

**Multi Year Tariff Order
For
Himachal Pradesh Power Transmission
Corporation Limited (HPPTCL)
For the period
FY 2014-15 to FY 2018-19**



**Himachal Pradesh Electricity Regulatory
Commission
10th June 2014**

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**Before the Himachal Pradesh Electricity Regulatory Commission
At Shimla**

Case No. 140 of 2013

CORAM

SUBHASH CHANDER NEGI

In the matter of:

Filing of Multi Year Aggregate Revenue Requirements (ARR) for the third control period (FY 2014-15 to FY 2018-19) and determination of transmission tariff under Section 62, 64 and 86 of the Electricity Act, 2003

And

In the matter of:

Himachal Pradesh Power Transmission Corporation Limited
Barowalias House, Khalini,
Shimla-171002 (H.P.)

Petitioner/Applicant

ORDER

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 Aggregate Revenue Requirement (ARR) and determination of Transmission Tariff for the third MYT Control Period (FY2014-15 to FY2018-19) under Sections 62, 64 and 86 of the Electricity Act, 2003 (hereinafter referred to as 'the Act'), read with the HPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011 and HPERC (Terms and Conditions for Determination of Transmission Tariff) (first amendment) Regulations, 2013. The Commission scheduled the public hearing for interaction with the Petitioner, interveners, consumers, consumer representatives of various consumer groups on March 26, 2014 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 determined the ARR of the HPPTCL for each year of the third Control Period (FY 2014-15 to FY 2018-19) under the Multi Year Tariff (MYT) regime and approved 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 2014.

In terms of sub-regulation (3) of Regulation 4 of the HPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011 the Tariff Order shall, unless amended or revoked, continue to be in force up to 31 March, 2019. In the event of failure of the Petitioner to submit the additional details required as per this Tariff Order within six months, the Tariff Order shall cease to operate unless allowed to be continued by the Commission. Similarly in the event of failure on the part of the licensee to file Aggregate Revenue Requirement (ARR) under Part-IV and V of HPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011 read with HPERC (Terms and Condition for determination of transmission tariff) (First Amendment), Regulations, 2013, the ARR determined by the Commission shall cease to operate, unless allowed to be continued for a further period with such variations, or modifications, as may be ordered by the Commission.

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. The publication shall include a general description of the tariff changes and its effect on consumers.

Shimla
Dated: 10th June 2014

(Subhash C. Negi)
Chairman

1 Introduction

1.1 Himachal Pradesh Electricity Regulatory Commission

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

1.2 Functions of HPERC

1.2.1 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.

1.2.2 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.

1.3 Himachal Pradesh Power Transmission Corporation Ltd.

1.3.1 The Himachal Pradesh Power Transmission Corporation Limited (hereinafter referred to as 'HPPTCL' or 'the Petitioner') is a deemed licensee under first, second and fifth provisos of Section 14 of the Electricity Act, 2003 (hereinafter referred to as 'the Act') for transmission of electricity in the State of Himachal Pradesh.

1.3.2 HPPTCL was formed through a notification by the Government of Himachal Pradesh (hereinafter referred to as 'GoHP' or the 'State Government') vide its notification No. MPP-A-(1)-4/2006-Loose, dated 11 September, 2008.

1.3.3 Through notification No. MPP-A-(1)-4/2006-Loose dated 3 December, 2008 read with the GoHP's earlier notification dated 31 October, 2008, the 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

- f) All other matter of subject that the State Government may specifically assign to the Corporation from time to time

1.3.4 The HPPTCL was declared the State Transmission Utility (STU) by the GoHP vide its order dated 10 June, 2010 and as a result thereof the Commission recognized HPPTCL as a deemed "Transmission Licensee" as per the Commission's Order dated 31 July, 2010 in Petition No. 32 of 2010 filed by HPPTCL under Sections 14 and 15 of the Act, for grant of Transmission Licence 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.

1.3.5 The State Government also transferred and vested in HPPTCL the ownership, operation and maintenance of Transmission lines of 66 kV and above owned by the Himachal Pradesh State Electricity Board Limited (hereinafter referred to as 'HPSEBL') including the co-ordination of the lines owned and operated by Power Grid Corporation of India, (PGCIL), Independent Power Producers (IPPs), Haryana Vidyut Prasaran Nigam Limited (HVPNL) and Power Com (PSEB) vide its notification No. MPP-A (3)-1/2001-IV, dated 21 June, 2010 read with earlier notification of even number dated 10th June, 2010. In compliance of these orders of the State Government, HPSEBL provided the details of Transmission network along with the asset value which were transferred to HPPTCL vide letter No.-HPSEBL/CE (ES)/AU-4/2010-6220-25, dated 6 September, 2010.

1.4 Multi Year Tariff Framework

1.4.1 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.

1.4.2 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 in detail, with the possible sources of financing and the corresponding capitalization schedule for each investment.

1.4.3 The Commission had specified the terms and conditions for the determination of tariff in the year 2004, based on the principles as lays down under Section 61 of the Electricity Act 2003.

1.4.4 Thereafter, the Commission had notified the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, HPERC (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, and HPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations in the years 2007 and 2011. The HPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations were amended as HPERC (Terms

and Conditions for Determination of Transmission Tariff) (First Amendment) Regulations, 2013 on 1st November 2013.

1.4.5 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.

1.5 Filing of ARR and Tariff Petition for MYT Control Period (FY 2014-15 – FY 2018-19)

Procedural Background

1.5.1 The Petitioner has filed the application for approval of the Aggregate Revenue Requirement (ARR) and determination of Transmission tariff along with the Business Plan for the third control Period (FY 2014-15 to FY 2018-19), with the Commission on 30th November 2013 registered as Petition No. 140 of 2013.

1.5.2 Based on initial scrutiny of the petition, it was observed that the Petitioner has included all transmission works (i.e. both intra-state and inter-state) in its filing. In view of the Commission's jurisdiction on the intra state lines, the petitioner was advised vide letter No. HPERC/ MYT3/ HPPTCL/ 2013-14 – 2586-87 dated 05th December 2013 to submit the revised MYT petition and Business plan excluding the inter-state transmission lines/ sub stations.

1.5.3 The Petitioner submitted the revised Petition vide M.A. No 147/ 2013 on 21st December, 2013 as per the direction of the Commission.

1.5.4 Deloitte Touche Tohmatsu India Pvt. Ltd. (Deloitte) was appointed as Consultant to assist the Commission in the assessment of the ARR and determination of the relevant tariffs.

1.5.5 Based on preliminary scrutiny of the petition, the Commission vide letter No. HPERC/MYT3/HPPTCL/2013-14 – 2765 dated 31st December 2013, directed the Petitioner to submit details regarding first set of deficiencies identified in the petition, which were submitted by the Petitioner vide M.A. no. 2/2014 dated 13.01.2014. The Commission admitted the Petition vide the Interim Order dated 23rd January 2014 for further detailed scrutiny.

Interaction with the Petitioner

1.5.6 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.

1.5.7 The Commission conducted a Technical Validation Session (TVS) of the Petition on 24th February, 2014 in the office of the Commission during which the discrepancies and additional information requirements were highlighted.

- 1.5.8 Based on the detailed scrutiny of the petition, clarifications/ information sought by the Commission from time to time and submission was made by the petitioner in response there to, as detailed hereunder, have been taken on record:

Table 1: Communication with the Petitioner

Sl.	Letter from Commission	Response from Petitioner
1	HPERC/MYT3/HPPTCL/2013-14 – 3119 dated 01.02.14	Vide Affidavit dated 17.02.2014 (registered as MA 20/2014)
2	HPERC/MYT3/HPPTCL/2013-14 – 3306-07 dated 26.02.14	Vide Affidavit dated 04 .03.2014 (registered as MA 42/2014)

Public Hearing

- 1.5.9 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 2: List of Newspapers in which salient features of the MYT Petition were published

Sl.	Name of News Paper	Edition	Date of Publication
1.	The Tribune (English)	Chandigarh, Jalandhar and Bathinda	28 th and 30 th January 2014
2.	Divya Himachal (Hindi)	Shimla, Chandigarh and Dharamsala	28 th and 30 th January 2014

- 1.5.10 The Commission also 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, by 22nd February 2014 which was published in the following newspapers:

Table 3: List of Newspaper in which Notice inviting objections from Stakeholders were published

Sl.	Name of News Paper	Edition	Date of Publication
1.	The Tribune (English)	Chandigarh, Jalandhar and Bathinda	31 st January 2014
2.	Divya Himachal (Hindi)	Shimla, Chandigarh and Dharamsala	31 st January 2014

- 1.5.11 The HPPTCL was required to submit replies to the suggestions/ objections to the Commission by 10th March, 2014 with a copy to the objectors on which the objectors were required to submit rejoinder by 18th March 2014.

- 1.5.12 The Commission did not receive any comments/ suggestions from the stakeholders by the due date i.e. 22nd February 2014. The Commission, vide its letter no. HPERC/MYT3/HPPTCL/2013-14 – 3324-26 dated 28.02.14 also requested the HPSEBL being the major stakeholder, to furnish its comments on the MYT Petition of the HPPTCL, however the HPSEBL did not furnish any comments.

