TRUE UP FOR FY12

AND

ANNUAL PERFORMANCE REVIEW FOR FY14

UNDER THE 2ND MYT CONTROL PERIOD

FOR

HIMACHAL PRADESH STATE ELECTRICITY BOARD LIMITED (HPSEBL)

Himachal Pradesh Electricity Regulatory Commission

27 April, 2013

BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION AT SHIMLA

CASE NO.176/2012

CORAM

SUBHASH CHANDER NEGI

IN THE MATTER OF:

Approval of the Aggregate Revenue Requirement (ARR) for Second Annual Performance Review (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 FY12

AND

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’ or ‘Petitioner’) has filed a 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 Second APR of Second MYT Order for Control Period (FY12 to FY14) and determination of Wheeling and Retail Supply Tariff for FY14 under the Second MYT Control Period (FY12 to FY14) under Sections 62, 64 and 86 of the Electricity Act, 2003 (hereinafter referred to as ‘the Act’), read with the 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 FY12.

The Commission having heard the applicant, interveners and representatives of various consumer groups on March 13, 2013 at Shimla, and having had 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 FY14 under the Second MYT Control Period (FY12 to FY14) and has approved the Wheeling and the Retail Supply Tariffs for FY14, in accordance with the guidelines laid down under Section 61 of the Electricity Act, 2003, the National Tariff Policy and the regulations framed by the Commission that stipulate that the Wheeling and Retail Supply Tariff shall be decided every year taking into account the adjustment on account of allowed variations in uncontrollable parameters.

The Commission has trued-up the ARR approved for FY12 based on analysis of efficient and reasonable operating parameters and the prudent expenditure that could be passed on to consumers of the State. The Commission has detailed the reasons for modifying/ disallowing any expenditure in this Order.

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, 2013.

In accordance with sub-regulation (5) of Regulation 3 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011, the tariff determined by the Commission and directions given by the Commission in Chapter A8 of the Tariff Order 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 Himachal Pradesh Electricity Regulatory Commission (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, shall continue to be in force up to March 31, 2014. In the event of failure on the part of the licensee to file application for true up of FY13 and Business Plan filing for the next control period and approval of wheeling and retails supply tariff for the ensuing financial year, in terms of Regulation 35 and 36 of the HPERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 on or before

November 30, 2013, the tariff determined by the Commission shall cease to operate after March 31, 2014 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 in 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: 27 April, 2013 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 HPSEBL has filed an Annual Performance Review (APR) petition with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as ‘the Commission’ or ‘HPERC’) for approval of revised Aggregate Revenue Requirement (ARR) for FY14 and determination of Wheeling and Retail Supply Tariff for FY14 under the Second Multi Year Tariff 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 HPSEBL has also filed Applications for True Up of expenses and revenue pertaining to FY12 under the 2nd Multi Year Tariff (MYT) Control Period.

1.9 This is the second Annual Performance Review Order under the 2nd MYT Control Period. It relates to determination of revised Aggregate Revenue Requirement of HPSEBL for FY14 under the second Multi Year Tariff control period based on actual values of FY12 and approval of Wheeling and the Retail Supply Tariffs for FY14 based on the updated information submitted by HPSEBL.

1.10 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.

1.11 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.

1.12 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.

1.13 HPSEBL has filed the following Petitions / Applications before the Commission, as listed below:

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

<table>
<tr><th>S. No.</th><th>Case / Petition No.</th><th colspan="4">Petition Name</th><th>Date of Filing</th></tr>
<tr><td>1.</td><td>176/2012</td><td colspan="4">Petition in the matter of “Filing of Aggregate Revenue Requirement (ARR) for the Second APR of the Second MYT Order for the Control Period (FY12-FY14) under sections 62, 64 and 86 of the Electricity Act, 2003.”</td><td>30.11.2012</td></tr>
<tr><td>2.</td><td>MA No. 1/2013 in case No. 176/2012</td><td colspan="4">Miscellaneous Application in the matter of “True-up Petition under section 94(1)(f) of the Electricity Act, 2003 for review of the MYT Order dated 19th July, 2011 for True-up of FY12”</td><td>05.01.2013</td></tr>
<tr><td rowspan="7">3.</td><td colspan="6">Miscellaneous Applications filed by HPSEBL in the case No. 176/2012</td></tr>
<tr><td>MA No.</td><td>Date</td><td>MA No.</td><td>Date</td><td>MA No.</td><td>Date</td></tr>
<tr><td>3/2013</td><td>16.01.2013</td><td>4/2013</td><td>24.01.2013</td><td>7/2013</td><td>28.01.2013</td></tr>
<tr><td>12/2013</td><td>16.02.2013</td><td>16/2013</td><td>19.02.2013</td><td>26/2013</td><td>27.02.2013</td></tr>
<tr><td>29/2013</td><td>28.02.2013</td><td>33/2013</td><td>04.03.2013</td><td>34/2013</td><td>04.03.2013</td></tr>
<tr><td>35/2013</td><td>04.03.2013</td><td>36/2013</td><td>04.03.2013</td><td>37/2013</td><td>07.03.2013</td></tr>
<tr><td>39/2013</td><td>07.03.2013</td><td>45/2013</td><td>13.03.2013</td><td></td><td></td></tr>
</table>

