MULTI YEAR TARIFF ORDER FOR HIMACHAL PRADESH POWER TRANSMISSION CORPORATION LIMITED FOR THE PERIOD FY12 TO FY14



Himachal Pradesh Electricity Regulatory Commission

July 14, 2011

BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION AT SHIMLA

CASE NO. 245/2010

CORAM

SUBHASH CHANDER NEGI

IN THE MATTER OF:

Determination of Aggregate Revenue Requirement (ARR) for the Multi Year Tariff petition of the Second Control Period (FY12 – FY14) under section 62 of the Electricity Act, 2003.

AND

IN THE MATTER OF:

Himachal Pradesh Power Transmission Corporation Limited

... APPLICANT

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 Aggregate Revenue Requirement (ARR) and determination of Transmission Tariff for the Second MYT Control Period (FY12 to FY14) 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.

The Commission having heard the applicant, interveners, consumers, consumer representatives of various consumer groups on May 30, 2011 at Shimla, and having had formal interactions with the officers of HPPTCL and having considered the documents available on record, herewith accepts the applications with modifications, conditions and directions specified in the following Tariff Order.

The Commission has determined the ARR of HPPTCL for each year of the Second Control Period (FY12 – FY14) under the Multi Year Tariff (MYT) regime and approved the annual revenue requirement 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 annual revenue requirement shall come into force w.e.f. 1 April 2011. The

arrears, if any, for the months of April, May and June 2011 shall be adjusted in equal

instalments in the remaining months for FY12.

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, 2014. In the event of failure of

the petitioner to submit the additional details required as per 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, 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 the various classes of consumers.

sd/-

Shimla

(Subhash Chander Negi)

Dated: 14th July, 2011

Chairman

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A1: BACKGROUND

- 1.1 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.
- 1.2 HPPTCL was formed through an order notified by the Government of Himachal Pradesh (hereinafter referred to as 'GoHP') vide its notification No. MPP-A-(1)-4/2006-Loose, dated 11 September, 2008.
- 1.3 Through notification No. MPP-A-(1)-4/2006-Loose dated 3 December, 2008 read with the GoHP's earlier notification dated 31 October, 2008, HPPTCL was entrusted with the following work / business with immediate effect:
 - (1) All new works of construction of Sub-Stations of 66 kV and above.
 - (2) All new works of laying/ construction of transmission lines of 66 kV and above.
 - (3) Formulation, updation, 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.
 - (4) All matters relating to planning and co-ordinations of the transmission related issues with CTU, CEA, Ministry of Power, State Government and HPSEBL.
 - (5) 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.
 - (6) All other matter of subject that the State Government may specifically assign to the Corporation from time to time.
- 1.4 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.
- 1.5 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 10 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.

- 1.6 HPPTCL has now filed a petition with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as 'the Commission' or 'HPERC') for approval of its Multi Year Tariff petition and Aggregate Revenue Requirement (ARR) for the Second MYT Control Period (FY12 to FY14) under Sections 62, 64 and 86 of the Act, read with the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011 (hereinafter referred to as MYT Regulations, 2011).
- 1.7 This Tariff Order relates to the determination of Aggregate Revenue Requirement of the HPPTCL for each year of the Control Period (FY12 FY14) under the Multi Year Tariff regime.

Multi Year Tariff Framework

- 1.8 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.
- 1.9 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.
- 1.10 The Commission had specified the terms and conditions for the determination of tariff in the year 2004, based on the principles laid down under Section 61 of the Electricity Act 2003. Thereafter, the Commission had notified the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2007; HPERC (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2007 and HPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2007 and the previous tariff regulations of 2004 had been repealed.
- 1.11 Subsequently, the Commission notified HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011; HPERC (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2011 and HPERC (Terms and Conditions for Determination of

- Transmission Tariff) Regulations, 2011 and the previous tariff regulations of 2007 have been repealed.
- 1.12 The Commission vide notification dated 2nd April 2011, in exercise of the powers conferred by Clause (16) of Regulation 3 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Transmission Tariff) Regulations, 2011 fixed the duration of the Second Control Period as three years starting from 1st April 2011.

Filing of ARR and Tariff Petition for MYT Control Period (FY12 – FY14)

Procedural Background

- 1.13 The Petitioner filed the application for approval of the Aggregate Revenue Requirement (ARR) and determination of Transmission Tariff for the Second Control Period (FY12 FY14), with the Commission on 29th December 2010. Upon notification of the HPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011 (hereinafter termed as 'MYT Transmission Regulations, 2011') the Petitioner submitted a revised Petition vide M.A. No 34/ 2010 dated 16th April, 2011 incorporating changes as per the MYT Transmission Regulations, 2011.
- 1.14 PricewaterhouseCoopers Pvt. Ltd. (PwC) were appointed as Consultant to assist the Commission in the assessment of the ARR and determination of the relevant tariffs.

Admission Hearing

1.15 The Commission vide letter No. HPERC/480 – Vol-I/2010-11/4090 dated 10th January 2011, directed the Petitioner to submit details regarding first set of deficiencies identified during preliminary scrutiny of the ARR, which were submitted by the Petitioner vide M.A. No 12/ 2011 dated 8th February 2011. The Commission held Admissibility Hearing for the admission of the Petition on 7th April 2011 and admitted the petition.

Interaction with the Petitioner

- 1.16 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/clarification and justifications on various issues, critical for the analysis of the petition.
- 1.17 The Commission conducted the technical validation session on the petition filed by the Petitioner on 18th May, 2011 during which the discrepancies and additional information requirement over and above as given in the petition were highlighted.
- 1.18 The submissions made by the Petitioner, pursuant to the clarifications/ information sought by the Commission from time to time, as detailed hereunder, have also been taken on record:

Letter from Commission Response from Petitioner Letter. No. HPERC/480-Vol-I/TFA/2011 – 4090 M.A. No 12/2011 dated 10.01.2011 Dated 08.02.2011 Letter. No. HPERC/480-Vol-I/TFA Section/2011 - 336 M.A. No 43/2011 dated 27.04.2011 Dated 05.05.2011 Letter. No. HPERC/480-Vol-I/TFA Section/2011 – 711 M.A. No 91/2011 dated 23.05.2011 Dated 28.05.2011 Letter. No. HPERC/480-Vol-I/TFA Section/2011 - 808-809 M.A. No 97/11 dated 31.05.2011 dated 14.06.2011

Table 1: Communication with the Petitioner

Public Hearings

- 1.19 The Commission issued an interim order to the Petitioner, after admission hearing on 7 April 2011 for publishing a disclosure of the salient features of the petition for the information of all the stakeholders in the State. Accordingly the Petitioner published the salient features of the petition in the following newspapers:
 - (1) The Tribune (Chandigarh Edition) on 21st April 2011
 - (2) Amar Ujala (Chandigarh Edition) on 21st April 2011
 - (3) The Tribune (Chandigarh Edition) on 23rd April 2011
 - (4) Amar Ujala (Chandigarh Edition) on 23rd April 2011
- 1.20 The Commission invited suggestions and objections from the public on the tariff petition filed by the Petitioner in accordance with Section 64(3) of the Act subsequent to the publication of initial disclosure by the Petitioner. The public notice inviting objections/suggestions was published on 22rd April 2011 in the following newspapers:
 - (1) The Tribune (Chandigarh, Jalandhar and Bhatinda Edition)
 - (2) Amar Ujala (Chandigarh and Dharamsala Edition)
- 1.21 The interested parties/stakeholders were asked to file their objections and suggestions on the petition by 9th May 2011. The Commission received objections from two stakeholders by the stipulated date. The Petitioner filed its replies to the objections set out by various objectors vide M.A. No 86 of 2011 dated 26th May 2011 and M.A. No 90 of 2011 dated 28th May 2011, a copy of which was also sent to the individual objectors. The objectors were also allowed to file rejoinder, if any, to the Commission with a copy to the petitioner till 30th May 2011.
- 1.22 The Commission issued a public notice informing the public about the scheduled date of public hearing. All the parties, who had filed their objections/ suggestions, were also informed about the date, time and venue for presenting their case in the public hearing.

