

**Multi Year Tariff Order
For
Himachal Pradesh Power Transmission
Corporation Limited (HPPTCL)
FY 2019-20 to FY 2023-24**



**Himachal Pradesh Electricity Regulatory
Commission
June 29, 2019**

BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION AT SHIMLA**PETITION NO: 31/2019****CORAM
Sh. S.K.B.S. NEGI
Sh. BHANU PRATAP SINGH**

IN THE MATTER OF:

Approval of the Five Year Business Plan and MYT Petition for fourth Control Period FY 2019-20 to FY 2023-24 under sections 62, 64 and 86 of the Electricity Act, 2003.

AND

IN THE MATTER OF:

Himachal Pradesh Power Transmission Corporation Limited (HPPTCL)Petitioner

ORDER

The Himachal Pradesh Power Transmission Corporation Limited (hereinafter called the 'HPPTCL') has filed a Petition with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as 'the Commission' or 'HPERC') for approval of its Five Year Business Plan and MYT Petition for fourth Control Period FY 2019-20 to FY 2023-24 under Sections 62, 64 and 86 of the Electricity Act, 2003 (hereinafter referred to as 'the Act'), read the HPERC (Multi Year Tariff) Regulations, 2011 and its amendments in 2013 and 2018. The Commission scheduled the public hearing for interaction with the Petitioner, interveners, consumers, and consumer representatives of various consumer groups on April 29, 2019 at Shimla, and having had formal interactions with the officers of HPPTCL and having considered the documents available on record, herewith accepts the submissions with modifications, conditions and directions specified in the following Tariff Order.

The Commission has approved the Business Plan and MYT Petition for fourth Control Period FY 2019-20 to FY 2023-24 under the Multi Year Tariff (MYT) regime and approve the Aggregate Revenue Requirements for the Control Period duly taking into account the guidelines laid down in Section 61 of the Act, the National Electricity Policy, the National Tariff Policy and the regulations framed by the Commission.

The Commission, in exercise of the powers vested in it under Section 62 of the Act, orders that the approved Aggregate Revenue Requirement shall come into force w.e.f. 1st April 2019. The arrears, if any, from the long term and medium term customers for the months of April 2019 and May 2019 shall be adjusted in equal installments in the invoices for next

three months of FY 2019-20. Further, the approved short term transmission charges shall be applicable from 1st July 2019.

In terms of sub-regulation (10) of Regulation 9 of the HPERC (Multi Year Tariff) Regulations, 2011 along with Amendment 1, 2013, and Amendment 2, 2018, unless amended or revoked, continue to be in force up to 31 March, 2024.

The Commission further directs the publication of 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.

Sd/-
(BHANU PRATAP SINGH)
Member

Sd/-
(S.K.B.S. NEGI)
Chairman

Shimla

Dated: June 29, 2019

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1 INTRODUCTION

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 Himachal Pradesh Power Transmission Corporation Ltd.

- 1.2.1 Himachal Pradesh Power Transmission Corporation Limited (hereinafter referred to as 'HPPTCL' or 'the Petitioner') is a deemed licensee under first, second and fifth provision of Section 14 of the Electricity Act, 2003 (hereinafter referred to as 'the Act') for transmission of electricity in the State of Himachal Pradesh.
- 1.2.2 The Government of Himachal Pradesh (hereinafter referred to as 'GoHP' or the 'State Government' formed HPPTCL through a notification vide its notification No. MPP-A-(1)-4/2006-Loose, dated 11th September 2008.
- 1.2.3 Through notification No. MPP-A-(1)-4/2006-Loose dated 3rd December, 2008 read with the GoHP's earlier notification dated 31st October, 2008, HPPTCL was entrusted with the following work / business with immediate effect:
- a) All new works of construction of Sub-Stations of 66 kV and above
 - b) All new works of laying/ construction of transmission lines of 66 kV and above
 - c) Formulation, updating, execution of Transmission Master Plan for the state for strengthening of Transmission network and evacuation of power including new works under schemes already submitted by the Himachal Pradesh State Electricity Board (HPSEB) under this plan to the Financial Institutions for funding and where loan agreements have not yet been signed
 - d) All matters relating to planning and co-ordinations of the transmission related issues with CTU, CEA, Ministry of Power, State Government and HPSEBL
 - e) Planning and co-ordination with the IPPs/ CPSUs/ State PSUs/ Other Departments or organizations or agencies of the Central Government and

State Government, HPSEBL and HPPCL with regard to all transmission related issues

- 1.2.4 HPPTCL was declared the State Transmission Utility (STU) by the GoHP vide its order dated 10th June, 2010 and as a result thereof the Commission recognized HPPTCL as a deemed "Transmission Licensee" as per the Commission's Order dated 31st July, 2010 in Petition No. 32 of 2010 filed by HPPTCL under Sections 14 and 15 of the Act, for grant of Transmission Licensee in the State of Himachal Pradesh. Prior to FY11, the transmission tariff was being determined as a part of the tariff orders applicable to HPSEBL system.

1.3 Multi Year Tariff Framework

- 1.3.1 The Commission follows the principles of Multi Year Tariff (MYT) for determination of tariffs, in line with the provision of Section 61 of the Act.
- 1.3.2 The MYT framework is also 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.
- 1.3.3 The Commission had specified the terms and conditions for the determination of tariff in the year 2004, based on the principles as laid down under Section 61 of the Electricity Act 2003.
- 1.3.4 Thereafter, the Commission had notified the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011. The MYT regulations notified in the year 2011 were amended as (First Amendment) Regulations, 2013 on 1st November, 2013 and (Second Amendment) Regulations, 2018 on 22nd November, 2018 (herein after referred to as "HPERC MYT Transmission Regulations 2011").
- 1.3.5 The Commission issued the first Multi-Year Tariff (MYT) Order for HPPTCL for the period FY 2011-12 to FY 2013-14 on 14th July 2011 and thereafter for the second Control Period (FY 2014-15 to FY 2018-19) on 10th June, 2014. The Commission has also issued the Tariff Order on True Up for the FY 2014-15 to FY 2015-16 and Mid Term Review for Third Control Period FY 2016-17 to FY 2018-19.

1.4 Business Plan and Aggregate Revenue Requirement (ARR)

- 1.4.1 The Petitioner has filed the application for approval of Five Year Business Plan and MYT Petition for fourth Control Period FY 2019-20 to FY 2023-24, with the Commission on 30th November, 2018 registered as Filing No. 137 of 2018.
- 1.4.2 The Commission admitted the Petition vide interim order dated 25th February, 2019. The interim order inter alia included direction to the Petitioner to publish the application in an abridged form and manner as per

the “disclosure format” attached with the interim order for the information of all the stakeholders in the State. As per the direction, the Petitioner published the public notice in the following newspapers:

Table 1: List of Newspapers for Information on Petition

Sl.	Name of News Paper	Date of Publication
1.	The Tribune (English)	2 nd March 2019
2.	Dainik Bhaskar (Hindi)	2 nd March 2019
3.	Dainik Bhaskar (Hindi)	9 th March 2019

1.5 Interaction with the Petitioner

- 1.5.1 Since the submission of the Petition, there have been a series of interactions between the Petitioner and the Commission, both written and oral, wherein the Commission sought additional information/clarifications and justifications on various issues, critical for the analysis of the Petition.
- 1.5.2 Based on preliminary scrutiny of the petition, the Commission vide letter No. HPERC-F(1)-7/2018-2423 dated 15th December, 2018 directed the Petitioner to submit details regarding first set of deficiencies identified in the petition, which were submitted by the Petitioner vide MA No. 15/2019 dated 28th February, 2019.
- 1.5.3 Based on the detailed scrutiny of the petition, various clarifications/information were sought by the Commission from time to time. The following submissions made by the Petitioner in response there to, have been taken on record:

Table 2: Communication with the Petitioner

Sl	Submission of the Petitioner	Date
1	M.A No 15/2019	28.01.2019
2	M.A. No 57/2019	20.03.2019
3	M.A. No 107/2019	29.04.2019
3	M.A. No 116/2019	15.05.2019

1.6 Public Hearings

- 1.6.1 The interim order inter alia included direction to the Petitioner to publish the application in an abridged form and manner as per the “disclosure format” attached with the interim order for the information of all the stakeholders in the State. As per the direction, the Petitioner published the public notice in the following newspapers.

Table 3: List of Newspapers for Public Hearing

Sl.	Name of News Paper	Date of Publication
1.	The Tribune (English)	2 nd March 2019
2.	Dainik Bhaskar (Hindi)	2 nd March 2019
3.	Dainik Bhaskar (Hindi)	9 th March 2019

- 1.6.2 The Commission published a public notice inviting suggestions and objections from the public on the tariff petition filed by the Petitioner in accordance with Section 64(3) of the Act which was published in the newspapers as mentioned in the table:

Table 4: List of Newspapers for Public Notice by Commission

Sl.	Name of News Paper	Date of Publication
1.	The Tribune (English)	12 th March 2019
2.	Dainik Bhaskar (Hindi)	12 th March 2019

- 1.6.3 The stakeholders were requested to file their objections by 30th March, 2019. HPPTCL was required to submit replies to the suggestions/ objections to the Commission by 16th March, 2019 with a copy to the objectors on which the objectors were required to submit rejoinder by 23rd April, 2019. The date of public hearing was fixed on 29th April, 2019.
- 1.6.4 Consumer representative, officials of HPSEBL and representative from Directorate of Energy, GoHP were present during the hearing. The representative from Directorate of Energy, GoHP, HPSEBL and other Stakeholders had submitted written objections which are detailed in Chapter 4 of this Order.

2 SUMMARY OF BUSINESS PLAN FOR 4TH CONTROL PERIOD

2.1 Introduction

- 2.1.1 The Petitioner has submitted that the primary objective of the Business Plan is to analyse and anticipate the future requirements in advance and plan for the capital investments and Human resources required accordingly.
- 2.1.2 This Chapter summarizes the highlights of the Business Plan filed by HPPTCL for determination of the Aggregate Revenue Requirement (ARR) for the third MYT Control Period (FY 2019-20 to FY 2023-24).
- 2.1.3 Business Plan for the Control Period has been bifurcated into Human Resource Plan, CAPEX Plan, Operational Performance, O&M plan, Depreciation, etc. as detailed in the sections below.

2.2 Operational Performance and Plan

- 2.2.1 The Petitioner has highlighted that it has the prime responsibility of providing efficient transmission services within the State, it is the planner and facilitator of the transmission system for ensuring grid security, quality of supply, and performance in compliance with the Grid Code and Regulations framed under the Electricity Act, 2003.
- 2.2.2 The Petitioner has submitted the details of transmission lines both intrastate and interstate vested with HPPTCL as per notification no. MPP-A (3)-1/2001-iv dated June 10, 2010 by the Government of Himachal Pradesh, are as follows:

Table 5: Existing Transmission Lines Submitted by the Petitioner

S. No.	Name of Existing lines	Type of line AC/ HVDC	S/C or D/C	Line length (km)	COD
A	220 KV Lines				
1	220 kV D/C Bairasuil - Pong Line (LILO portion at Jassure)	AC	D/C	0.24	09-1985
2	220 kV S/C Jassure-Thein Line	AC	S/C	25.60	03-2001
3	220 kV Dehar-Kangoo Line (S/C ckt. Line on D/C tower)	AC	S/C	3.18	06-1999
4	220 kV D/C Panchkula-Kunihar Line	AC	D/C	46.72	05-1989
5	220 kV D/C Kodari-Majri Line	AC	D/C	35.02	09-1989
6	220 kV D/C Nalagarh (PGCIL)-Nalagarh Line	AC	D/C	3.50	07-2010
B	132 KV Lines				

S. No.	Name of Existing lines	Type of line AC/ HVDC	S/C or D/C	Line length (km)	COD
7	132 kV S/C Giri-Kulhal Line	AC	S/C	17.40	04-1978
8	132 kV D/C Giri-Abdullapur Line	AC	D/C	16.22	08-1982
9	132 kV S/C Kangra Tap Line	AC	S/C	0.14	02-1979
10	132 kV S/C Dehar-Kangoo Line	AC	S/C	2.99	12-1998
11	132 kV D/C Shanan-Bassi Line	AC	D/C	5.00	03-1970
C	66 KV Lines				
12	66 kV Shanan-Bijni Line	AC	S/C	35.00	10-1969
13	66 kV Pinjore-Parwanoo Line	AC	S/C	8.23	04-1956
14	66 kV Pong-Sansarpur Terrace Line	AC	S/C	6.30	10-1990
15	66 kV Bhakra-Goalthai-Rakkar Line	AC	S/C	16.72	12-1985

2.3 Performance Targets

Transmission Loss

- 2.3.1 The Petitioner submitted that it has approached the Government of Himachal Pradesh (GoHP) regarding functional segregation of the entire transmission system to HPPTCL from HPSEBL and for metering arrangements to determine the exact transmission losses and has pursued the same on regular basis with utmost priority.
- 2.3.2 Regarding, transmission losses, the Petitioner has submitted that 0.75% of transmission loss is lowest for a transmission licensee across the country in comparison to some other transmission utilities across the country. The actual transmission losses approved by various SERCs for the transmission licensees of the region are as follows.

Table 6: Transmission Losses as approved by various SERCs in the region

S. No	Transmission Licensee	Approved Loss (%)	Financial Year
1	Power Transmission Corporation of Uttarakhand Ltd.	1.78%	FY 2016-17 to FY 2018-19
2	Punjab State Transmission Corporation Limited	2.40%	FY 2018-19
3	Haryana Vidyut Prasaran Nigam Limited.	2.46%	FY 2016-17

- 2.3.3 The Petitioner has also submitted that since there is not much scope of further reduction in the losses, the transmission losses might be approved at a nominal level of 1.50% for the entire Control Period.

Reliability

- 2.3.4 The Petitioner mentioned that it should maintain a reliable transmission network both existing network as well as the recently commissioned and to be commissioned projects as stipulated under the Grid Code and all other relevant regulations on handing over of transmission assets from HPSEBL to HPPTCL.

2.4 Human Resource Development Plan

- 2.4.1 In order to ensure effective functioning of the organization, the Petitioner has carried out a detailed analysis of the adequacy and efficiency of its present work force. Considering the dynamic nature of the power sector and augmentation of several new projects in the form of lines and substations HPPTCL has proposed Employee addition plan for the fourth Control Period of FY 2019-20 to FY 2023-24 in order to achieve higher levels of efficiency.
- 2.4.2 The Petitioner claimed that currently it is grossly understaffed and considering the urgency in requirement of additional workforce to complete the projects within the predefined timelines, it has initiated efforts to enhance the capabilities of employees to develop competent, trained and multi-disciplinary human capital.
- 2.4.3 The Petitioner has mentioned that it is developing numerous substations and lines simultaneously, considering this the existing work force of HPPTCL against the sanctioned post is as follows:

Table 7: Existing Employee Strength Submitted by the Petitioner

S. No	Particulars	FY 16		FY 17		FY 18		FY 19 (30.11.2018)	
		A	B	A	B	A	B	A	B
1	Director	2	2	2	2	2	2	2	2
2	Chief Engineer / General Manager	2	2	2	2	2	2	2	2
3	Superintendent Engineer / Dy General Manager	7	8	7	8	7	8	9	10
4	Sr. Executive Engineer / Sr. Manager	19	22	20	22	19	22	11	31
5	Assistant Engineer / Dy Manager	26	70	41	70	50	70	50	104
6	Others	56	182	58	182	95	182	111	341
	Total	112	286	130	286	175	286	185	490

A: Actual Employee strength at the beginning of the year

B: Sanctioned Employee strength at the beginning of the year

- 2.4.4 Accordingly, the employee addition plan submitted by the Petitioner for the fourth Control Period is as follows:

Table 8: Employee Addition Plan Proposed for fourth Control Period

Particulars	FY 20		FY 21		FY 22		FY 23		FY 24	
	A	B	A	B	A	B	A	B	A	B
Total Employee Strength	235	490	490	490	490	490	490	490	490	490

A: Estimated Employee strength at the beginning of the year

B: Sanctioned Employee strength at the beginning of the year

2.5 O&M Expenses

2.5.1 The Petitioner has computed the Operation and Maintenance Expense as per HPERC MYT Transmission Regulations 2011 and its amendments. The methodology adopted is as follows:

"(3) The O&M expenses for the nth year of the Control Period shall be approved based on the formula given below:-

$$O\&M_n = R\&M_n + EMP_n + A\&G_n ;$$

Where -

$$'EMP_n' = [(EMP_{n-1}) \times (1+G_n) \times (CPIinflation)] + Provision(Emp) ;$$

$$'A\&G_n' = [(A\&G_{n-1}) \times (WPIinflation)] + Provision(A\&G) ;$$

$$'R\&M_n' = K \times (GFA_{n-1}) \times (WPIinflation) ;$$

'K' - is a constant (could be expressed in %). Value of K for each year of the Control Period shall be determined by the Commission in the MYT Tariff order based on licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

'CPIinflation' – is the average increase in the Consumer Price Index (CPI) for immediately preceding three years before the base year;

'WPIinflation' – is the average increase in the Wholesale Price Index (WPI) for

immediately preceding three years before the base year;

'EMP_n' – employee's cost of the transmission licensee for the nth year (employee cost for the base year would be adjusted for provisions for expenses beyond the Control of the licensee and one time expected expenses, such as recovery/ adjustment of terminal benefits, implication of pay revisions, arrears and interim relief.);

'Provision(Emp)'- Provision corresponding to clauses (iii), (iv) and (v) of sub-regulation (1-a) of regulation 13, duly projected for relevant year for expenses beyond Control of the Transmission Licensee and expected one-time expenses as specified above;

'A&G_n' – administrative and general costs of the transmission licensee for

the nth year;

'Provision(A&G)'-Cost for initiatives or other one-time expenses as proposed by the Transmission licensee and approved by the Commission after prudence check;"

'R&M_n' – Repair and Maintenance costs of the transmission licensee for the

nth year;

'GFAn-1' – Gross Fixed Asset of the transmission licensee for the n-1th year;

'Gn' - is a growth factor for the nth year. Value of Gn shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on licensee's filings, benchmarking, approved cost by the Commission in past and any other factor that the Commission feels appropriate;

Provided that, repair and maintenance expenses determined shall be utilized towards repair and maintenance works only;

Provided further that, the impact of pay revision (including arrears) shall be allowed on actual during the mid-term performance review or at the end of the Control Period as per actual/ audited accounts, subject to prudence check and any other factor considered appropriate by the Commission."

Employee Expenses

2.5.2 The Petitioner has computed the employee expenses as per the following formula:

$$'EMPn' = [(EMPn-1) \times (1+Gn) \times (CPIinflation)] + Provision (Emp)$$

Where:

'CPIinflation' – is the average increase in the Consumer Price Index (CPI) for

Immediately preceding three years before the base year

2.5.3 The Petitioner has reduced actual employee expenses attributable to Kashang-Bhabha transmission Line and 22/66/220 kV Bhoktoo Substation from the total employee expenses as both the projects achieved COD during May 2016 and April 2017 respectively.

2.5.4 The Petitioner has also submitted that 25% of the employee expenses has been computed and then the actual employee expenses on the basis of actual O&M personnel deployed to the two projects have been added to compute the expenses incurred towards O&M of Intra-State transmission system including STU functions. Accordingly, the computed Employee Expense for the FY 2016-17 and FY 2017-18 is as follows:

Table 9: Actual Employee Expense for FY 2016-17 and FY 2017-18 (Rs. Cr.)

Particulars	FY 17	FY 18
Total Actual Employee Cost (A)	14.75	16.32
Less: Actual Employee Expense of Kashang-Bhabha transmission Line (B)	0.15	0.37
Less: Actual Employee Expense of Bhoktoo Substation (C)		0.22
Net Employee Expense (D=A-B-C)	14.60	15.73
25% of Net Employee Expense attributable to STU and Intra-State Expense (E=25% of D)	3.65	3.93

Particulars	FY 17	FY 18
Total Employee Expense for computation of Base Year Expense (F= B+C+E)	3.80	4.52

2.5.5 Based on the above, the Petitioner has computed the Employee Expense for the fourth Control Period considering the average increase in CPI of preceding 3 years before Base Year as 4.30% .The CPI inflation rate is calculated as per the following table:

Table 10: Computation of Consumer Price Index

Month	Consumer Price Index						
	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY18
April	186	205	226	242	256	271	277
May	187	206	228	244	258	275	278
June	189	208	231	246	261	277	280
July	193	212	235	252	263	280	285
August	194	214	237	253	264	278	285
September	197	215	238	253	266	277	285
October	198	217	241	253	269	278	287
November	199	218	243	253	270	277	288
December	197	219	239	253	269	275	288
January	198	221	237	254	269	274	288
February	199	223	238	253	267	274	287
March	201	224	239	254	268	275	287
Average	195	215	236	251	265	276	285
Increase in CPI in preceding 3 years					5.65 %	4.12 %	3.14 %
Average increase in CPI in preceding three years						4.30%	

2.5.6 The Petitioner has estimated the growth factors on the basis of the employee growth as under:

Table 11: Computed Growth Factor for fourth Control Period

Particulars	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Employee Strength	50	52	77	205	205	205	205
Gn		5.71%	27.03%	108.51%	0.00%	0.00%	0.00%

2.5.7 The total employee cost projected by the Petitioner for the Third Control Period is tabulated below:

Table 12: Claimed Employee Expense for fourth Control Period (Rs. Cr.)