Interaction with the Petitioner

1.14 Since the submission of the petitions by HPSEBL, a series of interactions took place between 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 HPSEBL as follows:

a) In Case No. 176/2012, vide HPERC letter Nos. HPERC/(F)3(3)(3)/ MYT2APR2/2012-3798-99 dated December 21, 2012 and even file no. 3900-3901 dated January 4, 2013, HPSEBL was informed of the observations/deficiencies discovered during preliminary scrutiny of the petition. These observations/deficiencies were partially addressed by HPSEBL vide their Miscellaneous Applications, MA No. 3/2013 dated January 16, 2013 and MA no. 4/2013 dated January 24, 2013 but non-submission of complete information/data still remained a concern before the Commission.

b) Subsequently on date January 29, 2013, HPERC conducted the 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)(3)/MYT2APR2/2012-13-4023-24 dated January 30, 2013. Vide Miscellaneous Application MA No. 37/2013 dated March 7, 2013 these observations were addressed by HPSEBL, though not fully.

c) In addition to the above, HPSEBL also made additional submissions vide various Miscellaneous Applications tabulated above.

Admission Hearing

1.15 Vide Interim Order dated January 23, 2013, the Petition (along with the connected applications) 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

1.16 In pursuance to the Directions imparted vide Interim Order dated January 23, 2013, HPSEBL published the salient features of the petition No. 176/2012 (along with connected applications) in the following newspapers:

a) 'The Tribune' and 'Divya Himachal' dated February 2, 2013;

b) 'The Tribune' and 'Divya Himachal' dated February 4, 2013;

1.17 Tariff Proposal for FY14 was published by HPSEBL in the following newspapers:

a) 'The Tribune' and 'Amar Ujala' dated March 2, 2013;

b) 'Hindustan Times' and 'Divya Himachal' dated March 4, 2013;

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

1.18 In accordance with Section 64 (3) of the Act, The Commission through Public Notice in the newspapers 'The Indian Express' and 'Divya Himachal' dated February 6, 2013 invited suggestions and objections from the public on the petition No 176/2012 and connected applications filed by HPSEBL. The interested parties/stakeholders were asked to file their objections and suggestions on the petition by date March 1, 2013.

1.19 The date for filing replies by the Petitioner was fixed for date March 7, 2013 and the date for filing rejoinders, if any, was fixed for date March 14, 2013.

1.20 The HPERC on date March 2, 2013 issued a public notice in the newspapers 'Amar Ujala' and 'The Tribune' informing the public about the scheduled date of March 13, 2013 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.

1.21 In all, the Commission received objections from five stakeholders by the stipulated date i.e. March 1, 2013. HPSEBL filed its replies to the objections set out by various objectors by date March 07, 2013, a copy of which was also sent to the individual objectors. One rejoinder was filed in the aforementioned matters.

1.22 A Public Hearing was held on the scheduled date and time i.e. March 13, 2013 in the Commission's Court Room at Shimla. The issues and concerns voiced by various objectors have been carefully examined by the Commission. The major issues raised by the objectors in their written submission as well as those raised during the public hearing, have been summarized in Chapter A3 of this Order.

A2: SUMMARY OF PETITIONS FILED BY HPSEBL

2.1 This chapter summarizes the highlights of the petitions filed by HPSEBL for true-up of FY12 and Annual Performance Review for FY14 under the 2nd MYT Control Period.

SUMMARY OF TRUE-UP PETITION FOR FY12

2.2 The petition was filed on January 5, 2013 and additional information/clarifications were submitted by HPSEBL in response to the deficiency notes issued by the Commission. HPSEBL also made available the provisional accounts for FY12 on the Commission's direction.

Sales Projections

2.3 For FY12, HPSEBL has submitted that there has been a decrease in energy sales by 172.11 MU against the sales approved by the Commission. Category-wise energy sales submitted by HPSEBL are detailed in the table below:

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

Energy Sales (MU)	FY12 Approved	FY12 Actual
Domestic	1290.36	1407.29
Non Domestic Non Commercial	98.89	98.55
Commercial	388.95	387.20
Public Lighting	12.95	12.89
Small Power Medium Power	213.89	198.06
Large Supply (HT) Large Supply (EHT)	4304.85	4116.50
Irrigation & Agriculture Govt Irrigation & Water Pumping	470.16	476.14
Temporary	24.38	28.56
Bulk Supply	285.75	192.88
Total Energy Sales	**7090.18**	**6918.07**

Transmission and Distribution (T&D) Loss

2.4 HPSEBL has submitted that it has achieved a loss level of 13.43% in FY12. The actual T&D loss level for FY12 has increased by 2% as compared to that in FY11. It is also higher than the revised loss target of 12.55% set for FY12 by the Commission in the 1st APR Order.