1.5.13 The Commission issued a public notice in the following newspapers, to inform the public about the public hearing to be held on 26th March 2014 at the Court Room in Shimla:

Table 4: List of Newspaper in which Notice for Public Hearing was published

Sl.	Name of News Paper	Edition	Date of Publication
1.	The Tribune (English)	Chandigarh, Jalandhar and Bathinda	5 th March 2014
2.	Amar Ujala (Hindi)	Chandigarh and Dharamsala	5 th March 2014

1.5.14 Public Hearing was held as scheduled on 26 March 2014 at 3 pm onwards. None of the stakeholder presented their views during the public hearing on 26th March 2014.

1.6 Structure of the Order

1.6.1 This order is organised into the following chapters namely:

- **Chapter 1: Introduction**– Covers the background of the entire process along with details of the processes adopted by the Commission prior to issue of this MYT Order for HPPTCL and the approach being adopted therein.
- **Chapter 2: Summary of the ARR petition for the Control Period** - Covers the highlights of the petition filed by the HPPTCL for determination of the Aggregate Revenue Requirement (ARR) for the third MYT Control Period (FY 2014-15 to FY 2018-19).
- **Chapter 3: Responses from Stakeholders:** Deals with Objection/Suggestions filed by the stakeholders, Petitioners responses on the same and the views of the Commission;
- **Chapter 4: Analysis of the Tariff Petition for the Control Period** - Deals with the determination of ARR and transmission tariff for third MYT Control Period (FY 2014-15 to FY 2018-19);

2 Summary of the ARR petition for the Control Period

2.1 Introduction

2.1.1 This chapter summarizes the highlights of the Petition filed by the HPPTCL for determination of the Aggregate Revenue Requirement (ARR) for the third MYT Control Period (FY 2014-15 to FY 2018-19).

2.1.2 The Petition was filed on 30th November, 2013 which was registered with the Commission as MA No. 140 of 2013. On initial scrutiny, the Commission observed that the MYT Petition filed by the Petitioner is not limited to intra-state works and includes all capital works being undertaken by it. Therefore, the Petitioner was advised to submit a revised MYT Petition for intra-state transmission business only. Accordingly, the Petitioner submitted the revised MYT Petition vide M.A. No 147/2013 dated 21st December, 2013 as per the direction of the Commission.

2.1.3 The Petitioner has proposed projections for the Control Period as per the HPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011 read with HPERC (Terms and Conditions for Determination of Transmission Tariff) (First Amendment) Regulation, 2013 herein after referred to as "HPERC MYT Transmission Regulation" and considering the actual expense for past years and estimates for the base year i.e. FY 2013-14.

2.1.4 ARR for each year of the Control Period has been bifurcated into following elements:

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

2.1.5 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 10 schemes that HPPTCL proposes towards augmentation and strengthening of intra-state transmission network.

2.2 Operation & Maintenance Expenses (O&M)

Employee Expenses

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

$$EMP_n = [(EMP_{n-1}) \times (1+G_n) \times (CPI_{inflation})] + Provision_{(Emp)}$$

Where:

' $CPI_{inflation}$ ' – is the average increase in the Consumer Price Index (CPI) for immediately preceding three years before the base year;

2.2.2 The CPIinflation rate is calculated as per the following table:

Table 5: CPI Calculation

FY	CPI Index	Growth in CPI
2009-2010	162.75	
2010-2011	179.75	10.45%
2011-2012	194.83	8.39%
2012-2013	215.17	10.44%
Average		9.76%

' EMP_{n-1} ' – employee's cost of the transmission licensee for the (n-1)th year.

' $Provision_{(Emp)}$ '- 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;

' G_n ' - is a growth factor for the nth year. Value of G_n 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;

2.2.3 The petitioner has estimated the growth factors on the basis of the employee growth as under:

Table 6: Projected growth factor during MYT period for the intra state works

Particulars	FY14	FY15	FY16	FY17	FY18	FY19
Employee strength (No.) – Intra-state works	34	61	61	101	114	140
Growth of employee strength		79%	0%	66%	13%	23%
Overall growth factor (G_n) including expected revision under next Pay Commission		79%	0%	66%	13%	53%

2.2.4 The Petitioner has segregated the total employee cost incurred in FY 2012-13 into 3 heads, namely, Head Office cost, Intra-State works Cost and Inter-State works cost to compute the EMP(n-1) cost. The Head Office cost has been taken as 20% of the overall Employee Cost. The balance 80% costs are segregated into inter-state and intra-state works costs on the basis of the respective GFA as below:

Table 7: Break up of Intra and Inter-State Cost components based on Capital Expenditure

Particulars	FY 2013-14	Percentage
Intra-State component of GFA (Rs Cr.)	354.31	13%
Inter-State component of GFA (Rs Cr.)	2315.77	87%

2.2.5 Based on the above bifurcation of intra and inter-state costs, the Petitioner has allocated the balance 80% of the employee costs to intra and inter-state works as below:

Table 8: Overall break-up of employee costs into various heads

Particulars	Percentage break up
% Employee Cost for HO	20%
% Employee Cost for intra-state (100% - 20%)*13%	11%
% Employee Cost for inter-state(100% - 20%)*87%	69%

2.2.6 The Petitioner has considered 35% of the total intra-state employee cost as the percentage capitalized for the projections.

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

Table 9: Projected employee cost for the Control Period (Rs Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
Employee's Cost (Rs.. Cr)					
Salaries	2.60	2.85	5.18	6.41	10.76
Dearness Allowance	1.57	1.73	3.12	3.87	6.49
Sub-Total (Salary+DA)	4.16	4.57	8.30	10.28	17.24
Medical Expenses Reimbursement	0.09	0.10	0.19	0.23	0.39
Leave Travel Assistance	0.05	0.05	0.10	0.12	0.20
Fee & Honorarium	0.02	0.03	0.05	0.06	0.10
Leave Salary Contribution	0.60	0.66	1.20	1.49	2.50
Staff Welfare Expenses	0.04	0.05	0.09	0.11	0.18
Apprentice And Other Training Expenses	0.04	0.05	0.08	0.10	0.18
Payment/Contribution To PF Staff Pension And Gratuity					
Terminal Benefits	0.03	0.03	0.06	0.08	0.13
Grand Total	5.05	5.54	10.07	12.47	20.92
Chargeable To Construction Works (Capitalized)	1.75	1.92	3.49	4.32	7.25
Net Employee Expenses	3.30	3.62	6.58	8.15	13.67

Administrative and General Expenses

2.2.8 The Petitioner has calculated the norms of A&G expenses per employee and A&G expenses per MW capacity handled for the base year (FY 2013-14) as shown in the table below:

Table 10: Norms for A&G expenses per employee and per MW of capacity

Particulars	FY14
A&G Expense for intra-state works (Rs. Cr.) (removing inter-state expenses from actual expenditure of Rs. 3.52 Crores)	1.85
Intra State Employees (FY 2013-14)	34
MW (FY 2013-14) (Excl inter-state lines)	343
A&G expenses (in Rs. Cr) per employee	0.0543
A&G expenses (in Rs. Cr) per MW capacity handled	0.0054

2.2.9 The above norms have been escalated based on the WPI for each of the years under the third MYT control period. HPPTCL has proposed the weightage for A&G expenses per employee as 80% and that for the A&G expenses per MW capacity handled as 20%.

2.2.10 The WPI_{inflation} rate projected for escalation are calculated as per the following table:

Table 11: WPI Calculation

Year	WPI Index	Growth in CPI
2009-2010	130.81	
2010-2011	143.32	9.56%
2011-2012	156.13	8.94%
2012-2013	167.62	7.36%
Average		8.62%

2.2.11 The Petitioner has segregated the total A&G cost for the Control Period into 3 components, namely, Head Office cost, Intra-State works Cost and Inter-State works cost similar to the methodology followed for projection of employee cost. The proportion of each element has been considered similar to the breakup provided as per 2.2.4.

2.2.12 Total A&G cost for the Third Control Period as proposed by the Petitioner is tabulated below:

Table 12: Projected A&G Cost for Intra-State Lines (Rs Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
Insurance of employees, assets, Legal insurance	0.08	0.42	0.63	0.63	0.80
Revenue Stamp Expenses Account	0.00	0.00	0.00	0.00	0.00
Telephone, Postage, Telegram, Internet Charges	0.13	0.11	0.23	0.29	0.37
Consultancy Charges	0.40	0.34	0.72	0.94	1.20
Other Professional Charges	0.32	0.28	0.58	0.76	0.96
Conveyance And Travel (vehicle hiring, running)	0.62	0.53	1.11	1.44	1.83

Particulars	FY15	FY16	FY17	FY18	FY19
HPERC License and other regulatory fees	1.00	1.00	1.00	1.00	1.00
Security / Service Charges Paid To Outside Agencies	0.04	0.04	0.04	0.04	0.04
Regulatory Expenses	0.00	0.00	0.03	0.00	0.00
Sub-Total of Administrative Expenses	2.58	2.69	4.35	5.10	6.20
Other Charges					
Fee And Subscriptions Books And Periodicals	0.04	0.03	0.06	0.08	0.11
Printing And Stationery	0.02	0.02	0.04	0.05	0.06
Advertisement Expenses (Other Than Purchase Related) Exhibition & Demo.	0.05	0.04	0.09	0.12	0.15
Electricity Charges To Offices	0.03	0.02	0.05	0.07	0.08
Miscellaneous Expenses	0.04	0.03	0.07	0.09	0.12
Public Interaction Program	0.01	0.01	0.01	0.01	0.01
Any Other expenses	0.04	0.03	0.07	0.09	0.12
Sub-Total of other charges	0.22	0.19	0.40	0.51	0.65
Legal Charges	0.01	0.01	0.02	0.03	0.04
Auditor'S Fee	0.01	0.01	0.01	0.02	0.02
Freight - Material Related Expenses	0.01	0.01	0.01	0.02	0.02
Consultancy Charges (drawn from ADB for ERP and capacity development)	0.54	0.54	0.54	0.31	0.31
Total Charges	3.37	3.44	5.33	5.98	7.24
Chargeable To Construction Works (Capitalized)	1.17	1.19	1.85	2.07	2.51
Net A&G Expenses	2.20	2.25	3.48	3.91	4.73

Repair and Maintenance Expenses

2.2.13 The Petitioner has computed the R&M expenses as per under HPERC (Terms and Conditions for Determination of Transmission Tariff) (First Amendment) Regulations, 2013:

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

Where:

'K' - is a constant (could be expressed in %).

