

**BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY
COMMISSION AT SHIMLA**

CASE NO. 137/2011

CORAM

SUBHASH CHANDER NEGI

IN THE MATTER OF:

Approval of the Aggregate Revenue Requirement (ARR) for First APR of the Second MYT Order for Control Period (FY12 – FY14) under sections 62, 64 and 86 of the Electricity Act, 2003.”

AND

IN THE MATTER OF:-

True-Up Petition for the 1st MYT Control Period (FY09-FY11) and True up for FY11

IN THE MATTER OF:-

Himachal Pradesh State Electricity Board Limited, Vidyut Bhawan, Shimla-171004

..... APPLICANT

The Himachal Pradesh State Electricity Board Limited (hereinafter referred to as the ‘HPSEBL’) has filed petition with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as the “Commission” or “HPERC”) for approval of its Revised Aggregate Revenue Requirement (ARR) for First APR of Second MYT Order for Control Period (FY12-FY14) and determination of Wheeling and Retail Supply Tariff for FY13 under the 2nd 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 Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 and Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2011. The HPSEBL has also filed Applications for the True Up of FY11 and for the True Up of 1st MYT Control Period (FY09 – FY11).

The Commission having heard the applicant, interveners, representatives of various consumer groups and the Consumer Representative, on March 6, 2012 at Shimla, and having had the formal interactions with the Managing Director and Whole Time Members of the Himachal Pradesh State Electricity Board Limited and having considered the documents available on record, herewith accepts the petition/applications with modifications, conditions and directions specified in the following Tariff Order. The Commission has determined Aggregate Revenue Requirement of the distribution function of the HPESBL for FY13 under the Second MYT Control Period (FY12–FY14) and has approved the Wheeling and the Retail Supply Tariffs for FY13, in accordance with the guidelines laid down under Section 61 of the Electricity Act, 2003, the National Electricity Policy, the National Tariff Policy and the regulations framed by the Commission, The Wheeling and Retail Supply Tariff shall be decided every year taking into account the adjustment on account of allowed variations in uncontrollable parameters.

The Commission, in exercise of the powers vested in it under Sections 62, 64 and 86 of the Electricity Act, 2003, orders that the approved tariffs together with “Schedule of General and Service Charges” shall come into force w.e.f. April 1, 2012.

In accordance with sub-regulation (5) of Regulation 4 of the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2007, the tariff determined by the Commission and directions given in Chapter A9 of the Tariff Order by the Commission shall be quid pro quo and mutually inclusive. The tariff determined shall, within the period specified by it, be subject to the compliance of the directions-cum-orders to the satisfaction of the Commission and the non-compliance shall lead to such amendment, revocation, variation and alteration of the tariff as may be ordered by the Commission.

In terms of sub-regulation (6) of Regulation 3 of the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011, the Wheeling and the Retail Supply Tariff shall, unless amended or revoked, continue to be in force upto March 31, 2013. In the event of failure on the part of the licensee to file application for true up of FY12 and approval of wheeling and retails supply tariff for the ensuing financial year, in terms of Regulation 38 of the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 on or before November 30, 2012, the tariff determined by the Commission shall cease to operate after March 31, 2013,

unless allowed to be continued for 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.

The HPSEBL is directed to make available the copies of the Tariff Order to all concerned officers up to AE level Operations sub-divisions, within two weeks of issue of this Order. The HPSEBL may file clarificatory petition in case of any doubt in the provisions of the Tariff Order, within 30 days of issue of the Tariff Order.

Shimla

Subhash Chander Negi

Dated: April 24, 2012

Chairman

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A1: BACKGROUND

Overview of HPSEBL

- 1.1 The Himachal Pradesh State Electricity Board (HPSEB) was constituted in accordance with the provisions of Electricity Supply Act (1948) in the year 1971. Thereafter, all functions of the Department of Multi-Purpose Projects and Power such as generation, execution of hydroelectric projects except functions of flood control and minor irrigation were transferred to the Board.
- 1.2 HPSEB carried out functions of Generation, Transmission and Distribution for the State of Himachal Pradesh up to June 10, 2010, when the Government of Himachal Pradesh, in exercise of the power conferred to it under Section 131 (2), 132, 133 and other applicable provisions of the Electricity Act 2003, transferred the functions of generation, distribution and trading of electricity to Himachal Pradesh State Electricity Board Limited (HPSEBL) and the function of evacuation of power by transmission lines to Himachal Pradesh Power Transmission Company Limited (HPPTCL), vide the Himachal Pradesh Power Sector Reforms Transfer Scheme, 2010. A separate Generation Company for execution of new projects in State sector was already created by GoHP.
- 1.3 In accordance with provisions of the Act, vide Notification No. MPP-A(3)-1/2001-IV dated June 15, 2009, the functions, assets, properties, rights, liabilities, obligations, proceedings and personnel of Himachal Pradesh State Electricity Board (HPSEB) were vested with the Government of Himachal Pradesh. Also in accordance with the provisions of the Act, vide the 'Himachal Pradesh Power Sector Reforms Transfer Scheme, notified vide No. MPP-A(3)-1/2001-IV, dated June 10, 2010, the above mentioned functions, assets, properties, rights etc earlier vested with the Government of Himachal Pradesh were re-vested into corporate entities by the name of Himachal Pradesh State Electricity Board Limited (HPSEBL) and Himachal Pradesh Power Transmission Corporation Limited (HPPTCL). Thus, HPSEBL came into being with effect from June 10, 2010, from the date of re-vesting, the functions of generation, distribution and trading of electricity shall be undertaken by HPSEBL.
- 1.4 The Himachal Pradesh State Electricity Board Limited (hereinafter referred to as 'HPSEBL' or 'the Petitioner') is a deemed licensee under the first proviso to Section 14 of the Electricity Act, 2003 (hereinafter referred to as 'the Act') for distribution and supply of electricity in the State of Himachal Pradesh.
- 1.5 HPSEBL after reorganisation has been entrusted with the functions of distribution of electricity in the State of Himachal Pradesh and hence, HPSEBL is responsible for the development, (planning, designing, and construction), operation and maintenance of power distribution system in Himachal Pradesh with inherent trading functions. Identification and investigation of new hydro power potential of the State is also entrusted to HPSEBL. Ownership and O&M of generating stations of erstwhile HPSEB has also been given to HPSEBL and it can continue executing new generating projects in state sector if so allocated by GoHP. HPSEBL has share of power in Central Sector stations while it also imports power from neighbouring states to meet the requirement in the state.

- 1.6 Operation and maintenance of the distribution system in HPSEBL is carried out by its three Operation Wings, namely 'North', 'Central' and 'South', and one EHV wing, each headed by a Chief Engineer. These three operation wings comprise 12 Operation Circles. The geographical area under these Circles is strictly not as per the territorial jurisdiction of the 12 districts in the State. Despite extreme geographical terrain and climate with the population spread over far- flung and scattered areas, the State has achieved 100% electrification of towns and villages in 1988.

Filing of Petitions by HPSEBL

- 1.7 The HPSEBL has filed petitions with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as the 'Commission' or 'HPERC') for approval of its Revised Aggregate Revenue Requirement (ARR) for FY13 and determination of Wheeling and Retail Supply Tariff for FY13 under the 2nd 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 Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 and Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2011 (hereinafter referred to as the 'MYT Regulations, 2011').
- 1.8 The HPSEBL has filed Applications for the True Up of FY11 and for the True Up of 1st MYT Control Period (FY09 – FY11).
- 1.9 The HPSEBL has also filed an Annual Performance Review (APR) Petition for approval of revised ARR and determination of tariff for FY13.
- 1.10 This is the first Annual Performance Review Order under the 2nd MYT Control Period. It relates to determination of revised Aggregate Revenue Requirement of HPSEBL for FY13 under the second Multi Year Tariff control period based on actual values of FY11 and approval of Wheeling and the Retail Supply Tariffs for FY13 based on the updated information submitted by the Board.
- 1.11 As per the MYT Regulations, Wheeling and Retail Supply Tariff shall be decided every year taking into account the adjustment on account of allowed variations in uncontrollable parameters based on the Annual performance review petition filed by the Licensee.
- 1.12 The Commission has reviewed the operational and financial performance of HPSEBL and has finalised this Order based on the review and analysis of past records, information submissions, necessary clarifications submitted by the licensee and views expressed by the stakeholders.
- 1.13 M/s PricewaterhouseCoopers Ltd (hereinafter referred to as PwC) were appointed Consultants to assist the Commission in assessment of the APR and True up petitions and determination of the relevant tariffs.
- 1.14 HPSEBL has filed the following Petitions / Applications before the Commission:

Table 1: Petitions/Applications filed by HPSEBL before the Commission

S. No.	Case / Petition No.	Petition Name	Date of Filing			
1.	119/2011	Review Petition in the matter of “Review of MYT Order for the Second Control Period (FY12-FY14) dated 19.07.2011/14.09.2011 passed by the Commission in Case No 224/2010.”	01.10.2011			
2.	MA No. 134/2011 in Case No. 119/2011	Miscellaneous Application in the matter of “Amended Review Petition”	02.12.2011			
Other Miscellaneous Applications filed by HPSEBL in Case No 119 / 2011						
3.	MA No.	Date	MA No.	Date	MA No.	Date
	134/2011	05.12.2011	1/2012	02.01.2012	23/2012	16.02.2012
4.	137/2011	Petition in the matter of “Filing of Aggregate Revenue Requirement (ARR) for First APR of the Second MYT Order for Control Period (FY12 – FY14) under sections 62, 64 and 86 of the Electricity Act, 2003.”	24.12.2011			
5.	MA No. 2/2012 in Case No. 137/2011	Miscellaneous Application in the matter of:- a) “True-Up Petition for the 1 st MYT Control Period (FY09-FY11)” and b) “True Up Petition for FY11”	10.01.2012			
Miscellaneous Applications filed by HPSEBL in Case No 137 / 2011						
6.	MA No.	Date	MA No.	Date	MA No.	Date
	2/2012	10.01.2012	27/2012	17.02.2012	38/2012	25.02.2012
	44/2012	01.03.2012	61/2012	27.03.2012	71/2012	05.04.2012
	73/2012	07.04.2012				

Interaction with the Petitioner

1.15 Since the submission of the petitions by HPSEBL, a series of interactions took place between the HPSEBL and the HPERC, both written and oral, wherein additional information/clarification and justifications on various issues, critical for the analysis of the petition were sought by the HPERC from the HPSEBL as follows:

- a) In Case No. 119/2011, vide HPERC letter No. HPERC/Reader/119/2011/2578 dated November 18, 2011 HPSEBL was informed of the shortcomings observed during the preliminary scrutiny in this Review Petition. Consequently HPSEBL amended the Review Petition on date 2 December 2011.
- b) In Case No. 137/2011, vide HPERC letter No. HPERC/(F)3(3)(2)/APR1-Pet-137/2011/TFA Section/2011-12/-183 dated January 18, 2012, HPSEBL was informed of the first set of observations/deficiencies discovered during preliminary scrutiny of the petition. These observations/deficiencies were partially addressed by HPSEBL vide letter No. HPSEBL/MYT/1st APR/2012/18307 dated February 3, 2012 but non-submission of complete information/data still remained a concern before the Commission.
- c) Subsequently on date February 8, 2012, HPERC conducted the first Technical Validation Session with the petitioner, during which the discrepancies in the petitioned ARR were conveyed to HPSEBL and other additional information was sought from HPSEBL vide HPERC letter no. HPERC/(F)3(3)(2)/APR1-Pet-137/2011/TFA Section/2011-12/380 dated February 9, 2012 vide HPSEBL letter

No. HPSEBL/CE(Comm)/MYT/1st APR/-19633 dated February 27, 2012, these observations were addressed by HPSEBL, though not fully.

- d) In addition to the above, HPSEBL also made additional submissions vide the following Letter Nos.: HPSEBL/CE(Comm)/SERC/HPERC-Misc/19052 dated February 21, 2012, HPSEBL/CE(Comm)/SERC/1st APR/2012 dated March 5, 2012; HPSEBL/CE(Comm)/SERC/MYT-1st APR/21178 dated March 19, 2012; HPSEBL/CE(Comm.)/SERC-Codes/2011-23741 dated March 31, 2012; and HPSEBL/CE(Comm.)/SERC-MYT/2011-219 dated April 5, 2012.

Admission Hearing

- 1.16 On January 3, 2012, the Commission held the Admission Hearing in Case No. 119/2011. Vide Interim Order dated January 3, 2012, the Petition was admitted and HPSEBL was directed to take action under Section 64(2) of the Act read with regulation 16(5) of HPERC (Conduct of Business) Regulations, 2005 for publishing the application in abridged form.
- 1.17 On January 10, 2012, the Commission held the Admission Hearing in Case No. 137/2011. Vide Interim Order dated January 10, 2012, the Petition (along with the connected application) was admitted for processing in terms of Section 64(3) of the Act, subject to further detailed scrutiny by the Commission. HPSEBL was directed to take action under Section 64(2) of the Act read with regulation 16(5) of HPERC (Conduct of Business) Regulations, 2005 for publishing the application in such abridged form as specified in the Interim Order.

Action by the Petitioner HPSEBL under Section 64(2) of the Act

- 1.18 In pursuance to the Directions imparted vide the Interim Order dated January 3, 2012, HPSEBL published the salient features of the petition No. 119/2011 in the following newspapers:
- a) 'The Tribune' and 'Amar Ujala' dated January 18, 2012;
 - b) 'The Indian Express' and 'Divya Himachal' dated January 20, 2012.
- 1.19 In pursuance to the Directions imparted vide the Interim Order dated January 10, 2012, HPSEBL published the salient features of the petition 137/2011 in the following newspapers:
- a) 'The Tribune' and 'Amar Ujala' dated January 17, 2012;
 - b) 'The Indian Express' and 'Punjab Kesari' dated January 19, 2012.

Public Notice by HPERC for Inviting Objections/Suggestions and for Public Hearings

- 1.20 In accordance with Section 64 (3) of the Act, The Commission through Public Notice in the newspapers 'The Tribune' and 'Punjab Kesari' dated January 20, 2012 invited suggestions and objections from the public on the petitions No 119/2011 and 137/2011 filed by HPSEBL. The interested parties/stakeholders were asked to file

their objections and suggestions on the petition by date February 13, 2012.

- 1.21 The date for filing replies by the petitioner was fixed for date February 21, 2012 and the date for filing rejoinders, if any, was fixed for date March 1, 2012.
- 1.22 The HPERC on date February 26, 2012 issued a public notice in the newspapers 'Divya Himachal' and 'The Indian Express' informing the public about the scheduled date of March 6, 2012 for the 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 The HPERC on date March 1, 2012, issued another Public Notice in the newspapers 'Divya Himachal' and 'The Indian Express' inviting objections from the Public in the matter of "Determination of tariff for 1 MW open Access consumers in Case No. 137/2011 filed by HPSEBL" by March 6, 2012, the date set for the Public Hearing.
- 1.24 In all, the Commission received objections from eight stakeholders by the stipulated date i.e. February 13, 2012. HPSEBL filed its replies to the objections set out by various objectors by date February 21, 2012, a copy of which was also sent to the individual objectors. One rejoinder was filed in the aforementioned matters.
- 1.25 Public hearing was held on the Scheduled Date and time i.e. March 6, 2012 in the Commission's Court Room at Shimla.
- 1.26 The Commission in pursuance to the provisions of Section 94(3) of the Electricity Act 2003, since May 18, 2006, had authorised Shri P.N. Bhardwaj as the 'Consumer Representative' to represent the interest of consumers in all proceedings before the Commission. Shri P.N. Bhardwaj presented himself in the Public Hearing held on March 6, 2012.
- 1.27 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 PETITIONS FILED BY HPSEBL

- 2.1 This chapter summarizes the highlights of the petitions filed by HPSEBL for true-up of FY11, true up for the first MYT control period (FY09 to FY11) and Annual Performance Review of the 2nd MYT Control Period.

SUMMARY OF TRUE-UP PETITION FOR FY11

- 2.2 The petition was filed on January 10, 2012 and appropriate clarifications were submitted by HPSEBL in response to the deficiency notes issued by the Commission. HPSEBL also made available the un-audited accounts for FY11 on the Commission's direction.

Sales Projections

- 2.3 For FY11, the HPSEBL has submitted that there has been an increase in energy sales by 558.62 MU against the sales approved by the Commission. Category-wise energy sales submitted by the HPSEBL are detailed in the table below:

Table 2: HPSEBL Submission – Consumer Category wise Energy Sales (MU)

Energy Sales	FY11		Deviation
	Approved	Actuals	
Domestic	1154.51	1281.96	127.45
BPL	0.59	0.54	-0.05
Non Domestic Non Commercial	78.76	89.54	10.78
Commercial	306.32	356.53	50.21
Public Lighting	12.54	12.55	0.01
Small Power	179.97	201.45	21.48
Medium Power			
Large Supply (HT)	3642.06	3993.21	351.15
Large Supply (EHT)			
Irrigation & Agriculture	445.13	445.09	-0.04
Govt Irrigation & Water Pumping			
Temporary	27.27	24.64	-2.63
Bulk Supply	235.31	235.57	0.26
Total Energy Sales	6082.46	6641.08	558.62

Transmission and Distribution (T&D) Loss

- 2.4 HPSEBL has submitted that it has achieved a loss level of 12.66% in FY11, which is although higher than the loss level of 12.49% revised and approved by the Commission in the first APR but is lower than loss level of 14.50% approved by the Commission based on estimates given by HPSEBL for base year in the first MYT order. HPSEBL has also requested the Commission to allow incentive for the remarkable performance during FY11.

Table 3: HPSEBL Submission – Transmission & Distribution Loss

T&D Losses	FY11
	Actuals
Sales within State (MU)	6641
Proposed T&D Loss within the State (%)	12.66%
Power Requirement for sale within the State (MU)	7604

Energy Availability

- 2.5 HPSEBL has submitted that the net own generation for FY11 after deducting the GoHP share comes to 1934 MU against the Commission approved own generation of 1824.45 MU. The balance power requirement of the state was met by power purchase.
- 2.6 HPSEBL has stated that the actual power purchase from CGS, Interstate for FY11 has increased to 7375 MU which is due to increase in energy quantum under banking arrangement, unallocated share during FY11, etc. It has further stated that although the energy sales/demand within the state has been lesser than power purchase for FY11 but HPSEBL has sold higher quantum of energy to other states and UI.

Energy Balance

- 2.7 HPSEBL has prepared the Energy Balance based on the actual sales data, actual T&D loss level during the year, own generation and power purchase data. The energy balance for FY11 is shown in Table 4 below.
- 2.8 HPSEBL has submitted its energy balance based on the estimated and projected sales data, own generation data and power purchase data. HPSEBL has thus quantified the T&D losses as 13.40%, 14.58% and 12.66% for FY09, FY10 and FY11 respectively.
- 2.9 HPESBL’s energy balance for the MYT Control Period is as shown below:

Table 4: HPSEBL Submission – Energy Balance (MU)

Energy Balance	FY11
	Actual
Power Availability	
Net Own Generation Sources + HPPCL	1934
Net Power Purchase Sources (CGS, Inter-state etc.)	7375
Total Availability	9308
Sales within the State (MU)	6641
Proposed T&D Loss % within the State	12.66%
Power Requirement for sale within the State (MU)	7604
Inter-State Sale (MU)	1705
Total Sale within & Outside the State (MU)	8346
Overall Losses (MU) - Total availability less Total Sale	963
Overall T&D Losses %	10.3%

Annual Revenue Requirement

2.10 The Board submitted the ARR for the whole Control Period, the components of which are as discussed below:

Cost of Power Purchase

2.11 HPSEBL has submitted that the actual cost of power purchase for FY11 is Rs 2012.73 Cr as against Rs 1574.76 Cr approved by the Commission. The reasons submitted for increase in power purchase cost are given hereunder:

- (a) Actual UI purchase during FY11 was 356 MU (Rs 49 Crores) resulting in net increase in cost by Rs 49 Crores.
- (b) The BASPA Arrears approved by the Commission were Rs 90 Crores whereas actual BASPA Arrears incurred are Rs 103 Crores. HPSEBL also paid other arrears to the tune of Rs 54 Crores in FY11.
- (c) The energy available from Baspa II (Secondary Energy) in FY11 was 242 MU at Rs 46 Crores whereas the Commission had approved nil on this account.
- (d) Difference in the energy actually available from GoHP Free Power Share & Equity Power share in Nathpa Jhakri, compared to the figures approved under these heads by the Commission.

2.12 The table below summarizes the actual power purchase quantum and cost submitted by HPSEBL for FY11:

Table 5: HPSEBL Submission – Power Purchase Quantum and Cost

Stations	Quantum	Rate	Cost
	MU	Rs/Unit	Rs Cr
BBMB Old	44	64	3
BBMB New	125	43	5
Dehar	79	57	4
Pong	0	0	0
Sub-Total	248	51	13
NTPC			
Anta(LNG)	7	432	3
Anta(G)	67	304	20
Anta (L)	0	857	0
Auraiya(LNG)	13	498	6
Auraiya(G)	102	281	29
Auraiya(L)	0	991	0
Dadri(LNG)	12	500	6
Dadri(G)	120	289	35
Dadri(L)	0	818	0
Unchahar-I	50	264	13
Unchahar-II	86	274	24

Stations	Quantum	Rate	Cost
	MU	Rs/Unit	Rs Cr
Unchahar-III	54	311	17
Rihand-1 STPS	238	200	48
Rihand-2 STPS	245	231	56
Kehalgaon	134	313	42
Singrauli	0	172	0
Barh I & II	0	0	0
Dadri II TPS	0	326	0
Jhajjar STPS	0	444	0
Rihand STPP-III	0	0	0
Sub-Total	1127	265	299
NHPC			
Chamera-I	70	160	11
Chamera-II	51	360	18
Salal	32	91	3
Tanakpur	14	184	3
Uri	82	171	14
Dhaul Ganga	40	234	9
Dulhasti	0	734	0
Sewa	0	572	0
Chamera-III	0	0	0
Parbatti-II	0	0	0
Parbatti-III	0	0	0
Kotlibehi	0	0	0
Sub-Total	289	202	58
Other stations			
NAPP	51	204	10
RAPP	85	302	26
Nathpa Jhakri SoR	176	303	53
Koldam SOR	0	0	0
Shanan	5	38	0.2
Shanan Extn	45	40	1.8
Yamuna (UJVNL)	401	35	14
Khara	65	37	2
Baspa -II	1050	278	292
Baspa II Sec Energy	242	297	46
Tehri I	87	490	43
ADHPL	24	295	7
Koteshwar	0	0	0
Koldam	0	0	0
Rampur Project	0	0	0
Kashang	0	0	0
Patikari	61	225	14
Sarabari-II	15	295	4
Toss	54	250	14
Market Purchase	0	0	0
Sub-Total	2360	223	527

Stations	Quantum	Rate	Cost
	MU	Rs/Unit	Rs Cr
Free power & equity power			
Bairasiul	43	315	13
Chamera-I	139	315	44
Chamera –II	64	315	20
Shanan Share	3	315	1
Ranjeet Sagar Dam	76	315	24
Malana	49	315	16
Baspa – II	176	315	55
Nathpa Jhakri	303	315	96
Nathpa Jhakri Equity	554	396	219
Parbati II	0	0	0
Parbati III	0	0	0
Patikari	8	315	3
Sarabari-II	2	315	1
Toss	10	315	3
Ghanvi	7	315	2
Baner	5	315	2
Gaj	4	315	1
Larji	80	315	25
Khauri	5	315	2
Koladam	0	0	0
Kasang I (HPPCL)	0	0	0
AD Hydro	9	315	3
Karcham Wangtoo II	0	0	0
Budhil	0	0	0
Chamera III	0	0	0
Rampur Project	0	0	0
GoHP	0	0	0
Bhaba Augmentation	0	0	0
Ghanvi II	0	0	0
Ulh III	0	0	0
Total	1537	344	529
Private Micros			
Private Micros	479	262	125
Sub-Total	479	262	125
Banking and UI			
Banking	870	NA	0
UI Power	356	138	49
Sub-Total	1225	138	49
Unallocated Share			
Unallocated	377	259	97
Total	377	259	97
Other Charges			
PGCIL Charges			136
HPPTCL Charges			0
ULDC Charges			7

Stations	Quantum	Rate	Cost
	MU	Rs/Unit	Rs Cr
Other Charges			15
Baspa Arrears			103
Other Arrears			54
SLDC Charges			0
Total			315
Grand Total	7642	263	2013
External Loss	3.50%		
Net Power Purchase	7375	273	2013

Interest & Finance Charges

- 2.13 HPSEBL has submitted that the actual interest cost for FY11 was Rs 178.98 Cr as against Rs 175.82 Cr approved by the Commission after capitalisation. The reason for increase is the investment made by HPSEBL in commissioning and up-gradation of generation units, transmission and distribution system improvement and metering.
- 2.14 HPSEBL has further submitted that it has paid Rs 65.30 Cr as interest to the banks for financing of working capital. The reason stated by HPSEBL for increase in interest on working capital is increase in the short-term rates and power purchase cost in FY11. The details of interest and financing charges submitted by the HPSEBL for FY11 are given in the table below:

Table 6: HPSEBL Submission – Interest and finance charges (Rs Cr)

Interest Cost	FY11
RGVY	3
LIC	18.23
REC	32
PFC	45.59
Bonds	0.79
Bank Loans	75.13
Interest on State Govt. Loan	1.74
Non SLR Bonds	23.21
Other Negotiated Loan	0.00
Interest on Overdraft	0.00
Interest on GPF & CPF	6.01
Cost of Raising Finances	0.01
Other Charges	0.28
Interest on Consumer Security Deposits	9.00
Charges payable to CTU / NLDC	0.00
Rebate allowed for Timely Payment	0.71
Interest on WC Borrowing & Other Charges	65.30
Interest & Finance Charges - Total	280.43
Less: Interest Capitalization	101.45
Net Interest & Financing Costs	178.98

Employee Cost

- 2.15 For FY11, HPSEBL has submitted that the Commission had approved employee cost (including 5th Pay Commission arrears and provision for new recruitments) as Rs 815.87 Cr as against the actual cost of Rs 976.48 Cr which has resulted in a disallowance of Rs 160.61 Cr.
- 2.16 The reasons for increase in employee cost submitted by the HPSEBL are:
- In the MYT Order for FY11, the Commission has approved the consolidated Employee Cost for the control period based on the CPI and WPI. The Commission has not considered the DA as external factor/uncontrollable factor and has applied an escalation rate for approving the employees cost. The State Government allows two installments of DA increase, with increase of 6% and 5% effective in January and July. HPSEB Limited allows DA increase at the same rate to its employees as the increases in pay & allowances to its existing employees has to be at par with the State Government employees.
 - Revision in salaries and other incentives are kept at par with the other departments of Government of HP as the same is legally binding on the company also.
- 2.17 HPSEBL has prayed to the Commission to consider employee cost as uncontrollable due to factors like hike in DA/basic salary, revision through Pay Commission.
- 2.18 The actual employee cost submitted by HPSEBL for FY11 is detailed below:

Table 7: HPSEBL Submission – Employee Cost (Rs Cr)

Employee Cost	FY11 Actual
Salaries & Allowances	
Salaries (Basic) + Dearness Pay	358.73
Merger of DA with Basic (Proposed)	0.00
Grade pay	76.82
DA	183.43
Arrears due to the 5th Pay Commission	122.56
Other Allowances	30.51
Overtime	2.52
Bonus	0.09
Salaries – Total	774.66
Other Staff Cost	
Medical Expense Reimbursement	9.66
Fee & Honorarium	0.00
Earned Leave Encashment	41.56
Leave Salary Contribution	0.09
Payment under Workmen’s Compensation	0.29
LTC	0.50
Staff Welfare Expenses	2.42
Other Staff Cost – Total	54.52
Terminal Benefits	
Provident Fund Contribution	0.00

Employee Cost	FY11 Actual
Pension	155.45
Gratuity	46.60
Any other Items	6.01
Terminal Benefits – Total	208.06
Gross Employee Cost	1,037.24
Less: Employee Cost Capitalization	60.76
Net Employee Cost	976.48

Administrative & General Expenses

- 2.19 HPSEBL has submitted the actual A&G expenses for FY11 comes out to Rs 106.60 Cr as against RS 38.54 Cr approved by the Commission. HPSEBL has stated that the loan amounting to Rs 70 Cr taken from GoHP for distribution of CFL bulbs has also been completely repaid in FY11 itself.
- 2.20 Summary of actual A&G expenses for FY11 submitted by HPSEBL is given below:

Table 8: HPSEBL Submission – A&G Expenses (Rs Cr)

A&G Expenses (Rs Cr)	FY11 Actual
Administration Charges	
Rent, Rates & Taxes	1.98
Telephone, Postage & Telegrams	2.59
Consultancy Charges	0.17
Conveyance & Travel	14.95
Regulatory Expenses	2.29
Income Tax Updating Charges	0.02
Consumer Redressal Forum	1.04
Insurance	0.10
Other Charges	2.49
IT and other Initiatives	0.00
Administration Charges – Total	25.63
Other Charges	
Fees & Subscriptions, Books & Periodicals	0.35
Printing & Stationery	2.33
Advertisement Expenses	0.83
Electricity Charges	3.05
Water Charges / Cold weather expenses	0.25
Miscellaneous Expenses	1.92
Legal Charges	0.69
Audit Fee	2.76
Freight Material related Expenses	3.03
Entertainment Charges	0.19
Training to Staff	0.12
Public Interaction Program	0.25
Public Expenses / Other professional charges	12.86
GIS / GPS expenses related to High level Committee	0.00
Cost Free Bulb to DIS Consumers	56.00
DSM Program	0.00

A&G Expenses (Rs Cr)	FY11 Actual
A&G – Total	110.26
Less: Capitalization	3.66
Net A&G Costs	106.60

Non Tariff Income

- 2.21 HPSEBL has submitted that the actual non-tariff income in FY11 is Rs 202.78 Cr as against Rs 130.61 Cr approved by the Commission.
- 2.22 HPSEBL has submitted that it has not considered the rebate earned on timely payment of power purchase bills as the rebate is earned due to better working management of the utility and the same should not be included.
- 2.23 Also, with regards to LPSC charges, HPSEBL has submitted that the same should not be included as non-tariff income as LPSC compensate for the additional interest cost that is incurred by the utility on additional working capital requirement due to non-payment of consumer dues on time.

Annual Revenue Requirement

- 2.24 The table below summarizes HPSEBL's Annual Revenue Requirement for FY11 as per the true-up petition of FY11:

Table 9: HPSEBL Submission – Aggregate Revenue Requirement for FY11 (Rs Cr)

Annual Revenue Requirement	Approved in APR for FY11	Actuals as submitted by HPSEBL	Deviation
Power Purchase Cost	1,574.76	2,012.73	437.97
Employee Cost	815.87	976.48	160.61
Repairs & Maintenance	46.44	43.46	(2.98)
Admin & General	38.54	106.60	68.06
Interest	175.82	178.98	3.16
Depreciation	129.53	133.57	4.04
Extraordinary Items and Prior Period Charges		44.29	44.29
Total Costs	2,780.96	3,496.11	715.15
Add: Return on Equity	43.82	144.39	100.57
Less: Non-Tariff Income	136.93	202.78	65.85
Annual Revenue Requirement	2,687.85	3,437.72	749.87
Covered by			
Revenue at Existing Tariff	2,338.33	2,446.84	108.51
Revenue from Sale outside state	193.70	264.29	70.59
GoHP Subsidy	-	0.05	
GoHP Roll Back Subsidy (Receivable)	-	(14.00)	
FY10 (Gap)/Surplus Carry Forward	186.38	-	
Revenue at Existing Tariff + GoHP Subsidy	2,718.41	2,697.18	(21.23)
Revenue (Gap)/Surplus	30.56	(740.54)	-

Revenue from Sale of Power at Existing Tariffs

- 2.25 HPSEBL has submitted that it has earned good revenue in FY11 from sale of power outside the state due to which total expenses incurred have been balanced up to a certain extent resulting in a reduction of true up quantum.
- 2.26 Based on audited accounts of FY11, revenue generated from sale of power within the state and outside the state as submitted by HPSEB is given in the table below:

Table 10: HPSEBL Submission – Revenue from sale of power for FY11 (Rs Cr)

Revenue at Existing Tariff	Approved	Actual	Deviation
Revenue at Existing Tariff	2,338.33	2,446.84	108.51
Revenue from Sale outside state	193.70	264.29	70.59
GoHP Subsidy	-	0.05	
GoHP Roll Back Subsidy (Receivable)	-	(14.00)	
FY10 (Gap)/Surplus Carry Forward	186.38	-	
Revenue @ Existing Tariff + GoHP Subsidy	2,718.41	2,697.18	(21.23)

Revenue Gap

- 2.27 HPSEBL has submitted that Commission has determined the surplus of Rs. 288 Cr at the time of true up of FY09 and the same was deducted from the total ARR approved for the FY10. As a consequence of this, surplus of Rs 186.38 Cr is reflecting in FY11. HPSEBL has pointed out that in the existing scenario, banking rates are only considered for accounting purpose and in actual banking is a cashless transaction. Therefore, the surplus of Rs. 288 Cr determined by the Commission for the FY10 and consequential surplus of Rs 186.38 Cr has not been realized by the HPSEBL on account of cashless banking sale and other deductions made by the Commission under the head O&M cost, Interest cost, non tariff income, etc. for FY10 & FY11. As such, surplus of Rs 186.38 Cr has not been considered by HPSEBL in true-up of FY11.
- 2.28 The utility has further submitted that after adjustment of the accounts for FY11, it has been observed that the actual subsidy payable by GoHP for FY11 is Rs 160.07 Cr. Since initially subsidy provision was Rs 146.07 Cr only, total outstanding amount of the roll back subsidy due from the H.P. Govt. as on 31.03.2011 is Rs 14.00 Cr. It has submitted that the roll back subsidy has been increased due to rise in the consumption from estimated values.
- 2.29 HPSEBL has also pointed out that it has requested Principal Secretary (Power) to GoHP to release the balance payment of Rs 14 Cr on account of outstanding subsidy. However, GoHP has refused to release any such amount over and above the initial provision of subsidy of Rs 146.07 Cr.

SUMMARY OF TRUE-UP PETITION FOR THE FIRST MYT CONTROL PERIOD (FY09 TO FY11)

2.30 The petition was filed on January 10, 2012 and appropriate clarifications were submitted by HPSEBL in response to the deficiency note issued by the Commission.

Sales Projections

2.31 The table below summarises the energy sales projected by HPSEBL in various tariff Petitions and that approved by the Commission in various tariff/true-up orders:

Table 11: HPSEBL Submission – Energy Sales

FY	Proposed			Approved			Tariff Year
	MYT Order	First APR	Second APR	MYT Order	First APR	Second APR	Actual
FY09	5690	5632	5461	5782	5782	5461	5461
FY10	6271	6203	5816	6501	6501	5676	5814
FY11	6916	6834	6404	7157	7157	6082	6641

2.32 HPSEBL has submitted that the Commission had approved considerably higher sales for FY09, FY10 and FY11, and actual sales have been lower. For FY10, the Commission had considered the projected sales of 6501 MU, which was higher than the actual sales of 5814 MU. The Commission had lowered the tariff for FY10 on the basis of these higher projections and as such, HPSEBL has submitted that it ended up under-recovering the projected revenue vis-à-vis the costs incurred by it, and had to meet the same by taking short term loans. HPSEBL has requested the Commission to allow short-term loans to meet the expenses on account of actual sales being less than the approved sales and also allow carrying cost on the same.

Transmission and Distribution (T&D) Loss

2.33 The table below summarises the T&D loss level projected by HPSEBL in various tariff petitions and that approved by the Commission in various tariff/true-up orders:

Table 12: HPSEBL Submission – T&D Losses

FY	Proposed			Approved			Tariff Year
	MYT Order	First APR	Second APR	MYT Order	First APR	Second APR	Actual
FY09	17.00%	15.75%	13.40%	15.75%	13.14%	13.14%	13.40%
FY10	16.50%	15.00%	13.20%	15.00%	12.79%	12.79%	14.58%
FY11	16.00%	14.50%	13.00%	14.50%	12.49%	12.49%	12.66%

2.34 HPSEBL has stated that the Commission had initially approved a loss trajectory of 15.75%, 15.00% & 14.5% for FY09, FY10 & FY11 respectively in the MYT Order. However, in the 1st APR, the Commission had revised the trajectory to 13.14%, 12.79% & 12.49% for FY09, FY10 & FY11 respectively.

2.35 Further, HPSEBL has stated that the loss figures earlier submitted contained an error to the extent that the kVAh consumption for the three circles namely Shimla, Solan and Nahan have been inadvertently accounted for as kWh consumption. This resulted into wrong computation of losses.

2.36 HPSEBL has submitted that while the Commission in its True Up Order for FY10 dated 19 July 2011 trued up the losses to actual value, it has stated that:

“In view of above, the HPSEBL has requested that the targets fixed by the Commission based on the incorrect data may be reviewed. The Commission observes that that even though the actual performance of the HPSEBL in this regard is better than the targets fixed originally but does not meet the targets based on the data, which is now being claimed as incorrect by the HPSEBL. The Regulations provide for incentive and disincentive mechanism based on the actual performance vis-à-vis targets. In this case since the HPSEBL has sought the revision in target fixed by the Commission, the Commission shall take a final view for incentive and disincentive at the time of true up of the First Control Period after validating the data now submitted by the HPSEBL and other relevant aspects. The Commission, however, pending a decision about the disincentive aspect, provisionally approves the energy balance based on above details.”

2.37 HPSEBL has now requested the Commission to review the same and reconsider the loss trajectory on the basis of actual losses and also to allow the incentive for its achievement of T&D Loss reduction targets as set in the original MYT Order.

2.38 HPSEBL has also requested the Commission to allow the short term loans taken to meet up the Power Purchase Expenses on account of fact that lesser Power Purchase Cost was approved by the Commission as it considered lower T&D losses and allow carrying cost accordingly.

Energy Availability

2.39 Table below summarises the energy availability from own stations and other sources projected by HPSEBL in various Tariff Petitions and that approved by the Commission in various tariff/true-up orders:

Table 13: HPSEBL Submission – Energy availability from own stations

FY	Proposed			Approved			Tariff Year
	MYT Order	First APR	Second APR	MYT Order	First APR	Second APR	Actual
OWN STATIONS							
FY09	1,736.02	1,911.00	1,967.00	1,672.15	1,672.15	1,967.01	1,967.00
FY10	1,900.02	1,900.00	1,692.00	1,851.95	1,851.95	1,692.86	1,703.00
FY11	1,900.02	1,900.00	1,900.00	1,851.95	1,851.95	1,824.45	1,934.00
OTHER SOURCES							
FY09	5,478.00	6,085.00	6,057.00	5,884.81	5,817.11	6,047.50	6,057.00
FY10	5,998.00	6,081.00	6,307.00	6,863.79	6,758.99	5,667.68	6,387.34
FY11	6,682.00	6,622.00	5,964.00	7,995.73	7,891.79	6,086.08	7,375.00

Power Purchase Cost

2.40 The table below summarises the power purchase cost projected by HPSEBL in various Tariff Petitions and that approved by the Commission in tariff/true-up orders:

Table 14: HPSEBL Submission – Power purchase cost (Rs Cr)

FY	Proposed			Approved			Tariff Year			
	MYT Order	First APR	Second APR	MYT Order	First APR	Second APR	Proposed	Approved	Actual	True-up
FY09	1614.37	1614.37	1962.00	1319.22	1243.09	1436.73	1614.37	1319.22	1953.76	1436.73
FY10	1756.45	1756.45	1529.00	1599.81	1442.82	1290.30	1756.45	1442.82	1629.18	1629.18
FY11	2032.97	2032.97	1932.50	1960.55	1809.80	1574.76	1932.50	1574.76	2012.73	-

2.41 HPSEBL has taken short-term loans to meet the power purchase cost and employee cost not approved by the Commission initially.

2.42 HPSEBL has requested the Commission to allow the short-term loans taken to meet the power purchase expenses on account of the fact that lesser power purchase cost was approved by the Commission and also allow carrying cost on the same.

Interest Cost

2.43 Table below summarises the interest cost projected by HPSEBL in various Tariff Petitions and that approved by the Commission in various tariff/true-up orders:

Table 15: HPSEBL Submission – Interest cost (Rs Cr)

FY	Proposed			Approved			Tariff Year			
	MYT Order	First APR	Second APR	MYT Order	First APR	Second APR	Proposed	Approved	Actual	True-up
FY09	197.61	200.01	195.71	161.47	160.03	162.16	197.61	161.47	195.71	162.16
FY10	192.20	209.67	215.90	160.24	154.17	147.06	209.67	154.17	176.76	147.37
FY11	191.15	223.10	230.93	177.49	173.39	175.82	230.93	175.82	178.98	-

2.44 HPSEBL has submitted that the Commission has historically approved lower Interests costs than the initially estimated by utility and also from the actual values.

2.45 HPSEBL's actual interest costs estimated is more than Commission approved interest cost (after capitalization due to the interest on investments made by HPSEB Limited in commissioning and up-gradation of generation units, transmission & distribution systems improvement and metering).

2.46 The key reasons for increase in interest on working capital are due to increase in short-term interest rates as well as increase in the actual power purchase cost from approved values.

- 2.47 HPSEBL has submitted that as the regulations have provision for the true up of Interest Cost at the end of control period, therefore it requests the Commission to approve the Interest Cost as per actual.

Employee Cost

- 2.48 Table below summarises the employee cost projected by HPSEBL in various Tariff Petitions and that approved by the Commission in various tariff/true-up orders:

Table 16: HPSEBL Submission – Employee cost (Rs Cr)

FY	Proposed			Approved			Tariff Year			
	MYT Order	First APR	Second APR	MYT Order	First APR	Second APR	Proposed	Approved	Actual	True-up
FY09	775.73	699.21	612.78	516.29	577.32	579.99	775.73	516.29	612.78	579.99
FY10	847.99	839.26	792.21	547.82	613.64	613.64	839.26	613.64	729.65	658.61
FY11	828.35	780.61	860.38	575.69	647.05	815.87	860.38	815.87	976.48	-

- 2.49 The reasons for increase in employees cost in FY11 as submitted by HPSEBL are given hereunder:

- (a) In the MYT Order for FY11, the Commission had approved a consolidated Employee Cost for the control period based on the CPI and WPI. Further, Commission has not considered the DA as external/uncontrollable factor and has applied an escalation rate for approving the employees cost. The State Government allows two instalments of DA increase, with increase of 6% and 5% effective in January and July. HPSEB Limited allows DA increase at the same rate to its employees as the increases in pay & allowances to its existing employees has to be at par with the State Government employees.
- (b) Revision in salaries and other incentives are kept in par with the other departments of Government of HP and is a legal binding on the company to follow the same.

- 2.50 HPSEBL has submitted that considering the fact that there has been steady increase in employee cost by 14%, 16%, 12% & 20% since 2005-06 every year, the increase of 33.83% in FY11 is quite nominal considering that the Rs 122.56 Crores of 5th Pay Commission arrears were reimbursed in this year.

- 2.51 HPSEBL has requested the Commission that employee cost should be considered as uncontrollable due to factors like increase in DA/basic salary, revision through Pay Commission etc, as it would not be in the position to not allow these increases as any deviation will be against law/policy. HPSEBL has requested the Commission to true-up these costs and provide suitable mechanism for HPSEBL to recover such costs.

Administrative and General (A&G) Expenses

- 2.52 The table below summarises the A&G expenses projected by HPSEBL in various Tariff Petitions and that approved by the Commission in tariff or true-up orders:

Table 17: HPSEBL Submission – A&G Expenses (Rs Cr)

FY	Proposed			Approved			Tariff Year			
	MYT Order	First APR	Second APR	MYT Order	First APR	Second APR	Proposed	Approved	Actual	True-up
FY09	42.39	48.72	49.34	28.44	29.26	29.26	42.39	28.44	49.34*	43.26*
FY10	32.34	46.37	58.00	33.55	34.50	34.50	46.37	34.50	47.85*	34.50
FY11	33.54	41.52	67.08	34.88	35.98	35.98	67.08	35.98	106.60*	-

* includes cost of CFL

2.53 HPSEBL has requested the Commission to allow balance expenditure incurred on the Atal Bijlee Bachat Yojna amounting to Rs 56 Cr as the CDM credits are yet to be decided in the validation process.

Repair and Maintenance (R&M) Expenses

2.54 The table below summarises the R&M expenses projected by HPSEBL in various Tariff Petitions and that approved by the Commission in various tariff/true-up orders:

Table 18: HPSEBL Submission – R&M Expenses (Rs Cr)

FY	Proposed			Approved			Tariff Year			
	MYT Order	First APR	Second APR	MYT Order	First APR	Second APR	Proposed	Approved	Actual	True-up
FY09	37.76	35.98	27.81	36.46	33.09	33.09	37.76	36.46	27.81	33.09
FY10	40.54	43.91	38.93	42.22	38.54	38.54	43.91	38.54	30.44	38.54
FY11	43.85	49.94	43.39	50.57	46.44	46.44	43.39	46.44	43.46	-

2.55 The table below summarises the Repair and Maintenance expenses (K factor) projected by HPSEBL in various Tariff Petitions and that approved by the Commission in various tariff/true-up orders:

Table 19: HPSEBL Submission – R&M Expenses (K factor)

FY	Proposed			Approved			Tariff Year			
	MYT Order	First APR	Second APR	MYT Order	First APR	Second APR	Proposed	Approved	Actual	True-up
FY09	1.01%	1.01%	-	0.99%	0.93%	-	1.01%	0.99%	0.78%	0.93%
FY10	1.01%	1.01%	0.91%	0.99%	0.93%	0.93%	1.01%	0.93%	0.71%	0.93%
FY11	1.01%	1.01%	0.91%	0.99%	0.93%	0.93%	0.91%	0.93%	0.94%	-

2.56 HPSEBL has requested the Commission to allow the additional R&M expenses on account of Hon'ble Appellate Tribunal of Electricity's (APTEL) judgement, the details of which are provided below:

Table 20: Additional R&M Expenses on account of APTEL judgement (Rs. Cr)

MYT Order	First APR	R&M to be allowed
36.46	33.09	3.37
42.22	38.54	3.68
50.57	46.44	4.13
Additional R&M allowed by APTEL		11.18

Return on Equity

2.57 Table below summarises the Return on equity projected by HPSEBL in various Tariff Petitions and that approved by the Commission in various tariff/true-up orders:

Table 21: HPSEBL Submission – Return on equity (Rs Cr)

FY	Proposed			Approved			Tariff Year			
	MYT Order	First APR	Second APR	MYT Order	First APR	Second APR	Proposed	Approved	Actual	True-up
FY09	72.97	48.62	53.97	41.69	43.82	43.82	72.97	41.69	53.97	43.82
FY10	112.22	57.02	56.07	41.69	43.82	43.82	57.02	43.82	140.08	43.82
FY11	153.13	65.42	59.85	41.69	43.82	43.82	59.85	43.82	144.39	-

2.58 HPSEBL has submitted that since it is now functioning as a Distribution Company from 10 June 2010, the assets earlier maintained as Transmission assets are now part of distribution business. HPSEBL has submitted that as per the audited accounts of FY10, the total equity of the company stands at Rs. 971.77 Cr. This increase in equity of Rs. 575.24 Cr during FY10 is mainly on account of equity invested by the HPSEBL in the past years for own hydel plants, which is capitalized during the year.

2.59 HPSEBL has requested the Commission to consider the equity as per the audited accounts and allow Return on Equity accordingly along with carrying cost.

Asset Capitalisation

2.60 The table below summarises HPSEBL's submission in various Tariff Petitions and that approved by the Commission in various tariff orders / true-up orders:

Table 22: HPSEBL Submission –GFA and Additions (Rs Cr)

FY	Proposed			Approved			Tariff Year			
	MYT Order	First APR	Second APR	MYT Order	First APR	Second APR	Proposed	Approved	Actual	True-up
GFA Opening Balance (Rs Cr)										
FY09	3741	3565	3565	3698	3547	3547	3741	3698	3565	3547
FY10	4017	4351	4271	4282	4131	4131	4351	4131	4271	4131
FY11	4344	4949	4760	5129	4978	4978	4760	4978	4645	-
Net additions during the year (Rs Cr)										
FY09	275	787	707	584	584	584	275	584	707	584
FY10	328	597	489	847	847	847	597	847	373	847
FY11	300	744	730	407	407	407	730	407	76	-
GFA Closing Balance (Rs Cr)										
FY09	4017	4351	4271	4282	4131	4131	4017	4282	4271	4131
FY10	4344	4949	4760	5129	4978	4978	4949	4978	4645	4978
FY11	4645	5692	5490	5536	5385	5385	5490	5385	4721	-

2.61 HPSEBL has submitted that the assets worth Rs. 199.09 Cr were transferred to Himachal Pradesh Transmission Company Limited (HPPTCL) on April 1, 2010 and, therefore, the same has been deducted from the Opening Gross fixed asset for FY11. HPSEBL has requested the Commission to consider the GFA and asset capitalization as per their submission.