Particulars	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Employee Expense	4.99	6.61	14.37	14.99	15.63	16.30

Administrative and General Expenses

- 2.5.8 The Petitioner has calculated the A&G expenses based on the approach adopted by the Commission in its previous orders i.e. by allocating 25% of the actual A&G Expense as the expense towards STU and Intra-State and remaining expense towards ongoing projects.
- 2.5.9 While computing the A&G expenses, the Petitioner has considered the increase in the expenses on account of expanding infrastructure, and thus factored in the impact of increase in the assets along with various other charges, in addition to the WPI escalation.
- 2.5.10 Considering the increasing expenses on account of expanding infrastructure, the Petitioner has made provisions for all recurring costs like License Fees, Membership Fees, Filing Fees, Insurance Fees, Manpower training, ERP consultancy & maintenance etc. for each year of the Control Period.
- 2.5.11 The actual A&G expenses for FY 2016-17 and FY 2017-18 proposed by the Petitioner is shown in the table below:

Table 13: Actual A&G Expense Submitted for FY17 and FY18 (Rs. Cr.)

Particulars	FY 17	FY 18
Total A&G Expense	1.50	1.58

- 2.5.12 Based on the above, the A&G Expense for the fourth Control Period has been computed considering the average increase in WPI of preceding 3 years before Base Year as 0.33%. The WPI inflation rate projected for escalation are calculated as per the following table:

Table 14: Computation of Wholesale Price Index

Month	Wholesale Price Index						
	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18
April	100	105	109	114	110	109	113
May	100	105	110	115	111	110	113
June	100	105	111	115	112	112	113
July	100	106	113	117	111	112	114
August	100	107	113	117	110	111	115
September	100	108	114	116	110	111	115
October	100	107	115	116	110	112	116
November	100	107	114	114	110	112	116
December	100	107	113	112	109	112	116
January	100	108	114	111	108	113	116
February	100	108	114	110	107	113	116
March	100	109	114	110	108	113	116
Average	100	107	113	114	110	112	115
Increase in CPI in preceding 3 years					-3.65%	1.73%	2.92%
Average increase in WPI in preceding three years					0.33%		

2.5.13 The total A&G expense for the fourth Control Period as proposed by the Petitioner is tabulated below:

Table 15: Claimed A&G Expense for fourth Control Period (Rs. Cr.)

S. No.	Particulars In Rs. Cr.	Control Period				
		FY 20	FY 21	FY 22	FY 23	FY 24
A)	Administration Expenses					
1	Rent rates and taxes (Other than all taxes on income and profit)	0.20	0.32	0.46	0.52	0.52
2	Insurance of employees, assets, Legal insurance	0.00	0.00	0.00	0.00	0.00
3	Revenue Stamp Expenses Account	-	-	-	-	-
4	Telephone, Postage, Telegram, Internet Charges	0.04	0.07	0.10	0.11	0.11
5	Incentive & Award To Employees/Outsiders	-	-	-	-	-
6	Consultancy Charges	0.12	0.19	0.27	0.31	0.31
7	Technical Fees	-	-	-	-	-
8	Other Professional Charges	-	-	-	-	-
9	Conveyance And Travel (vehicle hiring, running)	0.34	0.54	0.78	0.87	0.87
10	Plant And Machinery	0.00	0.00	0.00	0.00	0.00
11	Security / Service Charges Paid To Outside Agencies	0.25	0.25	0.25	0.25	0.25
12	Ombudsman Expenses	-	-	-	-	-
	Sub-Total of Administrative Expenses	0.95	1.37	1.87	2.07	2.07
B)	Other Charges					
1	Fee And Subscriptions Books And Periodicals	0.00	0.01	0.01	0.01	0.01
2	Printing And Stationery	0.20	0.21	0.23	0.24	0.24
3	Advertisement Expenses (Other Than Purchase Related) Exhibition & Demo.	0.15	0.17	0.18	0.19	0.19
4	Contributions/Donations To Outside Institute / Association	-	-	-	-	-
5	Electricity Charges To Offices	0.05	0.09	0.13	0.15	0.16
6	Water Charges		-	-	-	-
7	Any Study - As per requirements	0.20	0.20	0.20	0.20	0.20
8	Miscellaneous Expenses	0.01	0.01	0.02	0.02	0.02
9	Public Interaction Program	-	-	-	-	-
10	Any Other expenses	0.12	0.19	0.28	0.31	0.31
	Sub-Total of other charges	0.74	0.88	1.04	1.13	1.15
C)	Legal Charges	0.01	0.02	0.02	0.03	0.03
D)	Auditor's Fee	0.01	0.01	0.02	0.02	0.02

S. No.	Particulars In Rs. Cr.	Control Period				
		FY 20	FY 21	FY 22	FY 23	FY 24
E)	Consultancy Charges (drawn from ADB for ERP and capacity development)	0.03	0.05	0.08	0.09	0.09
F)	Total Charges	1.74	2.33	3.04	3.33	3.35
G)	Total Charges Chargeable to Revenue Expenses	1.74	2.33	3.04	3.33	3.35
H)	Provisions					
1	Licence Fees	1.00	1.00	1.00	1.00	1.00
2	Membership Fees	0.10	0.10	0.10	0.10	0.10
3	Manpower Training	0.66	1.37	1.37	1.37	1.37
4	Insurance	0.66	1.05	1.52	1.69	1.69
5	Petition Filing Fees including 13 capex petitions	0.05	0.10	0.16	0.20	0.15
6	ERP Consultancy and Maintenance	1.84	1.84	1.84	1.84	1.84
7	Vehicles	0.75	0.00	0.00	0.00	0.00
	Total Provisions	5.06	5.46	5.99	6.20	6.15
	Total A&G	6.81	7.79	9.02	9.53	9.50

Repair and Maintenance Expenses

2.5.14 The Petitioner has mentioned that the Commission has been allowing the R&M Expense as the actual payment made by the HPPTCL to HPSEBL. The Petitioner has further mentioned that it will be carrying out the operation and Maintenance of its network and has requested the Commission to approve the R&M Expense as per the methodology provided in the HPERC Tariff Regulations, 2011 and its amendments.

2.5.15 The Petitioner has computed the K factor as a percentage of R&M expenses undertaken for the last 2 years GFA based on which 'K' factor has been projected for the fourth Control Period.

Table 16: K Factor for FY17 and FY18 (Rs. Cr.)

Particulars	FY 17	FY 18	Average
Actual R&M Expense	1.32	2.53	
Average GFA	78.38	141.61	
K Factor	1.69%	1.79%	1.74%

2.5.16 The total R&M cost for the fourth Control Period proposed by the Petitioner is tabulated below:

Table 17: Proposed R&M Expense for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
GFA	221.16	349.37	505.50	563.50	563.50
K Factor	1.74%	1.74%	1.74%	1.74%	1.74%

Particulars	FY20	FY21	FY22	FY23	FY24
R&M Expense	3.85	6.08	8.80	9.81	9.81

2.5.17 Accordingly, the total O&M expense proposed by the Petitioner for the fourth MYT Control Period is tabulated below:

Table 18: Proposed O&M Expense for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Employee Expense	6.61	14.37	14.99	15.63	16.30
A&G Expense	6.81	7.79	9.02	9.53	9.50
R&M Expense	3.85	6.08	8.80	9.81	9.81
Total O&M Expense	17.27	28.24	32.81	34.97	35.62

2.6 Capital Investment Plan

2.6.1 The Petitioner, in order to cater the increasing electricity consumption demand for the State of Himachal Pradesh owing to central government initiatives to provide electricity to each household under Saubhagya scheme, has proposed to undertake capital investment for developing its transmission network.

2.6.2 The Petitioner has proposed to undertake capital investment towards 400 kV, 220 kV, and 132 kV transmission works, ERP/IT implementation and other miscellaneous works, which has been broadly divided into works towards development of Inter-State network / Substation and Intra-State network / Substation.

2.6.3 The capital expenditure plan of HPPTCL for the fourth Control Period FY 2019-20 to FY 2023-24 are as follows:

Table 19: Proposed Intra-State Schemes for fourth Control Period

SI	Name of the Project	Actual/Expected COD
1	33/132 KV GIS Pandoh by Lilo of 132 kV Bajaura -Kangoo line	February 2019
2	33/132/,2x25/31.5 MVA Substation Chambi with LILO of 132 k V Dehra-Kangra line	February 2019
3	220 kV D/C Kashang-Bhabha Line (shall form part of the Inter-State Network upon completion of Wangtoo Substation)	May 2016
4	22/66/220KV Substation Bhoktoo by LILO of one circuit of 220 kV Kashang-Bhabha D/C line	March 2017
5	66/22 Kv,2 x 10 MVA GIS S.STN at Bagipul	December 2020
6	66Kv D/C Transmission from Bagipul to Kotla	December 2020
7	132/220 kV Substation at Kalaamb & 220 KV D/C TL from 400/220 kV S.STN of PGCIL at Araindwala to proposed 220/132 kV S.STN of HPPTCL at andhier Kalamb	June 2020
8	Additional 33/220kV,31.5 MVA Transformer at Pandoh Substation	June 2019
9	33 kV D/C Line between Palchan and 33/220 kV sub-station in the yard of Allain Dhuangan HEP	December 2019

SI	Name of the Project	Actual/Expected COD
10	132/220 kV GIS 2x 80/100 MVA sub-station at Mazra by LILO of 132 kV Kurthala- Bathri D/C Line	December 2021
11	66 kV switching station (GIS) at Urni	December 2018
12	66 kV Urni-Wangtoo D/C Line	May 2019
13	33/220 kV, 31.5 MVA sub-station in the yard of Allain Dhuangan HEP	June 2019

2.6.4 In addition to the above, the Petitioner has also proposed following projects, which may also be part of Intra-State transmission network depending upon the actual power flow post commissioning.

Table 20: Transmission Schemes for which Inter/Intra Status depends upon Actual Power Flow

SI	Name of the Project	Proposed COD
1	132 kV D/C Transmission Line between Rupin HEP and 132/220 kV Sunda sub station	October 2020
2	33/132 kV, 2x31.5 MVA sub-station at Rupin HEP	October 2020
3	132 kV D/C transmission Line between Tangnu Romai HEP and 132/220 kV sub-station at Sunda	December 2019

Capital Expenditure

2.6.5 The Petitioner with reference to the above-mentioned projects has proposed a capital expenditure plan for the fourth Control Period as summarized below.

Table 21: Proposed Capital Expenditure for fourth Control Period (Rs. Cr.)

S. No.	Name of the Transmission Line & Associated Substations	Estimated Cost	Completion Programme / Remarks	Control Period					
				FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
I.	220 KV LINES & S/stn.								
1	22/66/220KV Substation Bhoktoo by LILO of one circuit of 220 kV Kashang-Bhabha D/C line	54.50		15.04					
2	132/220 kV, 2x 80/100 MVA GIS sub-station at Mazra by LILO of 132 kV Kurthala- Bathri D/C Line	116.00	Dec-21	28.99	28.99	28.99	28.99	-	-
3	132/220 kV Substation at Kalaamb 220 KV D/C TL from 400/220 kV S.STN of PGCIL at Araindwala to proposed 220/132 kV	111.92	Jun-20	37.31	37.31	37.31	-	-	-

S. No.	Name of the Transmission Line & Associated Substations	Estimated Cost	Completion Programme / Remarks	Control Period					
				FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
	S.STN of HPPTCL at Andhier Kalamb								
4	33/220 kV, 31.5 MVA sub-station in the yard of Allain Dhuangan HEP	10.20	Dec-19	4.76	4.76				
TOTAL (II) (220KV)		292.62		86.10	71.60	66.30	28.99	-	-
II.	132 KV LINES & S/stn.								
1	33/132/,2x25/31.5MV A Substation Chambi with LILO of 132 k V Dehra-Kangra line	82.88	Feb-19	54.32	-	-	-	-	-
2	33/132 KV GIS Pandoh by lilo of 132 kV Bajaura -Kangoo line	49.09	Feb-19	27.65	-	-	-	-	-
TOTAL (III)(132KV)		131.97		81.98					
IV.	66 KV LINES & S/stn.								
1	66 kV switching station (GIS) at Urni	39.56	Dec-18	16.80	-	-	-	-	-
2	66 kV Urni-Wangtoo D/C Line	16.65	May-19	4.57	4.57	-	-	-	-
3	66/22 kV,2 x 10 MVA GIS S.STN at Bagipul	56.02	Dec-20	18.66	18.66	18.66	-	-	-
4	66kV D/C Transmission from Bagipul to Kotla	28.31	Dec-20	9.42	9.42	9.42	-	-	-
TOTAL (IV)(66KV)		140.54		49.45	32.65	28.08	-	-	-
V.	MISC. WORKS								
1	Additional 33/132 kV, 31.5 MVA Transformer at Pandoh Substation	24.22	Jun-19	12.11	12.11	-	-	-	-
2	33 kV D/C Line between Palchan and 33/220 kV sub-station in the yard of Allain Dhuangan HEP	9.10	Dec-19	3.22	3.22	-	-	-	-
TOTAL (V) MISC. WORKS		33.32		15.33	15.33				

Capital Structure

2.6.6 As per Regulation 37 (b) of the HPERC Tariff Regulations, 2011 and its amendments, the Petitioner has submitted the financing scheme for the proposed capital structure for the fourth Control Period. The scheme wise financing of the capital investment plan is as follows:

Table 22: Proposed Capital Structure for fourth Control Period

S. No.	Name of the Transmission Line & Associated Substations	Estimated Cost (Rs. Cr.)	Completion Programme / Remarks	Funding Agency	Debt (%)	Equity (%)	Grant (%)
I.	220 KV LINES & S/stn.						
1	132/220 kV, 2x 80/100 MVA GIS sub-station at Mazra by LILO of 132 kV Kurthala- Bathri D/C Line	116.00	Dec-21	ADB (Tranche-III)	77.20	22.80	NIL
2	132/220 kV Substation at Kalaamb 220 KV D/C TL from 400/220 kV S.STN of PGCIL at Araindwala to proposed 220/132 kV S.STN of HPPTCL at andhier Kalamb	111.92	Jun-20	Domestic Loan	90	10	NIL
3	33/220 kV, 31.5 MVA sub-station in the yard of Allain Dhuangan HEP	10.20	Dec-19	Domestic Loan	90	10	NIL
II.	132 KV LINES & S/stn.						
1	33/132, 2x25/31.5MVA Substation Chambi with LILO of 132 kV Dehra-Kangra line	82.88	Feb-19	ADB (Tranche-II)	75.20	24.80	NIL
2	33/132 KV GIS Pandoh by lilo of 132 kV Bajaura -Kangoo line	49.09	Feb-19	ADB (Tranche-I)	79.40	20.60	NIL
III.	66 KV LINES & S/stn.						
1	66 kV switching station (GIS) at Urni	39.56	Dec-18	ADB (Tranche-II)	75.20	24.80	NIL
2	66 kV Urni-Wangtoo D/C Line	16.65	May-19	ADB (Tranche-II)	75.20	24.80	NIL
3	66/22 kV, 2 x 10 MVA GIS S.STN at Bagipul	56.02	Dec-20	ADB (Tranche-III)	77.20	22.80	NIL
4	66kV D/C Transmission from Bagipul to Kotla	28.31	Dec-20	ADB (Tranche-III)	77.20	22.80	NIL
IV.	MISC. WORKS						
1	Additional 33/132 kV, 31.5 MVA Transformer at Pandoh Substation	24.22	Jun-19	KFW	40.00	20.00	40.00
2	33 kV D/C Line between Palchan and 33/220 kV sub-station in the yard of Allain Dhuangan HEP	9.10	Dec-19	KFW	40.00	20.00	40.00

2.7 Depreciation

2.7.1 For working out depreciation for the FY 2019-20 to FY 2023-24, the Petitioner has considered the proposed Capital Expenditure Plan. The Petitioner has computed the depreciation in accordance with the HPERC MYT Transmission Regulations 2011, 2011 and its subsequent amendments as per following methodology-

(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

(2-a) The salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable.

(3) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the transmission system:

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the asset.

(4) For transmission project which are in operation for less than 12 years, the difference between the cumulative depreciation recovered and the cumulative depreciation arrived at by applying the depreciation rates specified in this regulation corresponding to 12 years, shall be spread over the period up to 12 years, and the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the asset.

(5) For the project in operation for more than 12 years, the balance depreciation to be recovered shall be spread over the remaining useful life of the asset.

(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."

2.7.2 The Petitioner has submitted that it has computed depreciation based on above methodology separately for the two recently commissioned project and the transmission network inherited from HPSEBL.

2.8 Non-Tariff Income

2.8.1 The Petitioner has computed the Non-Tariff Income in accordance with the HPERC MYT Transmission Regulations 2011 and its subsequent amendments.

2.8.2 The Petitioner has submitted the Non-Tariff Income for the third Control Period based on the actual non-tariff income for FY 2016-17 and FY 2017-18 as per accounts as tabulated below.

Table 23: Actual Non-Tariff Income for FY 2016-17 and FY 2017-18 (Rs. Cr.)

Particulars	FY 2016-17	FY 2017-18
Sale of Tender Forms	0.15	0.08
interest on Bank Deposits	5.14	4.09
Interest on ADB Loan Imprest	2.49	0.99
Miscellaneous Receipts	0.02	0.00
Interest on IT Refund	0.01	0.10
Interest from Cont./Supplier	2.33	1.67
Total	10.14	6.93

2.8.3 The non-tariff income proposed by the Petitioner for the fourth Control Period is summarized below:

Table 24: Non-Tariff Income claimed for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Sale of Tender Forms	0.12	0.12	0.12	0.12	0.12
interest on Bank Deposits	4.61	4.61	4.61	4.61	4.61
Interest on ADB Loan Imprest	1.74	1.74	1.74	1.74	1.74
Miscellaneous Receipts	0.01	0.01	0.01	0.01	0.01
Interest on IT Refund	0.06	0.06	0.06	0.06	0.06
Interest from Cont./Supplier	2.00	2.00	2.00	2.00	2.00
Total	8.54	8.54	8.54	8.54	8.54

2.9 Income from Other Business

2.9.1 HPPTCL submitted that it was not involved in any other business as defined in the HPERC Tariff Regulations, 2011 and its subsequent amendments, and accordingly it has not proposed for any income from other Business.

3 SUMMARY OF MYT TARIFF PETITION FOR 4TH CONTROL PERIOD

3.1 Introduction

3.1.1 This Chapter summarizes the highlights of the Petition filed by HPPTCL for determination of the Aggregate Revenue Requirement (ARR) for the third MYT Control Period (FY 2019-20 to FY 2023-24).

3.1.2 The Petitioner has proposed projections for the Control Period as per the HPERC MYT transmission Regulations 2011. ARR for each year of the Control Period has been bifurcated into following elements:

- O&M Expenses;
 - (i) Employee cost;
 - (ii) Administrative and General Expenses (A&G);
 - (iii) Repairs and Maintenance expenses(R&M);
- Depreciation;
- Interest and Financing Charges;
- Interest on Working Capital;
- Return on Equity
- Non-Tariff Income

3.1.3 The Petitioner has computed the ARR only for the intra-state transmission network after excluding the lines and sub-stations falling under the ISTS system. Hence, the total fixed cost for the Control Period includes the existing 12 transmission lines and the upcoming 13 schemes that HPPTCL proposes towards augmentation and strengthening of intra-state transmission network.

3.2 O&M Expenses

3.2.1 The Petitioner has computed Operation and Maintenance Expense as per HPERC MYT transmission Regulations 2011 and its amendments thereof. The methodology and approach adopted by the Petitioner have already been discussed in the previous Chapter in detail. Accordingly, the O&M expense proposed by the Petitioner for the fourth MYT Control Period is tabulated below:

Table 25: Proposed O&M Expense for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Employee Expense	6.61	14.37	14.99	15.63	16.30
A&G Expense	6.81	7.79	9.02	9.53	9.50
R&M Expense	3.85	6.08	8.80	9.81	9.81
Total O&M Expense	17.27	28.24	32.81	34.97	35.62

3.3 Capital Expenditure during the fourth Control Period

3.3.1 The Petitioner has mentioned that as per the Business Plan, only Intra-State Transmission Schemes have been considered in this Petition. The Petitioner has accordingly considered ARR expenses of the existing Intra State Transmission System and proposed schemes that shall form part of the Intra-State Transmission Network. The Petitioner has also submitted that 220 kV D/C Kashang-Bhabha Line and 22/66/220KV Substation Bhoktoo by LILO of one circuit of 220 kV Kashang-Bhabha D/C line schemes shall form part of the Inter-State Transmission Network on completion of Wangtoo Substation after FY 2019-20 and has proposed to adjust the same from the GFA claimed in FY 2019-20.