'WPI_{inflation}' – is the average increase in the Wholesale Price Index (WPI) for immediately preceding three years before the base year;

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

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

2.2.14 'K' factor has been calculated as a percentage of R&M expenses undertaken for the last 3 years GFA on the basis of which 'K' factor has been projected for the third Control Period.

Table 13: K Factor for R&M

Particulars	FY11	FY12	FY13
R&M cost (Rs Cr.)	4.27	5.65	5.97
GFA (Rs Cr.)	199.43	199.43	199.43
Average K Factor for the assets	2.66%		

2.2.15 The total R&M cost for the Third Control Period as proposed by the Petitioner is tabulated as below:

Table 14: Projected R&M Cost (Rs Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
Plant & Machinery, Lines, Cables, Networks	0.90	4.65	7.28	7.28	9.18
Vehicles	0.002	0.01	0.01	0.01	0.02
Office Equipment	0.001	0.01	0.01	0.01	0.01
Total	0.90	4.66	7.30	7.30	9.21

2.2.16 The total O&M expense proposed by the Petitioner for the Third MYT Control period are shown as below:

Table 15: Projected O&M cost for the Control period (Rs Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
Employee Cost	3.30	3.62	6.58	8.15	13.67
A&G Cost	2.20	2.25	3.48	3.91	4.73
R&M Cost	0.90	4.66	7.30	7.30	9.21
O&M Cost (In Rs Cr.)	6.40	10.53	17.36	19.36	27.60

2.3 Capital Investment Plan

2.3.1 The Petitioner has provided the details of the Capital Investment Plan proposed to be implemented and commissioned during the Third MYT Control period. Further, HPPTCL has stated that ADB has agreed to finance transmission projects in multi-tranche funding arrangement to the tune of 350 Million US Dollars under LIBOR based lending facility and this amount is to be given to Government of Himachal Pradesh by Government of India as 90% grant and 10% loan and the same is to be transferred to HPPTCL by Government of Himachal Pradesh as interest bearing loan.

2.3.2 The detailed breakup of the proposed addition to the intra state works during the Control Period FY 2014-15 to 2018-19 as projected by the Petitioner is presented in the table below:

Table 16: Proposed Capex Addition for Intra-State Works (Rs Cr.)

S.N.	Funding source	Particulars	Total Cost	COD	FY14	FY15	FY16	FY17	FY18	FY19
1	Domestic - REC	220 kV D/C Kashang-Bhaba Line	87.8	April-14	0	93.1	0	0	0	0

S.N.	Funding source	Particulars	Total Cost	COD	FY14	FY15	FY16	FY17	FY18	FY19
2	Domestic – REC	Replacement of Meters in existing transmission lines	0.38	Mar-16	0	0	0.38	0	0	0
3	ADB Tranche I	22/66/220 kV (22/66 kV, 2*10 MVA, 66/220 kV, 31.5 MVA) S/stn at Bhoktoo with LILO of one circuit of 220 kV Kashang-Bhaba D/C line	42.6	Jul-14	0	42.6	0	0	0	0
4	ADB	ERP Implementation	15.58	Jun-18	0	0	0	0	0	15.6
5	ADB Tranche II	33/132 kV, 2*25/31.5 MVA S/stn at Chambi(Shahpur) with LILO of 132 kV Kangra-Dehra S/C line	49.4	Feb-16	0	0	49.4	0	0	0
6	ADB Tranche II	33/132 kV S/stn at Pandoh + LILO of one circuit of 132 kV Bajaura-Kangoo D/C line	41.86	Feb-16	0	0	41.9	0	0	0
7	ADB Tranche III	33/132 kV , 1*50/63 MVA S/stn at Banjal	38.4	Jun-18	0	0	0	0	0	38.4
8	ADB Tranche III	132 kV S/C line on D/C towers from Banjal to Kurthala	12.3	Jun-18	0	0	0	0	0	12.3
9	ADB Tranche III	66/22 kV , 2*10 MVA GISS at Nirmand (Bagipul)	38	Jun-17	0	0	0	0	38.0	0
10	ADB Tranche III	66 kV D/C line from 66/22 kV GISS Nirmand to 66/220 kV Kotla S/stn	28	Jun-17	0	0	0	0	28.0	0
		Total	354.3		0	130.4	91.6	0	66.0	66.3

2.3.3 The petitioner has proposed the following Transmission Capacity for the intra state lines in its Capital Investment Plan for the third Control period:

Table 17: Details of projected cumulative transmission capacity from intra-state works

Particulars	FY15	FY16	FY17	FY18	FY19
Cumulative Capacity (MW)	420	481.5	481.5	514.5	542.5

2.3.4 The Petitioner has provided the following details of the ongoing and proposed intra state works:

Scheme 1: 220 KV Kashang- Bhaba D/C Line

2.3.5 The project is located in District Kinnaur (Satluj basin) and is being implemented to evacuate integrated Kashang- I and Tidong-I (195+100=295 MW). Before commissioning of 400 kV Wangtoo sub-station, only 65 MW of Integrated Kashang HEP along with 25 MW of Small HEPs can flow due to capacity constraints in the 220 kV system beyond Bhaba that shall form a part of intra-state transmission system. The funds are being sourced from REC.

Scheme 2: Replacement of Meters in existing transmission lines

2.3.6 HPPTCL has proposed to replace the meters for the existing intra state transmission lines. These meters shall be installed at both the ends of the transmission lines. The funding for the same has been proposed to be received from REC.

Scheme 3: 22/66/220 kV (22/66 kV, 2x10 MVA+66/220 kV, 31.5 MVA) GISS at Bhoktoo and LILO of one circuit of 220 kV Kashang-Bhaba D/C Line

2.3.7 The Petitioner has informed that the project is located in District Kinnaur (Satluj basin) and is being implemented to evacuate Small HEPs in Upper Kinnaur area of Satluj basin which is of the order of 33 MW. Further the Petitioner has submitted that the existing 22 kV distribution lines of HPSEBL are insufficient to evacuate the Small Hydel generation. So, in order to evacuate the Small Hydel power, HPPTCL has planned to construct 22/66/220 kV sub-station at Bhoktoo where IPPs shall inject their power at 22 kV level which shall be stepped up to 220 kV level and injected in to 220 kV Kashang- Bhaba D/C line. Thus the power can be evacuated at 220 kV level up to 220 kV grid sub-station at Kunihar through 220 kV Bhaba-Kunihar D/C line of HPSEBL. 66 kV level has been created at Bhoktoo for 66 kV line planned from Bhoktoo to Kaza to be implemented by HPSEBL.

Scheme 4: ERP Implementation

2.3.8 HPPTCL has planned to implement Enterprise Resource Planning software (ERP) SAP by 2017 which shall help in centralizing and streamlining the overall processes. An overall budget of around Rs. 15 Crores had been proposed to ADB for the same.

Scheme 5: 33/132 kV, 2x31.5 MVA GIS Sub Station at Shahpur (Chambi) by LILO of 132 kV Dehra-Kangra Line of HPSEBL

2.3.9 The project is located in District Kangra (Beas basin) and is being implemented to evacuate Small HEPs in Shahpur area of Beas basin. Currently, 33 kV Shahpur sub-station is connected with 33/132/220 kV sub-station at Jassore, 33/132 kV Kangra and 33 kV Gaj power house of HPSEBL through 33 kV S/C lines and is evacuating about 21 MW to Jassore and Kangra with constraints. The Petitioner has stated that with additional generation coming up at Gaj power house and Shahpur, this power cannot be evacuated through 33 kV existing lines and there is a need to have 33/132 kV sub-station at Shahpur (Chambi) and inject the power in to 132 kV Dehra-Kangra line by LILO. The sub-station along with LILO of 132 kV Dehra-Kangra line is being

implemented with ADB assistance and is included in Tranche-II of loan by ADB under Himachal Pradesh Clean Energy Transmission Investment Programme.