Depreciation

2.62 Table below summarises the depreciation projected by HPSEBL in various Tariff Petitions and that approved by the Commission in various tariff/true-up orders:

Table 23: HPSEBL Submission – Depreciation (Rs Cr)

FY	Proposed			Approved			Tariff Year			
	MYT Order	First APR	Second APR	MYT Order	First APR	Second APR	Proposed	Approved	Actual	True-up
FY09	96.97	98.78	96.91	100.15	95.97	95.97	96.97	100.15	96.91	95.97
FY10	104.51	115.25	110.71	118.03	113.85	113.85	115.25	113.85	105.42	113.85
FY11	112.36	130.38	124.58	133.71	129.53	129.53	124.58	129.53	133.57	-

2.63 HPSEBL has stated that different depreciation rates were charged in FY11. While average depreciation rate up to 13 June 2010 was 2.5%, depreciation rates specified by the Commission in its MYT Regulations were used to arrive at the depreciation from 14 June 2010 to 31 March 2011 to comply with the provisions of the Companies Act. The average depreciation rate for FY11 for HPSEBL comes out to be 2.88%.

2.64 As there is a provision of true up of depreciation at the end of Control Period, HPSEBL has requested the Commission to consider the depreciation amount as submitted above.

Non-Tariff Income

2.65 Table below summarises the non tariff income projected by HPSEBL in various Tariff Petitions and that approved by the Commission in various tariff/true-up orders:

Table 24: HPSEBL Submission – Non-tariff income (Rs Cr)

FY	Proposed			Approved			Tariff Year			
	MYT Order	First APR	Second APR	MYT Order	First APR	Second APR	Proposed	Approved	Actual	True-up
FY09	94.92	94.43	113.81	94.92	124.59	140.92	94.92	94.92	113.81	140.92
FY10	99.67	99.15	105.68	99.66	130.61	130.61	99.15	130.61	177.54	177.54
FY11	104.65	104.11	110.96	104.64	136.93	136.93	110.96	136.93	202.78	-

2.66 HPSEBL has submitted that Commission approves the working capital based on normative basis which takes into account 2 month of receivables. As per the MYT regulations, any benefit or loss on account of early or delayed payment is to the account of the HPSEB Limited. Further, it is submitted that LPSC is levied on consumers who do not make payment within the credit period allowed for payment.

The LPSC charges compensate HPSEBL for the additional interest cost that is incurred on the additional working capital requirement due to non-payment of the consumer dues on time. Therefore, it would not be appropriate to consider the LPSC charges in the determination of the ARR of HPSEBL during the control period.

- 2.67 Further, HPSEBL has stated that through efficient working capital management, it has been able to pay its power purchase bills before the due date and has been allowed a rebate. Any additional cost arising due to inefficient management of working capital requirement is borne by HPSEBL and is not passed in the ARR. Similarly, rebate earned by HPSEBL is due to the better management of working capital and should not be included for the determination of the ARR. Therefore, HPSEBL has not considered the rebate earned on timely payment of power purchase bills for the control period.

SUMMARY OF THE 1ST APR PETITION FOR THE 2ND MYT CONTROL PERIOD (FY12 TO FY14)

- 2.68 The petition was filed on December 24, 2011 and appropriate clarifications were submitted by HPSEBL in response to the deficiency notes issued by the Commission.
- 2.69 The Annual Performance Review (APR) petition constitutes revised estimates of HPSEBL for FY12 and projections for FY13 and FY14 for the purpose of determination of the Aggregate Revenue Requirement (ARR), Distribution & Retail Supply Tariff as well as Generation Tariff for the remaining period of the second MYT Control Period (FY12 to FY14).
- 2.70 The Generation ARR has been filed on the basis of current information available and projections for FY12, FY13 and FY14. Based on the Total ARR and Generation ARR, HPSEBL has arrived at the Distribution ARR by deducting the Generation ARR from the Total ARR.

Sales Projections

- 2.71 HPSEBL has projected sales using past trends, by applying the category-wise Compounded Annual Growth Rate (CAGR) of certain years on the estimated sales of FY12. For the Domestic and Large Supply category, FY10 has been taken as the base year due to the abnormal increase in sales to these categories witnessed in FY11.
- (a) For Domestic category, HPSEBL has projected an increase in sales at 5.5%, in line with 3 years' CAGR (with FY10 as base year) for sales to this category.
 - (b) For Non-Domestic Non-Commercial (NDNC) and Commercial categories, HPSEBL has projected sales growth at the 3 year CAGR of 5.0% and 12.8% respectively.
 - (c) For Small and Medium Supply category, licensee has projected sales growth at 5.7%, which is the 6 years' CAGR for this category.
 - (d) Under Large Industrial Power Supply category, HPSEBL has projected sales growth for HT and EHT consumers at 6.7% and 9.9% respectively, which is in line with the 2 years' CAGR for these categories taking FY10 as the base year.
 - (e) For Street Lighting, Water Pumping and Agricultural Supply categories, HPSEBL has projected sales using the 4-year CAGR of the respective categories.
 - (f) For Temporary Supply and Bulk Supply categories, HPSEBL has projected energy sales using 2 years' CAGR of 4.2% and 15.3% respectively on the estimated sales for FY12.
 - (g) Accordingly, HPSEBL has estimated the sales of 6957 MU for FY12 and projected energy sales of 7501 MU and 8092 MU for FY13 and FY14 respectively, within the state of Himachal Pradesh, as tabulated hereunder:

Table 25: HPSEBL Projection – Category wise Energy Sales

S. No.	Consumer Category	FY11	FY12	FY13	FY14
		Actual	RE	Projected	Projected
1	Domestic	1282	1361	1436	1514
2	Non Domestic Non Commercial	90	97	102	107
3	Commercial	357	368	416	469
4	Temporary	25	29	31	32
5	Small & Medium Industrial Power Supply	201	206	218	230
5a	<i>Small Industrial Power Supply</i>	59	63	66	70
5b	<i>Medium Industrial Power Supply</i>	142	143	151	160
6	Large Industrial Power Supply	3993	4196	4537	4906
6a	<i>LT/HT</i>	2169	2341	2498	2666
6b	<i>EHT</i>	1824	1855	2039	2240
7	Govt., Irrigation & Water Supply	410	411	436	462
8	Public Lighting	13	14	14	14
9	Agricultural	35	37	40	43
10	Bulk Supply	236	237	273	315
Total Energy Sales		6641	6957	7501	8092

Transmission and Distribution (T&D) Loss

- 2.72 For the 2nd Control Period, the Commission had set a T&D loss reduction trajectory of 0.25%, 0.50% and 1.00% in FY12, FY13 and FY14 respectively, starting from 14.25%, to reach a level of 12.5% by the end of the Control Period. HPSEBL has submitted that the actual loss level achieved in FY11 has been better at 12.66%.
- 2.73 In its APR petition HPSEBL has proposed a revised loss reduction trajectory of 0.1%, 0.15% and 0.15% for FY12, FY13 and FY14 respectively to reach 12.26% by the end of the second Control Period.

Table 26: HPSEBL Projection – distribution loss trajectory

Energy Balance (MU)	FY11	FY12	FY13	FY14
	Actuals	R.E.	Projected	Projected
Total availability of power	9308	9428	9750	11798
Sales within the State (MU)	6641	6957	7501	8092
Proposed T&D Loss % within the State	12.66%	12.56%	12.41%	12.26%
Power Requirement for sale within the State (MU)	7604	7956	8564	9223
Inter-State Sale (MU)	1705	1472	1186	2575
Total energy sale within & Outside the State (MU)	8346	8429	8687	10667

- 2.74 HPSEBL has requested the Commission not to further reduce the loss trajectory from the revised proposal stating that it would not be feasible for it to achieve the same considering the lower level of losses already achieved and in view of the capital expenditure plan already approved by the Commission in the MYT Order.

Energy Availability

2.75 HPSEBL has projected energy availability from its own generating stations for the Control Period as tabulated hereunder:

2.76 The energy is available to HPSEBL from following sources:

- Own Hydel Generation;
- Central Sector and Joint Stations where Government of HP (GoHP) or HPSEBL have share allocations;
- Free Power Entitlement of GoHP availed from some of the NHPC and PSEB stations as well as a few new stations under private sector;
- Purchase through Private Small Hydel Plants installed in the State and Bilateral Short Term Contracts; and
- Share of HPSEBL in new Generation Projects of HPPCL in the State.

Own Hydel Generation

2.77 HPSEBL has projected energy availability from its own generating stations for the Control Period as tabulated hereunder:

Table 27: HPSEBL Projection - Power Purchase Quantum

Stations	FY11 Actual	FY12 R.E.	FY13 Projected	FY14 Projected
Chaba	10	8	8	8
Chamba	0	0	0	0
Nogli	8	7	7	7
Bassi	192	203	203	203
Giri	234	196	196	196
Rukti	1	1	1	1
Binwa	30	28	28	28
Rongtong	1	2	2	2
Andhra	56	56	56	56
Bhaba	646	626	626	626
Killar	0	1	1	1
Throit	9	8	8	8
Sal-II	4	5	5	5
Gumma	0	3	3	3
Holi	9	9	9	9
Gaj	36	37	37	37
Baner	42	38	38	38
Ghanvi	60	71	71	71
Khauri	42	38	38	38
Larji	666	640	640	640
Bhabha Aug	0	9	27	27
Ghanvi II	0	0	39	52
Uhl III	0	0	0	293
TOTAL	2045	1983	2040	2346

Stations	FY11	FY12	FY13	FY14
	Actual	R.E.	Projected	Projected
Less: Auxiliary Consumption	10	7	8	12
Less: GoHP free 12% share	101	99	103	139
Net Availability from Own Hydro Stations	1934	1877	1928	2194

2.78 Some highlights of HPSEBL's projection methodology for power availability from own generating stations are:

- (a) HPSEBL has considered the average generation for the recent three years (FY09 to FY11) for projecting the own generation for the Second Control Period, except for Bhabha Augmentation, Ghanvi II and Uhl III. HPSEBL has estimated the generation for the current year (i.e. FY12) based on the trend of actual generation during the first six months.
- (b) Auxiliary consumption has been considered based on the trend of actual auxiliary consumption of the past 3 years i.e. FY09 to FY11 and on the trend of Actual Consumption during the first six months of FY12.
- (c) Bhaba Augmentation was commissioned in June 2011 and has generated 5.40 MU till November 2011. Generation from this station for FY12 has been estimated on the basis of actual trend from June to November, using 2 month moving average. HPSEBL has submitted that the plant has been generating less than its design energy during FY12 due to reasons such as low water level, faulty AVR, silt or muddy water etc. For FY13 and FY14, HPSEBL has projected generation equivalent to design energy in a 75% dependant year. Since actual auxiliary consumption for complete year is not available yet, the average auxiliary consumption of all Own Generating Stations of HPSEBL during FY11 has been considered for FY13 and FY14.
- (d) Ghanvi II and Uhl III are planned to be commissioned in July 2012 and July 2013 respectively. The design energy in a 90% dependable year is 52.27 MU and 391.19 MU for Ghanvi II & Uhl III respectively. Accordingly generation from these 2 new plants in FY13 and FY14 have been considered on the basis of their anticipated commissioning dates and design energy. Auxiliary consumption has been considered equivalent to the average auxiliary consumption of all Own Generating Stations of HPSEBL during FY11.
- (e) GoHP is entitled to 12% of the power in all projects exceeding 5 MW capacity commissioned by HPSEB after 1990. HPSEBL has submitted that Gaj, Baner, Ghanvi, Larji, Khauli, Bhaba Augmentation, Ghanvi II and Uhl III fall in this category. The 12% free power share of GoHP from these plants has been deducted while projecting net generation from own plants for FY12 to FY14.

Power Purchase Quantum from Other Sources

2.79 The quantum of power availability for HPSEBL from various sources has been detailed in the table below:

Table 28: HPSEBL Projection - Power Purchase Quantum (MU)

Stations	FY11 Actual	FY12 R.E.	FY13 Projected	FY14 Projected
Power Availability (MU) from BBMB Stations				
BBMB Old	44	44	44	44
BBMB New	125	224	395	395
Dehar	79	87	188	188
Pong	0	21	52	52
Total	248	376	679	679
Power Availability (MU) from NTPC Stations				
Anta(LNG)	7	4	3	3
Anta(G)	67	84	86	86
Anta (L)	0	1	1	1
Auraiya(LNG)	13	7	4	4
Auraiya(G)	102	117	127	127
Auraiya(L)	0	1	1	1
Dadri(LNG)	12	7	5	5
Dadri(G)	120	142	149	149
Dadri(L)	0	1	1	1
Unchahar-I	50	50	53	53
Unchahar-II	86	93	93	93
Unchahar-III	54	63	63	63
Rihand-1 STPS	238	285	273	273
Rihand-2 STPS	245	258	261	261
Kehalgaon	134	117	119	119
Singrauli	0	0	0	0
Barh I & II	0	0	24	777
Dadri II TPS	0	0	0	0
Jhajjar STPS	0	0	0	0
Rihand STPP-III	0	0	162	243
Total	1127	1229	1424	2258
Power Availability (MU) from NHPC Stations				
Chamera-I	70	72	48	48
Chamera-II	51	59	54	54
Salal	32	31	30	30
Tanakpur	14	16	15	15
Uri	82	68	69	69
Dhaulti Ganga	40	42	40	40
Dulhasti	0	0	0	0
Sewa	0	0	0	0
Chamera-III	0	3	29	29
Parbatti-II	0	0	0	86
Parbatti-III	0	3	54	54
Kotlibehi	0	0	0	96
Total	289	295	339	522
Power Availability (MU) from other Stations				
NAPP	51	49	49	49
RAPP	85	93	71	71
Nathpa Jhakri SoR	176	192	169	169

Stations	FY11 Actual	FY12 R.E.	FY13 Projected	FY14 Projected
Koldam SOR	0	0	2	84
Shanan	5	5	5	5
Shanan Extn	45	45	45	45
Yamuna (UJVNL)	401	422	371	371
Khara	65	70	57	57
Baspa –II	1050	1050	1050	1050
Baspa II Sec Energy	242	155	154	154
Tehri I	87	104	71	71
ADHPL	24	0	0	0
Koteswar	0	9	25	25
Koldam	0	0	0	0
Rampur Project	0	0	0	51
Kashang	0	0	0	234
Patikari	61	61	61	61
Sarabari-II	15	31	31	31
Toss	54	54	54	54
Market Purchase	0	0	0	0
Total	2360	2340	2215	2582
Power Availability (MU) as Free Power & Equity Power				
Bairasiul	43	38	35	35
Chamera-I	139	79	60	60
Chamera –II	64	86	67	67
Shanan Share	3	3	3	3
Ranjeet Sagar Dam	76	69	61	61
Malana	49	63	38	38
Baspa – II	176	171	143	143
Nathpa Jhakri	303	192	248	248
Nathpa Jhakri Equity	554	439	353	353
Parbati II	0	0	0	61
Parbati III	0	3	50	50
Patikari	8	8	8	8
Sarabari-II	2	4	4	4
Toss	10	10	10	10
Ghanvi	7	8	8	8
Baner	5	4	4	4
Gaj	4	4	4	4
Larji	80	77	77	77
Khauli	5	5	5	5
Koladam	0	0	8	45
Kasang I (HPPCL)	0	0	0	0
AD Hydro	9	13	16	16
Karcham Wangtoo II	0	0	142	105
Budhil	0	0	0	0
Chamera III	0	15	21	21
Rampur Project	0	0	0	47
GoHP	0	0	0	0
Bhaba Augmentation	0	0	0	0

Stations	FY11 Actual	FY12 R.E.	FY13 Projected	FY14 Projected
Ghanvi II	0	0	5	6
Uhl III	0	0	0	35
Total	1537	1291	1370	1515
Power Availability (MU) from Private Micros				
Private Micros	479	569	569	569
Total	479	569	569	569
Power Availability (MU) due to Banking & UI				
Banking	870	997	800	200
UI Power	356	300	0	0
Total	1225	1297	800	200
Power Availability (MU) from Unallocated Share				
Unallocated	377	427	709	1627
Total	377	427	709	1627
Grand Total				
	7642	7825	8105	9952
External Loss	3.50%	3.50%	3.50%	3.50%
Net Power Purchase	7375	7551	7822	9603

2.80 Some highlights of power purchase assumptions made by HPSEBL are:

- (a) The quantum of power purchase for the first half of the current year i.e. FY12 is based on the actual bills received from each power purchase source/station.
- (b) The power purchase quantum for BBMB New and Dehar in FY12 is based on six months actual energy received. As per a judgment by the Hon'ble Supreme Court, there is an increase in HPSEBL's share in these plants during FY12. Additionally, share from Pong HEP is also available, all of which has been taken into account in HPSEBL's projections.
- (c) Revised Estimates for FY12 and projections for FY13 and FY14 of the power purchase quantum from NTPC Stations have been calculated by applying the average of last three years month-wise PLF as mentioned in the REA, on the Installed Capacity of each Plant to calculate the month-wise gross generation.
- (d) HPSEBL has also factored the Auxiliary Consumption based on the CERC Tariff Order to arrive at the month-wise Net Generation for each plant. The effective share of the HPSEBL is then applied to the total month-wise Net Generation to project month-wise Net Energy Purchase from each station.
- (e) In Barh-II, Unit I is assumed to be commissioned in December 2012 and Unit II in October 2013. Also, Barh-I is assumed to be commissioned by the end of FY13. Projections for Barh-II for FY13 & FY14 have been done assuming a PLF of 80% and allocation of 20 MW, while projections of Barh-I for FY13 & FY14 have been done considering allocation of 130 MW and 80% PLF.
- (f) Commissioning of Unit I of Rihand III is considered in March 2012 and commissioning of Unit II is anticipated in March 2013. Considering the fact that average PLF of Rihand I & II for last 3 years is above 90%, PLF of 90%

is assumed along with HPSEBL's share of 34 MW for projections of availability from Rihand III in FY12, FY13 & FY14.

- (g) A nominal power purchase quantum from liquid fuel in case of Anta, Auriaya and Dadri has been considered for the control period. This is primarily for the winter period when HPSEBL will be facing shortage of power and during real time operation, there is every likelihood of liquid fuel power being booked to HPSEBL on the basis of governing frequency.
- (h) The power purchase quantum from existing as well as new stations of NHPC for the second half of FY12 as well as for FY13 and FY14 have been calculated on basis of month-wise design energy shown by each plant in their respective water studies (as mentioned in the CERC Orders). The effective share of the HPSEBL is applied on the total month-wise ex-bus generation to estimate the month-wise energy purchases from the respective stations. The 12% free power share of GoHP from the corresponding plants has been worked out in a similar manner. The 12% free power share has been considered only during the winter months (October to April) of control period to meet the deficit in the state.
- (i) Commissioning schedule considered for new plants of NHPC is: Chamera III in December 2011, Parbati III in February 2012, Parbati II and Kotlibehel during FY14. The respective share of HPSEBL from these new stations is 41 MW, 92 MW, 142 MW and 26 MW.
- (j) The power purchase quantum from NAPP is calculated by applying the average of previous three years month-wise PLF on installed capacity and then availability is computed corresponding to HPSEBL in this station. For RAPP same methodology is adopted but a PLF of 60% is used.
- (k) The power purchase quantum from Baspa II (Primary energy), Nathpa Jhakri and Tehri Hydro for the second half of the FY12 and FY13 & FY14 has been calculated as per the month-wise design energy generation shown by each plant in their respective water studies and then the effective share of the HPSEBL is applied on the total month-wise ex-bus generation to estimate the month-wise energy purchases from these stations. The 12% free power share of GoHP from Baspa II, Nathpa Jhakri and Equity Power of Nathpa Jhakri has been worked out in the similar manner.
- (l) Energy Availability from Yamuna (UJVNL) & Khara has been considered at the average generation level of last three years.
- (m) HPSEBL has considered the energy availability from four new Hydel plants i.e. Koldam from March 2013, Koteswar Unit I from April 2011 and Unit II from October 2011, Rampur & Kashang during FY14, based on their design energy given in their respective DPRs and their respective allocation. Further, 12% Free Power GoHP share has also been considered only during the winter months from these plants except Koteswar.
- (n) HPSEBL has also considered energy availability from Private Sector Projects

namely Patikari, Sarabari II and Toss, as well as from Private Micros based on actual availability during FY11. For plants like Sarabari II and some Private Micros which got commissioned during FY11, the monthly average has been taken to project Energy Availability during FY12–FY14. Accordingly Free Power from Patikari, Sarabari II and Toss has also been estimated at 12%.

- (o) In Karcham-Wangtoo II, HPSEBL does not have any allocation and only 12% GoHP Free Power share during the winter months based on Design Energy has been considered by HPSEBL. This plant has been expected to get commissioned during FY13.
- (p) HPSEBL has considered Free Power from its own Hydro Stations Bhaba Augmentation, Ghanvi II and Uhl III at 12%. Free Power from existing Stations is based on month wise design energy.
- (q) Unallocated share from Central Generating Stations for FY12 & FY13 has been considered at the same level of unallocated share received during the winter months of FY11. Due to the proposed commissioning of new plants during FY13 & FY14 where HPSEBL has unallocated share (e.g. Parbati II & III and Koldam), the quantum of Unallocated Share is projected accordingly.
- (r) UI Purchase of 300 MU in FY12 is based on actual six months' information. No further UI purchase has been considered in the remaining 6 months and the balance control period.
- (s) Generation from the new plants has been considered as per the expected COD of each station. In case of delay in the COD, it will impact the projected energy availability and the energy deficit within the state will be met through additional market purchase.
- (t) External transmission losses on power purchase are estimated at 3.50%, based on the actual loss levels for the first six months of the FY12.

Outside State Sales

2.81 Considering the power availability and the state's own power requirement during the Control Period, the HPSEBL has projected the surplus power available for sale outside the State as 475 MU, 386 MU and 2375 MU for FY12, FY13 and FY14 respectively.

Table 29: HPSEBL Projection - Outside State Sales Projection (MU)

Energy Sales to Outside State (MU)	FY11	FY12	FY13	FY14
	Actuals	RE	Projected	Projected
Energy available for sale to consumers outside State	1705	1472	1186	2575
Less: Banking Power return	851	997	800	200
Net Inter State Sales	854	475	386	2375

Energy Balance

2.82 Based on the data on estimated and projected sales, own generation and power purchase, the following Energy Balance has been proposed by HPSEBL to assess T&D losses during the Control Period.

Table 30: HPSEBL Projection - Energy Balance

Energy Balance (MU)	FY11	FY12	FY13	FY14
	Actuals	RE	Projected	Projected
Power Availability				
Net Own Generation Sources + HPPCL	1934	1877	1928	2194
Net Power Purchase Sources (CGS, Inter-state etc.)	7375	7551	7822	9603
Total Availability	9308	9428	9750	11798
Sales within the State (MU)	6641	6957	7501	8092
Proposed T&D Loss % within the State	12.66%	12.56%	12.41%	12.26%
Power Requirement for sale within the State (MU)	7604	7956	8564	9223
Inter-State Sale (MU)	1705	1472	1186	2575
Total Sale within & Outside the State (MU)	8346	8429	8687	10667
Overall Losses (MU) - Total availability less Total Sale	963	999	1063	1131
Overall T&D Losses %	10.3%	10.6%	10.9%	9.6%

Aggregate Revenue Requirement

Cost of Power Purchase

2.83 The cost of power available from various sources has been projected by HPSEBL on the basis of the following assumptions:

- An escalation of 5% has been assumed for projecting the Per Unit cost for BBMB Stations for FY12 to FY14. Even though there has been substantial increase in cost from FY10 to FY11, HPSEBL has projected only a nominal increase in per unit cost for FY12 to FY14, considering actual six month purchase cost.
- The power purchase cost of NTPC for FY12 and rest of the 2nd MYT Control Period has been calculated based on the actual Power Purchase cost for FY11 and the first six months of FY12.
- For FY12, based on actual six month purchase, an escalation of 7%, 13% and 5% is assumed over FY11 for Anta, Auraiya and Dadri respectively. Further, an escalation of 8% has been assumed for NTPC Liquid and Gas based power stations for projecting the Per Unit cost for FY13 & FY14 in view of the considerable increase in the fuel prices in the recent years.
- For NTPC Coal based power stations for FY12, based on actual 6 months purchase, along with soaring international coal prices and strong depreciation

of rupee, overall escalation of 15% has been considered over FY11. Further, an escalation of 7% has been assumed for projecting the Per Unit cost for FY13 & FY14 keeping in view of the escalation of approximately 7% increase in the coal prices over the past ten years.

- (e) For NHPC Stations, keeping in view of actual 6 months bills, an escalation of 10% has been assumed for FY12 over FY11 per unit cost. A nominal escalation of 5% has been assumed for projecting the Per Unit cost for FY13 & FY14 keeping in view of the trend of increase in cost in the past years.
- (f) Further an escalation of 5% for FY12 to FY14 is assumed for Power Purchase from other stations except for Nathpa Jhakri and Tehri in FY12 where an escalation of 10% is assumed based on actual purchase.
- (g) For Free Power in FY12, rates specified by GoHP in its letter for “Sale Rate of Free & Equity Power” is assumed which are different in summers and winters. Accordingly weighted average cost is considered since HPSEBL processed the bills during FY12 at the GoHP specified rate of Rs. 4/Unit. For the Plants where Free Power is purchased in winters only, Power Purchase cost of Rs. 2.96/Unit is assumed. However, for FY13 & FY14, Rs 2.96/Unit is considered as cost of Free Power is considered as per Commission’s order regarding rate of Free Power. For Equity Power an escalation of 5% is assumed.
- (h) Power Purchase Cost from Private Micros & Unallocated Share in FY11 is assumed to be escalated by 5% during FY12 to FY14.
- (i) Revised Estimates for PGCIL Charges for FY12 is based on 6 months actual and 6 months estimated power purchase. An escalation of 5% is considered on PGCIL Charges.
- (j) HPPTCL Charges are based on approved HPPTCL Order for FY12 to FY14.
- (k) As SLDC function has been transferred to HP Load Dispatch Society, ULDC Charges for FY12 to FY14 have been projected as Nil as the same is included in SLDC Charges.
- (l) Baspa Arrears for FY11 is based on the actual payout. Further, HPSEBL has considered the arrears for FY12 & FY13 on the basis of Judgement by ATE on 21st October 2011.
- (m) Other Arrears include the supplementary bills raised by CPSUs for recovery of arrears on account of New Tariff Orders issued by CERC. Further, other arrears also include the provision of Rs 40 Crores in FY12 & Rs 20 Crores in FY13 towards payment of arrears to UJVNL.

2.84 The table below summarizes the station wise power purchase costs for current and ensuing years.

Table 31: HPSEBL Projection – Power Purchase Cost

Stations	FY11 (Actual)			FY 2011-12 (R.E.)			FY 2012-13 (Projected)			FY 2013-14 (Projected)		
	MU	P/U	Rs. Cr	MU	P/U	Rs. Cr	MU	P/U	Rs. Cr	MU	P/U	Rs. Cr
Power purchase cost from BBMB Stations												
BBMB Old	44	64	3	44	68	3	44	71	3	44	75	3
BBMB New	125	43	5	224	45	10	395	47	19	395	50	20
Dehar	79	57	4	87	60	5	188	63	12	188	66	12
Pong	0	0	0	21	81	2	52	85	4	52	89	5
Total	248	51	13	376	53	20	679	56	38	679	59	40
Power purchase cost from NTPC Stations												
Anta(LNG)	7	432	3	4	462	2	3	499	1	3	539	1
Anta(G)	67	304	20	84	326	27	86	352	30	86	380	33
Anta (L)	0	857	0	1	917	1	1	991	1	1	1070	1
Auraiya(LNG)	13	498	6	7	563	4	4	608	2	4	656	3
Auraiya(G)	102	281	29	117	317	37	127	343	43	127	370	47
Auraiya(L)	0	991	0	1	1120	1	1	1210	1	1	1307	1
Dadri(LNG)	12	500	6	7	525	3	5	567	3	5	612	3
Dadri(G)	120	289	35	142	303	43	149	327	49	149	353	53
Dadri(L)	0	818	0	1	859	1	1	928	1	1	1002	1
Unchahar-I	50	264	13	50	303	15	53	324	17	53	347	18
Unchahar-II	86	274	24	93	316	29	93	338	31	93	361	34
Unchahar-III	54	311	17	63	358	22	63	383	24	63	410	26
Rihand-1 STPS	238	200	48	285	230	66	273	247	67	273	264	72
Rihand-2 STPS	245	231	56	258	265	68	261	284	74	261	304	79
Kehalgaon	134	313	42	117	360	42	119	386	46	119	413	49
Singrauli	0	172	0	0	198	0	0	211	0	0	226	0
Barh I & II	0	0	0	0	360	0	24	386	9	777	413	320
Dadri II TPS	0	326	0	0	375	0	0	402	0	0	430	0
Jhajjar STPS	0	444	0	0	511	0	0	547	0	0	585	0
Rihand STPP-III	0	0	0	0	511	0	162	547	88	243	585	142
Total	1127	265	299	1229	295	363	1424	344	490	2258	391	884
Power purchase cost from NHPC Stations												

Stations	FY11 (Actual)			FY 2011-12 (R.E.)			FY 2012-13 (Projected)			FY 2013-14 (Projected)		
	MU	P/U	Rs. Cr	MU	P/U	Rs. Cr	MU	P/U	Rs. Cr	MU	P/U	Rs. Cr
Chamera-I	70	160	11	72	176	13	48	185	9	48	194	9
Chamera-II	51	360	18	59	396	23	54	415	23	54	436	24
Salal	32	91	3	31	100	3	30	105	3	30	110	3
Tanakpur	14	184	3	16	202	3	15	213	3	15	223	3
Uri	82	171	14	68	188	13	69	197	14	69	207	14
Dhaul Ganga	40	234	9	42	258	11	40	270	11	40	284	11
Dulhasti	0	734	0	0	807	0	0	847	0	0	890	0
Sewa	0	572	0	0	630	0	0	661	0	0	694	0
Chamera-III	0	0	0	3	396	1	29	415	12	29	436	13
Parbatti-II	0	0	0	0	0	0	0	0	0	86	436	38
Parbatti-III	0	0	0	3	396	1	54	415	22	54	436	23
Kotlibehi	0	0	0	0	0	0	0	0	0	96	436	42
Total	289	202	58	295	233	69	339	285	97	522	347	181
Power purchase cost from other Stations												
NAPP	51	204	10	49	214	10	49	225	11	49	236	12
RAPP	85	302	26	93	317	29	71	333	24	71	350	25
Nathpa Jhakri SoR	176	303	53	192	333	64	169	350	59	169	367	62
Koldam SOR	0	0	0	0	0	0	2	397	1	84	416	35
Shanan	5	38	0.2	5	40	0	5	42	0	5	44	0
Shanan Extn	45	40	1.8	45	42	2	45	44	2	45	46	2
Yamuna (UJVNL)	401	35	14	422	59	25	371	59	22	371	59	22
Khara	65	37	2	70	35	2	57	35	2	57	35	2
Baspa –II	1050	278	292	1050	292	306	1050	306	321	1050	321	338
Baspa II Sec Energy	242	297	46	155	297	46	154	297	46	154	297	46
Tehri I	87	490	43	104	539	56	71	566	40	71	594	42
ADHPL	24	295	7	0	295	0	0	295	0	0	295	0
Koteshwar	0	0	0	9	550	5	25	578	14	25	606	15
Koldam	0	0	0	0	0	0	0	0	0	0	0	0
Rampur Project	0	0	0	0	0	0	0	0	0	51	351	18
Kashang	0	0	0	0	0	0	0	0	0	234	351	82

APR for FY13 under second MYT Control Period and True up of FY11 & first Control Period

Stations	FY11 (Actual)			FY 2011-12 (R.E.)			FY 2012-13 (Projected)			FY 2013-14 (Projected)		
	MU	P/U	Rs. Cr	MU	P/U	Rs. Cr	MU	P/U	Rs. Cr	MU	P/U	Rs. Cr
Patikari	61	225	14	61	225	14	61	225	14	61	225	14
Sarabari-II	15	295	4	31	295	9	31	295	9	31	295	9
Toss	54	250	14	54	250	14	54	250	14	54	250	14
Market Purchase	0	0	0	0	0	0	0	0	0	0	0	0
Total	2360	223	527	2340	249	583	2215	261	579	2582	285	736
Power purchase cost of Free Power & Equity Power												
Bairasiul	43	315	13	38	347	13	35	296	10	35	296	10
Chamera-I	139	315	44	79	351	28	60	296	18	60	296	18
Chamera –II	64	315	20	86	357	31	67	296	20	67	296	20
Shanan Share	3	315	1	3	351	1	3	296	1	3	296	1
Ranjeet Sagar Dam	76	315	24	69	371	26	61	296	18	61	296	18
Malana	49	315	16	63	378	24	38	296	11	38	296	11
Baspa – II	176	315	55	171	383	65	143	296	42	143	296	42
Nathpa Jhakri	303	315	96	192	315	60	248	296	73	248	296	73
Nathpa Jhakri Equity	554	396	219	439	356	156	353	350	123	353	367	129
Parbati II	0	0	0	0	296	0	0	296	0	61	296	18
Parbati III	0	0	0	3	360	1	50	296	15	50	296	15
Patikari	8	315	3	8	360	3	8	296	2	8	296	2
Sarabari-II	2	315	1	4	364	2	4	296	1	4	296	1
Toss	10	315	3	10	362	3	10	296	3	10	296	3
Ghanvi	7	315	2	8	296	3	8	296	3	8	296	3
Baner	5	315	2	4	364	2	4	296	1	4	296	1
Gaj	4	315	1	4	363	2	4	296	1	4	296	1
Larji	80	315	25	77	371	28	77	296	23	77	296	23
Khauli	5	315	2	5	364	2	5	296	1	5	296	1
Koladam	0	0	0	0	0	0	8	296	2	45	296	13
Kasang I (HPPCL)	0	0	0	0	0	0	0	0	0	0	0	0
AD Hydro	9	315	3	13	296	4	16	296	5	16	296	5
Karcham Wangtoo II	0	0	0	0	0	0	142	296	42	105	296	31
Budhil	0	0	0	0	0	0	0	0	0	0	0	0

Stations	FY11 (Actual)			FY 2011-12 (R.E.)			FY 2012-13 (Projected)			FY 2013-14 (Projected)		
	MU	P/U	Rs. Cr	MU	P/U	Rs. Cr	MU	P/U	Rs. Cr	MU	P/U	Rs. Cr
Chamera III	0	0	0	15	296	4	21	296	6	21	296	6
Rampur Project	0	0	0	0	0	0	0	0	0	47	296	14
GoHP	0	0	0	0	0	0	0	0	0	0	0	0
Bhaba Augmentation	0	0	0	0	296	0	0	296	0	0	296	0
Ghanvi II	0	0	0	0	296	0	5	296	1	6	296	2
Ulh III	0	0	0	0	296	0	0	296	0	35	296	10
Total	1537	344	529	1291	354	457	1370	310	424	1515	313	474
Power purchase cost from Private Micros												
Private Micros	479	262	125	569	275	156	569	289	164	569	303	173
Power purchase cost of Banking & UI												
Banking	870	0	0	997	0	0	800	0	0	200	0	0
UI Power	356	138	49	300	386	116	0	0	0	0	0	0
Total	1225	40	49	1297	89	116	800	0	0	200	0	0
Power purchase cost of Unallocated Share												
Unallocated	377	259	97	427	272	116	709	285	202	1627	300	488
Power purchase cost - Other Charges												
PGCIL Charges			136			166			174			183
HPPTCL Charges			0			12			12			12
ULDC Charges			7			0			0			0
Other Charges			15			0			0			0
Baspa Arrears			103			21			55			0
Other Arrears			54			168			20			0
SLDC Charges			0			8			9			11
Total			315			374			270			206
Grand Total	7642	263	2013	7825	288	2254	8105	279	2265	9952	320	3181
External Loss	3.50%			3.50%			3.50%			3.50%		
Net Power Purchase	7375	273	2013	7551	299	2254	7822	290	2265	9603	331	3181

Repair and Maintenance Cost

2.85 For projecting R&M expenses, K-factor of 0.89% on the opening GFA, as approved by the Commission in its MYT Order dated 19th July 2011, has been used by HPSEBL for the corresponding years of the control period.

2.86 The proposed R&M expenses during the Control Period are given below:

Table 32: HPSEBL Projection – R&M Expenses (Rs Cr)

R&M Expenses	FY11	FY12	FY13	FY14
	Actual	R.E.	Projected	Projected
Opening GFA	4644.55	4720.57	5212.19	6007.26
K factor	0.94%	0.89%	0.89%	0.89%
R&M Expenses	43.46	42.13	46.52	53.62

Employee Cost

2.87 HPSEBL has considered the actual six monthly employee expenses for FY12 for forecasting employee expenses for the remaining Control Period. The licensee has submitted that the pay for employees has been revised as per the recommendations of V Pay Commission with effect from 1st November, 2009.

2.88 The basic salary component of the employee expense for 2nd Control Period has been calculated by escalating the projected basic salary during FY12 by 3% every year.

2.89 Dearness Allowance (DA) for FY12 to FY14 is calculated as a percentage of Basic & Grade Pay. DA percentage as on 1 January 2011 was 51% which was increased to 58% on 1 July 2011. A nominal 5% increase in DA has been assumed every six months during the 2nd Control Period.

2.90 The Commission had previously approved total Arrears of Rs. 395 Crores on account of Fifth Pay Commission impact, but the actual payout in FY11 was only Rs. 122.56 Crores and actual payout during FY12 is Rs. 106.89 Crores. The remaining payout of Rs. 166.55 Crores has been considered in FY13.

2.91 Other Allowances, Overtime Payments, Medical Expenses, LTC, Staff Welfare Expenses and Other Items have been increased by average CPI of FY09 to FY11 i.e. 10.64% and no bonus has been considered by HPSEBL during the entire Control Period.

2.92 A contribution of Rs. 300 Crores in FY14 for establishing a Pension Corpus has been proposed by HPSEBL so that a fund is created to meet the statutory requirements of pension liabilities from return of this Fund.

2.93 For projecting Pensions, actual payout of FY11 has been increased by average CPI of FY09 to FY11 i.e. 10.64% and impact of retirements has been added. Projection of Gratuity is based on retirements and increase in DA percentages during the 2nd Control Period.

2.94 The summary of employee expenses proposed by HPSEBL is shown below.

Table 33: HPSEBL Projection - Employee Cost (Rs Cr)

Particulars	FY11	FY12	FY13	FY14
	Actual	R.E.	Projected	Projected
Salaries & Allowances				
Salaries (Basic) + Dearness Pay	358.73	369.49	380.58	391.99
Merger of DA with Basic (Proposed)	0.00	0.00	0.00	0.00
Grade pay	76.82	79.12	81.50	83.94
DA	183.43	257.95	314.21	371.23
Arrears due to the 5 th Pay Commission	122.56	106.89	165.55	0.00
Other Allowances	30.51	33.76	37.35	41.32
Overtime	2.52	2.79	3.08	3.41
Bonus	0.09	0.00	0.00	0.00
Salaries - Total	774.66	850.01	982.27	891.90
Other Staff Cost				
Medical Expense Reimbursement	9.66	10.69	11.82	13.08
Fee & Honorarium	0.00	0.01	0.01	0.01
Earned Leave Encashment	41.56	52.46	72.05	76.81
Leave Salary Contribution	0.09	0.19	0.19	0.19
Payment under Workmen's Compensation	0.29	0.55	0.55	0.55
LTC	0.50	0.55	0.61	0.68
Staff Welfare Expenses	2.42	2.68	2.96	3.28
Other Staff Cost - Total	54.52	67.12	88.20	94.60
Terminal Benefits				
Provident Fund Contribution	0.00	0.00	0.00	300.00
Pension	155.45	195.45	248.47	309.26
Gratuity	46.60	58.82	80.79	86.12
Any other Items	6.01	6.65	7.36	8.14
Terminal Benefits - Total	208.06	260.92	336.62	703.53
Gross Employee Cost	1,037.24	1,178.05	1,407.09	1,690.03
Less : Employee Cost Capitalization	60.76	69.01	82.43	99.00
Less : Employee Attrition Impact		37.92	54.57	57.92
Net Employee Cost	976.48	1,071.12	1,270.10	1,533.11

Administrative and General Expenses

2.95 The new MYT Regulations lay down the following methodology for projection of A&G expenses:

$$A\&G_n = (A\&G_{n-1}) * (WPI_{inflation})$$

2.96 HPSEBL has projected A&G Expenses during the 2nd Control Period on the basis of the methodology as per the Commission's MYT Regulations. The inflation factor has been estimated at 7.14% and the same has been used for the escalating A & G Expenses during the second control period.

2.97 Additionally, the Commission had requested the GoHP to bear the balance cost of the CFL Program in its MYT Order dated 19 July 2011. HPSEBL has submitted that it had taken up the matter with GoHP but response is still awaited. Therefore, HPSEBL has considered the payment of balance Rs. 56 Cr in FY11 itself as complete payment has already been made to GoHP by the end of FY11.

2.98 The summary of proposed A&G expenses is provided below

Table 34: HPSEBL Projection – A&G Expenses (Rs Cr)

Particulars	FY11 Actuals	FY12 R.E	FY13 Projected	FY14 Projected
Administration Charges				
Rent, Rates & Taxes	1.98	2.12	2.27	2.44
Telephone, Postage & Telegrams	2.59	2.77	2.97	3.19
Consultancy Charges	0.17	1.00	1.00	1.00
Conveyance & Travel	14.95	16.02	17.16	18.39
Regulatory Expenses	2.29	2.50	2.50	2.50
Income Tax Updating Charges	0.02	0.05	0.05	0.05
Consumer Redressal Forum	1.04	1.11	1.19	1.28
Insurance	0.10	0.11	0.11	0.12
Other Charges	2.49	2.67	2.86	3.06
IT and other Initiatives	0.00	2.00	2.00	2.00
Administration Charges - Total	25.63	30.35	32.12	34.02
Other Charges				
Fees & Subscriptions, Books & Periodicals	0.35	0.37	0.40	0.43
Printing & Stationery	2.33	2.50	2.67	2.87
Advertisement Expenses	0.83	0.89	0.95	1.02
Electricity Charges	3.05	3.27	3.50	3.75
Water Charges / Cold weather expenses	0.25	0.27	0.29	0.31
Miscellaneous Expenses	1.92	2.06	2.20	2.36
Legal Charges	0.69	0.74	0.79	0.85
Audit Fee	2.76	2.96	3.17	3.39
Freight Material related Expenses	3.03	3.25	3.48	3.73
Entertainment Charges	0.19	0.20	0.22	0.23
Training to Staff	0.12	0.13	0.14	0.15
Public Interaction Program	0.25	0.55	0.55	0.55
Public Expenses / Other professional charges	12.86	13.78	14.76	15.82
GIS / GPS expenses related to High level Committee	0.00	0.00	0.00	0.00
Cost Free Bulb to DIS Consumers	56.00	0.00	0.00	0.00
DSM Program	0.00	0.47	0.00	0.00
A&G - Total	110.26	61.78	65.25	69.48
Less: Capitalisation	3.66	4.17	4.40	4.69
Net A&G Costs	106.60	57.61	60.85	64.79

Depreciation

- 2.99 Depreciation is charged on the basis of straight-line method, on the fixed assets in use at the beginning of the year.
- 2.100 Different depreciation rates were charged by HPSEBL in FY11. While the average depreciation rate up to 13 June 2010 was 2.5%, depreciation rates specified by the Commission in its MYT Regulations have been used to arrive at the depreciation from 14 June 2010 to 31 March 2011 to comply with the provisions of the Companies Act.
- 2.101 The average depreciation rate for FY11 hence comes out to be 2.88%. But HPSEBL has assumed a slightly higher depreciation rate of 3.10% to account for the increased rates of depreciation that would be applicable for the full year beginning FY12 for distribution assets.

Table 35: HPSEBL Projection – Depreciation (Rs Cr)

Particulars	FY11	FY12	FY13	FY14
	Actuals	R.E	Projected	Projected
GFA - Opening Balance	4,644.55	4,720.57	5,212.19	6,007.26
Net Additions during the Year	76.02	491.62	795.07	1,628.57
GFA - Closing Balance	4,720.57	5,212.19	6,007.26	7,635.83
Depreciation Rate %	2.88%	3.10%	3.10%	3.10%
Depreciation for the Year	133.57	207.77	223.58	240.94

Interest and Finance Charges

- 2.102 HPSEBL has assumed interest rate for new loans a 12%. For existing loans the interest payments have been projected based on the actual interest outgoes during the 2nd Control Period.
- 2.103 Working capital requirement has been calculated as per the Commission's MYT Regulations. However, one month's Power Purchase component has not been reduced from the total working capital because HPSEBL has stated in its petition that it has historically has paid all its power purchase bills within one week after the issuance of the bill by the respective plants to avail the rebate for the timely payment of the power purchase bills. A rate of interest of 13% has been considered for working capital loans.
- 2.104 HPSEBL has proposed the following interest expenses based on the existing loan agreements and proposed capital expenditure plan for the 2nd Control Period.

Table 36: HPSEBL Projection – Interest & Finance Charges (Rs Cr)

Particulars	FY11	FY12	FY13	FY14
	Actuals	R.E	Projected	Projected
RGGVY	3	3.54	3.86	3.59
LIC	18.23	16.43	14.20	12.00
REC	32	47.15	45.20	40.00
PFC	45.59	42.54	41.57	8.54
Bonds	0.79	0.67	0.00	3.00

Particulars	FY11	FY12	FY13	FY14
	Actuals	R.E	Projected	Projected
Bank Loans	75.13	122.70	111.79	68.46
Interest on State Govt. Loan	1.74	1.67	1.53	1.45
Non SLR Bonds	23.21	17.25	13.81	24.00
Other Negotiated Loan	0.00	0.00	0.00	0.00
Interest on Overdraft	0.00	0.00	0.00	0.00
Interest on GPF & CPF	6.01	6.00	6.00	6.00
Cost of Raising Finances	0.01	0.01	0.01	0.01
Other Charges	0.28	0.29	0.31	0.32
Interest on Consumer Security Deposits	9.00	9.45	9.92	10.42
Charges payable to CTU / NLDC	0.00	0.00	0.00	0.00
Rebate allowed for Timely Payment	0.71	0.75	0.79	0.83
Interest on WC Borrowing & Other Charges	65.30	69.27	74.85	104.69
Interest & Finance Charges - Total	280.43	337.73	323.83	283.31
Additional Debt Infusion due to Capitalization		425.35	687.90	1,409.04
Interest on Debt		25.52	41.27	84.54
Cumulative Interest		25.52	66.79	151.34
Interest & Finance Charges - Total after Capitalization	280.43	363.25	390.63	434.64
Less: Interest Capitalization	101.45	131.41	141.32	157.24
Net Interest & Financing Costs	178.98	231.84	249.31	277.40

Return on Equity

2.105 HPSEBL has considered 15.5% return on equity for generation business and 16% return on equity for the distribution business, and has proposed the following return on equity:

Table 37: HPSEBL Projection – Return on Equity (Rs Cr)

Particulars	FY11	FY12	FY13	FY14
	Actuals	R.E	Projected	Projected
Opening Equity	971.77	998.71	1073.62	1192.86
Equity Infusion	26.93	74.91	119.24	331.41
Closing Equity	998.71	1073.62	1192.86	1524.26
Return on Equity	144.39	167.73	186.51	238.28

Non Tariff Income and Other Income

2.106 Non Tariff and Other Income, as shown in table below, has been estimated by HPSEBL to increase at around 5% p.a. An escalation of 5% p.a. is applied on FY11 actual figures for future projections.

Table 38: HPSEBL Projection – NTI and Other Income (Rs Cr)

Particulars	FY11	FY12	FY13	FY14
	Actuals	R.E	Projected	Projected
a) Meter Rent/Service Line Rentals	31.60	33.18	34.84	36.58
b) Recovery for theft of Power / Malpractices	30.71	32.25	33.86	35.55
c) Wheeling Charges Recovery	43.05	45.20	47.46	49.84
d) Miscellaneous Charges from Consumers	8.72	6.25	6.56	6.89
Non Tariff Income – Total	114.08	116.88	122.72	128.86
Other Income				
a) Interest on Staff loans & Advances	0.60	0.63	0.66	0.69
b) Income from Investments	7.05	7.40	7.77	8.16
c) Interest on Loans & Advances to Licensees	0.00	0.00	0.00	0.00
d) Delayed Payment Charges from Consumers	14.18	14.89	15.63	16.42
e) Interest on Advances to Suppliers / Contractors	0.13	0.14	0.14	0.15
f) Interest on Banks (other than on Fixed Deposits)	0.00	0.00	0.00	0.00
g) Income from Trading	1.25	1.31	1.38	1.45
h) Income from Staff Welfare Activities	0.06	0.06	0.07	0.07
i) Miscellaneous Receipts	65.43	55.79	58.57	61.50
j) O&M Charges Recovery from HPPTCL	0.00	2.31	2.54	2.80
k) Recovery of Investigation & Survey Charges	0.00	0.00	52.27	52.27
Other Income – Total	88.70	82.53	139.04	143.51
Total Non Tariff Income & Other Income	202.78	199.41	261.77	272.37

Aggregate Revenue Requirement

2.107 The table below summarizes HPSEBL's revised estimate for ARR of FY12 and projections for FY13 and FY14:

Table 39: HPSEBL Projection – Total Aggregate Revenue Requirement (Rs Cr)

Particulars	FY11	FY12	FY13	FY14
	Actuals	R.E	Projected	Projected
Costs				
Power Purchase Cost (including PGCIL Charges)	2012.73	2254.15	2264.68	3180.64
Employee Cost	976.48	1071.12	1270.10	1533.11
Repairs & Maintenance Cost	43.46	42.13	46.52	53.62
Administrative & General Expenses	106.60	57.61	60.85	64.79
Interest Cost	178.98	231.84	249.31	277.40
Depreciation	133.57	207.77	223.58	240.94
Amortization of Regulatory Asset with Interest	0.00	0.00	0.00	0.00
Prior Period Credit / Charges	41.66	0.00	0.00	0.00
Other Debits / Write Offs	1.40	0.00	0.00	0.00
Extra Ordinary Items	1.23	0.00	0.00	0.00
Total Costs	3,496.11	3,864.63	4,115.05	5,350.51
Add: Return on Equity	144.39	167.73	186.51	238.28
Add: Recovery of Prior Period Gap	0.00	0.00	0.00	0.00
Less: Non-Tariff Income	202.78	199.41	261.77	272.37
Annual Revenue Requirement	3,437.72	3,832.95	4,039.80	5,316.41

2.108 As seen above, HPSEBL has submitted revised estimate for ARR for FY12 as Rs 3,832.95 Cr. The projected ARR for FY13 is Rs 4,039.80 Cr and for FY14 is Rs 5,316.41 Cr.