1.23 Public hearing on HPPTCL's petition was held on 31st May, 2011 at the Commission's Court Room in Shimla. The issues and concerns voiced by various objectors have been carefully examined by the Commission. The major issues raised by the objectors in their written submission as well as those raised during the public hearing, have been summarized in Chapter A3 of this Order.

A2: SUMMARY OF THE ARR PETITION FOR THE CONTROL PERIOD

- 2.1 This chapter summarizes the highlights of the petition filed by the HPPTCL for determination of the Aggregate Revenue Requirement (ARR) for the Second MYT Control Period (FY12 to FY14).
- 2.2 The petition was filed on 29th December, 2010. Upon notification of the HPERC Tariff Regulations 2011, the Petitioner submitted revised Petition on 16th April, 2011 incorporating changes as per the new MYT Regulations, 2011.

Repairs and Maintenance Cost

- 2.3 For projection of the R&M cost the Petitioner has considered the K-factor @ 2.5% which has been taken by the Punjab Transco for projection of its R&M Expenses in its ARR and Tariff Petition filed before the Punjab State Electricity Regulatory Commission. This K-factor of 2.5% has been applied on the opening GFA for each year of the Control Period.
- 2.4 The R&M expenses for the Control Period proposed by the Petitioner are given below:

R&M Expenses (In Rs. Cr)	FY11 RE	FY12 Projected	FY13 Projected	FY14 Projected
Opening GFA	199.09	199.48	275.83	328.13
R&M Costs as % of GFA (K factor)	2.50%	2.50%	2.50%	2.50%
Net R&M Expenses	4.98	4.99	6.90	8.20

Table 2 Proposed R&M Expenses

Employee Cost

- 2.5 The Petitioner has estimated its employee cost in the ratio of value of the fixed assets transferred to HPPTCL and the total value of fixed assets available with HPSEBL as on 1st April 2011. The employee cost filed by HPSEBL for FY12 has been apportioned in the ratio of the GFA available with HPPTCL to that of HPSEBL to estimate the employee cost of FY12.
- 2.6 The DA for FY11 has been calculated by HPPTCL at 48% of the total basic salary and grade pay (after deducting the arrears paid under this head) projected for FY11. Thereafter, further two installments of DA at the rate of 6% each have been assumed every year for projecting the DA for subsequent years of the Control Period. This increase in DA has been estimated considering the past trends of increase in DA for the employees of HPPTCL and the same is in line with that of State Government employees.
- 2.7 The Petitioner has submitted that since only the task of construction of new lines and

FY14

FY13

FY12

sub-stations has been entrusted to HPPTCL, the entire employee cost of the employees deployed in HPPTCL has been capitalized. However, in its projections for net employee cost, the Petitioner has considered only a part of its gross employee cost as capitalized.

2.8 The employee cost for the Control Period proposed by the Petitioner is given below:

Employee Cost) RE Projected Projected **Projected Salaries & Allowance** Salaries 1.41 18.98 19.05 19.15 Grade Pay 0.53 4.35 4.25 4.1 Dearness Allowance 0.85 13.98 16.31 19.43 Other Allowances & Relief 0.14 1.91 1.92 1.93 Arrears due to the 6th Pay Commission 0 4 7.22 0 Salaries – Total 2.93 45.53 46.44 44.61 0.04 Medical Expenses Reimbursement 0.53 0.56 0.6 0 0.01 Leave Travel Concession 0.01 0.02 Earned Leave Encashment 0.08 1.07 1.09 1.2 Leave Salary Contribution 0 0.01 0.01 0.02 Payment Under Workman's Compensation 0 0.03 0.03 0.03 0 Staff Welfare Expenses 0.05 0.05 0.06 Allowances - Total 0.12 1.7 1.75 1.93 **Terminal Benefits** a) Pension Payments 0.63 8.51 8.54 8.58 b) Gratuity Payment 0.11 1.51 1.52 1.53

Table 3 Proposed Employee Cost (Rs Cr)

FY11

Administrative & General Expenses

Any Other Items

Terminal Benefits – Total

Gross Employee Cost

Less: Capitalization

Net Employee Cost

2.9 The A&G expenses proposed by the Petitioner have been estimated in the ratio of value of the fixed assets transferred to HPPTCL and the total value of fixed assets available with HPSEBL as on 1st April 2011. The A&G Expenses filed by HPSEBL for FY12 have been apportioned in the ratio of the GFA available with HPPTCL to that of HPSEBL to estimate the A&G Expenses of FY12.

0.04

0.78

3.83

3.58

0.25

0.52

10.54

58.68

3.59

55.09

0.53

10.59

57.87

3.61

54.26

0.53

10.64

57.18

3.63

53.55

2.10 HPPTCL has quoted the projections for CPI (overall) for Industrial Workers and WPI (overall) made by HPSEBL in its original MYT & ARR Petition for the Second Control Period. Based on the CPI and WPI trends of the past six years from 2004-05

to 2009-10, HPSEBL had projected CPI (overall) for Industrial Workers and WPI (overall) as shown below:

Year	Projected growth in WPI	Projected Growth in CPI
2009-10	3.85%	12.30%
2010-11	5.35%	7.74%
2011-12	5.53%	8.44%
2012-13	5.55%	8.72%
2013-14	5.74%	9.26%
Average	5.21%	9.29%

Table 4 Projection of Inflation index by the Petitioner

2.11 Thereafter, HPPTCL has followed HPSEBL's original petition in arriving at an indexation factor using the following formula:

$$INDX_n = 0.75*CPI_n + 0.25*WPI_n = 0.75*(5.21\%) + 0.25*(9.29\%)$$

Hence, HPPTCL has estimated the inflation factor to be 6.23% for projection of A&G Expenses in respect of transmission lines transferred from HPSEBL to HPPTCL.

