0.55	10.81
9	Rohru	4	04451009	11.22	1.32	0.67	13.21
10	Shimla	3	04451010	6.42	0.76	0.38	7.56
11	Solan	8	04451011	12.08	1.42	0.72	14.22
12	Una	5	04451012	10.31	1.21	0.61	12.13
		54		93.94	11.06	5.6	110.60

The Circle –wise provisions of IPDS scheme is attached as "Annexure V"
To comply with the conditions of IPDS Guidelines, HPSEBL appointed M/s WAPCOS Ltd as Project Management Agency (PMA) for IPDS projects on 09.09.2015. Till date 10% advance Grant i.e. Rs. 9.39 Crore has been received by HPSEBL from M/s PFC Ltd.

Completion Target: As per the guideline, the scheme has to be completed in 30 months (i.e. 6 months for tendering + 24 months for implementation) from the date of sanction conveyed by M/s REC Ltd.
Tendering Status: To execute the works on full turkey basis, HPSEBL has invited/ floated tenders on 06.10.2016 & 14.10.2016. Due to non-participation of bidders, tender opening dates were extended five times and rescheduled for opening on 31.03.2017 & 05.04.2017. As on 20.05.2017, tenders of total 10

Direction	Commission's observation	Compliance status	Additional Observation
		Circles have been opened, while in 2 Circles viz. Dalhousie & Rampur no participation has been occurred. Further, the Bid evaluation of tenders in respect of Shimla, Nahan, Solan, Rohroo, Kangra &Una Circles have been completed and the same is under process in case of Mandi, Hamirpur & Kullu Circles. The bid in respect of Bilaspur Circle has been rejected due to disqualification of bidder. **R-APDRP PART-A**: RAPDRP Part-A completion date extended till 30.9.2017 (Annexure V) 1. Work completed during June 2015 2. TPIEA-IT deputed during August 2015 3. Final report accepted by PFC/ MoP during September 2017 Formal communication expected shortly.	
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**	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.	The details of scheme wise/ work wise capital expenditure & capitalization and its source of funding for the FY 2016-17 is provided in soft copy-CD. Further, work wise Capital Expenditure /Capitalization will be submitted in due course of time and the matter has already been discussed in KPI meeting dated 23.11.2017.	Compliance noted. The Petitioner is however, directed to improve account keeping with respect to capital schemes at the field as well as head office level. HPSEBL/Petitioner is yet to submit a compliance report for the steps undertaken as directed in the previous tariff order.

Direction	Commission's observation	Compliance status	Additional Observation
following year to the Commission for scrutiny and year-wise capitalization of assets.			
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	The Petitioner is directed to keep pursuing with the various developers/ agencies for recovery of the balance amount booked under S&I.	The latest status of S&I charges latest detail compliance of this direction is provided in soft copy-CD.	Compliance noted. 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
amount that would be deferred for recovery in the future;" The Commission has provisionally considered an amount of Rs.125 Cr. to be recovered equally during the Third Control Period. **The Commission also directs HPSEBL for 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.**			
Half-Yearly Reporting of Capital Schemes and Works **11.1.4** The Commission also arranged a Management meeting		HPSEBL is making efforts to provide the details of capital expenditure. However, the details of scheme wise / work wise Capital Expenditure / Capitalization for the Financial Year 2011-12 to 2016-17 is provided in soft copy-CD.	The Petitioner is further directed to submit all capital expenditure and capitalization details for the Third Control Period along with Business Plan and Tariff Petition for the

Direction	Commission's observation	Compliance status	Additional Observation
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		Further, work wise Capital Expenditure /Capitalization will be submitted in due course of time and the matter has already been discussed in KPI meeting dated 23.11.2017	subsequent Control Period

Direction	Commission's observation	Compliance status	Additional Observation
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.		HPSEBL is in the process of filing the petition for Ghanvi-II & UHL-III and the same shall be filed shortly.	In the interaction meeting with the Board, the Petitioner has agreed to file the tariff petition for Ghanvi-II in three months from the date of this Order and therefore, the Commission has decided to continue with the provisional tariff for both these stations. The Petitioner is required to file the tariff petitions within three months.
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		HPSEBL is making efforts to provide the details of capital expenditure. However, the details of scheme wise / work wise Capital Expenditure / Capitalization for the Financial Year 2011-12 to 2016-17 is provided in soft copy-CD.	While the details of schemes provided is noted. However, the Petitioner has failed to provide changes in the accounting system to address the concern of the auditor with respect to accounting of GFA/ CWIP in the audited accounts have not been clarified. The Petitioner

Direction	Commission's observation	Compliance status	Additional Observation
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 schemewise 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-			is required to provide accounting methodology for recognizing the capital expenditure and capitalization for various schemes / works.