Aggregate Revenue Requirement – Generation Business

2.109 HPSEBL has also submitted its estimates for FY12 and projections for FY13 & FY14 of the Annual Fixed Charges of all its own generating stations. The same has been considered for estimating the Generation ARR out of the total ARR tabulated above.

2.110 The total ARR/AFC for the generation business estimated by HPSEBL is Rs 339.04 Cr for FY12, Rs 359.23 Cr for FY13 and Rs 437.04 Cr for FY14.

2.111 The average rate of sale of power from all own generating stations is projected to be 181 paise/unit in FY12, 186 paise/unit in FY13 and 199 paise/unit in FY14.

Table 40: HPSEBL Projection – Total Generation ARR/AFC

Particulars	Units	FY11	FY12	FY13	FY14
		Actuals	R.E	Projected	Projected
Actual Generation	MU	2045.26	1982.98	2039.53	2345.99
Total Auxiliary	MU	10.26	7.32	8.15	12.07
Net Generation at Bus	MU	2035.00	1975.66	2031.38	2333.92
Less: Free Power to GoHP @ 12%	MU	101.29	98.53	103.18	139.48
Energy Available for Sale	MU	1933.71	1877.13	1928.21	2194.44
O & M Expenses	Rs Cr	87.34	94.96	104.38	124.72
- Employee Expenses	Rs Cr	69.53	75.53	82.72	96.60
- Administrative & General Expenses	Rs Cr	2.24	2.46	2.82	4.22
- Repair & Maintenance Expenses	Rs Cr	15.57	16.97	18.84	23.90
Depreciation	Rs Cr	54.90	129.84	130.78	126.71
Interest Charges	Rs Cr	75.05	57.80	58.68	100.05
Return on Equity	Rs Cr	54.99	72.05	81.26	112.60
Interest on Working Capital	Rs Cr	14.52	10.28	11.02	13.58
Less : Employee Expenses Capitalized	Rs Cr	6.07	6.59	7.22	8.43
Less : A&G Expenses Capitalized	Rs Cr	0.02	0.02	0.03	0.04
Less : Interest Expenses Capitalized (30%)	Rs Cr	0.00	17.34	17.60	30.02
Amortization of Regulatory Asset with Interest	Rs Cr	0.00	0.00	0.00	0.00
Prior Period Credit /Charges	Rs Cr	6.26	0.00	0.00	0.00
Other Debits / Write Offs	Rs Cr	0.00	0.00	0.00	0.00
Extraordinary Items	Rs Cr	-0.03	0.00	0.00	0.00
Recovery of Prior Period Gap	Rs Cr	0.00	0.00	0.00	0.00
Less: Non-Tariff Income	Rs Cr	1.84	1.93	2.03	2.13
Annual Fixed Charge	Rs Cr	285.09	339.04	359.23	437.04
Sale Rate of Energy	P/kWh	147	181	186	199

Aggregate Revenue Requirement – Distribution Business

2.112 Based on the Total ARR and the Generation ARR computed station-wise, HPSEBL has derived the Distribution ARR after deduction of Generation ARR from the Total ARR for FY12 to FY14, as shown below:

Table 41: HPSEBL Projection – Distribution ARR

Particulars	FY11	FY12	FY13	FY14
	Actuals	R.E	Projected	Projected
ARR - Distribution Business				
Cost of Own Generation	285	339	359	437
Power Purchase Cost (including PGCIL Charges)	2013	2254	2265	3181
Operation & Maintenance Expenses	1045	1083	1280	1535
- Employee Expenses	913	1002	1195	1445
- Repair & Maintenance Expenses	28	25	28	30
- Administrative & General Expenses	104	55	58	61
Depreciation	79	78	93	114
Interest & Financing Charges	89	181	197	194
Return on Equity	89	96	105	126
Amortization of Regulatory Asset with Interest	0	0	0	0
Prior Period Credit /Charges	35	0	0	0
Other Debits / Write Offs	1	0	0	0
Extra Ordinary Items	1	0	0	0
Recovery of Prior Period Gap	0	0	0	0
Less: Non-Tariff Income	201	197	260	270
ARR – Total	3438	3833	4040	5316

Revenue from Sale of Power at Existing Tariffs

2.113 HPSEBL's revised estimate for revenue from sale of power for FY12 and projections for FY13 & FY14 is determined based on the projections of energy sales, consumer load, connected load and category wise tariff (approved by the Commission in its Tariff Order dated 19 July 2011) as shown in the table below:

Table 42: HPSEBL Projection – Revenue from Sale of Power (Rs. Cr)

S. No.	Consumer category	FY11	FY12	FY13	FY14
1	Domestic	347	436	457	480
2	Commercial	182	192	214	237
3	Small Supply	26	25	25	25
4	Medium Supply	60	57	58	58
5	Large Supply	1462	1824	1960	2109
6	Agriculture/Irrigation	17	11	12	13
7	Public Lighting	6	6	6	6
8	Bulk and Grid Supply	97	114	129	147
9	Common Pool	1	0	0	0
10	NDNC	51	48	51	53
11	Other (Water Works and Sewerage)	185	172	182	193
12	Temporary Metered Supply	12	22	23	24
Total projected revenue from sale of power		2447	2907	3116	3345

2.114 Based on projected energy availability, revenue from inter-state sale of surplus power has been computed by HPSEBL by considering the rate for inter-state sale at Rs 4.50/unit, based on the average sale rate during recent years.

Revenue Gap

2.115 The table below shows HPSEBL's revised estimate of the revenue gap at existing tariff for FY12 and projections for FY13 & FY14:

Table 43: HPSEBL Projection – Revenue Gap at Existing Tariff (Rs. Cr)

Particulars	FY11	FY12	FY13	FY14
	Actuals	R.E	Projected	Projected
Annual Revenue Requirement	3438	3833	4040	5316
Covered by				
Revenue at Existing Tariff	2,447	2,907	3,116	3,345
Revenue from Sale Outside State	264	214	174	1,069
GoHP Subsidy	0.05	0	0	0
GoHP Roll Back Subsidy (Receivable)	(14.00)			
Revenue @ Existing Tariff + GoHP Subsidy	2697	3120	3290	4413
Revenue Gap / (Surplus)	741	712	750	903

Wheeling Charges

2.116 Wheeling Tariff has been calculated by HPSEBL by deducting the Power Purchase Cost (including PGCIL charges and cost of generation from own sources) from Total Distribution Cost and dividing the same by sales. The Distribution Cost excluding Power Purchase Cost has been estimated at Rs. 1,198 Cr, Rs. 1,369 Cr and Rs. 1617 Cr for FY12, FY13 and FY14 respectively. Hence, HPSEBL has proposed the following wheeling tariff:

- Wheeling Tariff for FY12 = Rs 1240 Cr / 6957 MU = Rs 1.78 per unit
- Wheeling Tariff for FY13 = Rs 1416 Cr / 7501 MU = Rs 1.89 per unit
- Wheeling Tariff for FY14 = Rs 1699 Cr / 8092 MU = Rs 2.10 per unit

CONCLUSION

HPSEBL's Appeal in True-up Petition for FY11

2.117 In its true-up petition for FY11, HPSEBL has appealed to the Commission to:

- True-up expenditure for FY11 based on actual performance; and
- Consider additional provision of Rs 14 Cr in FY11 on account of subsidy already borne by HPSEBL which is still payable by GoHP.

HPSEBL's Appeal in True-up Petition for the 1st MYT Control Period

2.118 In its true-up petition for the 1st MYT Control Period, HPSEBL has requested the Commission to:

- (a) True-up the expenditure for 1st MYT Control Period based on the actual performance of HPSEBL;
- (b) Allow further necessary changes in petition when the audited accounts of FY11 are available; and
- (c) Consider surplus/deficit on account of this petition in the 1st APR of 2nd MYT Control Period.

HPSEBL's Appeal in 1st APR Petition for the 2nd MYT Control Period

2.119 In its true-up petition for the 1st MYT Control Period, HPSEBL has requested the Commission to:

- (a) Approve the Aggregate Revenue Requirement of FY12, FY13 and FY14 as proposed;
- (b) Allow taxes, FBT, cess, etc. as pass through on actual basis;
- (c) Consider increasing the Distribution & Retail Supply tariffs applicable from 1 April, 2012;
- (d) Consider the formats and plant wise information as submitted in this petition as complete till the time the accounts for individual plants are segregated and finalized, and allow necessary changes in same once plant wise accounts are available; and
- (e) Allow further necessary changes in petition when the audited accounts of FY11 are available.

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

3.1 In all, thirteen objectors filed written objections to the petitions filed by HPSEBL for true up of FY11, true up of the 1st Control Period and for APR & tariff determination for FY13. The objectors listed at Sr. No 5 (a), (b), (c) and (d) jointly filed their objections. The objectors at Sr. No. 7 (a), (b) and (c) also filed their objections jointly. The objections/ suggestions raised by the objectors have been taken on record. The list of objectors along with Miscellaneous Applications and their respective dates vide which objections/suggestions were filed as follows:

- (1) Sh. Tulsi Ram, Distt. Kullu
(Vide MA No. 34/2012 dated 03.01.2012 in Case No. 119/2011)
- (2) Sh. Roop Singh Thakur, Distt. Kullu
(Vide MA No. 33/2012 dated 03.01.2012 in Case No. 119/2011)
- (3) Sh. Ganesh Dutt Sharma, President, Self Help Group & Milk Production Union
(Vide MA Nos. 35/2012 and 36/2012 dated 03.01.2012 in Case No. 119/2011)
- (4) M/s Reliance Communications Ltd
(Vide MA No. 28/2012 dated 18.02.2012 in Case No. 119/2011)
- (5) (a) The Confederation of Indian Industry (CII), Chandigarh
(b) BBN Industries Association (BBNIA), Baddi
(c) Parwanoo Industries Association, Parwanoo
(d) Kala Amb Chamber of Commerce and Industries (KACCI)
(Vide MA No. 17/2012 dated 13.02.2012 in Case No. 137/2011)
- (6) M/s Auro Spinning Mills, Baddi in Case No. 137/2011
(Vide MA Nos. 19/2012 dated 13.02.2012, 46/2012 dated 05.03.2012 and 51/2012 dated 12.03.2012)
- (7) (a) M/s Sri Rama Steels Ltd, Barotiwala
(b) M/s J.B. Rolling Mills (P) Ltd, Kala Amb
(c) M/s H.M. Steel Ltd, Kala Amb
(Vide MA No. 14/2012 and 15/2012 dated 13.02.2012 in Case No. 137/2011)
- (8) Er. P.N. Bhardwaj, Consumer Representative.

3.2 The public hearing was held on March 6, 2012 at the Commission's Court Room in Shimla. Names of the objecting organization/companies and their respective representatives, who presented their cases before the Commission during public hearing, are given in the table below:

Table 44: List of Objectors present during Public Hearing

S. No.	Objector/Organisation	Represented by
1.	M/s Reliance Communication Ltd.	Sh. Amandeep
2.	CII, BBNIA, PIA and KACCI Industries Associations	Sh. Rakesh Bansal, Convenor, Power Panel, HP State Council, CII.
3.	M/s Auro Spinning Mills, Baddi	Sh. DR Sharma, Sh. Harsh Anand, Sh. DB Arora
4.	Consumers' Representative	Er. PN Bhardwaj

3.3 Issues raised by the objectors in their written submission as well as during the public hearing, along with replies given to these objections by HPSEBL and views of the Commission, are detailed in this chapter.

Tariff related issues

3.4 The objectors raised the following points with regard to the tariff hike proposed by HPSEBL as well as other tariff related issues:

- (a) HPSEBL has projected increasing average cost of supply per unit which is proposed to be recovered by increasing the tariff. Such increases in costs and tariffs are not desirable for consumers of the state.
- (b) Tariff of the subsidized class of consumers should be brought to 80% of average cost of supply by 2011 in accordance with Para 8.3 of the National Tariff Policy and each category's tariff should be within $\pm 20\%$ of the average cost of supply.
- (c) Time of Day (TOD) Tariff can be used to bring down the power purchase cost if used in the right manner in view of the variations in the load curve over 24 hours.
- (d) AT&C losses in some areas are lower than in some others. This is possible only through self discipline and self policing of the industry. It is proposed that incentive may be inbuilt for such belts where low line losses or theft is recorded.
- (e) The Commission may think of introducing a nominal rebate of 2 to 5 paise per unit if bill payment is made within a week of presentation of the bill to the industry. The interest earned by the HPSEBL on prompt payment may offset the incentive given.
- (f) The Commission may introduce incentive on high load factor up to 5 paise per unit for keeping a load factor in excess of 75%. This encourages consumers to better utilise their machinery, thus reducing the demand on the power system.

HPSEBL's Response:

3.5 Replies filed by HPSEBL to the above issues are compiled below:

- (a) Various reasons for proposing increase in tariff are:

- (i) Increase in cost of power procurement from Central Generating Stations due to increase in cost of coal in the market;
 - (ii) Increase in tariff of central generating stations as per the CERC (Terms & Condition of Tariff) Regulations, 2009 for the period 2009-14; and
 - (iii) Increase of cost of power in the short term market.
- (b) The tariff proposed for FY13 is already in line with the norms stipulated in the National Tariff Policy except in case of Domestic consumers. A hike has been proposed for the Domestic category to progressively reach the level specified in the Policy within the next 2-3 years.
- (c) HPSEBL understands the importance of TOD Tariff and is presently working on details of implementing same in the State.
- (d) HPSEBL welcomes the proposal for providing incentives to the areas which have lower losses than other areas. However, considering the fact that not all energy is billed at substation level, information of energy billed cannot be provided for individual substations.
- (e) Given that the Commission has to allow full recovery of approved ARR in the regulatory regime, any change in rebate structure for supply of power would require an increase in energy charges to maintain overall revenue neutrality. However, HPSEBL would like the Commission to take an independent view on this matter.

Commission's Views:

- 3.6 Due to practical considerations, implementing area specific tariffs (including incentive and disincentive schemes) is premature.
- 3.7 All electricity bill payments are required to be made by the consumer well within the due date prescribed by the utility. Payments after due date are discouraged and are penalized by way of late payment surcharge or by way of disconnection of the defaulting consumer. Hence, an incentive/disincentive scheme is already inbuilt into the tariff structure. However, it is a useful suggestion and can be examined for future MYT periods.
- 3.8 The concept of 'High Load Factor Incentives' is applicable where the consumers are required to utilize as much load as possible during a given period so as to encourage greater use of surplus power available with the State. In the context of consumers in Himachal Pradesh, the optimal use of load is encouraged through the application of 'Demand Charges' and 'Contract Demand Violation Charges'.
- 3.9 While determining tariffs, the Commission would consider all the suggestions in the light of provisions under Section 61 of the Electricity Act 2003, the National Electricity Policy, the National Tariff Policy and the MYT principles laid down in the regulations framed by the Commission.

Category Wise Cost of Supply and Cross-Subsidy

- 3.10 The objectors made the following submissions with respect to category-wise cost of supply and the issue of cross-subsidy:
- (a) Cost of supply as per the 'Cost to Serve' model based on voltage levels is less in case of EHT and HT consumers than in the case of LT consumers, and therefore this model should be adopted instead of 'Average Cost of Supply' model.
 - (b) Cross subsidies should be reduced.

HPSEBL's Response:

- 3.11 Replies filed by HPSEBL to the above issues are compiled below:
- (a) Regarding category-wise cost of supplying power, most capital expenditure incurred is for capacity augmentation and building new infrastructure for industrial consumers and a majority of power procurement expenses are also for procuring power for industrial consumers. The 'Average Cost of Supply' model has been followed and the tariff proposal has been prepared in line with that in other States.
 - (b) Increase in sales is more prominent in industrial category. The power available from the existing sources is not sufficient to meet such growth. The increase in average power purchase cost leading to high tariff has been due to purchase of short-term market purchase from costlier sources to cater to the rapidly increasing consumer base and sales in Industrial Category.

Commission's Views:

- 3.12 The Commission agrees with consumers on the desirability of following the 'Cost to Serve' model. Voltage-based Cost to Serve model is relevant in the context of charging consumers on actual cost basis pertinent to the system on which they exist. 'Cost to Serve' model may be adopted in the future as and when the HPSEBL is capable of providing voltage specific data. As of now, voltage wise cost allocation data has not been provided by HPSEBL which would facilitate a voltage-based Cost to Serve model.
- 3.13 Regarding cross-subsidy, tariffs are determined by the Commission keeping in mind the provisions of the Electricity Act and the National Tariff Policy. The Commission has based the tariff fixation exercise mainly on the average cost of supply and has duly kept in mind the need for progressively moving towards the targeted limits of + 20% of the average cost of supply, as has been specified in the National Tariff Policy. The Commission wishes to highlight that in the MYT Tariff Order dated July 19, 2011, the level of cross-subsidization of tariff for FY 2011-12 by the Large Industrial consumer category was a mere 2.2% which can be gradually decreased further.

Employee Cost

3.14 The objectors raised the following points with regard to the employee cost claimed by HPSEBL in its petition:

- (a) Through graphical representation, a consumer has depicted the employee cost of HPSEBL (in Rs per unit sold) as being very high. In the 2nd MYT Order dated 19 July, 2011, the Commission had made a comparison of employee cost in different states and noted that employee cost is the highest in Himachal Pradesh on certain parameters. The Commission did not allow passing on such high cost and suggested that grant in aid may be given by the State Government. However, it is learnt that HPSEBL has not received the same in full and has hence claimed the carrying cost of such funds. Consumers should not be burdened with the full cost of employees as claimed, and only justified part of the same may be allowed to become part of ARR.
- (b) HPSEBL has relied upon the likely impact of recommendations of the 5th Pay Commission on employee cost. The Commission is not bound to pass on the increase in employee cost as proposed by HPSEBL even if the 5th Pay Commission recommendations are implemented in the State of Himachal Pradesh.
- (c) An increase of 33.83% over FY10 employee cost is mind boggling. HPSEBL has incurred a non-budgeted expenditure of Rs 160.61 Cr in employee cost, the funding of which must have come through short term borrowings which have further impacted the interest cost paid by the utility. Such excesses must not be allowed by the Commission otherwise the whole purpose of ARR approval goes futile.
- (d) HPSEBL is paying huge sums of money to consultants in spite of being overstaffed.

HPSEBL's Response:

3.15 Replies filed by HPSEBL to the above issues are compiled below:

- (a) The Employee Cost claimed by HPSEBL is as per actual cost incurred. The upward revision in projected per unit employee cost is primarily on account of actual payout of arrears due to 5th Pay Commission recommendations. Pending payment of arrears of Rs 295 Cr due to the same is yet to be released by GoHP. This has partially been paid by HPSEBL on its own in FY12 and the remaining is envisaged to be paid in FY13. Discoms of other States have similarly claimed a hike. Also, non-payment of these arrears can lead to potential industrial unrest. HPSEBL has also submitted that after complete payout of arrears, the employee cost will substantially reduce.
- (b) Moreover, it may be noted that as per the provisions of the Act, the unbundling model approved is such that the terminal liabilities of successor entities have been retained with HPSEB Limited only.

- (c) HPSEBL on its part has already taken a number of steps to curtail Employee Cost. It is worthwhile to mention that there is absolutely no increase in the number of employees in the past many years, except those allowed by the Commission. This is quite appreciable as the distribution network and consumer profile has increased considerably over the past few years, which has been managed by HPSEBL through judicious use of existing manpower alone. Also, only a nominal hike in employee costs has been proposed in the control period in view of the fact that there is a considerable number of retirements during this period.
- (d) There will be state-wise review and rationalization of manpower once the rollout of billing software is complete in all the sub-divisions.
- (e) Regarding appointment of consultants, it is submitted that ARR and Tariff Determination is a specialist job. Hence, using the services of consultants for preparation of ARR is required and almost all the utilities are following this practice.

Commission's Views:

- 3.16 The Commission reiterates its concern over the employee cost incurred by HPSEBL, especially the increase in the per unit employee cost which is an indicator of the efficiency of any utility. While approving the employee cost for the Second Control Period, the Commission has taken into account the need for reducing the per unit employee cost incurred by the utility. However, revisions of pay and arrears are not in the utility's control and hence are required to be met through increase in the Board's efficiency as well as tariff.

Cost of power purchase and own generation

- 3.17 The objectors raised the following issues pertaining to the projections of power purchase cost made by HPSEBL in the APR petition for FY13:
- (a) The design energy and capacities are still not given in the petition despite the Commission's views as per clause 3.7 of the Tariff Order for FY10. Consumers have no means of finding out the efficiency in power generation unless the design capacities are mentioned alongside actual generation in the tables.
 - (b) In presentations given by HPSEBL last year before the Commission, it was given to understand that the utility will be power surplus by 2013. But the ARR figures do not conform to this and the power purchase cost is increasing tremendously.
 - (c) The rate of energy from certain plants such as Nogli, Rukti, Rongtong, Killar and Gumma are so high that it would be better if these plants are not kept harnessed. The energy contribution from these plants is very low and it makes more sense if the shortfall is arranged from the power exchanges.

- (d) Escalation of 5-15% has been assumed for projecting per unit cost from almost all the plants including equity power, which is on the higher side. It is suggested that this costly power may be scheduled last of all.
- (e) Past performance of the project execution shows that there has been a huge cost and time over-run, resulting in abnormally high per MW cost. The Licensee being a State Government undertaking should not be permitted such time and cost over-runs.

HPSEBL's Response:

3.18 Replies filed by HPSEBL to the above issues are compiled below:

- (a) HPSEBL has submitted best available plant wise information this time which includes design energy and actual generation from each plant.
- (b) While it was envisaged that HPSEBL would be power surplus by FY13, the same could not be achieved on account of following:
 - (i) Delay in commissioning schedule of majority of plants.
 - (ii) Considerable year-on-year increase of 15% in sales in FY11 as compared to average 7% increase in previous years.
- (c) HPSEBL acknowledges that the generation cost of some of its plants is higher than average, owing to lower generation. The utility is working on various options of cutting costs / increasing generation to achieve the optimal generation cost.
- (d) Merit order dispatch is already being followed. Till the time there is shortage of power, the allocations received from Central Generating Stations like Anta, Auriya, Dadri are critical to ensure uninterrupted supply of power to consumers. The higher cost is attributable to liquid fuel stations which are run to ensure grid stability.
- (e) HPSEBL is making all efforts to complete all projects within the stipulated time to avoid cost and time over runs. Further, it also acknowledges, as in the case of Larji, any cost or time over-run, if not duly justified is not admitted by the Commission.

Commission's Views:

3.19 The Commission is concerned at the low generation of some plants and therefore has already directed the HPSEBL to draw up a plan to increase the PLF of its various plants and initiate RMU of the older plants. For the purpose of the 2nd MYT Order dated 19 July 2011, the Commission had based the generation projections for HPSEBL's own plants on the actual generation achieved by the station in the past three years. However, for the purpose of recovery of annual fixed charges, the Commission had considered the design energy of the respective stations, in accordance with the HPERC Generation Tariff Regulations, 2011.

- 3.20 Detailed plant wise petition for admitting of capital cost of new projects shall be submitted to the Commission well in time in accordance with the HPERC (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2011 HPSEBL shall make all efforts to prevent cost and time over runs.

Peak Load Charges

- 3.21 The objectors made the following observations/suggestions regarding charges and procedures related to peak load:
- (a) HPSEBL imposes load restrictions on the industry during power shortages in winter and at times power supply is not available to the industry due to planned or un-planned cuts. In case power cuts occur for any period during 24 hours and continue beyond one week at a stretch, the demand charges that are billed based on continuous supply of power (except peak load hours) should be pro-rata based accordingly. Moreover, HPSEBL be directed to impose power cuts uniformly across all consumer categories without any discrimination against industrial consumers.
 - (b) The rate of power purchase by a consumer in the peak hours is double in the State of Himachal Pradesh. This is not so in any other state. The Commission is requested to reduce the rates of peak hour charges.
 - (c) Peak load is sanctioned to industries for the full year without any condition to apply for the same next year. However, HPSEBL has the right to curtail the peak load sanctioned depending upon power availability. Therefore, there is no need to charge fees every year for the already sanctioned peak load. Only in case of incremental increase in peak load, the consumer may be asked to deposit the prescribed fee.
 - (d) Waiver of peak load restrictions should be provided for loads up to 100 kW.

HPSEBL's Response:

- 3.22 Replies filed by HPSEBL to the above issues are compiled below:
- (a) While it is desirable that a consumer should get continuous power supply, there are power cuts for reasons beyond HPSEBL's control such as grid disturbances, breakdowns etc. All possible efforts are made by HPSEBL to ensure uninterrupted power supply to consumers, which can be judged by the frequency or duration of power cuts prevalent in neighboring states. In two part tariff mechanism, the demand charges are primarily meant to recover the fixed costs and as such cannot be reduced. Further, any reduction in demand charges on account of non-availability of power supply would require alternate mode of recovery to ensure full recovery of the approved annual revenue requirement. Under these circumstances, it may not be feasible to make any adjustment in tariff on this account. Further, HPSEBL would like to submit that the power cuts not only affect the consumers but also the HPSEBL as it results in loss of revenue.

- (b) The existing supply constraints in Himachal Pradesh do not permit a system where consumers can freely choose their consumption pattern because of shortages in peak capacity. Industrial, water irrigation and agriculture pumping consumers are normally not permitted to use electricity during the peak load hours. In some cases, where exemption is granted to use electricity during peak hours, the peak load exemption charges (PLEC) are applied.
- (c) Fee for peak load exemption has already been approved by the Commission through a Clarificatory Order. This fee is fair and is charged to recover the cost incurred by HPSEBL to process such requests. These costs are incurred towards maintenance of data and energy record at head office and substation/field offices. However, the relevant provisions shall be reviewed after commissioning of new generating stations where HPSEBL will get additional power and the concerns of the objector may get addressed in the ensuing year.
- (d) The peak load restriction is a tool to curb the peak demand and flatten the demand curve. Any instance of peak load hour violation cannot be ignored and as such the HPSEBL levies penalty even in case of a single instance of peak load violation.

Commission's Views:

- 3.23 Due to power cuts during adverse conditions on the grid and breakdowns beyond HPSEBL's control, the consumers are not charged energy charges for non-consumption of electricity during such period. Depending upon the running conditions, Demand Charges are based on contracted demand or the actual maximum demand occurring during the period of billing (generally monthly). Since the Demand Charges are also based on actual and because there is only one Maximum Demand occurring in a month i.e. during the availability of electricity, hence reduction on proportionate basis of these charges is neither correct nor practically feasible. However, if the cumulative period of such power cuts, for reasons other than those not in the control of HPSEBL, exist for more than, say, 21 hours in a month of 720 hours, then the consumer should be entitled to a rebate proportionate to the Contract Demand Charges for the number of hours in excess of the 21 hours, for which HPSEBL shall submit a proposal to the Commission in this regard before the ARR filing for second APR of the 2nd MYT Control Period.
- 3.24 HPSEBL shall consider fixing a longer period for allowing Peak Load Exemption in respect of consumers who apply for availing Peak Load Exemption instead of six month basis; and in fact once exemption is granted, there should not be any need for renewed exemptions. HPSEBL should ensure supply in peak hours subject to disclosed regulation during unforeseen situations. With respect to the suggestion of the consumer, HPSEBL shall submit a proposal to the Commission before the ARR filing for second APR of the 2nd MYT Control Period. The fee for the first and subsequent applications for peak load exemption by the same consumer shall also be proposed by HPSEBL.
- 3.25 Regarding waiving of peak load exemption charges for loads up to 100 kW, these peak load restrictions are imposed due to shortages of power on the grid during peak

load hours that has bearing on the security and stability of the Grid and such restrictions are resorted to in a power deficit state. Moreover, the difference between tariffs set by the Commission for the industrial category and the high rates at which HPSEBL may have to procure power during peak hours (due to large Demand-Supply gap during peak hours) is huge and hence not viable for the utility's financial health.

- 3.26 Peak load charges are levied at double the rate of normal energy charges in order to ensure grid discipline and to maintain the demand supply situation during peak hours. The Commission feels it necessary to continue with these charges in order to keep the load profile of the State in control during peak hours. However, the Commission will try to bring down the price difference gradually to an optimal level and agrees to maintain peak hour tariff at existing level.

Operationalisation of Open Access

- 3.27 The issue of operationalisation of open Access as per Electricity Act 2003 came up as per the communication as conveyed vide Ministry of power, Govt. of India letter No. 23/1/2008-R&R (Vol-IV) dated 30th November 2011, which categorically marked all the 1 MW and above consumers as deemed open access consumers and barred the jurisdiction of the electricity regulator over fixing energy charges for such consumers.

- 3.28 In the State Advisory Committee meeting held on dated 29.02.2012, the agenda item for operationalisation of open access came up for discussion, especially with regard to section 42 (2) of the electricity Act 2003, wherein the 5th proviso provides for open access to all the consumers where maximum power to be made available at any time exceeds 1 MW. Relevant portion of the deliberations are as under:-

“The Chairman, HPERC gave a presentation on various provisions of open access to intrastate transmission and distribution system and the provision of electricity supply act, 2003 and stated that immediate steps are required to be taken by all concerned to implement these provisions. It was informed that open access regulations 2005 and 2010 of HPERC already provides for open access to all consumers requiring power above 1 MVA and commission has no problem in implementation i.e. Determination of tariff for only 1 MW and below consumers. Any minor amendment necessitated in regulation shall be done immediately.

The officers from HPSEBL stated that the above provisions may be operationalised w. e. f. 2013-14 as the implementation at this stage could lead to various procedural difficulties and other problems particularly when tariff petition for 2012-13 has already been filed as per past practice.

The representatives of CII/ Industries Association also stated that implementation of these provisions with immediate effect could lead to hardships and difficulties to them as they may find it difficult to tie up their power requirements in a short period. They also suggested that the provisions of deemed open access may not be implemented during 2012-13.

Mr. S. S. Sharma, PTC and Mr. Rajesh Kr. Mediratta, IEX suggested that early action should be taken for implementation.

The principal secretary (power) to H P. government stated that he does not foresee any problems in implementing the provisions of deemed open access in Himachal

Pradesh and suggested that HPSEBL may take suitable steps for implementation of the said provisions and if there are any procedural and reorientation requirements these should be addressed immediately so that it could be implemented at the earliest possible but not later than April 2013”

- 3.29 For implementing the decision of the ministry of power with the opinion of the ministry of Law and justice on operationalisation of Open Access in Himachal Pradesh, the commission issued public notice seeking comments from the stakeholders as to why the commission should determine retail supply tariff. The public notice was published on 01.03.2012 in the daily newspaper ‘The Indian Express’ and ‘Divya Himachal’.
- 3.30 The objectors made the following observations/suggestions regarding charges and procedures related to peak load:
- (a) The sole purpose of Open Access is to generate competition and do away with the monopolies of State run utilities.
 - (b) Segregation of Assets and T& D losses is a must for going ahead with the mandatory provisions of Open Access. However, the wheeling Charges have been estimated on the basis of certain assumptions and not on actual in the absence of segregation of assets. The consumers seeking continuous supply under open access are likely to suffer in the absence of dedicated feeders.
 - (c) Those consumers that draw power from the Discom’s only in an emergency should not be levied temporary tariff but nominal applicable tariff. The consumers should have the choice to inform the discom of the intent to draw such power and Discom should provide power at short notice, in case the power is not available from open access, then the discom should provide power from its own sources at normal tariff
 - (d) Non availability of adequate transmission corridors is a major problem constraining flow of power from surplus regions to deficient regions. Whenever the transmission network congestion occurs in electricity market, it divide the market in different zones and trading price of electricity will no longer remain the same for the whole system.
 - (e) The market for short term transactions of electricity are not mature to the extent that consumer above 1 MW can be shifted compulsory to the open access. Further the present system of tariff determination by the regulatory commission, in which all prudent costs are fully reimbursed to the distribution licensee with the assured return on equity is a fair price and no way against the distribution licensee.

HPSEBL’s Response:

- 3.31 Replies filed by HPSEBL to the above issues are compiled below:
- (a) Need for Realignment of Open Access regulations due to

- i) The Nodal agency i.e. the SLDC has not laid down the detailed procedure as yet.
 - ii) The regulation has a provision of 2 years prior intimation to Nodal Agency before availing long term open Access. If the exact source of supply of destination of off take, as the case may be, shall have to be firmed up for augmentation of the transmission/ distribution system, whichever is lesser to facilitate such augmentation.
- (b) The multi year tariff framework is currently in force in HPSEBL and currently in the process of determination of tariff for middle year FY 2012-13 of 2nd MYT Control Period (FY 2011-12 to FY 2013-14). Since the targets/provisions of sales projections, T&D loss targets and power purchase projections are directly impacted by consideration of 1 MW and above consumers as deemed Open Access Consumers., the average cost of supply will change considerably and as such adequate tariff needs to be determined accordingly.
- (c) Technical Issues for implementing Open Access
- i) Network Constraints: the supply of the deemed Open access consumers are through mixed feeders only. As such while granting open access on these feeders, various issues pertaining to the supply to open access and non open access consumers existing simultaneously on same feeders specially on account of scheduling which has been envisaged on day ahead basis.
 - ii) Metering of Open Access Consumers: As per regulations, the meters for open access consumers must be ABT compliant with online communication provision. As such these meters are not yet been installed, it will take some time before these meters are installed for deemed open access consumers.
 - iii) Role of Consequential Issue
 - Role of SLDC: The preparedness of SLDC to handle the sudden rush of large no. of open access consumers may also be checked which is a important factor of consideration as SLDC is the nodal agency for open access in distribution.
 - Impact on R-APDRP Grants: As per the guidelines of R_APDRP, the conversion of loan into grant depends on certain parameters, and reduction in AT&C losses. The migration of high end consumers in open access will result in Technical losses and as net increase in AT&C losses. This may lead to NO-conversion of loan into Grant and as such same needs to be considered accordingly.

Commission's Views:

Keeping in view the above comments from the various stakeholders, the commission decides to continue to determine the tariff as per the petition filed by HPSEBL

General Comments on Petitions filed by HPSEBL

3.32 The objectors raised the following issues pertaining to the petitions filed by HPSEBL:

- (a) HPSEBL in its ARR has submitted that certain data cannot be made available due to the inherent complexity. In its past submissions as well, HPSEBL has stated the same reasons for incomplete data. To meet regulatory requirements, the licensee be given a deadline and be directed to undertake and maintain a reliable databank of administrative, financial and technical information by the set deadlines.
- (b) HPSEBL is over-projecting its Capital Expenditure which is not in accordance with the Tariff Order for FY10 and FY11, wherein the Commission has clarified that only actual expenses incurred on capitalized assets shall be passed on to consumers. Moreover, the amounts earmarked as CWIP in respect of Larji and Khauli HEP are unclear, along with being significant.
- (c) Due to absence of balance sheets, it is difficult to ascertain the costs of HPSEBL. The Commission should scrutinize past balance sheets of the Board and look into the details of loans raised and corresponding assets created.
- (d) In case funds are found to have been diverted from the Capital to the Revenue account, cost of such funds may be disallowed because costs (i.e. interest) on such borrowings cannot be lawfully passed on to consumers.
- (e) Interest & Finance Charges have been projected at very high levels. All loans considered by HPSEBL while claiming interest on loans should be indentified with the assets created. For each year, a comparison of the Commission-approved loan amount and the loan amount shown as outstanding in HPSEBL's ARR reflects that 60-65% of the interest cost claimed by HPSEBL has not been considered by the Commission. Requirement for loans should be linked with the actual past performance of HPSEBL and future projections should also be based on the same.
- (f) It is stated that power purchase bills are paid by due date and the rebate is claimed. It should be ensured that the rebate claimed is more than 13% which is the prime lending rate. It makes little sense to borrow at 13% to pay off the bills by due date and to claim a rebate which is less than 13%. Moreover, this rebate does not appear anywhere in the non tariff income.
- (g) The claimed Return on Equity (RoE) is very high and not based on HPERC MYT Regulations or on the principles adopted in previous tariff orders. As per regulations, the burden of RoE which may be invested in coming years cannot be passed on to the present consumers in the State. Further, the equity invested

in projects which are yet to start commercial production cannot be provided. As per APTEL judgment too, the RoE is to be based on actual equity if it is less than 30%.

- (h) Connected Load in kW be replaced with contract demand in case of industrial consumers because all electrical appliances draw current in Amperes and consumption is recorded in kVAh. Also, contract demand is sanctioned by HPSEBL and consumers cannot draw more than the sanctioned demand without violation of the agreement. Hence, there is no significance of load getting sanctioned in kW. It is merely a handle with utility officials to harass consumers.
- (i) Night hours be revised from the existing time period of 00:00 Hrs to 06:00 Hrs to an 8-hour period of 22:00 Hrs to 06:00 Hrs. Most of the lighting load is reduced from 22:00 Hrs onwards and industrial demand is also reduced due to single shift and two shift industries being switched off by 22:00 Hrs. Moreover, night shift workers come to duty from 22:00 Hrs onwards rather than 00:00 Hrs.
- (j) Minimum chargeable demand should be 80% of the contract demand as against 90% because it is difficult to control the fluctuating load so as to keep it within the sanctioned contract demand. In cases of high sanctioned contract demand, the consumer is generally not in a position to utilize the full contract demand while he has to pay the higher charges. However, if by chance he draws more than the contract demand he pays penal charges. Thus, the consumer loses either way.
- (k) As the benefit of energy savings might have accrued to CFL users in general who fall in domestic category and also HPSEBL indirectly by reducing its power purchase cost, there is no reason why the burden of the same be put on other category of consumers. HPSEBL is bound to recover the cost over a few years by savings on power purchase cost. Hence, the same should be disallowed.
- (l) The APR petition states that depreciation has been calculated @ 3.10% on the average of opening and closing GFA, but the figures in Table 16 of ARR do not match with the calculation.
- (m) Actual consumption data of FY10 and FY11 may be used instead of averages of different CAGRs to minimize the error in computing energy sales. Different basis such as 3-year CAGR, 5-year CAGR, ad hoc percent growth etc. have been assumed for different categories to inflate the figure of energy requirement.
- (n) It is mentioned in the APR petition that HPSEBL intends to increase the R&M expenses for its assets, though in the past it has remained low. In percentage terms, R&M has consistently gone down from 1.06% to 0.71% in the current year. It would be fair to assume 0.65% on the same trajectory instead of 0.89%.

- (o) In the HPSEBL petition, important Strategic Issues and Directions/Advisories issued in MYT Order dated 19 July 2011 have not been touched upon, despite these being of great significance to the operational efficiency and power quality.
- (p) Shri P.N. Bhardjwaj has submitted that the direction pertaining to Demand Side Management has now been dropped, whereas it should be continued. Wastage of electricity, be it through theft/ T&D loss/ commercial loss, needs to be tackled on priority. In this direction, as a first step, a consumer tariff based on 'voltage based Cost to Serve' will help to prevent wastage of electrical energy
- (q) What steps has the licensee taken to reduce losses, especially at feeders where these have been found to be very high? This needs to be tackled on priority.
- (r) Consumers, especially in rural and tribal areas, continue to be neglected with regard to quality of supply. These consumers have neither the wherewithal nor the knowledge of Standards of Performance regulations framed by the Commission. This is an area which needs the utmost attention. It is essential that the quality of supply and customer service parameters be monitored as per the norms laid down by the Commission from time to time, as mentioned in Regulation 36.
- (s) M/s Reliance Communications Ltd. have requested for incorporation of the communication industry within the Industrial category in concurrence with the IT Policy.

HPSEBL's Response:

3.33 Replies filed by HPSEBL to the above issues are compiled below:

- (a) HPSEBL has issued directions to all concerned for maintaining additional information/database. The Enterprise Resource Planning Software deployment is in advanced stage and once implemented most of the data related issues will automatically be resolved.
- (b) In order to reduce T&D losses, to augment the existing electricity infrastructure and create new infrastructure for the rapidly increasing consumer base, and to ensure that quality and reliability standards of electricity supply to consumers are met, HPSEBL has proposed a nominal Capex Plan. The detailed Capex Plan was submitted to the Commission for approval and the Commission has also accorded its conditional approval for the same. This investment plan is in line with the regulations laid down by the Commission for the second Control Period.
- (c) Only the existing CWIP ending March 2011 for further projections as these works cannot be stopped abruptly. No further CAPEX was proposed as far as the generation business is concerned. Apart from that, it may also be taken into consideration that the petition for additional capitalization will be filed for those costs which in line with the prevailing regulations and that too will be

allowed only after prudence check by the Commission.

- (d) Sufficient copies of both un-audited and audited Balance Sheets of FY11 have been made available to the Commission over a period of time.
- (e) Short term loans are being taken for necessary reasons, e.g. to cover the gap in the ARR, to comply with the Commission's directions/orders with respect to arrears of the power purchase cost of IPPs especially Baspa (HEP), to meet Employee Cost over & above that approved by the Commission and to meet immediate material requirement. There has been continuous effort on part of the HPSEBL to restructure its loans in order to reduce the interest cost burden. However, various disallowances in the past have affected the utility's financial health. Therefore, HPSEBL was constrained to raise loans to fund its losses to continue its operations. However, the utility has tried to curtail its costs wherever possible. The following reasons lead the HPSEBL to depend on borrowed funds in order to meet its requirement:
 - (i) HPSEBL was not allowed to recover genuine interest cost on loans taken up for generation projects and other system improvement projects;
 - (ii) The tariff allowed by the Commission was not adequate to meet the costs of the HPSEBL;
 - (iii) The Commission has not approved any carrying cost for the gaps approved in previous true-up orders. There is a time lag of two years between the actual expenses incurred and truing up of these actual expenses as against approved expenses.
- (f) HPSEBL avails maximum possible rebate as allowed in respective invoices. However, it is not possible to link the same with PLR as it is as per invoice raised by different suppliers and the payment of same is done through revenue and allowed working capital only. HPSEBL has considered all the revenue generated from other sources like penalties, income from interest, rebates etc. which can also be verified from the annual accounts. The rebate availed is taken into consideration in overall power purchase cost.
- (g) HPSEBL is running in losses and the Return on Equity (RoE) cannot be denied as it will only push it into further losses. RoE is permitted for generation of internal resources and must be distinguished from actual profits especially in case of an entity which is reporting losses in its accounts. RoE is allowed under the Electricity Act, 2003 and most SERCs like Rajasthan, Kerala, Punjab, Chattisgarh, etc. are allowing the return irrespective of the accumulated losses of the utility. The Return on Equity earned during the year/previous years can be invested to fund some of the equity portion of the capital expenditure in subsequent years. Further, as per provisions in the Act, HPSEBL has full liberty to invest equity in any project up to 30%. The return on equity earned (through MYT) during the year can be invested to fund some of the equity portion of the capital expenditure in the subsequent years. The Commission should not disapprove the equity investment for the control

period based on the funding pattern in previous years. RoE is currently being claimed on assets already capitalized or those proposed to be capitalized during the year (as per the approved capitalization schedule) strictly as per the provisions of the regulations.

- (h) The billing of industrial consumers is on the basis of contract demand which is measured in kVA. The connected load of consumer premises is maintained by HPSEBL in kW as per the Supply Code of HPERC based on the standard supply voltages.
- (i) Night time concessions are offered for effective demand side management. The provisions of night time concessions are reviewed periodically based on the power supply situation. In view of representation filed in Case No. 224/2010 for extension of Night Time Period, HPSEBL has submitted a proposal for the Commission's consideration and as per the Commission's further direction, HPSEBL is currently working on a detailed petition and shall submit the same shortly.
- (j) There is a provision of revision of contract demand twice a year to suit the requirement of the particular consumer on the basis of actual consumption. As such, the provision of demand charges at 90% of the contract demand is reasonable as consumers has the flexibility of reducing or enhancing their demand if they were not able to meet the contract demand sanctioned earlier.
- (k) In context of CFL scheme, the cost of CFL bulbs should be borne by all the consumers as the net benefit of reduction in power purchase cost is also passed through to all the consumers.
- (l) The rationale for calculation of depreciation has been detailed in the petition.
- (m) There is no scientific method for computation of Energy Sales. It is an uncontrollable parameter and eventually will be trued up every year by the Commission. HPSEBL has already factored in 6-month actual sales for FY12 while projecting sales for FY13.
- (n) R&M is necessary for proper maintenance and strengthening of the system and quality of supply in the region in order to ensure consumer satisfaction. This is quite nominal considering the increased loading of consumers and connected load in the coming years on the existing network.
- (o) Directions issued by the Commission have been adhered with and regular inputs are being provided to the Commission in this regard. The DSM Cell as per Commission's directive has been constituted and DSM Plan will be submitted to Commission shortly. Stringent instructions have been issued to all concerned up to the level of sub-divisions for energy accounting and auditing and timely returns for same is also submitted to the Commission. The Call Centre has already been established and is fully functional. Overall, voltage wise losses have already been compiled and submitted to the Commission recently. Asset Mapping is targeted to be complete latest by 30 June 2012. Regarding generation, instructions have already been issued to

prepare plant-wise balance sheet for individual plants. A committee was constituted to submit the detailed action plan to ensure timely compliance of all the generation directions issued by the Commission in the MYT Order.

- (p) All issues pertaining to DSM are now being covered under separate regulations notified on 30 September 2011.
- (q) HPSEBL has already framed circle-wise targets for reduction of T&D and AT&C losses and shall work out incentive provisions for best performing circles for FY12.
- (r) HPSEBL wishes to submit that while the performance monitoring and penalty framework is already in place in the notified Standards of Performance (SOP) Regulations, awareness about the same is being spread through various public interaction programs. A status note for the same has already been supplied to the Commission. Further, regular workshops are being conducted at the zonal level to make all officers aware of latest regulations so as to ensure better compliance of the provisions of the notified regulations. Most recently these workshops were conducted for all officials (AEs and above) in Central Zone on 24 January 2012, in North Zone on 3 February 2012 and in South Zone on 10 February 2012, in order to appraise them about the current regulatory framework and to impart more clarity on the existing notifications and regulations.
- (s) HPSEBL submits that change in the definition or composition of a category is within the Commission's purview. As per the prevailing tariff order, industrial tariff is extended to IT Industry but currently limited to IT Parks recognized by State/Central Govt only. Further, in the absence of clear cut definition, HPSEBL currently charges the tariff for the relevant industry at Commercial rates in line with the following provisions of Schedule of Tariff for Commercial Supply (CS):

“This schedule will also include all other categories, which are not covered by any other tariff schedule.”

HPSEBL requests the Commission to take an independent view and make appropriate decision in this regard.