- 2.12 It shall be pertinent to mention here that after notification of the revised MYT Regulations in April 2011, the Commission has specified that projections of A&G Expenses must be on the basis of WPI index alone. Accordingly, HPSEBL later made changes to its original submission and filed a revised MYT & ARR petition to bring it in line with the revised MYT Regulations. However, HPPTCL has continued with the indexation factor based on CPI and WPI as estimated by HPSEBL in its original petition.
- 2.13 A&G Expenses for the Control Period proposed by the Petitioner is given below:

FY11 FY12 **FY13 FY14 Administration Expenses** RE Projected Projected **Projected** Rent rates and taxes (Other than all taxes on 0.01 0.06 0.06 0.07 income and profit) Telephone, Postage, Telegram, Internet Charges 0.04 0.17 0.18 0.19 0.04 0.17 0.19 Consultancy Charges 0.18 Other Professional Charges 0.01 0.04 0.04 0.05 0.95 Conveyance and Travel 0.22 1.02 1.67 Regulatory Expenses 0.04 0.17 0.18 0.19 SLDC Fee and Charges 0.04 0.16 0.17 0.18 Regulatory Licence fee 0.00 1.00 1.06 1.13 Technical Fee 0.02 0.09 0.10 0.10 **Sub-Total of Administrative Expenses** 0.42 2.81 2.99 3.77 Other Charges

Table 5 Proposed A&G Expenses

Administration Expenses	FY11	FY12	FY13	FY14
Administration Expenses	RE	Projected	Projected	Projected
Fee and Subscriptions, Books and Periodicals	0.01	0.03	0.03	0.05
Printing and Stationery	0.02	0.10	0.11	0.16
Advertisement Expenses (Other than Purchase Related) Exhibition & Demo.	0.01	0.04	0.04	0.06
Electricity Charges To Offices	0.04	0.17	0.18	0.29
Water Charges	0.00	0.01	0.01	0.03
Any Other expenses	0.33	1.32	1.40	2.21
Sub-Total of other charges	0.41	1.67	1.77	2.80
Legal Charges	0.00	0.01	0.01	0.02
Auditor's Fee	0.02	0.10	0.11	0.16
Freight – Material Related Expenses	0.01	0.06	0.06	0.18
Sub-Total	0.03	0.17	0.18	0.36
Total Charges	0.86	4.65	4.94	6.93
Total Charges Chargeable To Capital Works	0.00	0.89	0.95	1.01
Total Charges Chargeable to Revenue Expenses	0.86	3.76	3.99	5.92

Depreciation

- 2.14 HPPTCL has proposed a Capital expenditure plan which would be funded through both debt and equity. Based on the capitalization plan, the additional depreciation is estimated and included in the total depreciation amount during the Second Control Period.
- 2.15 Depreciation for the Control Period proposed by the Petitioner is given below:

FY11 FY12 FY13 **FY14** Depreciation (Rs. Cr) RE Projected Projected Projected GFA - Opening Balance 199.09 199.48 275.83 328.13 Net Additions during the Year 0.39 76.35 52.30 530.00 GFA – Closing Balance 199.48 275.83 328.13 858.13 4.99 **Depreciation for the Year** 4.98 6.90 8.20 **Depreciation Rate %** 2.50% 2.50% 2.50% 2.50%

Table 6: Proposed Depreciation

Interest & Finance Charges

- 2.16 The Petitioner has proposed Interest & Finance charges based on the proposed capital expenditure plan for the entire Control Period and the existing loans. It has been assumed that the opening value of assets transferred to HPPTCL amounting to Rs. 199.09 Cr has been funded by a normative loan of the same amount.
- 2.17 Interest rate for new loans has been assumed @ 9.5% p.a. for Normal Schemes (other works) and @ 3.6% p.a. for ADB schemes. Interest on working capital has been

assumed at 12.25%. Interest & Finance Charges proposed by the Petitioner for the Control Period are given below:

Table 7 Proposed Interest & Finance Charges

Interest Costs (Rs Cr)	FY11 RE	FY12 Projected	FY13 Projected	FY14 Projected
Interest and Finance Charges on Long Term Loans / Credits from the FIs/banks/organisat approved by the State Government				
Interest on loan on Opening Assets Transfer from HPSEBL)	18.91	18.44	18.39	18.38
Others (normative)	0.55	3.62	7.37	8.54
ADB Tranche – I	0.00	1.10	6.22	11.77
ADB Tranche – II	0.00	0.00	0.83	4.86
Total of I	19.46	23.16	32.81	43.55
Interest on Working Capital Loans or Short Term Loans	0.50	2.10	2.33	2.69
Total of A: I + II	19.96	25.26	35.14	46.24
Other Interest & Finance Charges				
Total of B	0.00	0.00	0.00	0.00
Grand Total of Interest & Finance Charges: A + B	19.96	25.26	35.14	46.24
Less: Interest & Finance Charges Chargeable to Capital Account	0.55	4.72	9.34	16.62
Net Total of Interest & Finance Charges : For Revenue Account: C-D	19.41	20.54	25.80	29.62

Interest on Working Capital

2.18 The normative interest on working capital estimated by HPPTCL is summarized below:

Table 8 Proposed Interest on working capital (Rs Cr)

Working Conital Dequipment	FY11	FY12	FY13	FY14
Working Capital Requirement	RE	Projected	Projected	Projected
Two month of Receivables	5.12	15.26	17.63	19.57
1/12 of O&M	0.51	5.32	5.43	5.64
Maintenance spares @ 40% of R&M of one month	0.17	0.17	0.23	0.27
Total Working Capital	5.80	20.75	23.29	25.48
Interest on WC @ 12.25%	0.71	2.54	2.85	3.12

Return on Equity

2.19 The Petitioner has proposed a capital expenditure plan for the Second Control Period, which would be funded through both debt and equity. Equity to the tune of 30% of total proposed capital expenditure has been considered for computation of ROE of business of HPPTCL.

- 2.20 HPPTCL has calculated return on equity @ 23.21% for completed works, based on 15.5% return on equity and the balance 7.71% for payment of normal corporate tax @ 33.22% as per the HPERC (Terms & Conditions for Determination of Transmission Tariff) Regulation, 2011.
- 2.21 The return on equity proposed by the Petitioner for the Second Control Period is summarized below:

FY11 FY12 FY14 FY13 **Return on Equity** RE Projected Projected **Projected** Closing Balance of Equity 0.00 22.91 38.54 197.54 Rate of Return on Equity 23.21% 23.21% 23.21% 23.21% **Return on Equity** 0.00 0.00 5.32 8.95

Table 9: Proposed Return on Equity (Rs Cr)

Non-Tariff Income & Other Income

2.22 Non-tariff income includes income from Investment, Fixed & Call Deposits and miscellaneous charges from consumers. The Petitioner's submission of Non Tariff Income is summarized below:

Non-Tariff Income	FY11	FY11	FY12	FY13
(Rs. Cr)	RE	RE	Projected	Projected
1. Non-Tariff Income				
Income From Investment, Fixed & Call Deposits				
a) Interest on Fixed Deposits	0.00	0.00	0.00	0.00
Non-Tariff Income – Total	0.00	0.00	0.00	0.00
2. Other Income				
a) Interest on advances to suppliers/contractors	0.02	0.03	0.05	0.06
b) Miscellaneous receipts	0.43	0.32	0.20	0.09
Other Income Total	0.45	0.35	0.25	0.15
Total Non-Tariff Income & Other Income	0.45	0.35	0.25	0.15