3.3.2 The capital expenditure plan of HPPTCL for the fourth Control Period FY 2019-20 to FY 2023-24 are as follows:

Table 26: Proposed Intra-State Schemes for fourth Control Period

SI	Name of the Project	Actual/Expected COD
1	33/132 KV GIS Pandoh by Lilo of 132 kV Bajaura -Kangoo line	February 2019
2	33/132/,2x25/31.5 MVA Substation Chambhi with LILO of 132 k V Dehra-Kangra line	February 2019
3	220 kV D/C Kashang-Bhabha Line (shall form part of the Inter-State Network upon completion of Wangtoo Substation)	May 2016
4	22/66/220KV Substation Bhoktoo by LILO of one circuit of 220 kV Kashang-Bhabha D/C line	March 2017
5	66/22 Kv,2 x 10 MVA GIS S.STN at Bagipul	December 2020
6	66Kv D/C Transmission from Bagipul to Kotla	December 2020
7	132/220 kV Substation at Kalaamb & 220 KV D/C TL from 400/220 kV S.STN of PGCIL at Araindwala to proposed 220/132 kV S.STN of HPPTCL at andhier Kalamb	June 2020
8	Additional 33/220kV,31.5 MVA Transformer at Pandoh Substation	June 2019
9	33 kV D/C Line between Palchan and 33/220 kV sub-station in the yard of Allain Dhuangan HEP	December 2019
10	132/220 kV GIS 2x 80/100 MVA sub-station at Mazra by LILO of 132 kV Kurthala- Bathri D/C Line	December 2021
11	66 kV switching station (GIS) at Urni	December 2018
12	66 kV Urni-Wangtoo D/C Line	May 2019
13	33/220 kV, 31.5 MVA sub-station in the yard of Allain Dhuangan HEP	June 2019

3.3.3 The Petitioner has submitted the phasing of capital expenditure of the proposed schemes as summarized below:

Table 27: Proposed Capital Expenditure for fourth Control Period (Rs. Cr.)

S. No.	Name of the Transmission Line & Associated Substations	Estimated Cost	Control Period					
			FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
I.	220 KV lines & S/stn.	292.62	86.10	71.60	66.30	28.99	-	-
II.	132 KV lines & S/stn.	131.97	81.98					
III.	66 KV lines & S/stn.	140.54	49.45	32.65	28.08	-	-	-
IV.	Misc. Works	33.32	15.33	15.33				
	Total	598.45	232.86	119.58	94.38	28.99	0	0

3.4 Funding of Proposed Capital Expenditure during the fourth Control Period

- 3.4.1 The Petitioner has proposed the funding of the proposed capital expenditure as per Regulation 18 of the HPERC MYT Transmission Regulations 2011 and its amendments.
- 3.4.2 The Petitioner has mentioned that for carrying out the proposed capital expenditure, it has secured loan from ADB and KFW through State Government. Under this mechanism, the State Government has provided the loan at a basic interest cost of 10%. Petitioner has also submitted that any variation in the exchange rates is to the account of State Government. Further, the Petitioner has submitted that it has also secured domestic loan from REC and PFC at the rate of 12.50%.
- 3.4.3 The capital structure for funding the proposed scheme during the fourth Control Period is as follows:

Table 28: Proposed Capital Structure for fourth Control Period

S. No.	Funding Agency	Debt (%)	Equity (%)	Grant (%)
1	Domestic Loan	90	10	NIL
2	ADB (Tranche-I)	79.40	20.60	NIL
3	ADB (Tranche-II)	75.20	24.80	NIL
4	ADB (Tranche-III)	77.20	22.80	NIL
5	KFW	40.00	20.00	40.00

3.5 Depreciation

- 3.5.1 The Petitioner has computed the depreciation in accordance with the Regulation 23 of the HPERC MYT Transmission Regulations 2011 and its subsequent amendments. The depreciation for each year of the Control Period has been computed as per the depreciation rates prescribed in the HPERC MYT Transmission Regulations 2011 as below:

Table 29: Depreciation Proposed for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Opening GFA (Less Grant)	317.53	237.92	434.17	550.17	550.17

Particulars	FY20	FY21	FY22	FY23	FY24
GFA Addition during the year	60.17	196.25	116.00	-	-
Less: Grant	13.33	-	-	-	-
GFA Deletion	126.46	-	-	-	-
Closing GFA	237.92	434.17	550.17	550.17	550.17
Depreciation	14.48	17.74	25.99	29.05	29.05

3.6 Interest on Loan

- 3.6.1 The Petitioner has computed the Interest on Loan in accordance with the Regulation 20 of the HPERC MYT Transmission Regulations 2011 and its subsequent amendments.
- 3.6.2 The Petitioner has considered the actual closing loan of FY 2017-18 corresponding to Intra-State Transmission Network as the opening loan for FY 2018-19 for computation of Interest on long term loans.
- 3.6.3 The Petitioner has mentioned that as per the Regulations, interest on loan has been computed based on actual weighted average interest on loan applicable for the project. The Petitioner has considered the separate weighted average rate of interest for the two recently commissioned projects and separately for new projects that are proposed to be executed in the next Control Period.
- 3.6.4 The Petitioner has also submitted that 220 kV D/C Kashang-Bhabha Line and 22/66/220KV Substation Bhoktoo by LILO of one circuit of 220 kV Kashang-Bhabha D/C line schemes shall form part of the Inter-State Transmission Network on completion of Wangtoo Substation in FY 2019-20 and has proposed the same to be transferred to Inter-State Transmission network. Hence, no outstanding loan against these assets have been shown at the end of FY 2019-20 by the Petitioner.
- 3.6.5 The Interest on Loan for each year of the Control Period proposed by the Petitioner is as below:

Table 30: Interest on Loan proposed for Upcoming Projects for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Opening Loan	126.52	157.85	315.04	389.63	373.01
Loan Addition during the Year	35.03	165.83	89.55	-	-
Less: Repayment of Loans during the year	3.71	8.63	14.97	16.62	17.18
Closing Loan	157.85	315.04	389.63	373.01	355.83
Interest on loan	14.22	23.84	37.01	39.58	37.78
Weighted average Rate of Interest on Loans	10.00%	10.50%	10.24%	10.38%	10.37%

Table 31: Interest on Loan proposed for Kashang-Bhabha Line fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Opening Loan	57.32	-	-	-	-
Loan Addition during the Year	-	-	-	-	-
Less: Repayment of Loans during the year	2.19	-	-	-	-
Closing Loan	0.00	-	-	-	-
Interest on loan	3.58	-	-	-	-
Weighted average Rate of Interest on Loans	12.50%	-	-	-	-

Table 32: Interest on Loan proposed for Bhoktoo Substation fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Opening Loan	26.98	-	-	-	-
Loan Addition during the Year	-	-	-	-	-
Less: Repayment of Loans during the year	0.96	-	-	-	-
Closing Loan	0.00	-	-	-	-
Interest on loan	1.35	-	-	-	-
Weighted average Rate of Interest on Loans	10.00%	-	-	-	-

Table 33: Total Interest on Loan claimed for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Total Interest on Loan	19.15	23.84	37.01	39.58	37.78

3.7 Interest on Working Capital

- 3.7.1 The Petitioner has computed the Interest on Working Capital in accordance with the Regulation 21 and 22 of the HPERC MYT Transmission Regulations 2011 and its subsequent amendments.
- 3.7.2 The Petitioner has calculated the interest on working capital considering prevalent SBI MCLR as on 1.11.2018 plus 300 basis points and proposed an interest rate on working capital @ 11.50%.
- 3.7.3 The Interest on Working Capital for each year of the Control Period proposed by the Petitioner is as below:

Table 34: Interest on Working Capital claimed for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Annual O&M Expenses	17.27	28.24	32.81	34.97	35.62
O&M Expenses for 1 month	1.44	2.35	2.73	2.91	2.97
Maintenance Spares (at 15% monthly O&M Expenses)	1.54	2.43	3.52	3.93	3.93
Receivables for 2 months on projected Annual Transmission Charges	10.50	14.01	19.60	21.47	21.27
Total Working Capital	13.48	18.80	25.86	28.31	28.17
Interest Rate (SBI MCLR+300 BP)	11.50%	11.50%	11.50%	11.50%	11.50%
Interest on Working Capital	1.55	2.16	2.97	3.26	3.24

3.8 Return on Equity

- 3.8.1 The Petitioner has computed the Interest on Working Capital in accordance with the Regulation 19 of the HPERC MYT Transmission Regulations 2011 and its subsequent amendments.
- 3.8.2 The Petitioner has considered prevalent Corporate Tax Rate of 34.61% and gross up allowable RoE of 15.50% to derive at the pretax RoE of 23.70% for the next Control Period.
- 3.8.3 The return on equity proposed by the Petitioner for the fourth Control Period is summarized below:

Table 35: RoE claimed for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Opening Equity	89.07	71.84	102.26	128.71	128.71
Net Equity Addition during the year	-17.23	30.42	26.45	0.00	0.00
Closing Equity	71.84	102.26	128.71	128.71	128.71
RoE (%)	23.70%	23.70%	23.70%	23.70%	23.70%
Return on Equity	19.07	20.63	27.37	30.51	30.51

3.9 Non-Tariff Income

- 3.9.1 The Petitioner has computed the Non-Tariff Income in accordance with the Regulation 24 of the HPERC MYT Transmission Regulations 2011 and its subsequent amendments. The non-tariff income proposed was discussed in previous Chapter of Business Plan. The NTI proposed by the Petitioner for the fourth Control Period is summarized below:

Table 36: Non-Tariff Income claimed for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Sale of Tender Forms	0.12	0.12	0.12	0.12	0.12
interest on Bank Deposits	4.61	4.61	4.61	4.61	4.61
Interest on ADB Loan Imprest	1.74	1.74	1.74	1.74	1.74
Miscellaneous Receipts	0.01	0.01	0.01	0.01	0.01
Interest on IT Refund	0.06	0.06	0.06	0.06	0.06
Interest from Cont./Supplier	2.00	2.00	2.00	2.00	2.00
Total	8.54	8.54	8.54	8.54	8.54

3.10 Income from Other Business

3.10.1 HPPTCL submitted that it was not involved in any other business as defined in the HPERC Tariff Regulations, 2011 and its subsequent amendments, and accordingly it has not proposed for any income from other Business.

3.11 Aggregate Revenue Requirement

3.11.1 The Petitioner's submission of ARR for the fourth Control Period i.e. FY 2019-20 to FY 2020-24 has been summarized below:

Table 37: ARR claimed for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
O&M Expenses	17.27	28.24	32.81	34.97	35.62
Employee Expenses	3.85	6.08	8.80	9.81	9.81
R&M Expenses	6.61	14.37	14.99	15.63	16.30
A&G Expenses	6.81	7.79	9.02	9.53	9.50
Interest on Loan	19.15	23.84	37.01	39.58	37.78
Depreciation	14.48	17.74	25.99	29.05	29.05
Interest on Working Capital	1.55	2.16	2.97	3.26	3.24
Return on Equity	19.07	20.63	27.37	30.51	30.51
Less: Non-Tariff Income	8.54	8.54	8.54	8.54	8.54
Less: Other Income	-	-	-	-	-
Aggregate Revenue Requirement	62.97	84.09	117.61	128.82	127.65

3.11.1 The Petitioner has requested the Commission to approve the above expenses to be recovered by HPPTCL in accordance with HPERC Tariff Regulations 2011 and its amendments thereof.

4 OBJECTION FILED AND ISSUES RAISED BY STAKEHOLDERS DURING PUBLIC HEARING

4.1 Introduction

- 4.1.1 In response to the public notice inviting objections / suggestions from stakeholders on the petition filed by HPPTCL for Aggregate Revenue Requirement (ARR) for Fourth Control Period from FY 2019-20 to FY 2023-24, few stakeholders i.e. HPSEBL, Shri K.S. Dhaulta, IA Hydro Energy Pvt. Ltd. and Directorate of Energy (GoHP) filed their suggestions/ objections in writing.
- 4.1.2 The public hearing was held on 29th April 2019 at the Commission's Court Room in Shimla. The list of stakeholders is as follows:

Table 38: List of Stakeholders

Sl.	Objector	Address
1.	HP State Electricity Board Ltd.	Vidyut Bhawan, Shimla-04
2.	Directorate of Energy	Phase-III, Sector-6, Kangnadar, New Shimla
3.	M/s IA Hydro Energy Pvt. Ltd.	D17, Lane1, Sector-1 New Shimla
4.	Sh. K.S. Dhaulta, Consumer Representative	House No. A32, Sector 2, Phase I, New Shimla

- 4.1.3 A presentation was done by the Petitioner on the salient features of the petition. Subsequently, the representatives of the stakeholders presented their key points before the Commission during public hearing.
- 4.1.4 Issues raised by the stakeholders in their written submission and during the public hearing, along with replies given to the objections by the HPPTCL and views of the Commission are summarized in following paras:

4.2 Operation and Maintenance

Stakeholder's comments:

- 4.2.1 Shri K.S Dhaulta submitted that the Petitioner has proposed to undertake O&M of intra-state lines on their own from 31.03.2019 which is a welcome initiative. He mentioned that distribution licensee should focus on maintenance of its distribution lines only.

Petitioner's reply:

4.2.2 HPPTCL submitted that it has proposed to undertake the O&M of intra-state lines after extensive deliberations with the Management/Board. HPPTCL requests the Commission to grant approval of the same.

Commission's View:

4.2.3 The Commission is in agreement with the proposal to undertake the responsibility of O&M by the Petitioner. For the approval of O&M expenses for the fourth Control Period, the Commission has considered the various expenses including employee cost, R&M expenses and A&G expenses considering the fact that HPPTCL would be able to undertake the O&M of the transmission network in the fourth Control Period.

Stakeholder's comments:

4.2.4 Shri K.S Dhaulta has submitted that the Petitioner has proposed entire work force of employees to be recruited hereafter, who shall be allocated to O&M function, out of which 50% has been allocated to intra-state transmission system. He submitted that the Petitioner has not provided any basis or rationale for the same in the present petition. Basis and rationale for considering 50% of employees towards intra-state O&M function should be provided. Also, rationale for apportionment of 25% of employee cost in each year of the Control Period towards intra-state transmission to be justified in view of commissioning of inter-state transmission projects. He submitted that the above submissions may kindly be considered for just and effective disposal of the petition in the larger interests of the consumers.

Petitioner's reply:

4.2.5 The Petitioner has submitted that it is undertaking many Inter-State as well Intra-State projects simultaneously considering the requirement for evacuation of the upcoming Hydro Generating Stations and growing demand in the State of Himachal Pradesh. The Petitioner has further submitted that presently there is no such formal bifurcation among the employees between Inter-State and Intra-State projects. In lieu of the same, the Petitioner has proposed to allocate 50% of the employees towards Inter-State projects and remaining 50% to Intra-State projects based on the nature (Inter-State and Intra-State) of number of projects being undertaken at present, i.e. approximately 50% of which is envisaged as Inter-State in nature, whereas the remaining 50% is envisaged as Intra-State in nature. The Petitioner also provided details of line length, transformation capacity of all the ongoing Inter-State and Intra-State scheme. With regard to the rationale for apportionment of 25% of employee cost towards Intra-State projects, the Petitioner mentioned that it has considered actual employee expense for FY 2015-16 to FY 2017-18 based on the methodology adopted by the Commission in previous Orders i.e. apportioning 25% of the employee cost towards Intra-State. However, for the projection of the employee expense for

the Control Period, the Petitioner has not made any such apportionment and has computed based on the growth factor.

Commission's View:

4.2.6 It is observed that the Petitioner has not been maintaining separate details of inter-state and intra-state operations resulting in significant difficulties in determination of various cost elements. Considering the non-availability of data with respect to the beneficiaries and associated uncertainty, the categorization of the proposed works/ projects of the Petitioner is not possible. Therefore, the Commission has continued with allocation of 25% towards intra-state employee and A&G expenses for the fourth Control Period as detailed in Chapter-6 of this Order.

Stakeholder's comments:

4.2.7 DOE has submitted that in table No. 9 (Proposed Employee addition and retirement during the Control Period) HPPTCL has added the employee i.e. 54 Nos. for the financial year FY 2018-19 and 263 Nos. for the financial year 2019-20 with the increase of 48% to 166% only in two Control Periods. The employee addition is to be as per specific benchmarks (i.e. km line length, number of substation and transformer capacity etc.)

Petitioner's reply:

4.2.8 The Petitioner has submitted that it has proposed the employee strength considering the large number of projects being executed by it which shall be commissioned during this Control Period. Therefore, adequate employee strength will be required in order to operate and maintain the developed system in an efficient way. Accordingly, the Petitioner has requested the Commission to approve the employee addition plan as claimed in the petition.

4.2.9 Additionally, the Petitioner has submitted that there is a minimum support staff strength which is required to be maintained by a Transmission Licensee and STU. The Petitioner has further mentioned that as more and more projects are commissioned, the pro-rate addition in the number of employees will reduce and therefore it should not be compared with larger transmission licensees.

Commission's View:

4.2.10 It is observed that the Petitioner has proposed to undertake the responsibility of O&M of its transmission network as against the existing practice of outsourcing to HPSEBL. Based on the above proposal, the Commission is of the view that HPPTCL shall require additional manpower for efficient management and maintenance of its transmission network.

4.2.11 In view of the same, the Commission finds it prudent to approve the addition of 207 employees for the fourth Control Period considering the added responsibility of O&M for its transmission system. The detailed approach of the Commission is discussed in the subsequent Chapters.

Stakeholder's comments:

4.2.12 HPSEBL submitted that the Commission might seek justification from HPPTCL regarding the expenses considered towards "any study-as per requirements" of Rs. 0.20 Cr per financial year.

Petitioner's reply:

4.2.13 The Petitioner stated that considering the demand growth of the state of Himachal Pradesh and its difficult geographical terrain it may require to conduct some studies as per the requirement on case-to-case basis. Thus, the provision of Rs. 0.20 Cr. per financial year is adequate, moreover expert advice is being taken from IITs/NITs which is leading to higher expense due to remote localities.

Commission's View:

4.2.14 The Commission has undertaken detailed scrutiny of each cost element while approving the A&G expenses for the fourth Control Period. All details and discussions in this regard is provided in Chapter-6 of the Order.

Stakeholder's comments:

4.2.15 HPSEBL submitted that the Commission might seek justification from HPPTCL regarding the expenses considered towards "manpower training" which is on higher side. Moreover, HPPTCL must provide details of training as Induction Level Training and In Service Training.

Petitioner's reply:

4.2.16 The Petitioner stated that it is in the process of implementing various projects simultaneously in order to cater to the demand growth in the State of Himachal Pradesh and in order to achieve the same, the Petitioner requires trained staff for carrying out all the activities efficiently with utmost reliability.

4.2.17 The Petitioner also submitted that the training shall be in the areas of efficient transmission operation, best industry practices, transmission planning, ERP Systems, Regulatory Reporting and Compliances and it has already initiated the process for assessing the training required which will depend on the expenses approved by the Commission and the same shall be submitted to the Commission on completion. Thus, the Petitioner has requested the Commission to allow the expenses for manpower training as claimed in the Petition.

Commission's View:

4.2.18 The Commission has analyzed the proposal of the Petitioner in this regard and observed that proposed training expense is based on assumptions and lack adequate study and assessment. Accordingly, the Commission has provided a provisional amount towards training and capacity building during the Control Period and has directed the Petitioner to assess the training requirements and submit the details of the same to the Commission after approval of its Board.

Stakeholder's comments:

- 4.2.19 HPSEBL submitted that the Commission might seek justification from HPPTCL regarding the provisioning of insurance by HPPTCL during the Control Period, which is on higher side.
- 4.2.20 DOE has submitted that the cost towards insurance @0.30% of assets value insured that need to be supported by adequate documentary evidence along with computation of insurance cost for intra-State transmission network. Insurance is to be considered only for fixed assets that are critical in nature.

Petitioner's reply:

- 4.2.21 The Petitioner submitted that in absence of any benchmarking of the insurance cost, the Petitioner has considered nominal rate for claiming the insurance cost, which pertains to safety and security of the assets. Further, the same shall be subject to review / truing up at the time of midterm review/ true up. Thus, the Petitioner humbly requests the Commission to allow the expenses as claimed in the Petition.

Commission's View:

- 4.2.22 The Commission has noted the submission of the Petitioner in this regard and has provisionally approved the cost towards insurance as per the submissions of the Petitioner.

Stakeholder's comments:

- 4.2.23 HPSEBL submitted that HPPTCL did not provide details of the provisioning of ERP Consultancy and Maintenance and requested the Commission to seek justification from HPPTCL regarding the same.

Petitioner's reply:

- 4.2.24 The Petitioner submitted that the provision for ERP consultancy and maintenance charges are as per actual of previous years, as the same is a recurring expense which is required for maintenance of the system installed. Thus, the Petitioner requests the Commission to allow the expenses as claimed in the Petition and any deviation of actual expenses vis-a-vis that approved shall be proposed to be recovered during truing up.