Commission's Views:

- 3.34 The tariff petitions filed by HPSEBL have many information gaps on several aspects, which necessitated repeated correspondences with the utility, pointing out information deficiencies. Information on many of these data gaps was supplied by the HPSEBL during the course of processing the petition. Regarding insufficiency/ unavailability/ quality of data, the directions by the Commission in this context stand issued.
- 3.35 The Capex Plan submitted by HPSEBL for its Distribution Business vide Letter No. HPERC/476-VOL VI/CAPEX PLAN/2011-12/-1149 and even file No. 2493 dated 30.03.2012 and 04.11.11 respectively has been accorded approval by the Commission only to the extent as mentioned under paragraphs 7.133 to 7.136 of the 2nd MYT

- Order dated 19 July, 2011. The Commission encourages capital investment for quality supply, loss reduction, evacuation of renewable power etc., although allowance of cost shall be subject to prudence checks.
- 3.36 During prudence check by the Commission, if it is discovered that funds raised for capital works are used to meet the working capital requirements then such funds are treated accordingly as per the relevant HPERC Tariff Regulations.
- 3.37 The T&D trajectory for HPSEBL is stipulated and approved by the Commission based on baseline distribution loss levels and loss reduction trajectory proposed by the licensee. This is done to improve the performance of HPSEBL through incentive and disincentive. The distribution licensee is entitled to share between itself and the contingency reserve, profit in the ratio 60:40 arising out of better performance vis-à-vis distribution loss targets set, while any financial loss due to underperformance shall be to the account of the distribution licensee. For this incentive/disincentive mechanism to work, the trajectory should be in line with baseline actual loss levels.
- 3.38 Regarding the issue of connected load being replaced with contract demand, at the time of creating infrastructure for release of connections, the distribution licensee designs the electrical system, that shall be used by the consumer getting connected to the system, based on the maximum load which is the connected load (in kW). In order to prevent indiscriminate load growth on the electrical system, a check is exercised by the distribution licensee, through this connected load. This connected load, unlike the Maximum Demand (in kVA) which is based on production factors and may accordingly vary seasonally, remains constant over larger periods of time. Connected load also forms the basis of charging/billing the consumer in the absence of an Agreement of Contract Demand (in kVA) between the HPSEBL and the consumer. Therefore, the concept of connected load needs to be continued as of now. However, in the SAC meeting it was agreed that HPSEBL will allow certain extra percentage as grace/relaxation that will not entail any technical and punitive concerns. Regarding Night Time Period, in Appeal No. 113 of 2005 filed by HPSEBL, the Hon'ble APTEL in its judgement dated July 6, 2006 has held that revision of Night Time Concession duration to be done by the HPSEBL was required to be detailed, based on overall practical considerations and commercial viability, incorporating the adverse affect on revenues, factoring the likely impact on ARR calculation, and load curves showing availability and demand both for summers and winters along with frequency patterns during these seasons. HPSEBL had merely made a representation to the Commission without a detailed basis and was therefore asked to submit a detailed proposal. Pending such details, the Commission will extend Night Hours duration from 10 PM to 6 AM.
- 3.39 Regarding minimum chargeable demand, the Commission feels that consumers have ample flexibility to manage and optimize their respective Demand with respect to their Contract Demand and consequently to keep their Maximum Demand within limits. Penal provisions become applicable only in the event of violations of agreed supply conditions by the consumers. The present provisions prescribed by the Commission are adequate. Thus, the Commission does not agree with the suggestion of the consumer.
- 3.40 Regarding cost of CFL bulbs being allowed to the utility, the Commission agrees with

the consumer view and has accordingly disallowed the same in Paragraphs 5.70 to 5.73 of this Order.

- 3.41 Regarding voltage wise 'Cost to Serve' model being integral to DSM, the Commission feels that while such a model is desirable in general, it may not be very relevant in terms of Demand Side Management in terms of preventing wastage of energy for the reasons that electricity is a non-substitutable item and consumers while consuming electricity do not see the actual cost of electricity and therefore price elasticity of electricity is low (When prices of electricity to consumers is determined by the 'cost to the utility to serve' this electricity to the end user and/or by 'subsidies' that reduce the effective prices to the consumers, consumers may respond little or at times not at all to the price signals and therefore price elasticity of electricity would be zero).
- 3.42 Once the feeder-wise/voltage-wise losses are available, appropriate measures be taken to reduce these losses at feeder level.
- 3.43 While a performance monitoring and penalty system is already in place in keeping with the Standards of Performance regulations, the Commission has instructed the utility in the past and reiterates the same now, to create more awareness regarding the same among all consumers.
- 3.44 In response to the concern expressed by some consumers over certain expenses claimed by HPSEBL, the Commission wishes to state that it has exercised prudence checks and taken into consideration the concerns expressed by various objectors while analyzing and evaluating the projections/submissions made by the HPSEBL. The Commission has also taken into consideration the need for encouraging efficiency in all aspects of operation and functioning of the HPSEBL while approving expenses and setting down targets for performance parameters. The Commission's views have been brought out in the ensuing chapters where various issues relating to the HPSEBL have been discussed in detail.
- 3.45 Regarding the request of M/s Reliance Communications Ltd. for incorporation of their industry within the Industrial category, the Commission deems that the nature of work of M/s Reliance Communications falls within the scope of commercial work and hence the request for change of category is not granted.

A4: INTERACTION WITH THE MANAGING DIRECTOR AND WHOLE TIME DIRECTORS OF HPSEBL

- 4.1 In order to highlight important concerns of the Commission and to gain insight into the implementation program, the Commission held interactive session with the Board of Directors of HPEBL on March 21, 2011. The interactive session was intended to further enable the Commission to know about the initiatives undertaken by HPSEBL and the progress made on the various suggestions/ directions issued for the better performance of the utility. Further, the interaction enabled the objective evaluation of the performance of utility and enforcing internal accountability leading to pressure to perform pointers.
- 4.2 The deliberations on the various issues during the interaction are summed up as follows:-

Implementation of R-APDRP and other Schemes under Capex Plan

- 4.3 It has been observed and emphasised by the commission that HPSEBL should focus on actual demonstrable performance in terms of sustained loss reduction, establishment of reliable and automated systems for sustained collection of accurate base line data, and the adoption of information technology in the areas of energy accounting and auditing.
- 4.4 The Capex Plan approved by the Commission has emphasised over the period of time that the above mentioned parameters should be the precondition before sanctioning any regular distribution strengthening and efficiency improvement project. R-APDRP program (both Part A and Part B), MIS, ERP Implementation, Asset Mapping, computerised billing etc. are some of the key initiatives which are crucial for improving governance and bringing operational efficiency and accountability in HPSEBL.

R-APDRP: Detailed deliberations were held on the various issues regarding the implementation of the scheme in different parts of the state and the progress made till date. The Commission observed that the timely completion of the schemes is the key factor for bringing reform in the distribution sector. The Commission expressed concerns in delay in implementation of R-APDRP as per the schedule suggested in the MYT Tariff Order dated July 19, 2011.

- 4.5 HPSEBL was advised to focus on getting the Part A and Part B of R-APDRP to be effectively implemented as it is essential to have good management of the metering, billing and collection, together with better customer service and reliable power to perform better. Therefore, HPSEBL need to co-ordinate various activities of the program right from identification, planning, implementation, execution and completion so as to reap the benefits of the program.
- 4.6 It was also suggested to HPSEBL to invest liberally in System improvement schemes so as to upgrade the transmission and distribution network as per the load growth requirement to optimise the system requirements and also to co-ordinate with the State Transmission Utility to avoid duplicity of effort.

IT Initiative, Computerised billing and Status of ERP Package

- 4.7 HPSEBL apprised the Commission about the status of various IT initiatives, computerised billing and status of ERP implementation in HPSEBL.
- 4.8 The Commission observed that HPSEBL should understand the scale and size of the IT System and use the investment properly and take appropriate steps/interventions to make the IT initiatives and ERP implementation fully integrated and functional system so that HPSEBL could realize the gains.

Segregation of Accounts and balance sheet for different businesses and assets mapping and revaluation

- 4.9 The Commission directed HPSEBL to Segregate Accounts and balance sheet for different businesses. Further, the commission directed HPSEB to expedite the transfer of assets to HPPTCL, SLDC, HPPCL, etc. Wherever necessary and complete the process of asset mapping and revaluation.

Generation Business

- 4.10 The Commission directed that the accounts for the generation business of HPSEBL should be segregated and emphasised that the generation business should have an independent accounting system.
- 4.11 The Commission opined that HPSEBL should rationalise the O&M costs of various power stations. Further, case to case Capex Plan for Renovation and Modernisation of projects which are more than 25 years old should be submitted for extension of life of power plants.

Finalisation of Manual for Consumer Complaint Handling Mechanism and Sales Manual

- 4.12 The Commission expressed its concerns regarding the finalisation of Manual for Consumer Complaint Handling Mechanism and Sales Manual and directed HPSEBL to submit the Manual for Consumer Complaint Handling Mechanism and Sales Manual to the Commission for approval.

Procurement of DTR meters and Consumers Meters

- 4.13 The Commission observed that the availability of the of DTR Meters and consumers meters has direct relationship with effective Energy Auditing & Energy accounting and the revenue realisation of HPSEBL. Timely procurement and availability of DTR meters and consumer meters with the field units are very crucial. HPSEBL was directed to take effective steps in this direction.

Mechanism for Short Term Sale and purchase of power

- 4.14 The short term power procurement for meeting the deficiency in power availability and short term sale of surplus power during excess availability directly affects the cost of power. The Commission advised HPSEBL to device mechanism for short term sale

and purchase of power so as to reduce the power purchase cost of HPSEBL.

- 4.15 For devising such a mechanism HPSEBL should have a dedicated team of senior professionals from various fields so as to optimise the sale and purchase of short term power and hedge the risk of variation in power availability and also a management level team for periodic decision making and review because financial stakes are very high.

A5: TRUE UP FOR FY11 UNDER THE 1ST MYT CONTROL PERIOD (FY09 – FY11)

- 5.1 HPSEBL has submitted a petition for true up of expenses for FY11 on the basis of difference in actual expenses and revenue in FY11 vis-à-vis the expenses and revenue approved for FY11 in the second Annual Performance Review (APR) order for FY11 dated June 10, 2010. It has also provided the audited accounts for the period April 1, 2010 to June 13, 2010, and provisional accounts for the period June 14, 2010 to March 31, 2011.
- 5.2 The Himachal Pradesh Power Sector Reforms Transfer Scheme, 2010 notified by the Principal Secretary (Power) to the Government of Himachal Pradesh vide notification no. MPP-A(3)-1/2001-IV dated 10.6.2010 stipulates that the scheme shall come into force on the date of its publication in the official gazette of the State Government. The notification was published in the official gazette on 14.6.2010. Therefore, HPSEBL has submitted that the Profit & Loss account and Balance Sheet for FY11 have been prepared in two parts. In the first part, Profit & Loss Account and Balance Sheet of the erstwhile HPSEB were to be prepared for the period w.e.f. 1.4.2010 to 13.6.2010. In the second part, Profit & Loss Account and Balance Sheet for HPSEBL for the period w.e.f. 14.6.2010 to 31.3.2011 were to be prepared after transferring the amount of assets & liabilities (including accumulated profit/loss appearing in the Balance Sheet of the erstwhile HPSEB as on 13.6.2010) to the Balance Sheet of HPSEBL.
- 5.3 HPSEBL has further submitted that the accounts of the erstwhile HPSEB for the period 1.4.2010 to 13.6.2010 have been audited by the CAG and audit certificate has also been issued and received from the Statutory Auditor. But the accounts for the period 14.6.10 to 31.3.11 are yet to be audited by the Statutory Auditor.
- 5.4 The Commission has reviewed the operational and financial performance of HPSEBL for FY11 based upon the accounts made available, and has finalised the true up in line with the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2007 (hereinafter referred to as the 'MYT Regulations, 2007'), taking into account all the information submissions, necessary clarifications submitted by the licensee and views expressed by stakeholders.
- 5.5 While scrutinizing the data submitted with the petition as well as information submitted subsequently, the Commission observed several serious discrepancies and inconsistencies in the accounts and other data submitted by HPSEBL. Even after multiple discussions with officials of the utility, the discrepancies could not be sorted out by HPSEBL.
- 5.6 Therefore, the Commission finds merit in provisionally approving expenses and revenue on the basis of the accounts submitted by HPSEBL. **The Commission wishes to highlight that since this true-up is based on provisional accounts for the period 14.6.2010 to 31.3.2011, this is a provisional true-up and may be reviewed once the audited accounts are made available for the entire period of FY11 and discrepancies are fully settled/addressed.**

5.7 As per Clause 11 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2007:

“The true up across various controllable and uncontrollable parameters shall be conducted as per principles stated below: -

- (1) *Variation in revenue / expenditure on account of uncontrollable sales and power purchase shall be trued up every year;*
- (2) *For controllable parameters,*
 - (a) *any surplus or deficit on account of O&M expenses shall be to the account of the licensee and shall not be trued up in ARR; and*
 - (b) *at the end of the control period –*
 - i. *the Commission shall review actual capital investment vis-à-vis approved capital investment.*
 - ii. *depreciation and financing cost, which includes cost of debt including working capital (interest), cost of equity (return) shall be trued up on the basis of actual/audited information and prudence check by the Commission.”*

5.8 The following sections contain details of true-up for FY11, based on the provisional accounts of HPSEBL.

Energy Sales and Revenue

5.9 HPSEBL in its true up petition for FY11 has submitted the actual sales for FY11 as 6641.08 MU as compared to 6082.48 MU approved by the Commission for FY11. The Commission accepts the actuals given by utility at this stage.

5.10 The following table shows the sales projected by HPSEBL in the sales approved by the Commission in the 2nd APR Order for FY11, sales submitted as actual by HPSEBL in its true up petition for FY11, and trued up (approved) sales for FY11.

Table 45: Energy sales in FY11 within the state (MU)

Category	Approved in 2 nd APR	True-up petition	Approved True-up
Domestic Supply	1154.51	1281.96	1281.96
BPL (Antodaya)	0.59	0.54	0.54
Non Domestic Non Commercial Supply	78.76	89.54	89.54
Commercial Supply	306.32	356.53	356.53
Small & Medium Industrial Power Supply	179.97	201.45	201.45
Large Industrial Power Supply	3642.06	3993.21	3993.21
Water Pumping & Irrigation Supply	445.13	445.09	445.09

Category	Approved in 2 nd APR	True-up petition	Approved True-up
Street Lighting Supply	12.54	12.55	12.55
Bulk Supply	235.31	235.57	235.57
Temporary Supply	27.27	24.64	24.64
Total Sales	6082.48	6641.08	6641.08

Revenue from Sale of Power

- 5.11 Revenue from sale of power includes revenue from sale of power within state (sale of power to own consumers) and revenue from sale of power outside state (sale of surplus power outside state). While analysing the revenue from sale of power in HPSEBL's accounts, the Commission observed that revenue from sale of power through banking has been included in the revenue from sale of power outside state, although the same has not been included as a part of revenue. The Commission further observed that in the accounts of HPSEBL, the power purchase cost is inclusive of power purchased under banking, although the same has not been claimed as part of the power purchase cost by HPSEBL in its petition.
- 5.12 The Commission has recognised banking as a cashless transaction, revenue from sale of power through banking has not been allowed in the revenue from sales outside state, and similarly the cost of purchase of power through banking has not been considered in the power purchase cost as shown in the accounts.
- 5.13 In its true up petition for FY11, HPSEBL has requested the Commission to consider allowing an additional provision of Rs 14 Crores on account of subsidy already borne by HPSEBL and still payable by the Government of Himachal Pradesh. HPSEBL's claim of Rs 14 Crores rollback on GoHP subsidy is not approved by the Commission since there is no explicit intimation from the State Government on the status of release/rollback of this subsidy.
- 5.14 Based on the data provided by HPSEBL for FY11, the revenue generated from sale of power within the state is presented in the table below.

Table 46: Revenue from sale of power within state (Rs Crores)

Categories	Sales from 01.04.2010-13.06.2010	Sales from 14.06.2010-31.03.2011	Total sales in FY11 as per accounts
Domestic	51.35	296.01	347.36
Non Domestic Non Commercial	9.65	41.61	51.26
Commercial	30.85	151.28	182.13
Small & Medium Industrial Power Supply	15.68	70.02	85.7
Large Industrial Power Supply	242.53	1218.98	1461.51
Water Pumping & Irrigation Supply	46.92	155.07	201.99
Street Lighting Supply	1.14	4.87	6.01
Bulk and Grid supply	16.04	82.76	98.8
Temporary Supply	2.78	9.27	12.05
Total Sales as per accounts	416.94	2029.87	2446.8

- 5.15 For revenue from sale of power outside state, HPSEBL submitted various documents and data in the earlier stages that were at variance with each other. However, as per the latest information submitted by HPSEBL on March 28, 2012, the revenue from sale of power outside state (excluding banking) is shown as Rs 264.29 Crores, the same as submitted originally in the petitioner's true up petition.

Table 47: Revenue from sale of power in FY11 (Rs Cr)

	Approved in 2 nd APR	Petition	Approved
Revenue at existing tariff	2338.33	2446.84	2446.84
Revenue from sale outside state	193.70	264.29	264.29
GoHP Subsidy	-	0.05	0.05
GoHP Roll back subsidy (Receivable)	-	(14.00)	0.00
Revenue at existing tariff +GoHP Subsidy	2532.03	2697.18	2711.18

- 5.16 The Commission approves the revenue of Rs 2711.18 Cr for FY11 arising out of sale of power both within the state and outside the state, as well as GoHP subsidy.

Power Purchase

- 5.17 HPSEBL in its true up petition for FY11 had submitted that the actual power purchase cost for FY11 was Rs 2012.73 Crores, as against Commission's approved power purchase cost of Rs 1574.76 Crores (including PGCIL and other charges). Subsequently, HPSEBL submitted a revised figure of Rs 2064.40 Crores as power purchase cost net of banking amount. The actual quantum of power purchase for FY11 is given as 7642 MU.
- 5.18 HPSEBL has submitted that the following reasons are attributable for higher power purchase cost incurred in FY11:
- Actual UI purchase of 356 MU resulting in net increase in cost by Rs 49 Cr;
 - BASPA Arrears approved by the Commission were Rs 90 Cr whereas actual BASPA Arrears incurred were Rs 103 Cr;
 - Other arrears paid to the tune of Rs 54 Cr in FY 10-11;
 - The energy available from Baspa-II (Secondary Energy) in FY11 was 242 MU at a total cost of Rs 46 Cr against the NIL approved by the Commission;
 - 983 MU from GoHP Free Power Share and Equity Power share was available to HPSEBL as against approved 546.15 MU;
 - The energy available from Nathpa Jhakri Equity was 554 MU as against 324 MU approved by the Commission, resulting in net increase in cost by Rs 117 Cr. However, the surplus energy available during summer months was sold to outside states.

- (g) The requirement of power is seasonal whereas the procurement or commitment to purchase is for the entire year. HPSEBL has submitted that this purchase is done to avoid deficit/load shedding in certain months of the year and it endeavours to sell surplus power in certain months to outside state to avoid impact of tariff increase for the consumers of the State.

5.19 The Commission approves the power purchase quantum for FY11 based on the accounts as shown in the table below:

Table 48: Power purchase quantum for FY11

Stations	True up petition (MU)	Approved true up (MU)
BBMB		
BBMB Old	44	44
BBMB New	125	125
Dehar	79	79
NTPC		
Anta(LNG)	7	7
Anta(G)	67	67
Auraiya(LNG)	13	13
Auraiya(G)	102	102
Dadri(LNG)	12	12
Dadri(G)	120	120
Unchahar-I	50	50
Unchahar-II	86	86
Unchahar-III	54	54
Rihand-1 STPS	238	238
Rihand-2 STPS	245	245
Kehalgaon	134	134
NHPC		
Chamera-I	70	70
Chamera-II	51	51
Salal	32	32
Tanakpur	14	14
Uri	82	82
Dhaulti Ganga	40	40
Other Stations		
NAPP	51	51
RAPP	85	85
Nathpa Jhakri SoR	176	176
Shanan	5	5
Shanan Extn	45	45
Yamuna (UJVNL)	401	401
Khara	65	65
Baspa –II	1050	1050
Baspa II Sec Energy	242	242
Tehri I	87	87
ADHPL	24	24

Stations	True up petition (MU)	Approved true up (MU)
Patikari	61	61
Sarabari-II	15	15
Toss	54	54
Free Power & Equity		
Bairasiul	43	43
Chamera-I	139	139
Chamera –II	64	64
Shanan Share	3	3
Ranjeet Sagar Dam	76	76
Malana	49	49
Baspa – II	176	176
Nathpa Jhakri	303	303
Nathpa Jhakri Equity	554	554
Patikari	8	8
Sarabari-II	2	2
Toss	10	10
Ghanvi	7	7
Baner	5	5
Gaj	4	4
Larji	80	80
Khauri	5	5
AD Hydro	9	9
Private Micros		
Private Micros	479	479
Banking & UI Power		
Banking	870	870
UI Power	356	356
Unallocated Share		
Unallocated power	377	377
Grand Total	7642	7642
External Loss	3.50%	3.50%
Net Power Purchase from non-HPSEBL sources for sale within state (A)	7375	7375
Own generation (B)	1934	1934
Total power purchase available for sale (A+B)	9308	9308

5.20 As mentioned in Paragraphs 5.11 and 5.12 of this Order, the Commission observed the power purchase cost shown in HPSEBL's accounts is inclusive of power purchased under banking, although the same has not been claimed as part of the power purchase cost by HPSEBL in its petition. Since banking is a cashless transaction, the cost of purchase of power through banking amounting to Rs 594.96 Cr has not been considered in the power purchase cost as shown in the accounts.

- 5.21 The power purchase cost as approved by the Commission in the 2nd APR of first MYT period, as submitted by the Petitioner in its true-up Petition of FY11 and now provisionally approved by the Commission while true-up for FY11 is given below:

Table 49: Break up of Power Purchase cost in FY11 (Rs Cr)

Particulars	Approved in 2 nd APR	True up petition	Revised Submission	Approved true up
Power Purchase Expenses	1330.23	1697.34	1680.65	1680.65
PGCIL Charges	154.53	136.36	169.45	169.45
Other Charges including arrears except Baspa arrears	-	75.94	111.21	111.21
Baspa Arrears	90.00	103.09	103.09	103.09
Total	1574.76	2012.73	2064.40	2064.40

Energy Balance

- 5.22 The Commission has analyzed the energy balance of HPSEBL based on the sales and power purchase data submitted by HPSEBL. The utility has submitted in its petition that the overall T&D losses for FY11 stood at 12.66%.
- 5.23 The energy balance approved for FY11, based on the data submitted by HPSEBL and the accounts for the year, is shown in the table below:

Table 50: Energy balance FY11 (MU)

Energy balance for FY11	True up petition	Approved true up
Power Availability		
Net own Generation Sources + HPPCL	1934	1934
Net Power Purchase from Other Sources (CGS, Inter-state etc.)	7375	7375
Total Availability at Discom periphery	9308	9308
Inter-State Sales (MU)	1705	1705
Power Requirement for sale within the State (MU)	7604	7604
Sales within the State (MU)	6641	6641
T&D Loss % within the State	12.66%	12.66%

T&D Loss Trajectory

- 5.24 Based on the actual loss figure submitted for FY 2010-11, the Commission approves actual T&D losses as 12.66% for FY11. With this, the actual and approved T&D loss trajectory for the 1st MYT Control Period stands as shown below.

Table 51: Actual vs Approved T&D Loss Trajectory for the 1st Control Period

Particulars	FY08	FY09	FY10	FY11
Original trajectory approved in the first MYT Order dated May 2008	Not under MYT regime	15.75%	15.00%	14.50%
Revised trajectory approved in the first APR Order for FY10 under the 1 st Control Period		13.14%	12.79%	12.49%
Actual trajectory achieved	13.49%	13.29%	14.58%	12.66%

- 5.25 In the first MYT Order for the period FY09–FY11, the Commission had set a T&D loss reduction trajectory of 14.50% for the Board. However, at the time of the first Annual Performance Review (APR) under the MYT regime for FY10, the Board submitted revised figures for the actual T&D loss achieved in the base year i.e. FY08, stating that the actual loss figure in FY08 was 13.49% as opposed to the earlier estimate of 16.50% considered by the Commission for FY08 on the basis of data available at the time of issue of the first MYT Order.
- 5.26 In view of the actual T&D losses in the base year i.e. FY08, the Commission revised the T&D trajectory for the first MYT Control Period in the first APR Order for FY10 dated 24 August, 2009. Relevant extracts from the said order are quoted below:

“The Commission in its MYT Tariff Order had approved T&D loss figure of 16.5% for FY08 based on the revised T&D loss for FY07 at 17% and had accordingly used this as a base figure for MYT projections.

(...) On the basis of the analysis of the audited accounts for FY08 submitted by the Board for truing up, it is observed that the actual T&D loss figure for the Board, as per the true up order dated 11-8-2009, stood at 13.49%.

For the Control Period (FY09-FY11) in MYT order dated May 30, 2008, the Commission had considered the T&D loss reduction trajectory of 0.75%, 0.75% and 0.5% in FY09, FY10 and FY11 respectively to reach a level of 14.5% by the end of the Control Period from base level of 16.5% at the start of the MYT period (FY08).

Since the Board has stood by the audited figures for T&D losses, the Commission is left with no option but to revise the T&D loss trajectory for the Control Period. (...) The Commission is therefore revising the T&D loss trajectory for the Control Period based on the actual T&D loss levels in the base year FY08.”

- 5.27 Following this revision in the T&D loss trajectory, the Board filed an appeal before the Appellate Tribunal for Electricity (ATE) against revisiting the loss trajectory in the middle of the Control Period, which as per the Board was contrary to the tariff regulations. However, the Hon’ble ATE vide its judgment dated July 11, 2011 ruled in the Commission’s favour and the relevant extract from the said judgment is reproduced hereunder:

“The second issue is regarding Transmission and Distribution losses. According to the appellant, the T&D loss trajectory set up in the MYT order could not be altered in the middle of the control period. We have noticed that the State Commission had to revisit the T&D loss trajectory on account of incorrect T&D loss figure for the base year i.e. FY 2007-08 assumed at the time of passing the MYT order. The State Commission in the MYT order had taken T&D losses for base year 2007-08 as 16.5% and accordingly considered loss reduction trajectory of 0.75%, 0.75% and 0.5% for FY 09, FY 10 and FY 11 respectively to reach a figure of 14.5% by the end of Control Period. The Commission had also clarified in the MYT order that the trajectory for the Control Period may be trued up as and when the audited accounts for FY 08 were made available. On the true up of the FY 2007-08 it was found that the actual T&D losses for the FY 2007-08 stood at 13.49% which is less than the target of 14.5% set for the end of the control period i.e. FY11. In normal circumstances the T&D loss

trajectory should not have been revisited by the State Commission. However, in this case due to incorrect data made available to the State Commission for the previous year, the State Commission had to review the T&D loss targets during the control period. If the T&D loss targets had not been revised the appellant would have been entitled to the gains due to T&D loss reduction during the MYT control period even without actually reducing the T&D losses below the T&D losses achieved during the base year i.e. FY 2007-08. In any case, the T&D loss trajectory for the control period cannot be more than the actual T&D loss achieved during the base year. In view of above, we do not find any infirmity in the State Commission's findings and decide not to interfere with the same."

5.28 Therefore, in line with the Hon'ble ATE's judgement, the Commission has compared the actual T&D loss of FY11 with the revised target set in the first APR Order for FY10 under the first MYT regime, dated August 24, 2009. The petitioner has submitted that the actual T&D loss level achieved by HPSEBL in FY11 is 12.66%, which is 0.17% higher than the revised T&D loss target of 12.49%.

5.29 Thus, HPSEBL is not entitled to any incentive for reduction in T&D losses because although the actual T&D loss of 12.66% is lower than the earlier target of 14.50% set in the first MYT Order, nevertheless it is still higher than the revised T&D loss target of 12.49% set by the Commission in the first APR under the MYT regime.

5.30 As regards penalty, clause 4.22 (c) of the first APR Order for FY10 specifies that:

Any under recovery in the revenue realized, if the T&D loss reduction in the last year of the Control Period is below 0.20% and that the cumulative value of loss reduction at the end of the Control Period is below 1%, shall be to the account of the Petitioner. The Petitioner shall not be eligible for any incentive or penalty if the cumulative T&D loss reduction at the end of the Control Period is 1.0%.

5.31 In light of the fact that the cumulative loss reduction (from the opening loss level in FY09 of 13.49% to the closing loss level in FY11 of 12.66%) in the first MYT Control Period has been less than 1%, the under-recovery in revenue, the penalty on account of under-recovery in revenue would have been as shown below:

Table 52: Under recovery in revenue on account of higher T&D loss

Particulars	T&D loss achieved	Sales (MU)	Per unit realization (Rs./unit)	Revenue from within state SOP (Rs Cr)
Actual in FY11 (A)	12.66%	6641.08	3.68	2446.84
Scenario if loss target was achieved (B)	12.49%	6654.01	3.68 (Same as actual)	2451.60
Difference (A – B)	0.17%	-12.93	0	-4.76

5.32 However, due to the variation between actual and targeted loss levels being minimal and on account of the fact that the T&D loss reduction in FY11 has been a commendable 1.92% (higher than the 0.20% threshold loss reduction specified for the last year, as per the APR Order for FY10), the Commission is not imposing any penalty on HPSEBL for under-achievement in T&D loss reduction.

True up of Controllable Parameters

O&M expenses

- 5.33 Operation and Maintenance (O&M) expenses include:
- (a) salaries, wages, pension contribution and other employee costs;
 - (b) administrative and general expenses;
 - (c) repairs and maintenance expenses; and
 - (d) other miscellaneous expenses, statutory levies and taxes (except corporate income tax).
- 5.34 The Commission, in its First MYT Order had mentioned that the O&M trajectory for the Control Period would be trued up once the audited accounts for FY08 is made available and/or the utility is unbundled and/or recommendations of the 5th Pay Commission are implemented during the Control Period.
- 5.35 In its first APR order, the Commission had revised the O&M trajectory based on audited accounts for FY08 and availability of CPI and WPI figures for FY08. The other two events i.e. unbundling of Board and implementation of 5th Pay Commission recommendations have also happened during FY10 and FY11 respectively.

Employee Expenses

- 5.36 The Commission had approved the following Employee Expenses for FY11 in its Tariff Order for FY11:

Table 53: Approved Employee Expenses for FY11 (Rs Cr)

Particulars	FY11
Total Employee Cost approved	695.46
Less: Capitalisation	56.39
Net Employee Cost approved	639.08
Provision for New Recruitments	7.97

- 5.37 The Commission also approved the provisional impact of 5th Pay Commission in the Tariff Order for FY11. The Commission had provisionally worked out the impact on account of revision in pay scale in FY11 to be Rs. 57.31 Cr, and impact on account of revision in IR to be Rs. 47.66 Cr. Further, the Commission allowed Rs. 27 Cr to the Board on account of the GoHP Orders dated March 19, 2010 and March 29, 2010 and an additional Rs. 36.85 Cr in order to meet a part of the commutation, gratuity and pension liabilities towards pensioners post January 2006. These expenses were allowed on a provisional basis and are subject to true-up based on actual payouts/audited accounts.

5.38 The summary of the provisional expenses allowed by the Commission on account of the 5th Pay Commission are shown below.

Table 54: Summary of provisional expenses on account of 5th Pay Commission allowed by the Commission (Rs. Cr)

Particulars	Commission's Allowance
Revision of pay scale and IR	47.66
Revision in pay scales in FY11	57.31
Terminal benefits	36.85
Arrears on account of GoHP Orders	27.00
Total	168.82

5.39 HPSEBL in its true up petition has submitted gross employee expenses at Rs 1037.24 Cr which includes 5th Pay Commission arrears of Rs 122.56 Cr and terminal benefits of Rs 208.06 Cr. The Petitioner has proposed net employee cost of Rs 976.48 Cr.

5.40 The Commission has dealt with incremental Employee Expenses separately, later in this chapter in Paragraphs 5.78 to 5.81.

Administrative and General (A&G) Expenses

5.41 The summary of A&G expenses approved by the Commission for FY11 in the First APR Order on the basis of approved True-up for FY08 is shown below:

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

Particulars	FY11
Total A&G Cost Approved	41.16
Less: Capitalisation	5.18
Net A&G Cost approved	35.98

5.42 The Petitioner has submitted Gross A&G Expenses of Rs 110.26 Cr which included Rs 56 Cr on account of Cost of Free CFL Bulbs to domestic consumers. Net A&G Expenses submitted by the Petitioner is Rs 106.60 Cr. The Commission has considered the expense on providing cost-free CFL bulbs separately from the A&G cost claimed by the Petitioner and is dealt with in the later sections.

5.43 As per Regulation 11 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2007, A&G expense is a controllable parameter and any surplus or deficit on account of actual A&G expense compared to as approved in the first APR Order for the Control Period shall be to the account of the Petitioner and shall not be trued up.

5.44 Accordingly, the A&G expenses are approved at the same level as provided in the Second APR Order, as shown as follows:

Table 56: A&G expenses for FY10 (Rs Cr)

Particulars	Approved in APR Order	True-up petition	True-up by Commission
A&G expenses	41.16		41.16
Less: Capitalisation	5.18	-	5.18
Net A&G expenses	35.98	50.60*	35.98

* Excluding expense on providing cost-free bulbs to consumers

Repair and Maintenance (R&M) Expenses

5.45 The summary of R&M Expenses approved by the Commission for the Control Period in the MYT Order is shown below.

Table 57: Approved R&M Expenses for the Control Period (Rs Cr)

Particulars	FY09	FY10	FY11
GFA (Opening)	3698.10	4281.97	5128.67
K Factor	0.99%	0.99%	0.99%
R&M Expenses	36.46	42.22	50.57

5.46 The Commission in the first APR Order revised R&M Expenses for the Control Period based on true up for FY08.

5.47 The revised R&M Expenses approved by the Commission in first APR for the Control Period is shown below:

Table 58: Approved R&M Expenses for the Control Period (Rs Cr)

Particulars	FY09	FY10	FY11
GFA (Opening)	3546.97	4130.84	4977.54
K Factor	0.93%	0.93%	0.93%
R&M Expenses	33.09	38.54	46.44

5.48 The Petitioner appealed against the revision of R&M Expenses by the Commission in first APR Order. The Hon'ble Appellate Tribunal (ATE) in its Order dated 11th July, 2011 on appeal no 186 of 2009 has held that

"10.5. Thus in the MYT order, the value of 'K' has been determined based on the data for the last 4 years i.e. FY 04 to FY 07 and the same was revised in the impugned order considering the data for last 5 years i.e. FY 04 to FY 08. In our opinion, this is contrary to the Regulations. The Regulations clearly state that the value of 'K' will be given in the MYT order. The Regulations also do not have any provision for review of 'K' value or review of approved R&M expenses or true up of R&M expenses. It is also not stated in the Regulations that the value of 'K' is to be worked out on the basis of data of last 4 or 5 years including the immediate previous year. Thus there was no need for the State Commission to revisit the 'K' factor in the impugned order.

10.6. Accordingly, we decide this issue in favour of the appellant and set aside the findings of the State Commission in the impugned order in this regard."

- 5.49 The Commission in has approved R&M Expenses for FY09 and FY10 while truing up for these years in the second APR and third APR respectively at Rs 33.09 Cr and 38.54 Cr respectively. The Commission in this Order is revising R&M Expenses for each year of the first Control Period as per the Order of the Hon'ble ATE. The summary of R&M Expenses now approved by the Commission for the Control Period as shown below:

Table 59: Additional R&M Expenses for the Control Period (Rs Cr)

Particulars	FY09	FY10	FY11
R&M Expenses Approved in first APR	33.09	38.54	46.44
Revised R&M Expenses (As approved in MYT Order)	36.46	42.22	50.57
Additional R&M Expenses now approved	3.37	3.68	4.13
Additional R&M Expenses approved in this Order			11.18

Table 60: R&M Expenses for FY11 (Rs Cr)

Particulars	FY11
GFA (Opening)	4977.54
K Factor	0.93%
R&M Expenses	46.44
Additional R&M Expenses	11.18

Review of Capital Investment & Capitalization

- 5.50 According to Clause 11 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2007:

“(b) at the end of the control period –

- iii. *the Commission shall review actual capital investment vis-à-vis approved capital investment.*
- iv. *depreciation and financing cost, which includes cost of debt including working capital (interest), cost of equity (return) shall be trued up on the basis of actual/audited information and prudence check by the Commission.”*

- 5.51 As per the HPERC MYT Regulations, 2007, any variation in actual capital expenditure with respect to the figures considered in the MYT Order shall be considered at the end of the MYT Control Period.
- 5.52 The Commission has reviewed the capital investment claimed by HPSEBL against the approved capital investment for the first Control Period in Chapter A6 of this Order.

Depreciation

- 5.53 The Commission has approved depreciation for FY11 in accordance with the principles of the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2007, under which depreciation has been provided as per the approved capital expenditure and capitalization schedule for the control period. This approved depreciation is subject to true up at the end of the control period.
- 5.54 The summary of the GFA & depreciation approved by the Commission for the FY11 is shown below:

Table 61: Approved GFA & Depreciation for the Control Period (Rs Cr)

Particulars	FY11
Opening	4977.54
Generation	1730.53
Transmission	1145.18
Distribution	2101.83
Addition	407.34
Generation	0.00
Transmission	202.20
Distribution	205.15
Reduction	0.00
Generation	0.00
Transmission	0.00
Distribution	0.00
Closing	5384.88
Generation	1730.53
Transmission	1347.38
Distribution	2306.97
Depreciation Rate	
Generation	2.50%
Transmission	2.50%
Distribution	2.50%
Depreciation	129.53
Generation	43.26
Transmission	31.16
Distribution	55.11

- 5.55 The Commission has reviewed the depreciation claimed by HPSEBL against the approved depreciation amounts for the entire first Control Period in Chapter A6 of this Order.

Interest & Financing Charges

- 5.56 The Commission had approved the interest expenses for the Control Period at the time of issuing the 1st APR Order under the first MYT Control Period, based on the true up data of FY08 as was submitted by the erstwhile Board.
- 5.57 Based on the loans and interest rates approved for the Control Period, the interest and financing charges approved by the Commission for FY11 in third APR Order are tabulated below:

Table 62: Interest Charges approved for FY11 (Rs Cr)

Particulars	FY11
LIC	0.70
PFC	50.01
REC & RGGY	12.25
Bank Loan	9.20
Non NSLR Bonds	16.43
State Govt Loans	1.83
Market Bonds	0.92
Short Term Loans	0.0
New loans for Capex	49.05
Interest on Consumer Deposit	5.73
Interest on Working Capital	29.69
Total Interest Charges	175.82
Less: Capitalisation	0.00
Net Interest Charges Approved	175.82

- 5.58 Based upon actual data pertaining to interest & finance charges of the first Control Period, the Commission has reviewed the same for the entire Control Period in Chapter A6 of this Order.

Return on Equity

- 5.59 The Commission had approved ROE to the generation, transmission and distribution businesses based on the true-up done for FY09, at the rate of 14%, 14% and 16%, respectively, in accordance with its Tariff Regulations, as detailed in the table below:

Table 63: Approved ROE for the Control Period (Rs Cr)

Particulars	FY10	FY11
Equity	297.27	297.27
Generation	108.27	108.27
Transmission	79.05	79.05

Particulars	FY10	FY11
Distribution	109.95	109.95
Rate		
Generation	14.00%	14.00%
Transmission	14.00%	14.00%
Distribution	16.00%	16.00%
Approved ROE	43.82	43.82
Generation	15.16	15.16
Transmission	11.07	11.07
Distribution	17.59	17.59

- 5.60 As per Clause 11 of MYT Regulations, 2007, return on equity shall be subject to true up at the end of the control period on the basis of actual/audited information and prudence check by the Commission.
- 5.61 The Commission has tried up return on equity based on actual data of the first Control Period in Chapter A6 of this Order.

Impact of Review Order on account of penalty recovered from PSPCL

- 5.62 The Petitioner has filed a review Petition in HERC for revisiting certain parameters approved in the second MYT Order. The Petitioner has submitted that the amount recovered from PSPCL under banking arrangement amounting to Rs 1.39 Cr is not appearing in the audited accounts of FY 2009-10 of HPSEBL and as such taking the amount based on the interaction with the Petitioner appears to be an error.
- 5.63 HPSEBL has further submitted that however, this amount could not be adjusted in the annual accounts of FY 2010-11 also and will consider in the prior period expenses for FY 2011-12. Therefore, HPSEBL has requested to consider the same in the first APR of second MYT Control Period.
- 5.64 The Commission is of the view that the audited accounts depict major heads and sub-heads in form of schedules. In order to get the detailed information as regards the individual accounts it is necessary to look into the individual head-wise details. In order to have an interaction with the accounts personnel to understand the nature of the transactions under some major heads and sub-heads and also to validate the figures for true-up of FY 10, the Commission officials had visited the office of the petitioner. It was during one such interaction, the Petitioner informed that the revenue from sale of banking power includes an amount of Rs.1.39 Cr, being the amount of penalty recovered by petitioner as a result of default committed by the PSPCL under banking arrangement.
- 5.65 It is now claimed by the petitioner that this amount is neither included in annual accounts of FY 10 nor in that of FY 11. The Commission is of the view that since the same is not included in the annual accounts although the same has already been considered as revenue item by the Commission in FY 10, therefore, the Commission

will adjust this amount when it gets accounted for in future in FY12 as informed by the Petitioner.

Extraordinary Items

5.66 In addition to the above, the Commission also approves extraordinary items as per balance sheet and prior period expenses amounting to Rs 44.29 Cr, which will be subject to true-up once the audited annual accounts for FY 11 are made available by HPSEBL.

Non Tariff Income

5.67 As per Clause 25 and sub clause (2) of the MYT Regulations, 2007:

“The amount received by the licensee on account of non-tariff income shall be deducted from the aggregate revenue requirement in calculating the net revenue requirement of such licensee.”

5.68 The above clause indicates that NTI, being an integral part of the revenue requirement, shall be true up at the end of each year of the Control Period.

5.69 The Commission has analysed NTI and considers that Late Payment Surcharge (LPSC) and rebate earned on power purchase bills should be considered as part of NTI since HPSEBL has been allowed certain working capital requirement separately which takes care of cash-flow related needs arising out of late payment by consumers. Accordingly, Commission approves non tariff income for FY11 at Rs 202.78 Cr as per the accounts of HPSEBL and as claimed in true up petition for FY11.

Expenditure on CFL

5.70 The Board has submitted in its petition as well as audited accounts an expenditure of Rs 56 Cr as a part of A&G cost for providing cost-free CFL bulbs to domestic consumers. The Board also submitted in the public hearing on May 17, 2010, that implementation of the CFL scheme has resulted in direct saving of energy consumption of 121 MU in the domestic consumer category.

5.71 The Commission acknowledges the contribution of CFL bulbs as an energy conservation initiative in reducing the growth of energy consumption for the domestic consumer categories. It is observed that the growth rate of domestic sales in FY10 over FY09 sales is 0.95%, which is much lower compared to the growth rate of 3.61% of FY09 sales over sales in FY08.

5.72 HPSEBL has distributed free CFL to the domestic consumers as per the direction of the Government of Himachal Pradesh under “Atal Bachat Lamp Yojna”. Allowing A&G Expenses of 56 Cr on account of cost of distribution of free CFL lamp to domestic consumers is to allow HPSEBL to recover the cost of “free CFL” distributed as per the Government’s directive which defeats the concept of “free CFL”. The Commission also notices that there are initiatives by Bureau of Energy Efficiency and Ministry of Power to distribute free CFL to consumers and consumers have not been

charged for that. On the similar lines, HPSEBL may request GoHP to provide funds as grant for free distribution. The Commission therefore, has not allowed cost of free CFL in the ARR of the HPSEBL.

- 5.73 The Commission believes that the scheme for providing CFLs envisaged availing the benefits of CDM and accordingly the claim for availing carbon credits is already under process. As such the Commission directs the Petitioner to pursue the matter for getting the benefit under the CDM mechanism.

Annual Revenue Requirement

- 5.74 For true-up of FY11, the Commission in this chapter has trued-up only the uncontrollable expenses viz. power purchase cost, revenue from sale of power and non-tariff income. The true-up of controllable expenses has been detailed in Chapter A6 of this Order.

- 5.75 The ARR approved by the Commission in the 2nd APR Order, ARR as submitted by the Petitioner in its true-Petition and ARR now approved by the Commission for FY11 are shown in the table below:

Table 64: Trued up ARR of FY11 (MU)

Particulars	Approved in 2 nd APR	True up petition	Approved true up
Power Purchase Expenses	1330.23	1680.65	1680.65
PGCIL Charges	154.53	169.45	169.45
Other Charges	-	111.21	111.21
Baspa Arrears	90.00	103.09	103.09
Employee cost (without arrears)	695.46	976.48	695.46
Impact of 5 th Pay Commission	168.82		168.82
Provision for New Recruitments	7.97		7.97
R&M	46.44	43.46	46.44
Additional R&M Expenses	0.00	0.00	11.18
A&G	41.16	106.60	41.16
Provision for IT & Other Initiatives	1.28	0.00	0.00
Provision for Public interaction	0.41	0.00	0.00
Provision for EE & DSM Programme	0.87	0.00	0.00
Interest & Financing Charges	175.82	178.98	175.82
Depreciation	129.53	133.57	129.53
Extraordinary items	-	44.29	44.29
Return on Equity	43.82	144.39	43.82
Less: Capitalization	61.56		61.56
Less: Non Tariff Income	136.93	202.78	202.78
Less: Net Surplus as per FY10 True-up ¹		-	47.12
Aggregate Revenue Requirement	2687.84	3489.39	3117.43

¹ Approved in the true up for FY10 undertaken by the Commission in the 2nd MYT Order dated July 19, 2011

Revenue from sale of power

- 5.76 HPSEBL has submitted that actual revenue from sale of power within state in FY11 was Rs 2446.84 Cr. HPSEBL's revenue from sale of power outside state comes out to be Rs 264.29 Cr. The Commission has considered these figures, along with GoHP subsidy of Rs 0.05 Cr shown as received in FY11, in its approval of trued up revenue of HPSEBL in FY11, as shown below:

Table 65: Trued up Revenue of FY11 (Rs Cr)

Particulars	Approved in 2 nd APR	True up petition	Approved true up
Revenue from sale within the state	2338.33	2446.84	2446.84
Revenue from sale outside the state	193.70	220.53	264.29
GoHP Subsidy	-	0.05	0.05
GoHP Roll back subsidy (Receivable)	-	-14.00	0.00
Trued up gap	2532.03	2653.42	2711.18

Revenue Gap

- 5.77 The Commission approves the trued up gap of Rs 406.25 Crores after accounting for the surplus amounting to Rs 47.12 Cr approved for FY10 in the true up for FY10. The ARR approved by the Commission in the 2nd APR Order and ARR now approved by the Commission for FY11 is shown in the table below:

Table 66: Trued up Revenue Gap of FY11 (Rs Cr)

Particulars	Approved in 2 nd APR	Trued up Gap
Annual Revenue Requirement	2687.84	3117.43
Revenue from sale of power & GoHP subsidy	2532.03	2711.18
Revenue Gap for FY11	155.81	406.25

Additional Employee Expenses on account of 5th Pay Commission

- 5.78 The Commission had approved gross Employee Expenses of Rs 872.25 Cr for FY11 while approving tariff for FY11.

Table 67: Employee Expenses Approved by Commission (Rs Cr)

Particulars	Approved in 2 nd APR
Gross Employee Expenses	695.46
Provision for new Recruitments	7.97
Impact of 5 th Pay Commission	168.82
Total	872.25
Less : Capitalization	56.39
Net Employee Expenses	815.86

- 5.79 The Commission has reviewed the actual Employee Expenses of the Petitioner. The Commission has received information on actual Employee Expenses payouts from the

finance wing of the Petitioner.

- 5.80 As per the information available with the Commission the actual Gross Employee Expenses for the Petitioner were Rs 957.90 Cr. The Employee cost capitalized was Rs 60.76 Cr. The Commission further observed that Employee Cost of new project wing and CE (Project & Arbitration) wing was not fully capitalized, thus resulting in under capitalisation by Rs 4.57 Cr. The Commission has considered Employee Cost capitalisation of Rs 65.33 Cr. The

Table 68: Actual Employee Expenses (Rs Cr)

Particulars	Approved in 2nd APR
Gross Employee Expenses	957.90
Less: Capitalization	65.33
Total	892.57

- 5.81 The Commission recognizes the uncontrollable nature of the 5th Pay Commission's recommendations and hence has decided to approve Employee Expenses at the actual level for FY11. The Commission approves additional Employee Expense of Rs 76.71 Cr (892.57 Cr – 815.86 Cr) over and above the Gap approved for FY11.

A6: TRUE UP FOR FIRST MYT CONTROL PERIOD (FY09 – FY11)

6.1 HPSEBL has submitted a petition for true up of the entire first MYT Control Period (FY09–FY11) on the basis of difference in actual expenses and revenue in the period FY09–FY11 vis-à-vis the expenses and revenue approved for the period in the first MYT Order dated May 30, 2008.

6.2 As per the HPERC MYT Regulations, 2007:

“For controllable parameters,

(a) any surplus or deficit on account of O&M expenses shall be to the account of the licensee and shall not be trued up in ARR; and

(b) at the end of the control period –

i. the Commission shall review actual capital investment vis-à-vis approved capital investment.

ii. depreciation and financing cost, which includes cost of debt including working capital (interest), cost of equity (return) shall be trued up on the basis of actual/audited information and prudence check by the Commission.”

6.3 Accordingly, every year the Commission has trued up the uncontrollable parameters like Sales, Power Purchase, Non Tariff Income etc., in the True Up Orders for the respective years. However, the Commission has not undertaken any true up of controllable parameters like depreciation, interest & finance charges, return on equity etc. since it was specified in the MYT Regulations, 2007 that these parameters would be trued up only at the end of the first control period.

6.4 Therefore, in this Order, the Commission is truing up the controllable parameters for the Board for the entire first control period.

6.5 The Commission has reviewed the capital investment, capitalisation, depreciation, interest cost and return on equity for each year of the first MYT Period (FY09–FY11) of the Board and has finalised the true up based on the MYT regulations, information submissions, necessary clarifications submitted by the licensee and views expressed by stakeholders.