Scheme 6: 33/132 kV, 31.5 MVA GIS Sub Station at Pandoh by LILO of 132 kV Bajaura-Kangoo Line of HPSEBL

2.3.10 The project is located in District Mandi (Beas basin) and is being implemented to evacuate Small HEPs in Pandoh area of Beas basin. Currently, 33 kV sub-station of HPSEBL exists at Pandoh and is connected with 33/132 kV sub-station of HPSEBL at Bijni through 33 kV D/C line. The Petitioner has submitted that the existing sub-station is barely sufficient to evacuate power of 16 MW of commissioned Patikari HEP and for additional generation, 33/132 kV sub-station has to be installed for injection of additional generation in to 132 kV Intrastate Grid. The sub-station along with LILO of existing Bajaura-Kangoo 132 kV line of HPSEBL is being constructed with ADB assistance and is included in Tranche-II of loan by ADB under Himachal Pradesh Clean Energy Transmission Investment Programme.

Scheme 7 & 8: 33/132 kV, 63 MVA GIS Sub Station at Banjal and by 132 kV Banjal-Kurthala-Kangra S/C Line on D/C Towers

2.3.11 The project is located in District Chamba (Ravi basin) and is being implemented to evacuate Small HEPs in Upper Tissa valley of Ravi basin which is of the order of 79 MW. Power of Small HEPs can be injected in to 33/132 kV sub-station at Kurthala of HPSEBL. The Petitioner has planned to pool the entire power at Banjal and evacuate it up to Kurthala at 132 kV level by construction of 33/132 kV sub-station at Banjal along with 132 kV Banjal- Kurthala D/C line. Initially, 1x31.5 MVA 33/132 kV transformer shall be provided and 132 kV S/C line on D/C towers shall be constructed. With the progress in generation, 2nd 31.5 MVA transformer and 2nd circuit on 132 kV Banjal- Kurthala line shall be put in place. The sub-station along with 132 kV Banjal- Kurthala line shall be implemented with ADB assistance and is included in Tranche-III of loan by ADB under Himachal Pradesh Clean Energy Transmission Investment Programme.

Scheme 9 & 10: 66/22 kV, 2x10 MVA GIS Sub-Station at Nirmand and 66 kV Nirmand-Kotla D/C Line

2.3.12 The project is located in District Kullu (Satluj basin) and is being implemented to evacuate Small HEPs in Nirmand area of Satluj basin which is of the order of 55 MW. The Petitioner has stated that existing 22 kV distribution lines of HPSEBL are insufficient to evacuate the Small Hydel generation in this area and in order to evacuate the Small Hydel power, the Petitioner has planned to construct 22/66 kV sub-station at Nirmand (Bagipul) where IPPs shall inject their power at 22 kV as well as at 66 kV level and further injected in to 66/220 kV Kotla sub-station of HPSEBL through 66 kV D/C line. Thus the power can be evacuated at 220 kV level up to 220 kV grid sub-station at Kunihar through 220 kV Bhaba- Kotla-Kunihar D/C line of HPSEBL. The sub-station along with 66 kV line is being implemented with ADB assistance and is included in Tranche-III of loan by ADB under Himachal Pradesh Clean Energy Transmission Investment Programme.

2.4 Depreciation

2.4.1 For working out the depreciation, the Petitioner has considered the opening balance of assets at the beginning of the Control Period as per the assets transferred to the HPPTCL. Further, the Petitioner has proposed a capital expenditure plan for implementation of intra-state work schemes which would be funded through both, debt and equity. Based on the capitalization plan, the addition to the GFA has been proposed and the GFA is projected below.

Table 18: Proposed GFA for the Control Period (Rs Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19	Depreciation rate
Land	2.1	11.4	11.4	13.5	18.1	0%
Furniture & Fixtures	0.4	0.4	0.4	0.4	0.4	6.33%
Vehicle	0.1	0.1	0.1	0.1	0.1	9.50%
Computer	0.5	0.5	0.5	0.5	0.5	6.33%
Office Equipment	0.1	0.1	0.1	0.1	0.1	6.33%
Misc Equipment	0.0	0.0	0.0	0.0	0.0	5.28%
Fire Safety Equipment	0.0	0.0	0.0	0.0	0.0	6.33%
Leased Asset	0.0	0.0	0.0	0.0	0.0	6.33%
Software	0.4	0.4	0.4	0.4	15.9	5.28%
Plant & Machinery - Equipment (Old)	31.1	31.1	31.1	31.1	31.1	5.28%
Plant & Machinery - Equipment (New)	122.8	193.3	193.3	252.4	294.7	5.28%
Meters	0.0	0.4	0.4	0.4	0.4	5.28%
Buildings, etc.	1.9	6.0	6.0	8.2	10.4	3.34%
Total	159.3	243.6	243.6	307.0	371.8	

2.4.2 The depreciation for each year of the Control Period has been computed as per the depreciation rates prescribed in the MYT Transmission Regulations as below:

Table 19: Details of depreciation projected for the MYT Control Period (Rs Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
Depreciation	4.77	9.45	11.19	12.61	15.43

2.5 Interest and Finance charges

2.5.1 The Petitioner has proposed Interest & Finance charges based on the proposed capital expenditure plan for the entire Control Period and the existing loans.

2.5.2 The detail of funding sources for the proposed capital expenditure plan is shown in the table below:

Table 20: Details of funding sources

Sr. No	Loan	Debt-Equity Ratio	Interest rate (%)	Moratorium (years)	Repayment duration (years)
1	Rural Electrification Corporation	90%-10%	12.50	3	3+15
2	Asian Development Bank (Tranche I)	80%-20%	10.00	5	5+15
3	Asian Development Bank (Tranche II)	75%-25%	10.00	5	5+15

Sr. No	Loan	Debt-Equity Ratio	Interest rate (%)	Moratorium (years)	Repayment duration (years)
4	Asian Development Bank (Tranche III)	75%-25%	10.00	5	5+15

2.5.3 The summary of the proposed interest and finance charges for the Third MYT Control Period:

Table 21: Summary of the proposed Interest and Finance charges for the MYT Control Period (Rs Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
REC funding	4.73	9.19	9.20	8.90	8.28
ADB Tranche – I	0.28	0.40	0.40	0.40	25.16
ADB Tranche – II	0.15	0.45	0.69	0.79	0.81
ADB Tranche – III	0.00	0.07	0.24	0.53	0.80
Interest on Loans on existing assets	0.31	0.22	0.13	0.04	0.00
Total Interest and Finance Charges	5.47	10.33	10.66	10.65	35.06

2.6 Interest on working capital

2.6.1 The Petitioner has proposed an interest rate on working capital @ 13.30% in line with the provisions of the HPERC MYT Transmission Regulations. The normative working capital requirement and interest thereon as projected by HPPTCL is summarized below:

Table 22: Details of proposed Interest on working capital for Third Control Period (Rs Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
O&M expenses for 1 month	0.53	0.88	1.45	1.61	2.30
Maintenance spares @40% of R&M expenses for 1 month	0.03	0.16	0.24	0.24	0.31
Receivable for 2 months	2.03	5.51	7.50	8.64	15.48
Total Working capital Requirement	2.59	6.54	9.19	10.49	18.08
Interest rate	13.30%	13.30%	13.30%	13.30%	13.30%
Interest on Working capital	0.34	0.87	1.22	1.40	2.41

2.7 Return on equity

2.7.1 The petitioner has computed the Return on Equity for the Control Period on the basis of average equity for the corresponding year @ 15.50% / Pre-Tax rate of return @ 23.48%.

2.7.2 The equity invested for the inter-state lines has been excluded for arriving at the opening level of equity. This has been estimated as 30% of the GFA of these lines (i.e. 30% of Rs. 168.34 Cr). This amount has been excluded from the opening level of equity for FY 2014-15. Hence, the opening equity for FY 14-15 comes out to be Rs. 11.59 Cr.

2.7.3 The return on equity proposed by the Petitioner for the third Control Period is summarized below:

Table 23: Details of the proposed Return on Equity for the MYT Control Period (Rs Cr.)

Particulars	FY15	FY16	FY17	FY18	FY19
Equity (Opening Balance)	11.59	28.89	51.74	51.74	68.24
Net addition during the year	17.30	22.85	0.00	16.50	12.68
Equity (Closing Balance)	28.89	51.74	51.74	68.24	80.92
Pre-tax Rate of Return on Equity	23.48%	23.48%	23.48%	23.48%	23.48%
Normative Pre-tax Rate of Equity	4.75	9.47	12.15	14.09	17.51

2.8 Other Income

2.8.1 The Petitioner has calculated the amount of other income based on the average for past 3 years. However, for projecting the interest cost on bank deposits, reduction in interest income due to utilization of funds for the proposed capital expenditure has been assumed.

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

Table 24: Details of the Proposed Non-Tariff Income for the MYT Control Period (Rs Cr.)