Commission's View:

- 4.2.25 The Commission has noted the submission of Petitioner. On being queried by the Commission, the Petitioner had submitted that the implementation of ERP is completed and gone live from 01.04.2019 and functioning of ERP is under observation by HPPTCL for next six months. In line with the submissions, the Commission has provisionally approved the charges towards ERP consultancy and maintenance as detailed in Chapter-6 of this Order.

Stakeholder's comments:

4.2.26 DOE has claimed that in A&G Expense for FY 2019-20 to FY 2023-24 (table-13), the hiring charges of vehicle has been mentioned in each Control Period. Also, cost for purchase of vehicle of Rs. 0.75 Crore has been mentioned towards FY 2019-20. Both expenditures on vehicle cost should not be allowed.

Petitioner's reply:

4.2.27 The Petitioner has submitted that it is undertaking many projects simultaneously in the State of Himachal Pradesh. Hence, in order to monitor and to carry out necessary O&M activities at these sites easy accessibility is required which presently is very difficult given the difficult terrain of the State of Himachal Pradesh. Therefore, it is proposed to have vehicles for its employees to reach the project site within time to attend to faults and other exigencies.

4.2.28 Additionally, it was submitted that the Petitioner is vested with old infrastructure which requires regular maintenance and for redressal of exigencies, vehicles are required. Hence, the claimed provision towards procurement of new vehicle is Rs. 0.75 Crore. Further, the Petitioner has submitted that apart from cost for procurement of new vehicles, most of the sites will still incur conveyance and travel (vehicle hiring, running) charges.

4.2.29 The stakeholder contention that neither new vehicles should be allowed nor hiring charges should be allowed is irrational as HPPTCL has to operate and maintain its transmission system with utmost diligence. Therefore, it was requested to the Commission to approve the A&G Expense as claimed by the Petitioner for the Control Period.

Commission's View:

4.2.30 The detailed methodology adopted for approval of A&G expenses for the fourth Control Period is detailed in Chapter-6 of the Order.

Stakeholder's comments:

4.2.31 HPSEBL submitted that HPPTCL did not provide details of the Gross Fixed Assets value under the claimed Repair & Maintenance (R&M) Expenses for FY 2019-20 to FY 2023-24 and requested the Commission to seek justification from HPPTCL regarding the same.

Petitioner's reply:

4.2.32 The Petitioner submitted that the required details of GFA for the Control Period has already been submitted in Table 16 of the Petition.

Commission's View:

4.2.33 The Commission has reviewed the details submitted with respect to the GFA and proposed R&M by the Petitioner. The views of the Commission with regard to these aspects are discussed in Chapter-6 of the Order.

4.3 Capital Expenditure

Stakeholder's comments:

- 4.3.1 HPSEBL submitted that HPPTCL in its petition has not provided the comprehensive transmission system augmentation plan during the Control Period FY 2020-24 that shall be used to meet the load growth of its long-term transmission customers.
- 4.3.2 HPSEBL also submitted that there is no clarity with applicability of annual charges for the existing common use of transmission elements for Discom & IPPs or specific use for HPSEBL or IPPs. Moreover, if the proposed System Strengthening is for HPSEBL, the Petitioner must provide the details of such specific project along with necessary requisitions furnished by HPSEBL for drawl of power.
- 4.3.3 Shri K.S. Dhaulta has submitted that the Petitioner has failed to provide just and reasoned basis for total capitalization proposed for each year to substantiate & justify its petition. Further, he has requested the Commission to direct the Petitioner to provide the same for just and effective disposal of the petition.

Petitioner's reply:

- 4.3.4 The Petitioner submitted that the contention raised by HPSEBL that the Petitioner has not submitted the transmission augmentation plan for the Control Period is devoid of any merit. The Petitioner has proposed 13 intra-state schemes for the fourth Control Period out of which 6 schemes are for the purpose of system strengthening whereas the remaining 8 schemes has been proposed for the evacuation of power from the upcoming Hydro Generating Station in the State of Himachal Pradesh. The Petitioner stated that it has submitted the updated scheme-wise details for the fourth Control Period along with necessary approval of the CEA for which detailed load flow analysis has been carried out.
- 4.3.5 The Petitioner also mentioned that it has already submitted the detailed reasons along with the approved DPR and scheme wise approval of CEA and therefore the schemes have been planned meticulously.

Commission's View:

- 4.3.6 Based on the various submissions made by the Petitioner during the processing of the petition, it is observed that details of beneficiaries of the upcoming transmission capacity and Long Term Open Access Agreements (LTOA)/ Medium Term Open Access Agreements (MTOA) have not been signed so far. Based on scrutiny of documents provided with respect to the proposed works, the Commission is of the view that the Petitioner is required to undertake a detailed planning and analysis with respect to the proposed evacuation system in view of the changes in upcoming status of the generators and expected beneficiaries. Accordingly, the Commission has reviewed each scheme based on adequacy of information as detailed in Chapter-5 of this Order.

Stakeholder's comments:

4.3.7 HPSEBL submitted that HPPTCL in its petition has used estimated GFA value for the calculations of various components of annual tariff. Moreover, HPPTCL has not submitted the actual capital expenditure details of each transmission element and has instead considered estimated capital cost of existing 12 lines, which are intra-state lines.

Petitioner's reply:

4.3.8 The Petitioner submitted that it has already provided the details of the Gross Fixed Asset of the existing as well as proposed lines for the MYT period in Format F5 of the Petition. Further the Petitioner has also submitted the breakup of the opening capital cost considered for FY 2018-19.

Commission's View:

4.3.9 The Commission has reviewed the details submitted by the Petitioner in MYT Petition and subsequent clarifications of the Petitioner in response to various queries of the Commission with respect to the GFA. The views of the Commission with regard to consideration of capital cost of the existing intra-state transmission network is discussed in Chapter-6 of the Order.

Stakeholder's comments:

4.3.10 DOE has submitted that Gross Fixed Assets added for each financial year should be as per audited accounts and provisional accounts for FY 2018-19. The reason stated for this is that as per Form No. F9, the estimated budget cost for project/work/scheme wise has been mentioned along with the expenditure to be incurred for each project with respect to respective Control Period. Further, it also submitted that most of the scheme wise capital expenditure/Gross Fixed Assets are proposed to be incurred and added during the financial year FY 2018-19 and FY 2019-20. Capital Expenditure should be based on the past year performance / progress of HPPTCL, that the projects which have commissioned by HPPTCL within that financial year or not.

4.3.11 HPSEBL submitted that HPPTCL has not provided details of opening Gross Fixed Assets, GFA addition and depreciation for the FY 2019-20. Further, it also mentioned that there was no justification for Gross Fixed Assets deletion for FY 2019-20. Thus, requested the Commission to seek justification from HPPTCL regarding the same.

Petitioner's reply:

4.3.12 HPPTCL submitted that at the time of filing of the Petition i.e., Nov 2018, audited data for FY 2018-19 was not available and the financial year was underway and therefore GFA for FY 2018-19 could only be submitted on projection basis. Further, FY 2018-19 has just elapsed and the provisional accounts of FY 2018-19 are under preparation. With regards to capex projection on the basis of historical trends, the Petitioner has submitted that

the schemes were taken up without much time gap between these schemes and therefore are slated to achieve COD as submitted by HPPTCL to the Commission in the current tariff proceedings. As these schemes were work in progress in the past, not much capitalization could be done in the past. The schemes are nearing completion and therefore the same have been considered while projecting ARR for the next Control Period which is as per the HPERC Tariff Regulations, 2011 and as amended from time to time. The Petitioner has submitted that the depreciation should be computed separately for old transmission network, proposed transmission lines and newly commissioned lines.

4.3.13 The Petitioner submitted that the required details and computation has already been submitted in Format of the Petition. Further, the Petitioner mentioned that the Kashang-Bhabha Line and Substation Bhoktoo may form part of the inter-state transmission network on completion of Wangtoo Substation in FY 2019-20 and are proposed to be transferred to inter-state transmission network. Therefore, the GFA towards the said scheme has been deleted from FY 2019-20.

Commission's View:

4.3.14 During the review of the Petition, the Commission has sought several written and oral clarifications with regard to capitalization of proposed schemes during the fourth Control Period. All details and discussions in this regard is provided in Chapter-5 of the Order along with views of the Commission.

Stakeholder's comments:

4.3.15 HPSEBL submitted that HPPTCL needs to provide the details of the expenditure incurred on construction of Kashang-Bhabha Transmission Line and execute the LTOA/MTOA with the beneficiaries of the same. Moreover, HPPTCL must clarify whether the cost of Kashang-Bhabha Transmission Line is included in the Gross Fixed Assets (GFA) and in case of projects for the evacuation of power from the identified beneficiaries; the estimated cost of these projects should not become part of the Gross Fixed Assets of HPPTCL since value of GFA is taken for all calculations.

4.3.16 HPSEBL submitted that HPPTCL claimed the opening loan for the Kashang-Bhabha Line as Rs. 57.32 crore and repayment of loan during the year as Rs. 2.19 crore & average interest rate as 12.50%, however no break-up of loan was provided. Therefore, HPSEBL has requested the Commission to seek justification from HPPTCL regarding the same.

Petitioner's reply:

4.3.17 The Petitioner stated that HPSEBL had transferred the 220 kV D/C Kashang-Bhabha line in March 2009 to HPPTCL with an already incurred capital expenditure of Rs. 66.08 Crore till time of transfer of asset. The Petitioner has also was considered the transferred amount as loan. However due to absence of the details/ data / information from HPSEB, sufficient funding details could not be submitted to the Commission. Further, it has submitted

that the Petitioner is consistently approaching HPSEBL for the necessary documents required for compiling the information / data sought by the Commission.

Commission's View:

4.3.18 The Commission has undertaken detailed review on proposal of Kashang-Bhaba Transmission Line. All details and discussions in this regard is provided in Chapter-5 of the Order along with views of the Commission.

Stakeholder's comments:

4.3.19 HPSEBL submitted that HPPTCL in its petition did not provide details of commencement date of ongoing transmission system projects and new projects under its capital investment plan for the Control Period.

4.3.20 HPSEBL further submitted that HPPTCL in its petition has sought the transmission tariff for the Control Period FY 2020-24 in respect of the whole of the transmission systems including ongoing projects that will be commissioned during the Control Period. HPSEBL has requested the Commission to seek clarification from HPPTCL regarding the COD of upcoming system and take appropriate decision w.r.t. allowing AFC to upcoming system of HPPTCL.

4.3.21 Shri. K.S Dhaulta submitted that in present petition under the section Capital Investment Plan, the Petitioner has not provided the physical and financial progress of the various schemes proposed. The Petitioner is required to provide the same along with details including project cost as per DPR, actual expenditure till date, balance expenditure, expected COD, etc. for each scheme to substantiate and justify its claim.

4.3.22 DOE has submitted that HPPTCL has mentioned the COD date for the proposed / commissioned intra-state schemes as Dec-2018 and Mar-2019. The current status with respect to COD of proposed/commissioned intra-state schemes needs to be provided.

Petitioner's reply:

4.3.23 The Petitioner has mentioned that details of the start date of all the proposed projects along with the physical and financial progress of all the proposed projects had been submitted in reply dated 19.03.2019 to deficiency note-2.

4.3.24 The Petitioner has also submitted that it has to operate in very difficult terrain which is subjected to many unprecedented uncontrollable events because of which at times there could be slippages in planned activities. This Petitioner mentioned that due to harsh and prolonged winter, only limited working days were available for execution of the project. However, HPPTCL has been putting its best efforts and is taking all necessary steps to complete the proposed projects as per prescribed schedule. The Petitioner had projected COD of three schemes i.e. 66 kV switching station (GIS) at Urni, 33/132, 2x25/31.5MVA Substation Chambi with LILO of 132 kV Dehra-Kangra line and 33/132 kV GIS Pandoh by LILO of 132 kV Bajaura-Kangoo line as December

2018, February 2019 and February 2019 respectively. However, as per the present status, these schemes are expected to achieve COD in between April 2019 to June 2019.

Commission's View:

4.3.25 During the processing of the Business Plan and MYT Petition, the Commission has sought several details with respect to proposed schemes including physical and financial progress of the schemes, list of beneficiaries, DPRs of all schemes, approval certificates from CEA and Board, other documents in support of the status of the works, etc. Accordingly, the Commission has reviewed the submissions of the Petitioner with respect to the proposed intra-state projects and has approved the schemes for the fourth Control Period as detailed out in Chapter-5 of the Order.

Stakeholder's comments:

4.3.26 As per DOE, the Petitioner under System Strengthening Scheme has mentioned the list of generating stations in Pandoh Valley (54MW) and Shahpur Valley (42.4MW) that are getting commissioned in near future & would require the demand for power evacuation. It has further submitted that HPPTCL has justified the requirement of system strengthening for these HEPs but has not mentioned the expected COD date of these HEPs for which system strengthening schemes are proposed. The expected COD of these projects needs to be mentioned.

Petitioner's reply:

4.3.27 The Petitioner stated that it has already provided detailed scheme wise justification for the proposed system strengthening schemes in reply to first deficiency note of the Commission. Further, it has submitted that the upcoming generating station in Pandoh and Shahpur valley has been awarded to various developers and is at various stages of implementation. Further, it was submitted that unlike generating station associated transmission system, system strengthening schemes cannot be exactly matched with the SCODs of the generating stations as system strengthening is carried out well in advance and with adequate redundancy factors which has already been approved by CEA. Further, it was submitted that substation at Pandoh and Chambi will also help in evacuation of the power generated through existing HEPs in Pandoh and Shahpur valley thereby decongesting the existing transmission infrastructure.

Commission's View:

4.3.28 During the processing of the Business Plan and MYT Petition, the Commission has sought several details with respect to proposed schemes including physical and financial progress of the schemes, list of beneficiaries, DPRs of all schemes, approval certificates from CEA and Board, other documents in support of the status of the works, etc. Accordingly, the Commission has reviewed the submissions of the Petitioner with respect to the proposed intra-

state projects and has approved the schemes for the fourth Control Period as detailed out in Chapter-5 of the Order.

Stakeholder's comments:

4.3.29 Shri K.S. Dhaulta has submitted that the Petitioner has just mentioned capital structure of the proposed intra state schemes in the present petition without any documentary evidence with respect to debt, equity and grant etc., which must be placed on record to substantiate its claim in the petition. Thus, all supporting documents including debt / equity / grant commitment should be provided in support of the same by the Petitioner.

4.3.30 As per Shri Dhaulta, the present petition lacks in clearly detailing the break-up of funding (equity, grant and loan) of capitalization proposed in each year. Thus, the Petitioner should provide all details including scheme-wise break-up to justify the claim.

Petitioner's reply:

4.3.31 As per the Petitioner, all the above details have been submitted to the Commission.

Commission's View:

4.3.32 The Commission has sought all relevant details and supporting documents required for prudency check of the Petitioner's proposal with regard to Business Plan and MYT Petition for the fourth Control Period. Details of all documents referred and considered by the Commission for approving the various parameters for the Control Period have been mentioned at relevant paras of Chapter-5 & 6 of this Order.

Stakeholder's comments:

4.3.33 DOE has submitted that depreciation should be computed separately for old transmission network, proposed transmission lines and newly commissioned lines.

Petitioner's reply:

4.3.34 HPPTCL has submitted that it has computed the depreciation for the Control Period as per the provision of the Regulations. Further, the Petitioner has already provided computation of depreciation separately for existing system, newly commissioned system and the proposed system separately for the Control Period in reply to the deficiency note-1 of the Commission.

Commission's View:

4.3.35 The Commission has computed the depreciation separately for existing assets and proposed assets as detailed in Chapter-6 of the Order.

Stakeholder's comments:

4.3.36 HPSEBL submitted that HPPTCL claimed opening Loan for FY2019-20 as Rs. 126.52, however no break-up of loan is provided for the entire Control Period. HPSEBL has requested the Commission to seek justification from HPPTCL regarding the same.

Petitioner's reply:

4.3.37 The Petitioner submitted that the required details have already been submitted in Format 6A of the Petition.

Commission's View:

4.3.38 The detailed working with respect to computation of interest on loan for the fourth Control Period has been detailed in Chapter-6 of this Tariff Order.

Stakeholder's comments:

4.3.39 HPSEBL submitted that HPPTCL has not provided details of the opening equity, net equity addition during the FY2019-20 and subsequent years. Thus, requested the Commission to seek justification from HPPTCL regarding the same.

Petitioner's reply:

4.3.40 The Petitioner submitted that the required details has already been submitted in Format of the Petition.

Commission's View:

4.3.41 The detailed working with respect to consideration of equity and computation of return on equity for the fourth Control Period has been detailed in Chapter-6 of this Tariff Order.

4.4 Income**Stakeholder's comments:**

4.4.1 The DOE has suggested that the payment received by HPPTCL as non-tariff income from GoHP @ 2 paise per kWh (STOA charges) for each bilateral transaction has not been refunded back to GoHP till date for the last 3 years. However, GoHP has not utilized HPPTCL transmission system for delivering its royalty power share for bilateral transaction. HPPTCL can claim the STOA charges from the beneficiaries who are using its transmission network. If beneficiaries are not using its transmission systems then HPPTCL should refund the charges to those beneficiaries including GoHP. The Commission is requested to direct HPPTCL to refund the STOA charges deducted by it as GoHP has not utilized intrastate transmission system.

Petitioner's reply:

4.4.2 As per the Petitioner, the objection raised by the DoE does not pertain to the current regulatory proceedings.

Commission's View:

- 4.4.3 The transmission charges under this Order are being approved for long-term, medium-term and short-term consumers of the state transmission network. In case of any concern with respect to applicability of the charges, the stakeholders are required to submit a separate petition in this regard.

Stakeholder's comments:

- 4.4.4 HPSEBL submitted that HPPTCL has not proposed any income from short term open access consumer. However, based on the past Control Period FY 2015-19 data on income to HPPTCL from short-term open access customer, HPPTCL should have proposed non-tariff income from the short-term open access customers during the Control Period FY 2020-24. Thus, HPSEBL has requested the Commission to seek justification from HPPTCL regarding the same.

Petitioner's reply:

- 4.4.5 The Petitioner submitted that it has not projected short-term open access charges as there is no certainty on the receipt of such applications and is subject to applications made by the consumers. Thus, the short-term open access charges shall be submitted on actual basis.

Commission's View:

- 4.4.6 The income from connectivity charges and open access income for use of intra-state transmission lines has been considered as part of non-tariff income as detailed in Chapter-6 of this Order.

4.5 Transmission charges**Stakeholder's comments:**

- 4.5.1 HPSEBL submitted that HPPTCL has proposed ARR of Rs. 62.97 crore for FY 2019-20 in comparison to Rs. 6.04 crore at FY2018-19. Thus, approximately 10 times increase in the ARR of FY2019-20 is noticed, and there is 1/3rd increase in ARR year on year basis for FY2020-21 & FY2021-22. Further, HPPTCL has not mentioned MW capacity of its Long-Term /Medium-Term customers that would be handled. Accordingly, HPSEBL has requested the Commission to seek justification from HPPTCL regarding such huge increase in ARR.
- 4.5.2 IA Hydro Energy Private Limited (IAHEPL) has opposed to increase in transmission losses as well as transmission charges because proposed transmission charges are on very high side as compare to other states like Uttarakhand, J&K, Arunachal Pradesh, etc. (at 132 KV line) and further increase in STU charges and losses is unjustified.
- 4.5.3 Further, IAHEPL has submitted that at present, despite connectivity of project Chanju-1 (36MW) at 132 kV, whereas Distribution losses 4%, Wheeling

charge @65 paise/unit is being charged by HPSEBL and transmission losses @0.75 % and STU Charges @1.7 Paise per unit are being charge by STU resulting in expenses @88 paise per unit. Based on the petition filed by HPPTCL, the proposed charge would increase by 13 paise per unit to 101 paise/unit which is highest among all hydro power generating states.

Petitioner's reply:

- 4.5.4 The Petitioner submitted that the ARR approved till FY 2018-19 was based on the existing transmission lines transferred to HPPTCL from HPSEBL, wherein no new projects were considered. Thus, the main reason for increase in the ARR projection for each year of the Control Period is due to capitalization of the proposed capital expenditure against the proposed schemes in each year of the Control Period for which the adequate details of each scheme has been provided.
- 4.5.5 The Petitioner has submitted that with regard to the proposed increase in transmission losses it is submitted that the transmission losses approved by the Commission is the lowest for any transmission licensee across the country. Further, considerable network expansion has been envisaged by HPPTCL to support the growth in demand in the next five years which also includes Sub-stations.

Commission's View:

- 4.5.6 The Commission has determined the ARR for the fourth Control Period for HPPTCL after scrutinizing the submissions of the Petitioner and analysing the Petitioner's claims against various parameters of the ARR. The analysis underlying the Commission's approval of ARR for the fourth Control Period is set out in the chapter-5 and 6 of this Order.