Capital Investment and Capitalisation

6.6 The Commission in its MYT Order for the first Control Period (FY09–FY11) approved the following capital investment for each year of the first Control Period:

Table 69: Capital Investment Plan approved in MYT Order for 1st Control Period (Rs Cr)

Particulars	FY09	FY10	FY11
Generation	119.60	20.50	69.74
Transmission	248.00	170.00	175.00

Particulars	FY09	FY10	FY11
Distribution	359.03	142.68	134.55
Total	726.63	333.18	379.29

6.7 Actual capital investment as per the annual accounts of the HPSEBL are as follows:

Table 70: Capital Investment as per annual accounts of HPSEBL (Rs Cr)

Particulars	FY09	FY10	FY11
Total capital investment	605.83	614.79	302.54*

**unaudited accounts*

6.8 The Commission in its MYT Order for the first Control Period approved the following asset capitalisation for each year of the Control Period:

Table 71: Capitalisation approved in MYT Order for 1st Control Period (Rs Cr)

Particulars	FY09	FY10	FY11
Generation			
CWIP (opening)	0.00	119.60	39.58
Addition	119.60	20.50	69.74
Base Expenditure	99.90	17.66	63.45
Establishment Exp.	9.73	0.80	2.97
IDC	9.97	2.04	3.32
Capitalisation	0.00	100.52	0.00
CWIP (closing)	119.60	39.58	109.32
Transmission			
CWIP (opening)	172.58	284.69	235.20
Addition	248.00	170.00	175.00
Base Expenditure	235.59	156.95	158.66
Establishment Exp.	6.98	6.76	6.56
IDC	5.43	6.29	9.78
Capitalisation	135.89	219.49	202.20
CWIP (closing)	284.69	235.20	208.00
Distribution			
CWIP (opening)	680.54	591.59	207.59
Addition	359.03	142.68	134.55
Base Expenditure	291.43	70.98	64.61
Establishment Exp.	49.19	52.73	52.04
IDC	18.41	18.97	17.90
Capitalisation	447.98	526.69	205.15
CWIP (closing)	591.59	207.59	136.99

6.9 HPSEBL has submitted the following as actual capitalisation in each year of the first MYT Period:

Table 72: Capital Investment as submitted by HPSEBL (Rs Cr)

Particulars	FY09	FY10	FY11
Capitalisation	706.58	373.21	76.02*

*unaudited accounts

- 6.10 The Commission asked HPSEBL to provide details of the year-wise capitalisation. HPSEBL submitted following details of the capitalisation:

Table 73: Capitalisation submitted for True Up (Rs Cr)

Particulars	FY09	FY10	FY11
Generation			
Larji	123.02	47.03	0.28
Khauri	18.95	1.76	0.97
Bhabha	26.41	52.60	2.45
Bassi	0.05	20.76	8.84
Thirot	298.14	4.25	
Giri	0.06	4.60	1.26
Total	466.64	131.01	13.79
Transmission	149.01	30.22	85.23
Distribution			
Una	9.85	21.15	4.88
Rampur	20.28	31.12	6.00
Hamirpur	14.10	7.58	10.24
Nahan	8.47	4.42	2.77
Shimla	36.96	15.92	6.16
Solan	8.75	22.58	5.75
Kangra	24.19	26.36	5.38
Bilaspur	2.81	26.58	7.24
Dalhousie	17.30	17.44	16.65
Kullu	5.21	9.98	3.94
Rohru	6.93	12.01	2.82
Mandi	14.96	22.12	11.51
Total	169.81	217.27	83.32
Grand Total	785.46	378.50	182.35

- 6.11 The Commission observed that the year-wise capitalisation details submitted by HPSEBL were at variance with the earlier submission in HPSEBL's true up petition. However, HPSEBL could not provide any explanation of the variations.
- 6.12 As the annual accounts of HPSEBL for FY11 are yet to be finalised and audited, the Commission has decided to go ahead with the details provided by HPSEBL for capitalisation and has provisionally true up capitalisation for the Control Period. **The Commission wishes to highlight that it shall review the capitalisation true up in this order once the annual accounts of HPSEBL for FY11 get audited and HPSEBL submits revised information on the same.**

- 6.13 The Commission approves the transmission and distribution capitalisation as submitted by HPSEBL. However, the Commission does not approve any capitalisation for Larji, Khauli, Bhabha, Thiroth and Giri hydro generating stations. The Commission has already approved capitalisation amount for Larji station in the Tariff Order for determination of capital cost of Larji HEP (126 MW) dated July 7, 2011. With respect to capitalisation in Khauli, Bhabha, Thiroth and Giri hydro generating stations, the Commission shall review the same once the respective tariff determination / additional capitalisation petitions of these hydro generating stations are filed by HPSEBL. For Bassi hydro generating station, the Commission approves capitalisation equivalent to the amount approved for Bassi station in the MYT Order for HPSEBL dated May 30, 2008.
- 6.14 The Commission now approves the following capitalisation for each year of the first Control Period:

Table 74: Trued up Capitalisation (Rs Cr)

Particulars	FY09	FY10	FY11
Generation			
Bassi	0.05	20.76	8.84
Total Generation	0.05	20.76	8.84
Transmission	149.01	30.22	85.23
Distribution	169.81	217.27	83.32
Grand Total	318.87	268.25	177.39

Depreciation

- 6.15 The summary of GFA and depreciation approved by the Commission in its MYT Order for first Control Period (FY09–FY11) is shown below:

Table 75: Approved GFA & Depreciation for the Control Period in 1st MYT Order (Rs Cr)

Particulars	FY09	FY10	FY11
Opening	3698.10	4281.97	5128.67
Generation	1827.02	1827.02	1927.54
Transmission	780.26	916.15	1135.64
Distribution	1090.82	1538.80	2065.49
Addition	583.87	846.70	407.34
Generation	0.00	100.52	0.00
Transmission	135.89	219.49	202.20
Distribution	447.98	526.69	205.15
Reduction	0.00	0.00	0.00
Generation	0.00	0.00	0.00
Transmission	0.00	0.00	0.00
Distribution	0.00	0.00	0.00
Closing	4281.97	5128.67	5536.01

Particulars	FY09	FY10	FY11
Generation	1827.02	1927.54	1927.54
Transmission	916.15	1135.64	1337.84
Distribution	1538.80	2065.49	2270.63
Depreciation Rate			
Generation	2.52%	2.52%	2.52%
Transmission	2.50%	2.50%	2.50%
Distribution	2.50%	2.50%	2.50%
Depreciation	100.15	118.03	133.71
Generation	46.08	47.33	48.59
Transmission	21.21	25.65	30.92
Distribution	32.87	45.05	54.20

6.16 HPSEBL has submitted the following depreciation for each year of the first Control Period in the True Up Petition:

Table 76: Depreciation for the Control Period submitted by HPSEBL (Rs Cr)

Particulars	FY09	FY10	FY11
Depreciation	96.91	105.42	133.57

6.17 HPSEBL has considered a depreciation rate of 2.5% for FY09 and FY10, while for FY11 it has considered a depreciation rate of 2.88% for FY11.

6.18 The Commission has revised the depreciation for each year of the Control Period based upon the year-wise average GFA now approved and the depreciation rate as considered in the first MYT Order.

6.19 The revised depreciation now approved by the Commission is shown below:

Table 77: Trued Up GFA & Depreciation for the Control Period (Rs Cr)

Particulars	FY09	FY10	FY11
Opening	3698.10	4016.97	4285.22
Generation	1827.02	1827.07	1847.83
Transmission	780.26	929.27	959.50
Distribution	1090.82	1260.63	1477.90
Addition	318.87	268.25	177.39
Generation	0.05	20.76	8.84
Transmission	149.01	30.22	85.23
Distribution	169.81	217.27	83.32
Reduction	0.00	0.00	0.00
Generation	0.00	0.00	0.00
Transmission	0.00	0.00	0.00
Distribution	0.00	0.00	0.00

Particulars	FY09	FY10	FY11
Closing	4016.97	4285.22	4462.61
Generation	1827.07	1847.83	1856.67
Transmission	929.27	959.50	1044.73
Distribution	1260.63	1477.90	1561.22
Depreciation Rate			
Generation	2.52%	2.52%	2.52%
Transmission	2.50%	2.50%	2.50%
Distribution	2.50%	2.50%	2.50%
Depreciation	96.84	103.92	109.38
Generation	46.08	46.08	46.34
Transmission	21.37	23.61	25.05
Distribution	29.39	34.23	37.99

Funding and Interest

- 6.20 In the pre-MYT period, loans were recognized at the capital investment stage and interest was allowed in the Annual Revenue Requirement of the year on the same. However in the MYT Control Period, debt or equity is allowed only on capitalized assets and not on the capital works in progress.
- 6.21 The Commission in the first MYT Order had approved funding requirement only for assets which were capitalized during the year out of the fresh investments during the MYT Period, since the funding/loan requirement for the capital investment during the pre-MYT period (which was part of opening CWIP for the first year of the MYT Control Period) was already part of the opening loan considered by the Commission for calculation of interest during the Control Period.

Table 78: Funding Requirement and Funding approved in 1st MYT Order (Rs Cr)

Particulars	FY09	FY10	FY11
Total Capitalisation	583.87	846.70	407.34
Pre MYT Schemes	426.56	426.56	0.00
MYT Schemes	157.31	420.14	407.34
Funding Requirement	157.31	420.14	407.34
Consumer Contribution	52.41	100.71	122.02
Debt	104.90	319.42	285.32
Equity	0.00	0.00	0.00

- 6.22 Loan and interest approved for the capitalisation of fresh investment during the MYT Period is shown below:

Table 79: Funding Requirement and Funding approved in 1st MYT Order (Rs Cr)

Particulars	FY09	FY10	FY11
Funding Requirement	157.31	420.14	407.34
Consumer Contribution	52.41	100.71	122.02

Particulars	FY09	FY10	FY11
Debt	104.90	319.42	285.32
Equity	0.00	0.00	0.00
New loans taken for Capex			
Opening	0.00	94.41	371.40
Addition	104.90	319.42	285.32
Repayment	10.49	42.43	70.96
Closing	94.41	371.40	585.76
Interest Rate	10.25%	10.25%	10.25%
Interest	4.84	23.87	49.05

- 6.23 HPSEBL did not submit segregated information on asset capitalization in pre-MYT period schemes and MYT Period schemes. In absence of information from HPSEBL, the Commission has assumed the following asset classification for capitalization approved in this Order for the first MYT Control Period:

Table 80: Classification of Capitalisation now approved (Rs Cr)

Particulars	FY09	FY10	FY11
Total Capitalisation	318.87	268.25	177.39
Pre MYT Schemes	250.00	200.00	150.00
MYT Schemes	68.87	68.25	27.39

- 6.24 HPSEBL has not submitted the funding details of capitalisation during each year of the first Control Period. The Commission has analysed the head-wise scheme classification submitted by HPSEBL to arrive at the funding pattern of the capitalisation approved in this Order.
- 6.25 The Commission has considered the following funding pattern for total asset capitalisation (both pre-MYT and MYT schemes, as segregation was not available).

Table 81: Capitalisation classification now approved (Rs Cr)

Funding	FY09		FY10		FY11	
	Loan	Grant	Loan	Grant	Loan	Grant
Transmission	149.01	0.00	30.22	0.00	85.23	0.00
Generation	0.05	0.00	20.76	0.00	8.84	0.00
Distribution	81.38	88.43	95.79	121.48	48.13	35.19
Total	230.44	88.43	146.78	121.48	142.20	35.19

- 6.26 The Commission has considered the funding pattern for MYT schemes as per the funding pattern of all schemes capitalised during the MYT Period. The Commission analysed the details of new loans taken by HPSEBL during FY09–FY11 and observed that interest rates on these loans varied from 7% to 12.5%. The Commission therefore has retained the interest rate on new loans at 10.25% as approved in the MYT Order.
- 6.27 Funding details of the MYT schemes and interest now approved for the capitalisation of fresh investment during the MYT Period is shown below:

Table 82: Funding Requirement and Funding now approved (Rs Cr)

Particulars	FY09	FY10	FY11
Funding Requirement	68.87	68.25	27.39
Consumer Contribution/Grant	22.08	21.88	8.78
Debt	46.79	46.37	18.61
Equity	0.00	0.00	0.00
New loans taken for Capex			
Opening	0.00	42.08	66.45
Addition	46.79	46.37	18.61
Repayment	4.68	9.32	11.18
Closing	42.11	79.17	86.60
Interest Rate	10.25%	10.25%	10.25%
Interest	2.16	6.22	8.50

Return on Equity (ROE)

6.28 In the first Annual Performance Review Order for the first Control Period, the Commission approved ROE to the generation, transmission and distribution businesses at the rate of 14%, 14% and 16%, respectively, in accordance with its Tariff Regulations, as detailed in the table below:

Table 83: Approved ROE for the Control Period (Rs Cr)

Particulars	FY09	FY10	FY11
Equity	297.27	297.27	297.27
Generation	108.27	108.27	108.27
Transmission	79.05	79.05	79.05
Distribution	109.95	109.95	109.95
Rate			
Generation	14.00%	14.00%	14.00%
Transmission	14.00%	14.00%	14.00%
Distribution	16.00%	16.00%	16.00%
Approved ROE	43.82	43.82	43.82
Generation	15.16	15.16	15.16
Transmission	11.07	11.07	11.07
Distribution	17.59	17.59	17.59

6.29 HPSEBL in its true up petition has claimed the following ROE for each year of the first Control Period:

Table 84: Return on Equity for the Control Period (Rs Cr)

Particulars	FY09	FY10	FY11
Return on Equity	53.97	140.08	144.39

6.30 HPSEBL has submitted that as per the Audited Accounts of FY10 the total equity of HPSEB stands at Rs. 971.77 Cr. This increase in equity of Rs. 575.24 Cr during FY10

is mainly on account of equity invested by the HPSEBL in the past years for the own hydel plants, which is capitalized during the year.

- 6.31 The Commission observes that Government has infused equity of 5.12 Cr in Ghanvi HEP (FY09), Rs 74.26 Cr in Beas Valley Power Corporation and Rs 55.8 Cr in Pabbar Valley Power Corporation. While Ghanvi HEP was capitalized much before FY09, generation projects under Beas Valley Power Corporation and Pabbar Valley Power Corporation are under construction. The Commission will consider the equity infused in Ghanvi HEP while determining tariff for the Ghanvi generating plants. With respect to equity infusion in Beas Valley Power Corporation and Pabbar Valley Power Corporation, the Commission will consider them while determining tariff for respective generating stations after their capitalization.
- 6.32 The Commission also observes that HPSEBL in its annual accounts for FY10 has shown addition of equity of 575.24 Cr in its already commissioned projects. On analyzing the equity shown as invested in the projects, it is seen that the equity invested is equivalent to 30% of the project cost considered by the Commission in its Tariff Order dated May 30, 2009.
- 6.33 The Commission is of the opinion that in accordance with the provisions of Tariff policy additional equity can be invested only if there is any surplus income generated in the business or if there is any equity infusion by Government of Himachal Pradesh. The Commission has not considered the equity shown to have been invested in the project in FY10 as these are only book entries and employed to inflate the books of the Petitioner and also considering the provisions relating to equity as per Tariff Policy and the equity shown as invested in the projects.
- 6.34 The Commissions now approves ROE to the generation, transmission and distribution businesses at the rate of 14%, 14% and 16%, respectively, in accordance with its Tariff Regulations, as detailed in the table below:

Table 85: Trued Up ROE for the Control Period in MYT Order (Rs Cr)

Particulars	FY09	FY10	FY11
Equity	297.27	297.27	297.27
Generation	108.27	108.27	108.27
Transmission	79.05	79.05	79.05
Distribution	109.95	109.95	109.95
Rate of return			
Generation	14.00%	14.00%	14.00%
Transmission	14.00%	14.00%	14.00%
Distribution	16.00%	16.00%	16.00%
Approved ROE	43.82	43.82	43.82
Generation	15.16	15.16	15.16
Transmission	11.07	11.07	11.07
Distribution	17.59	17.59	17.59

Summary

- 6.35 The Commission has reviewed capitalization, depreciation, interest and return on equity for each year of the first MYT Control Period. The table below summarizes capitalization, depreciation, interest and return on equity earlier approved by the Commission, now submitted by HPSEBL in the true up petition for the Control Period and now approved by the Commission in this Order. below:

Table 86: Trued Up ROE for the Control Period in MYT Order (Rs Cr)

Particulars	FY09	FY10	FY11
Capitalisation			
Approved in MYT Order	583.87	846.70	407.34
Now Approved	318.87	268.25	177.39
Depreciation			
Approved in MYT Order	100.15	118.03	133.71
Now Approved	96.84	103.92	109.38
Interest on New Loan for Capex in MYT			
Approved in MYT Order	4.84	23.87	49.05
Now Approved	2.16	6.22	8.50
Return on Equity			
Approved in First APR Order	43.82	43.82	43.82
Now Approved	43.82	43.82	43.82

- 6.36 As Depreciation, Interest charges and Return on Equity are part of aggregate revenue requirement (ARR) of any year; due to change in these components the ARR for each of the year will change.

Particulars	FY09		FY10		FY11	
	Earlier approved	Trued Up	Earlier approved	Trued Up	Earlier approved	Trued Up
Depreciation	100.15	96.84	118.03	103.92	133.71	109.38
Interest on New Loan for Capex in MYT	4.84	2.16	23.87	6.22	49.05	8.50
Return on Equity	43.82	43.82	43.82	43.82	43.82	43.82
Total	148.81	142.82	185.73	153.96	226.59	161.70
Reduction in ARR		5.99		31.77		64.89
Total reduction in ARR						102.66

- 6.37 The total revenue requirement for first Control Period on account of depreciation, Interest and Return on Equity has reduced by 102.66 Cr. This will be adjusted in the ARR for FY13. As the accounts of HPSEBL for FY11 have not been finalised, the Commission will revisit these numbers after receiving information on capitalisation, interest etc after the accounts are finalised.

- 6.38 Reduction in capitalisation for each year of the first Control Period will also impact the depreciation, interest etc. of each year of the second Control Period. However, the Commission is not revising the depreciation and interest for second Control Period as these figures have not attained finality.
- 6.39 In view of the trued-up gap of Rs 406.25 Cr for FY11 on account of uncontrollable factors, as approved earlier in Paragraph 5.77 of this Order, the net trued-up gap approved for the entire first MYT Control Period comes to Rs 303.59 Cr, as shown in Table 87 below.
- 6.40 The Commission has issued a True up Order for Baspa II HEP for FY04 – FY11 on April 23, 2012. As per the True up Order, HPSEBL has to pay Rs 56.40 Cr to Baspa II HEP till March 31, 2011. The Commission Rs 56.40 Cr as Baspa arrears till FY11 in the ARR of HPSEBL for FY13.
- 6.41 As per the direction of the Hon'ble ATE, the Commission has to revise MAT allowed for Baspa II HEP for FY04 – FY11. The Commission has not determined the impact of revised MAT due to non-availability of the information from the Baspa II HEP. The Commission provisionally approves Rs 50 Cr in HPSEBL ARR for the current year for payment towards any liability arising out of determination of revised MAT for Baspa II HEP. HPSEBL has filed an appeal against the direction of the Hon'ble ATE in Hon'ble Supreme Court. The Commission will true up this amount based upon the revised MAT liability approved by the Commission and Order of the Supreme Court.

Table 87: Net provisional trued-up gap approved for entire 1st MYT Control Period (including FY11)

Particulars	Amount (Rs Cr)
Trued-up gap for FY11 on account of uncontrollable factors	406.25
Change in approved ARR of 1 st Control Period	(102.66)
Total trued-up gap approved for 1st Control Period (including FY11 uncontrollable factors)	303.59
Arrears payable to Baspa till 31 March 2011	56.40
Provisional allowance towards revised MAT of Baspa	50.00
Additional Employee Cost for FY11	76.71
Total	182.91
Total Amount to be trued up due to True up of First MYT Control Period	486.70

- 6.42 The Commission is not allowing any holding cost to HPSEBL on account of true up since no carrying cost was charged to HPSEBL during earlier years viz. FY09 and FY10 when the utility was in surplus with regard to approved vis-à-vis actual costs incurred. In FY09, as per the true up order for FY09 dated June 10, 2010, the Commission after scrutinizing the audited accounts of HPSEBL had approved a revenue surplus of Rs 288.42 Cr, as against a gap of Rs 39.74 Cr earlier approved for FY09 in the first MYT Order of May 2008. Similarly, HPSEBL was found to be in a

surplus of Rs 47.12 Cr in FY10, as opposed to the revenue gap of Rs 186.38 Cr approved earlier for FY10 in the first MYT Order of May 2008.

- 6.43 As shown in the table below, the cumulative revenue gap/surplus of each of the three years comes to the following: revenue surplus of Rs 294.41 Cr for FY09, revenue surplus of Rs 78.89 Cr for FY10 and revenue gap of Rs 418.07 Cr for FY11.

Table 88: Cumulative revenue gap/(surplus) for the first MYT Control Period

Particulars (Rs Cr)	True up amount as per respective true up orders	Control Period true up	Total true up amount
2008-09	(288.42)	(5.99)	(294.41)
2009-10	(47.12)	(31.77)	(78.89)
2010-11	482.96*	(64.89)	418.07

* Rs 406.25 Cr on account of true up of uncontrollable items and Rs 76.71 Cr on account of additional employee cost in FY11. Arrears payable to Baspa (including provisional allowance towards revised MAT) have not been included since these have not been paid out yet by HPSEBL.

- 6.44 Assuming a carry-forward period of 1 year for the revenue gap/surplus of each of these three years, in the event of an appropriate holding cost being allowed/charged to HPSEBL after one year (when the audited accounts for the corresponding year would be available), the carrying cost allowable to the Board on account of revenue gap in FY11 nearly cancels out the carrying cost chargeable to the Board on account of revenue surplus in FY09 & FY10.
- 6.45 Therefore, the Commission is not allowing any carrying cost to HPSEBL on account of true up of the first MYT Control Period.

A7: ANALYSIS OF THE ANNUAL PERFORMANCE REVIEW (APR) FOR FY13

Introduction

- 7.1 The Commission has analyzed the revised Aggregate Revenue Requirement (ARR) petition FY13 submitted by the Petitioner (HPSEBL) for approval of revised Aggregate Revenue Requirement (ARR) of HPSEBL and determination of Wheeling and Retail Supply Tariffs for FY13.
- 7.2 The Commission held several rounds of technical discussions to validate the data submitted by the Petitioner and sought further clarifications on various issues. For the purpose of determination of tariff, the Commission has considered all information submitted by the Petitioner as part of the review petition, audited accounts for past years, provisional accounts for FY11 and the Petitioner's responses to various queries raised during the Technical Validation session, discussions as well as during the public hearing.
- 7.3 This section contains detailed analysis of HPSEBL's revised ARR petition and the Commission's Annual Performance Review of various parameters for determination of revised ARR for HPSEBL.

Aggregate Revenue Requirement (ARR) of HPSEBL as per 2nd MYT order

- 7.4 The Aggregate Revenue Requirement approved by the Commission for HPSEBL for the second Control Period (FY12-FY14) under its MYT order dated July 19, 2011 is summarized in the table below:

Table 89: Approved ARR of Distribution business for the Control Period (Rs Cr)

Particulars	FY12	FY13	FY14
Power Purchase Expenses	2097.21	2252.44	2607.56
PGCIL Charges	161.66	169.74	178.23
HPPTCL Charges	11.71	12.05	11.92
Operation & Maintenance Costs	912.17	943.32	974.77
Employee Cost	845.09	871.78	896.00
R&M Cost	30.81	32.83	36.45
A&G Cost	36.26	38.71	42.33
Interest & Financing Charges	87.20	92.47	121.19
Depreciation	89.21	97.11	109.02
Return on Equity	30.24	30.24	30.24
Public Interaction Program	0.52	0.00	0.00
Less: Non Tariff Income	289.29	349.00	259.20
Less: Capitalisation of Expenses	31.39	92.00	65.83
Aggregate Revenue Requirement	3069.23	3156.38	3707.91

Approach of the First Annual Performance Review under the 2nd MYT Control Period

- 7.5 In accordance with Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011, HPSEBL has filed for the annual performance review for FY13.
- 7.6 The Commission in its second MYT Order (FY12 to FY14) dated July 19, 2011 has fixed the targets for controllable parameters. Any loss due to under performance of the licensee on these controllable parameters would be to its own account. However, any variation on account of factors deemed uncontrollable such as power purchase cost and energy sales is treated as a pass-through expense after due deliberation by the Commission.
- 7.7 In light of the above, the Commission has considered the revision of ARR for uncontrollable parameters for FY13, while other components of costs are considered as per the figures approved by the Commission in the second MYT Order.

Sales Forecast

- 7.8 For projecting the energy sales of HPSEBL for FY13, the Commission has used the actual trend of past sales and estimated sales for FY12 of HPSEBL. The Commission has made use of the statistical tool of Compounded Annual Growth Rate (CAGR) which gives the smoothed annualized growth rate of a parameter like energy sales in order to capture fluctuations in the value of that parameter over a period of time. Accordingly, the CAGR was calculated for each consumer category, corresponding to different lengths of time. Depending on the specific characteristics of each category, a particular CAGR has been chosen as the basis of sales projection for that category.
- 7.9 HPSEBL has projected energy sales for the Domestic, Commercial Supply and Non Domestic Non Commercial Supply (NDNCS), Small & Medium Industrial Power Supply (SMS), Large Industrial Power Supply, Water and Irrigation Pumping Supply (WIPS), Street Lighting, Bulk Supply and Temporary Supply categories by applying the respective CAGR over the estimated sales for FY12, as detailed in the subsequent sections.
- 7.10 HPSEBL has estimated its energy sales within the state during FY11 at 6641 MU and projected energy sales of 6957 MU for FY12.
- 7.11 During the Technical Validation session held with HPSEBL officials, the Commission discussed the trends in growth in sales over the years. For checking the rationale behind sales estimation and to get in-depth information on sales, the Commission directed HPSEBL to submit category-wise actual sales for each month of FY11 and FY12 (till December), in response to which HPSEBL submitted the actual sales for FY11 and FY 2011-12 (till October).
- 7.12 The Commission also asked HPSEBL to provide the details of applications pending for new connections to enable the Commission to examine and assess the growth in sales to each consumer category, which were complied with by HPSEBL.

- 7.13 The Commission has undertaken a detailed analysis of the sales projected by HPSEBL. The Commission has analyzed the year-on-year variations in sales as well as the short term and long term trends in sales and has computed the CAGR for different lengths of time (2 years, 3 years, 4 years, 5 years, 6 years, 8 years and 10 years). While calculating the CAGR for various period, sales till FY11 is considered as the actual sales figures are available till then only and the Commission did not find merit in including FY12 for working out the various CAGR as the sales for the said year are on estimated basis and the same would have distorted the trend, hence not have given the true picture. The Commission has approved the total sales of 6956.61 MU for FY12 and 7533.08 MU for FY13, which shows a growth rate of 4.75% and 8.29% respectively as compared to the previous year.
- 7.14 For estimating the annual sales of FY12, the Commission has taken into account actual sales till October 2011 based on the data made available by HPSEBL and has estimated the energy sold in the last six month of FY12 to be the same as projected by HPSEBL in its Petition after a prudence check.
- 7.15 The Commission has approved the sales to each consumer category as detailed below.

Domestic Supply

- (a) The trend analysis of sales to this category shows that the year-on-year variation in sales ranges widely between 0.17% and 10.84%. The actual growth rate of sales in FY11 over FY10 sales was 17.55%. The 2-year CAGR for the category comes out to be 8.52% while the 10-year CAGR is 7.25%. The number of domestic consumers in FY12 (till November) has increased by 31,298 as compared to FY11. Reasons for this increase can be: higher losses, defective meters, electromechanical meters as against need for electronic meters which are sensitive to efficient lamps like CFL/LED, inconsistencies in the use or replacement of CFLs, etc.
- (b) Considering this, the Commission has projected an increase of 5.86% in FY13 over FY12, which is 1% less than the 3 year CAGR for this category. While projecting the sales for FY13, the Commission has considered the estimated sales for FY12 as the base year.
- (c) This demand projection detailed above includes the demand projection for the BPL category too. For its demand projection, the Commission has estimated sales to this category in FY13 to be the same proportion as the ratio of estimated sales to BPL category to total domestic sales in FY12.
- (d) On this basis, the Commission has projected total sales of 1440.96 MU to the domestic category in FY13, including sales of 0.82 MU to the BPL category.

NDNCS

- (a) The NDNCS category was created in the Tariff Order for FY 02. An analysis of the trend in sales to the NDNCS category shows that the year-on-year variation in sales ranges between 3.60% to 35.20%. The long term (6 years) CAGR for sales is 28% while the short term (2 years) CAGR is 5.41%. The

actual growth rate of sales in the estimated sales of FY11 over FY10 is observed to be 7.2% and estimated growth rate in FY12 is 7.98%.

- (b) Considering all this, for FY13, the Commission has projected an increase in sales to this category at 8.02%, which is 1% less than 4 year CAGR for this category.
- (c) Therefore, based on the above methodology, the Commission has projected sales of 104.44 MU to this category in FY13.

Commercial Supply

- (a) An analysis of the trend in sales to the Commercial category shows that the year-on-year variation in sales ranges between 3.50% to 19.70%. The long term (6 years) CAGR for sales is 8.05% while the short term (2 years) CAGR is 13.93%. The actual growth rate of sales in the estimated sales of FY11 over FY10 is observed to be 19.7% and estimated growth rate in FY12 is 3.31%.
- (b) HPSEBL, in its Petition, has proposed an increase of 12.80%, which is based on 3 year CAGR approach. Considering all this, for FY13, the Commission has projected an increase in sales to this category at 10.32%, which is based on 5 year CAGR for this category.
- (c) Therefore, based on the above methodology, the Commission has projected sales of 406.33 MU to this category in FY13.

Small & Medium Industrial Power Supply

- (a) An assessment of the growth in sales to this category indicates large variations in growth on a year-to-year basis with variation in sales ranging from 0.09% to 11.2%. Based on the actual data for first six months of FY12, HPSEBL has estimated an increase of 5.71% in FY13 over FY12.
- (b) Further the long term CAGR for 6 years for this category is 5.71% while short term CAGR for 3 year works out to 5.50%.
- (c) After detailed analysis of the trend in sales, pending applications for new connections and the economic outlook of the State, for FY13 the Commission has projected an increase in sales to this category at 5.28% which is 1% less than the 4-year CAGR for this category, over the estimated sales of FY12.
- (d) Therefore, the Commission has projected sales of 216.65 MU to this category for FY13.

Large Industrial Power Supply (LS)

- (a) An assessment of the growth in sales to this category indicates large variations in growth on a year-to-year basis with variation in sales ranging from 8% to 48.90%. The long term (10 years) CAGR for sales is 16.08% while the short

term (2 years) CAGR is 11.63%. The actual growth rate in sales for FY11 was 15.40% while the expected growth rate for FY12 is 5.10%.

- (b) However, it is acknowledged that the major reasons for such high growth in sales in recent years were the incentives offered to industries and liberal industrial policies. Growth in sales to this category in ensuing years will not continue at the same pace because the excise incentives offered by the Central Government to set up industrial units in Himachal Pradesh have ended partly in 2010 and other incentives may end up in 2013.
- (c) After detailed analysis of the trend in sales and the economic outlook of the State for the forthcoming year, the Commission has projected an increase in sales to this category in FY13 at 8.91% which is 2% less than 3 year CAGR for this category
- (d) This is because the Commission is of the opinion that growth in this category is slowing down since the incentive offered by the Central Government for setting up industrial units in Himachal Pradesh would end partly in FY10 and completely by FY13.
- (e) Therefore, the Commission has projected a sales of 4569.89 MU for this category for FY13.

Water and Irrigation Pumping Supply (WIPS)

- (a) An analysis of the trend in sales to this category during the last 10 years shows that the year on year variation in sales ranges from -2.7% to 15.6%. The long term (10 years) CAGR for sales is 6.97% while the short term (2 years) CAGR is 3.18%.
- (b) Considering the past trend in sales to the two sub-categories that comprise this WIPS category, viz. Water Pumping Supply and Agricultural & Allied Activities Supply, the Commission has projected increase in sales to the Water Pumping category at the 5-year CAGR of 6.07% and to the Agricultural Pumping category at the 4-year CAGR of 7.41%. The sum of projected energy sales to these two sub-categories is taken to be the demand projection for the consolidated Water Pumping and Irrigation Supply category for FY13.
- (c) On this basis, the Commission has projected sales of 476.11 MU for this category for FY13.

Street Lighting Supply

- (a) An analysis of the trend in sales to this category shows that the year on year variation in sales ranges from -9.9% to 11.3%. The long term (10 years) CAGR for sales is 4.60% while the short term (2 years) CAGR is -1.81%.
- (b) For FY13, the Commission has projected increase in sales to this category at 2.57% which is in line with the 4-year CAGR for this category.

- (c) Therefore, the Commission has projected sales to this category at 14.10 MU for FY13.

Bulk Supply

- (a) The year-on-year variation in sales to this category ranges from 0.6% to 20.9%. The long term (10 years) CAGR for sales is 8.62% while the short term (2 years) CAGR is as high as 15.35%. The actual growth in sales of FY11 over FY10 is also observed to be high at 14.1%.
- (b) Considering the recent trends in energy demand by this category, for FY13 the Commission has projected increase in sales to this category at 15.35% which is based on 2-year CAGR for sales to this category.
- (c) Therefore, the Commission has projected sales to this category at 273.40 MU for FY13.

Temporary Supply

- (a) The actual year on year growth in sales to this category witnessed in FY11 was -5.1% while HPSEBL has estimated growth at 19.21% in FY12.
- (b) The Commission approves the sales at 31.20 MU to this category in FY13 based on 4 year CAGR.

7.16 After detailed scrutiny of the consumer category wise sales, the Commission estimates the following sales to the retail consumers in the state of Himachal Pradesh:

Table 90: Approved sales for FY13

Particulars	FY12		FY13	
	Petition	Approved	Petition	Approved
Domestic Supply	1361	1361	1436	1440.96
Non Domestic Non Commercial	96.68	96.68	101.52	104.44
Commercial Supply	368	368	416	406.33
Temporary Supply	29	29	31	31.20
Small & Medium Industrial Power	206	206	218	216.65
Large Industrial Power Supply	4196	4196	4537	4569.89
Water Pumping and Irrigation Supply	448	448	476	476.11
Street Lighting Supply	14	14	14	14.10
Bulk Supply	237	237	273	273.40
Total	6957	6957	7501	7533.08

T&D Losses

7.17 In the MYT Order for the second control Period, the Commission had approved the T&D trajectory of 14%, 13.50% and 12.50% for FY12, FY13 and FY14 respectively based on the T&D loss figure of 14.25% submitted by the petitioner. However, the Commission in its MYT Order had clarified that the T&D loss reduction trajectory

would be revisited once the actual T&D losses for FY11 are submitted by the Petitioner for true-up.

- 7.18 The Commission had earlier also revised the T&D loss trajectory in the first MYT Control period while determining the tariff for FY 2009-10 in its order dated August 24, 2009 against which the appeal was filed by the Board before the ATE. Board had raised the issue against revisiting the loss trajectory in the middle of the control period, contrary to the tariff regulations. However, the Hon'ble ATE vide order dated July, 11, 2011 held the judgment in the Commission's favor, the extract from the said judgment is reproduced hereunder:

“The second issue is regarding Transmission and Distribution losses. According to the appellant, the T&D loss trajectory set up in the MYT order could not be altered in the middle of the control period. We have noticed that the State Commission had to revisit the T&D loss trajectory on account of incorrect T&D loss figure for the base year i.e. FY 2007-08 assumed at the time of passing the MYT order. The State Commission in the MYT order had taken T&D losses for base year 2007-08 as 16.5% and accordingly considered loss reduction trajectory of 0.75%, 0.75% and 0.5% for FY 09, FY 10 and FY 11 respectively to reach a figure of 14.5% by the end of Control Period. The Commission had also clarified in the MYT order that the trajectory for the Control Period may be true up as and when the audited accounts for FY 08 were made available. On the true up of the FY 2007-08 it was found that the actual T&D losses for the FY 2007-08 stood at 13.49% which is less than the target of 14.5% set for the end of the control period i.e. FY11. In normal circumstances the T&D loss trajectory should not have been revisited by the State Commission. However, in this case due to incorrect data made available to the State Commission for the previous year, the State Commission had to review the T&D loss targets during the control period. If the T&D loss targets had not been revised the appellant would have been entitled to the gains due to T&D loss reduction during the MYT control period even without actually reducing the T&D losses below the T&D losses achieved during the base year i.e. FY 2007-08. In any case, the T&D loss trajectory for the control period cannot be more than the actual T&D loss achieved during the base year. In view of above, we do not find any infirmity in the State Commission's findings and decide not to interfere with the same.”

- 7.19 Similarly, the T&D trajectory for second MYT Control period was decided by the Commission based on provisional T&D loss figures of 14.25% submitted by HPSEBL for FY11. However, while trueing up of FY11, the Commission found that the actual T&D loss for FY11 of 12.66% is much lower than the T&D loss approved earlier in the second MYT Order. Therefore, the Commission finds merit in revisiting the trajectory for second MYT control period based on the actual T&D loss figure for the base year i.e. FY11.
- 7.20 HPSEBL while firming up and informing the actual distribution losses for FY11 at 12.66%, has also proposed 12.56%, 12.41% and 12.26% as the revised loss trajectory for the 2nd Control Period.
- 7.21 In view of the actual T&D losses of FY11, the Commission has examined the trajectory proposed by HPSEBL and has recast the T&D trajectory for the second MYT Control Period (FY12 to FY14) so as to consolidate HPSEBL's loss reduction

achievements on a sustainable basis and incentivize better performance. Accordingly, the Commission accepts the proposal of HPSEBL for the first two years of the 2nd MYT Control Period. However, for the third year i.e. FY14, the Commission feels that HPSEBL can do much better because of commissioning of more EHV systems and completion of R-APDRP works.

7.22 Hence, the revised T&D loss trajectory lays down a loss reduction target of 0.11% during FY12, 0.15% during FY13 and 0.40% during FY14, to ensure that the Board reaches a T&D loss level of 12.00% by the end of the second Control Period. The revised T&D loss trajectory now approved by the Commission is as under:

Table 91: Revised T&D trajectory for the Control period

Losses (%)	FY12	FY13	FY14
	Approved	Approved	Approved
Opening T&D Loss (%)	12.66%	12.55%	12.40%
T&D Loss Reduction (%)	0.11%	0.15%	0.40%
T&D Losses for the year (%)	12.55%	12.40%	12.00%

7.23 Hence, for projecting the energy balance for FY13, the Commission has considered the revised T&D loss target of 12.40% set for HPSEBL.

7.24 For calculating incentive/penalty on account of over/under achievement of T&D loss reduction target, the Commission shall consider the following:

- (a) First year of the Control Period: The Petitioner shall be eligible for an incentive if the T&D loss reduction in the first year of the Control Period is above 0.11%. Any under recovery in the revenue realized, if the T&D loss reduction in the first year of the Control Period is below 0.11%, shall be to the account of the Petitioner.
- (b) Second year of the Control Period: The Petitioner shall be eligible for an incentive if the cumulative value of loss reduction in that year and in the previous year is over 0.26%. Any under recovery in the revenue realized, if the cumulative T&D loss reduction till the second year of the Control Period is below 0.26% shall be to the account of the Petitioner.
- (c) Last year of the Control Period: The Petitioner shall be eligible for an incentive if the cumulative value of loss reduction at the end of the Control Period is over 0.66%. Any under recovery in the revenue realized, if the cumulative T&D loss reduction till the second year of the Control Period is below 0.66% shall be to the account of the Petitioner

7.25 As per the clause 15 (1) of MYT Distribution Regulations, 2011 the incentives/profits arising from achieving loss level better than specified in the loss reduction trajectory shall be shared in the ratio of 60:40 with the licensee and the contingency reserve for the Second Control Period.

7.26 For all the generating stations that are in the Northern Region and wherein the power comes through PGCIL network to Himachal Pradesh, regional losses of 3.50% have

been considered by the Commission. For Kahalgaon-II, Eastern Region losses of 3.0% have also been considered.

Energy Requirement

7.27 The Commission's estimates of energy requirement at distribution periphery for FY13 are based on the energy sales figures and T&D loss reduction trajectory approved for the year in this Order, as shown below:

Table 92: Approved Energy Requirement for the Control Period

Energy Requirement	FY12 Approved	FY13 Approved
Sales (MU)	6956.61	7533.08
T&D losses (%)	12.55%	12.40%
Energy Requirement at distribution periphery (MU)	7955.40	8599.41

Power Purchase

7.28 As per the MYT Regulations, power purchase is an uncontrollable parameter and needs to be trued up every year based on actual. Hence, any variation in the power purchase cost shall be trued up at the end of every year of the Control Period.

7.29 For the Annual Performance Review (APR) of FY13, the Commission has updated the station-wise projection of energy availability and power purchase cost for FY13 taking into consideration the actual normative parameters achieved by generating stations in FY11 as well as change in allocation, if any, as notified from time to time by the Northern Regional Power Committee and Eastern Regional Power Committee.

7.30 However, the Commission has retained the projection of energy generation from HPSEBL's own stations at the same level as approved in the 2nd MYT Order (FY12-14), since it had estimated the same on the basis of operational norms approved in the MYT Order. Hence, the Commission shall revisit the same only at the end of the second Control Period when it conducts a true-up of expenses, revenue and performance of the Generation function of HPSEBL.

Sources of Power

7.31 The following generating stations have been considered for the purpose of estimation of power availability for FY13:

- (a) HPSEBL's own generating stations;
- (b) Purchase from Central Generating Stations of NTPC, NHPC, SJVNL, NPCIL and Tehri;
- (c) Purchase from Baspa, Patikari HEPs and private SHPs up to 5 MW;
- (d) Purchase from BBMB and shared stations;

- (e) Purchase of Free & Equity power from GoHP;
- (f) Purchase through bilateral short term arrangements;
- (g) New Plants expected to be commissioned during FY13;
- (h) Banking arrangements; and
- (i) Purchase from SHPs under REC on APPC.

Allocation in Generating Stations

A. Allocation from HPSEBL's own stations

7.32 The Commission has considered the following allocation from HPSEBL's own generating stations while estimating the power availability from these stations.

Table 93: Allocation from HSPEB own stations

Station	FY13
	Allocation
Bhaba	100.00%
Bassi	100.00%
Giri	100.00%
Andhra	100.00%
Ghanvi	88.00%
Baner	88.00%
Gaj	88.00%
Binwa	100.00%
Thirot	100.00%
Gumma	100.00%
Holi	100.00%
Larji	88.00%
Khauri	88.00%
Nogli	100.00%
Chaba	100.00%
Rukti	100.00%
Rongtong	100.00%
Chamba	100.00%
Killar	100.00%
Sal-II	100.00%
SHPs	100.00%

B. Allocation from Central Sector Generating Stations (CSGS)

7.33 Himachal Pradesh has firm allocated share in Central Sector Generating Stations (CSGS) of National Thermal Power Corporation (NTPC), National Hydroelectric Power Corporation (NHPC), Tehri Hydro Development Corporation (THDC), Satluj Jal Vidyut Nigam Limited (SJVN) and Nuclear Power Corporation Limited

(NPCIL).

- 7.34 In addition to the firm share allocation, most of these stations (except Bairasiul, Salal, Tanakpur, Chamera-I and Uri stations of NHPC) have 15% unallocated power. The distribution of this unallocated power among the constituents of Northern Region is decided from time to time, based on the power requirement and power shortage in different States.
- 7.35 The Commission has considered allocation of firm power from CSGS in accordance with the allocations effective from March 1, 2012 as has been specified in notification no. NRPC/SE(O)/Allocations/2011-12 dated February 28, 2012 of the Northern Regional Power Committee, Ministry of Power, Government of India.
- 7.36 HPSEBL's share in CSGS unallocated quota varies from time to time based on the allocation made to HP depending upon power requirement and power shortage in various states. Thus, apart from the unallocated quota specified by NRPC in the abovementioned notification, the Commission has considered the monthly share of HP from firm & unallocated sources as average of past three years i.e. FY09, FY10 & FY11 sourced from the Final REA of March 2009, March 2010 and March 2011.
- 7.37 The State's share in Central Sector Generating Stations is summarized below:

Table 94: Firm Allocation from Existing Central Sector Generating Stations (CSGS)

Station	FY13
	Allocated
NTPC	
Anta GPP	3.58%
Auriya GPP	3.32%
Dadri GPP	3.01%
Unchahar-I	1.67%
Unchahar-II	2.86%
Unchahar-III	3.81%
Rihand-1 STPS	3.50%
Rihand-2 STPS	3.30%
Kahalgaon – II	1.53%
NPCIL	
NAPP	3.18%
RAPP (V & VI)	3.40%
NHPC	
Salal	0.99%
Tanakpur	3.84%
Chamera I	2.90%
Chamera II	3.67%
Uri	2.71%
Dhauliganga	3.57%
THDC	
Tehri	2.80%
SJVNL	

Station	FY13
	Allocated
Nathpa Jhakri HEP	2.47%
BBMB	
BBMB (Old)	Fixed ²
BBMB (New)	7.19% ³
Dehar	7.19% ⁴
Pong	7.19% ⁵

Table 95: Unallocated Share from Central Sector Generating Stations (CSGS)

Stations	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
NTPC												
Anta GPP	1.31%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.95%	1.42%	1.42%	1.42%	1.42%
Auriya GPP	0.91%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.65%	0.98%	0.98%	0.98%	0.98%
Dadri GPP	0.61%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.44%	0.66%	0.66%	0.66%	0.66%
Unchahar-I	0.42%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.30%	0.45%	0.45%	0.45%	0.45%
Unchahar-II	1.31%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.95%	1.42%	1.42%	1.42%	1.42%
Unchahar-III	1.28%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.09%	1.64%	1.64%	1.39%	1.40%
Rihand-1 STPS	1.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.94%	1.41%	1.41%	1.41%	1.41%
Rihand-2 STPS	1.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.95%	1.42%	1.42%	1.42%	1.42%
Singrauli STPS	1.31%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.95%	1.42%	1.42%	1.42%	1.42%
Kahalgaon – II	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NPCIL												
NAPP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	1.49%	1.49%	0.00%	1.52%	1.49%
RAPP (V & VI)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NHPC												
Salal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Tanakpur	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Chamera I	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Chamera II	1.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.13%	1.70%	1.70%	1.70%	1.70%
Uri	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Dhauliganga	1.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.95%	1.42%	1.42%	1.42%	1.42%
Dulhasti	1.31%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.95%	1.42%	1.42%	1.42%	1.42%
THDC												
Tehri	0.98%	0.35%	0.00%	0.00%	0.00%	0.00%	0.17%	1.09%	1.11%	1.10%	1.11%	1.05%
SJVNL												
Nathpa Jhakri	0.96%	0.35%	0.00%	0.00%	0.00%	0.00%	0.15%	1.07%	1.09%	1.11%	1.11%	1.04%

² BBMB (old) share: 1.2 LU per day

³ After deducting Rajasthan's share of 15.22% from generation busbar availability

⁴ After deducting Rajasthan's share of 20.00% from generation busbar availability

⁵ After deducting Rajasthan's share of 59.00% from generation busbar availability

C. Allocation from Shared Stations

7.38 HP has firm allocated share in Shanan, Shanan (extension), UJVNL and Khara. The allocation from these stations considered for FY13 is shown below:

Table 96: Allocation from Shared Stations

Station	FY13
	Allocated
Shanan	Fixed ⁶
Shanan Ext	Fixed ⁷
Yamuna (UJVNL)	24.68%
Khara	20.00%

D. Allocation from IPPs, Private projects and REC Mechanism

7.39 The allocation from IPPs, other private projects as well through REC mode as considered by the Commission for FY13 is shown below:

Table 97: Allocation from IPPs & Private projects

Stations	FY13
	Allocated
Baspa-II	88.00%
Patikari	88.00%
Private SHPs	100.00%
REC mechanism	100.00%

E. Allocation from Free & Equity Power

7.40 GoHP has free power and equity power entitlements in several stations as shown in the table below. HPSEBL gets free from GoHP during the winter months.

Table 98: Free Power Entitlement from GoHP

Station	FY13
	Allocated
Bairasiul	12.00%
Chamera-I	12.00%
Chamera –II	12.00%
Shanan Share	Fixed ⁸
Ranjeet Sagar Dam Share	4.60%
Malana	15.00%
Baspa – II	12.00%
Patikari	12.00%

⁶ Shanan Share: Fixed share of 1000 kW at 60% PLF

⁷ Shanan Ext: Fixed share of 45 MU per annum

⁸ Shanan Free Power Share: Fixed share of 500 kW at 60% PLF

Station	FY13
	Allocated
Nathpa Jhakri	12.00%
Ghanvi	12.00%
Baner	12.00%
Gaj	12.00%
Larji	12.00%
Khauri	12.00%
Allian Duhangan Hydro	12.00%
Karcham Wangtoo	12.00%
Toss	15.00%
Sarbari	12.00%
Upper Joiner	15.00%
Tangling	3.00%

F. Allocation from New Projects

7.41 The Commission has considered HPSEBL's entitlement in upcoming projects while projecting the availability to HPSEBL from these stations in FY13. During technical validation sessions, HPSEBL was asked to provide the expected COD schedule for some of the projects which are anticipated to come up in the next one year. The Commission shall take into consideration the actual status of the new projects scheduled to be commissioned during the Control Period (FY12 to FY14) during the true-up for the 2nd Control Period.