Non-Tariff Incomes	FY15	FY16	FY17	FY18	FY19
Sale of Tender Forms		0.02			0.03
Interest on Bank Deposit	8.42	6.58	6.58	5.25	4.23
Misc. Receipts	0.00	0.00	0.00	0.00	0.00
RTI Fee	0.00	0.00	0.00	0.00	0.00
Interest on Contractor/Supplier	0.30	0.24	0.19	0.22	0.09
Short Term Open Access	0.51	0.51	0.51	0.51	0.51
Connectivity Fee	0.36	0.26	0.29	0.30	0.29
Total (in Rs. Cr.)	9.58	7.62	7.57	6.29	5.15

2.9 Aggregate Revenue Requirement

2.9.1 The Petitioner's submission of ARR for the Third Control Period i.e. FY 2014-15 to FY 2018-19 has been summarised below:

Table 25: Details of the ARR proposed by HPPTCL for the MYT Control Period (Rs Cr)

Particulars	FY15	FY16	FY17	FY18	FY19
O&M Cost	6.40	10.53	17.36	19.36	27.60
Employee Cost	3.30	3.62	6.58	8.15	13.67
A&G Cost	2.20	2.25	3.48	3.91	4.73
R&M Cost	0.90	4.66	7.30	7.30	9.21
Depreciation	4.77	9.45	11.19	12.61	15.43
Interest & Finance Charges	5.47	10.33	10.66	10.65	35.06
Interest on Working Capital Requirement	0.34	0.87	1.22	1.40	2.41
Return on Equity	4.75	9.47	12.15	14.09	17.51
Total Expenses	21.73	40.65	52.58	58.10	98.01
Non-Tariff Income	9.58	7.62	7.57	6.29	5.15
Aggregate Revenue	12.15	33.03	45.01	51.81	92.86

Particulars	FY15	FY16	FY17	FY18	FY19
Requirement					

2.10 Transmission tariff

2.10.1 The table below summarises the Petitioner's proposal for the transmission tariff for the Third MYT Control Period:

Table 26: Transmission Tariff proposed by the HPPTCL for the Third MYT Control Period

Particulars	FY15	FY16	FY17	FY18	FY19
Aggregate Revenue Requirement (in Rs Cr.)	12.15	33.03	45.01	51.81	92.86
Transmission Capacity, excl inter-state (in MW)	420.00	481.50	481.50	514.50	542.50
Transmission charges (in Rs. / MW / month)	24,108	57,171	77,906	83,916	142,636

3 Responses from the Stakeholders

3.1 Introduction

3.1.1 The Commission has published a Public Notice inviting the interested parties/stakeholders to file their objections and suggestions on the Petition by 22nd February 2014. The Commission, however, did not received any comments from the stakeholders.

3.1.2 A public hearing was held on 26th March, 2014 at the Commission's Court Room in Shimla where the stakeholders did not make any comments.

4 Analysis of the Tariff Petition

4.1 Background

- 4.1.1 The Commission has analysed the MYT Petition for approval of the ARR and determination of Transmission Tariff for the Third Control Period (FY 2014-15 to FY 2018-19).
- 4.1.2 This Chapter covers the item-wise analysis of ARR for each year of the Third Control Period including Depreciation, O&M expenses, Interest and Finance Charges and Working Capital Requirement, etc. to reflect the total ARR of the Petitioner for the Control Period.
- 4.1.3 For this purpose, the Commission held several rounds of technical discussions to validate the data submitted by the Petitioner and sought further clarifications on various issues. The Commission has considered all information submitted by the Petitioner as part of the Tariff Petition including responses to various queries raised during the discussions.

4.2 Approach

- 4.2.1 The Commission has, in this Tariff Order, determined the ARR and transmission tariff for the intra state lines/ Sub-stations vested with the HPPTCL by the GoHP. The Commission has for that purpose analysed in detail, the submissions made by the petitioner to arrive at the ARR for the third Control Period in accordance with the HPERC MYT Transmission Regulations.
- 4.2.2 The GoHP had vested the transmission assets worth Rs. 199.43 Cr. with the HPPTCL as per the Transmission network details provided by the HPSEBL. The annual accounts of HPPTCL upto FY 2012-13 does not reflect the assets and the corresponding revenue, expenditure, etc. in respect of the assets transferred to the HPPTCL. In the absence of any relevant information in respect of the intra-state transmission assets in the audited accounts of the HPPTCL, the Commission has been constrained to make certain assumptions/ adjustments in the submissions made by the petitioner to arrive at the various components of the ARR.
- 4.2.3 The approach adopted by the Commission in arriving at various components of the ARR is discussed in the following paragraphs in detail.

4.3 ARR for Transmission Licensee

- 4.3.1 As per the HPERC MYT Transmission Regulations, 2011 the ARR for the transmission business for each year of the Control Period shall consists of the following items:
- a. Operation and Maintenance expenses;

- b. Financing cost which includes cost of debt including working capital (interest), cost of equity (return);
- c. Depreciation;
- d. Income tax; and
- e. Non-tariff income;
- f. Less: Income from other business

4.4 Operation & Maintenance (O&M) Expenses

- 4.4.1 As per regulation 13 (3) of HPERC MYT Transmission Regulations 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 -

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

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

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

- 4.4.2 As per the HPERC MYT Transmission Regulations, O&M expenses are controllable and hence the O&M expenses projected for the Control Period as per the methodology specified in the MYT Regulations are not subject to true-up. Further, any surplus or deficit on account of O&M expenses shall be to the account of the licensee and shall not be true up.

- 4.4.3 In the current scenario the existing intra-state network is being maintained by the HPSEBL and therefore HPPTCL is required to pay the O&M charges for the existing intra-state transmission network to HPSEBL as mutually agreed between them. In the previous MYT Transmission Order it is mentioned that:

"5.7 However, in the present case, since the baseline data is not available, the Commission shall revisit this figure once the O&M charges are mutually agreed between the Petitioner and HPSEBL and the audited accounts for FY11 are made available. The Petitioner is directed to file the requisite baseline data along with the first APR"

- 4.4.4 The Petitioner has provided copy of the annual audited accounts for FY 2011-12 and FY 2012-13 along with the current MYT Petition. As per Note 20 of the audited accounts of FY 2012-13, the auditor has made the following observation:

"In terms of "Himachal Pradesh Power Sector Reforms Transfer Scheme, 2010" notified by the State Govt. Vide No. MPP-A(3)-1/2001-IV dated 10.06.2010 transmission lines having gross value of Rs. 199,07,72,000/- are re-vested with HPPTCL. The value of assets to be transferred to HPPTCL is under reconciliation with HPSEB Ltd and all assets & liabilities in this regard shall be taken in the accounts of HPPTCL after ascertaining the actual cost of such assets accumulated

depreciation and net block. Accordingly no provision has been made for any income or expenditure pertaining to said transmission lines.”

- 4.4.5 Accordingly, in the absence of information regarding income and expenditure for transferred assets in the accounts of the HPPTCL, the Commission has analysed each expense to arrive at the appropriate level of the O&M expenses for the intra state lines and Sub stations. Further, the Commission again directs the petitioner to update the fixed assets register, reconcile the transmission assets transferred by HPSEBL, and inform the Commission within next three months after issuance of the Order.
- 4.4.6 The escalation to be applied for projecting the O&M parameters has been considered as per the HPERC MYT Transmission Regulations. 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 27: Inflation considering average increase in CPI & WPI Index for past three years

Particulars	CPI inflation	WPI Inflation
Average increase in last three years	9.76%	8.62%

Employee Expenses

- 4.4.7 The Commission observed that the Petitioner has segregated the employee cost for intra-state and inter-state transmission network based on certain assumptions which could not be appropriately supported with past data.
- 4.4.8 It is observed that the entire employee cost of the Petitioner is being capitalised in the accounts as the transferred assets have not been reflected in the books of the accounts of the HPPTCL. However, the petitioner submitted that the transferred assets would be reflected in the books of accounts for FY 2013-14.
- 4.4.9 The Commission has considered the employee cost of the HPPTCL for the year FY 2012-13 as per annual accounts. The details of actual employee cost as per annual accounts for FY 2012-13 is shown in the table below:

Table 28: Actual employee cost for FY 2012-13 (Rs Lac)

Particulars	FY 13
Salaries, Wages, Allowances and Benefits	628.08
Contribution to Provident and other Funds	7.30
Leave Salary and Pension Contribution	90.04
Welfare Expenses	28.58
Total	754.00

- 4.4.10 In the absence of the details of the beneficiaries of the proposed lines, the Commission has not considered the proposed schemes under the intra-state network and has therefore not considered any requirement for additional employees during

the Control Period. Any addition in employees (if any) on account of implementation of intra-state works during the Control Period shall be considered by the Commission at the time of mid-term performance review or true-up.

4.4.11 Further, the Commission has apportioned the total employee cost based on the ratio of existing intra-state gross fixed assets to the total projects being undertaken by HPPTCL (including existing intra-state lines) which computes to 1.08%.