4.6 Transmission Capacity and Losses

Stakeholder's comments:

- 4.6.1 HPSEBL submitted that HPPTCL has not provided the details of the MW capacity which shall be flowing on the intra-state network during the Control Period FY 2020-24. HPSEBL requests the Commission to ask the Petitioner to provide the beneficiary wise MW sharing of the existing 12 lines, newly commissioned and upcoming transmission system so that the recovery of the Annual Charges is made from the beneficiaries only for the system in proportion to their MW capacity.
- 4.6.2 HPSEBL also submitted that HPPTCL in its petition has not provided beneficiary identification with MW capacity along with the details whether the beneficiary is long term / medium term/ short-term transmission customer. Further, HSPEBL submitted that particular assets are in common use with Discom while some transmission assets may be specific for IPPs use only.

Petitioner's reply:

- 4.6.3 The Petitioner submitted that it has only Long Term Agreement (LTA) of 670 MW operational presently is with HPSEBL for the existing 12 transmission lines. Further, HPPTCL with regard to beneficiaries for the upcoming transmission system has provided the details of the connection agreement signed with the generators and the Long Term Agreement application in progress to the Commission in reply to the deficiency note.

Commission's View:

- 4.6.4 The Commission agrees to the concerns raised by objectors regarding non-submission of adequate details of beneficiaries of the upcoming transmission lines and capacity of the intra-state network for fourth Control Period. The Commission has reviewed each of the intra-state work proposed by the Petitioner in view of the details of beneficiaries provided in response to the clarifications.
- 4.6.5 Further, the Petitioner has provided the details of demand handled during past years and proposed to be handled during subsequent years of the fourth Control Period in response to the Commission's query. The approach adopted by the Commission for determination of transmission charges is detailed in the Chapter-6 of the Order.

Stakeholder's comments:

- 4.6.6 As per DOE, with respect to transmission loss, HPPTCL has requested Commission to approve bare minimum losses of 1.50% as compared to 0.75% approved in previous Control Period. The calculation of transmission losses should be based on the methodology adopted by other states. The STU has not mentioned the data regarding transmission losses for its transmission network. The kind of investment HPPTCL has made for reducing the transmission losses as per norms set by Central Electricity Regulatory Commission (CERC) for particular capacity of kV lines may be taken into consideration while determining the tariff for HPPTCL.
- 4.6.7 Shri K.S Dhaulta has submitted that with respect to transmission losses, Petitioner has requested for a target of 1.50% as compared to 0.75% approved in the previous Control Period. In this regard a comparison of transmission loss of other states has been provided. The Petitioner may also provide a comparison of the transmission capacity, kms line length, number of substations, transformation capacity with the mentioned states, to ascertain the claim after assessing comparison with available data.

Petitioner's reply:

- 4.6.8 HPPTCL has submitted that it has claimed transmission losses in accordance to HPERC MYT Transmission Regulations 2011 and its amendments thereof. The Petitioner has further mentioned that the stakeholders have submitted that the losses should be considered based on the HPPTCL's investment which factually as on today is "NIL". No transmission schemes have been capitalised

prior to FY 2017-18. Further, as also submitted earlier, 0.75% losses approved for transmission system is grossly inadequate and does not depict the actual system losses and will lead to aberration in the loss data thus affecting scheduling and actual system cost. The Petitioner has also submitted a table of comparison of transmission capacity, kms line length, number of substations and transmission loss for the state of Uttarakhand, Punjab and Haryana.

Commission's View:

4.6.9 The Commission has gone through the submissions of the Petitioner and the objections raised by the stakeholder. Based on the submission and subsequent clarifications of the Petitioner, the Commission feels that the measures undertaken by the Petitioner has been limited and also the Petitioner has still not devised any mechanism for determination of transmission losses in co-ordination with HPSEBL. As the existing intra-state transmission infrastructure of the Petitioner is limited to lines with proposed additions in the future, the Commission feels it adequate to continue with the transmission losses of 0.75% approved during third Control Period.

Stakeholder's comments:

4.6.10 Shri K.S Dhaulta has submitted that as per HPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011 and its amendments thereof, a set of targets proposed for Controllable items such as, availability of transmission system, transformer failure rate, etc. is required to be provided by the Petitioner. The Petitioner has not provided such details in its petition which otherwise is mandatory as per regulation to consider its claim.

Petitioner's reply:

4.6.11 The Petitioner has in turn submitted that with regard to Transmission System Availability, several efforts to obtain the data on transmission system availability of its existing transmission infrastructure from SLDC has been made, however till date the Petitioner has not received any reply from SLDC. Further, the Petitioner has submitted that it is carrying out ERP implementation works and shall undertake efforts to maintain and record system availability as per the provision of the regulations. As regards to the transformer failure rate, HPPTCL has submitted that it has only one substation i.e. Bhoktoo Substation for which the actual transformer failure rate from the date of commissioning till date is zero.

Commission's View:

4.6.12 The details with respect to targets of Controllable items such as availability of transmission system, transformer failure rate, etc. were sought from the Petitioner. In view of the submissions made by the Petitioner, the Commission feels that the Petitioner should make efforts for recording of all relevant details with respect to the transmission system and submit line-wise details of system availability within three months from issuance of this Order.

4.7 Others

Stakeholder's comments:

- 4.7.1 DOE has submitted that HPPTCL has not furnished the provisional accounts of FY 2018-19. The provisional accounts for FY 2018-19 also needs to be submitted for future projection of ARR.

Petitioner's reply:

- 4.7.2 The Petitioner submitted that the provisional accounts of FY 2018-19 is under preparation and has sought waiver for submission of the same.

Commission's View:

- 4.7.3 The Commission has noted the request and directs the Petitioner to file the true-up petition for FY 2016-17 to FY 2018-19 along with Annual Accounts with subsequent Mid-term Review Petition.

Stakeholder's comments:

- 4.7.4 IA Hydro Energy Pvt. Ltd has submitted that as per statutory provision of electricity Act, 2003, 132 kV transmission line are high-pressure transmission line and they do not form part of distribution licensee system or assets. Further, in all other states, 132 kV transmission system comes under preview of STU contrary to situation in the state of Himanchal Pradesh where 132kV is part of distribution licensee resulting in huge amount of wheeling/transmission charges and distribution/transmission losses in kind on hydroelectric project. The stakeholder has submitted that imposition of distribution losses as well as wheeling charges on the transmission system even in the absence of complete segregation of assets is against the express principle of Electricity Act, 2003.
- 4.7.5 IAHEPL has also requested the Commission to look into the provision of Electricity Act, 2003 and 132/220 KV electricity line to be transferred to STU and/or dedicated transmission network should be developed by STU so as to avoid huge losses and charges towards open access for interstate transmission of power.

Petitioner's reply:

- 4.7.6 The Petitioner has submitted that as per the notification No-MPP-A-(1)-4/2006-Loose dated 31st October 2008 by the Government of Himachal Pradesh, HPPTCL is entrusted with the following works/business with immediate effect:
- All new works of construction of Sub-Stations of 66 KV and above.
 - All new works of laying/construction of transmission lines of 66 kV and above.
 - Formulation, updation and execution of Transmission Master Plan for the State in order to strengthen the Transmission Network and plan the

evacuation of power including new works under schemes that are already submitted by the Board under this Plan to the Financial Institutions for funding and where loan agreements are not yet signed.

- All matters relating to Planning and Co-ordination of the Transmission related issues with Central Transmission (CTU), Central Electricity Authority (CEA), Ministry of Power, State Government and HPSEBL.
- Planning and coordinating with the IPPs / CPSUs / PSUs / Other Departments or organizations or agencies of the Central Government & State Government, HPSEBL and HPPCL regarding all Transmission related issues.
- All other matters related to the subject which the State Government may specifically assign to HPPTCL from time to time.

4.7.7 Further, HPPTCL was declared State Transmission Utility (STU) vide notification no. MPP-A (3)-1/2001-iv dated June 10, 2010 by the Government of Himachal Pradesh and as a result thereof the Himachal Pradesh Electricity Regulatory Commission (HPERC) recognized HPPTCL as deemed "Transmission Licensee" under Section 14 and 15 of the Electricity Act, 2003 in the Commission's order dated 31.07.2010 in Petition No. 32 of 2010 filed by HPPTCL.

4.7.8 The Petitioner also submitted that it has already taken up the issue of transfer of all the transmission assets to HPPTCL for effective operation of transmission system within the state with GoHP and a decision in this regard is awaited.

Commission's View:

4.7.9 Based on the submission and subsequent clarifications of the Petitioner, the Commission feels that proper segregation of assets and functions would help in eliminating the concerns of the stakeholders. The Petitioner has already mentioned that the matter is under consideration with the Government of Himachal Pradesh. The Commission further directs the Petitioner to undertake sincere efforts and pursue the matter of functional segregation of entire transmission system to HPPTCL in interest of the State and consumers.

Stakeholder's comments:

4.7.10 HPSEBL submitted that Phojal Sub-Station of HPPTCL is not shown in this petition. It further submitted that HPSEBL power of 11.4 MW is wheeled through Phojal Sub-Station which is further wheeled on 220 kV dedicated ADHPL Transmission Line upto CTU interconnection point. HPSEBL has an agreement with HPPTCL for wheeling of 11.4 MW power through Phojal Sub-station @ Rs. 54.72 lakh per annum which are billed to HPSEBL as Rs. 4,56,000/- per month and for wheeling of 11.4 MW power on 220 kV dedicated ADHPL Transmission Line, there is separate agreement amongst HPSEBL, HPPTCL & ADHPL and the charges agreed are Rs. 2.77 crore per annum which are billed on monthly basis to HPSEBL. Therefore, HPPTCL should provide clarification on the Phojal Sub-Station & its associated assets, which are not considered in this petition.

Petitioner's reply:

4.7.11 It was submitted by Petitioner that it has filed Petition for approval of Tariff for Phojal Sub-Station before the Hon'ble CERC. However, the same has been disposed of by the Hon'ble CERC as Northern Regional Power Committee (NRPC) has classified it under intra-state system. The Petitioner has further submitted that it is analysing the issue in detail and shall take up this separately after completion of detailed analysis.

Commission's View:

4.7.12 The Commission has noted the submission of the Petitioner in this regard.

5 ANALYSIS ON BUSINESS PLAN AND CAPITAL INVESTMENT PLAN FOR 4TH CONTROL PERIOD

5.1 Introduction

5.1.1 HPPTCL has submitted a petition for Business Plan for fourth Control Period (FY 2019-20 to FY 2023-24) in line with the provisions of the HPERC MYT Transmission Regulations 2011.

5.1.2 As per the HPERC MYT Transmission Regulations 2011,

Beginning of the Control Period - Business Plan Filings- The transmission licensee shall file for the Commission's approval, on 1st April of the year preceding the first year of the Control Period or any other date as may be directed by the Commission, a business plan approved by its board of directors. The business plan shall be for the entire Control Period and shall, interalia, contain –

(a) Capital Investment Plan: This should be commensurate with load growth and quality improvement proposed in the business plan. The investment plan should also include corresponding capitalisation schedule and financing plan; The Commission shall approve the system augmentation/ expansion plan submitted by the transmission licensee, based on the load growth forecast/ generation evacuation requirement during the Control Period. The capital investment plan shall be in conformity with the plans made by the CEA/ CTU/ STU/ distribution licensee.

(b) Capital Structure: The appropriate capital structure of each scheme proposed and cost of financing (interest on debt) and return on equity, terms of the existing loan agreements, etc.;

(c) Operation and Maintenance (O&M) Expenses: This shall include the costs estimated for the base year, the actual expenses incurred in the previous two years and the projected values for each year of the Control Period based on the proposed norms for O&M cost, including indexation and other appropriate mechanism;

(d) Depreciation: Based on the on the useful life of the asset and capitalisation schedules for each year of the Control Period;

(e) Performance Targets: A set of targets proposed for Controllable items such as, availability of transmission system, transformer failure rate, and any other parameters for quality of supply for each year of the Control Period for the purpose of incentive / penalties. The targets shall be consistent with the capital investment plan proposed by the transmission licensee;

(f) Proposals for Non-tariff Income with item-wise description and details;

(g) Proposals in respect of income from Other Business;

(h) Other Information: This shall include any other details considered appropriate by the transmission licensee for consideration during determination of tariff.

5.1.3 The Commission has reviewed the proposed Business Plan comprising of the capital expenditure plan, funding of capex schemes, capitalization plan, operational HR development plan and O&M plan for the Fourth Control Period. A Technical Validation Session (TVS) session was conducted on 2nd May 2019 in the office of the Commission to discuss in detail the submissions of the Petitioner and validate the data submitted by the Petitioner and sought further clarifications regarding status of the proposed schemes, status of upcoming generators, beneficiary details, manpower recruitment, etc. as part of the Business Plan.

5.1.4 The Commission's approach on approval of the Business Plan for the Petitioner for the fourth Control Period from FY 2019-20 to FY 2023-24 is detailed in paras below.

5.2 Existing Infrastructure

5.2.1 During the unbundling of State power sector, only 15 Nos of Transmission Lines have been transferred to HPPTCL which was previously held by HPSEB. Whereas the line bays, substations, C&R Panel, Metering arrangement and other transmission related infrastructure are still in possession of HPSEBL.

5.2.2 The Petitioner has provided the details of existing intra-state transmission infrastructure vested with HPPTCL as per notification no. MPP-A (3)-1/2001-iv dated June 10, 2010 by the Government of Himachal Pradesh. In addition to the above, the transmission system of HPPTCL also contains three Inter-State lines, the tariff of which is approved by Central Electricity Regulatory Commission (CERC). The details of the existing Intra-state Transmission system of the Petitioner is tabulated below.

Table 39: Details of existing Transmission lines

S. No.	Name of Existing lines	Date of Commercial Operation	Cost of Asset in Rs Cr
A	220 KV Lines		
1	220 kV D/C Bairasuil - Pong Line (LILO portion at Jassure)	09-1985	0.66
2	220 kV Dehar-Kangoo Line (S/C ckt. Line on D/C tower)	06-1999	0.69
3	220 kV D/C Nalagarh (PGCIL)-Nalagarh Line	07-2010	10.93
B	132 KV Lines		
4	132 kV S/C Giri-Kulhal Line	04-1978	1.71
5	132 kV D/C Giri-Abdullapur Line	08-1982	0.43
6	132 kV S/C Kangra Tap Line	02-1979	0.37
7	132 kV S/C Dehar-Kangoo Line	12-1998	0.42
8	132 kV D/C Shanan-Bassi Line	03-1970	2.19
C	66 KV Lines		
9	66 kV Shanan-Bijni Line	10-1969	0.11
10	66 kV Pinjore-Parwanoo Line	04-1956	0.21

S. No.	Name of Existing lines	Date of Commercial Operation	Cost of Asset in Rs Cr
11	66 kV Pong-Sansarpur Terrace Line	10-1990	0.55
12	66 kV Bhakra-Goalthai-Rakkar Line	12-1985	1.27

5.3 Transmission Losses

- 5.3.1 The Petitioner has requested the Commission to approve the transmission loss target of 1.50% for all years of the Control Period. However, no details with respect to the actual transmission loss during third Control Period has been provided by the Petitioner. Instead the Petitioner has submitted comparison of transmission loss with other State transmission companies.
- 5.3.2 In the MYT Order of third Control Period, the Commission had provisionally approved 0.75% transmission loss in absence of any data submitted by the Petitioner with regard to the transmission losses. The approved losses were for the limited purpose of recovery of transmission losses from open access consumers while the distribution licensee had to continue to bear the losses under the current accounting system.
- 5.3.3 The Commission had also directed the Petitioner to devise a mechanism for determination of transmission losses with HPSEBL and submit the same before the Commission. In the earlier Petitions, the Petitioner has mentioned that as the line bays and metering arrangements are in the possession of HPSEBL, the meters can only be installed/ changed post transfer of complete bay to HPPTCL. The Commission in Mid-term review order had further directed the Petitioner to take up the matter with the GoHP and get the issue resolved at the earliest. In the current petition, the Petitioner has mentioned that it has approached the Government of Himachal Pradesh (GoHP) in this matter and is pursuing the same on regular basis.
- 5.3.4 Based on the submission and subsequent clarifications of the Petitioner, the Commission feels that the measures undertaken by the Petitioner has been limited and also the Petitioner has still not devised any mechanism for determination of transmission losses in co-ordination with HPSEBL. The Commission also sought details of correspondence with HPSEBL and GoHP undertaken in the past five years to resolve the issue. However, the Petitioner did not provide any details or supporting letters in this regard except a few correspondence with HPSEBL for rectification of data. **The Petitioner is directed to undertake sincere efforts and pursue the matter of functional segregation of entire transmission system to HPPTCL in interest of the State and consumers. Any delay in this regard would only result in further complexities which the existing generators and open access consumers are currently facing in the state of HP.**
- 5.3.5 Therefore, considering the circumstance that no direct comparison of HPSEBL exists with other state transmission companies and in absence of any proper metering data for past years, the Commission approves the transmission losses similar to losses approved during third Control Period i.e. 0.75%. The

approved transmission losses of HPPTCL approved for fourth Control Period is tabulated below.

Table 40: Approved Transmission losses for fourth Control Period

Name of Scheme	FY20	FY21	FY22	FY23	FY24
Proposed by the Petitioner	1.5%	1.5%	1.5%	1.5%	1.5%
Approved by the Commission	0.75%	0.75%	0.75%	0.75%	0.75%

5.3.6 The Commission would like to clarify that the losses shall be for the limited propose of recovery of transmission loss from the open access consumers. The distribution licensee shall however continue to bear the losses under the present accounting system.

5.4 Other Performance Parameters

5.4.1 Clause 37 of HPERC MYT Transmission Regulations 2011 provides for setting up of targets Controllable items such as, availability of transmission system, transformer failure rate, etc. However, the Petitioner has not provided any details on transmission availability and transformer failure rate in its MYT Petition for the fourth Control Period. In response to the query in this regard, the Petitioner had requested the Commission to grant waiver for submission of these parameters and made following submission:

- Regarding transmission availability, the Petitioner has submitted that it is carrying out ERP implementation works to maintain and record system availability as per the provision of the HPERC Tariff Regulations and its amendments thereof. The Petitioner has requested the Commission to submit the same along with the Mid Term Review Petition.
- The Petitioner on transformer failure had submitted that it has only one Substation i.e. Bhoktoo Substation for which the actual transformer failure rate from the date of commissioning till date is zero. The Petitioner has further mentioned that in the absence of past performance, Transformer Failure Rate cannot be projected for the fourth Control Period at this stage.

5.4.2 In absence of any submission by the Petitioner on transmission availability and transformer failure rate and lack of availability of any baseline data, the Commission is constrained to project these parameters for the fourth Control Period. **However, the Commission directs the Petitioner to maintain the assets at higher efficiency and submit the quarterly status reports on transmission availability and transformer failure rate to the Commission. Also, the Petitioner is required to submit line-wise details of system availability within three months from issuance of this Order.**

5.5 Human Resource Development Plan

5.5.1 Presently, the responsibility of O&M of all existing lines of HPPTCL is being carried out by HPSEBL. Accordingly, HPPTCL is required to pay O&M charges

for the existing intra-state transmission network to HPSEBL as mutually agreed between them. The Petitioner has submitted that it has decided to take responsibility of Operation and Maintenance of these lines from HPSEBL from 31st March 2019 considering the fact that the HPPTCL has developed expertise and competency for its maintenance. In response to one of the query regarding approval of the Board, the Petitioner has submitted the copy of minutes of 40th Meeting of Board of Directors in support for undertaking the O&M of its network internally.

- 5.5.2 In line with the above, the Petitioner has submitted HR plan for fourth Control Period for strengthening its manpower to 490 employees from existing strength of 185 employees as part of the Business Plan for fourth Control Period to undertake the operation and maintenance of the substations and lines being constructed by the Petitioner.
- 5.5.3 The Commission has scrutinized the submission of the Petitioner and asked HPPTCL to submit the preparedness for the proposed employee addition. The Commission has also directed the Petitioner to submit the current level of recruitment along with detailed schedule of addition and retirement of employees during the year. In response, the Petitioner has informed that request letter has been sent to Himachal Pradesh Public Service Commission, HP sub-ordinate staff service Commission to recruit 207 employees along with the copy of correspondence letter. The employee strength submitted by the Petitioner for the fourth Control Period is tabulated below:

Table 41: Proposed Employee Movement and Strength for fourth Control Period

Particulars	FY20	FY21	FY22	FY23	FY24
Employee Strength	235	490	490	490	490
Addition	263	15	8	2	11
Retirement	08	15	08	02	11
Closing Employee Strength	490	490	490	490	490

- 5.5.4 On examining the letters sent to Himachal Pradesh Public Service Commission to hire 207 employees, the Commission observed that the proposed recruitment is on contractual basis. In view of the above, the Commission sought detailed break-up of regular, outsourced and contractual employees for third Control Period. In response, the Petitioner mentioned that all the employees hired by HPPTCL are initially on contractual basis and are subsequently confirmed after completion of three years of service. Further, the Petitioner submitted that it has inadvertently submitted the incorrect employee strength for the third Control Period and submitted a revised break-up of employees as detailed below:

Table 42: Revised Employee Strength for third Control Period

Particulars	FY15	FY16	FY17	FY18	FY19
Regular Employees					
Opening Employee Strength	115	113	111	118	84

Particulars	FY15	FY16	FY17	FY18	FY19
Addition	00	00	07	0	20
Retirement	02	02	0	34	4
Closing Employee Strength	113	111	118	84	100
Contractual Employees					
Opening Employee Strength	0	0	0	12	89
Addition	0	0	12	77	09
Retirement	0	0	0	0	0
Closing Employee Strength	0	0	12	89	98
Outsources Employees					
Opening Employee Strength	0	16	25	36	46
Addition	16	09	11	10	34
Retirement	0	0	0	0	0
Closing Employee Strength	16	25	36	46	80
Total Employees	129	136	166	219	278

5.5.5 Based on the submission of the Petitioner to initiate in-house O&M of its transmission network, the Commission feels that HPPTCL shall require additional manpower for efficient management and maintenance of its transmission network. In view of the same, the Commission finds it prudent to approve the employee addition for the fourth Control Period considering the added responsibility of O&M for its transmission system.