Table 10 Proposed Non-Tariff & Other Income

Aggregate Revenue Requirement

2.23 The Table 11 summarizes the Petitioner's submission of ARR for the Second Control Period (FY 12–FY 14).

FY14 FY11 FY12 **FY13** Aggregate Revenue Requirement RE Projected Projected Projected Costs **O&M** Expenses Employee Cost 0.25 55.09 54.26 53.55 4.99 Repairs & Maintenance Cost 4.98 6.90 8.20 3.99 5.92 Admin & General Cost 0.86 3.76 O&M Expenses – Total 6.09 63.84 65.15 67.67 20.54 29.62 Interest Cost 19.41 25.80 4.99 4.98 6.90 8.20 Depreciation Interest on Working Capital 0.71 2.54 2.85 3.12 **Total Costs** 31.19 91.91 100.70 108.61 Add: Return on Equity 0.00 0.00 5.32 8.95 Add: Recovery of Prior Period Gap 0.00 0.00 0.00 0.00 Less: Non-Tariff Income 0.35 0.25 0.45 0.15 **Aggregate Revenue Requirement** 30.74 91.56 105.77 117.41

Table 11 Proposed ARR for the Control Period (Rs Cr)

Transmission Tariff

2.24 The table below summarizes the Petitioner's proposal for the Transmission Tariff for FY12.

Table 12 Transmission Tariff proposed by HPPTCL

Particulars	FY12	FY13	FY14
Farticulars	Projected	Projected	Projected
Power Purchase from CGS, Inter-State etc. as per MYT ARR from 2011-12 to 2013-14 of HPSEBL	6451	7047	8361
Less: Quantum of Power Purchase from Micro Hydel Power Stations	518	595	631
Net Power Purchase which routed through the Transmission system of HPPTCL	5933	6452	7730
Less: Transmission Line losses at interface point @ 2%	119	129	155
Net Energy Power supplied to HPSEBL through the Transmission system of HPPTCL	5814	6323	7575
Amount of ARR required	91.56	105.77	117.41
Rate of Transmission Charges paise per kWh	15.75	16.73	15.50
Transmission Cost (approximate) (Rs.)	0.16	0.17	0.16

A3: OBJECTIONS FILED AND ISSUES RAISED BY CONSUMERS DURING PUBLIC HEARINGS

- 3.1 There were two objectors who filed written objections to the Multi-Year Tariff petition for FY12 FY14 filed by the HPPTCL. The objectors listed at Sr. No (1) have filed their objections jointly. The list of objectors is as follows:
 - (1) M/s H.M. Steel Ltd., Kala Amb

M/s J.B. Rolling Mills (P) Ltd., Kala Amb

M/s Sri Rama Steels Ltd., Barotiwala

- (2) Himachal Pradesh State Electricity Board Limited
- 3.2 The public hearing was held on 31st May, 2011 at the Commission's Court Room in Shimla. Names of objecting organization/companies who presented their cases before the Commission during public hearing, are given below:

Table 13 List of Objectors present during Public Hearing

S. No.	Objector/Organization				
1	M/s H.M. Steel Ltd., Kala Amb				
	M/s J.B. Rolling Mills (P) Ltd., Kala Amb				
	M/s Sri Rama Steels Ltd., Barotiwala				
2	Himachal Pradesh State Electricity Board Limited				

3.3 Issues raised by the objectors along with replies given to the objections by HPPTCL and views of the Commission are detailed in the sections below:

General Comments on Petition filed by the HPPTCL

- 3.4 The objectors pointed out the following issues related to the MYT Petition filed by the HPPTCL:
 - (1) The list and cost of works have been given without indicating any target dates of completion, present status, etc. in the absence of which it is not possible to examine the assets created and added during different years of the MYT period.
 - (2) The cost of assets transferred to the new entity have not been indicated anywhere in the petition.
 - (3) R&M expenses were initially projected as 0.85% of GFA. However, the same were subsequently escalated to 2.5% in the revised petition. K factor of 2.5% has been taken from Punjab Transco whereas it should have been calculated for the State separately.

- (4) It is stated that employees have been transferred to HPPTCL in the ratio of Assets as on 1st April 2011 which is not justified. The requirement of number of employees in Transmission is far less than in Distribution.
- (5) Employee cost is not capitalized whereas it is stated to have been capitalized.
- It is not clear how the expenditure has been divided into revenue and capital (6) charges. Moreover, no units have been mentioned.
- (7) The source and composition of GFA of Rs. 199.09 Cr has not been given. Construction of only new works has been allotted to the petitioner. Addition of Rs. 76 Cr in FY12 over FY11 to the GFA is not explained.
- The equity plan and the source for the same may be clarified, along with (8) details of equity proposed to be infused year-wise.
- (9) The rate of interest on working capital is very high.
- (10)Closing balance of equity as provided in the relevant table in the petition is not explained.
- Escalation of Employee Cost and A&G Expenses has been computed on the (11)basis of both CPI and WPI. However as per the new regulations issued by the Commission, employee cost has to be linked with CPI only while A&G expenses should be linked with WPI alone.
- (12)The gross employee cost in FY11 is Rs 3.83 Cr which suddenly increases to Rs 58 Cr during the Control Period.
- (13)Extremely high provision of terminal benefits during the MYT Control period should be explained in context with actual employees of HPPTCL retiring during this period.
- It is not clear if there is any provision of cost of employees deputed by (14)HPSEBL (for O&M of lines of HPPTCL on its behalf) in the Employees Expenses for the MYT Control Period
- (15)HPPTCL has mentioned that it is capitalizing the entire employee cost for the construction of new lines and substations. The Commission is requested to ask HPPTCL to provide all the relevant details regarding capitalization.
- HPPTCL has shown the license fees for FY11 as nil and has not taken into (16)account the license fees for FY11 which is to be refunded to HPSEBL amounting to Rs. 80,82,192 on reorganization of HPSEBL. The Commission on 31st July 2010 ordered the HPPTCL to deposit the transmission license fee for FY11 i.e. w.e.f. 10th June, 2010 to 31st March 2011. However, the annual transmission license fee for FY11 had already been deposited (Rs. 100 Lakhs)

- by HPSEBL. The amount which is required to be paid for the period 10th June, 2010 to 31st March 2011 works out to be Rs. 80,82,192. This amount is to be refunded by HPPTCL to HPSEBL.
- (17) It is not clear why HPPTCL has considered the normative loan of Rs 199.09 Cr for assets transferred to it from HPSEBL whereas the actual loan liability for these assets will be very less as most of the assets are very old and loan pertaining to most of the assets has already been repaid. The interest component of this normative loan forms the largest part of overall Interest Cost and must be reconsidered on actual basis.
- (18) HPPTCL has mentioned that other income includes "Income from Trading". This may be clarified that as per the Act and applicable Regulations, the applicant that holds a license for transmission of electricity shall not be qualified for grant of License. Hence HPPTCL must clarify why same has been considered while computing ARR.
- (19) HPPTCL is requested to provide the cost-benefit analysis of all the Schemes in its capital expenditure plan of Rs 1068.45 Cr. Further, the commissioning schedule of the projects should be provided for which these lines/ substations are being constructed. The Commission is requested to consider only those projects for actual Capex for Control Period which genuinely required to be constructed during the MYT Control Period on basis of actual requirement.
- (20) HPPTCL in its prayer in the petition has requested the Commission to advise the State Government to transfer the entire Transmission activities from HPSEBL to HPPTCL, when the transfer scheme notified by the GoHP vide notification dated 10th June, 2010 is a detailed document in which the transfer of function, undertaking personnel, rights and obligations etc. have been spelt out clearly. Therefore, the request of HPPTCL to transfer the assets shall be contradictory to the transfer scheme & agreement signed thereafter.