Table 99: Allocation from New Projects

Station	Anticipated COD	FY13		
		Allocated	Unallocated	Total
Rihand-III (Units 5,6)	July-12, Jan-13	3.37%	0.00%	3.37%
Chamera-III	By FY13	2.75%	15.00%	17.75%
Parbati-III	By FY13	2.75%	15.00%	17.75%
Koteshwar	FY11 (first two units), July-11, Oct-11	2.51%	1.00%	3.51%
Ghanvi-II	Sep-11	88%	0%	88%
Karcham Wangtoo	May-11, Aug-11, Oct-11, Dec-11 (under dispute)	12%	0%	12%
Uri-II	Mar-12	3.33%	0%	3.33%

Energy Availability

A. Energy Availability from HPSEBL's own stations

7.42 As explained in Para 7.30, the Commission has retained the projection of net energy available to HPSEBL from its own stations at the same quantum as approved in the 2nd MYT Order, as shown in table below:

Table 100: Energy Available from HPSEB Own Stations in FY13 (MU)

Station	FY13			
	Generation	Aux Consumption	Allocation	HPSEB Share
Bhaba	464.70	1.20%	100.00%	459.12
Bassi	346.83	0.70%	100.00%	344.40
Giri	289.55	0.70%	100.00%	287.52
Andhra	87.30	1.00%	100.00%	86.43
Ghanvi	93.34	1.20%	88.00%	81.15
Baner	60.67	1.00%	88.00%	52.86
Gaj	38.31	1.00%	88.00%	33.38
Binwa	29.25	0.70%	100.00%	29.05
Thirot	23.44	0.70%	100.00%	23.28
Gumma	18.11	0.70%	100.00%	17.98
Holi	17.52	0.70%	100.00%	17.40
Larji	586.82	1.20%	88.00%	510.20
Khauri	49.95	0.70%	88.00%	43.65
Nogli	14.70	1.00%	100.00%	14.55
Chaba	7.67	1.00%	100.00%	7.59
Rukti	6.54	1.00%	100.00%	6.47
Rongtong	7.64	1.00%	100.00%	7.56
Chamba	5.00	1.00%	100.00%	4.95
Killar	1.16	0.70%	100.00%	1.15
Sal-II	12.52	0.70%	100.00%	12.43
Total	2161.02	-	-	2041.13

B. Energy Availability from the Central Sector Generating Stations (CSGS)

- 7.43 For all the generating stations that are in the Northern Region and whose power comes through PGCIL network to HP, regional losses of 3.50% has been considered by the Commission. For Kahalgaon-II, Eastern Region losses of 3.0% have also been considered.
- 7.44 While the methodology of projecting energy availability from CSGS for FY13 remains the same as followed in the 2nd MYT Order, the Commission has taken into account updated information on PLF, availability and allocation notified by NRPC. Thereafter, the effective share of HPSEBL is applied on the energy sent out to estimate the energy available to HPSEBL from the respective stations. Energy sent out from the CSGS and HPSEBL's share of energy in each station are summarized below in the table:

Table 101: Energy Available from Central Sector Generating Stations (CSGS)

Station	Capacity (MW)	PLF (%)	Aux Consumption	Energy sent Out (MU)	HPSEB share (MU)
NTPC					
Anta (G)	419.33	68.14%	3.00%	2428.04	102.86
Auraiya (G)	663.36	71.95%	3.00%	4055.42	153.01

Station	Capacity (MW)	PLF (%)	Aux Consumption	Energy sent Out (MU)	HPSEB share (MU)
Dadri (G)	829.78	73.85%	3.00%	5206.86	172.60
Unchahar-I	420.00	94.20%	9.00%	3153.98	59.23
Unchahar-II	420.00	94.56%	9.00%	3165.93	111.32
Unchahar-III	210.00	94.58%	9.00%	1583.26	71.40
Rihand-1 STPS	1000.00	94.33%	8.50%	7561.27	313.92
Rihand-2 STPS	1000.00	97.22%	6.50%	7962.79	314.98
Singrauli STPS	2000.00	93.13%	6.50%	15255.98	100.13
Kahalgaoon-II	1500.00	70.68%	9.00%	8451.49	129.31
Rihand-3 Units-1,2	1000.00	80.00%	9.00%	2657.20	89.55
NPCIL					
NAPP	440.00	55.00%	9.50%	1918.53	61.01
RAPP (V & VI)	440.00	70.00%	9.50%	2441.76	83.02
NHPC					
Salal	690.00		1.00%	3051.89	30.21
Tanakpur	94.20		1.00%	449.09	17.25
Chamera I	540.00		1.20%	2177.85	63.16
Chamera II	300.00		1.20%	1375.56	61.28
Chamera III	231.00		1.00%	901.50	160.02
Uri	480.00		1.20%	2880.64	78.07
Dhauliganga	280.00		1.20%	1109.30	46.87
Dulhasti	0.00		1.20%	2195.33	14.41
Parbati III	520.00		1.00%	2029.34	360.21
Uri II	240.00		1.20%	934.73	31.13
THDC					
Tehri	1000.00		1.20%	2763.44	89.26
Koteshwar	400.00		1.00%	1463.47	51.33
Other CGS					
BBMB Old	1480.30			43.92	43.92
BBMB New	1480.30		1.00%	5841.02	315.40
Dehar	990.00		1.00%	2970.00	170.83
Pong	396.00		1.00%	1111.77	33.17
Ghanvi II	10.00		1.00%	19.51	17.17
SJVNL					
Nathpa Jhakri	1500.00		1.20%	6422.00	186.52

C. Energy Available from Shared Stations

7.45 The energy availability from shared stations has been approved as shown below:

Table 102: Energy Available from Shared Stations

Station	Capacity (MW)	Aux Consumption	Energy sent Out (MU)	HPSEB share (MU)
Shanan (available to HPSEB)	60.00		5.26	5.26
Shanan Extension (available to HPSEB)	50.00		45.00	45.00
Yamuna	474.75	1.00%	1479.62	365.17
Khara	72.00	1.00%	314.36	62.87

D. Allocation from IPPs, Private projects and REC Mechanism

- 7.46 The total energy available from Baspa-II HEP has been considered at design energy of Baspa i.e. 1193 MU and energy available to HPSEBL out of it has been considered as per the existing PPA i.e. 1050.06 MU. Secondary energy from Baspa-II has been taken to be nil since the same has not been considered for Baspa-II in the Baspa MYT Order.
- 7.47 The total energy availability from Patikari HEP has been considered at 78.02 MU as per the existing PPA and HPSEBL's share in Patikari HEP has been considered at 68.66 MU, after reducing the 12% free power entitlement of GoHP.
- 7.48 Power via REC mode has been considered on the basis of information on capacity addition in eligible projects. An estimated 47.5 MW capacity is likely to be available through REC mode in FY13 at 45% capacity utilization factor (CUF), giving an approximate 187 MU. Another 38 MW capacity is likely to get commissioned during FY13, which at 45% CUF and 25% availability is expected to yield another 40 MU approximately. Hence, the total energy expected to be available through REC mechanism in FY13 is 224.52 MU.

Table 103: Energy Available from Baspa & Patikari

Station	Capacity (MW)	Design Energy (MU)	HPSEB Share (MU)
Baspa-II	300.00	1193.25	1050.06
Baspa-II Secondary energy	-	-	-
Patikari	16.00	78.02	68.66
REC Mechanism	47.5 + 38	-	224.52

- 7.49 The energy available from private SHPs during the Control Period as considered by the Commission is shown in the table below.

Table 104: Energy Available from Private SHPs (MU)

Station	FY13
Private Micros (existing PPAs)	594.59
Private Micros (new PPAs)	181.06

E. Energy Available from Free Power

- 7.50 The GoHP has 12% free power share in 5 of the HPSEB power plants viz. Ghanvi, Baner, Gaj, Larji and Khauli. The GoHP also has free power share of 12% in three of

the NHPC plants (i.e. Bairasiul, Chamera I and Chamera II), as also a fixed share in Shanani (500 kW) and 4.6% in Ranjeet Sagar Dam. The GoHP also has 12% shares in Baspa II, Nathpa Jhakri, Allian Duhangan Hydro, Karcham Wangtoo and Sarbari projects. Additionally, GoHP is entitled to 15% shares each in Malana and Toss stations, and 3% in Tangling project.

- 7.51 The GoHP has agreed to provide free power from these plants to HPSEBL during October to April, when HPSEBL is deficit in energy at a Commission-determined free power rate, for which a separate order shall be issued for FY13.
- 7.52 The table below shows the Commission's estimates of energy availability to HPSEBL plant-wise:

Table 105: Energy Available Free Power (MU)

Station	Total Energy Available (MU)	Aux Consumption (%)	Energy Sent Out (MU)	GoHP Share (%)	Free Power Available to HPSEB (Oct - Apr)
Bairasiul	674.44	0.70%	669.72	12.00%	32.17
Chamera-I	2204.30	1.20%	2177.85	12.00%	80.61
Chamera-II	1392.26	1.20%	1375.56	12.00%	54.45
Shanani Share	2.63		2.63	Fixed	1.52
Ranjeet Sagar Dam	1326.20	1.00%	1312.94	4.60%	28.91
Malana	350.00	1.00%	346.50	15.00%	12.86
Baspa-II	1213.18	1.64%	1193.25	12.00%	39.03
Patikari	78.02		78.02	12.00%	4.26
Nathpa Jhakri	6500.00	1.20%	6422.00	12.00%	274.27
Ghanvi	70.84	1.20%	69.99	12.00%	3.92
Baner	37.52	1.00%	37.14	12.00%	1.61
Gaj	36.91	1.00%	36.55	12.00%	1.94
Larji	639.93	1.20%	632.25	12.00%	26.87
Khauri	38.87	0.70%	38.60	12.00%	1.72
Allian Duhangan	678.00	1.00%	671.22	12.00%	29.94
Parbati-III	2049.84	1.00%	2029.34	12.00%	86.67
Chamera-III	910.60	1.00%	901.50	12.00%	33.37
Karcham Wangtoo	1971.00	1.20%	1947.35	12.00%	83.17
Toss	10.00			15.00%	2.97
Sarbari	5.40			12.00%	1.57
Upper Joiner	12.00			15.00%	1.54
Tangling	7.00			3.00%	0.16

F. Energy Available from New Projects

- 7.53 HPSEBL has submitted a commissioning schedule for new projects as part of additional information submitted along with the review petition.
- 7.54 Energy available from future stations has been considered as per the allocation share

specified in Table 99 and the latest information available on the commissioning schedule of expected stations. The Commission has assumed PLF of 80% for thermal plants and has considered the design energy for hydro plants. Auxiliary consumption has been assumed at 9% for coal fired thermal projects and 1% for hydro projects (including 0.5% transformational loss).

7.55 Energy availability to HPSEBL in FY13 from future projects as considered by the Commission is given below:

Table 106: Energy availability from future projects (MU)

Station	Energy availability (MU)
Rihand-III (Units 5,6)	89.55
Chamera-III	160.02
Parbati-III	360.21
Koteshwar	51.33
Ghanvi-II	17.17
Uri-II	31.13

G. Other Sources, Bilateral and Short Term Arrangements and Banking

7.56 For the purpose of projecting the power purchase from Bilateral, Short term arrangements and Banking, the Commission has carried out a month-wise demand supply analysis for FY13, as it had done earlier in the 2nd MYT Order.

7.57 A summary of the same is shown in the table below:

Table 107: Monthly Demand Supply Position (MU) in F13

Particulars (MU)	Total	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Sales	7533.08	572	598	608	615	620	618	626	608	624	655	657	731
Losses	1066.33	81	85	86	87	88	87	89	86	88	93	93	104
Monthly Demand Discom Periphery	8599.41	654	683	694	702	708	705	715	694	712	748	750	835
Monthly Availability Discom Periphery	8806.45	708	696	784	958	994	904	850	543	559	529	531	751
Deficit Power Discom Periphery	826.67	0	0	0	0	0	0	0	151	154	218	220	84
Deficit Power Ex Bus	856.65	0	0	0	0	0	0	0	157	159	226	228	87
Surplus Power Discom Periphery	1033.72	54	13	90	256	286	199	136	0	0	0	0	0
Surplus Power Ex Bus	1071.21	56	14	94	265	296	206	141	0	0	0	0	0
Net Surplus Ex Bus	214.56	56	14	94	265	296	206	141	(157)	(159)	(226)	(228)	(87)

7.58 As shown in the table above, HPSEBL is power deficit in the winter months of November to March, and power surplus in the remaining months. Thus, it is considered that HPSEBL would enter into banking arrangements with other states during the summer months to partly offset the deficit in the winter months.

Power Purchase Cost

7.59 The cost of power available from various sources has been projected by the licensee considering the following:

A. Generation cost of HPSEBL's own stations

7.60 The cost of generation from HPSEBL's own generating stations was determined by the Commission in the 2nd MYT Order in accordance with the HPERC Generation Tariff Regulations, 2011. The same shall not be revised by the Commission before the end of the 2nd MYT Control Period because it forms a part of the controllable operational norms specified for the generation function for the 2nd MYT Control Period.

7.61 Hence, the cost of generation from HPSEBL's own stations has been taken to be the same as approved by the Commission in the 2nd MYT Order.

B. Cost of Power of Central Sector Generating Stations (CSGS)

NTPC

7.62 The Commission has derived annual fixed charges (in proportion to HPSEBL's share) applicable in FY13 from the relevant Tariff Orders issued by CERC. Further, the fixed cost of the plant has been linked to the projected availability of the plant, in line with the methodology laid down in the CERC (Terms & Conditions of Tariff) Regulations, 2009. The said regulations mandate that capacity charges be calculated in such a way that thermal power stations achieving a plant availability factor higher (or lower) than the normative availability factor are given a suitable incentive (or disincentive) by being allowed capacity charge proportionately pro-rated based on their actual availability factor.

7.63 The variable cost including Fuel Price Adjustment (FPA) for FY13 is based upon the actual variable cost incurred up to December 2011 by HPSEBL, and an escalation of 3% has been applied on the same to arrive at the projected variable cost for FY13.

7.64 Other Charges has been considered as the average of other charges paid in actual per unit in FY09, FY10 and FY11 by HPSEBL.

7.65 The summary of the variable charges (including FPA), fixed charges and other charges considered by the Commission for NTPC stations for FY13 is shown in the table below:

Table 108: Variable Charges (P/unit) considered for NTPC Stations

Station	FY13 (P/unit)
Anta GPP	301.38
Auriya GPP	297.52
Dadri GPP	286.85
Unchahar-I	256.40

Station	FY13 (P/unit)
Unchahar-II	246.00
Unchahar-III	250.74
Rihand-1 STPS	167.39
Rihand-2 STPS	164.41
Singrauli STPS	134.24
Kahalgaon - II	289.86

Table 109: Fixed & Other Charges considered for NTPC Stations for FY13

Station	Fixed cost of the plant pro-rated as per availability (Rs Cr)	Fixed Cost payable by HPESBL (Rs Cr)	Other Charges (P/ unit)
Anta GPP	199.34	8.44	1.38
Auriya GPP	309.87	11.69	0.00
Dadri GPP	368.48	12.21	0.01
Unchahar-I	274.99	5.16	4.31
Unchahar-II	322.35	11.33	3.82
Unchahar-III	228.14	10.29	4.17
Rihand-1 STPS	594.06	24.66	4.10
Rihand-2 STPS	736.44	29.13	4.38
Singrauli STPS	838.01	5.50	3.54
Kahalgaon-II	1008.10	15.42	0.83

NHPC

- 7.66 For NHPC hydro stations, annual fixed charges (AFC) as specified in the respective CERC tariff orders has been considered. In line with the CERC (Terms & Conditions of Tariff) Regulations, 2009, the annual charges for each station have been bifurcated into two components – a fixed capacity charge equivalent to 50% of the specified AFC (after deducting the free share of power, if any) and energy charges calculated by dividing the remaining 50% of the AFC by the design energy of the plant.
- 7.67 The summary of the fixed charges considered by the Commission for NHPC stations for FY13 is shown in the table below.

Table 110: Fixed Charges considered for NHPC Stations for FY13

Station	Design energy (MU)	Total AFC approved for the station (Rs Cr)	Fixed Charges (Rs Cr)	Variable charges (Paise/unit)
Salal	3082.00	240.49	136.64	44.78
Tanakpur	452.19	84.47	47.99	107.21
Chamera I	1664.56	261.92	148.82	90.49
Chamera II	1499.89	348.78	198.17	133.73
Uri	2587.38	333.65	189.57	74.16
Dhauliganga	1134.69	270.47	153.68	137.08
Dulhasti	1906.80	966.96	549.41	291.63

NPCIL

- 7.68 For NPCIL plants, based on the actual power purchase bills for FY12 up to December 2011, single part tariff has been considered.
- 7.69 The summary of the composite variable charges considered by the Commission for NPCIL stations for FY13 is shown in the table below.

Table 111: Variable Charges (P/ unit) considered for NPCIL Stations

Station	FY13
NAPS	204.46
RAPS	302.29

THDC

- 7.70 For Tehri HEP, the Commission has considered a composite variable rate of 500.02 P/unit for FY13, taking into account variable charges paid in FY12 up to December 2011.

SJVNL (Nathpa Jhakri)

- 7.71 For Nathpa Jhakri HEP the annual fixed charge for FY12 i.e. Rs 1312.43 Cr has been considered and the net charges payable have been derived after deducting the free share of power. Variable charges have been estimated on the basis of actual variable charges paid up to December 2011.

BBMB

- 7.72 As per the power purchase agreement with BBMB stations, HPSEBL bears proportionate O&M charges towards cost of energy. For BBMB (old), the Commission has considered the variable charges (O&M charges) paid by HPSEBL in FY12 up to December 2011 and has escalated the same by 3 Paise/unit, as per HPSEBL's submission made in its MYT petition.
- 7.73 For power from BBMB (new), Dehar and Pong, the Commission has considered variable charges (O&M charges) paid by HPSEBL in FY12 up to December 2011 and has escalated the same by 3 Paise/unit for FY13. However, this rate is applied only to power available under the old allocation, in accordance with Ministry of Power Order No. 02/13/96-BBMB(Vol-VI) dated 31.10.2011 in deference to the Judgment dated 27.09.2011 of the Hon'ble Supreme Court of India in Original Suit No. 2 of 1996 (State of Himachal Pradesh vs Union of India & Ors). As per this notification, allocation of energy from Bhakra-Nangal and Beas Projects has been changed w.e.f. November 2011, and only energy available under the old allocation is to be billed at the preferential low rates hitherto applicable to BBMB stations. The additional energy now available to HPSEBL as per the revised allocation is to be billed at the average power purchase cost estimated for FY13 in line with the Commission's projection methodology. This arrangement proposed by GoHP and HPSEBL is being done because there is no regulatory tariff for generation determined by the appropriate commission.

- 7.74 The summary of the weighted average variable charges thus arrived at, which have been considered by the Commission for BBMB stations for FY13, is shown in the table below:

Table 112: Variable Charges (P/ unit) considered for BBMB Stations for FY13

Station	Total energy available for FY13	Weighted Average Cost of the station Rate (P/unit)
BBMB (old)	43.92	74.40
BBMB (new)	315.40	162.86
Dehar	170.83	132.32
Pong	33.17	209.00

C. Cost of Power from Shared Stations

- 7.75 The cost of power from Shanan and Shanan (extension) has been considered at the rates shown below, as per the existing practice.

Table 113: Variable Charges (P/ unit) considered for Shared Stations

Station	FY13
Shanan	38.36
Shanan (Ext)	39.81
Yamuna (UJVNL)	46.32
Khara	41.85

D. Cost of Power from IPPs, Private projects and REC Mechanism power

- 7.76 The Commission has considered the tariff for Baspa-II for FY13 as approved for the year in the 2nd MYT Order.
- 7.77 The Commission has considered the tariff for Patikari HEP as 225 P/unit for FY13.
- 7.78 Cost of power from private SHPs has been considered at the same rates as considered in the 2nd MYT Order.
- 7.79 Cost of power through REC mode is considered at the average power purchase cost estimated for FY13 in line with the Commission's projection methodology.

E. Cost of Power of Free Power

- 7.80 The rate of free power considered is at the rate of 290 paise/unit, in line with the Commission's order on Free Power for FY13 issued separately along with this Order.
- 7.81 Hence, free power is approved at the rate of 290 paise/unit.

F. Cost of power from New Projects

- 7.82 The summary of composite rate considered by the Commission for the new projects is

shown in the table below:

Table 114: Variable Charges (P/unit) of New Projects

Station	Variable charges (P/unit)
Rihand-III (Units 5,6)	350.00
Chamera-III	450.00
Parbati-III	450.00
Koteshwar	450.00
Ghanvi-II	450.00
Uri-II	450.00

G. Cost of Power Purchase from Other Sources, Bilateral, Short Term Arrangements and Banking

7.83 The Commission has analyzed the power purchase and sale data submitted by HPSEBL for FY11 and observed that it has purchased power through UI at an average rate of Rs. 3.48/unit in FY11 and sold surplus power at a rate of Rs 2.98/unit in FY11. Thus, the Commission has considered the bilateral/market purchase from inter-State sources at Rs 3.50 per unit for FY13, the same as approved in the 2nd MYT Order.

7.84 The Petitioner is directed to undertake purchase and sale of power based on commercial interest of HPSEBL with Rs 3.50/unit as the upper ceiling price for purchase of deficit power and lower ceiling price for sale of surplus power. It is emphasized that this upper ceiling price of Rs 3.50/unit is inclusive of all incidental charges as may be.

7.85 The summary of power purchase cost approved by the Commission for FY13 is shown in the table below:

Table 115: Approved Power Purchase Cost (Rs Cr) for the Control Period

Station	Quantum (MU)	Cost (Rs. Crores)
NTPC - Thermal		
Anta (G)	102.86	39.59
Auraiya (G)	153.01	57.21
Dadri (G)	172.60	61.73
Unchahar-I	59.23	20.61
Unchahar-II	111.32	39.15
Unchahar-III	71.40	28.49
Rihand-1 STPS	313.92	78.50
Rihand-2 STPS	314.98	82.30
Singrauli STPS	100.13	19.30
Kahalgaon-II	129.31	53.01
Rihand-3 Units-1,2	89.55	31.34
NPCIL		
NAPP	61.01	12.47

Station	Quantum (MU)	Cost (Rs. Crores)
RAPP (V & VI)	83.02	25.10
NHPC		
Salal	30.21	2.89
Tanakpur	17.25	3.94
Chamera I	63.16	10.62
Chamera II	61.28	18.23
Chamera III	160.02	72.01
Uri	78.07	11.63
Dhauliganga	46.87	13.80
Dulhasti	14.41	8.30
Parbati III	360.21	162.09
Uri II	31.13	14.01
HPSEB		
Bhaba	459.12	20.27
Bassi	344.40	22.13
Giri	287.52	13.85
Andhra	86.43	5.82
Ghanvi	81.15	12.63
Baner	52.86	7.97
Gaj	33.38	7.61
Binwa	29.05	3.95
Thirot	23.28	4.27
Gumma	17.98	3.28
Holi	17.40	2.27
Larji	510.20	140.89
Khauri	43.65	8.83
Nogli	14.55	2.14
Chaba	7.59	1.39
Rukti	6.47	0.57
Rongtong	7.56	1.12
Chamba	4.95	0.36
Killar	1.15	0.83
Sal-II	12.43	0.88
THDC		
Tehri	89.26	44.63
Koteshwar	51.33	23.10
Other CGS		
BBMB Old	43.92	3.27
BBMB New	315.40	51.36
Dehar	170.83	22.60

Station	Quantum (MU)	Cost (Rs. Crores)
Pong	33.17	6.93
Ghanvi II	17.17	7.73
Shared Stations		
Shanan	5.26	0.20
Shanan Extension	45.00	1.79
Yamuna	365.17	16.91
Khara	62.87	2.63
SJVNL		
Nathpa Jhakri	186.52	67.87
Baspa - II	1050.06	260.54
Patikari	68.66	15.45
Pvt Micros (Existing SHPs)	594.59	148.65
Pvt Micros (New SHPs)	181.06	53.41
REC Mechanism	224.52	46.92
Free Power		
Bairasiul	32.17	9.33
Chamera-I	80.61	23.38
Chamera-II	54.45	15.79
Shanan Share	1.52	0.44
Ranjeet Sagar Dam Share	28.91	8.38
Malana	12.86	3.73
Baspa-II	39.03	11.32
Patikari	4.26	1.24
Nathpa Jhakri	274.27	79.54
Ghanvi	3.92	1.14
Baner	1.61	0.47
Gaj	1.94	0.56
Larji	26.87	7.79
Khauri	1.72	0.50
Allian Duhangan	29.94	8.68
Parbati-III	86.67	25.13
Chamera-III	33.37	9.68
Karcham Wangtoo	83.17	24.12
Toss	2.97	0.86
Sarbari	1.57	0.45
Upper Joiner	1.54	0.45
Tangling	0.16	0.05
Sub Total	8974.38	2134.39
Banking Purchase	0.00	0.00

Station	Quantum (MU)	Cost (Rs. Crores)
Bilateral Purchases	856.65	299.83
Total	9831.03	2434.22
Bilateral Sale	(1071.21)	(374.92)
Banking Sale	0.00	0.00
Power Purchase for own use	8759.83	2059.30

Energy Balance

7.86 The month wise energy balance for HPSEBL for FY13 is shown in the table as follows:

Table 116: Energy Balance for FY13 (MU)

	Total	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
Power Purchase from Outside	4691.01	364.68	362.34	418.85	474.67	483.08	437.25	420.67	277.10	370.68	353.15	334.56	393.99
Deficit Power Purchase	856.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	156.91	159.21	226.20	227.64	86.69
Total Purchase outside state	5547.66	364.68	362.34	418.85	474.67	483.08	437.25	420.67	434.01	529.89	579.34	562.20	480.68
Less: PGCIL Losses	160.42	11.06	12.46	11.61	7.52	6.84	8.42	10.16	15.56	18.92	20.61	20.00	17.26
Net Purchased for state	5387.24	308.68	348.60	325.35	209.29	186.78	231.48	280.14	434.01	529.89	579.34	562.20	480.68
Power Sold Outside State	1033.72	55.99	13.74	93.50	265.37	296.30	205.77	140.53	0.00	0.00	0.00	0.00	0.00
Balance Available	4353.53	297.62	336.14	313.74	201.78	179.94	223.07	269.98	418.46	510.97	558.73	542.20	463.42
Power Purchase within state	4283.37	355.89	346.63	380.37	500.06	528.25	482.29	444.78	275.48	201.30	188.84	208.05	371.43
Total Power Available for sale	8636.90	653.52	682.77	694.11	701.83	708.19	705.35	714.76	693.94	712.27	747.57	750.25	834.85

PGCIL Charges

- 7.87 The Commission would true up the PGCIL charges for each year of the Control Period based on actual amount paid at the end of each year.
- 7.88 The PGCIL charges for FY13 have been approved at the same amount as approved for FY13 in the 2nd MYT Order dated July 19, 2011.

Table 117: Approved PGCIL Charges (Rs Cr) for FY13

Particulars (Rs Crores)	FY13
PGCIL Charges	169.74

Operation and Maintenance (O&M) Expenses

- 7.89 In its APR petition, HPSEBL has claimed higher employee expenses, A&G expenses and R&M expenses for FY13 than the respective amounts approved for the year in the 2nd MYT Order. HPSEBL's submissions for increase in O&M expenses have been summarized in Chapter A2 of this Order.
- 7.90 However, as per the MYT Regulations, 2011, O&M expense is a controllable factor and hence the O&M expenses approved for the Control Period, as per the methodology specified in the MYT Regulations, 2011, are not subjected to true-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 true up in ARR.
- 7.91 The Commission, however, had made it clear that it may revise the O&M trajectory for the Control Period once the audited accounts of FY11 are made available. Since the audited accounts for FY11 are still not available, the Commission is retaining the same O&M expenses approved for FY13 as approved in the 2nd MYT Order.
- 7.92 Hence, the approved O&M expenses for FY13 are as shown below:

Table 118: O&M expenses approved for FY13 (Rs Cr)

Particulars (Rs Crores)	FY13
Employee expenses (Gross)	871.78
R&M expenses	32.83
A&G expenses (Gross)	38.71
Total O&M expenses (Gross)	943.33
Less: Capitalization	92.00
Total O&M expenses (Net)	851.33

- 7.93 The Commission has dealt separately with the arrears payment to employees on account of revision of salary due to 5th Pay Commission recommendations in Paragraph 7.108 of this Order.

Capital Investment

7.94 The capital investment of HPSEBL for FY13 shall be the same as approved in the 2nd MYT Order dated July 19, 2011. This amount, however, shall be trued up at the end of the second Control Period based on the actual capital expenditure incurred by HPSEBL, subject to prudence check and the Commission's approval.

Asset capitalization

7.95 The asset capitalization for FY13 shall be the same as approved in the 2nd MYT order dated July 19, 2011.

7.96 The Commission would like to highlight that the capitalization approved is provisional and the same would be subjected to true-up at the end of the second Control Period.

Depreciation

7.97 In the 2nd MYT Order, the Commission had determined the opening and closing GFA of the distribution functions for all three years of the second Control Period. For this, the Commission had considered the closing value of assets approved in the first MYT order for distribution and transmission functions after excluding assets worth Rs. 199.09 Cr transferred to HPPTCL and taking into account the approved capitalization schedule for the Control Period.

7.98 The Commission had calculated the depreciation on the average of GFA for the respective years and in the absence of a Fixed Asset Register of HPSEBL, the Commission had considered the rate of depreciation as 2.50% in line with the practice followed in previous tariff orders.

7.99 The depreciation approved for FY13 remains the same as approved for the year in the second MYT Order dated July 19, 2011, as shown below:

Table 119: Approved GFA & Depreciation for FY13 (Rs Cr)

Particulars (Rs Cr)	FY13
Opening GFA	3681.25
Addition	406.08
Reduction	0.00
Closing GFA	4087.32
Depreciation Rate (%)	2.50%
Depreciation	97.11

Working Capital Requirement

7.100 Based on the approved O&M Expenses, expected receivables and consumer security deposits, the Commission in the 2nd MYT Order had approved the working capital requirement for the Control Period as show below.

7.101 Hence, the working capital approved for FY13 remains the same as approved for the year in the 2nd MYT Order.

Table 120: Working Capital Requirement approved for FY13 (Rs Cr)

Particulars	FY13
Working Capital Requirement	76.22

Interest & Financing Charges

7.102 The Commission has approved a capital investment plan as well as its capitulation schedule, source of funding and financing for the second MYT Control Period. This capital plan shall be trued-up at the end of the second Control Period.

7.103 The summary of means of finance approved by the Commission for HPSEBL remains the same as approved in the 2nd MYT Order, as shown below:

Table 121: Means of Finance approved by the Commission for the Control Period (Rs Cr)

Particulars	FY13
Funding Requirement	406.08
Less: Consumer Contribution	17.35
Less: Grant	123.73
Balance Remaining	265.00
Funded through Debt	265.00
Funded through Equity	0.00

7.104 Based on the loans approved for the Control Period in the 2nd MYT Order, the interest and financing charges approved by the Commission for FY13 are tabulated below:

Table 122: Interest & finance charges approved (Rs Crores)

Particulars	FY13
LIC	0.05
PFC	0.19
REC	6.59
Banks	0.00
Non SLR Bonds	6.53
State Govt Loans	1.56
Market Bonds	0.00
Other Short Term	
Interest on New loans for capex (FY09-11)	28.45
Interest on New loans for capex (FY12-14)	31.94
Interest on Consumer Deposit	7.58
Interest on Working Capital	10.10
Total Interest Charges	92.98
Less: Interest Charges on Loans transferred for HPPTCL assets	0.51
Net Interest and Finance Charges	92.47

Return on Equity (RoE)

7.105 During the second Control Period, the Commission does not envisage any equity investment for the approved capitalization by the Petitioner due to lack of surpluses/ internal accruals and other priorities. Thus, in the 2nd MYT Order, the Commission had approved RoE on the same base which was approved during the Second Control Period at the rate of 16%, in accordance with its MYT Regulations, 2011, detailed as follows:

Table 123: Approved ROE for Control Period (Rs Cr)

Particulars	FY13
Distribution Equity	189.00
Rate	16.00%
Approved ROE	30.24

7.106 The Commission shall, however, true-up the funding and financing approved at the end of the Second Control Period.

Non Tariff Income (NTI)

7.107 The non tariff income approved by the Commission for FY12 and FY13 has been kept at the same level as approved in the second MYT Order (FY12 to FY14).

Table 124: Approved NTI for FY13 (Rs Cr)

Particulars	FY13
Interest Income from Investments	11.06
Interest on loans and Advances to staff	0.64
Interest on Advances to Suppliers / Contractors	0.20
Income from Trading (other than Electricity)	1.28
Income/Fee/Collection against staff welfare activities	0.07
Miscellaneous receipts	40.82
Delayed payment charges from consumers	12.77
Meter Rent	44.02
Recovery from theft of energy	33.73
Wheeling charges	44.83
Misc. charges from consumers	4.38
Investigation fees reimbursement	150.00
O&M Charges from HPPTCL	5.18
Total NTI	349.00

5th Pay Commission Arrears

7.108 The Commission in the MYT Order for the second Control Period has requested the GoHP to provide grant for payment of arrears on account of revision of salary due to Pay Commission recommendation during the second Control Period. However, the GoHP has not provided for any grant till date. During its interaction with the

Commission, HPSEBL submitted that it has paid approximately Rs 106 Cr towards 5th Pay Commission arrears during FY12 and remaining arrears will be paid in FY13 (estimated to be approximately Rs 189 Cr).

7.109 The Commission, in this Order, provisionally allows Rs 106 Cr paid by HPSEBL towards arrears in FY12 and Rs 189 Cr to be paid out in FY13. The Commission reiterates that expenses on account of 5th Pay Commission payouts will be subject to true-up once actual figures for the same are available.

Cost for Operation of Call Center

7.110 The Petitioner has submitted that it has established a 24-hour call center as per the Commission's direction. HPSEBL has also submitted that it will be incurring Rs 0.85 Cr towards operation expenses of this Call Center. The Commission approves Rs 0.85 Cr towards cost of operating of call center in this Order.

Aggregate Revenue Requirement of HPSEBL

7.111 The Commission approves the ARR of Rs 3338.15 Cr for FY13. In addition, the Commission allows Rs 106 Cr on account of arrear payout in FY12, Rs 189 Cr on account of expected arrear payout in FY13 and Rs 0.85 Cr as call center operation cost.

7.112 The Commission in its Order dated January 24, 2011 had approved additional capitalisation for Baspa II HEP. This will also result in increase in annual fixed cost for Baspa II HEP during the second Control Period. As the Commission has not yet issued revised MYT Order for Baspa II HEP for the second Control Period, the Commission is provisionally allowing Rs 35 Cr towards the revision of annual fixed cost in FY12 and FY13. The Commission will true up this based upon the actual impact of revision of annual fixed cost for FY12 and FY13 in accordance with the revised MYT Order for second Control Period for Baspa II HEP.

7.113 The table given below provides a summary view of the Aggregate Revenue Requirement as approved by the Commission under Annual Performance Review for FY13.

Table 125: Approved ARR of Distribution business for FY13 (Rs Cr)

Particulars	FY13
Power Purchase Expenses	2434.22
<i>Cost of own generation</i>	<i>261.06</i>
<i>Cost of purchase from other sources</i>	<i>2173.16</i>
PGCIL Charges	169.74
HPPTCL Charges	12.05
Operation & Maintenance Costs	943.32
<i>Employee Cost</i>	<i>871.78</i>
<i>R&M Cost</i>	<i>32.83</i>
<i>A&G Cost</i>	<i>38.71</i>

Particulars	FY13
Interest & Financing Charges	92.47
Depreciation	97.11
Return on Equity	30.24
Less: Non Tariff Income	349.00
Less: Capitalisation of Expenses	92.00
Aggregate Revenue Requirement	3338.15
Impact of review order – Arrear payout in FY12	106.00
Impact of review order – Arrear payout in FY13	189.00
Impact of review order – Call centre operation cost	0.85
BASPA Revision of second MYT	35.00
ARR for FY13 including other adjustments	3669.00

7.114 In addition to the Distribution ARR of Rs 3669.00 Crores (including other adjustments) approved for FY13, the Commission has allowed Rs to HPSEBL on account of past true up, as detailed in Chapters A5 & A6 earlier and summarized in Table 87. Hence, the total revenue requirement approved for HPSEBL in this Order comes to Rs 4155.70 Cr, as shown below:

Table 126: Total revenue requirement approved (including past adjustments)

	Particulars	FY13
A	ARR for FY13 including other adjustments	3669.00
	<i>Add:</i>	
	Trued-up gap for FY11 on account of uncontrollable factors	406.25
	Change in approved ARR of 1 st Control Period	(102.66)
B	Total trued-up gap approved for 1st Control Period (including FY11 uncontrollable factors)	303.59
	<i>Add:</i>	
	Arrears payable to Baspa till 31 March 2011	56.40
	Provisional allowance towards revised MAT of Baspa	50.00
	Additional Employee Cost for FY11	76.71
C	Total of other cost allowed to HPSEBL	182.91
D	Total Amount to be trued up due to True up of First MYT Control Period (A + B)	486.70
E	Total Revenue Requirement approved including ARR for FY13, Other Adjustments and Past True up (A + D)	4155.70

Allocation of Distribution ARR into Wheeling and Retail Supply

7.115 As per the MYT Regulations, 2011 the total Distribution ARR for the Control Period has to be allocated between Wheeling and Retail Supply business. The wheeling charges would be calculated on the Wheeling ARR and the Retail Tariffs would be

calculated on the Retail Supply ARR.

7.116 The Commission has allocated the Distribution ARR for FY13 i.e. Rs 3669.00 Crores into Wheeling and Retail Supply business based on the allocation statement approved by the Commission in the Second MYT Order.

Table 127: Allocation of ARR of Distribution business for FY13

Particulars	Wheeling	Retail Supply
Power Purchase Expenses	0%	100%
PGCIL Charges	0%	100%
HPPTCL Charges	0%	100%
Employee Expenses	70%	30%
R&M Expenses	90%	10%
A&G Expenses	60%	40%
Interest & Financing Charges (other than interest on working capital)	100%	0%
Depreciation	100%	0%
Return on Equity on Wheeling Business	100%	0%
Public Interaction Program	0%	100%
Non Tariff Income (excluding wheeling charges received from other states)	0%	100%
Wheeling charges received from other states	100%	0%

7.117 The summary of Wheeling and Retail Supply ARR for FY13 is shown as follows.

Table 128: Approved ARR of Wheeling business for FY13 (Rs Cr)

Particulars	FY13
Operation & Maintenance Costs	870.03
Interest & Financing Charges	92.47
Depreciation	97.11
Return on Equity	30.24
Less: Capitalisation of Expenses	63.84
Aggregate Revenue Requirement	1026.01

Table 129: Approved ARR of Retail Supply business for FY13 (Rs Cr)

Particulars	FY13
Power Purchase Expenses (including impact of Baspa revision)	2469.22
PGCIL Charges	169.74
HPPTCL Charges	12.05
Operation & Maintenance Costs	369.14
Less: Non Tariff Income	349.00
Less: Capitalisation of Interest & Expenses	28.16
Aggregate Revenue Requirement	2642.99

Wheeling Charges

7.118 Based on the ARR approved for Wheeling function, the Commission has determined the Wheeling charges for FY13 as per the methodology specified in the MYT Regulations, 2011. The summary of the approved Wheeling charges for FY13 is shown as follows.

Table 130: Approved Wheeling Charges for FY13

Particulars	FY13
Wheeling ARR (Rs Cr)	1026.01
Energy Sales (MU)	7533.08
Wheeling Charges (Rs/ unit)	1.36

7.119 The above charges are applicable to all consumers connecting to distribution network and the distribution losses approved by the Commission would be borne by the beneficiary in kind.

A8: TARIFF PHILOSOPHY AND DESIGN

Cost to Serve

- 8.1 In this chapter, the Commission has elaborated on the detailed methodology and assumptions used for determination of the cost of supply.
- 8.2 In the earlier Tariff Orders, the Commission has consistently made an effort to reduce the extent of cross-subsidies in the system by reducing the differential between the average revenue assessment and the cost of supply at the respective voltage level. The Commission has also tried to ensure that no consumer category is subject to a tariff shock and has thus attempted to reduce cross-subsidies in a gradual manner.
- 8.3 The Commission has developed a Cost to Serve Model based on information provided by the Petitioner. In subsequent sections, the method of computation of the cost-of-supply for FY13 has been explained, along with details of the assumptions taken by the Commission.
- 8.4 The Commission in the previous tariff orders has given directions to the Petitioner to submit relevant data to enable computation of the voltage level cost of supply in a more scientific and robust manner, the Petitioner has however not submitted any additional data accordingly, therefore, the Commission has used the same basis and assumptions to determine the voltage level cost of supply as was taken in the second MYT Order.
- 8.5 The Petitioner while replying to the objection has stated that it has been following the average cost of supply model for determination of tariff and is making efforts to shift to the category wise cost of supply in due course of time. Most other states are also following average cost of supply model for determination of tariff. The Petitioner is trying to bring the level of cross subsidy to $\pm 20\%$ as per the National Tariff policy. The Commission agrees with the Petitioner that the National tariff Policy in Clause 8.3 on tariff design provides as under:

“1. In accordance with the National Electricity Policy, consumers below poverty line who consume below a specified level, say 30 units per month, may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply. This provision will be re-examined after five years.

2. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify roadmap within six months with a target that latest by the end of year 2010-2011 tariffs are within $\pm 20\%$ of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy.

For example if the average cost of service is Rs 3 per unit, at the end of year 2010-2011 the tariff for the cross subsidised categories excluding those referred to in para 1 above should not be lower than Rs 2.40 per unit and that for any of the

cross-subsidising categories should not go beyond Rs 3.60 per unit.”

- 8.6 The Commission has accordingly based the tariff fixation exercise mainly on the average cost of supply and has duly kept in mind the need for progressively moving towards the targeted limits of $\pm 20\%$ of the average cost of supply, which we have achieved and would like to consolidate during this Control Period. However, the Commission has also carried out an exercise to assess voltage wise cost to serve based on the piecemeal data given by the Petitioner in the past and the general perception on the aspects for which no data is available. This voltage wise cost to serve has however been worked out for indicative purposes only. Commission does not find it prudent to fix the tariff on the basis of this model, which involves many assumptions but could also lead to tariff shocks in the event of its adoption. Based on the availability of data, the Commission may consider progressively moving towards the cost to serve philosophy from next control period onwards. The voltage wise projections of cost to serve have been worked out by considering the following assumptions and methodologies.

Assumptions

- 8.7 The Commission has considered the following assumptions:
- (a) Energy Input: Only the energy input into the State transmission system is considered for intra-state consumption. Hence, the Commission has not considered energy sale outside the State for its cost-of-supply computation.
 - (b) Category-wise sales have been allocated to different voltages proportionately based on past information, except for categories where sales data at different voltages is available, such as Large Industrial Power, Water and Irrigation Pumping, and Bulk Supply.
 - (c) As the Petitioner has failed to submit authentic information on losses at different voltage level, the Commission has allocated loss uniformly across all voltage levels based upon the sales at that voltage level.
 - (d) Data on cost segregation across voltage levels and consumer category wise is not available with the Commission. Hence, segregation has been done based on information provided by the Petitioner in the past.

Methodology

- 8.8 Power Purchase Cost: The total cost of power purchase and own generation (reduced by the component of the sale outside the state) has been distributed over the energy sale on per unit basis. This has been done in view of the fact that the quantum of the energy purchased and generated at 33 kV and 22 kV levels is increasing with the commissioning of more SHPs and bidirectional flows cannot be ruled out. However the other costs of HT system has not been allocated to EHT system
- 8.9 Cost of Supply to consumers at 66 kV and above has been determined by allocating the cost according to the sales in this network (66 kV and above) and power

wheeled through this network. However, out of the total cost at 66 kV, a cost of Rs 10 Cr has been only considered for the sales at 66 kV on account of expenses related metering and billing related infrastructure / manpower cost only for 66 kV sales.

- 8.10 Cost of Supply to consumers at High Tension (11 kV and above) has been estimated by allocating costs to the sales to HT consumers and power wheeled to reach the LT network. However, out of the total cost at HT, a cost of Rs 30 Cr has been only considered for the sales at HT on account of expenses related metering and billing related infrastructure/ manpower cost only for HT sales. It also proportionally includes the cost incurred during the wheeling of power at 66 kV and above network.
- 8.11 Cost of Supply for the consumers at Low Tension (below 11 kV) level has been estimated by estimating the distribution cost (below 11 kV) and sales to LT consumers. It also includes the proportional costs incurred for wheeling the power at higher voltage levels (from 220 kV till 11 kV).
- 8.12 Arrears to the extent covered through tariff hike have been considered in the ARR.

Sales at various voltage levels

- 8.13 The sales at various voltage levels have been estimated based upon assumptions mentioned above, and are reproduced in the table as follows:

Table 131: Sales at Different Voltage Levels (MU)

S. No	Category	Total Sales (MU)	EHT (≥ 66 kV)	HT (≤ 11 kV)	LT (< 11 kV)
1	Domestic	1440.96	0.00	0.00	1440.96
2	NDNCS	104.44	0.00	31.33	73.11
3	Commercial	406.33	0.00	60.95	345.38
4	Small and Medium Industrial Power	216.65	0.00	0.00	216.65
5	Large Industrial Power Supply (LIPS)	4569.89	1761.94	2807.95	0.00
6	Water and Irrigation Pumping	476.11	0.00	136.86	339.25
7	Street Lighting	14.10	0.00	0.00	14.10
8	Bulk supply	273.40	0.00	174.98	98.42
9	Temporary Supply	31.20	0.00	0.00	31.20
	Total (inside State)	7533.08	1761.94	3212.06	2559.07

Cost Segregation

- 8.14 The methodology followed by the commission in the previous tariff order has been followed in this order also and the results are depicted in Table 132. However, in order to validate the reasonableness of the per unit rate of distribution for the consumers of each voltage category, the Commission also assessed the same based on certain other relevant parameters including the pattern of usage of the system by consumers by various voltages, and found the rates worked out in Table 132 below, to be reasonable.

8.15 Hence, the costs are divided into Generation, Transmission and Distribution functions, in the following manner:

- (a) **Generation and Power purchase cost:** The Commission has considered the approved generation and power purchase cost (including transmission cost) for consumers of HP at Rs 2241.09 Cr (net of revenue from sales outside state).
- (b) **Cost of wheeling at EHT:** The Commission has estimated cost of wheeling at EHV at Rs. 412.23 Cr based on EHV component of the GFA (wheeling cost of Rs 402.23 Cr plus Rs 10 Cr towards metering, billing and collection which is reflected in the distribution cost). Out of Rs 412.23 Cr, Rs 402.23 Cr has been apportioned to sales at all voltage level, and Rs 10 Cr has been allocated only to the sales at EHT level.
- (c) **Distribution cost:** For arriving at the CoS, the Commission has considered the distribution cost of Rs 806.66 Cr after deducting Rs 10 Cr towards the metering, billing and collection cost incurred for the consumers in the EHT system from the Wheeling and Retail Supply cost of Rs 816.66 Cr. The distribution cost has further been divided into HT and LT network costs, according to the proportion of sales in these networks. Out of HT distribution cost of Rs 448.96 Cr, Rs 418.96 Cr has been apportioned to sales at HT and LT voltage level respectively and Rs 30 Cr has been allocated only to the sales at HT level. LT Distribution Cost of Rs 357.69 Cr has been allocated only to LT Sales.

8.16 The approved CoS at different voltage levels for determination of tariff is shown in the table as follows:

Table 132: Cost to Serve

S. No.	Particulars	Generation bus bar	(≥66 kV)	(≥11 kV)	(<11 kV)	Total
1	Energy Input (MU)	8806.45	8806.45	7044.51	3832.44	
2	Sales at respective level (MU)		1761.94	3212.06	2559.07	7533.08
3	Cost at respective level (Rs Cr)	2241.09	402.23	418.96	357.69	3459.98
4	Average Power Purchase Cost for per unit of sales (Rs/unit)	2.97				
5	Cost Allocation (Rs/unit)					
a	Power Purchase Cost		2.98	2.98	2.98	
b	EHV Distribution Cost (≥ 66 kV)		0.59	0.53	0.53	
c	Distribution Cost (≥ 11 kV)			0.82	0.73	
d	Distribution Cost (< 11 kV)				1.39	
e	<i>Total Distribution cost (b+c+d)</i>		<i>0.59</i>	<i>1.35</i>	<i>2.65</i>	
6	Cost of Supply (Rs/unit) (a + e)		3.57	4.33	5.63	4.59*

*Rs 4.59 per unit is the average cost of supply

Tariff Principles

8.17 The philosophy of tariff determination is primarily guided by the principles enshrined in Section 61 of the Electricity Act, 2003, Himachal Pradesh Electricity Regulatory

Commission (Terms and Conditions for Determination of Tariff) Regulations, 2004 and the National Electricity Policy issued by Ministry of Power, GoI on February 12, 2005. Guiding principles laid down in Section 61 of the Act are reproduced below:

- (a) the principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;
- (b) the generation, transmission, distribution and supply of electricity are conducted on commercial principles;
- (c) the factors which would encourage competition, efficiency economical use of the resources, good performance and optimum investments;
- (d) safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;
- (e) the principles rewarding efficiency in performance;
- (f) multi-year tariff principles;
- (g) that the tariff progressively, reflects the cost of supply of electricity, and also reduces and eliminates cross-subsidies within the period to be specified by the Appropriate Commission;
- (h) the promotion of co-generation and generation of electricity from renewable sources of energy;
- (i) the National Electricity Policy and Tariff Policy.