5.5.6 The Commission has approved addition of 207 employees. Any change in approved employee addition during the fourth Control Period shall be considered under Mid-term Review or Truing-up exercise. The approved employee strength for each year of the fourth Control Period is summarized below.

Table 43: Revised Employee Strength of fourth Control Period

Particulars	FY20	FY21	FY22	FY23	FY24
Employee Strength opening	278	378	485	485	485
Addition during the year	100	107	0	0	0
Closing Employee Strength	378	485	485	485	485

5.6 Capital Investment Plan

5.6.1 The Petitioner has proposed to undertake capital investment for developing new transmission network as well as for strengthening the existing infrastructure. In the Business Plan, the Petitioner has proposed to execute 13 schemes under intra-state system in accordance with Regulation 15 of HPERC MYT Transmission Regulations 2011 of which six schemes are classified under system strengthening.

- 5.6.2 Through several deficiency notes, the Commission asked the Petitioner to submit such information on the proposed intra-state works including preparedness for execution of schemes including physical and financial progress of the schemes, DPRs, approval certificates, etc. In response, the Petitioner submitted the DPRs of all schemes along with approval certificates from CEA and Board approvals for few schemes. The Petitioner has also submitted a summary of financial and physical progress for the proposed intra-state schemes as on December 2018.
- 5.6.3 The Commission has examined the each intra-state scheme proposed by the Petitioner under capital expenditure for fourth Control Period based on the information submitted by the Petitioner in the tariff petition and subsequent responses to the queries and clarifications sought by the Commission. Some of the major issues identified during prudence check are detailed below:
- 5.6.4 **Absence of Prior Approval of the proposed schemes under implementation:** Based on the details of physical and financial progress of the proposed works, it was observed that most of the schemes were either in the development phase or in advance stage of commissioning or have achieved the COD. However, it was observed that the Petitioner has not undertaken any in-principle/ prior approval from the Commission for executing majority of the schemes which are already under implementation. In its queries, the Commission sought reasons for non-submission of DPRs and other details for seeking approval of the Commission and approval on deviation in proposed schemes from the Commission before implementation.
- 5.6.5 In response, the Petitioner submitted the following:
- i. a master transmission evacuation plan of power from Small Hydro Generating Stations had been prepared by HPSEBL where in-principle approval on the evacuation plan had been provided by the Commission on 18.10.2009.
 - ii. post approval, master plan was further reviewed by HPPTCL after its formation on 31.10.2008 and seven new schemes were added to the existing transmission plan.
 - iii. one scheme was recently transferred to HPPTCL from HPSEBL on 12.09.2018.
 - iv. submission for approval of capital expenditure of the proposed schemes in the Petition for approval of ARR and transmission tariff for the third Control Period from FY 2014-15 to FY 2018-19. However, the Commission disapproved the same due to lack of proper justification and adequate details for consideration of schemes under Intra-state system.
- 5.6.6 It is observed that the Petitioner has not sought prior approval for any of the proposed schemes. The in-principle approval for few proposed projects are approximately ten years old and the scope of these have also undergone a change based on submissions of the Petitioner. In the MYT Order for the third Control Period, the Commission had mentioned:

"4.5.8 The Petitioner has thus proposed capex addition of Rs. 354.3 crore for the works proposed as Intra state for the next Control Period but has

*not submitted any detailed justification/capex approval for works proposed as intra-state work except for the replacement of the meters on existing transmission lines at a cost Rs.0.38 crore. The Commission feels that the Petitioner should take necessary action to obtain capex approval of the various works being undertaken by it from the appropriate Commission(s). **The Commission would consider according such approval for the intra-state works proposed to be taken up by it after receipt of details from the Petitioner. For this purpose, the Petitioner should submit detailed justification of each of the works and the reasons as to why it should be considered as intra-state works and not inter-state work. The Commission expects that Petitioner shall obtain capex approval for the proposed intra-state works well before the mid-term review so that the ARR for the same can be considered during mid-term review or even earlier.** All these 8 works listed above are of immense importance and very urgent because they are all essential network for evacuation of power from upcoming HEPs, mostly renewable. Pending submission of requisite details, the Commission has not included any liability pertaining to the capital works in the ARR. "*

- 5.6.7 In the MYT Order for third Control Period, the Commission had clearly highlighted the reason for non-submission of adequate information with respect to the proposed schemes and had directed the Petitioner to obtain capex approvals for the proposed intra-state works during mid-term review or even before. However, the Petitioner has shown complete disregard for the Commission's Order and has taken up the proposed works without adequate approvals. **In this regard, the Commission takes serious note on the non-submission of adequate details including DPRs, cost – benefit analysis, etc. for prior approval of the Commission for the above schemes and directs the Petitioner take prior approval of the schemes which are under execution by providing all details along with supporting documents within six months of issuance of this Order and ensure compliance with Clause 7 of the HPERC MYT Transmission Regulations 2011.**

Details of Beneficiaries for the proposed intra-state works

- 5.6.8 The Petitioner submitted that the proposed schemes have been identified under head of inter-state and intra-state schemes based on the expected power flow or nature of use. However, it is observed that the Petitioner has not provided essential details for establishing the same. In order to examine the nature of transmission system vis-à-vis loading on the proposed system, the Commission in its several discrepancy notes had directed the Petitioner to submit the details of generator, plant capacity, beneficiaries, LTOA/ MTOA and connectivity agreement for establishing the respective schemes. In response, the Petitioner submitted scheme-wise details of upcoming generators along with their current status, details of beneficiary and status of connectivity agreement/ LTOA.
- 5.6.9 Based on the submission and subsequent clarification from the Petitioner, the Commission has observed that the total evacuation capacity of proposed

network is significantly higher than the capacity of the beneficiaries for which the transmission system is being constructed. Further, the beneficiaries in case of few works have not signed the Transmission Service Agreement (TSA) or the beneficiaries from these stations were not available.

- 5.6.10 On enquiring the Petitioner, it has submitted that a master evacuation plan was made considering the upcoming generation scenario, anticipated demand growth, HEP potential of each valley, etc. It was also submitted by the Petitioner that CEA being the technical authority has approved the schemes as per the plan. It is observed that most of the generators are at survey stage and investigation only with no clarity on the date of commissioning.
- 5.6.11 It is observed that planning of the proposed schemes was done in year 2008. Thereafter, the Petitioner has not undertaken any detailed planning and analysis with respect to the proposed evacuation system in view of the changes in upcoming status of the generators and expected beneficiaries. Further, on being queried by the Commission on the same, the Petitioner has failed to provide any justification and rationale in this regard. Moreover, the beneficiaries of the upcoming transmission capacity are not known for most of the schemes and connectivity agreement for most of the schemes are not in place as the LTOA/ MTOA have not been signed so far.
- 5.6.12 **Therefore, the Commission directs the Petitioner to review the status of the beneficiaries for each of the proposed intra-state works and undertake proper planning in view of the required capacities instead of going ahead with obsolete planning. The Petitioner should expedite signing of TSA with the beneficiaries at the earliest and prioritize the works in a manner that matches with the expected commissioning of the beneficiaries. Subsequently, a petition covering details like DPR, list of beneficiaries, funding, cost-benefit analysis, etc. is required to be submitted to the Commission for prior approval.**
- 5.6.13 Even with the limitations mentioned above with respect to the information of proposed works by the Petitioner, recognizing the importance of adequate evacuation and transmission capacity in the State, the Commission has approved few transmission works after detailed review of the individual works for the fourth Control Period. These schemes have been considered based on availability of adequate information and reasoning provided as part of various submissions. However, in the absence of relevant information for rest of the schemes, the Petitioner should submit separate petitions along with adequate details and supporting documents for approval of the Commission.
- 5.6.14 The scheme wise approach taken by the Commission while approving the proposed schemes for the fourth Control Period are discussed below-

Table 44: Approach for approval of Capital Expenditure for fourth Control Period

Sl	Name of Scheme	Observation of the Commission
Schemes approved by the Commission		
1.	132/220 kV Substation at Kalaamb & 220 KV D/C TL from 400/220 kV S.STN of	It is observed that the proposed system has been identified by HPSEBL to downstream the power from PGCIL EHV (400/220KV) substation in village Andheri Kala Amb area.

SI	Name of Scheme	Observation of the Commission
	PGCIL at Araindwala to proposed 220/132 kV S.STN of HPPTCL at andhier Kalamb	<p>The system was also intended to provide additional supply source to existing 132/33/11 kV substation at Kala Amb Johron. Based on the submissions it is observed that-</p> <ul style="list-style-type: none"> • Due to delay in completion of work, HPSEBL is being imposed full recovery of PGCIL network without even sourcing power from PGCIL substation. The scheme was subsequently transferred to HPPTCL for timely completion. • The existing 132/33/11 kV substation of kalaamb is 90% loaded of its capacity which is catering to the industrial areas of kalaamb, Ponta Sahib and Giri Nagar. • The addition in proposed substation will aid in meeting the increasing load requirement of these industrial areas. • The beneficiary of the scheme is HPSEBL and may form part of intra-state transmission system. <p>Based on the above observations, it is expected that the construction of proposed transmission system will help in meeting the congestion in evacuation and will be utilised by HPSEBL for down streaming the power from PGCIL system. Accordingly, the Commission provisionally allows the capital expenditure of the proposed scheme in fourth Control Period. However, the Petitioner is directed to submit the NRPC certificate post commissioning of the above schemes.</p>
2.	66 kV switching station (GIS) at Urni	<p>66kV Urni- Wangtoo line and GIS substation are proposed as intra-state transmission system to evacuate the power of 40 MW. The proposed schemes have been approved by the CEA on 05.06.2012. Based on the submissions it is observed that-</p> <ul style="list-style-type: none"> • Schemes are proposed to evacuate 40 MW of power from small HEPs as per DPR. • Out of the upcoming capacity, 24 MW has already been commissioned and is supplying power to HPSEBL through interim arrangement from Kashang-Bhabha transmission line till the commissioning of the Urni Substation and Urni-Wangtoo transmission line.
3.	66 kV Urni-Wangtoo D/C Line	<ul style="list-style-type: none"> • Power allocated to HPSEBL is more than 50% of the total capacity of the system as per the signed connectivity agreements. • The proposed schemes shall form part of intra-state transmission system based on the estimated power flow. <p>Hence, based on the above submissions, the Commission provisionally approves the capital expenditure of proposed schemes. However, the Petitioner is directed to submit the NRPC certificate post commissioning of the above schemes.</p>
Schemes not considered for fourth Control Period		
4.	220 kV D/C Kashang-Bhabha Line	<p>The Petitioner has submitted that presently the 220 kV D/C Kashang-Bhabha Line is catering to intra-state power requirement. However, the line shall form part of inter-state transmission system post commissioning of Wangtoo substation in FY 2019-20.</p>

SI	Name of Scheme	Observation of the Commission
		<p>The Commission in its Order dated 06.12.2018 had disapproved the proposal of HPPTCL on determination of Tariff for FY 2016-17 to FY201819 of 220kV D/C Kashang-Bhaba Transmission Line on account of submission of insufficient data pertaining to the expenditure. Also, in the Order, the Commission has mentioned that the Petitioner would not be able to recover the ARR in the absence of Long Term Open Access (LTOA)/ Medium Term Open Access (MTOA) with the beneficiaries. The Commission also directed the Petitioner to maintain the proper record and to execute the LTOA/ MTOA with the beneficiaries.</p> <p>In response to one of the query, the Petitioner had submitted that HPPCL has entered into an agreement with IEX for sale of its 76% power to IEX, which will be evacuated through 220 kV D/C Kashang-Bhabha Line.</p> <p>Considering that majority capacity of the line shall be utilized for transmission of power outside the state, the same cannot be considered under intra-state transmission system.</p>
5.	22/66/220KV Substation Bhoktoo by LILO of one circuit of 220 kV Kashang-Bhabha D/C line	<p>The Petitioner has submitted that presently the 22/66/220KV Bhoktoo substation is catering to intra-state power requirement, however it shall form part of inter-state transmission system on commissioning of Wangtoo substation in FY 2019-20. The Bhoktoo substation has been proposed to evacuate 13 MW of power project.</p> <p>In one of the submissions, the Petitioner has mentioned referring to the line diagram that after completion of Wangtoo substation, which is being developed by LILOing both the circuits of Kashang Bhabha transmission line and 400 KV Karcham-Abdullapur transmission line of PGCIL, the proposed system will become part of Inter-State transmission System.</p> <p>As the proposed work is intended for inter-state evacuation of power, the Commission has not considered the same towards intra-state transmission network.</p>
6.	132/220 kV GIS 2x 80/100 MVA sub-station at Mazra by LILO of 132 kV Kurthala-Bathri D/C Line	<p>The Petitioner has proposed the 132/220 kV GIS 2x 80/100 MVA sub-station at Mazra under the intra-state system which is planned for evacuating power of 176 MW from various generators. Following is observed as per the submission of the Petitioner:</p> <ul style="list-style-type: none"> • Most of the generators are at survey and investigation stage only with no clarity on the date of commissioning. • Out of the commissioned generator, the power from Chanju-1 is already being evacuated through HPSEBL network. • Details of beneficiaries, connectivity agreement and LTOA/ MTOA are not provided by the Petitioner. <p>In absence of details of beneficiaries, uncertain status of upcoming generators, the Commission finds it difficult to</p>

SI	Name of Scheme	Observation of the Commission
		qualify the proposed scheme under Intra-state transmission system.
7.	33/220KV,31.5 MVA sub-station in the yard of Allian Dhuangan HEP	<p>This Petitioner has proposed the construction of sub-station in the yard of Allian Dhuangan HEP and further connecting to palchan from proposed 33 kV D/C Line to cater the intra-state requirement by evacuating power from 44 MW of Small HEPs awarded to various IPP's by HP Govt.</p> <p>It is observed from the submitted DPR that the construction of 33 kV switching station at Palchan will help all the IPPs to pool their power at 33 kV level and the pooled power shall be evacuated to 33/220 kV substation in the yard of Allain Dhuangan HEP by construction of 33 kV D/C line.</p>
8.	33 kV D/C Line between Palchan and 33/220 kV sub-station in the yard of Allain Dhuangan HEP	<p>Based on the information sought with respect to the proposed project, the Petitioner has not been able to provide any details of upcoming generators, beneficiaries, status of connectivity agreement/LTOA/ MTOA, etc.</p> <p>Therefore, in the absence of sufficient data, the Commission has not considered the proposed works under intra-state transmission system during the fourth Control Period.</p>
9.	33/132 KV GIS Pandoh by Lilo of 132 kV Bajaura - Kangoo line	<p>The Petitioner has proposed to develop the substation to evacuate 54 MW of Small Hydel power by injecting it in to 132/220 kV substation (HPSEBL) at Kangoo through existing 132 kV Bajaura-Kangoo D/C line. The scheme is proposed under system strengthening of existing intra-state transmission infrastructure.</p> <p>Based on the DPR and other details submitted by the Petitioner, it is observed that-</p> <ul style="list-style-type: none"> • Most of the generators, except Patikari HEP are at survey and investigation stage only with no clarity on the date of commissioning. • The Power evacuated from Patikari 16 MW HEP which is being sold to HPSEBL is currently being evacuated through 33kV D/C line of 25 km from Pandoh to Bijni substation. • Details of beneficiaries, connectivity agreement and LTOA/ MTOA have not been provided by the Petitioner. <p>Therefore, in the absence of sufficient data, the Commission has not considered the proposed works under intra-state transmission system during the fourth Control Period.</p>
10.	Additional 33/220kV,31.5 MVA Transformer at Pandoh Substation	<p>Based on the DPR and other details submitted by the Petitioner, it is observed that-</p> <ul style="list-style-type: none"> • Most of the generators, except Patikari HEP are at survey and investigation stage only with no clarity on the date of commissioning. • The Power evacuated from Patikari 16 MW HEP which is being sold to HPSEBL is currently being evacuated through 33kV D/C line of 25 km from Pandoh to Bijni substation. • Details of beneficiaries, connectivity agreement and LTOA/ MTOA have not been provided by the Petitioner. <p>Therefore, in the absence of sufficient data, the Commission has not considered the proposed works under intra-state transmission system during the fourth Control Period.</p>
11.	33/132/,2x25/31.5 MVA Substation Chambi with LILO of 132 k V Dehra-Kangra line	<p>The Petitioner has proposed the construction of Chambi substation to evacuate 42.4 MW of power from various upcoming HEPs. The scheme is proposed under system strengthening of existing Intra-state transmission network. The Petitioner has proposed that the above substation will be connected to HPSEBL's 33 KV network to improve the voltage profile of the system and quality of power.</p>

SI	Name of Scheme	Observation of the Commission
		Based on the DPR and other details submitted by the Petitioner, it is observed that- <ul style="list-style-type: none"> • Except one, all the generators are at survey and investigation stage only with no clarity on the date of commissioning. • Details of beneficiaries, connectivity agreement and LTOA/ MTOA have not been provided by the Petitioner. Therefore, in the absence of sufficient data, the Commission has not considered the proposed works under intra-state transmission system during the fourth Control Period.
12.	66/22 Kv, 2 x 10 MVA GIS S.STN at Bagipul	66 kV DC line from Bagipul to Kotla and 66/22 kV substation at Bagipul are proposed as intra-state transmission system to evacuate the power of 55 MW. Based on the DPR and other details submitted by the Petitioner, it is observed that- <ul style="list-style-type: none"> • Most of the generators are at survey and investigation stage only with no clarity on the date of commissioning. • Details of beneficiaries, connectivity agreement and LTOA/ MTOA have not been provided by the Petitioner. Therefore, in the absence of sufficient data, the Commission has not considered the proposed works under intra-state transmission system during the fourth Control Period.
13.	66Kv D/C Transmission from Bagipul to Kotla	Based on the DPR and other details submitted by the Petitioner, it is observed that- <ul style="list-style-type: none"> • Most of the generators are at survey and investigation stage only with no clarity on the date of commissioning. • Details of beneficiaries, connectivity agreement and LTOA/ MTOA have not been provided by the Petitioner. Therefore, in the absence of sufficient data, the Commission has not considered the proposed works under intra-state transmission system during the fourth Control Period.

5.6.15 As detailed in the table above, the Commission has provisionally approved three proposed schemes where adequate information was available with respect to beneficiaries and nature of work to consider the scheme for determination of intra-state transmission works. **The Petitioner is directed to submit the NRPC certificate at the time of Mid-term Review for these schemes.**

5.6.16 For the balance schemes which have not been considered, the Petitioner may approach the Commission during the Mid-term review post attainment of certificate from NRPC approving the scheme as Intra-state based on the nature of future load flow and along with other required information. **Also, the Petitioner is directed to analyse and realign the construction of proposed transmission system on the demand estimation and construction status of the upcoming stations to ensure effective utilization and loading of transmission infrastructure. The Petitioner is further directed to expedite the process of signing of LTOA/ MTOA with upcoming generators in conformity with the expected beneficiary.**

5.7 Capital Cost of the proposed works

5.7.1 On scrutiny of the project cost for the proposed works, the Commission has observed significant variation in the proposed cost for some of the schemes as compared with the DPR cost. The Commission in subsequent queries had directed the Petitioner to submit the rationale behind cost variation along with

documentary evidences supporting the same. In response, the Petitioner submitted the scheme wise justification behind the variation of cost and mentioned that major variation in cost is due to variation in award cost or change of scope.