Petitioner's Response

- 3.5 The compilation of replies filed by HPPTCL to the above comments/issues is as follows:
 - (1) The list of works to be carried out during the Control Period was given duly mentioning the capital outlay to be incurred. As regards the target date of completion, present status, etc., necessary break-up is duly provided in the Tariff Petition.
 - (2) Transmission Lines existing with HPSEBL for the Intra State Transmission of Power as on 10th June, 2010 worth Rs. 199.09 Cr, except for the lines for evacuating power from generating stations of HPSEBL, were vested in HPPTCL. This fact was duly incorporated in the MYT ARR and Tariff Petition and also mentioned in the Business Plan enclosed with the Petition.

- (3) The earlier figure of 0.85% was based on the HPSEBL ARR and Tariff Petition for the Second Control Period. However, HPSEBL observed that R&M expenses so projected are on the lower side and specifically pointed out that in the neighbouring state of Punjab, the R&M expenses as projected by Punjab Transco are 2.5% of GFA. Since it was not possible for HPPTCL to calculate the 'K' factor for the state of Himachal Pradesh separately and as advised by HPSEBL, the K factor of Punjab Transco was taken for the calculation of R&M expenses.
- (4) Since the Transmission Lines existing at the time of vesting in HPPTCL are very old, the Gross Assets Value thereof is very less and therefore the proportionate employee cost on Transmission activities is on lower side. Since the HPPTCL is sharing the employee cost of HPSEBL its counter effect on Distribution & Supply activity will be less and thereby the ultimate result would be nil.
- (5) Employee cost has been capitalized in each year of Control Period as shown in the MYT Petition.
- (6) Since the A&G Expenses claimed by HPPTCL are to be incurred partly by HPSEBL, the break-up of these expenses expected to be incurred by HPSEBL and HPPTCL separately was provided by HPPTCL annexed to its response to public comments. As per this information, A&G expenses anticipated to be incurred exclusively by HPPTCL during FY12 are worked out to Rs. 2.35 Cr out of which a sum of Rs. 0.89 Cr is worked out to be capitalized because this portion of the expenditure relates to be incurred on the activities entrusted to the project wing of HPPTCL. During subsequent years, the A&G expenses of the projects wing of the HPPTCL are worked out to Rs. 0.95 Cr in FY13 and Rs. 1.01 Cr during FY14. Accordingly the amount to this extent has been capitalized which is justified.
- (7) As specified in the MYT Petition, HPPTCL was entrusted with the ownership, operation and maintenance of transmission lines of 66 kV and above owned by HPSEBL, in compliance of which transmission lines worth Rs. 199.08 Cr were vested in HPPTCL by the HPSEBL. Thus the GFA of Rs. 199.08 Cr was the value of these transmission lines transferred by HPSEBL to HPPTCL in compliance of the Government order. Rs. 76 Cr is the cost of new works to be commissioned during the year.
- (8) Equity is utilized for construction of new transmission lines and sub-stations, the details of which are provided in the Petition. The equity is invested by the GoHP.
- (9) The rate of interest on working capital permissible as per HPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011 is the Prime Lending Rate of State Bank of India prevalent on 1 April of the respective Financial Year. The PLR of SBI for April, 2011 was taken as 12.25%.

- (10) Closing balance of equity has been worked out on the basis of proportionate share of capital expenditure projected for construction of new transmission lines and sub-stations. Since the equity is not required to be infused, there is straight relation of the balance of equity with the equity actually availed of.
- While recasting the ARR and Tariff Proposal as per new Regulations issued by the Commission, it was informed that HPSEBL is not revising the ARR and Tariff Petition filed before the Commission and therefore, knowing well that as per new Regulations the escalation was linked with CPI/WPI only, HPPTCL continued to share the proportionate employee cost as worked out by HPSEBL taking the escalation factor of earlier Regulations. In case HPSEBL has revised its employee expenses as per new Regulations, the Commission may approve a proportionate employee cost taking the GFA value in respect of transmission Lines of HPSEBL vested in HPPTCL to the extent of Rs. 199.08 Cr.
- (12) In FY11 no transmission tariff in respect of transmission lines vested in HPPTCL w.e.f. 10th June, 2010 was claimed because such charges were duly incorporated in the Retail Tariff approved by the Commission for HPSEBL for the first Control Period (FY09–FY11). The HPPTCL, therefore, claimed Transmission Tariff in respect of transmission lines owned by it for the Second Control Period (FY12–FY14) taking into consideration that these transmission lines are being operated and maintained by HPSEBL as per their Agreement. The proportionate employee expenses were extracted from the ARR and Tariff Petition filed by HPSEBL. Thus there appears sudden increase in employee cost from Rs. 3.83 Cr to Rs. 58.68 Cr which is fully justified.
- (13) These benefits have been extracted from the employee cost projected by HPSEBL itself as per its ARR and Tariff Petition for the Second Control Period.
- (14) The employee cost is inclusive of employee expenses incurred by HPSEBL for the O&M of transmission lines owned by HPPTCL.
- (15) Details of Capex are duly provided in the revised petition filed before the Commission.
- (16) The point related with refund of proportionate Transmission License fee paid to HPERC by HPSEBL for FY11 is irrelevant because the Retail Tariff approved by HPERC of HPSEBL for FY11 was inclusive of transmission charges. Due to these reasons the HPPTCL has not filed any ARR and Tariff Proposal for determination of Transmission charges covering the period from 10th June, 2010 to 31st March, 2011. Now, in compliance with the Commission's direction, the Transmission License fee for FY11 (period 10th June, 2010 to 31st March, 2011) amounting to Rs. 80,82,192 has been paid to HPSEBL vide cheque No. 724676 dated 24th May, 2011 drawn on State Bank

of Patiala Khalini, Shimla. Simultaneously, the HPPTCL will raise a bill for transmission charges covering the amount of Transmission License fee so paid, to be passed through to HPSEBL for recovery from its consumers through Retail Tariff. Particularly because during this period the transmission lines so vested in HPPTCL remained in the possession of HPSEBL and that these have continued to be operated and maintained in the same manner as were in force prior to 10th June, 2010. HPPTCL will raise the bills for Transmission Charges against HPSEBL for the period from 10th June, 2010 to 31st March, 2011 with the objective of recovering the Transmission Licensee fee so borne, to be recovered from the beneficiary which is HPSEBL itself.