Direction	Commission's observation	Compliance status	Additional Observation
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.		The details of no. of consumers and energy sales have been submitted in the ARR petition.	The Petitioner has not been able to provide actual sales, no. of consumers and connected load details for sub-categories (HT-1, HT-2 and EHT) and has observed discrepancy in the past data. The Petitioner is directed to maintain formats, reconcile the data submitted in the past years and submit it during 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		The use of energy efficient appliances is being promoted by way of UJALA scheme. The Scheme is under progress. 76,62,047 LED bulbs have been distributed under the scheme till date. The Ujala scheme has also been extended to the distribution of energy efficient fans and tube lights. And till date 10,324 fans and 42,959 tube lights have been distributed under this scheme.	Compliance is noted.

Direction	Commission's observation	Compliance status	Additional Observation
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.		HPSEBL is charging the tariff strictly according to the Schedule of Tariff approved by the Hon'ble Commission. The consumers are levied under temporary category of tariff for construction purposes. However, once the part of construction for which temporary connection was given is over and the same is given NOC by the TCP/ MC/ Other ULB's for permanent electricity connection, the consumer is provided permanent connection for the respective category of tariff under which the consumer falls. This procedure is being followed in case of the release of connections in the area for which TCP Act 1977 is applicable. It is requested that the Hon'ble Commission may please elaborate on the requirement of completion certificate for construction mentioned in the directive for ensuring compliance without any ambiguity at the part of HPSEBL.	Compliance is noted.
Maintenance of Pension Contribution for Employees shared with Generation, BVPCL, Projects and S&I		In this regard it is informed that letters has been written to all the entities (all the generating Stations, BVPCL, Projects and S&I, SJVNL & HPPCL) of HPSEBL to provide list of employees serving in their institutions from 14.06.2010 to till date. However even after several reminders, requisite information is still awaited.	The Petitioner must continue to pursue the matter with different entities and maintain proper records against pension contribution

Direction	Commission's observation	Compliance status	Additional Observation
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		However a fresh reminder has been issued to provide the requisite information in order to decide the share of pension contribution & leave salary in terms of HPERC regulations.	made by them. These details must be submitted along with subsequent tariff petitions.

Direction	Commission's observation	Compliance status	Additional Observation
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.		M/s CRISIL has been engaged for carrying out voltage-wise cost of supply study and the same is ongoing. The filing of the voltage-wise cost of supply study shall be done by the month of March.	The Commission has observed that the Petitioner has still not complied with the directive. The Petitioner is required to submit the report on voltage-wise cost of supply at the earliest and positively before 30th June 2018.
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		After constant efforts, HPSEBL has been successful to persuade ICICI bank to waive off the transaction charges, being levied on consumers of HPSEBL, on online payment of electricity bills through ICICI Bank Payment Gateway similar to HDFC Bank Payment Gateway.	Compliance is noted. The Petitioner must continue to forge similar partnerships with different payment gateways and financial institutions to pass on the benefits to consumers using digital platforms for bill payment.

Direction	Commission's observation	Compliance status	Additional Observation
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		Pursuant to directions, provisions for showing detail of Security Deposit on the electricity bills in respect of HT and EHT consumers has already been made on the billing implemented on SAP-ISU Platform. This software has already been implemented in 59 operation sub-divisions under HPSEBL. For balance 132 sub-divisions which are already on computerized billing (HCL billing), the provision of same shall be made by the end of 2018, since this customized billing is also being switched over on SAP-ISU billing software.	The Petitioner is directed to complete the same as per the time lines committed and provide a status update for the remaining 132 sub-divisions along with the subsequent tariff petition.

Direction	Commission's observation	Compliance status	Additional Observation
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.			
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.		HPSEBL is making constant endeavours to ensure reliable and quality power supply to the consumers and reduce the losses. The detailed status of losses has been discussed in the previous sections of this ARR petition.	Compliance is noted.
Fresh Directive:			

Direction	Commission's observation	Compliance status	Additional Observation
Details of RPPO Compensation Fund **6.22.5** It is observed that the Commission had approved an amount of Rs. 12.23 Cr. as per the Order dated 10th November 2014 in the Petition no. 129/2013 on account of RPPO Compensation Fund in the First APR for FY16. The amount has been retained as part of the truing-up for FY16. However, it is observed that no details of the RPPO Compensation Fund has been provided. **The Petitioner is directed to provide the details of the RPPO Compensation Fund and the balance available in the fund along with the next tariff filing. In absence of such details, the Commission shall be constrained to reverse the amount**			

Direction	Commission's observation	Compliance status	Additional Observation
allowed in the subsequent ARR along with carrying cost.			