4.4.12 The employee cost so apportioned has been escalated at average CPI growth rate as mentioned in para 4.4.6. The employee cost approved by the Commission for the third Control period is given in the table below:

Table 29: Approved Employee cost for intra state works (Rs Lacs)

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
Employee cost towards intra state transmission works	9.84	10.81	11.86	13.02	14.29

Administrative and General (A&G) Expenses

4.4.13 The Commission has observed that the entire A&G expenses in the annual accounts are being capitalized, as the transferred transmission assets have not been reflected in the books of accounts of HPPTCL. In absence of appropriate baseline data, the Commission has considered the A&G expenses for FY 2012-13 as per annual accounts. The table below shows the details of A&G cost for FY 2012-13:

Table 30: Actual A&G Cost for FY 2012-13 as submitted by the Petitioner (Rs Lacs)

Particulars	FY 2012-13
Printing & Stationery	5.32
Books & Periodicals	0.24
Electricity & Water Charges	4.76
Advert & Publicity Exp.	5.63
Hiring Charges for Vehicles	43.92
Fees & Subscription	3.46
Office Exp.	3.48
Postage & Courier	0.45
Rent, Rates & Taxes	25.94
Insurance Vehicle	0.21
Hospitality Exp.	4.2
Professional Charges	31.29
Meeting Expenses	0.15
Telephone Exp.	9.21
Vehicle Running Exp.	4.12
Internal Audit Fee	0.24
Statutory Audit Fee	0.28
Out of Pocket Exp.	0.13
Bushes Clearing Exp. At site	-

Particulars	FY 2012-13
Interest Paid	0.01
TA/DA Consultant	1.86
Consumable Elec Fitting	0.31
Licence & Reg. Fee	103
Repair and Maintenance	0.45
TA/DA auditors	0.14
Other Misc.	0.44
Membership Fees STU (NRPC Fund)	10
ARR Exp MYT Cont period	3.02
Collection of revenue record Exp.	0.28
ADB Consultant Remuneration	9.75
Annual Subscription Auto cad	0.74
Legal charges	0.38
Service tax advocate Services	0.51
Loss on replacement of assets	0.05
TA/DA ADB Consultant	0.19
Total A&G Cost	274.16

4.4.14 The Commission has segregated each expense item as under:

- **Expenses that can be clearly allocated towards intra-state**

The Commission has considered the following charges as A&G Expense exclusively towards intra-state works during MYT control period

Table 31: A&G Expenses exclusive for intra state works 3rd MYT Control period (Rs Lakh)

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
License & regulatory fee	100.0	100.0	100.0	100.0	100.0
Fees and subscription	3.46	3.46	3.46	3.46	3.46
ARR expenses during MYT control period	3.02	3.02	3.02	3.02	3.02
Membership Fees STU (NRPC Fund)	10.0	10.0	10.0	10.0	10.0
Total	116.48	116.48	116.48	116.48	116.48

- **Common A&G Expense**

Balance A&G expenses for FY 2012-13 has been considered as common expense towards both intra and inter-state works. The same has been apportioned @ 1.08% which has already been explained under para 4.4.11. The common A&G expenses so apportioned has been projected as per Wholesale Price Index (WPI_{inflation}) during MYT Control Period as mentioned in para 4.4.6.

Table 32: Common A&G Expenses allocated towards intra state works (Rs Lakh)

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
Approved Common A&G Expenses (allocated towards intra state Works)	1.98	2.15	2.33	2.53	2.75

4.4.15 The total approved A&G expenses (for intra-state works) for the Third Control Period is provided in the table below:

Table 33: Approved A&G cost for third Control Period (Rs Lacs)

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
A&G Expenses (Exclusive for intra state works) (a)	116.48	116.48	116.48	116.48	116.48
Common A&G Expenses (Exclusive for intra state works) (b)	1.98	2.15	2.33	2.53	2.75
Total A&G Cost (= a + b)	118.46	118.63	118.81	119.01	119.23

4.4.16 The Commission however expects the petitioner to maintain separate accounts by suitably allocating the expenses for not only for Intra-State and Inter-State works but also for completed and under construction works. The position can be reviewed at the time of midterm review.

Repair and Maintenance Expenses

4.4.17 Operation and Maintenance (O&M) of the existing intra-state transmission network is outsourced to HPSEBL as per an agreement. Therefore, the R&M expense to be approved to HPPTCL shall be the charges payable to HPSEBL as per the O&M agreement.

4.4.18 Based on the initial scrutiny of the MYT Petition, the Commission observed that the HPPTCL has submitted the R&M expense payable to HPSEBL for maintenance of the transmission lines as per the CERC norms which are applicable for inter-state lines. The Commission in its initial queries asked HPPTCL to submit the copy of the agreement entered with HPSEBL with regard to the payment of O&M charges.

4.4.19 In response, the Petitioner submitted a copy of the agreement which specified that the payment of O&M charges would be decided as per mutually agreed terms between the parties. During the Technical Validation Session (TVS), the Petitioner was asked to provide the details of the charges agreed with HPSEBL for maintenance of the transmission lines. The Petitioner submitted that the invoices prior to FY 2013-14 were raised without providing any rationale and on clarification of the same with HPSEBL, the HPSEBL has revised the O&M charge invoices as per CERC O&M norms. Subsequently, HPPTCL submitted the details of O&M invoices raised earlier by HPSEBL as per the query of the Commission.

4.4.20 The Commission has examined the various submissions with regard to R&M expenses proposed by the HPPTCL. It is observed that the inter-state norms for O&M are very high as compared with the earlier invoices (based on actual expenses) raised by the HPSEBL prior to FY 2013-14 and therefore cannot be considered.

4.4.21 In absence of an agreement between the HPPTCL and HPSEBL with regard to the maintenance charges on the existing transmission lines and lack on any past

information regarding actual R&M cost, the Commission has considered the R&M expenses as approved by the Commission for FY 2013-14 (in Order for 2nd MYT Control Period).

4.4.22 Since, the R&M expense so approved in the Order included the R&M expense on inter-state lines, therefore, the Commission has allocated the projected total R&M expense for the third Control Period towards intra state works based on the ratio of line length of the existing intra state to the total line length of the HPPTCL. Accordingly, a ratio of 51.7% has been used for this purpose. The R&M cost so apportioned has been projected as per Wholesale Price Index (WPIinflation) during MYT Control Period.

4.4.23 The Petitioner has also proposed a capex of Rs. 37.5 lacs towards installation/ replacement of meters pertaining to intra-state transmission lines under capital works. However, considering the amount involved and proposed phasing, the Commission has provisionally approved the cost towards the proposed installation/ replacement of meters as one time R&M expense for FY 2014-15 and FY 2015-16. This amount shall be trued-up at the time of mid-term review or true-up of the Control Period.

4.4.24 The total approved R&M expenses (for intra-state works) for the Third Control Period is provided in the table below:

Table 34: Approved R&M cost for third Control Period (Rs Lacs)

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
R&M cost towards intra state works (a)	111.76	121.40	131.86	143.23	155.58
Cost of replacement of meter on intra state lines (b)	18.75	18.75	0.00	0.00	0.00
Total R&M Cost (=a+b)	130.51	140.15	131.86	143.23	155.58

4.4.25 Further, the Commission directs the Petitioner to mutually devise on an appropriate methodology for determination of O&M charges towards maintenance of existing transmission lines by HPSEBL. The Commission advise the Petitioner and HPSEBL to arrive on reasonable O&M charges based on the actual O&M expense of HPSEBL towards such high voltage lines. This methodology along with the computed O&M charges is required to be submitted to the Commission within 3 months of issuance of this Order for approval.

Total Operation and Maintenance Cost

4.4.26 Based on the above explanation, the total O&M cost approved by the Commission for Third MYT Control period is given in the table below:

Table 35: Approved O&M costs for Third MYT Control Period (Rs Lacs)

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
Employee Cost	9.84	10.81	11.86	13.02	14.29

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
A&G Cost	118.46	118.63	118.81	119.01	119.23
R&M Cost	130.51	140.15	131.86	143.23	155.58
Total O&M Cost	258.81	269.59	262.54	275.26	289.10

4.5 Capital Expenditure

Existing Transmission System

4.5.1 The details of the transmission lines vested in the HPPTCL as per Government Order dated 21.06.2010 are as under:

Table 36: Existing transmission network of HPPTCL

S. No.	Name of Line	Gross Fixed Asset (Rs Lac)	COD	Line Length (KM)
A.	220 KV Lines			
1	220 kV D/C Bairasuil - Pong line (one Ckt LILO at Jassure)	19.47	09/1985	0.240
2	220 kV S/C Jassure - Thein Line	1900.11	03/2001	25.602
3	220 kV S/C line on D/C towers Dehar to Kangoo line	149.43	06/1999	3.177
4	220 kV D/C Panchkula - Kunihar Line	8535.74	05/1989	46.720
5	220 kV D/C Khodri -Giri line	6398.15	09/1989	35.02
6	220 kV D/C Nalagarh(PGCIL) to Nalagarh Line	639.45	07/2010	3.500
	Sub-Total (A):	17642.35		114.259
B.	132KV Lines			
1	132 kV S/C Giri - Kulhal Line	23.66	04/1978	17.40
2	132 kV D/C Giri -Abdullapur line	1348.20	08/1982	16.220
3	132 kV S/C Kangra Tap	10.00	02/1979	0.135
4	132 kV S/C Dehar - Kangoo Line	86.10	12/1998	2.992
5	132 kV D/C Shanan – Bassi Line	11.55	03/1970	5.00
	Sub-Total (B):	1479.51		41.747
C.	66 KV Lines			
1	66 kV Shanan- Bijni Line	10.50	10/1969	35.00
2	66 kV Pinjore -Parwanoo Line	574.20	04/1956	8.230
3	66 kV Pong -Sansarpur Terrace line	43.40	10/1990	6.300
4	66 kV Bhakra -Una LILO Gwalthai line	192.97	12/1985	16.724
	Sub-Total (C):	821.07		66.254
	Total (A+B+C)	19942.7		222.26

4.5.2 The petitioner has clarified that out of the 15 Nos. 220, 132 and 66 kV existing lines, ARR for 3 nos. lines i.e. 220 kV Jessour-Thein Line, and 220 kV D/C Panchkulla - Kunihar Line, 220 kV D/C Khodri- Giri has not been claimed in this Petition in view of the direction by the Central Electricity Regulatory Commission (CERC) to the HPPTCL that the tariff petition for these lines has to be submitted to the CERC. The

criteria followed for identifying only these three lines as inter-state line has not been clearly spelt out. The Commission would like the petitioner to ascertain the factual position, the impact of these three lines being treated as interstate lines on the transmission tariff in the short run as well as long run and take necessary action within the legal framework.