- (17) As per HPSEBL's Petition, only the GFA to the extent of Rs. 199.08 Cr has been shown as vested in HPPTCL, but neither the accumulated depreciation nor equity or debts have been vested in HPPTCL to counter balance such transfer. It was, therefore, incumbent upon the HPPTCL to claim interest cost on the amount of debts equivalent to the value of GFA so vested in it, because HPSEBL expressed its inability to spare any equity for HPPTCL. The HPPTCL has, therefore, claimed the interest cost on the normative debts to the extent of value of GFA although the amount so recovered through the Transmission Tariff will be reimbursed to HPSEBL because the loan servicing of the existing debts is still continued by HPSEBL.
- (18) The caption "Income from Trading" does not imply "Income from Trading Other than Transmission activities". It has been used for the Non-Tariff Income derived from the transmission business itself but not covered by the Transmission Tariff as is duly described in the HPERC (Terms & Conditions for Determination of Transmission Tariff) Regulations, 2011.
- (19) The Capital Expenditure Plan has been drawn in such a manner that it may commensurate with the requirement of intra-State transmission of power within the State. It is also evident from the fact that in spite of escalation factor no substantial increase in the rate of transmission cost per unit has been envisaged which itself justifies the cost benefit available through the capital investment to the extent of Rs. 1085.45 Cr during the Control Period (FY12–FY14). However, necessary details related with Capex Plan are duly submitted to the Commission for seeking the investment approval of capital works.
- (20) According to the present status, only the existing transmission lines meant for intra-State transmission of power have been vested in HPPTCL and the O&M of transmission sub-stations including control activities are still retained by HPSEBL. Without support of sub-stations the vesting of intra-State transmission lines into HPPTCL is like retaining body without soul. HPPTCL has made the request as per Section 39 of the Act and notification issued by the GoHP on 10th June, 2010. As per the said notification, "the statutory function of State Transmission Utility (STU) shall be performed by HPPTCL". Further, the decision of Commission will be acceptable.

Commission's Observations

- 3.6 The Commission is in agreement with the Objectors that the MYT ARR and Tariff Petition filed by HPPTCL involve certain issues. It may also not be fair to derive the estimate of several expenses directly from the HPSEBL's MYT ARR and Tariff Petition on a proportionate basis (i.e. based on the value of assets transferred to the Petitioner).
- 3.7 On the issue of new capex works, the stand taken by the Commission is detailed in the Chapter A4 of this Tariff Order.
- 3.8 The Commission, however, directs the Petitioner to obtain all the relevant data and information regarding the assets transferred to it and related matters, and file a more comprehensive first Annual Performance Review (APR) petition.
- 3.9 At the time of public hearing held on 31st May, 2011, the Commission pointed out several discrepancies in the methodology of projections done by HPPTCL in its ARR & tariff petition. The Commission also directed the Petitioner to submit complete information about details of assets transferred to HPPTCL along with details of actual loans taken on these transferred assets. Further, vide the Commission's Memo No. HPERC/480-Vol.I/TFA Sec./2011-808-809 dated 31 May, 2011, the Commission sought additional information in response to which the Petitioner filed the following additional information:

Table 14: Additional information provided by HPPTCL

S. No.	Deficiency to which additional information was provided by HPPTCL
1	Commercial Operation date and Capital cost on Completion with additional capital cost, for each transmission line for the purpose of working out depreciation.
2	Total debt, balance debt, interest rate of loan, instalment and annual interest cost for FY 2011-12 and onwards for each transmission line.
3	Break-up of O&M expenses i.e. employee cost, repair and maintenance, administrative and general expenses for maintenance of each transmission line.
4	Employee cost for each transferred asset as per HPSEBL norms and also as per regulatory norms.

A4: INTERACTION WITH MANAGING DIRECTOR AND DIRECTORS OF HPPTCL

- 4.1 In order to highlight important concerns of the Commission and to gain insight into the present day organizational / operational problems engulfing the Power Sector Utilities like HPPTCL, the Commission held interactive session with the Management of HPPTCL. This interactive session was intended to further enable the Commission to understand the difficulties being experienced by them and evoke suggestions/ solutions from them for the better performance of the Utility.
- 4.2 Interaction with the Managing Director and Directors of HPPTCL was held on date 20th May 2011 at 11.00 AM. The agenda for discussions were circulated beforehand for these interactive sessions.
- 4.3 The deliberations on issues that were raised by the Management of HPPTCL and the Commission during these interactions are summed up below:

Status of Transmission Master Plan

The Management of the HPPTCL informed the Commission that the Transmission Master Plan had been got approved from the CEA. In addition to the Master Plan, four (4) number schemes had also been approved by the CEA for execution. When the question on inclusion of proposal on evacuation system from Small Hydro Projects (SHPs) arose, it was suggested by the Commission that basin wise sub-plan on evacuation system from SHPs be prepared and notified for the information of the developers. The Commission also recommended proper coordination between the HPPTCL and the HPSEBL particularly with references to assigning for schemes for evacuation of power timelines etc. and informed that the HPPTCL as a Transmission Company (TRANSCO) will also have to play proactive role as a State Transmission Utility (STU). The Commission also suggested that proper analysis on cost benefits, modes of financing and recovery of costs with regard to investment proposals in construction of transmission networks be carried out.

Preparation of CAPEX Plan

- 4.5 The HPPTCL was advised by the Commission to prepare a CAPEX plan and approach the appropriate Commission for its approval. In order to secure its investment, HPPTCL was suggested to issue letters to all the IPP's asking them to enter into agreements of the nature of either PPA's or of open access as per the provisions of existing HPERC Regulations.
- 4.6 The Commission also suggested that based on the Transmission Master Plan, execution of critical transmission network projects be done in a time bound manner.

A5: ANALYSIS OF THE AGGREGATE REVENUE REQUIREMENT (ARR) FOR THE SECOND CONTROL PERIOD

- 5.1 The Commission has analysed the MYT ARR and Tariff Petition submitted by the Petitioner for approval of the Petitioner's ARR and determination of Transmission Tariff for the Second Control Period (FY12–FY14).
- 5.2 The Commission held several rounds of technical discussions to validate the data submitted by the Petitioner and sought further clarifications on various issues. The Commission has considered all information submitted by the Petitioner as part of the Tariff Petition, responses to various queries raised during the discussions and during the public hearing for determination of transmission tariff.
- 5.3 This Section contains detailed analysis of the MYT petition and various parameters approved by the Commission for determination of ARR and Transmission Tariff.

Approach

5.4 The Petitioner has submitted its capital expenditure plan for the Control Period (FY12-FY14) as tabulated hereunder:

Table 15: Details of Capital Works Proposed by the Petitioner during FY12-14 (Rs. Crores)

S.N.	Capital Works	FY12-FY14
	Normal Scheme	
1	220 KV 31.5 MVA, GIS S/Stn at Palchan	55.35
2	220 KV D/C Trans. Line from Palchan S/Stn to 220 KV S/s of AD Hydro Power Project	21.00
3	220 KV D/C Trans. Line from Karian to PGCIL Pooling Station at Chamba	4.10
4	220/33 KV, 50/63 MVA GIS S/Stn. At Karian	48.00
	Sub-total	128.45
	ADB- Tranche 1	
1	220 KV D/C Transmission Line from Hatkoti to Sainj (28 Kms)	77.0
2	220/400 KV, 1x315 MVA P.S at Sainj + LILO of one circuit of 400 KV Jhakri-Abdullapur D/C Line at Sainj (Shimla)	120.0
3	220/400 KV, 2X315 MVA P.S at Sherpa Colony + LILO of 400 KV Wangtoo Abdullapur Line	160.0
4	66/220 KV, 2x80/100 MVA pooling station at Sherpa Colony with 220 kV LILO of Kashang-Bhaba Line	100.0
5	66/220 KV, 31.5 MVA+22/66, 2x10 MVA sub-station at Bhoktoo with 220 kV LILO of Kashang-Bhaba Line	73.0
	Sub-total	530.00
	ADB- Tranche 2	
1	220 KV switching station at Hatkoti (4 Nos 220 KV GIS feeder Bays)	63.0
2	33/220 KV, 50/63 MVA P.S at Lahal + 220 KV line upto 220 KV Yard of Budhil HEP	96.0