10.1.3 It is further observed that the Petitioner has not complied with the fresh directives issued by the Commission in the Mid-Term Performance Review (MTR) 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.

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, 2018** 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, 2018** that was in force with effect from 1st April, 2017 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) *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.*

2) *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%.*

3) *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.*

4) *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.*

I. Lower Voltage Metering Surcharge (LVMS): In respect of consumers, for whom the metering (for maximum demand (kVA) or energy consumption (kWh or kVAh) or both) instead of being done on the higher voltage side of the transformer at which the supply had been sanctioned by the HPSEBL, is actually done on the lower voltage side of the transformer due to non-availability of higher voltage metering equipment or its unhealthy operation, such consumers shall in addition to other charges, be also charged "Lower Voltage Metering Surcharge" (LVMS) at the rate of 2% on the amount of only the energy charges billed.

J. Late Payment Surcharge (LPS): Surcharge for late payment shall be levied at the rate of 2% per month or part thereof, on the outstanding amount excluding electricity duty/ taxes for all the consumer categories.

K. Supply during peak load hours: The following additional conditions shall be applicable for use of power during peak load hours (6:30 PM to 10 PM) in case of the consumers covered under small industrial power supply, medium Industrial power supply, large industrial power supply and irrigation and drinking water power supply:

i) Such consumption shall be recorded separately through suitable meters which are capable of recording the energy (kVAh/kWh) during the peak load hours. In cases where such meters do not already exist, the consumer intending to use power during peak load hours shall give a notice of 3 months to HPSEBL and may start using power during peak load hours after such meter has been installed;

ii) The consumers who have already obtained sanction from HPSEBL for using electricity during peak load hours may continue doing so to the extent of permission granted to them without any additional notice;

iii) Where the meters as per clause (i) already exist but the consumers have not already obtained exemption to run their plant during peak load hours or want to use higher load than what was permitted during peak load hours, they shall give a prior intimation of 30 days to HPSEBL where after they may start using power or additional power during peak load hours as per their requirement within their sanctioned contract demand unless HPSEBL issues any instructions to the contrary through a general or specific order. In the meanwhile, consumers may continue using power to the extent of bonafide factory lighting and colony supply forming part of sanctioned connected load or to the extent of permission obtained. The consumption shall however be charged at the rates applicable for respective periods (normal, peak and night) as a part of the total consumption during such respective periods.

iv) HPSEBL shall, in case of any constraint, always be entitled to impose any restrictions on usage of power during peak load hours in all cases through general or specific order;

v) In cases where HPSEBL imposes any restrictions through general or specific orders the consumer shall abide by such restrictions failing which the HPSEBL shall be entitled to disconnect the supply to such consumers after giving a notice;

vi) The sanctioned contract demand shall not be violated;

vii) Payment of peak load charges (demand and energy) shall be made as per the respective schedules of tariff;

L. Demand Charge (DC): Consumers under two (2) part tariff, whose energy consumption during non-peak load hours of the month is billed/ charged in Rs/kVAh, shall in addition to the kVAh charges, be also charged at the rates as per Part-III, the 'Demand Charges' (in Rs/kVA/month), calculated on the actual Maximum Demand (in kVA) recorded on the energy meter during any consecutive 30 minute block period of the month or at 90 % of the Contract Demand (in kVA), whichever is higher but up to a ceiling of contract demand as currently applicable. The demand in excess of Contract Demand will be charged under clause "M" relating to Contract Demand Violation Charges (CDVC).

Explanation:

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 part 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, Kinnaur and Pangi 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. <u>Power Factor Surcharge (PFS):</u>

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. 01.04.2018 under this mechanism but gets his sanctioned contract demand permanently reduced to 8 MVA w.e.f. 01.05.2018, he shall have to pay charges based on 6 MVA contract demand till 30.06.2018 (i.e. till the expiry of 3 months period from the date at which the contract demand was last revised i.e. from 01.04.2018). However, if the contract demand is to be reduced permanently to lesser than 6 MVA (say 4 MVA as on 01.05.2018), the demand charges would have been based on a contract demand of 4 MVA during the period upto 30.06.2018.

T. Sanction of Contract Demand:

1) In case of new connections, except for Domestic Supply, the Contract Demand shall invariably be incorporated in the Application and Agreement form as well in the load sanction, irrespective of the connected load.
2) In case of such existing connections, other than Domestic Supply, where the Contract Demand has not been applied for or has not been sanctioned, 90% of the sanctioned connected load, converted in to kVA by adopting a power factor of 0.9, shall be deemed as the Contract Demand till such time the consumer informs HPSEBL about the quantum to be considered as his Contact Demand.

U. HPSEBL shall provide suitable meters capable of recording the parameters for billing purposes as per the tariff structure under respective schedules.