8.18 Apart from these principles, the National Electricity Policy has also laid down emphasis on Multi-Year Tariff framework, segregation of technical and commercial losses, incentives for the use of pre-paid meters, putting in place the governance structure in distribution needed for ensuring recovery of cost of service from consumers, minimum level of support for consumers of poor categories, need to correct the imbalance on account of cross subsidy progressively and gradually without giving tariff shock to the consumers and above all, to promote competition which is the very essence of the Electricity Act. The National Electricity Policy also emphasizes that advance subsidy be given by the State Government as per Section 65 of the Act to the power utility and mentions that necessary budgetary provision be made in advance so that the utilities do not suffer financial problems. The Electricity Policy further mentions of the need to make efforts to ensure that subsidies reach the targeted beneficiaries in the most transparent and efficient way.

8.19 Based on the analysis of the cost to serve it is seen that the average cost of supply as determined for FY13 is Rs. 4.59 per unit, whereas the average realization from revenue at existing tariffs in FY13 is estimated to be only Rs. 4.05 per unit.

8.20 Further, at existing tariffs, the revenue surplus of the Petitioner for FY13 as estimated by the Commission without considering past adjustments (excluding additional

allowance of Rs 295.85 Cr on account of 5th Pay Commission arrears and Operation expenses of call center and Rs 35 Cr towards provisional revision of Baspa APR for second Control Period for FY12 & FY13 in ARR for FY13, Rs 303.59 Cr on account of past period true up, Rs 76.71 Cr on account of additional employee expenses now approved for FY11, Rs 56.40 Cr towards Baspa True Up and Rs 50 Cr towards Baspa MAT in ARR of FY13) translates to Rs 84.94 Cr. However, after accounting for past adjustments, there is a gap of Rs 732.61 Cr in FY13.

Table 133: Projection of revenue in FY13 at Existing Tariff (Rs. Cr)

Category	Petitioner's Submission	Commission's Analysis
Domestic	457	461.77
BPL		
NDNCS	51	51.27
Commercial Supply	214	205.76
Small and Medium Supply	83	86.87
Large Supply	1960	1904.23
Water and Irrigation Pumping Supply	194	186.53
Street Lighting	6	5.69
Bulk Supply	129	124.09
Temporary Supply	23	21.95
Total	3116	3048.17

Table 134: Commission's Analysis of HPSEBL's Revenue-Expenditure position for FY13 at Existing Tariff (Rs. Cr)

Parameters	FY13
Aggregate Revenue Requirement (including other adjustments)	3669.00
Revenue From Sale of Power outside State	374.92
Revenue From Sale of Power within State	3048.17
Revenue Surplus/(Gap)	(245.91)
Gap for the First MYT Period to be adjusted	(486.70)
Total Gap to be adjusted	(732.61)

- 8.21 Revenue gap of Rs 732.61 Cr is too huge to be recovered in full in the current year because it will entail a tariff hike of about 25%. The audited balance sheet of FY11 is not yet available and actual payments of arrears of pay and pension for FY12 will be firmed up at true-up stage. Also, actual payment of arrears during FY13 will be known only by the end of FY13. Moreover, this entire amount is a one-time cost. Therefore, the Commission considers it prudent to recover the entire true-up cost during current year by an appropriate tariff hike, and the balance amount on account of pay and pension arrears (due to pay revision) is allowed to be spent by HPSEBL as per GoHP interest free financing mechanism which can be recovered in FY14 without requiring further tariff hike in FY14 to such extent.
- 8.22 Accordingly, the Commission increases tariff to recover about Rs 411.81 Crores and the balance unrecovered amount of Rs 320.80 Crores on account of pay and pension arrears due to pay revision shall be recovered in FY14.
- 8.23 The category-wise tariffs approved for FY13 are detailed as follows.

Approved Tariff

The contents of Part-I GENERAL and Definitions contained thereto and the contents of Part II SCHEDULE OF TARIFF contained in Annexure II annexed with this Order to be Notified by the HPSEBL as *NOTIFICATION* bears the Approval of the Commission and be read as an integral part of this Tariff Order

DS: Domestic Supply

8.24 The existing schedule is applicable to consumers using electrical energy for lights, fans, heaters, cooking ranges, ovens, refrigerators, air conditioners, stereos, radios, televisions, mixers, grinders, electric iron, sewing/embroidery/knitting machines, domestic pumping sets and other domestic appliances in a single private house/flat or any other residential premises; Religious places with connected load up to 5 kW; Monasteries; Panchayat Ghars with connected load upto 2KW; Patwarkhanas and Kanungoo Bhawans (Government Buildings only) with connected load up to 5 kW; Orphanages, homes for old people and homes for destitute; Working Women Hostels, Hostels attached to the educational institutions if supply is given separately to each hostel and the electricity charges are recovered from the students based on actual consumption; Leprosy Homes run by charity and un-aided by the Government; "Home Stay Units" in rural areas duly registered with the District Tourism Development Officer; and Offices of the Himachal Pradesh Senior Citizen Forum.

Note:

- (i) *Where a portion of the dwelling is used regularly for the conduct of a business, the consumption in that portion shall be separately metered and billed under the appropriate Commercial or Industrial power tariff whichever is applicable. If separate circuits are not provided, the entire supply will be classified under "Commercial Supply."*
 - (ii) *Resale and supply to tenants, other flats etc. is strictly prohibited.*
 - (iii) *No compounding will be permissible. For residential societies which wish to take a single point supply, this would be permitted, and the energy charges would be divided by the number of such units to determine the relevant slab. Thus if there are 10 dwelling units in a society and the energy consumption in a month is 3000 units, the first 1250 (125x10) units would be charged at Rs 2.50 per kWh, the next 1250 (125*10) at Rs 3.45 per unit and the balance 500 units at Rs. 3.50 per unit. Consumer service charge shall be Rs. (30x10).*
- 8.25 The Petitioner has proposed the following for the consumers in the domestic category:
- a) No increase in tariff for BPL consumers;
 - b) 40% increase in energy charges for consumers consuming upto 40 units/month;
 - c) 45% increase in energy charges for consumers consuming upto 125 units/month;
 - d) 60% increase in energy charges for consumers consuming above 126 units/month;
 - e) Increase in consumer service charges from existing Rs 30/conn/month to Rs 60/conn/month.

- 8.26 The comparison of existing tariff and tariff proposed by the Petitioner for domestic category is given in Table 135 below. The Commission after having considered the entire details and reasons, approves the tariff for Domestic category as under:

Table 135: Existing, Proposed and Approved Tariff for Domestic Category

Description Units/month	Existing		Proposed		Approved	
	Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/month)	Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/month)	Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/month)
BPL Consumer (Up to 40 units per month)	2.10	10	2.10	10	2.50	10.00
Other						
0 - 40	2.35	30.00	3.29	60.00	2.85	30.00
0-125	2.50	30.00	3.63	60.00	3.00	30.00
126-250	3.45	30.00	5.52	60.00	3.90	30.00
251 & above	3.50	30.00	5.60	60.00	4.00	30.00
Pre-paid meter	2.50		4.45		3.00	

- 8.27 In the case of Below Poverty Line beneficiaries the concessional tariff will be available for use of electricity by these families up to a maximum of 40 units per month. In case this limit is exceeded, the normal domestic tariff slabs of 0-125; 126-250; and above 250 kWh per month respectively will apply.
- 8.28 In the case of Domestic Category consumers with consumption in the slabs 126-250; and above 250 kWh per month respectively, the slab rates for 0-40 kWh per month shall **not** apply.
- 8.29 The applicable rebates and surcharges for this category have been detailed in Annexure II of this Order.
- 8.30 Subsidy given by GoHP shall apply to prepaid meter consumers also. Should the GoHP decide to maintain the tariffs at the current levels after subsidy, then the prepaid consumers shall be deemed to be placed at the 0-125 slab of domestic consumers, in respect of entire consumption after State Government subsidy.

Non Domestic Non Commercial Supply

- 8.31 This schedule is applicable to Government and semi Government offices; Government – Hospitals, primary health centres, dispensaries and veterinary hospitals; Educational Institutions viz. Schools, Universities; I.T.Is, Colleges, Centre for Institute of Engineers, Sports Institutions, Mountaineering Institutions and allied sports and Libraries Hostels, Government Libraries, Centre for Institute of Engineers, Hostels and residential quarters attached to the educational institutions if supply is given at a single point; Religious places such as Temples, Gurudwaras, Mosques, Churches with connected load greater than 5 kW; Sainik and Government Rest Houses, Anganwari workers training centres; Mahila mandals, village community centers; Hospitals run on charity basis; Sarais and Dharamsalas run by Panchayats and Municipal Committees or on donations and those attached with religious places; and Panchayat Ghars with connected load greater than 2KW; Patwar Khanas and Kanungoo Bhawans (Government Buildings only) with connected load greater than 5 kW.

NOTE: In the case of residences attached to the Government as well as private Institutions, the same shall be charged at the 'Domestic tariff' where further distribution to such residential premises is undertaken by the Petitioner and the Petitioner provides meters for individual consumers.

8.32 The Petitioner has proposed the following for the consumers in the non domestic non commercial supply category:

- a) For up to 20 kW slab, an increase of 20% in energy charges and consumer service charges has been proposed.
- b) For above 20 kW slab, an increase of 25% in energy charges and 20% in consumer service charges and demand charges have been proposed.

8.33 The Commission, after having considered the entire details and reasons, approves the tariff for NDNCS category as shown in the tables below. The comparison of existing tariff and tariff proposed by the Petitioner is also given below.

Table 136: Existing, Proposed and Approved Tariff for NDNCS Category (Up to 20 kW)

Existing		Proposed		Approved by Commission	
Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/month)	Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/month)	Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/month)
4.45	60.00	5.34	72	4.45	60.00

Table 137: Existing, Proposed and Approved Tariff for NDNCS Category (Above 20 kW)

Existing			Proposed			Approved by Commission		
Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)	Energy Charges (Rs/kVAh)	Consumer Service Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)
3.70	120.00	100.00	4.63	144.00	120.00	4.00	120.00	120.00

8.34 The applicable rebates and surcharges for this category have been detailed in Annexure II of this Order.

Commercial Supply (CS)

8.35 This schedule is applicable to consumers for lights, fans, appliances like pumping sets, central air conditioning plants, cold storages, lifts, heaters, embroidery machines, printing press, power press and small motors in all Commercial premises such as shops, business houses, cinemas, clubs, banks, private offices, private hospitals, petrol pumps, hotels/motels, welding sets, service stations, private nursing homes, private rest/guest houses, private research institutions, private coaching institutions, private Museums, dry cleaning, garages and private auditoriums, departmental stores, restaurants, lodging and boarding houses. This schedule will also include all other categories, which are not covered by any other tariff schedule.

8.36 The Petitioner has proposed the following for the consumers in the Commercial Supply category:

- a) An increase of 24% in energy charges and 10% in consumer service charge has been proposed for both the slabs
- b) Demand charges have been proposed to be raised to Rs 90 per kVA and Rs 120 per kVA per month from existing Rs 75 per kVA and Rs 100 per kVA per month respectively.

8.37 The Commission, after having considered the entire details and reasons, approves the tariff for the Commercial Supply category as shown in the tables below. The comparison of existing tariff and tariff proposed by the Petitioner is also given below.

Table 138: Existing, Proposed and Approved Tariff for CS Category (Up to 20 kW)

Existing		Proposed		Approved by Commission	
Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/month)	Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/month)	Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/month)
4.60	60.00	5.70	66.00	4.60	60.00

Table 139: Existing, Proposed and Approved Tariff for CS Category (Above 20 kW)

Slab	Existing			Proposed			Approved by Commission		
	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/month)	Demand Charge (Rs/kVA/month)	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/month)	Demand Charge (Rs/kVA/month)	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/month)	Demand Charge (Rs/kVA/month)
20-100 kW	3.95	120.00	75.00	4.90	132.00	90.00	4.20	120.00	75.00
Above 100kW	3.75	240.00	100.00	4.65	264.00	120.00	4.10	240.00	120.00

8.38 In case of mobile welding sets, the consumer will pay Rs 200 per day, in addition to the energy charges.

8.39 The applicable rebates and surcharges for this category have been detailed in Annexure II of this Order.

Small and Medium Industrial Power Supply (SMS)

8.40 This schedule is applicable to Industrial consumers with connected load not exceeding 100 kW including pumps (other than irrigation pumping), poultry farms and sheds, Atta Chakkis, and also for supply to Information Technology Industry, limited only to IT Parks recognised by the State/Central Government. The Industrial type of Agricultural loads with connected load falling in the above-mentioned range and not covered by Schedule “WIPS” shall also be charged under this schedule.

8.41 The Petitioner has proposed the following for the consumers in the Commercial Supply category:

- a) An increase of 50% in energy charges has been proposed for all the slabs.

- b) Consumer service charges have been proposed to be raised to Rs 100 & Rs 188 per connection per month from the existing Rs 80 & Rs 150 per consumer per month respectively.

8.42 The Commission, after having considered the entire details and reasons, approves the tariff for the SMS category as shown in the tables below. The comparison of existing tariff and tariff proposed by the Petitioner is also given below.

Table 140: Existing, Proposed and Approved Tariff for SMS Category (Up to 20 kW)

Existing		Proposed		Approved by Commission	
Energy Charges (Rs./kWh)	Service Charges (Rs./con/ month)	Energy Charges (Rs./kWh)	Service Charges (Rs./con/ month)	Energy Charges (Rs./kWh)	Service Charges (Rs./con/ month)
3.70	80.00	5.55	100.00	4.10	80.00

Table 141: Existing, Proposed and Approved Tariff for SMS Category (Above 20 kW)

Existing			Proposed			Approved by Commission		
Energy Charges (Rs/kVAh)	Service Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/ month)	Demand Charge (Rs/kVA/ month)
3.30	150.00	50.00	4.95	188.00	50.00	3.70	150.00	70.00

8.43 The applicable rebates and surcharges for this category have been detailed Annexure II of this Order.

8.44 All consumption for bona fide factory lighting, i.e., energy consumed in factory premises including factory building, its offices, stores, time keeper office, canteen, library, staff dispensary, welfare centre and factory yard lighting shall be charged under this tariff schedule. The consumption for bona fide use of residential/staff quarters and street lighting of the colony shall also be charged under this tariff schedule if the supply is not taken separately but taken at the same single supply point of the industry. Such consumption shall be charged for the energy consumed at the following rates, irrespective of whether the consumer has opted for peak time consumption or not:

- During normal times: normal rate
- During peak times: the PLEC rate
- During night time: the night time rate

8.45 If supply for colony lighting/ residences is taken separately than the same shall be charged as per the relevant category under this schedule of tariff.

Large Industrial Power Supply (LIP)

8.46 This schedule is applicable to all industrial power consumers with connected load exceeding 100 kW including the Information Technology industry (limited only to IT parks recognized by the State/Central Government) and not covered by the schedule “WIPS”.

8.47 The Petitioner has proposed the following in its petition:

- (a) An increase of 60% in energy charges has been proposed for all slabs.
- (b) Consumer service charge has been proposed to be raised to Rs 438 per connection per month from existing Rs 350 per connection per month respectively.
- (c) Demand charges have been proposed to be raised to Rs 300 per kVA per month from existing Rs 240 per kVA per month respectively.

8.48 The Commission, after having considered the entire details and reasons, approves the tariff for the Large Industrial Power Supply category as shown in the tables below. The comparison of existing tariff and tariff proposed by the Petitioner is also given below.

Table 142: Existing, Proposed and Approved Tariff for Large Industrial Power Supply Category

Slab	Existing			Proposed			Approved by Commission		
	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/month)	Demand Charge (Rs/kVA/month)	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/month)	Demand Charge (Rs/kVA/month)	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/month)	Demand Charge (Rs/kVA/month)
EHT									
Up to 300 kVAh/kVA/month	2.85	350.00	240.00	4.56	438.00	300.00	3.35	350.00	300.00
Balance kVAh during the month	3.05	350.00	240.00	4.88	438.00	300.00	3.60	350.00	300.00
HT									
Up to 300 kVAh/kVA/month	3.05	350.00	240.00	4.88	438.00	300.00	3.45	350.00	300.00
Balance kVAh during the month	3.25	350.00	240.00	5.20	438.00	300.00	3.70	350.00	300.00

8.49 The applicable rebates and surcharges for this category have been detailed Annexure II of this Order.

Bulk Supply

8.50 This schedule is applicable to general or mixed loads to M.E.S and other Military establishments, Central PWD Institutions, Hospitals, Departmental colonies, A.I.R

Installations, Aerodromes, construction power to hydroelectric projects and other similar establishments where further distribution to various residential and non-residential buildings is to be undertaken by the consumers for their own bonafide use and not for resale to other consumers with or without profit. However, in case of MES, this schedule shall continue to apply till such time M.E.S. do not avail open access.

8.51 The Petitioner in its petition has proposed the following:

- (a) An increase of 20% in energy charges has been proposed for all slabs.
- (b) Consumer service charges have been proposed to be raised to Rs 165 per connection per month from existing Rs 150 per connection per month
- (c) Demand charges have been proposed to be raised to Rs 240 per kVA per month from existing Rs 200 per kVA per month.

8.52 The Commission, after having considered the entire details and reasons, approves the tariff for Bulk Supply category as shown in the tables below. The comparison of existing tariff and tariff proposed by the Petitioner is also given below.

Table 143: Existing, Proposed and Approved Tariff for Bulk Supply Category

Slab	Existing			Proposed			Approved by Commission		
	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)
LT	4.05	150.00	200.00	5.27	165.00	240.00	4.50	150.00	240.00
HT	3.50	150.00	200.00	4.55	165.00	240.00	4.00	150.00	240.00
EHT	3.35	150.00	200.00	4.36	165.00	240.00	3.80	150.00	240.00

8.53 The applicable rebates and surcharges for this category have been detailed Annexure II of this Order.

Street Lighting Supply

8.54 This schedule is applicable for Street Lighting system including traffic control signal systems on roads and Park lighting in Municipalities, Panchayats and Notified Committee areas.

8.55 The Petitioner has proposed the following increase in the street light category.

- a) An increase of 20% in energy charges is proposed for all slabs
- b) Consumer service charge has been proposed to be raised to Rs 72 per connection per month from existing Rs 60 per connection per month.

8.56 The Commission, after having considered the entire details and reasons, approves the tariff for the Street Lighting category as shown in the tables below. The comparison of existing tariff and tariff proposed by the Petitioner is also given below.

Table 144: Existing, Proposed and Approved Tariff for Street Lighting Supply Category

Existing		Proposed		Approved by Commission	
Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/mth)	Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/mth)	Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/mth)
4.00	60.00	4.80	72.00	4.60	60.00

8.57 The applicable rebates and surcharges for this category have been detailed Annexure II of this Order.

Temporary Metered Supply

8.58 This schedule is applicable to all loads of temporary nature including exhibitions, touring talkies, circuses, fairs, melas, marriages, festivals, temporary supply for construction purposes including civil works by Government departments and other similar purposes for temporary needs only. However, this tariff is not applicable to wheat threshers and paddy threshers which shall be covered under Water and Irrigation Pumping Supply (WIPS) even for temporary connection.

8.59 The Petitioner has proposed an increase of 15% in energy charges, consumer service charges and demand charges for this category.

8.60 The Commission, after having considered the entire details and reasons, approves the tariff for the Temporary Supply category as shown in the tables below. The comparison of existing tariff and tariff proposed by the Petitioner is also given below.

Table 145: Existing, Proposed and Approved Tariff for Temporary Meter Category (Up to 20 kW)

Existing		Proposed		Approved by Commission	
Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/mth)	Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/mth)	Energy Charges (Rs./kWh)	Consumer Service Charges (Rs./con/mth)
6.80	140.00	7.82	161.00	7.00	140.00

Table 146: Existing, Proposed and Approved Tariff for Temporary Meter Category (above 20 kW)

Existing			Proposed			Approved by Commission		
Energy Charges (Rs/kVAh)	Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)
5.25	200.00	350.00	6.04	230.00	403.00	5.50	200.00	350.00

8.61 The applicable rebates and surcharges for this category have been detailed Annexure II of this Order.

Water and Irrigation Pumping Supply (WIPS)

8.62 The earlier categories of WPS and AAAS were merged together in the first APR Order issued by the Commission and are now collectively termed as Water and

Irrigation Pumping Supply (WIPS).

- 8.63 The existing schedule is applicable to Government connections for water and irrigation pumping. The schedule also covers all consumption for bona fide Pump House lighting.
- 8.64 This schedule shall also be applicable to private Irrigation Pumping loads. This schedule shall also be applicable to green houses, poly houses, processing facilities for agriculture, pisciculture, horticulture, floriculture and sericulture etc. where all such activities are undertaken by farmers only under this category. This schedule will also be applicable to temporary agricultural loads such as wheat threshers, paddy threshers, tokas, and cane crushers.
- 8.65 The Petitioner has proposed an increase of 30% in energy charges, 10% in consumer service charges and 15% in demand charges for this category.
- 8.66 The Commission, after having considered the entire details and reasons, approves the tariff for the WIPS category as shown in the tables below. The comparison of existing tariff and tariff proposed by the Petitioner is also given below.

Table 147: Tariff for WIPS up to 20 kW

Existing		Proposed		Approved by Commission	
Energy Charges (Rs./kWh)	Service Charges (Rs./con/mth)	Energy Charges (Rs./kWh)	Service Charges (Rs./con/mth)	Energy Charges (Rs./kWh)	Service Charges (Rs./con/mth)
2.50	40.00	3.25	44.00	3.00	40.00

- 8.67 The two-part tariff applicable for WIPS for connected load above 20 kW shall be as shown in the table as follows:

Table 148: Tariff for WIPS above 20 kW

Slab	Existing			Proposed			Approved by Commission		
	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)
LT	3.50	140.00	50.00	4.55	154.00	58.00	4.00	140.00	50.00
HT	3.85	200.00	175.00	5.01	220.00	201.00	4.25	200.00	220.00
EHT	3.45	250.00	175.00	4.49	275.00	201.00	3.95	250.00	220.00

- 8.68 The applicable rebates and surcharges for this category have been detailed Annexure II of this Order.

Railway Traction

- 8.69 The Petitioner has requested the Commission for creating of a separate category for Railway Traction from FY 2011-12 in view of the application received by the Petitioner from the Northern Railway for availing 66 kV supply from the Petitioner's substation at Parwanoo for the Railway traction substation proposed at Parwanoo.
- 8.70 The Petitioner has not proposed any increase in the charges for this category.

8.71 The two-part tariff applicable for Railway Traction shall be as shown in the table as follows:

Table 149: Tariff for Railway Traction

Slab	Proposed			Approved by Commission		
	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)	Energy Charges (Rs/kVAh)	Service Charges (Rs/con/mth)	Demand Charge (Rs/kVA/mth)
Railway Traction	4.00	350.00	240.00	4.50	350.00	300.00

Revenue Projection at Approved Tariff

8.72 The following sections summarize the Commission's revenue projection at the revised tariff now approved in this Tariff Order.

Revenue from Sale of Power within State

8.73 For calculation of projected revenues for each category of consumers along with its slabs and sub-categories, actual past data has been taken into account for each consumer category. For other categories, estimation has been done to split sales across slabs and sub categories as proposed by the Petitioner.

8.74 For projection of sales from WIPS category in the absence of data, 30% of sales under WPS at less than 11 kV have been considered at tariff applicable for less than 20 kW consumers under the revised WIPS category.

8.75 The Commission has calculated the revenue from sale of power across each consumer category at the revised approved tariff as shown in the table as follows:

Table 150: Projection of Revenue from Sale of Power within State for FY13 (Rs. Cr)

Category	Petitioner's Submission		Commission's Analysis		Revenue Mobilization as per Commission's Analysis
	Existing Tariff	Proposed Tariff	Existing Tariff	Approved Tariff	
Domestic	457	716	461.77	532.33	70.45
BPL					
NDNCS	51	62	51.27	54.54	3.28
Commercial Supply	214	262	205.76	211.79	6.03
Small and Medium Supply	83	121	86.87	97.60	10.72
Large Industrial Power Supply	1960	2704	1904.23	2181.59	277.36
Water and Irrigation Pumping Supply	194	249	186.53	212.05	25.52
Street Lighting	6	7	5.69	6.40	0.85
Bulk Supply	129	166	124.09	141.07	16.98
Temporary Supply	23	26	21.95	22.57	0.62
Total	3116	4313	3048.17	3459.98	411.81

Revenue from Sale of Power Outside State

- 8.76 The Petitioner in its petition has projected the energy available for sale outside the State as 1186 MU which takes into account banking power return of 800 MU. The proposed revenue from sale of power outside the State is Rs 174 Cr.
- 8.77 The Commission has projected the power available for sale outside the State (Ex-Bus) during FY13 and a summary of the same is shown as follows:

Table 151: Surplus Power Available for Sale in FY13 (MU)

Particulars	FY13
Total Surplus at State Periphery (MU)	1033.72
Inter State Transmission Losses (%)	3.50
Total surplus at Ex-Bus (MU)	1071.21

- 8.78 The Commission has considered that HPSEBL would enter into commercial agreements with other states/buyers including banking arrangement of sale of surplus power.
- 8.79 The cost of power purchase for sale of power outside State, revenue and profit from it are tabulated as follows:

Table 152: Revenue Projection for Sale of Power outside State for FY13

Parameters	FY13
Bilateral Sale (MU)	1071.21
Sale Rate (Rs per unit)	3.50
Revenue from sales of power outside State (Rs Cr)	374.92

Overall Revenue–Expenditure Position of HPSEBL at Approved Tariff

- 8.80 The overall revenue and expenditure position of HPSEBL at approved tariff is given in the table as follows:

Table 153: Overall Revenue-Expenditure position of HPSEBL in FY13 at Approved Tariffs (Rs. Cr)

	Parameters	FY13
A	Aggregate Revenue Requirement for FY13 including other adjustments	3669.00
B	Gap for the First MYT Period to be adjusted	486.70
	Total ARR for FY13 including past adjustments and gap for the First MYT Period	4155.70
C	Less: Revenue From Sale of Power within State at approved tariff	3459.98
D	Less: Revenue from sale of power outside State	374.92
E	Uncovered Revenue Surplus/(Gap) (A + B - C - D)	(320.80)

- 8.81 Thus, the Commission has approved uncovered gap of Rs 320.80 Cr. Of this amount,

Rs 189 Cr is on account of arrears expected to be paid out in FY13. The uncovered gap also includes part payment of Rs 76.71 Cr allowed as additional employee expense (arrears) in FY11 for which the audited balance sheet is not yet finalized; and Rs 106 Cr as arrear payment in FY12 which is currently on estimate basis and will be claimed by HPSEBL as per actuals in the true-up petition for FY12 to be filed with the Commission next year.

Treatment of Uncovered Gap

- 8.82 The Commission has been informed that in a meeting held on April 18, 2012 between Principal Secretary (Power) to the GoHP, Principal Secretary (Finance) to the GoHP and CMD HPSEBL, it was decided that the State Government would provide suitable funding mechanism for any uncovered gap that may be treated as regulatory asset in the tariff to be announced by the Commission, and hence there shall be no carrying cost allowed to HPSEBL for the same. Accordingly, the Commission is not allowing any carrying cost to HPSEBL for the uncovered gap amount of Rs 320.80 Cr, which amount is arrears of pay and pension on account of pay revision paid in FY11 & FY12 and payable in FY13.
- 8.83 It was also conveyed at the meeting that the subsidized tariff in respect of Domestic and Agricultural categories for FY13 would be maintained at the current level as applicable for FY12. The State Government would provide additional required amount as subsidy to HPSEBL for this purpose.
- 8.84 In view of the in-principle decision of the Government of Himachal Pradesh of granting subsidy to domestic and agricultural consumers for the Financial Year 2012-13 to the tune of approximately Rs 70 Crores additional to the subsidy amount granted for the previous year i.e. FY 2011-12, in accordance with provisions of Section 65 of the Electricity Act, 2003, the Commission in terms of sub-regulation (5) of Regulation 42 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 in giving effect to the subsidy hereby makes the following provisions:
- (a) The effective energy charges for Domestic Supply category, as proposed by the GoHP after accounting for Government subsidy, shall be as given below:

Table 154: Subsidized tariff for Domestic category

Description	Units/month	Approved Tariff for FY13 (Rs/kWh)	GoHP Subsidy for FY13 (Rs./kWh)	Effective Tariff after subsidy (Rs/kWh)
BPL Consumers	0-40	2.50	1.80	0.70
Other Consumers	0-40	2.85	1.85	1.00
	0-125	3.00	1.90	1.10
	126-250	3.90	1.70	2.20
	Above 250	4.00	0.75	3.25
	Prepaid Consumers	3.00	1.90	1.10

- (b) With respect to agricultural consumers under Water and Irrigation Pumping Supply (WIPS) category, the energy charges shall be Rs 0.50 per kWh to the consumer category up to 20 kW under single part tariff and Rs. 0.50 per kVAh only for LT category under two part tariff. These revised energy charges on the account of Government subsidy would only be applicable to agricultural and allied activities, and which are paid for by individuals/ user groups.
- (c) The above revised tariffs in respect of Domestic and Agricultural consumers shall be effective retrospectively from April 1, 2012. HPSEBL shall give appropriate adjustments in consumer bills for the subsidy amount.

The Commission orders that subsidy amount shall be paid in advance to the HPSEBL as per the provisions of Section 65 of the Electricity Act, 2003, and reconciled after every quarter. HPSEBL is directed to submit quarterly report regarding the payment of subsidy as well as the outstanding amount, if any. In case the State Government fails to pay the subsidy, as per the provisions of Section 65 of the Act, the tariffs in respect of above two categories shall stand reverted back to the original tariff, as approved by the Commission in this tariff order.

A9: DIRECTIONS AND ADVISORIES

- 9.1 In order to provide quality supply and services by the HPSEBL to the consumers of Himachal Pradesh and to improve the efficiency and productivity of the HPSEBL, the Commission in its previous Tariff Orders had issued various Directions to the HPSEBL. The Commission had regularly been reviewing the progress in implementation of these Directions.
- 9.2 The Commission in the MYT Order dated July 19, 2011, had directed that during the Second Control Period, the carried forward and the new Directions shall be implemented and monitored meticulously by the HPSEBL. The Commission shall regularly review the progress against each Direction.

Status of Compliance of Previous Directions as submitted by HPSEBL

Some of the appreciable performances of the utility are:-

- 9.3 HPSEBL has been able to reduce Transmission and Distribution (T&D) losses by 2% from 14.5% in FY09 to 12.66% in FY11, leading to saving of about Rs 30.00 Crores per annum in power purchase cost.
- 9.4 Although assets mapping and valuation is progressing satisfactorily, yet mapping and valuation of assets transferred to HPPTCL, HPPCL and SLDC should be accomplished at the earliest in first phase so that transfer process is completed early.
- 9.5 HPSEBL has taken very good initiative in procurement of renewable power under REC mechanism which will go a long way in promoting generation and also procuring power at cheaper rates for the benefit of consumers in the State.
- 9.6 HPSEBL has been able to fulfill its renewable power purchase obligation.

However, areas of serious concerns are very high T&D losses in the rural areas and unsatisfactory performance/outcome of IT Projects particularly computerized billing, ERP and Asset Mapping and reevaluation which requires special attention of management and if performance and outcomes for FY13 continue to be unsatisfactory, commission may consider disallowing certain costs/investment of these projects.

New Directives Issued in this Order

- 9.7 In view of new developments and experience over the year, the Commission considers it desirable to issue the following fresh directions:-

Operationalising Open Access in distribution system

- 9.8 In accordance with the provisions of Section 42 of the Electricity Act, the Ministry of Power letter dated 30.11.2011 and the Report of the Second Task Force under the chairmanship of Sh. B.K. Chaturvedi, Member Planning Commission, on measures for operationalising open access in Power Sector – Jan 2012, electricity pricing for consumers requiring power above 1 MW will be deregulated and the State Commission will determine only Wheeling tariff and cross subsidy surcharge,

including additional surcharge, if any. The matter was discussed in State Advisory Committee meeting held on February 28, 2012 and objections and comments of the Stake holders were invited through public notice and in the public hearing held by Commission on March 6, 2012. There was a consensus among the stakeholders i.e. consumers, HPSEBL and State Government, that since the State has a large number of consumers above 1 MW load involving about 50% of total electricity consumption at current level, it would need adequate preparedness on the part of DISCOM, SLDC and consumers and therefore operationalising open access to these consumers w.e.f. April 1, 2012 will not be smooth.

9.9 The estimated number of consumers and contract demand is as under:-

Consumers above 1 MVA Sanctioned Contract Demand									
Category		11/15/22 kV		33 kV		EHT (66kV & above)		Total	
		Nos.	Demand (MVA)	Nos.	Demand (MVA)	Nos.	Demand (MVA)	Nos.	Demand (MVA)
1.	Industrial	74	112	81	249	32	388	187	749
2.	Bulk	12	40	5	10	0	0	17	50
3.	Water pumping	13	36	2	5	0	0	15	41
4.	Non-Domestic Non- Commercial	6	13	0	0	0	0	6	13
5.	Commercial	4	6	0	0	0	0	4	6
6.	Others	6	6	1	6	0	0	7	12
	Total	115	213	89	270	32	388	236	871

9.10 The total energy requirement will be about 4000 MU, which is about 50% of the total of the State.

9.11 In view of position discussed above, the Commission directs that:-

- (a) The tariff petition for FY 2013-14 will be in two parts. Part-A shall contain requirements of total ARR and retail supply tariff for consumers requiring power up to 1 MW (appropriate conversion in MVA would be done) and tariff for standby supply to Open Access consumers. Part-B will be for wheeling tariff and cross subsidy surcharge, including additional surcharge, if any.
- (b) An objective, transparent and equitable mechanism for intra-state supply of surplus power to Open Access consumers as per Section 49 of the Act and a transparent and competitive mechanism for disposal/sale of surplus power outside the State be evolved by HPSEBL.
- (c) Metering arrangements and wheeling agreements including supply agreement under Section 49 of the Act, if any, should be done concurrently.
- (d) Capacity enhancement of SLDC as required to handle the additional work of Open Access should be done well in time.

Banking / Procurement of Power

9.12 The Commission has observed that banking arrangements involve Power Grid cost

and open access costs and therefore if banking is considered necessary and prudent way for sale/purchase of power by HPSEBL, it should explore ways and means to avoid or minimize such costs. Ordinarily, HPSEBL has banking arrangements with Punjab and Haryana. BBMB system is owned by partner states and H.P. is one of the partners. Similarly H.P. has share in Shanana and Ranjit Sagar project. It may be possible to bank entire share of H.P. in BBMB system with Punjab/Haryana during June to September and take in return during winter at Dehar or Ganguwal or Pong as per load requirements. This arrangement does not involve Power Grid and hence there will be savings on power grid costs and losses for both H.P. and Punjab/Haryana. Similarly entire share of H.P. in Ranjit Sagar and Shanana could be given to Punjab during May to October and in return get power from Shanana at Bassi/Kangra during winters. Similar arrangements can be explored for H.P.'s share in Yamuna projects.

- 9.13 There are certain CPSU generating stations where the cost of power is high, like gas based stations, Rihand III, new NHPC project, Tehri project etc. H.P. Share from such projects can be sold to other states for a medium term period and in its place cheaper power from other sources could be procured e.g. Government of Himachal Pradesh equity power from NJPS will be cheaper. Task Force of Planning Commission on operationalising open access have suggested that such power could be sold on regulated tariff plus trading margin as fixed by CERC.
- 9.14 HPSEBL has large number of PPAs with power sector CPSUs, UMPPs, bilateral projects and IPPs including SHPs for power purchase and such agreements are likely to increase in future with more PPAs with SHPs under regulated tariff or under REC framework. PPAs provide for rights and obligations on parties and need close watch in each case from time to time particularly with reference to deemed generation, secondary energy, force majeure events, tariff adjustments due to changes in taxes and free power structure, payment conditions etc. Consequent to such PPAs, power availability will also increase substantially over time and therefore, power management i.e. planning, procurement and disposal of surpluses will assume critical importance impacting upon the finances and earnings of the utility. Hence, there is a need for capacity building and institutional mechanism for decision making and monitoring, comprising of a multidisciplinary core team of senior professionals with delegations and accountability for day to day affairs and a Standing Committee of management for decision making and monitoring.

Pension contribution of deputationists

- 9.15 A large number of HPSEBL employees are on deputation/secondment in PSUs, CPUs, Government Departments, on foreign service, etc. However, pension contribution of such employees is not being received from all the borrowing organisations. As per State Government policy, pension contribution is not needed where deputation is with State Government Departments or PSUs. Now, since HPSEBL is a commercial organisation, it should review its policy and obtain pension contribution from borrowing PSUs including HPERC because PSUs in power sector are also commercial organizations. With respect to those posted in State Government Departments, the matter could be placed before BoD as to whether such contributions should be obtained from those who are on secondment with Government Departments. Pension contribution should be deducted from employee cost in the ARR because there is no separate fund in HPSEBL for pension as of now.

ANNEXURE-I

SCHEDULE OF GENERAL AND SERVICE CHARGES

S. No.	Description	Approved by the Commission
1.		
A. Meter Inspection and Testing Charges (Challenge of Correctness of Meter by Consumer)		
(i)	Single Phase	Rs. 55/-per meter
(ii)	Poly phase (LT)	Rs. 225/-
(iii)	HT or special meter (MDI or Trivector Meter)	Rs.550/-
		Rs. 1100/ with CT/ PT combined unit
Note:- This amount shall be deposited by the consumer along with his application for the inspection of the meter and will be refunded to him in case the meter is not found to be correct with in the prescribed limits.		
B. Testing Charges of Transformers or other equipment of consumer or private party		
(I)	Protective Relays:	
	Testing including current and Time Setting of protective relays	Rs.1100/-per Relay
(II)	Power and Distribution Transformers	
(a)	Insulation resistance tests of winding	Rs. 770/-per Transformer
(b)	General checking of breather and other accessories	Rs. 400/-per Transformer
(c)	Dielectric strength test of oil	Rs.220/-per Transformer
(d)	Testing of buchholz relay and temperature indicators functioning	Rs.800/-each
(III)	Circuit Breaker 400 volts and 11/33kV	
	General checking of breaker and testing of the tripping mechanism	Rs. 800/-each
(IV)	Current transformer and Potential transformers and meters:	
(a)	Testing of single phase LT current transformer	Rs.165/-each
(b)	Current Testing of 3 phase LT current transformer	Rs. 440/-each
(c)	Testing of single phase 11kV & 33kV CTs	Rs. 550/-each
(d)	Testing of three phase 11kV & 33kV CTs	Rs.1100/-each
(e)	Testing & recalibration of single phase LT energy meter	Rs. 90/-per meter
(f)	Testing & recalibration of three phase energy meter w/o CT	Rs. 330/-per meter
(g)	Testing & recalibration of three phase energy meter With CT	Rs.660/-per meter
(h)(i)	Testing & recalibration of HT/EHT metering equipment	Rs. 2000/-per meter
(h)(ii)	With CT/PT combined unit	Rs. 2500/-per unit
(i)	Testing & recalibration of maximum demand indicator	Rs. 660/-per meter
(j)	Testing & adjustment of voltmeter/ ammeter	Rs.165/-each
(V)	Checking of Capacitors (other than initial checking) on consumer's request:	
(a)	At 400 volts	Rs. 110/-per job
(b)	At 11 kV and above	Rs. 110/-per job
(VI)	General	
(a)	Dielectric strength of oil of various equipment	Rs. 220/- per sample

S. No.	Description	Approved by the Commission	
(b)	Earth test of substation	Rs. 220/- per earth	
(c)	Insulation resistance of cables/insulation of various equipment /installations	Rs. 220/- per cable/equipment	
<p>C. Testing charges at the time of routine periodical inspections or first test and inspection of new installation which includes protection and control of complete sub-station (including Transformers, Capacitor Banks, Meter and Metering equipment having connected load >50 kW and/or supply voltage 11 kV or higher) and inclusive of all manpower required</p> <p>(Note: In accordance with Rule 46 of the Indian Electricity Rules, 1956, where an installation is already connected to the supply system of the supplier, every such installation shall be inspected and tested at intervals not exceeding five (5) years (known as routine periodical inspections and testing).</p>			
(i)	11/22 kV	Sub Stations	Rs. 10000/-
(ii)	33 kV		Rs. 15000/-
(iii)	66 kV		Rs. 50000/-
(iv)	132 kV		Rs. 100000/-
(v)	220 kV		Rs. 300000/-
(vi)	SHP Capacity (up to 2.5 MW)	Small Hydro Plants	Rs. 25000/-
(vii)	SHP Capacity (greater than 2.5 MW)		Rs 50,000/-
D.	Visiting charges		
	Visiting charges for Officers and staff to Consumers premises for testing of equipments(other than C above)		Rs. 3500/- per day for complete team PLUS actual journey charges as per out turn of vehicle
Remarks: -			
(i) The charges mentioned under 'C' above shall be charged for the actual Periodical Inspection done and shall be on per inspection basis only.)			
(ii) Visiting charges mentioned under D above include the visiting charges of M&T staff as well.			
(iii) Charges for HPSEBL's maintenance/testing Vans or Trucks if needed for the purpose will be extra. All Charges shall be got deposited before undertaking the testing work.			
(iv) Complete testing of 11kV, 22kV and 33 kV connections as per item C above shall be conducted before the release of HT connection.			
(v) Test reports on suitable forms will be issued by the operation sub-divisions/M&T Lab, which will be produced by the prospective consumer along with the wiring Contractor's test report.			
(vi) The insulation, earth and oil tests as well as general checking and inspection should be performed by the operation sub-division. Other tests requiring M&T Lab. facilities shall be arranged by the operation sub-division/division in the nearest M&T Lab., or by arranging the visit of the M&T staff to the consumer's premises.			
(vii) The requests for testing shall be entertained by the concerned operation sub-division which will be responsible for arranging all tests including tests by the M&T Lab and also for the recoveries of all the charges, including those of M&T Lab			
(viii) The amount recovered from consumers for testing carried out by the M&T Lab shall be adjusted through inter divisional adjustment between the operation divisions and the M&T divisions.			
2. Changing the position of meter at the request of consumer			
(i)	Single phase		Rs.45/-
(ii)	Poly phase (LT) without CT		Rs. 220/-

S. No.	Description	Approved by the Commission
	Poly phase (LT) with CT	Rs.440/-
(iii)	HT or special meter	Rs. 1100/-
3. Resealing charges		
(i)	Meter cup board	Rs.25/-
(ii)	Meter Cover or Terminal Cover (single phase)	Rs. 110/-for meter terminal cover and full cost of the meter where M&T seal is found broken.
(iii)	Meter cover or terminal cover (three phase)	Rs. 350/-for meter terminal cover and full cost of the meter where M&T seal is found broken.
(iv)	Cutout (where it has been independently sealed)	Rs. 25/-
(v)	Maximum demand indicator	Rs. 550/-
(vi)	Potential fuse(s) time switch/CT chamber	Rs. 550/-
4. Monthly meter/equipment rentals:		
(i)	Single phase energy meter low tension	Rs. 15/- per month
(ii)	Polyphase energy meter low tension (up to 50 Amps.)	Rs. 30/- per month
(iii)	a) Polyphase low tension meters with CTs (up to 20 kW)	Rs. 35/- per month
	b) Polyphase low tension meters with CTs(above 20 kW)	Rs. 50/- per month
(iv)	Polyphase 11kV meter with CT/PT without any breaker of HPSEBL	Rs. 550/-per month
(v)	Polyphase 11kV meter with CT/PT with one 11kV breaker of HPSEBL	Rs. 4000/- per month
(vi)	Single phase Pre Paid energy meter low tension	Rs 50/- per month
(vi)	Polyphase 33,22 kV meter with CT/PT without any 33, 22 kV breaker of HPSEBL	Rs. 800/- per month
(vii)	Polyphase 33,22 kV meter with CT/PT with one 33, 22 kV breaker of HPSEBL	Rs. 7000/- per month
(viii)	Polyphase meter with CT/PT with or without circuit breaker of voltage 66 kV and above	
(a)	Polyphase 66 kV with CT/PT without any 66 kV circuit breaker of HPSEBL	Rs. 1300/- per month
(b)	Polyphase 66 kV with CT/PT with 66 kV circuit breaker of HPSEBL	Rs. 13500/- per month
(c)	Polyphase 132 kV with CT/PT without any 132 kV circuit breaker of HPSEBL	Rs. 2500/- per month
(d)	Polyphase132 kV with CT/PT with 132 kV circuit breaker of HPSEBL	Rs. 20000/- per month
5. Reconnection of supply		
(I)	Industrial consumers (connected load <= 50 kW)	Rs. 100/-
(ii)	Industrial consumers (connected load > 50 kW and <= 100 kW)	Rs. 500/-
(iii)	Large power industrial consumers (connected load >100 kW)	Rs. 1000/-
(iv)	All other categories of consumers	Rs. 40/-

S. No.	Description	Approved by the Commission
6. Fuse replacement:		
	Replacement of fuse(s) pertaining to HPSEBL/ Consumer	Rs. 5/-
7. Testing consumer's installation:		
(i)	The first test and inspection of a new installation or of an extension to the existing installation	Nil
(ii)	For every subsequent visit for the test and inspection of a new installation or of an extension to the existing installation	
(a)	Single Phase LT	Rs. 60/-
(b)	Three phase (LT)	Rs.100/-
(c)	Three phase (HT)	Rs. 500/-
	Note:- These charges shall be deposited by the consumer in advance before every subsequent visit for inspection of installation	
8. Replacement of meter card:		
(i)	Domestic/NDNCS/Commercial	Rs.10/- in each case
(ii)	All other categories of consumers	Rs.10/-in each case
9. Replacement of meter glass:		
(i)	Replacement of broken glass of meter cup board when the consumers is considered to have broken it	Rs. 50/-
(ii)	Replacement of broken or cracked glass of meter when there is no evidence of consumer having broken it or tempered with the meter	Rs. 50/-
(iii)	Replacement of broken glass of meter when the consumer has tempered with or broken by consumer:	
(a)	Single phase	*Rs.500/-or the actual cost of meter which ever is higher
(b)	Three phase	Rs.1500/-*or the actual cost of meter, which ever is higher.
	Note-1: This amount will be charged without prejudice to the right of HPSEBL to take any other action or impose penalty on the consumer as per the prevailing rules. Since in such cases, the meter has to be sent to M&T lab, the meter changing charges shall be levied additionally.	
	*- This is without prejudice to HPSEBL's right to recover the estimated cost of theft of energy. Principles of natural justice shall invariably be followed and opportunity of being heard given to the consumer before levying such charge.	
10. Supply of duplicate copies of the bills/ review of bills:		
(i)	Review of bills (all Categories)	Nil
(ii)	Supply of duplicate copies of bills	
(a)	Domestic/NDNCS/Commercial	Rs. 5/-
(b)	Medium and large power supply	Rs. 5/-
(c)	All other categories	Rs. 5/-

S. No.	Description	Approved by the Commission
(iii)	Supply of duplicate copies of Demand notice:	
(a)	Domestic consumers	Rs.10/-
(b)	Non residential consumers	Rs.10/-
(c)	Small Industrial and Agriculture consumers	Rs.10/-
(d)	Medium Industrial consumers	Rs.10/-
(e)	Large Industrial and other categories of consumers	Rs.10/-
(iv)	Supply of detailed print out of the meter recording	Rs.50/-
11. Attendants for functions		
	Deputing attendants (line staff) for all functions.	
	(Per Attendant per day per function limited to 8 hours/day)	Rs. 250/-
12. Cost of Application/Agreement Form and wiring Contractor's test report forms:		
(i)	Domestic Supply	Rs. 15/-per copy per form
(ii)	Industrial supply (Small, Medium and Large)	Rs. 15/-per copy per form
(iii)	For all other categories	Rs. 15/-per copy per form
13. Processing fee for PLE and for change in contract demand		
i)	Fee for change in Contract Demand (CD)	Rs. 25/- per kVA of the changed quantum of CD
ii)	Fee for seeking peak load exemption (PLE)	Rs. 50/- per kVA of the quantum of load for which PLE sought. The fee is to be charged once in a financial year.

ANNEXURE-II

HIMACHAL PRADESH STATE ELECTRICITY BOARD LIMITED

*NOTIFICATION *

NO.	DATED: -
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In pursuance of the tariff order dated _____ issued by the Himachal Pradesh Electricity Regulatory Commission; the Himachal Pradesh State Electricity Board Limited is pleased to notify the following Schedule of Tariff and the general conditions of tariff for supply of electricity to various categories of consumers in Himachal Pradesh with effect from **1st April 2012**.

PART - I GENERAL

- A. This Schedule may be called the **'Himachal Pradesh State Electricity Board Limited Schedule of Electricity Tariff, 2012'**.
- B. This Schedule of Tariff shall come into force with effect from **1st April 2012** and will be applicable through out the State of Himachal Pradesh.
- i) Provided that the arrears if any, arising on account of revised tariffs for the billing month of April 2012, shall be adjusted in the future bills of the respective consumers in a single instalment.
- ii) Provided further that this Tariff Order shall not be applicable to consumers who have been permanently disconnected prior to the date of issue of this Order unless such consumers get their connections re-instated in the future.
- C. The rates mentioned in this Schedule of Tariff are exclusive of electricity duty, taxes and other charges already levied or as may be levied by the Government of Himachal Pradesh from time to time.
- D. This tariff automatically supersedes the existing tariff that was in force with effect from 1st April, 2011 except in such cases where 'Special Agreements' have otherwise been entered into for a fixed period, by HPSEBL with its consumers. Street Lighting Agreements shall however, not be considered as 'Special Agreements' for this purpose and revised tariff as per schedule **'SLS'** of this Schedule of Tariff shall be applicable.
- E. This Schedule of Tariff is subject to the provisions of related Regulations notified by the Commission, from time to time, and the **'Schedule of General and Service Charges'**.