S.N.	Capital Works	FY12-FY14
3	132/220 KV, 2x50/63 MVA P.S at Naggar with LILO of 220 KV AD Hydro Line	94.0
4	22/66 KV, 2x 6.3 MVA P.S at Karcham with 66 KV DC Line upto Sherpa colony	58.0
5	33/132 KV, 2X31.5 MVA P.S at Pandoh + Tapping of 132 KV Bajoura- Kangoo line	40.0
6	22/66 KV, 2x 10 MVA P.S at Bagipul (Nirmand) + 66 KV DC line upto Kotla	59.0
	Sub-total	410.00
	Grand Total	1068.45

- 5.5 From the above capital plan, the Commission notes that the proposed transmission lines and related sub-stations are basically meant for evacuation of power from the under-construction hydro electric projects by IPPS, CPUs and State utility. Some of the proposed systems may not touch the HPSEBL's network and may have interconnection directly with the Central Transmission Utility system. As such these could form part of the inter-state transmission system. The Petitioner shall need to file petitions for approval of capital cost and determination of tariff before the appropriate Commission(s) as the transmission system forming part of the intra-state transmission system shall fall under the purview of this Commission. In view of the above, the Commission has only considered the transmission lines worth Rs.199.08 Cr transferred by HPSEBL for the purpose of present tariff determination.
- 5.6 The Commission however advises the Petitioner to approach the appropriate commission to seek approval on the each component of the proposed capex plan and also for determination of transmission line wise ARR and Tariff Petition upon commissioning of the individual lines along-with the information required as per the applicable Regulations of the appropriate Commission in force.
- 5.7 The Petitioner has submitted that it was mutually agreed between the Petitioner and HPSEBL that HPSEBL will continue to operate and maintain the transmission lines so vested in HPPTCL with effect from 10.06.2010 and a formal agreement in this respect was entered into between HPPTCL and HPSEBL on 20.11.2010. In accordance with the terms of the agreement, the Petitioner is required to pay annual charges to HPSEBL for the O&M of transferred transmission lines. However, the amount of O&M charges payable to HPSEBL has not been yet finalized and therefore, the Petitioner has for the purpose of present ARR and tariff determination, proposed the O&M expenses as per the norms set by the erstwhile Board, for the transferred transmission lines. In its additional information submitted in response to Commission's Memo No. HPERC/480-Vol.I/TFA Sec./2011-808-809 dated 31st May, 2011 as tabulated hereunder:

Table 16: Approved O&M Expenses (Rs. Cr)

Year	FY12	FY13	FY14
Employees Cost	2.55	2.81	3.09
R&M Expenses	1.64	1.81	1.99
A&G Expenses	0.51	0.56	0.61

Year	FY12	FY13	FY14
Total	4.70	5.18	5.69

- 5.8 The Commission has, therefore, decided to approve the O&M expenses as per the information provided by the Petitioner. The Commission however, directs the Petitioner to mutually work out the O&M expenses payable to HPSEBL and submit the same along with the first APR.
- 5.9 For other components of ARR viz., depreciation, interest & other finance charges, RoE, NTI, etc. the Commission has followed the MYT Regulations, 2011 and applied them on the value of on the transferred transmission lines worth Rs.199.08 Cr.
- 5.10 As per Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011 the base year for the Second Control Period means the financial year immediately preceding first year of the Control Period (i.e. FY11). The Regulations further provide that the baseline values (operating and cost parameters) for the base year of the Control Period shall be based on the latest audited accounts, estimate of the actual for the relevant year, prudence check and other factors considered appropriate by the Commission.
- 5.11 As stated above the Commission has considered the O&M expenses as provided by Petitioner in its additional submissions and other costs on the basis of the value of transferred transmission line and associated debts. The Commission, however, clarifies that all expense projections and the trajectory for the Control Period may be revised by the Commission as and when the audited accounts for FY11 are made available.

ARR for Transmission Licensee

- 5.12 As per the MYT Transmission Tariff Regulations, 2011 the ARR for the transmission business for each year of the Control Period shall contain the following items:
 - (1) Operation and Maintenance expenses;
 - (2) Financing cost which includes cost of debt including working capital (interest), cost of equity (return);
 - (3) Depreciation;
 - (4) Income tax; and
 - (5) Non-tariff income;
 - (6) Less: Income from other business.

Operation & Maintenance (O&M) Expenses

- 5.13 The Petitioner has submitted that in terms of the agreement entered into with HPSEBL, HPSEBL is responsible for operation and maintenance of the transmission lines transferred to HPPTCL. The O&M expenses payable to HPSEBL has to be mutually decided by both the Petitioner and HPSEBL. Pending agreement on O&M charges the transmission licensee has projected the O&M Expenses on the basis of norms set by the erstwhile Board.
- 5.14 As stated in Para 5.8 above, the Commission approves the O&M expenses as submitted by the Petitioner.
- 5.15 The Commission feels that in addition to O&M expenses (payable to HPSEBL) the Petitioner may also incur some additional expenditure for various statutory and other expenses incidental to its becoming the STU. Therefore, the Commission has approved additional Rs.1.00 Cr for such expenses for each year of the Control Period.

Year	FY12	FY13	FY14
Employee cost	2.55	2.81	3.09
A & G Expenses	0.51	0.56	0.61
R&M expenses	1.64	1.81	1.99
Other Statutory Levies	1.00	1.00	1.00
Operation & Maintenance Expenses	5.70	6.18	6.69

Table 17: Approved O&M Expenses (Rs. Cr)

Periodic Review & True up

- 5.16 As per the MYT Transmission Regulations, 2011 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 subjected to truing-up in the ARR. Further, any surplus or deficit on account of O&M expenses shall be to the account of the licensee and shall not be trued up in ARR.
- 5.17 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

Capital Investment

5.18 The Petitioner does not propose to incur any additional capital expenditure on the transferred transmission lines and therefore the Commission has approved the NIL capital investment for the transmission lines transferred to the Petitioner in view of the position clarified under Para 4.5 & 4.6.

Depreciation

5.19 The Petitioner has submitted the depreciation schedule, in accordance with the rates

specified in Appendix-I of the MYT Transmission Regulations, 2011 in respect of transferred transmission lines. The details of accumulated depreciation on the individual lines have also been submitted by the petitioner.

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 (i.e. the salvage 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 depredation 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.
- 5.23 The summary depreciation approved by the Commission for the Control Period is shown below.