V. In case any dispute regarding interpretation of this tariff order and/or applicability of this tariff arises, the decision of the Commission will be final and binding.

DEFINITIONS

1. **Act:** means The Electricity Act, 2003 as amended from time to time;

2. **Average Power Factor:** means the ratio of kWh (kilo Watt hour) to the kVAh (kilo Volt Ampere hour) registered during a specific period;

3. **HPSEBL:** means the Himachal Pradesh State Electricity Board Limited;

4. **Commission**: shall mean the Himachal Pradesh Electricity Regulatory Commission;

5. **Connected Load**: expressed in kW, means aggregate of the manufacturer's rated capacities of all energy consuming devices or apparatus connected with the distribution licensee's service line, on the consumer's premises, which can be simultaneously used;

6. **Consumer Service Charges**: shall mean the fixed amount to be paid by the consumer as defined in the respective tariff schedule;

7. **Contract demand**: expressed in kVA units means the maximum demand contracted by the consumer in the agreement with the licensee and in absence of such contract, the contract demand shall be determined in accordance with the relevant sections of this Tariff Order;

8. **Demand Charges**: for a billing period shall mean the amount chargeable based upon the recorded maximum demand in kVA or the contract demand; whichever is higher but up to a ceiling of Contract Demand and shall be calculated at the rates prescribed in this Tariff Order and shall be in addition to the energy charges and other fixed charges wherever applicable;

9. **Energy Charges**: expressed in Rs/kWh or Rs/kVAh for a billing period shall mean the amount chargeable in rupees based on the quantity of electricity supplied measured in (kWh or kVAh) and calculated at the rates prescribed in this Tariff Order. The Demand or other fixed charges, wherever applicable, shall be in addition to the energy charges;

   Note: During the actual number of days of billing in any period, the above mentioned parameters i.e. energy (in kWh or kVAh) and the prescribed respective rates of charges in the relevant schedule of tariff, alone, shall form the basis for calculation of energy charges and the licensee, based on the number of days of billing in excess or short of a month (of 28 or 29 or 30 or 31 days), shall not apply any other factor other *than mentioned in para '9' above, that may alter or vary either of these parameters in any way.*

10. **Maximum Demand:** means the highest load measured in kVA or kW at the point of supply of a consumer during consecutive period of 30 minutes or as laid down by the Commission, during the month;

11. **Rules:** means the Rules or Safety Regulations made or saved under the Act.

12. **Sanctioned Load**: means the load expressed in kW/kVA of the consumer, which the licensee has agreed to supply, from time to time, in the agreement;

13. **Schedule**: shall mean this Tariff Schedule;

14. **State**: means the State of Himachal Pradesh;

15. **Supplier**: shall mean the Himachal Pradesh State Electricity Board Limited;

16. For the purpose of this tariff order, the voltage wise categorization shall be as follows:

    a) **EHT** means the voltage, which exceeds 33,000 volts; under normal conditions subject, however, to the percentage variation allowed under electricity rules;
    b) **HT** means the voltage higher than 400 volts but not exceeding 33,000 volts under normal conditions, subject, however, to the percentage variation allowed under the electricity rules;
    c) **LT** means the voltage, not exceeding 230 volts between phase and neutral and 400 volts between phases under normal conditions, subject, however, to the percentage variation allowed under electricity rules.

Part-II : Character of Supply -Standard Supply Voltage/ Supply Voltage

Depending upon the minimum and maximum limits of contract demand (or connected load in case of domestic supply) the character of supply under the respective schedules shall be as per the relevant provisions of the Himachal Pradesh Electricity Supply Code, 2009, as amended from time to time. The relevant provisions are as below:

1. Standard Supply Voltage:

The standard supply voltage shall mean the standard voltage at which electricity shall be given to the consumer through a common or dedicated or joint dedicated feeder without payment of any lower voltage supply surcharge (LVSS). Depending upon the connected load(kW or MW), contract demand (kVA or MVA), nature of load and existence of a voltage (volts/kV) and phase in the relevant distribution system, the standard supply voltage for a consumer shall be as provided in clauses (a) and (b) of this para and para 3-

(a) The maximum limits of connected load (kW or MW) and contract demand (kVA or MVA) for the supply of power at a voltage, shall be as under-

S. No.	Standard Supply Voltage	Maximum Connected Load	Maximum Contract Demand
1.	Single phase 230 volts or three phase 415 volts or 2.2 kV; (for supplies not involving special category loads)	50 kW	50 kVA
2.	Three phase 11 kV or 22 kV; (for supplies not involving special category loads)	3 MW	2.2 MVA
3.	Three phase 33 kV	12 MW	10 MVA
4.	Three phase 66 kV	14 MW	12 MVA
5.	Three phase 132 kV or 220 kV	No limits	