- 5.7.2 Regarding cost of Urni lines and substation, the Petitioner had submitted that variation is due to provision of additional 2 Nos. 66 kV of bays (INR 30 million), mandatory spares (INR 12 million) and testing and maintenance equipment (INR 12 million) which was not considered in DPR. The Petitioner also submitted that the provision of civil works was kept at INR 3 million in DPR whereas the actual cost quoted by the awardee stood at INR 130 million. However, the Petitioner has failed to provide any documentary evidence with regard to approval of the increased project cost.
- 5.7.3 Therefore, in absence of approval on the increased cost, the Commission finds it prudent to provisionally approve the combined cost of Rs. 40 Cr. for Urni lines and substation. However, the Petitioner is directed to seek approval of completed cost at the time of mid-term review by furnishing necessary documentary evidences justifying the increase in cost of the project.

Table 45: Approved Capital Expenditure for fourth Control Period (Rs. Cr.)

SI	Name of Scheme	Cost as per CEA	Cost Proposed	Cost Approved
1	132/220 KV Substation at Kalaamb & 220KV D/C TL from 400/220KV S.STN of PGCIL at Araindwala to proposed 220/132KV S.STN of HPPTCL at andheir Kalamb	111.1	111.92	111.1
2	66 KV switching station (GIS) at Urni	27.39	39.56	40.0
3	66 kV Urni-Wangtoo D/C line		16.65	

Table 46: Approved Year wise Capital Expenditure for fourth Control Period (Rs. Cr.)

SI	Name of Scheme	Capex as on Mar'19	FY20	FY21	FY22	FY23	FY24
1	132/220 KV Substation at Kalaamb & 220KV D/C TL from 400/220KV S.STN of PGCIL at Araindwala to proposed 220/132KV S.STN of HPPTCL at andheir Kalamb	0.01	37.03	37.03	37.03	-	-
2	66 KV switching station (GIS) at Urni	32.51	7.49	-	-	-	-
3	66 kV Urni-Wangtoo D/C line						

5.8 Capitalization

- 5.8.1 In response to a query regarding capitalization of the proposed schemes, the Petitioner has submitted that it has proposed to capitalize the project-wise capital expenditure in the year in which it achieves COD.

5.8.2 The Commission for the purpose of approving the schemes has analyzed the present physical and financial status of the approved projects. Based on the review of submissions, the Commission has considered the following approach for capitalization of the approved schemes:

- It was observed that HPPTCL has purchased the land for Kalaamb work from private owners and is in the process of tendering. As on Dec'18, the financial and physical progress of the project stood at zero percentage. Based on the present stage of development, the Commission has provisionally considered the capitalization in June 2021.
- For Urni substation and line, approx. 60% of the work has been completed as on Dec'18. The Petitioner in the subsequent reply to the Commission's queries has submitted that due to unprecedented uncontrollable events, there has been slippages in planned activities. The Petitioner has also informed that Urni substation has been completed, however, COD can only be achieved after commissioning of Urni-Wangtoo Transmission line. Therefore, the Commission has considered the revised COD of two works as September 2019.

5.9 Funding of Proposed Scheme

5.9.1 With regard to funding, the Commission had directed the Petitioner to submit the documentary evidences with respect to debt, equity and grant claimed under capital structure of proposed scheme. In response, the Petitioner had submitted that it has availed multi tranches loan facility from ADB, KfW and Domestic Loan from REC for funding its upcoming transmission projects. The Petitioner in support has submitted scheme wise break-up of capital structure and copy of loan agreements of various lenders. The Petitioner has submitted the following capital structure for proposed schemes as per their source of funding:

Table 47: Capital Structure of schemes for fourth Control Period (Rs. Cr.)

Sl	Name of Scheme	Debt (%)	Equity (%)	Grant (%)
1	REC	90	10	0
2	ADB (Tranche-I)	79.4	20.6	0
3	ADB (Tranche-II)	75.2	24.8	0
4	ADB (Tranche-III)	77.2	22.8	0

5.9.2 The Commission has observed certain variations in the capital structure for the ADB funded scheme with respect to capital structure (80:20; Debt:Equity) mentioned under DPR. Based on the clarifications sought, the Petitioner submitted a snapshot of loan agreement highlighting the revised structure. It was observed in the above document that a total funding of USD 146.3 Million is provided under ADB Tranche-II facility for developing transmission projects. Out of which, USD 110 Million (75.2%) is to be funded by ADB and remaining USD 36.2 Million (24.8%) by the Government of HP. It was also mentioned by the Petitioner that funding provided by ADB do not

cover the entire project cost and funding for meeting the soft cost, cost of land etc. is to be borne by HPPTCL only.

5.9.3 The Petitioner also submitted that under ADB loans, the amount provided by ADB to Government of India is in form of 90% grant and 10% loan and the same has been transferred to HPPTCL by Government of Himachal Pradesh as interest bearing loan. **It is observed that the nature of funding is being revised in the hands of the Petitioner. While the amount is being received as grant to the State Government, the same is being extended as loan to the Petitioner. Increase in transmission charges due to addition of new projects would lead to significant increase in transmission charges and put additional burden on the consumers. Therefore, the Commission directs the Petitioner to take up the matter with the State Government for retaining the nature of funding (i.e. grant) as was received from the funding agency in interest of the consumers of the state and submit quarterly report to the Commission in this matter.**

5.9.4 The Commission has approved the capital structure as per the loan agreements which is in line with the submission of the Petitioner as tabulated below:

Table 48: Approved Funding of Capitalization for fourth Control Period (Rs. Cr.)

SI	Name of Scheme	Funding Agency	Approved Cost	Debt	Equity	Grant
1	132/220 KV Substation at Kalaamb & 220KV D/C TL from 400/220KV S.STN of PGCIL at Araindwala to proposed 220/132KV S.STN of HPPTCL at andheir Kalamb	REC	111.1	99.99	11.11	0
2	66 KV switching station (GIS) at Urni	ADB (Tranche-II)	40.0	30.08	9.92	0
3	66 kV Urni-Wangtoo D/C line					

5.9.5 For approving the funding of schemes in the fourth Control Period, the Commission has provisionally considered the debt:equity structure as per the submission of the Petitioner. However, the Commission may take an appropriate view with regard to ADB funded schemes at the time of mid-term review.

6 ANALYSIS ON MYT TARIFF PETITION FOR 4TH CONTROL PERIOD

6.1 Introduction

- 6.1.1 HPPTCL has submitted projection of ARR for the fourth Control Period from FY 2019-20 to FY 2023-24 in accordance with the provisions of applicable HPERC MYT Transmission Regulations 2011 and its amendment thereof. The Petitioner has considered the basis of past trends, regulatory norms; and activities planned and proposed to be undertaken during the fourth Control Period.
- 6.1.2 The Commission has examined the MYT Petition for the fourth Control Period and subsequent submissions made by the Petitioner in response to the deficiency letters for the purpose of approving the elements of ARR for the Control Period FY 2019-20 to FY 2023-24. The Commission has considered the provisions of HPERC MYT Transmission Regulations 2011, Audited Annual Accounts for past years and approved capital expenditure, capitalization and funding plan for the fourth Control Period as part of the Business Plan for the purpose of ARR projections for each year of the fourth Control Period.
- 6.1.3 In this chapter, the Commission has detailed the methodology for computing each component of the ARR for HPPTCL including O&M expenses, interest and finance charges, depreciation, return on equity, working capital requirement, etc. for approving the total ARR for each year of the fourth Control Period i.e. FY 2019-20 to FY 2023-24. The methodology followed and approved values for each parameter of the ARR is detailed in subsequent sections:

6.2 Approved Capitalization and Means of Finance for the fourth Control Period

- 6.2.1 The Commission, in the approval of Business Plan for the fourth Control Period from FY 2019-20 to FY 2023-24, as discussed in Chapter 5 of the Order, has approved the following capitalization:

Table 49: Approved Capitalization for fourth Control Period

SI	Name of Scheme	Approved Cost	Expected COD
1	132/220 KV Substation at Kalaamb & 220KV D/C TL from 400/220KV S.STN of PGCIL at Araindwala to proposed 220/132KV S.STN of HPPTCL at Andheir Kalamb	111.1	June 2021
2	66 KV switching station (GIS) at Urni	40.0	

SI	Name of Scheme	Approved Cost	Expected COD
3	66 kV Urni-Wangtoo D/C line		September 2019

6.2.2 Further, the Commission has approved the following financing plan for the fourth Control Period as part of the Business Plan:

Table 50: Approved Funding of Capitalization for fourth Control Period (Rs. Cr.)

SI	Name of Scheme	Funding Agency	Approved Cost	Debt	Equity	Grant
1	132/220 KV Substation at Kalaamb & 220KV D/C TL from 400/220KV S.STN of PGCIL at Araindwala to proposed 220/132KV S.STN of HPPTCL at Andheir Kalamb	REC	111.1	99.99	11.11	0
2	66 KV switching station (GIS) at Urni	ADB (Tranche-II)	40.0	30.08	9.92	0
3	66 kV Urni-Wangtoo D/C line					

6.2.3 The above approved capitalization and funding plan has been considered for computation of ARR components like depreciation, return on equity, interest expense, etc. as detailed in respective sections below.

6.3 O&M Expenses

6.3.1 As per regulation 13 (3) of HPERC MYT Transmission Regulations 2011, the O&M expenses for the nth year of the Control Period shall be approved based on the formula given below:-

$$"O\&M_n = R\&M_n + EMP_n + A\&G_n:$$

Where -

$$'EMP_n' = [(EMP_{n-1}) \times (1+G_n) \times (CPIinflation)] + Provision (Emp);$$

$$'A\&G_n' = [(A\&G_{n-1}) \times (WPIinflation)] + Provision (A\&G);$$

$$'R\&M_n' = K \times (GFAn-1) \times (WPIinflation);$$

6.3.2 As part of its submission in the Business Plan, the Petitioner has proposed to take-up the responsibility of O&M of the lines transferred from HPSEBL from the beginning of fourth Control Period. The Petitioner has projected the O&M expenses considering that O&M for these lines that would be undertaken by them.

6.3.3 In the chapter for Business Plan, the Commission has accepted the proposal of the Petitioner to undertake complete O&M of its network and has approved employee addition as per the proposal of the Petitioner. For the approval of O&M expenses for the fourth Control Period, the Commission has also taken into consideration that HPSEBL shall no longer undertake the O&M of the existing intra-state transmission lines. However, in absence of any past data with respect to such operations by the Petitioner, the Commission has considered data as per the audited accounts and adequate assumptions for

projecting the O&M expenses for the fourth Control Period. The Commission shall review the same at the time of Mid-term Review as per the actual data made available by the Petitioner.

- 6.3.4 While projecting the O&M expenses for the fourth Control Period, the Petitioner has proposed to allocate 50% of the employee and A&G expenses towards Intra-State projects. The Commission sought reasoning for consideration of 50% allocation of O&M expenses towards intra-state transmission works. In response, the Petitioner submitted that no such formal bifurcation among the employees between inter-State and intra-State projects exists currently and the proposed allocation of 50% was based on approximate proportion of intra-state projects being undertaken. The Petitioner further submitted that of the total 42 schemes, approximately 50% is envisaged as inter-state whereas the remaining 50% is envisaged as intra-state.
- 6.3.5 In the previous Tariff Orders, the Commission had considered the O&M expenses by allocating 25% of corporate office expenses towards STU activities in absence of any reasonable basis of allocation submitted by the Petitioner. The existing basis of considering 50% is also unjustified as the nature of works (inter-state or intra-state) is unclear for the various projects being implemented by the Petitioner. In the Chapter for Business Plan, the Commission has approved three out of thirteen schemes proposed under intra-state due to lack of details of beneficiaries and LTOA/ MTOA. Therefore, the Commission finds it prudent to continue with allocation of 25% towards intra-state employee and A&G expenses for the fourth Control Period.
- 6.3.6 It is observed that the Petitioner has not been maintaining separate details of inter-state and intra-state operations resulting in significant difficulties in determination of various cost elements. **The Petitioner is directed to immediately implement prudence practices for separate recording of expenditure with respect to inter-state and intra-state projects. Also, detailed procedure and assumptions for allocations of common costs should be provided by the Petitioner. The statement prepared in this regard should be audited by the statutory auditors. Initially, a detailed note and future steps to implement the directive should be submitted to the Commission within three months of issuance of this Order.**
- 6.3.7 For the purpose of escalating the O&M expenses, the Commission has considered the escalation rates as per the HPERC MYT Transmission Regulations 2011. The Commission has calculated the Consumer Price Index (CPI inflation) and Wholesale Price Index (WPI inflation) based on the average increase for the preceding three years. The summary of the escalations considered is provided in table below:

Table 51: Escalation approved for fourth Control Period

Particulars	CPI Inflation	WPI Inflation
FY 2017-18	3.08%	2.92%
FY 2016-17	4.12%	1.73%

Particulars	CPI Inflation	WPI Inflation
FY 2015-16	5.65%	-3.65%
Three Years average	4.28%	0.33%

6.3.8 For purpose of approving the O&M expenses for the fourth Control Period, the claim of the Petitioner has been analysed based on the O&M expenses of the past years, approved Business Plan and other factors considered appropriate by the Commission.

6.3.9 The methodology and assumptions considered for projection of each component of the O&M expenses i.e. employee cost, R&M expense and A&G expense is further discussed below:

A) Employee Expense

6.3.10 In the Petition, Petitioner had proposed employee cost for the Control Period by allocating entire new employee addition towards O&M function. The Petitioner has further allocated the employees to Intra State Transmission network on pro-rata basis considering 50% allocation.

6.3.11 In response to a query, the Petitioner has resubmitted the actual employee strength from FY 2014-15 to FY 2018-19 along with their break-up in regular, contractual and outsourced employees. It is observed that the addition of employees during fourth Control Period are on contractual basis. However the Petitioner had collectively proposed the expenses of regular, contractual and outsourced employees in employee salary expenses.

6.3.12 Due to differences in salary structure and actual payout, the Commission has sought details of revised estimate of employees bifurcated in regular, outsourced and contracted along with their cost for each year of the fourth Control Period. However, no details regarding the number of employee and respective cost was made available. The Petitioner has further submitted that the bifurcation of cost for outsourced and regular employees is not available for previous years.

6.3.13 In absence of the above details, the Commission has approved the employee cost for fourth Control Period by adopting the following approach:

- The Commission has considered the total employee expenses of regular, contractual and outsourced employees of FY 2017-18 as per the Annual Accounts as the base and has escalated the same with the CPI inflation for computing cost of existing employees for each year of the Control Period.
- For projection of cost of newly added employees, the Commission has estimated the average cost of Rs 18,000/ month of contractual employees as per the letter submitted to Public Commission along with suitable salary correction. Considering the addition in manpower as approved in the Business Plan, employee expense for additional employees have been calculated for each year. The Commission has also considered the average of three-year CPI inflation for escalating the per employee cost for contractual employees.

- An allocation of 25% of the total employee cost has been considered for arriving at the approved employee cost towards Intra-state business for the fourth Control Period.

6.3.14 Thus, the total approved employee expenses of HPPTCL for the fourth Control Period is detailed below:

Table 52: Approved Employee Expenses for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Employee expenses (Existing Employee Base)	17.75	18.51	19.30	20.13	20.99
Employee expenses-Contractual	1.09	3.50	4.93	5.14	5.36
Allocation towards Intra-state Projects	25%	25%	25%	25%	25%
Total Employee Expense	4.71	5.50	6.06	6.32	6.59

B) A&G Expenses

6.3.15 The Petitioner had proposed the A&G expenses for fourth Control Period by factoring the impact of expanding infrastructure, increase in assets and employees. The Petitioner has also considered the escalation of expenses with WPI rate for immediately preceding three years before the base year.

6.3.16 The Commission has examined the submission of the Petitioner on A&G expenses in light with the approval of proposed capital expenditure schemes and employee addition. For the purpose of projection of A&G expense, the Commission has considered the formula provided in the HPERC MYT Transmission Regulations 2011 as given below:

$$A\&G_n = [(A\&G_{n-1}) \times (WPI \text{ inflation})] + Provision (A\&G)$$

6.3.17 While approving the A&G expenses, the Commission has segregated the A&G expenses into three heads as detailed below.

6.3.18 General A&G Expenses

- It is observed that the expenses recorded under A&G expenses for the respective year Audited Accounts include expenditure towards both intra-state and inter-state A&G expenses. For allocation of the common expense, the Commission has excluded few expense heads i.e. O&M expense payable to HPSEBL, regulatory and consultancy expenses from the total A&G expense for FY 2017-18.
- Thereafter, for projecting the total common A&G expense for the fourth Control Period, the Commission has escalated the above adjusted A&G expense with escalation of 0.33% for each year as per the average WPI increase in past three years.
- The Commission has considered an adjustment in A&G expense due to impact of increased manpower and has provisionally escalated the expenses by 10% each year. However, the Commission shall review the actual A&G expense at the time of truing-up for the fourth Control Period.

- Subsequently, allocation of 25% of the total A&G cost has been considered for approving the A&G expense towards intra-state transmission business.
- In addition to the allocated A&G expense towards intra-state transmission business, the Commission has considered additional expense under A&G head i.e. annual licensee fee, STU membership and regulatory expense towards which could be attributed exclusively towards Intra-state works. The additionally approved A&G expenses towards intra-state transmission business are detailed in the table below.

Table 53: General A&G Expenses for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
General A&G Expenses	0.75	0.83	0.92	1.01	1.12
License & regulatory fee	1.00	1.00	1.00	1.00	1.00
ARR expenses during MYT Control Period	0.10		0.10		
Membership Fees STU	0.10	0.10	0.10	0.10	0.10
Total	1.95	1.93	2.12	2.11	2.22

6.3.19 **Provisions:** In addition to the above recurring A&G expenses based on the past, the Petitioner has proposed additional provisioning in A&G expense on account of manpower training, insurance, ERP consultancy, etc. Based on the review of proposed provisions, the Commission has considered the following:

- Insurance at the rate of 0.30% of the asset value insured in line with the proposal of the Petitioner has been considered.
- The Petitioner has proposed the provision of cost towards ERP consultancy and maintenance charges. In response to one of the Commission's query, the Petitioner had submitted that the implementation of ERP is completed and gone live from 01.04.2019 and functioning of ERP is under observation by HPPTCL for next six months. The Petitioner also submitted a copy of agreement with M/s Accenture for AMC for ERP and SAP support, cloud hosting for SAP and internet connectivity. Accordingly, the Commission has approved the charges towards ERP consultancy and maintenance.
- The Petitioner has proposed the training expenses which includes the training cost of 7 man-days per employee per year at the rate of Rs. 4000/person/day of the number of employees on the payroll at the beginning of the year. It is observed that the proposed training expense is based on assumptions and lack adequate study and assessment. Therefore, the Commission finds it appropriate to provisionally consider an amount of Rs. 20 Lakh per annum towards training and capacity building.
- The Petitioner has also proposed the cost of vehicles of Rs 0.75 Cr under A&G expenses. As procurement of vehicle is of the nature of capital expenditure, the same cannot be allowed as part of A&G expense. Therefore, the Commission has not considered any provision towards vehicle charges as proposed.

- As the proposed provisions of ERP consultancy, and manpower training are for towards overall organization benefit, the approved allocation of 25% has been applied for determining the allocation towards intra-state transmission.
- The above-mentioned provisional amounts approved under A&G expense shall be reviewed during the mid-term review and trued-up as per actual. In absence of detailed information regarding the expenditure under these heads, the Commission shall be constrained to disallow the provisions approved during truing-up for the respective years.

Table 54: Approved Provisions in A&G Expenses for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
ERP consultancy	1.84	1.84	1.84	1.84	1.84
Manpower Training	0.20	0.20	0.20	0.20	0.20
Common Provision under A&G expenses	2.04	2.04	2.04	2.04	2.04
Allocation towards Intra-State works	25%	25%	25%	25%	25%
Provisioning in A&G expenses towards Intra-State works	0.51	0.51	0.51	0.51	0.51
Provisioning of Insurance	0.12	0.18	0.35	0.51	0.51
Total Provisions	0.63	0.69	0.86	1.02	1.02

6.3.20 Based on the above estimations for A&G expenses and provisions, the total approved A&G expenses of HPPTCL for the fourth Control Period is detailed below:

Table 55: Approved A&G Expenses for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Share of General A&G Expenses towards intra-state	1.95	1.93	2.12	2.11	2.22
Share of Provisions towards intra-state	0.63	0.69	0.86	1.02	1.02
Total A&G expense	2.58	2.62	2.97	3.14	3.24

C) R&M Expense

6.3.21 The Commission has been allowing the R&M Expense as the actual payment made by the HPPTCL to HPSEBL in the previous Orders. However, as per the proposal of the Petitioner for undertaking complete responsibility of O&M expense of the transmission system, the Commission has approved R&M expense on the intra-state network considering the changes.