2.5 The utility has attributed the increase in loss levels to an unfavorable increase in LT:HT ratio of its network due to execution of large number of schemes under RGGVY and decrease in sales to EHT consumers by almost 2% as compared to the previous year.

Table 3: HPSEBL Submission – Transmission & Distribution Loss

T&D Losses	T&D Losses
Sales within State (MU)	6918
T&D Loss within the State (%)	13.43%
Power Requirement for sale within the State (MU)	7991

Energy Availability

2.6 HPSEBL has submitted that the net own generation for FY12 after deducting the GoHP share comes to 1905.63 MU against the Commission approved own generation of 1992.10 MU. The balance power requirement of the state was met by power purchase.

2.7 HPSEBL has stated that the actual power purchase from CGS and Interstate for FY12 has increased to 7547.33 MU which is due to increase in energy quantum under banking arrangement, unallocated power received FY12, etc.

Energy Balance

2.8 HPSEBL has submitted the Energy Balance for FY12 based on the actual sales data, actual T&D loss level during the year, own generation and power purchase data. The energy balance for FY12 as submitted by the Petitioner is shown in Table 4 below.

2.9 HPSEBL has submitted its energy balance based on the estimated and projected sales data, own generation data and power purchase data, as shown below:

Table 4: HPSEBL Submission – Energy Balance (MU)

Energy Balance	FY12
	Actual
Power Availability	
Net Own Generation Sources + HPPCL	1905
Net Power Purchase Sources (CGS, Inter-state etc.)	7547
Total Availability	**9453**
Sales within the State (MU)	6918
Proposed T&D Loss % within the State	**13.43%**
Power Requirement for sale within the State (MU)	7991
Inter-State Sale (MU)	1461
Total Sale within & Outside the State (MU)	8380
Overall Losses (MU) - Total availability less Total Sale	1073
Overall T&D Losses %	**11.4%**

True up of Annual Revenue Requirement for FY12

2.10 Components of the Petitioner's submission of ARR for true up for FY12 are discussed below:

Cost of Power Purchase

2.11 HPSEBL has submitted that the actual cost of power purchase for FY12 is Rs 2330.17 Cr as against Rs 1998.21 Cr approved by the Commission. The reasons submitted for increase in power purchase cost are given hereunder:

(a) Actual UI purchase during FY12 was 209.95 MU (Rs 73.91 Cr.) resulting in net increase in cost by Rs 73.91 Cr.

(b) CPSU Arrears paid by HPSEBL was Rs 175.83 Cr. against the NIL approved by the Commission. Also, HPSEBL paid BASPA arrears to the tune of Rs 6.44 Cr. in FY12.

(c) The energy available from Baspa-II (Secondary Energy) in FY12 was 171.77 MUs at Rs 46.04 Cr. against nil approved by the Commission.

(d) Free Power Share and Equity Power share available to HPSEBL was 880.77 MU against the approved share of 653.78 MU during FY12, resulting in additional power purchase cost of Rs 67.19 Cr.

2.12 The table below summarizes the actual power purchase quantum and cost for FY12 as submitted by HPSEBL:

Table 5: HPSEBL Submission – Own Generation in FY12

HPSEBL Own Stations	Quantum MU	Rate* P./U	Cost* Rs. Cr
Chaba	8.96	1.83	1.64
Chamba	0.30	0.72	0.02
Nogli	7.22	1.47	1.06
Bassi	154.75	0.65	10.06
Giri	210.90	0.48	10.12
Rukti	0.62	0.89	0.06
Binwa	34.03	1.36	4.63
Rongtong	1.73	1.46	0.25
Andhra	72.42	0.67	4.85
Bhabha	588.27	0.52	30.53
Killar	0.36	7.14	0.26
Throit	9.65	1.82	1.76
Sal-II	3.76	0.70	0.26
Gumma	6.94	1.81	1.26
Holi	5.04	1.30	0.66
Gaj	36.68	1.99	7.30
Baner	40.48	1.31	5.30
Ghanvi	60.85	1.38	8.40

HPSEBL Own Stations	Quantum MU	Rate* P./U	Cost* Rs. Cr
Khauli	44.16	1.98	8.74
Larji	612.03	2.60	159.17
Bhabha Augmentation	6.48	2.95	1.91
Total	**1905.63**	**1.36**	**258.23**