Provided that where special category loads are involved, the standard supply voltage shall be 11 kV or 22 kV, as may exist on the relevant distribution system, if–

(i) the total connected load does not exceed 1 MW, irrespective of special category loads; or

(ii) the total quantum of connected load in respect of special category loads does not exceed 750 kW within the overall limit of total connected load upto 3 MW and total contract demand upto 2.2 MVA:

Provided further that, if neither of the limits given in the first proviso, in relation to supplies involving special category loads, are adhered to, the standard supply voltage shall be 33 kV or the appropriate higher voltage in accordance with the limits specified in this clause:

Provided further that where a consumer having connected load of not more than 50 kW is already getting supply at LT voltage immediately before commencement of the Himachal Pradesh Electricity Supply Code (First Amendment) Regulations, 2014, he shall continue to be covered under a LT standard voltage (i.e. single phase 230 volts or three phase 415 volts) irrespective of contract demand already sanctioned in his favour, so long as he does not further extend his connected load or contract demand beyond the specified limits of 50 kW or 50 kVA respectively:

Provided further that where a consumer is getting supply at a voltage higher than the standard supply voltage as per the said specified limits, he shall continue to get supply at such higher voltage without any rebate for higher voltage supply.

(b) Where the connected load or contract demand exceeds the relevant ceiling limit specified in clause (a), the appropriate higher voltage at which both such limits can be adhered to, shall be considered as standard supply voltage and there shall be no minimum limits for supply of power at a particular voltage.

2. Supply at Lower Voltage:

Where the consumer seeks supply of power at a voltage lower than the standard supply voltage as per para (1), the licensee shall supply power at such lower voltage subject to the maximum limits of connected load and contract demand as specified in this para; payment of lower voltage supply surcharge (LVSS) by the consumer at the rates given in the tariff order applicable from time to time; and other conditions, as may be relevant, specified in this para or in para (3) or elsewhere in the Supply Code :-

S. 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

S. No.	Supply Voltage	Description	Maximum Connected Load	Maximum Contract Demand
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 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 equipment 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 re-determined as per the provisions under the said paras based on enhanced connected load and enhanced contract demand.

Explanation- For the purposes of paras (1) and (2), "special category loads" means furnace loads and mass induction heating loads and shall also include any other load as the Commission may, after taking into consideration electrical characteristics and its impact on the distribution system, by order, declare it to be a special category load.

PART-III: Schedule of Tariff

SCHEDULE - DOMESTIC SUPPLY (DS)

1 Applicability

This schedule is applicable to the following consumers:

a) Consumers using electrical energy for lights, fans, heaters, cooking ranges, ovens, refrigerators, air conditioners, stereos, radios, televisions, mixers, grinders, electric iron, sewing/embroidery/knitting machines, domestic pumping sets and other domestic appliances in a single private house/flat or any other residential premises;

b) Religious places with connected load up to 5 kW;

c) Orphanages, homes for old people and homes for destitute;

d) Working Women Hostels, Hostels attached to the educational institutions if supply is given separately to each hostel and the electricity charges are recovered from the students based on actual consumption;

e) Leprosy Homes run by charity and un-aided by the Government;

f) Panchayat Ghars with connected load up to 5 kW;

g) Patwar Khanas and Kanungoo Bhawans (Government Buildings only) with connected load up to 5 kW;

h) Community gausadans managed by institutions/ government with connected load up to 5kW;

i) Monasteries;

j) Heritage Hotels approved under HP Government's Heritage Tourism Policy, 2017;

k) Incredible India Bed-and-breakfast as per GoI, Ministry of Tourism guidelines;

l) "Home Stay Units" in rural areas duly registered with the District Tourism Development Officer; and

m) Offices of the Himachal Pradesh Senior Citizen Forum.

n) 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) Fixed Charge (Charges-1)

Description	Fixed Charge (Rs./Month)
Lifeline consumers and Consumers in Tribal & Difficult Areas	40.00
Other consumers	
0-125	60.00
126-300	60.00
Above 300	60.00

b) Energy Charge

Description	Slabs (kWh per month)	Energy Charge (Rs./kWh)
Lifeline consumers	0-60	3.30
Other consumers	0-125	3.90
	126-300	4.80
	Above 300	5.40

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.*
3. *Heritage hotels, Incredible India bed-and-breakfast, homestay units in rural areas are to be charged under domestic category with energy charges for such consumers to be levied at 30% higher than the net energy charges payable (net off subsidy) by the consumers in the respective slab.*

B) Energy Charge [Prepaid *Meter*]

Description	**Slabs (kWh per month)**	**Energy Charge (Rs./kWh)**
Prepaid meter consumers	Entire consumption	4.80