4.5.3 Pending clarity on such issues, the Commission has considered the ARR for the existing lines other than the aforesaid lines. The Commission expects that the petitioner should be in a position to clarify all such related issue at the time of midterm review or before.

Proposed Capital Expenditure

4.5.4 The Commission has observed that the HPPTCL has proposed ten schemes towards intra-state capital works in the third Control Period (FY 2014-15 to FY 2018-19) amount to Rs. 354.30 Cr. as detailed in para 2.3.2 of the petitioner submission.

4.5.5 During the scrutiny of the above schemes, the Commission enquired regarding the progress of these schemes duly explaining the rationale for considering these schemes under intra-state works along with details of the beneficiaries of these lines and status of the PPAs/ TSAs regarding the same.

4.5.6 In response, the Petitioner submitted the following financial and physical progress of the proposed schemes which is tabulated below:

Table 37: Physical and Financial Progress of proposed Capital Investment Schemes

Sr. No	Project	Financial progress till Nov'13 (Rs. Cr.)	Physical Progress
1	220 kV D/C Kashang-Bhaba Line	80.81	Line completed except Two towers for maintaining the electrical clearance are yet to be completed
2	Replacement of Meters in existing transmission lines	Nil	Scheme in preparation stage
3	22/66/220 kV (22/66 kV, 2*10 MVA,66/220 kV, 31.5 MVA) S/stn at Bhoktoo with LILO of one circuit of 220 kV Kashang-Bhaba D/C line	3.92	Land development completed and layout finalized; GIS Building work in progress
4	ERP Implementation	Nil	Bid document for procurement of hardware and selection of Implementation partner are being prepared
5	33/132 kV, 2*25/31.5 MVA S/stn at Chambi(Shahpur) with LILO of 132 kV Kangra-Dehra S/C line	Nil	Land being finalized for S/S and Preliminary survey completed for line
6	33/132 kV S/stn at Pandoh + LILO of one circuit of 132 kV Bajaura-Kangoo D/C line	Nil	Transfer of land from BBMB is in final stage
7	33/132 kV , 1*50/63 MVA S/stn at Banjal	Nil	Nil
8	132 kV S/C line on D/C towers from Banjal to Kurthala	Nil	Nil

Sr. No	Project	Financial progress till Nov'13 (Rs. Cr.)	Physical Progress
9	66/22 kV , 2*10 MVA GISS at Nirmand (Bagipul)	Nil	Nil
10	66 kV D/C line from 66/22 kV GISS Nirmand to 66/220 kV Kotla S/stn	Nil	Nil

- 4.5.7 In response, the Petitioner stated that scheme for 'Replacement of meters' is exclusively for intra-state lines only. The Petitioner also submitted that complete details with respect to the list of generators and their generation capacity is currently unavailable as the generators have not approached the HPPTCL for signing of the TSA. The beneficiaries of the upcoming transmission capacity are therefore not known and cannot be provided at this stage.
- 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 midterm review so that the ARR for the same can be considered during midterm 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. However, the cost of replacement of meters and ERP implementation shall be dealt as per the succeeding paragraphs. The Commission believes that proper metering at all voltage levels is essential for energy audit and ascertaining the losses at each voltage level. Therefore, the Commission has provisionally approved the cost for replacement of meters on the intra-state transmission lines under the approved R&M expenses.
- 4.5.9 Further, the Commission provisionally approves the capital expenditure for 'ERP implementation' which is being proposed by the Petitioner. Since no major progress is reported currently and the scheme is expected to be implemented towards latter years of the Control Period, the Commission shall consider the same at the time of mid-term review and allow recovery based on proportion of inter and intra-state works.

4.6 Depreciation

4.6.1 The Petitioner has submitted the depreciation schedule in line with provisions of the Regulation 23 of the MYT Transmission Regulations, 2011 as also approved by the Commission in the previous MYT Order. The Commission has examined the depreciation proposed by the Petitioner for the Control Period and has adopted the following approach for computing depreciation:

a) **On old intra-state transmission assets transferred from erstwhile Board:**

The Commission has adopted a similar approach as approved in the previous MYT Order for Second Control Period dated July 14, 2011 for computing the depreciation on assets transferred from erstwhile Board which is stated below:

“5.20 In terms of Regulation 23 of the MYT Transmission Tariff Regulations, 2011 “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”

5.21 The Commission observes that when the transferred transmission lines belonged to the erstwhile Board, the depreciation at the flat rate of 2.5% was being charged on the 90% value. The Commission also approved the depreciation rate being used by the erstwhile Board.

5.22 However, for the purpose of present Tariff Order Commission has approved the depreciation charge on the basis of deprecation rates specified in Appendix-I of the MYT Transmission Regulations, as proposed by the Petitioner. In case of certain assets which have been depreciated upto 90% of their value during the Control Period, no further depreciation is being charged. Depreciation on new assets addition as proposed by the Petitioner has not been considered by the Commission.”

b) **On common assets (As on 31st March 2013):** Depreciation on the common assets has been computed based on the closing GFA as on 31st March 2013 in the audited accounts of HPPTCL and applicable depreciation rates as per the Appendix-I of the MYT Transmission Regulations, 2011.

Since these assets are used for both intra and inter-state works, the Commission has considered pro-rata depreciation on these assets for inclusion in the ARR for intra-state transmission network.

4.6.2 The depreciation approved by the Commission for the Third Control period is shown below:

Table 38: Approved Depreciation on Intra-State Assets for third MYT Control Period (Rs Lacs)

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
On Common assets	0.09	0.08	0.07	0.05	0.03
On Old assets transferred from erstwhile Board	75.78	75.78	75.78	75.78	75.24
Total Depreciation	75.87	75.86	75.85	75.83	75.27

4.7 Interest & Finance Charges

4.7.1 The Commission in its Order for 2nd MYT Control Period had considered the loan on the following three transferred lines for approval of interest and finance charges.

Table 39: Details of loan on transferred assets (Rs Lacs)

Scheme	Debt upto 10.06.10	Status
220 kV S/C Jassure- Thein Line	43	Inter-state Line
220 kV D/C Nalagarh (PGCIL) to Nalagarh Line	639	Intra-state Line
66 kV Bhakhra- Una LILO –Gwalthai	84	Intra-state Line
Total	766	

4.7.2 Of the three lines against which the Commission had considered the balance loans, 220 KV S/C Jassure -Thein Line is an inter-state line for which tariff shall be approved by the CERC. Therefore, the Commission has considered the loans against the balance two lines for the purpose of approval of Interest and Finance charges for intra-state works.

4.7.3 The Commission has considered similar interest rates and repayment as approved in the MYT Order for 2nd Control Period for computation of interest during the third Control Period. Based on the submission of the Petitioner, the Commission approves the interest charge on existing loans as under:

Table 40: Approved Interest & Finance Charges on old Loans (Rs Lacs)

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
Opening Balance	288.44	216.33	144.22	72.11	-
Receipt	-	-	-	-	-
Repayment	72.11	72.11	72.11	72.11	-
Closing Balance	216.33	144.22	72.11	-	-
Average Balance	252.39	180.28	108.17	36.06	-
Total Interest & Finance Cost on old loans	29.02	20.73	12.44	4.15	-

4.7.4 Since no additional capital expenditure and capitalization has been approved for the Third Control Period, the Commission has not considered any additional loans for the entire Control Period. Based on the submission of loan schedule by the Petitioner, the Commission approves the interest charges for the Control Period as tabulated hereunder:

Table 41: Approved Total Interest & Finance Charges (Rs Lacs)

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
Interest and Finance Charges on old Loans	29.02	20.73	12.44	4.15	-
Interest and Finance Charges on new Loans	0.0	0.0	0.0	0.0	0.0
Total Interest & Finance Cost	29.02	20.73	12.44	4.15	-

4.8 Interest on working capital

4.8.1 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. As per the amended regulations 22 -

“Amendment of regulation 22 – In regulation 22 of the said regulations, for the words and figure “Short Term Prime Lending Rate of the State Bank of India as on the 1st April of the relevant year” the words and figures “Average Base Rate of State Bank of India for the last six months prior to the filing of the MYT petition plus 350 basis points” shall be substituted.”