6.3.22 For the purpose of approving the R&M expense, the Commission has considered the formula provided in the HPERC MYT Transmission Regulations 2011 as given below.

$$R\&Mn' = K \times (GFAn-1) \times (WPI \text{ inflation})$$

6.3.23 The Petitioner had proposed a k-factor of 1.74% for projecting the R&M expenses for the fourth Control Period by computing the actual K factor arrived by averaging out actual R&M expenses of FY 2016-17 and FY 2017-18. It is observed that the O&M for transferred transmission assets was being undertaken by HPSEBL and reimbursed by HPPTCL due to lack of manpower and other resources. As the charges paid were inclusive of manpower and material, the same cannot be considered towards approving R&M expense of HPPTCL. In absence of past data which could be utilized for determining the k factor, the Commission has provisionally considered a K factor of 1.50% for approving the R&M expense for fourth Control Period which shall be reviewed based on the actual R&M expense for initial years at the time of Mid-term review.

6.3.24 Based on the above, the total approved R&M expenses of HPPTCL for the fourth Control Period is detailed below:

Table 56: Approved R&M Expenses for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
GFAAn-1	19.55	59.55	59.55	170.65	170.65
K factor	1.50%	1.50%	1.50%	1.50%	1.50%
Total R&M Expenses	0.29	0.89	0.89	2.56	2.56

O&M Expenses

6.3.25 The O&M expenses approved by the Commission for the fourth Control Period from FY 2019-20 to FY 2023-24 is as shown in the table below:

Table 57: Approved O&M Expenses for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Employee Expenses	4.71	5.50	6.06	6.32	6.59
A&G expenses	2.58	2.62	2.97	3.14	3.24
R&M Expenses	0.29	0.89	0.89	2.56	2.56
Total O&M Expenses	7.59	9.02	9.92	12.01	12.39

6.3.26 The Commission further directs the Petitioner to maintain segregation of O&M expense (specifically R&M and A&G expense) under intra-state and inter-state in its books of accounts and provide the same at the time of truing-up of fourth Control Period.

6.4 Depreciation

6.4.1 The Commission has approved the depreciation in line with provisions of the Regulation 23 of the MYT Transmission Regulations 2011.

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

(2-a) The salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable.

(3) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the transmission system:

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the asset.

(4) For transmission project which are in operation for less than 12 years, the difference between the cumulative depreciation recovered and the cumulative depreciation arrived at by applying the depreciation rates specified in this regulation corresponding to 12 years, shall be spread over the period up to 12 years, and the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the asset.

(5) For the project in operation for more than 12 years, the balance depreciation to be recovered shall be spread over the remaining useful life of the asset.

(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."

6.4.2 The Commission has examined the depreciation proposed by the Petitioner in detail. The Commission has computed the depreciation separately for existing assets and proposed assets as detailed below.

A) Existing Assets

6.4.3 For the purpose of approving the depreciation of existing assets, the Commission has considered the similar methodology adopted in the previous Order for True Up for FY 15 & FY 16 and Mid-Term Review Order for FY17 to FY 19. In the Order, the Commission has considered the accumulated depreciations and net book value of the transferred assets as per the Transfer Scheme 2010 and computed depreciation in line with the provisions of the HPERC MYT Transmission Regulations 2011. Accordingly, the Commission has continued with the depreciation on the existing assets considering the useful life and accumulated depreciation at the end of third Control Period. The depreciation allowed on the existing assets is provided below.

Table 58: Approved Depreciation on Existing Asset for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Depreciation on Existing Assets	0.66	0.65	0.64	0.25	0.25

B) New Assets

6.4.4 For the purpose of computation of depreciation of new assets, the Commission has arrived on GFA for each year based on the approved capitalization for each year as part of Business Plan in the previous Chapter. Further, the Commission has considered a depreciation rate of 5.28% for approving the depreciation for the Control Period in line with the provisions of HPERC MYT Transmission Regulations 2011. The approved depreciation on new assets for fourth Control Period is summarized in table below:

Table 59: Approved Depreciation on new Assets for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Opening GFA (Less Grant)	-	40.00	40.00	151.10	151.10
GFA Addition during the year	40.00	-	111.10	-	-
Closing GFA	40.00	40.00	151.10	151.10	151.10
Average GFA	20.00	40.00	95.55	151.10	151.10
Depreciation Rate	5.28%	5.28%	5.28%	5.28%	5.28%
Depreciation	1.06	2.11	5.05	7.98	7.98

6.4.5 Accordingly the total depreciation approved for the fourth Control Period is as provided in table below:

Table 60: Total Approved Depreciation for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Depreciation on Existing Assets	0.66	0.65	0.64	0.25	0.25
Depreciation on New Assets	1.06	2.11	5.05	7.98	7.98
Total Depreciation	1.72	2.76	5.69	8.23	8.23

6.5 Interest on Loan

6.5.1 The Commission has considered the loan addition during each year of the Fourth Control Period in line with funding plan for capitalized assets approved as part of the Business Plan. Normative repayment equivalent to the depreciation for the respective year has been considered for computing the opening and closing loan balances.

6.5.2 The Commission has observed that there is no outstanding loan against existing intra-state transmission lines on the Petitioner as on closing for FY 2018-19. Further, the Commission has considered the weighted average rate of interest on loan for each year of the Control Period based on the actual loan portfolio during the year in line with the Regulation 20 of the HPERC MYT Transmission Regulations 2011 as pronounced below-

(1) Interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the schedule of repayment in accordance with the terms and conditions of relevant agreements of loan, bond or non-convertible debentures. Exception can be made for the existing

or past loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable and approved projects.

(2) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

6.5.3 Accordingly, the interest on loan approved for the fourth Control Period is summarised in the table below:

Table 61: Proposed Interest on Loan for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Opening Loan	-	28.36	25.60	119.90	111.68
Loan Addition during the Year	30.08	-	99.99	-	-
Less: Repayment during the year	1.72	2.76	5.69	8.23	8.23
Closing Loan	28.36	25.60	119.90	111.68	103.45
Interest on loan	10.0%	10.0%	11.2%	11.2%	11.2%
Weighted average Interest on Loans	1.42	2.70	8.11	12.91	12.00

6.6 Interest on Working Capital

6.6.1 Based on the approved O&M expenses and expected receivables, the Commission approves the working capital requirements and interest on working Capital for the Control Period in accordance with regulations 21 & 22 of the HPERC MYT Transmission Regulations 2011. Amended provisions for computation of Interest on Working Capital is as below:

"21. Working Capital.- The Commission shall calculate the working capital requirement for the transmission licensee containing the following components:-

- (a) O&M expenses for one month;
- (b) receivables for two months on the projected annual transmission charges; and
- (c) maintenance spares @ 15% of O&M Expenses for one month."

"22. Interest Charges on Working Capital.- Rate of interest on working capital to be computed as provided hereinafter in these regulations shall be on normative basis and shall be equal one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1) Year period, as may be applicable as on 1st April of the Financial Year in which the Petition is filed plus 300 basis points. The interest on working capital shall be payable on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures."

6.6.2 According to the revised provision for computation of interest on working capital, the Commission has considered the rate of interest on working capital at the

rate of 11.15 % based on SBI MCLR as on 1st April 2018 (i.e. 8.15%) plus 300 basis points for the fourth Control Period. The computation for approved working capital requirement and interest on working capital is shown in the table below:

Table 62: Approved Interest on Working Capital for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
O&M Expenses for 1 month	0.63	0.75	0.83	1.00	1.03
Maintenance Spares (at 15% monthly O&M Expenses)	0.09	0.11	0.12	0.15	0.15
Receivables for 2 months on projected Annual Transmission Charges	1.80	2.57	4.29	6.04	5.95
Total Working Capital	2.53	3.43	5.24	7.19	7.14
Interest Rate (SBI MCLR+300 BP)	11.15%	11.15%	11.15%	11.15%	11.15%
Interest on Working Capital	0.28	0.38	0.58	0.80	0.80

6.7 Return on Equity

- 6.7.1 The Commission has considered equity addition for each year corresponding to the approved funding plan in the Business Plan for determination of return on equity for each year of the fourth Control Period. The Commission has further considered the opening equity as nil in line with the previous Tariff Order dated 6.10.2017.
- 6.7.2 The Petitioner has considered rate of return @23.70% after considering the base rate as 15.50% grossed up for corporate tax rate for the purpose of claiming RoE. The Commission asked the Petitioner to submit the details of actual tax paid during FY 2015-16 to FY 2017-18. In response, the Petitioner has submitted that tax liability on HPPTCL for FY 2016-17 and FY 2017-18 was zero.
- 6.7.3 Based on the above submissions, the Commission has considered rate of return @15.50% for approval of RoE for the fourth Control Period. Any tax liability arising on the Petitioner during the fourth Control Period shall be trued-up during the mid-term review or at the end of Control Period.
- 6.7.4 The return on equity approved by the Commission for the fourth Control Period is summarised in the table below:

Table 63: Approved RoE for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Opening Equity	-	9.92	9.92	21.03	21.03
Net Equity Addition during the year	9.92	-	11.11	-	-
Closing Equity	9.92	9.92	21.03	21.03	21.03
RoE (%)	15.5%	15.5%	15.5%	15.5%	15.5%
Return on Equity	0.77	1.54	2.40	3.26	3.26

6.8 Non-Tariff Income

- 6.8.1 The Petitioner has proposed NTI of Rs. 8.54 Cr. each year for the Control Period. The Commission has considered the average of actual NTI for FY17 and FY 18 for projecting NTI for fourth Control Period. The interest on account of ADB and bank deposits have not been considered in view of the utilization of funds towards the proposed projects which are under implementation and shall be considered on actuals at the time of truing-up for the respective years.
- 6.8.2 Further, it is observed that the Petitioner has not considered the connectivity charges and open access income for use of intra-state transmission lines as part of non-tariff income. The Commission has projected these elements for the fourth Control Period based on the average of last two years.
- 6.8.3 The non-tariff Income approved by the Commission for the Fourth Control Period is summarised in the table below:

Table 64: Approved Non-Tariff Income for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Sale of Tender Forms	0.11	0.11	0.11	0.11	0.11
Miscellaneous Receipts	0.02	0.02	0.02	0.02	0.02
STOA (SLDC)	0.58	0.58	0.58	0.58	0.58
Connectivity charges	0.26	0.26	0.26	0.26	0.26
Total	0.98	0.98	0.98	0.98	0.98

6.9 Aggregate Revenue Requirement

- 6.9.1 Based on the discussions in sections above, the summary of the Aggregate Revenue Requirement (ARR) approved by the Commission for the Fourth Control Period is summarised in the table below:

Table 65: Approved ARR for the fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
O&M Expenses	7.59	9.02	9.92	12.01	12.39
<i>Employee Expenses</i>	4.71	5.50	6.06	6.32	6.59
<i>R&M Expenses</i>	2.58	2.62	2.97	3.14	3.24
<i>A&G Expenses</i>	0.29	0.89	0.89	2.56	2.56
Interest on Loan	1.42	2.70	8.11	12.91	12.00
Depreciation	1.72	2.76	5.69	8.23	8.23
Interest on Working Capital	0.28	0.38	0.58	0.80	0.80
Return on Equity	0.77	1.54	2.40	3.26	3.26
Total Expenses	11.77	16.40	26.71	37.21	36.67
Less: Non-Tariff Income	0.98	0.98	0.98	0.98	0.98
Aggregate Revenue Requirement	10.80	15.42	25.73	36.24	35.69

6.10 Transmission Charges for Open Access Consumers

6.10.1 In accordance with Regulation 33(1) of HPERC Transmission Regulation, 2011, the annual transmission charges are to be shared between the long and medium-term consumers based on the allotted transmission capacity or contracted capacity, as the case may be.

6.10.2 However, it was observed that the Petitioner has not submitted any details with respect to proposed transmission charges for long-term and short-term consumers for fourth Control Period. In response to the Commission's query, the Petitioner submitted the the transmission charges for long term consumers for the fourth Control Period based on the historic maximum demand of the system with an escalation of 3% for each year of the Control Period. The Petitioner also submitted that it has considered the power purchase within State submitted by the HPSEBL for projecting short-term transmission charges. The charges proposed by the Petitioner is summarized in the table below-

Table 66: HPPTCL Proposed Transmission Charges for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
ARR (Rs. Cr.)	63.97	90.95	124.77	136.29	135.44
Maximum Demand (MW)	1751	1822	1898	1977	2059
Transmission Charges (Rs./MW/Month)	91,123	1,25,778	1,67,523	1,77,660	1,71,409
Energy (MU)	9,895	10148	10400	10659	11201
Transmission Charges for Short term consumers (Rs./kWh)	0.116	0.165	0.227	0.248	0.246

6.10.3 During the TVS, it was informed by the Petitioner that HPSEBL is the only existing long term customer of HPPTCL with contracted capacity of 1060 MW. Considering the single LTOA/ MTOA customer of the Petitioner i.e. HPSEBL, the Commission has determined the transmission charges for LTOA/ MTOA customers on monthly basis for each year of the fourth Control Period. The approved transmission charges shall be recovered from long term beneficiary i.e. HPSEBL on monthly basis. In case of addition of LTOA/ MTOA customers in the subsequent years, the long term transmission charges shall be recovered by the Petitioner on pro-rata basis from LTOA/ MTOA customers based on their contracted capacity.

6.10.4 The open access charges for long-term and medium-term consumers for use of the intra-state transmission system of the HPPTCL during the fourth Control Period as summarised below:

Table 67: Approved Transmission Charges for Long and Medium term Consumers for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
ARR (Rs. Cr.)	10.80	15.42	25.73	36.24	35.69
Transmission Charges (Rs. Cr. /Month)	0.90	1.28	2.14	3.02	2.97

6.10.5 For the purpose of determining the transmission charges from short term customers, the Commission has considered energy handled by State transmission system i.e. 4477.2 Mus in FY 2018-19 as per monthly reports of NRLDC. The Commission has further escalated the energy handled in FY 2018-19 by 3% as per the escalation of energy sales of HPSEBL for projecting the energy for fourth Control Period.

6.10.6 The transmission charges for the short-term open access customers based on the approved ARR of HPPTCL for fourth Control Period as tabulated below:

Table 68: Approved Transmission Charges for Short-term Open Access Consumers for fourth Control Period (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
ARR (Rs. Cr.)	10.80	15.42	25.73	36.24	35.69
Energy routed through Intra State Transmission Network taking 60% load factor	4611.5	4749.9	4892.3	5039.1	5190.3
Transmission Charges for Short term consumers (Paisa /kWh)	2.11	3.02	4.88	6.88	6.77

Notes:

- i. Approved transmission charges for long and medium term open access customers shall be applicable from 1st April 2019. The arrears, if any, from the these customers for the months of April 2019 and May 2019 shall be adjusted in equal installments in the invoices for next three months of FY 2019-20.
- ii. The recovery of approved ARR of HPPTCL from distribution licensee and other long term/ medium term open access customers shall be done on the basis of allotted transmission capacity or contracted capacity, as the case may be, on pro-rata basis.
- iii. Approved transmission charges for short term open access customers shall be applicable from 1st July 2019.
- iv. Transmission charges approved above for short term open access customers shall be levied on the energy injected into the State Transmission System.
- v. The amount of ARR of HPPTCL shall be subject to True-up as per the relevant provisions of the HPERC MYT Transmission Regulations 2011 and the shortfall / surplus, if any, after taking into account the receipts from the distribution licensee and the open access customers shall be carried forward to the next MYT.
- vi. In addition to the transmission charges, the transmission as well as distribution losses shall be absorbed by the Open Access customers 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.

7 DIRECTIVES

7.1 Functional Segregation

- 7.1.1 The Commission has been directing the Petitioner to take up the matter with the GoHP regarding functional segregation of HPPTCL. However, despite its several directions, it is observed that measures undertaken by the Petitioner has been limited and it has still not devised any mechanism for determination of transmission losses in co-ordination with HPSEBL.
- 7.1.2 The Petitioner is directed to undertake sincere efforts and pursue the matter of functional segregation of entire transmission system to HPPTCL in interest of the State and consumers. Any delay in this regard would only result in further complexities which the existing generators and open access consumers are currently facing in the state of HP.

7.2 Transmission Availability and Transformer Failure Rate

- 7.2.1 The Petitioner has not provided any details with respect to transmission availability and transformer failure rate in its MYT Petition for the fourth Control Period.
- 7.2.2 The Commission directs the Petitioner to maintain the assets efficiency and submit the quarterly status reports on transmission availability and transformer failure rate to the Commission. Also, the Petitioner is required to submit line-wise details of system availability within three months from issuance of this Order.

7.3 Prior Approval from Commission on Capex

- 7.3.1 As per the HPERC MYT Transmission Regulations 2011, the Petitioner is required to take prior approval for the proposed capex scheme in advance. The Commission in the previous Orders had also directed the Petitioner to obtain capex approvals for the proposed intra-state works. However, the Petitioner has shown complete disregard for the Commission's Order and has taken up the proposed works without adequate approvals.
- 7.3.2 In this regard, the Commission takes serious note on the non-submission of adequate details including DPRs, cost –benefit analysis, etc. for prior approval of the Commission for the above schemes and directs the Petitioner take prior approval of the schemes which are under execution by providing all details along with supporting documents within six months of issuance of this Order and ensure compliance with Clause 7 of the HPERC MYT Transmission Regulations 2011. In absence of prior approval, the Commission shall disallow the capitalization towards the respective scheme at the time of truing-up.

7.4 Planning of Proposed Capex

- 7.4.1 Based on the submission of the Petitioner on capital expenditure, the Commission observes that the planning of the proposed was done in year 2008 and in-principle approval provided are approximately 10 years old. Thereafter, the Petitioner has not undertaken any detailed planning and analysis with respect to the proposed evacuation system in view of the changes in upcoming status of the generators and expected beneficiaries.
- 7.4.2 The Commission directs the Petitioner to review the status of the beneficiaries for each of the proposed intra-state works and undertake proper planning in view of the required capacities instead of going ahead with obsolete planning.
- 7.4.3 Also, the Petitioner is directed to analyse and realign the construction of proposed transmission system on the demand estimation and construction status of the upcoming stations to ensure effective utilization and loading of transmission infrastructure.

7.5 Signing of LTOA/ MTOA and TSA

- 7.5.1 It is observed that the Petitioner has not provided signed LTOA/ MTOA and TSA for most of the schemes. The Petitioner is directed to expedite the signing of TSA with the beneficiaries at the earliest and prioritize the works in a manner that matches with the expected commissioning of the beneficiaries. The Petitioner is further directed to expedite the process of signing of LTOA/ MTOA with upcoming generators in conformity with the expected beneficiary.

7.6 Submission of NRPC certificates

- 7.6.1 The Petitioner is directed to submit the NRPC certificate at the time of Mid-term Review for the schemes provisionally approved by the Commission for the fourth Control Period.

7.7 Financing under ADB funded Schemes

- 7.7.1 As per the submission of the Petitioner, funds under ADB loans are to be provided by ADB to Government of India in form of 90% grant and 10% loan and the same has been transferred to HPPTCL by Government of Himachal Pradesh as interest bearing loan. While the amount is being received as grant to the State Government, the same is being extended as loan to the Petitioner. Increase in transmission charges due to addition of new projects would lead to significant increase in transmission charges and put additional burden on the consumers.
- 7.7.2 Therefore, the Commission directs the Petitioner to take up the matter with the State Government for retaining the nature of funding as (i.e. grant) as was received from the funding agency in interest of the consumers of the state and submit quarterly report to the Commission in this matter.

7.8 Separate Accounting

- 7.8.1 The Commission observes that the Petitioner has proposed to allocate 50% of the O&M expenses towards Intra-State projects in the absence of any formal bifurcation among the employees between Inter-State and Intra-State projects. The Commission feels that there is no reasonable basis of segregation of expenses or defined methodology of segregation of expense.
- 7.8.2 The Petitioner is directed to immediately implement prudence practices for separate recording of expenditure with respect to Intra-state and Inter-state transmission projects. The Petitioner is further directed to maintain the segregation of O&M expense (specifically R&M and A&G expense) under intra-state and inter-state.
- 7.8.3 Also, detailed procedure and assumptions for allocations of common costs should be provided by the Petitioner. The statement prepared in this regard should be audited by the statutory auditors. Initially, a detailed note and future steps to implement the directive should be submitted to the Commission within three months of issuance of this Order.

7.9 Capacity Building of Employees

- 7.9.1 The Petitioner in its Petition has claimed cost towards regular training under A&G expenses and had submitted that it has already initiated the process for assessing the training requirement and shall be submitted to the Commission on completion.
- 7.9.2 The Commission directs the Petitioner to prepare a comprehensive training assessment detailing the training type, objective, curriculum, duration, importance, participants, impact of each training, cost of training, etc. and submit the same in six months from the date of issuance of this Order.

7.10 Employee Addition

- 7.10.1 The Commission directs the Petitioner to put best efforts for meeting the proposed recruitment of employees in a time bound manner and submit the quarterly status of recruitment to Commission post issuance of Tariff Order.

7.11 Filing of True-up Petition and Mid-Term Review

- 7.11.1 The Commission directs the Petitioner to file the true-up Petition for FY 2016-17 to FY 2018-19 in accordance with the HPERC MYT Transmission Regulations 2011 along with the Mid-term Review Petition. The Petitioner should submit all relevant documents, Audited Accounts for respective years and tariff formats in support of the true-up claim for the respective years.