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-COMMERCIAL SUPPLY (NDNCS)

1. Applicability

This schedule is applicable to the following consumers:

a) Government and semi Government offices;

b) Educational Institutions viz. Schools, Universities, 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 vehicles

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. Consumers Other than Pre-Paid Metered

A) Single Part Tariff for contract demand ≤ 20 kVA

a) Fixed Charge (Charges-1)

Fixed Charge (Rs/month)	120.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	5.00

B) Energy Charge [Prepaid *Meter*]

Description	**Slabs (kWh per month)**	**Energy Charge (Rs./kWh)**
Prepaid meter consumers	Entire consumption	4.90

4. Two Part Tariff for contract demand > 20 kVA

a) Fixed Charge (Charges-1)

Fixed 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)	140.00

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

Note:

a. HPSEBL shall continue with the existing practice of installation of tri-vector meters capable of reading parameters applicable for two-part tariff, for all consumers in this category and having connected load of more than 20 kW, even though some of these consumers may be covered in single part tariff.

b. The present practice of meter reading through MRI/ AMR shall be continued for all consumers with connected load above 20kW irrespective of applicability of single/ two part tariff.

5. Lower Voltage Supply Surcharge (LVSS): *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

6. *Lower Voltage Metering Surcharge (LVMS):* *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

7. *Late Payment Surcharge (LPS):* *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

8. *Contract Demand Violation Charge:* *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

9. *Night Time Concession (NTC):* *Not Applicable.*

10. *Power Factor Surcharge (PFS):* *Not Applicable.*

11. ***Disturbing Load Penalty (DLP):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

12. ***Peak Load Charges (PLC):*** *Not Applicable.*

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. In case of hotels in tribal areas of Lahaul-Spiti, Kinnaur and Pangi seasonal tariff as described in Part-I of Annexure-I shall be applicable.

3. Character of service: *Applicable as per provisions under Part – II.*

4. Single Part Tariff for contract demand ≤ 20 kVA

a) Fixed Charge (Charges-1)

Fixed Charge (Rs/month)	120.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	5.10

5. Two Part Tariff for contract demand > 20 kVA

a) Fixed Charge (Charges-1)

Fixed 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)	4.85
Above 100 kVA	4.75

C) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	
>20 kVA ≤ 100 kVA (More than 20	110.00

kVA but upto 100 kVA)	
Above 100 kVA	170.00

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

Notes:

a) *HPSEBL shall continue with the existing practice of installation of tri-vector meters capable of reading parameters applicable for two-part tariff, for all consumers in this category and having connected load of more than 20 kW even though some of these consumers may be covered under single part tariff.*

b) *The present practice of meter reading through MRI/ AMR shall be continued for all consumers with connected load above 20kW irrespective of applicability of single/ two part tariff.*

5 **Lower Voltage Supply Surcharge (LVSS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

6. ***Lower Voltage Metering Surcharge (LVMS):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

7. ***Late Payment Surcharge (LPS):*** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

8. ***Contract Demand Violation Charge:*** *Applicable as specified under 'Part-1 General Conditions of Tariff'.*

9. ***Night Time Concession (NTC):*** *Not Applicable.*

10. ***Power Factor Surcharge (PFS):*** *Not Applicable.*

11. ***Disturbing Load Penalty:*** *Applicable as specified under 'Part-1 General Conditions of Tariff' of this Annexure I.*

12. ***Peak Load Charges (PLC):*** *Not Applicable.*

SCHEDULE - *SMALL INDUSTRI*AL POWER SUPPLY (SIP)

1. Applicability

This schedule is applicable to Industrial consumers with contract demand not exceeding 50 kVA including pumps (other than irrigation pumping), tokas, poultry farms and sheds, cane crushers, Atta Chakkis, and also for supply to Information Technology Industry (limited only to IT Parks recognised by the State/Central Government). Industrial type of Agricultural loads with connected load falling in the abovementioned range and not covered by Schedule "IDWPS" shall also be charged under this schedule.

2. Character of service: *Applicable as per provisions under Part-II.*

3. Single Part Tariff for contract demand ≤ 20 kVA

a. Fixed Charge (Charges-1)

Fixed Charge (Rs/month)	130.00

b. Energy Charge (Charges-2)

Energy Charge (Rs./kWh)*	4.75

***Note**:

a. For existing industrial consumers, a rebate of 10% on energy charges shall be applicable for additional power consumption beyond the level of FY 2017-18

b. For new industries coming into production after 01.04.2018 the energy charges shall be 10% lower than the approved energy charges for the respective category for a period of 3 years

4. Two Part Tariff for contract demand > 20 kVA ≤ 50 kVA

a) Fixed Charge (Charges-1)