4.8.2 Accordingly, the rate of interest on working capital has been arrived as below:

Table 42: Approved Rate of interest for Working capital requirement (%)

Particulars	Jun-13	Jul-13	Aug-13	Sept-13	Oct-13	Nov-13
SBI Base rate (%)	9.70%	9.70%	9.70%	9.74%	9.80%	9.96%
Average for last six months	9.77%					
Rate of Interest for computing IWC (Avg Base rate + 350 basis point)	13.27%					

4.8.3 The working capital requirement and interest on working capital approved by the Commission is shown in the table below:

Table 43: Approved Interest on Working Capital for the third Control period (Rs Lacs)

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
1/12th of total O&M Expenses	21.57	22.47	21.88	22.94	24.09
Maintenance Spares (40% of the R&M expense for one month)	4.35	4.67	4.40	4.77	5.19
Receivables equivalent to 2 months average billing	57.46	57.91	55.27	56.06	57.65
Working Capital Requirement	83.38	85.05	81.55	83.77	86.93
Interest on Working Capital @ 13.27%	11.06	11.28	10.82	11.11	11.53

4.9 Return on Equity (ROE)

4.9.1 The Commission in its previous MYT Order had observed that no equity was invested in the assets transferred to the Petitioner. Further, the Commission has not approved any capital expenditure in the third Control Period. Therefore, there is no addition in the equity of the Petitioner and hence the return on equity shall be nil.

4.10 Non-tariff Income (NTI)

4.10.1 The Petitioner has submitted non-tariff income based on the audited accounts for previous years. The Commission observed that the non-tariff income is currently being utilized to offset the pre-operating expense as no revenue or expense against the assets transferred from HPSEBL has been accounted for in the audited accounts of HPPTCL. The Commission has projected item wise non-tariff income (misc receipt, interest on contractors/ Suppliers, short term open access, connectivity fees, etc.) as per the last three year actuals.

4.10.2 The Non-Tariff Income (NTI) approved by the Commission for the third Control Period has been tabulated below:

Table 44: Approved Non-tariff Income for third Control period (Rs Lacs)

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
Non-Tariff Income	30.0	30.0	30.0	30.0	30.0

4.11 Prior Period Expenses for the FY 2010-11

4.11.1 The Petitioner has also requested the Commission to consider and allow certain expenses pertaining to the FY 2010-11 (from 10.06.2010 to 31.03.2011) as detailed in Chapter 7 of the MYT Petition. On examination of the documents, the Commission observed that the HPPTCL has not substantiated its claim with any document/justification relevant to its submissions.

4.11.2 The Commission is aware that prior to the unbundling in June 2010, all the activities, viz. Generation, Transmission Distribution, etc. were carried out by the HPSEBL and hence all the expenses pertinent to these activities were allowed to the HPSEBL as a part of their ARR. The final true up of the HPSEBL for the FY 2010-11 is yet to be undertaken. Accordingly, the claim of the HPPTCL of the expenses of FY 2010-11 from the HPSEBL shall be considered as a part of the final true up of the HPSEBL for the FY 2010-11 after verification of the relevant documents.

4.12 Aggregate Revenue Requirement (ARR)

4.12.1 The summary of the Aggregate Revenue Requirement (ARR) approved by the Commission during the Third MYT Control Period is given in the table below:

Table 45: Approved ARR of HPPTCL for the Third MYT Control period (Rs Lacs)

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
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Particulars		FY 15	FY 16	FY 17	FY 18	FY 19
1	Operation & Maintenance Expenses	258.82	269.58	262.54	275.26	289.10
A	Employee Expenses	9.84	10.81	11.86	13.02	14.29
B	A&G Expenses	118.46	118.63	118.81	119.01	119.23
C	R&M Expenses	130.51	140.15	131.86	143.23	155.58
2	Depreciation	75.87	75.86	75.85	75.83	75.27
3	Interest and Finance Charges	29.02	20.73	12.44	4.15	-
4	Interest on working Capital Requirement	11.06	11.28	10.82	11.11	11.53
5	Return on Equity	-	-	-	-	-
6	Total Fixed cost	374.77	377.46	361.64	366.35	375.90
7	Less: Non- Tariff Income	30.00	30.00	30.00	30.00	30.00
8	Net Aggregate Revenue Requirement (ARR)	344.77	347.46	331.64	336.35	345.90

4.13 Transmission Losses on HPPTCL System

4.13.1 The Commission in past has directed the Petitioner to mutually agree with HPSEBL on the mechanism of determination of transmission losses and submit the same before the Commission. However, no such submission has been made by the Petitioner.

4.13.2 With respect to transmission losses for past years, the Petitioner has submitted actual transmission losses of 1.02%, 0.49% and 0.39% for FY 2010-11, FY 2011-12 and FY 2012-13, respectively. However, the Petitioner has shown doubts over the correctness of these loss levels and has submitted that "It is to be noted that the meters installed at the sub-stations operated by HPSEBL are not correct. Hence the numbers mentioned above are limited by this fact. As a corrective step, HPPTCL has proposed to install its own meters to have a greater accuracy for energy balance. Capex for the same has been kept in the plan for this control period"

4.13.3 In the current petition, the Petitioner has proposed to install new meters for the purpose of accurate measurement of energy. The Commission has approved the cost for installation of these energy meters in this order as one time R&M expense. The Commission directs the Petitioner to implement the scheme at the earliest which shall facilitate collection of reliable data for power/energy flow through the HPPTCL's transmission network.

4.13.4 In the absence of proper metering data, the Commission approves the transmission loss trajectory at 0.75% for the Control Period based on the actual transmission losses submitted for last 3 years by the Petitioner. The Commission would like to make it clear that this shall be for the limited propose of recovery of transmission

losses from the open access consumers. The distribution licensee shall however continue to bear the losses under the present accounting system

Table 46: Transmission Losses trajectory for Third MYT Control period

Financial Year	Projected by the Petitioner	Approved by Commission
FY 2014-15	1.00%	0.75%
FY 2015-16	1.00%	0.75%
FY 2016-17	1.00%	0.75%
FY 2017-18	1.00%	0.75%
FY 2018-19	1.00%	0.75%

4.14 Transmission charges for Open Access Consumers

(i). Long term and Medium term open access consumers:

4.14.1 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.

4.14.2 The Petitioner has stated that a Transmission Service Agreement (TSA) has been signed between HPSEBL and HPPTCL for a capacity of 560 MW on the existing transmission lines vested in the HPPTCL. The petitioner has stated HPPTCL has requested to revise the contracted capacity with HPSEBL. The Commission directs the petitioner to submit the supplementary TSA after signing of the agreement.

4.14.3 Currently, the Commission has considered 560 MW as contracted capacity and the following table shows the breakup of total capacity to be catered through intra and inter-state transmission lines.

Table 46: Break up of Capacity to be catered through inter and intra state transmission lines.

Particulars	Capacity (MW)
Capacity catered through intra-state transmission lines	335
Capacity catered through inter- state transmission lines	225
Total Capacity (in MW)	560

4.14.4 Accordingly, the open access charges for long term and medium term open access consumers for use of the existing transmission system of the HPPTCL are determined in the Table below:

Table 47: Transmission Charges for long and medium term open Access Consumers

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
Aggregate Revenue Requirement (ARR) (in Rs. Lakhs)	344.77	347.46	331.64	336.35	345.90
Transmission Capacity – Intra State Works Only (in MW)	335	335	335	335	335

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
Transmission charges (in Rs/MW/month)	8,576	8,643	8,250	8,367	8,604

(ii). Short-term Open Access Consumers

4.14.5 The transmission charges for the short-term open access consumers are determined on the basis of total ARR approved for the HPPTCL and the total quantum of energy to be handled by the transmission system of the HPPTCL as tabulated below:

Table 48: Transmission Charges for Short-term Open Access Consumers

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19
ARR of HPPTCL (Rs. Cr.)	3.4477	3.4746	3.3164	3.3635	3.4590
Energy routed through Intra State Transmission Network taking 60% load factor on 335 MW (MUs)	1761	1761	1761	1761	1761
Transmission charges for Short-term Open Access Consumers (Paisa/ unit)	2.00	2.00	2.00	2.00	2.00

Notes:

1. Transmission charges for (i) as well as (ii) shall be levied on the energy / power injected into the State Transmission System.
2. The recovery from distribution licensee, through transmission charges, shall be limited to the approved ARR of HPPTCL based on the average power flows mentioned above.
3. The recovery from Open Access Consumers shall be done on the basis of Contracted Capacity at the above mentioned rates.
4. The amount of ARR of HPPTCL shall be subject to True-up as per the relevant provisions of the MYT Transmission Regulations and the shortfall / surplus, if any, after taking into account the receipts from the distribution licensee and the open access consumers shall be carried forward to the next MYT.
5. In addition to the transmission charges, the transmission as well as distribution losses shall be absorbed by the Open Access consumers 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.

4.15 Advisory to HPPTCL

4.15.1 The Commission had issued advisories/ directives to the Himachal Pradesh Power Transmission Corporation Ltd. (HPPTCL) in its previous MYT Order dated 14th July 2011 and Annual Performance Review Order dated 5th January 2013. The

Commission has reviewed the compliance report submitted by the Petitioner and has observed that action is yet to be taken on most of the important directives.

- 4.15.2 The Commission directs the petitioner to expedite the progress of previous advisories issued to it, the advisories issued in this Order and submit the status of compliance to the Commission on quarter basis.