Table 18: Approved Depreciation for the Control Period (Rs Cr)

Particulars	FY12	FY13	FY14
Depreciation	5.02	5.02	4.49

Interest Charges on Working Capital

5.24 Based on the approved O&M Expenses and expected receivables, the Commission approves the working capital requirement and interest on working capital for the Control Period in accordance with Regulations 21 and 22 of the MYT Transmission Tariff Regulations, 2011 as tabulated hereunder:

Table 19: Working Capital Requirement approved for Control Period (Rs Cr)

Particulars	FY12	FY13	FY14
1/12 th of total O&M Expenses	0.48	0.52	0.56
Maintenance Spares (40% of the R&M expense for one month)	0.05	0.06	0.07

Particulars	FY12	FY13	FY14
Receivables equivalent to 2 months average billing	1.95	2.01	1.99
Working Capital Requirement	2.48	2.58	2.61
Interest charges on Working Capital @ 13.25%	0.33	0.34	0.35

Interest and Finance Charges

5.25 The Petitioner has provided the details of loans tied-up in respect of the transferred transmission lines, amounting to Rs. 7.66 Cr as on the date of transfer of transmission lines as detailed hereunder:

Table 20: Details of Loans for Transferred Assets (Rs. Cr)

Schemes	Balance debt upto 10.6.10	Interest rate	Funding Agency
220 kV S/C Jassure- Thein Line	0.43	8.50 % & 12 %	PFC 04103007
220 kV D/C Nalagarh (PGCIL) to Nalagarh Line	6.39	11% & 11.75%	REC 060453
66 kV Bhakhra- Una LILO –Gwalthai	0.84	11.75% & 13.5%	REC 060439
Total	7.66		

5.26 Since no additional capitalization has been proposed by the Petitioner for the Second Control Period in respect of transferred transmission lines, the Commission has not considered any additional funding for the entire Control Period. Based on the submission of loan schedule provided by the Petitioner, the Commission approves the interest charges for the Control Period as tabulated hereunder:

Table 21: Interest Charges on Long term Loans approved for the Control Period (Rs Cr)

Particulars	FY11	FY12	FY13	FY14
Total Opening Balance	7.66	6.38	5.09	3.81
Total Repayment	1.28	1.28	1.28	0.76
Total Closing Balance	6.38	5.09	3.81	3.05
Total Interest	0.81	0.66	0.51	0.39
Interest Rate	11.50%	11.50%	11.50%	11.50%

5.27 The total interest and finance charges, including interest on working capital loan is detailed hereunder:

Table 22: Total Approved Interest and Finance Charges (Rs. Cr)

Particulars	FY12	FY13	FY14
Interest charges on Working Capital	0.33	0.34	0.35
Interest on Long Term Loans	0.66	0.51	0.39
Total	0.99	0.85	0.74

Return on Equity

5.28 The Commission observes that as there is no equity invested in the assets transferred to the Petitioner, the return on equity shall be nil.

Non-Tariff Income (NTI)

5.29 In view of the fact that the Commission has not considered any expenses other than those on transferred assets, the Commission has not considered the non-tariff income which is not related to transferred assets.

Aggregate Revenue Requirement (ARR)

5.30 The table given below provides a summary view of the Aggregate Revenue Requirement of the Petitioner as approved by the Commission for the Control Period:

Particulars	FY12	FY13	FY14
Operation & Maintenance Expenses	5.70	6.18	6.69
Interest & Financing Charges	0.66	0.51	0.39
Interest on Working Capital	0.33	0.34	0.35
Depreciation	5.02	5.02	4.49
Aggregate Revenue Requirement	11.71	12.05	11.92

Table 23: Approved ARR of HPPTCL for the Control Period (Rs. Cr)

- 5.31 In accordance to Regulation 33(1) of HPERC Transmission Regulation, 2011, the transmission charges are to be shared between the long and medium term consumers based on the allotted transmission capacity and contracted capacity. As the Petitioner has not entered into a transmission service agreement (TSA) with HPSEBL and/or any other user, the Commission is hence unable to determine the transmission tariff and the same shall be determined as and when the TSA is executed by the Petitioner. The Petitioner is directed to expedite signing of the requisite agreements.
- 5.32 The Commission believes that various liabilities pertaining to the lines transferred to HPPTCL are yet to be transferred to it. Till such time the liabilities are actually transferred to HPPTCL and it starts discharging the same independently, the Petitioner shall make available under the relevant components of the ARR to the transferor (HPSEBL) who is actually discharging these liabilities pending final settlement of the accounts etc. The Petitioner may however start billing on the basis of the approved ARR

Transmission Losses on HPPTCL System

5.33 The Petitioner has assumed transmission losses on its system as 2% but has not provided and details of the same. The transmission losses on the Petitioners system are hitherto being borne by HPSEBL under its composite system. The targeted losses for HPSEBL's system shall therefore have to be correspondingly reduced to the extent of losses on the Petitioner's system. The Petitioner is accordingly directed mutually to agree with HPSEBL on the mechanism for determination of transmission losses and submit the same for approval of the Commission. The Petitioner is also directed to file the base line data for FY11 along with the first APR.

Advisory to HPPTCL

- 5.34 After formation of HPPTCL in 2008 for carrying out certain limited functions, it has also been designated as STU in 2010. HPPTCL is accordingly required to discharge the functions as per Section 39 and 40 of the Act. The planning and co-ordination relating to intra-state transmission system with the distribution licensee and various others is one of the most important functions of the STU. It is heartening to note that master plans for the transmission system in the State are getting firmed up in a phased manner and ADB funds have also been arranged for certain components. The State Govt. has also taken a positive step by constituting State Transmission Co-ordination Committee to facilitate co-ordinations on the planning aspects, about which this Commission had also been stressing in the past.
- 5.35 Coordinated development of the system required for evacuation of power from SHPs is one of the important areas which require a focused approach while planning the transmission and sub transmission system. In order to ensure coordinated development of such systems the Commission would suggest that the HPPTCL should, apart from the main transmission plans, also facilitate preparations of sub plans in coordination with HPSEBL, matching with commissioning of SHPs, so that the concerned agencies mandated for implementation of such works feel free to take up the works in phases as per the requirements. The periodical review of progress of the implementation of the sub plan by the co-ordination group could prove to be very helpful.

5.36

LIST OF ABBREVIATIONS

The abbreviations and acronyms used in this tariff order shall have the following respective meanings unless the context requires otherwise

No.	Abbreviation/Acronym	Meaning
1	Act	The Electricity Act, 2003
2	A&G	Administrative & General
3	ARR	Aggregate Revenue Requirement
4	Capex	Capital Expenditure
5	CERC	Central Electricity Regulatory Commission
6	CGS	Central generating stations
7	CPSUs	Central Public Sector Undertakings
8	DA	Dearness Allowance
9	FY XX	Financial Year beginning 1 April of the year (XX-1) and ending on 31 March of the following year (XX)
10	GFA	Gross Fixed Assets
11	GoHP	Government of Himachal Pradesh
12	HPERC	Himachal Pradesh Electricity Regulatory Commission
13	HPPTCL	HP Power Transmission Corporation Limited
14	HPSEB	Himachal Pradesh State Electricity Board
15	HPSEBL	HP State Electricity Board Limited
16	MYT	Multi year tariff
17	NTI	Non Tariff Income
18	PGCIL	Power Grid Corporation of India Ltd.
19	ROE	Rate on equity
	STU	State Transmission Utility