Fixed Charge (Rs/month)	Nil

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)*	4.60

***Note**:

a. For existing industrial consumers, a rebate of 10% on energy charges shall be applicable for additional power consumption beyond the level of FY 2017-18

b. For new industries coming into production after 01.04.2018 the energy charges shall be 10% lower than the approved energy charges for the respective category for a period of 3 years

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	100.00

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

Note:

a. *HPSEBL shall not only continue with the existing practice of installation of tri-vector meters capable of recording the relevant parameters applicable for two-part tariff for different time blocks of the day, for all consumers in this category having connected load of more than 20 kW, but shall also provide such meters for new/ existing connections under single part tariff wherever the consumer expresses his intention to use power during peak load hours.*

b. *The present practice of meter reading through MRI/ AMR shall be continued for all consumers under this category with connected load above 20kW irrespective of applicability of single/ two part tariff.*

5. **Peak load charges (PLC)**

Description	Additional Charges on Average Demand * (Rs./kVA/month)	Energy Charge for consumption during peak load hours
Contract Demand ≤ 20 kVA	Nil	1.5 times of the normal per kWh charges
Contract Demand > 20 kVA	100.00	Rs. 6.40/kVAh

.

* 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 2018;

(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) Fixed Charge (Charges-1)

Fixed Charge (Rs/month)	Nil

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)*	4.60

*__Note__:

a. *For existing industrial consumers, a rebate of 10% on energy charges shall be applicable for additional power consumption beyond the level of FY 2017-18*

b. *For new industries coming into production after 01.04.2018 the energy charges shall be 10% lower than the approved energy charges for the respective category for a period of 3 years*

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	120.00

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

4. **Peak load charges (PLC)**

Description	***Additional Charges on Average Demand**	**Energy Charge**
	(Rs./kVA/month)	**(Rs./kVAh)**
> 50 kVA	100.00	Rs. 6.20

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* These additional charges shall be charged on the average demand during peak

load hours for the billing month, which shall be calculated in kVA by dividing the total kVAh consumption during peak load hours of the month by a fixed figure of 105.

5. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

6. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

7. **Late Payment Surcharge (LPS):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

8. **Contract Demand Violation Charge:** *Applicable as per provisions under 'Part-1 General Conditions of Tariff'.*

9. **Night Time Concession (NTC):** *Applicable as per provisions under 'Part-1 General Conditions of Tariff', at the following rates:*

    (i) 80 paise/kVAh for consumption during night hours for the month of June, July and August 2018;

    (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) Fixed Charge (Charges-1)

Description	Fixed 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*	4.20
HT-1* (Contract Demand up to and including 1MVA)	4.60
HT-2* (Contract Demand above 1 MVA)	4.30

***Note**:

a. *For existing industrial consumers, a rebate of 10% on energy charges shall be applicable for additional power consumption beyond the level of FY 2017-18*

b. *For new industries coming into production after 01.04.2018 the energy charges shall be 10% lower than the approved energy charges for the respective category for a period of 3 years*

c) Demand Charge (Charges-3)

Description	Demand Charge (Rs/kVA/month)
EHT	425.00
HT-1 (Contract Demand up to and including 1MVA)	250.00
HT-2 (Contract Demand above 1 MVA)	400.00

Note: Demand charges would be levied on the actual maximum recorded demand

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

4. Peak load charges (PLC)

Description	*Additional Charges on Average Demand (Rs/kVA/month)	Energy Charge (Rs./kVAh)
EHT	100.00	6.10
HT-1	100.00	6.30
HT-2	100.00	6.30

. * 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 2018; and*
   40 paise/kVAh for other months.

   b) For HT-2 and EHT categories*: 60 paise/kVAh for the month of June, July and August 2018; and*
   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 - 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) Fixed Charge (Charges-1)

Description	Fixed Charge (Rs/month)
All consumers	80.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	3.70

4. Two Part Tariff for contract demand > 20 kVA

a) Fixed Charge (Charges-1)

Fixed Charge (Rs/month)	
LT	Nil
HT	Nil
EHT	Nil

b) Energy Charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
LT	5.00
HT	4.60
EHT	4.20

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 2018;

(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, tunnel construction, Hospitals, Departmental/private colonies, group housing societies, A.I.R Installations, Aerodromes, Bus Stands with single point connection and other similar establishments/institutions where further distribution to various residential and non-residential buildings is to be undertaken by the consumer, for its own bonafide use and not for resale to other consumers with or without profit. However, in case of MES, this schedule shall continue to apply till such time MES do not avail Open Access.