- F. Force Majeure Clause - In the event of lockout, fire or any other circumstances considered by the HPSEBL to be beyond the control of the consumer, he shall be entitled to proportionate reduction in consumer service charge, demand charge or any other fixed charge, if applicable, provided he serves at least 3 days notice on the supplier for shut down of not less than 15 days duration.
- G. Standard Supply Voltage - As specified under each consumer category of this 'Schedule of Tariff', the 'Standard of Supply Voltage' (in kV) is the voltage of supply of electricity to consumers based on the respective consumer's connected load (measured in kW) to be adopted or followed by the HPSEBL
- i) either at the time of supply of electricity to prospective consumers or
 - ii) on request of existing consumers for change of their supply voltage to a higher voltage level as may be available on the relevant electrical network system of the HPSEBL or
 - iii) at the time of application of 'Lower Voltage Supply Surcharge' (LVSS) or 'Higher Voltage Rebate' (HVR), to its existing consumers categories in their respective bills.
- H. Single Point Supply - The various tariffs referred to in this Schedule are based on the supply being given at a single voltage and through a single delivery and metering point. Supply given at other voltages and through other points, if any, shall be separately metered and billed.
- I. Lower Voltage Supply Surcharge (LVSS) – Consumers availing electricity supply at a voltage lower than the 'Standard Supply Voltage' as specified under the relevant category shall, in addition to other charges, be also charged a 'Lower Voltage Supply Surcharge' (LVSS) at the rates given in the following Table on only the amount of energy charges billed, for each level of specified step down (as given in following table) from the 'Standard Supply Voltage' to the level of Actually Aailed Supply Voltage.

Standard Supply Voltage	Actually Aailed Supply Voltage	LVSS
11kV or 15kV or 22 kV	1Ø 0.23 kV or 3Ø 0.415kV OR 2.2 kV	5%
33 kV or 66 kV	11 kV or 15kV or 22 kV	3%
>= 132 kV	33 kV or 66 kV	2%

Note:-

- 1) In such cases, the tariff applicable at the lower voltage (i.e. voltage at which connection is actually availed) shall be applicable and the LVSS shall be levied in addition to the said tariff.
 - 2) LVSS shall not be applicable to such HT consumers (11kV or 15kV or 22 kV or 33 kV) or to such EHT consumers (66 kV and above) who were already existing on date 01.12.2007 and had been given electricity connections at a voltage less than the specified Standard Supply Voltage. However, in case any extension of load is sanctioned in such cases after 1.12.2007 the 'Standard Supply Voltage' and consequently the LVSS shall be applicable as specified.
 - 3) Here the expression"for each level of specified step down"..... as an example shall mean that in a particular case if the Standard Supply Voltage is 33kV or 66 kV and the Actually Aailed Supply Voltage is less than 11 kV, then the number of step downs shall be two (2) and the rate of LVSS applicable shall be 8% (5%+3%).
- J. Higher Voltage Supply Rebate (HVSRR) – Consumers availing electricity supply at a

voltage higher than the ‘Standard Supply Voltage’ as specified under the relevant category, shall be given a ‘Higher Voltage Supply Rebate’ at the rates given in the following Table on only the amount of energy charges billed, for each level of specified step up (as given in the following Table) from the ‘Standard Supply Voltage’ to the level of Actually Aailed Supply Voltage.

Standard Supply Voltage	Actually Aailed Supply Voltage	HVSR
1Ø 0.23 kV or 3Ø 0.415 kV OR 2.2 kV	11kV or 15kV or 22 kV	5%
11kV or 15kV or 22 kV	33 kV or 66 kV	3%
33 kV or 66 kV	>= 132 kV	2%

Note:-

- 1) In such cases, the tariff applicable at the higher voltage (i.e. voltage at which connection is actually availed) shall be applicable and the HVSR shall be allowed in addition the said tariff.
- 2) Here the expression”for each level of specified step up”..... as an example shall mean that in a particular case if the Standard Supply Voltage is less than 11 kV and the Actually Aailed Supply Voltage is 33kV or 66 kV, then the number of step downs shall be two (2) and the rate of HVSR applicable shall be 8% (5%+3%).

K. Lower Voltage Metering Surcharge (LVMS) - In respect of consumers, for whom the metering (for maximum demand (kVA) or energy consumption (kWh or kVAh) or both) instead of being done on the higher voltage side of the transformer at which the supply had been sanctioned by the HPSEBL, is actually done on the lower voltage side of the transformer due to non-availability of higher voltage metering equipment or its unhealthy operation, such consumers shall in addition to other charges, be also charged “Lower Voltage Metering Surcharge” (LVMS) at the rate of 2% on the amount of only the energy charges billed.

L. Late Payment Surcharge (LPS) - Surcharge for late payment shall be levied at the rate of 2% per month or part thereof, on the outstanding amount excluding electricity duty/ taxes for all the consumer categories.

M. Peak Load Exemption Charge (PLEC) - Electricity Supply shall, normally, not be available to the consumers covered under the categories ‘Small and Medium Industrial Power Supply’ (SMS), ‘Large Industrial Power Supply (LIP) and ‘Water and Irrigation Pumping Supply’ (WIPS), of this schedule of tariff during the peak load hours of the day. The duration of peak load hours in summers and winters shall be for a period of three hours in the evening. The duration of peak hours shall be as follows:-

- a) Summer (April to October) 7.00 PM to 10.00 PM
- b) Winter (November to March) 6.30 PM to 9.30 PM

However, where the above categories of consumers want to avail of exemption to run their unit during the peak load hours for any special reason, a separate sanction for the exemption (in kW or computed in kVA assuming 0.9 power factor), for running the unit (full load or part thereof), from the HPSEBL shall be required. This sanction (for full load or part thereof) shall be issued at the request of the consumer and shall be subject to availability of power in the area during the above specified peak hours.

Consumers requesting for peak load exemption (PLE) must be provided with suitable tri-vector meters which are capable of recording the maximum demand for every 30 minute block in twenty four (24) hours of the day for a whole month, apart from recording the energy consumption. However, any consumer possessing sanction for peak load exemption (for full load or part thereof) and without an installed tri-vector meter or a suitable meter, would also need to get the meter installed within three months of issue of this notification.

Where sanction for running of unit (for full load or part thereof) during peak load hours is already issued, no further sanction shall be required to the extent of the load for which the exemption has already been obtained. All consumers who have been given exemption to run their units (for full load or part thereof) during the peak load hours shall in addition to other charges be also charged at the rate specified in the relevant category of this schedule of tariff 'Peak Load Exemption Charge', in two parts which are Demand Charges (in Rs/kVA/month) and Energy Charges (Rs/kVAh).

N. Peak Load Violation Charge (PLVC) –

- (i) Consumers, in the categories 'Small and Medium Industrial Power Supply' (SMS), 'Large Industrial Power Supply (LIP) and 'Water and Irrigation Pumping Supply' (WIPS) who are covered under two part tariff and who have sanction of Peak Load Exemption (PLE) from the HPSEBL for running part load only during the peak load hours of the day are found using load in excess of the exemption, shall in addition to the Peak Load Exemption Charges (PLEC) be also charged Peak Load Violation Charges (PLVC) at the rates specified in the relevant Schedule of Tariff for the Energy (Rs/kVAh) and Demand (Rs/kVA/month) for the days of violation only.
- (ii) Consumers, who are covered under single part tariff and have meters installed capable of recording consumption (kVAh) and demand (kVA) but do not have sanction for Peak Load Exemption (PLE) from the HPSEBL for running their loads during the peak load hours of the day and are found doing so, shall in addition to the Peak Load Exemption Charges (PLEC) as applicable to the two part tariff consumers, be also charged Peak Load Violation Charges (PLVC) applicable for the two part tariff consumers at the rates specified in the relevant Schedule of Tariff for the Energy (Rs/kVAh) and Demand (Rs/kVA/month) for the days of violation only.
- (iii) Consumers, who are covered under single part tariff but do not have meters installed capable of recording consumption (kVAh) and Demand (kVA) and do not have sanction for Peak Load Exemption (PLE) from the HPSEBL for running their loads during the peak load hours of the day and are found doing so, shall for 50% of the consumption for the month be charged at normal rates (Rs/kWh) and the remaining 50% of the consumption shall be charged a PLVC rate that will be three (3) times the normal rate.
- (iv) Violation in excess of five times in a year shall result in disconnection of the defaulting consumer without prejudice to recover such charges.
- (v) No Higher Voltage Supply Rebate (HVSr) shall be applicable/achievable in respect of the consumption done as violation during peak load hours of the day.

- O. Demand Charge (DC) – Consumers under two (2) part tariff, whose energy consumption during normal load hours of the month is billed/ charged in Rs/kVAh, shall in addition to the kVAh charges, be also charged at the rate specified, the ‘Demand Charges’ (in Rs/kVA/month), calculated on the actual Maximum Demand (in kVA) recorded on the energy meter during any consecutive 30 minute block period of the month or at 90 % of the Contract Demand (in kVA) or in the absence of Contract Demand, calculated at 80% of the Connected Load (computed in kVA assuming 0.9 power factor) whichever is higher.

NOTE: During the actual number of days of billing in any period, the above mentioned parameters i.e. actual recorded Maximum Demand, Contract Demand or connected load in absence of contract demand as the case may be and the prescribed respective rates of charges in the relevant schedule of tariff alone shall form the basis for calculation of Demand Charges and the licensee, based on the number of days of billing in excess or short of a month (of 28 or 29 or 30 or 31 days), shall not apply any other factor other than mentioned in para ‘O’ above, that may alter or vary either of these parameters in any way.

- P. Contract Demand Violation Charge (CDVC) – In the event, the actual Maximum Demand (in kVA) recorded on the energy meter during any consecutive 30 minute block period of normal load hours of the month, exceeds the Contract Demand (in kVA) or in the absence of the Contract Demand, exceeds 80% of the Connected Load (computed in kVA assuming 0.9 power factor), the consumer shall be charged ‘Contract Demand Violation Charges’ (CDVC) (in Rs/ kVA) at a rate which shall be three (3) times the rate specified for Demand Charge (DC) (referred to in para ‘O’) to the extent the violation has occurred in excess of the Contract Demand or in the absence of the Contract Demand to the extent the violation has occurred in excess of 80% of the Connected Load (computed in kVA assuming 0.9 power factor).
- Q. Disturbing Load Penalty (DLP) - In case where there is unauthorized use of mobile welding sets, the consumer will pay by way of penalty, Rs. 20 per kVA of the load rating of welding, set per day, in addition to the energy charges.

NOTE: Authorization shall mean authorization (temporary or permanent) to a consumer by the designated office of the licensee in whose area the supply to the consumer exists and shall not be assumed as authorization of any form from local or other bodies.

- R. Night Time Concession (NTC) – Night Time Concession (in Rs/kVAh) on consumption of energy (in kVAh) from 22:00 hours to 06:00 hours shall be available to consumers with connected load greater than 20 kW, at the rate specified in the relevant consumer category under this Schedule of Tariff. However such consumers must be provided with suitable tri-vector meters capable of recording energy during different times of the day.
- S. Seasonal industries - In this schedule, unless the context otherwise provides, seasonal industries mean the industries which by virtue of their nature of production, work only during a part of the year, continuously or intermittently up to a maximum period of 7.5 months in a year, such as atta chakkis, saw mills, tea factories, cane crushers,

irrigation water pumping, rice husking/hullers, ice factories, ice candy plants and such other factories as may be approved and declared as seasonal by the HPSEBL from time to time. Seasonal industries shall be governed under the following conditions: -

- i) The consumer shall intimate in writing to the concerned Sub-Divisional Officer of the HPSEBL, one month in advance, the months or the period of off-season during which he will close down his plant(s).
- ii) The minimum working period for a seasonal industry in a year shall be taken as 4 (four) months.
- iii) During the off-season, the entire energy consumption and the power utilised for maintenance and overhauling of the plant and the factory lighting will be charged at "commercial supply" tariff.
- iv) The consumer service charge, demand charge or any other fixed charge shall be levied for the seasonal period only.

T. Power Factor Surcharge (PFS) -

- i) If at any point of time, the power factor of consumers specified under the relevant category of Schedule of Charges and without an installed and having connected load up to and including 20 kW, is checked by any means and found to be below 0.90 lagging, a surcharge @ 10% on the amount of energy charges irrespective of voltage of supply shall be charged from the consumer from the month of checking and will continue to be levied till such time the consumer has improved his power factor to at least 0.90 lagging by suitable means under intimation to the concerned Sub Divisional Officer who shall immediately get it checked.
- ii) The monthly average power factor will be calculated on readings of Tri-Vector Meter/ Bi-Vector Meter/ Two Part Tariff Meters as per formula given as follows and shall be rounded up to two decimal places.

$$\text{Power Factor} = \text{kWh} / \text{kVAh}$$

In case of defective tri-vector meter/bi-vector meter/two part tariff meter, power factor will be assessed on the basis of average power factor recorded during last three consecutive months when the meter was in order. In case no such readings are available then the monthly average power factor of three months obtained after installation of correct tri-vector meter/ bi-vector meter/ two part tariff meter shall be taken for the purpose of power factor surcharge during the period the tri-vector meter/ bi-vector meter/ two part tariff meter remained defective.

- iii) The said power factor surcharge shall be independent of the supply voltage.
- iv) The consumer service charge, demand charge or any other fixed charge shall

not be taken into account for working out the amount of power factor surcharge, which shall be levied on the amount of kWh energy charges only.

- v) No new supply to L.T. installations with induction motor(s) of capacity above 3 H.P and/ or welding transformers above 2 kVA shall be given unless shunt capacitors of appropriate ratings are installed to the entire satisfaction of the HPSEBL.

U. Replacement of Defective/Missing/damaged Shunt Capacitors -

- i) It will be obligatory on the part of the consumer to maintain capacitors in healthy conditions and in the event of its becoming burnt/ damaged he shall have to inform the Sub Divisional Officer concerned immediately in writing and also to get the defect rectified within a maximum period of one month from the date the capacitor has gone defective.
- ii) In case shunt capacitor(s) is/ are found to be missing or inoperative or damaged, one month notice shall be issued to the consumer for rectification of the defect and setting right the same. In case the defective capacitor(s) is/are not replaced / rectified within one month of the issue of the notice, a surcharge @ 10% per month on bill amount shall be levied w.e.f. the date of inspection to the date of replacement of defective/damaged missing capacitors.

- V. In case any dispute regarding interpretation of this tariff order and/or applicability of this tariff arises, the decision of the Commission will be final and binding.

DEFINITIONS

1. **Act:** means The Electricity Act, 2003 as amended from time to time.
2. **Average Power Factor:** means the ratio of kWh (kiloWatt hour) to the kVAh (kilo Volt Ampere hour) registered during a specific period.
3. **HPSEBL:** means the Himachal Pradesh State Electricity Board Limited.
4. **Commission:** shall mean the Himachal Pradesh Electricity Regulatory Commission.
5. **Connected Load:** expressed in kW, means aggregate of the manufacturer's rated capacities of all energy consuming devices or apparatus connected with the distribution licensee's service line, on the consumer's premises, which can be simultaneously used;
6. **Consumer Service Charges:** shall mean the fixed amount to be paid by the consumer as defined in the respective tariff schedule.
7. **Contract demand:** expressed in kVA units means the maximum demand contracted by the consumer in the agreement with the licensee and in absence of such contract, the contract demand shall be determined in accordance with the relevant sections of this Tariff Order.
8. **Demand Charges:** for a billing period shall mean the amount chargeable based upon the recorded maximum demand in kVA or the contract demand; whichever is higher and shall be calculated at the rates prescribed in this Tariff Order and shall be in addition to the energy charges and other fixed charges wherever applicable;
9. **Energy Charges:** expressed in Rs/kW or Rs/kVAh for a billing period shall mean the amount chargeable in rupees based on the quantity of electricity supplied measured in (kWh or kVAh) and calculated at the rates prescribed in this Tariff Order. The Demand or other fixed charges, wherever applicable, shall be in addition to the energy charges.

Note: During the actual number of days of billing in any period, the above mentioned parameters i.e. energy (in kWh or kVAh) and the prescribed respective rates of charges in the relevant schedule of tariff, alone, shall form the basis for calculation of energy charges and the licensee, based on the number of days of billing in excess or short of a month (of 28 or 29 or 30 or 31 days), shall not apply any other factor other than mentioned in para '9' above, that may alter or vary either of these parameters in any way
10. **Maximum Demand:** means the highest load measured in kVA or kW at the point of supply of a consumer during consecutive period of 30 minutes or as laid down by the Commission, during the month;
11. **Rules:** means the Indian Electricity Rules, 1956 to the extent saved by the Act and the rules made under the Act thereafter.
12. **Sanctioned Load:** means the load expressed in kW/kVA of the consumer, which the licensee has agreed to supply, from time to time, in the agreement.
13. **Schedule:** shall mean this Tariff Schedule.

14. **State:** means the State of Himachal Pradesh;
15. **Supplier:** shall mean the Himachal Pradesh State Electricity Board Limited.
16. For the purpose of this tariff order, the voltage wise categorization shall be as follows:
- a) **EHT** means the voltage, which exceeds 33,000 volts; under normal conditions subject, however, to the percentage variation allowed under electricity rules;
 - b) **HT** means the voltage higher than 400 volts but not exceeding 33,000 volts under normal conditions, subject, however, to the percentage variation allowed under the electricity rules;
 - c) **LT** means the voltage, not exceeding 230 volts between phase and neutral and 400 volts between phases under normal conditions, subject, however, to the percentage variation allowed under electricity rules;

PART – II - SCHEDULE OF TARIFF

SCHEDULE - DOMESTIC SUPPLY (DS)

1 Applicability

This schedule is applicable to the following consumers:

- a) Consumers using electrical energy for lights, fans, heaters, cooking ranges, ovens, refrigerators, air conditioners, stereos, radios, televisions, mixers, grinders, electric iron, sewing/embroidery/knitting machines, domestic pumping sets and other domestic appliances in a single private house/flat or any other residential premises;
- b) Religious places with connected load up to 5 kW;
- c) Orphanages, homes for old people and homes for destitute;
- d) Working Women Hostels, Hostels attached to the educational institutions if supply is given separately to each hostel and the electricity charges are recovered from the students based on actual consumption;
- e) Leprosy Homes run by charity and un-aided by the Government;
- f) Panchayat Ghars with connected load up to 2 kW;
- g) Patwar Khanas and Kanungoo Bhawans (Government Buildings only) with connected load up to 5 kW;
- h) Monasteries;
- i) “Home Stay Units” in rural areas duly registered with the District Tourism Development Officer; and
- j) Offices of the Himachal Pradesh Senior Citizen Forum.

Note:

- (iv) *Where a portion of the dwelling is used regularly for the conduct of a business, the consumption in that portion shall be separately metered and billed under the appropriate Commercial or Industrial power tariff whichever is applicable. If separate circuits are not provided, the entire supply will be classified under “Commercial Supply.”*
- (v) *Resale and supply to tenants, other flats etc. is strictly prohibited.*
- (vi) *No compounding will be permissible. For residential societies which wish to take a single point supply, this would be permitted, and the energy charges would be divided by the number of such units to determine the relevant slab. Thus if there are 10 dwelling units in a society and the energy consumption in a month is 3000 units, the first 1250 (125x10) units would be charged at Rs 3.00 per kWh, the next 1250 (125*10) at Rs 3.90 per unit and so on.*

2 Character of Service

Connected Load (kW)	Standard Supply Voltage (AC 50 Hz)
<= 50 kW	(1Ø 0.23 kV or 3Ø 0.415 kV) OR 2.2 kV
51 kW up to 2000 kW	11 kV or 15 kV or 22 kV
2001 kW up to 10000 kW	33 or 66 kV

3 Single Part Tariff

a) Consumer Service Charge (Charges-1)

Description	Consumer Service Charge (Rs./Month)
Below Poverty Line (BPL)	10.00
Other consumers	30.00

b) Energy Charge (Charges-2a) [Other Than Pre-Paid Metered]

Description	Slabs (kWh per month)	Energy Charge (Rs./kWh)
Below Poverty Line (BPL)	(up to 40 kWh)	2.50
Others	0-40	2.85
	0-125	3.00
	126-250	3.90
	Above 250	4.00

Note:

1. In the case of **Below Poverty Line** beneficiaries the concessional tariff will be available for use of electricity by these families up to a maximum of 40 units per month. In case this limit is exceeded, the normal domestic tariff slabs of 0-125; 126-250; and above 250 kWh per month respectively will apply.
2. In the case of Domestic Category consumers with consumption in the slabs 126-250; and above 250 kWh per month respectively, the slab rates for 0-40 kWh per month shall **not** apply.

c) Energy Charge (Charges-2b) [Prepaid Meter]

Description	Slabs (kWh per month)	Energy Charge (Rs./kWh)
Prepaid meter consumers	Entire consumption	3.00

Note: Subsidy given by GoHP shall apply to prepaid meter consumers also. Should the GoHP decide to maintain the tariffs at the current levels after subsidy, then the prepaid consumers shall be deemed to be placed at the 0-125 slab of domestic consumers, in respect of entire consumption after State Government subsidy.

4. The effective energy charges for Domestic Supply category, as proposed by the GoHP after accounting for Government subsidy, shall be as follows:

Table 155: Subsidized tariff for Domestic category

Description	Units/month	Approved Tariff for FY13 (Rs/kWh)	GoHP Subsidy for FY13 (Rs./kWh)	Effective Tariff after subsidy (Rs/kWh)
BPL Consumers	0-40	2.50	1.80	0.70
Other Consumers	0-40	2.85	1.85	1.00
	0-125	3.00	1.90	1.10
	126-250	3.90	1.70	2.20
	Above 250	4.00	0.75	3.25
	Prepaid Consumers	3.00	1.90	1.10

5. **Higher Voltage Supply Rebate (HVSR):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
6. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
7. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
8. **Late Payment Surcharge (LPS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
9. **Night Time Concession (NTC):** *Not Applicable.*
10. **Power Factor Surcharge (PFS):** *Not Applicable.*
11. **Disturbing Load Penalty (DLP):** *Applicable as specified under 'Part-1 General of this Annexure II'.*

SCHEDULE - NON-DOMESTIC NON-COMMERCIAL SUPPLY (NDNCS)

1. Applicability

This schedule is applicable to the following consumers:

- a. Government and semi Government offices
- b. Educational Institutions viz. Schools, Universities, ITIs, Colleges, Centre for Institute of Engineers, Sports Institutions, Mountaineering Institutions and allied sports and Libraries Hostels and residential quarters attached to the educational institutions if supply is given at single point.
- c. Religious places such as Temples, Gurudwaras, Mosques, Churches etc. with connected load greater than 5 kW.
- d. Sainik and Govt. Rest Houses, Anganwari workers training centers, Mahila mandals, village community centres
- e. Government Hospitals, primary health centers, dispensaries and veterinary hospitals.
- f. Panchayat Ghars with connected load greater than 2kW.
- g. Patwar Khanas and Kanungoo Bhawans (Government Buildings only) with connected load greater than 5kW
- h. Sarais and Dharamsalas run by Panchayats and Municipal Committees or on donations and those attached with religious places, subject to the condition that only nominal and token amount to meet the bare cost of upkeep and maintenance of the building etc. is being recovered and no rent as such is charged.

Note: In the case of residences attached to the Institutions, as at (b), (f) and (g) above, the same shall be charged at the Domestic Supply (DS) tariff, in cases where the consumer seeks a separately metered connection for the residential portion..

2. Character of service

Connected Load (kW)	Standard Supply Voltage (AC 50 Hz)
<= 50 kW	(1Ø 0.23 kV or 3Ø 0.415 kV) OR 2.2 kV
51 kW up to 2000 kW	11 kV or 15 kV or 22 kV
2001 kW up to 10000 kW	33 or 66 kV
>10000 kW	>= 132 kV

3. Single Part Tariff for connected load <= 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	60.00
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b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	4.45
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4. Two Part Tariff for connected Load > 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	120.00
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b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	4.00
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c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	120.00
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Note: Demand charges would be levied on the actual maximum recorded demand in a month in any 30 minute interval in a month or 90% of the contract demand, whichever is higher.

5. **Higher Voltage Supply Rebate (HVSr):** *Applicable as specified under 'Part-I General of this Annexure II'.*
6. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as specified under 'Part-I General of this Annexure II'.*
7. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as specified under 'Part-I General of this Annexure II'.*
8. **Late Payment Surcharge (LPS):** *Applicable as specified under 'Part-I General of this Annexure II'.*
9. **Contract Demand Violation Charge:** *Applicable as specified under 'Part-I General of Annexure II'*
10. **Night Time Concession (NTC):** *Applicable @ 20 p/kVAh as specified under 'Part-I General of this Annexure II'.*
11. **Power Factor Surcharge (PFS):** *Not Applicable.*
12. **Disturbing Load Penalty (DLP):** *Applicable as specified under 'Part-I General of this Annexure II'.*
13. **Peak Load Exemption Charges (PLEC):** *Not Applicable.*
14. **Peak Load Violation Charges (PLVC):** *Not Applicable.*

SCHEDULE – COMMERCIAL SUPPLY (CS)

1 Applicability

This schedule is applicable to consumers for lights, fans, appliances like pumping sets, central air conditioning plants, cold storages, lifts, heaters, embroidery machines, printing press, power press and small motors in all commercial premises such as shops, business houses, cinemas, clubs, banks, private offices, private hospitals, petrol pumps, hotels/motels, welding sets, servicing stations, private nursing homes, private rest/guest houses, private research institutions, private coaching institutions, private museums, dry cleaning, garages and private auditoriums, departmental stores, restaurants, lodging and boarding houses.

This schedule will also include all other categories, which are not covered by any other tariff schedule.

Note: Resale to tenants, adjoining houses and to other parties is strictly prohibited.

2. Character of service

Connected Load (kW)	Standard Supply Voltage (AC 50 Hz)
<= 50 kW	(1Ø 0.23 kV or 3Ø 0.415 kV) OR 2.2 kV
51 kW up to 2000 kW	11 kV or 15 kV or 22 kV
2001 kW up to 10000 kW	33 or 66 kV
>10000 kW	>= 132 kV

3. Single Part Tariff for connected load <= 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	60.00
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b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	4.60
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4. Two Part Tariff for connected Load > 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	
20 – 100 kW	120.00
Above 100 kW	240.00

b) Energy Charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
20 -100 kW	4.20
Above 100 kW	4.10

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	
20 -100 kW	75.00
Above 100 kW	120.00

Note: Demand charges would be levied on the actual maximum recorded demand in a month in any 30 minute interval in a month or 90% of the contract demand, whichever is higher.

5. **Higher Voltage Supply Rebate (HVSR):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
6. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
7. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
8. **Late Payment Surcharge (LPS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
9. **Contract Demand Violation Charge:** *Applicable as specified under 'Part-1 General of this Annexure II'.*
10. **Night Time Concession (NTC):** *Applicable @ 20 paise/kVAh as specified under 'Part-1 General of this Annexure II'.*
11. **Power Factor Surcharge (PFS):** *Not Applicable.*
12. **Disturbing Load Penalty:** *Applicable as specified under 'Part-1 General of this Annexure II'.*
13. **Peak Load Exemption Charges (PLEC):** *Not Applicable.*
14. **Peak Load Violation Charges (PLVC):** *Not Applicable.*

SCHEDULE - SMALL AND MEDIUM INDUSTRIAL POWER SUPPLY (SMS)

1. Applicability

This schedule is applicable to Industrial consumers with connected load not exceeding 100 kW including pumps (other than irrigation pumping), tokas, poultry farms and sheds, cane crushers, Atta Chakkis, and also for supply to Information Technology Industry (limited only to IT Parks recognised by the State/Central Government). The Industrial type of Agricultural loads with connected load falling in the abovementioned range and not covered by Schedule "WIPS" shall also be charged under this schedule.

2. Character of service

Connected Load (kW)	Standard Supply Voltage (AC 50 Hz)
<= 50 kW	(1Ø 0.23 kV or 3Ø 0.415 kV) OR 2.2 kV
51 kW up to 100 kW	11 kV or 15 kV or 22 kV

3. Single Part Tariff for connected load <= 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	80.00
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b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	4.10
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4. Two Part Tariff for connected Load > 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	150.00
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b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	3.70
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c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	70.00
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Note: Demand charges would be levied on the actual maximum recorded demand in a month in any 30 minute interval in a month or 90% of the contract demand, whichever is higher.

5. Peak load exemption charges (PLEC) and peak load violation charges (PLVC)

a) Peak Load Exemption Charge (PLEC)

Description	Additional Demand Charge on exempted load	Energy Charge
	(Rs./kVA/month)	(Rs./kVAh)
> 20 kW	60	6.60

b) Peak Load Violation Charge (Charge-2)

Description	Demand Charge	Energy Charge
	PLVC (Rs./kVA/month)	PLVC (Rs./kVAh)
>20 kW	300	9.90

Note

- i) *The Peak Load Violation Charges shall be applicable to the demand as well as the consumption recorded during the peak load hours only.*
 - ii) *Demand charge for peak load violation shall be calculated on the basis of the maximum demand during peak hours, in excess of the exempted load.*
 - iii) *Consumers who have the peak load exemption but are found exceeding the exempted load shall be deemed to have used energy, calculated prorata on the basis of the load in excess of the exempted load, for the days of violation only.*
6. **Higher Voltage Supply Rebate (HVSr):** *Applicable as specified under ‘Part-1 General of this Annexure II’.*
 7. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as specified under ‘Part-1 General of this Annexure II’.*
 8. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as specified under ‘Part-1 General of this Annexure II’.*
 9. **Late Payment Surcharge (LPS):** *Applicable as specified under ‘Part-1 General of this Annexure II’.*
 10. **Contract Demand Violation Charge:** *Applicable as specified under ‘Part-1 General of this Annexure II’.*
 11. **Night Time Concession (NTC):** *Applicable @ 20 paise/kVAh as specified under ‘Part-1 General of this Annexure II’.*
 12. **Power Factor Surcharge (PFS):** *Applicable as specified under ‘Part-1 General of this Annexure II’.*
 13. **Disturbing Load Penalty (DLP):** *Not Applicable.*
 14. **Factory lighting and colony supply:** All consumption for bonafide factory lighting i.e. energy consumed in factory premises including factory building, its offices, stores, time keeper office, canteen, library, staff dispensary, welfare centre and factory yard lighting shall be charged under this tariff schedule. The consumption for bonafide use of residential/staff quarters and street lighting of the colony shall also be charged under this tariff schedule if the supply is not taken separately but taken at the same single supply point of the industry. Such consumption shall be charged for the energy consumed at the following rates, irrespective of whether the consumer has opted for peak time exemption or not:
 - a. During normal times and night time: normal rate subject to the condition that the night time concession as per 10 above shall be given on the consumption during night time.
 - b. During peak times: the PLEC rate

If supply for colony lighting / residences is taken separately then the same shall be charged as per the relevant category under this schedule of tariff.

SCHEDULE - LARGE INDUSTRIAL POWER SUPPLY (LIPS)

1. Applicability

This schedule is applicable to all other industrial power consumers with connected load exceeding 100 kW including the Information Technology industry (limited only to IT parks recognized by the State/Central Govt.) and not covered by schedule "WIPS".

2. Character of Service

Connected Load (kW)	Standard Supply Voltage (AC 50 Hz)
101 kW to 2000 kW	11 kV or 15 kV or 22 kV
2001 kW to 10000 kW	33 or 66 kV
>10000 kW	>=132 kV

Note: Minimum voltage level for PIUs with load less than 1 MW shall be standard voltage mentioned above and not 33 kV

3. Two Part Tariff

a) Consumer Service Charge (Charges-1)

Description	Consumer Service Charge (Rs/month)
EHT	350.00
HT	350.00

b) Energy charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
EHT	
1. Upto 300 kVAh/kVA of contract demand/month	3.35
2. Remaining energy during the month	3.60
HT	
1. Upto 300 kVAh/kVA of the contract demand/month	3.45
2. Remaining energy during the month	3.70

c) Demand Charge (Charges-3)

Description	Demand Charge (Rs/kVA/month)
EHT	300.00
HT	300.00

Note: Demand charges would be levied on the actual maximum recorded demand in a month in any 30 minute interval in a month or 90% of the contract demand, whichever is higher.

4. Peak load exemption charges (PLEC) and peak load violation charges (PLVC)

a) Peak Load Exemption Charge (Charge-1)

Description	Addl. Demand Charge on exempted load (Rs/kVA/month)	Energy Charge (Rs./kVAh)
EHT	60	5.70
HT	60	6.10

b) Peak Load Violation Charge (Charge-2)

Description	Demand Charge	Energy Charge
	PLVC (Rs./kVA/month)	PLVC (Rs./kVAh)
EHT	300	8.55
HT	300	9.15

Note

- i) *The Peak Load Violation Charges shall be applicable to the demand as well as the consumption recorded during the peak load hours only.*
- ii) *Demand charge for peak load violation shall be calculated on the basis of the maximum demand during peak hours, in excess of the exempted load.*
- iii) *Consumers who have the peak load exemption but are found exceeding the exempted load shall be deemed to have used energy, calculated prorata on the basis of the load in excess of the exempted load, for the days of violation only.*

5. **Higher Voltage Supply Rebate (HVSR):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
6. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
7. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
8. **Late Payment Surcharge (LPS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
9. **Contract Demand Violation Charge:** *Applicable as specified under Part-1 General of this Annexure II'*
10. **Night Time Concession (NTC):** *Applicable @ 20 p/kVAh as specified under 'Part-1 General of this Annexure II'.*
11. **Power Factor Surcharge (PFS):** Not Applicable.
12. **Disturbing Load Penalty (DLP):** *Not Applicable.*
13. **Factory lighting and colony supply:** All consumption for bonafide factory lighting i.e. energy consumed in factory premises including factory building, its offices, stores, time keeper office, canteen, library, staff dispensary, welfare centre and factory yard lighting shall be charged under this tariff schedule. The consumption for bonafide use of residential/staff quarters and street lighting of the colony shall also be charged under this tariff schedule if supply is taken at a single point. Such consumption shall be charged for the energy consumed at the following rates, irrespective of whether the consumer has opted for peak time consumption or not:
 - a. During normal times and night time: normal rate subject to the condition that the night time concession as per 10 above shall be given on the consumption during night time.
 - b. During peak time: the PLEC rate

If supply for colony and/or its residences is taken separately then the same shall be charged as per the relevant consumer category of this schedule of tariff.

SCHEDULE - WATER AND IRRIGATION PUMPING SUPPLY (WIPS)

1 Applicability

This schedule is applicable to connections for water and irrigation pumping and also covers all consumption for bonafide Pump House lighting. This schedule is also applicable to Private Irrigation loads in individual/ society's names, green houses, poly houses, processing facilities for agriculture, fisheries, horticulture, floriculture and sericulture etc. where all such activities are undertaken by agricultural land holders and temporary agricultural loads such as wheat threshers, paddy threshers

2 Character of service

Connected Load (kW)	Standard Supply Voltage (AC 50 Hz)
<= 50 kW	(1Ø 0.23 kV or 3Ø 0.415 kV) OR 2.2 kV
51 kW up to 2000 kW	11 kV or 15 kV or 22 kV
2001 kW up to 10000 kW	33 or 66 kV
>10000 kW	>= 132 kV

3 Single Part Tariff for connected load <=20 kW

a) Consumer Service Charge (Charges-1)

Description	Consumer Service Charge (Rs/month)
All consumers	40.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	3.00
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4. Two Part Tariff for connected load above 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	
LT	140.00
HT	200.00
EHT	250.00

b) Energy Charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
LT	4.00
HT	4.25
EHT	3.95

c) Demand Charge (Charges-3)

Maximum Demand Charge (Rs/kVA/month)	
LT	50.00
HT	220.00
EHT	220.00

Note: Demand charges would be levied on the actual maximum recorded demand in a month in any 30 minute interval in a month or 90% of the contract demand, whichever is higher.

5. Peak load exemption charges (PLEC) and peak load violation charges (PLVC)

a) Peak Load Exemption Charge (Charge-1)

PLEC	Addl. Demand Charges on	Energy Charges (Rs./kVAh)
LT	60	6.90
HT	60	6.90
EHT	60	6.90

b) Peak Load Violation Charge (Charge-2)

Description	Demand Charge	Energy Charge
	PLVC (Rs./kVA/month)	PLVC (Rs./kVAh)
LT	300	10.35
HT	300	10.35
EHT	300	10.35

Note:

- i) *The Peak Load Violation Charges shall be applicable to the demand as well as the consumption recorded during the peak load hours only.*
 - ii) *Demand charge for peak load violation shall be calculated on the basis of the maximum demand during peak hours, in excess of the exempted load.*
 - iii) *Consumers who have the peak load exemption but are found exceeding the exempted load shall be deemed to have used energy, calculated pro-rata on the basis of the load in excess of the exempted load, for the days of violation only.*
- 6.** After GoHP subsidy, the energy charges shall be Rs 0.50 per kWh to the consumer category up to 20 kW under single part tariff and Rs. 0.50 per kVAh only for LT category under two part tariff. These revised energy charges on the account of Government subsidy would only be applicable to agricultural and allied activities, and which are paid for by individuals/ user groups.
- 7. Higher Voltage Supply Rebate (HVSRR):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
- 8. Lower Voltage Supply Surcharge (LVSS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
- 9. Lower Voltage Metering Surcharge (LVMS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
- 10. Late Payment Surcharge (LPS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
- 11. Contract Demand Violation Charge:** *Applicable as specified under 'Part-1 General of this Annexure II'.*
- 12. Night Time Concession (NTC):** *Applicable @ 20 paise/kVAh as specified under 'Part-1 General of this Annexure II'.*
- 13. Power Factor Surcharge (PFS):** *Applicable as specified under 'Part-1 General of this Annexure II'.*
- 14. Disturbing Load Penalty (DLP):** *Applicable as specified under 'Part-1 General of Annexure II'.*

SCHEDULE - BULK SUPPLY (BS)

1 Applicability

This schedule is applicable to general or mixed loads to M.E.S and other Military establishments, Central PWD Institutions, Construction power for Hydro-Electric projects, Hospitals, Departmental/private colonies, group housing societies, A.I.R Installations, Aerodromes and other similar establishments/institutions where further distribution to various residential and non-residential buildings is to be undertaken by the consumer, for its own bonafide use and not for resale to other consumers with or without profit. However, in case of MES, this schedule shall continue to apply till such time MES do not avail Open Access.

2 Character of service

Connected Load (kW)	Standard Supply Voltage (AC 50 Hz)
<= 50 kW	(1Ø 0.23 kV or 3Ø 0.415 kV) OR 2.2 kV
51 kW up to 2000 kW	11 kV or 15 kV or 22 kV
2001 kW up to 10000 kW	33 or 66 kV
>10000 kW	>= 132 kV

3. Two Part Tariff

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	
LT	150.00
HT	150.00
EHT	150.00

b) Energy Charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
LT	4.50
HT	4.00
EHT	3.80

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	
LT	240.00
HT	240.00
EHT	240.00

Note: Demand charges would be levied on the actual maximum recorded demand in a month in any 30 minute interval in a month or 90% of the contract demand, whichever is higher.

4. Higher Voltage Supply Rebate (HVSRR): Applicable as specified under 'Part-1 General of this Annexure II'.

5. Lower Voltage Supply Surcharge (LVSS): Applicable as specified under 'Part-1 General of this Annexure II'.

6. Lower Voltage Metering Surcharge (LVMS): Applicable as specified under 'Part-1 General of this Annexure II'.

7. **Late Payment Surcharge (LPS):** Applicable as specified under 'Part-1 General of this Annexure II'.
8. **Contract Demand Violation Charge:** Applicable as specified under 'Part-1 General of this Annexure II'
9. **Night Time Concession (NTC):** Applicable @ 20 paise/kVAh as specified under 'Part-1 General of this Annexure II'.
10. **Power Factor Surcharge (PFS):** Not Applicable.
11. **Disturbing Load Penalty (DLP):** Not Applicable.
12. **Peak Load Exemption Charges (PLEC):** Not Applicable.
13. **Peak Load Violation Charges (PLVC):** Not Applicable.

SCHEDULE - STREET LIGHTING SUPPLY (SLS)**1 Applicability**

This schedule is applicable for Street Lighting system including traffic control signal systems on roads and Park lighting in Municipalities, Nagar Panchayats, SADA areas and Panchayats.

2 Character of service

Connected Load (kW)	Standard Supply Voltage (AC 50 Hz)
<= 50 kW	(1Ø 0.23 kV or 3Ø 0.415 kV) OR 2.2 kV
>50 kW	11 kV or 15 kV or 22 kV

3. Single Part Tariff**a) Consumer Service Charge (Charges-1)**

Consumer Service Charge (Rs/month)	60.00
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b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	4.60
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4. Line maintenance and lamp renewal charges

Where the bulbs, tubes etc. are to be provided and replaced at the cost of the HPSEBL, Line Maintenance and lamp renewal charges shall be charged in addition to the energy charges. These charges shall be charged at the following rates:

Description	Charge (Rs./point/month)
(a) Bulbs all wattage	14
(b) Mercury vapour lamps up to 125 watt	40
(c) Mercury vapour lamps 126 watt to 400 watt	95
(d) Fluorescent 2 ft. 20 watt single tube fixture	21
(e) Fluorescent 2 ft. 20 watt double tube fixture	35
(f) Fluorescent 4 ft. single tube fixture	35
(g) Fluorescent 4 ft. double tube fixture	48

Note:

- i) For special type of fixtures like sodium and neon vapour lamps, fittings or any other fixtures not covered above, the material for maintenance of the fixtures and the lamps for replacement shall be provided by the Public Lighting consumers themselves and only replacement charges shall be levied..
- ii) When the bulbs/Mercury vapour lamps/tubes and other accessories are provided by the Public Lighting consumers and only replacement is to be done by the HPSEBL, Line Maintenance and lamp renewal charges shall be as follows:

Description	Charge (Rs./point/month)
Bulbs	7
Tubes and MVL etc	12
Sodium/Neon Vapour lamps or any	18

5. Higher Voltage Supply Rebate (HVSRR): Applicable as specified under 'Part-1 General of

this Annexure II'.

6. **Lower Voltage Supply Surcharge (LVSS):** *Applicable as specified under 'Part-1 General of this Annexure II*'.
7. **Lower Voltage Metering Surcharge (LVMS):** *Applicable as specified under 'Part-1 General of this Annexure II*'.
8. **Late Payment Surcharge (LPS):** *Applicable as specified under 'Part-1 General of this Annexure II*'.
9. **Night Time Concession (NTC):** *Not Applicable.*
10. **Power Factor Surcharge (PFS):** *Not Applicable.*
11. **Disturbing Load Penalty (DLP):** *Not Applicable.*

SCHEDULE - TEMPORARY METERED SUPPLY (TMS)

1 Applicability

This schedule is applicable to all loads of temporary nature including exhibitions, touring talkies, circuses, fairs, melas, marriages, festivals, temporary supply for construction purposes including civil works by Government departments and other similar purposes for temporary needs only.

2 Character of service

Connected Load (kW)	Standard Supply Voltage (AC 50 Hz)
<= 100 kW	(1Ø 0.23 kV or 3Ø 0.415 kV) OR 2.2 kV
101 kW up to 2000 kW	11 kV or 15 kV or 22 kV
2001 kW up to 10000 kW	33 or 66 kV
>10000 kW	>= 132 kV

3 Single Part Tariff for connected load <= 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	140.00
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b) Energy Charge (Charges-2))

Energy Charge (Rs./kWh)	7.00
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4 Two Part Tariff for connected Load > 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	200.00
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b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	5.50
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c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	350.00
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5 Higher Voltage Supply Rebate (HVSr): *Applicable as specified under 'Part-1 General of this Annexure II'.*

6 Lower Voltage Supply Surcharge (LVSS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

7 Lower Voltage Metering Surcharge (LVMS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

8 Late Payment Surcharge (LPS): *Applicable as specified under 'Part-1 General of this Annexure II'.*

- 9 **Contract Demand Violation Charge:** *Applicable as specified under ‘Part-1 General of this Annexure II’*
- 10 **Night Time Concession (NTC):** *Applicable @ 20 p/kVAh as specified under ‘Part-1 General of this Annexure II’.*
- 11 **Power Factor Surcharge (PFS):** *Not Applicable.*
- 12 **Disturbing Load Penalty (DLP):** *Not Applicable.*
- 13 **Peak Load Exemption Charges (PLEC):** *Not Applicable.*
- 14 **Peak Load Violation Charges (PLVC):** *Not Applicable.*

SCHEDULE – RAILWAY TRACTION

1 Applicability

This schedule is applicable to Railways for Traction loads.

2 Character of service

Standard Supply Voltage (AC 50 Hz)	>= 66kV
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3 Two Part Tariff for connected Load > 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	350.00
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b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	4.50
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c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	300.00
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5 Higher Voltage Supply Rebate (HVSR): *Applicable as specified under ‘Part-1 General of this Annexure II’.*

6 Lower Voltage Supply Surcharge (LVSS): *Applicable as specified under ‘Part-1 General of this Annexure II’.*

7 Lower Voltage Metering Surcharge (LVMS): *Applicable as specified under ‘Part-1 General of this Annexure II’.*

8 Late Payment Surcharge (LPS): *Applicable as specified under ‘Part-1 General of this Annexure II’.*

9 Contract Demand Violation Charge: *Applicable as specified under ‘Part-1 General of this Annexure II’.*

10 Night Time Concession (NTC): *Not applicable.*

11 Power Factor Surcharge (PFS): *Not Applicable.*

12 Disturbing Load Penalty (DLP): *Not Applicable.*

13 Peak Load Exemption Charges (PLEC): *Not Applicable.*

14 Peak Load Violation Charges (PLVC): *Not Applicable.*

Abbreviations Used

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

No	Abbreviation	Description
1	A&G	Administrative and General
2	ACD	Advance Consumption Deposit
3	Act	The Electricity Act, 2003
4	AFC	Annual Fixed Charge
5	APDRP	Accelerated Power Development and Reform Program
6	APR	Annual Performance Review
7	ARR	Aggregate Revenue Requirement
8	ATE	Appellate Tribunal for Electricity
9	BBMB	Bhakra Beas Management Board
10	Board	HP State Electricity Board
11	CAGR	Compounded Annual Growth Rate
12	CEA	Central Electricity Authority
13	CERC	Central Electricity Regulatory Commission
14	CoS	Cost of Supply
15	CPI	Consumer Price Index
16	CPSUs	Central Public Sector Undertakings
17	CSGS	Central Sector Generating Stations
18	DA	Dearness Allowance
19	DP	Dearness Pay
20	EHT	Extra High Tension
21	FPA	Fuel Price Adjustment
22	FY XX	Financial Year beginning 1 April of the year (XX-1) and ending on 31 March of the following year (XX)
23	GFA	Gross Fixed Assets
24	GoHP	Government of Himachal Pradesh
25	GOI	Government of India
26	GP	Grade Pay
27	GPF	General Provident Fund
28	GPP	Gas Power Plant
29	HEP	Hydro Electric Project
30	HPSEB	Himachal Pradesh State Electricity Board
31	HT	High Tension
32	HVPNL	Haryana Vidyut Prasaran Nigam Limited
33	IPP	Independent Power Producers
34	IR	Interim Relief
35	kV	Kilo Volt
36	kVA	Kilo Volt-Ampere
37	kVAh	Kilo Volt-Ampere Hour
38	kW	Kilo Watt
39	kWh	Kilo Watt Hour
40	LT	Low Tension

No	Abbreviation	Description
41	MU	Million Units
42	MW	Mega Watt
43	MYT	Multiyear tariff
44	NAPS	Narora Atomic Power Station
45	NFA	Net fixed assets
46	NHPC	National Hydro-electric Power Corporation
47	NPCIL	Nuclear Power Corporation of India Limited
48	NTPC	National Thermal Power Corporation
49	OT	Overtime
50	PGCIL	Power Grid Corp. of India Ltd.
51	PLF	Plant Load Factor
52	PPA	Power Purchase Agreement
53	PSEB	Punjab State Electricity Board
54	PSPCL	Punjab State Power Corporation Ltd
55	PSTCL	Punjab State Transmission Corporation Ltd
56	R&M	Repair and Maintenance
57	RAPS	Rajasthan Atomic Power Station
58	REA	Regional Energy Accounts
59	REC	Renewable Energy Certificate
60	ROE	Return on equity
61	SHP	Small Hydro Projects
62	SJVNL	Satluj Jal Vidyut Nigam Limited
63	State Govt	Government of Himachal Pradesh
64	STPS	Super Thermal Power Station
65	STU	State Transmission Utility
66	T&D	Transmission and Distribution
67	THDC	Tehri Hydro Development Corporation Limited
68	ToD	Time of Day
69	UJVNL	Uttaranchal Jal Vidyut Nigam Limited
70	UPSEB	Uttar Pradesh State Electricity Board
71	WPI	Wholesale Price Index