2. Character of service: *Applicable as per provisions under Part – II.*

3. Two Part Tariff

a) Fixed Charge (Charges-1)

Fixed 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) Fixed Charge (Charges-1)

Fixed Charge (Rs/month)	120.00

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) Fixed Charge (Charges-1)

Fixed 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) Fixed Charge (Charges-1)

Fixed 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) Fixed Charge (Charges-1)

Fixed 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
(VI)	General	

<table>
<tr><th>S. No.</th><th colspan="2">Description</th><th>Approved by the Commission</th></tr>
<tr><td>(a)</td><td colspan="2">Dielectric strength of oil of various equipment</td><td>Rs. 220/- per sample</td></tr>
<tr><td>(b)</td><td colspan="2">Earth test of substation</td><td>Rs. 220/- per earth</td></tr>
<tr><td>(c)</td><td colspan="2">Insulation resistance of cables/insulation of various equipment /installations</td><td>Rs. 220/- per cable/ equipment</td></tr>
<tr><td colspan="4">C. Testing charges at the time of routine periodical inspections or first test and inspection of new 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).</td></tr>
<tr><td>(i)</td><td>11/22 kV</td><td rowspan="5">Substations</td><td>Rs. 10,000/-</td></tr>
<tr><td>(ii)</td><td>33 kV</td><td>Rs. 15,000/-</td></tr>
<tr><td>(iii)</td><td>66 kV</td><td>Rs. 50,000/-</td></tr>
<tr><td>(iv)</td><td>132 kV</td><td>Rs. 1,00,000/-</td></tr>
<tr><td>(v)</td><td>220 kV</td><td>Rs. 3,00,000/-</td></tr>
<tr><td>(vi)</td><td>SHP Capacity (up to 2.5 MW)</td><td rowspan="2">Small Hydro Plants</td><td>Rs. 25,000/-</td></tr>
<tr><td>(vii)</td><td>SHP Capacity (greater than 2.5 MW)</td><td>Rs. 50,000/-</td></tr>
<tr><td>D.</td><td colspan="2">Visiting charges</td><td></td></tr>
<tr><td></td><td colspan="2">Visiting charges for Officers and staff to Consumers premises for testing of equipments(other than C above)</td><td>Rs. 3500/- per day for complete team PLUS actual journey charges as per out turn of vehicle</td></tr>
<tr><td colspan="4">Remarks: -</td></tr>
<tr><td colspan="4">(i) The charges mentioned under ‘C’ above shall be charged for the actual Periodical Inspection done and shall be on per inspection basis only.</td></tr>
<tr><td colspan="4">(ii) Visiting charges mentioned under D above include the visiting charges of M&T staff as well.</td></tr>
<tr><td colspan="4">(iii) Charges for HPSEBL's maintenance/testing Vans or Trucks if needed for the purpose will be extra. All Charges shall be got deposited before undertaking the testing work.</td></tr>
<tr><td colspan="4">(iv) Complete testing of 11kV, 22kV and 33 kV connections as per item C above shall be conducted before the release of HT connection.</td></tr>
<tr><td colspan="4">(v) Test reports on suitable forms will be issued by the operation sub-divisions/M&T Lab, which will be produced by the prospective consumer along with the wiring Contractor's test report.</td></tr>
<tr><td colspan="4">(vi) The insulation, earth and oil tests as well as general checking and inspection should be performed by the operation sub-division. Other tests requiring M&T Lab. facilities shall be arranged by the operation sub-division/division in the nearest M&T Lab., or by arranging the visit of the M&T staff to the consumer's premises.</td></tr>
<tr><td colspan="4">vii) The requests for testing shall be entertained by the concerned operation sub-division which will be responsible for arrangingall tests including tests by the M&T Lab and also for the recoveries of all thecharges, including those of M&T Lab</td></tr>
<tr><td colspan="4">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.</td></tr>
<tr><td colspan="4">2. Changing the position of meter at the request of consumer</td></tr>
<tr><td>(i)</td><td colspan="2">Single phase</td><td>Rs. 45/-</td></tr>
</table>

S. No.	Description	Approved by the Commission
(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		
(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/-

S. No.	Description	Approved by the Commission
(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	
(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/-

S. No.	Description	Approved by the Commission
(b)	Non residential consumers	Rs. 10/-
(c)	Small Industrial and Agriculture consumers	Rs. 10/-
(d)	Medium Industrial consumers	Rs. 10/-
(e)	Large Industrial and other categories of consumers	Rs. 10/-
(iv)	Supply of detailed print out of the meter recording	Rs. 50/-
11. Attendants for functions		
	Deputing attendants (line staff) for all functions.	
	(Per Attendant per day per function limited to 8 hours/day)	Rs. 250/-
12. Cost of Application/Agreement Form and wiring Contractor's test report forms:		
	For all categories	Nil
13. Processing fee for change in contract demand		
	Fee for change in Contract Demand (CD)	Rs. 25/- per kVA of the changed quantum of CD