** As per revised submission by HPSEBL in March 2013*

Table 6: HPSEBL Submission – Power Purchase Quantum and Cost in FY12

Stations	Quantum MU	Rate Paise/unit	Cost Rs. Cr
BBMB Stations			
BBMB Old	43.92	71	3.11
BBMB New	232.45	39	9.04
Dehar	81.79	87	7.15
Pong	23.78	32	0.77
Sub-Total	**381.94**	**53**	**20.07**
NTPC Stations			
Anta(LNG)	4.50	587	2.64
Anta(G)	88.37	364	32.14
Anta (L)	0.13	897	0.12
Auraiya(LNG)	6.60	683	4.51
Auraiya(G)	108.00	336	36.25
Auraiya(L)	0.03	1062	0.04
Dadri(LNG)	5.96	655	3.90
Dadri(G)	143.78	319	45.88
Dadri(L)	0.02	858	0.02
Unchahar-I	55.93	332	18.58
Unchahar-II	106.20	328	34.85
Unchahar-III	72.08	375	27.01
Rihand-1 STPS	309.66	218	67.61
Rihand-2 STPS	297.05	238	70.58
Kehalgaon	125.18	377	47.25
Singrauli	103.90	173	17.98
Dadri II TPS	57.49	402	23.13
Jhajjar STPS	10.22	585	5.98
Sub-Total	**1495.11**	**293**	**438.47**
NHPC Stations			
Chamera-I	75.56	141	10.66
Chamera-II	63.02	309	19.46
Salal	32.02	87	2.79
Tanakpur	15.35	217	3.33
Uri	72.86	163	11.87
Dhauli Ganga	44.41	335	14.86
Dulhasti	9.62	724	6.96

Stations	Quantum MU	Rate Paise/unit	Cost Rs. Cr
Sewa	3.73	446	1.67
Sub-Total	**316.58**	**226**	**71.60**
Other Stations			
NAPP	65.72	243	15.97
RAPP	145.65	341	49.74
Nathpa Jhakri SoR	204.78	271	55.42
Shanan	5.26	40	0.21
Shanan Extn	45.00	21	0.93
Yamuna (UJVNL)	428.96	59	25.29
Khara	74.41	37	2.75
Baspa –II	1050.06	266	279.00
Baspa II Sec Energy	171.77	297	46.04
Tehri I	125.46	453	56.83
Koteshwar	17.67	493	8.72
Sub-Total	**2334.74**	**232**	**540.88**
Free Power & Equity Power			
Baira Suil	34.99	296	10.36
Chamera-I	91.89	296	27.20
Chamera –II	71.26	296	21.09
Shanan Share	2.63	296	0.78
Ranjeet Sagar Dam	85.13	296	25.20
Malana	55.87	296	16.54
Baspa – II	166.61	296	49.32
Nathpa Jhakri	144.39	296	42.74
Nathpa Jhakri Equity	350.34	453	158.71
Karcham Wangtoo	79.00	296	23.38
Private Micros (Up to 5 MW)	0.51	296	0.15
Private Micros (Above 5 MW)	23.42	296	6.93
Ghanvi	8.30	296	2.46
Baner	5.52	296	1.63
Gaj	5.00	296	1.48
Larji	83.46	296	24.70
Khauli	6.02	296	1.78
AD Hydro	16.76	296	4.96
Sub-Total	**1231.11**	**341**	**419.42**
Private Micros Stations			
Above 5 MW	127.26	251	31.93
Up to 5 MW (Pref. Tariff)	682.47	278	189.79
Up to 25 MW (REC Tariff)	44.17	223	9.85
Sub-Total	**853.90**	**271**	**231.56**
Banking, Market and			

Stations	Quantum MU	Rate Paise/unit	Cost Rs. Cr
Bilateral Purchase & UI			
Banking	740.67	0	0.00
Market Purchase	211.09	449	94.87
Bilateral Purchase	0.06	407	0.02
PXI/IEX	18.55	345	6.40
UI Power	209.95	352	73.91
Sub-Total	**1180.32**	**148**	**175.20**
Other Charges			
PGCIL Charges			209.57
HPPTCL Charges			0.00
ULDC Charges (Including POSCO)			9.36
Other Charges			-1.09
ST Open Access – PTC			24.05
Baspa Arrears			6.44
CPSU Arrears			175.83
Other Arrears (including SHP)			8.80
Sub-Total			**432.97**
Grand Total	**7793.70#**	**298.98**	**2330.17**
External Losses (not applicable to Private Micros)	**3.55%**		
Net Purchase after External Losses ##	**7547.33**	**308.74**	**2330.17**

 # Excluding own generation quantum
As per the format 'Form 4' submitted by HPSEBL along with the petition

Employee Cost

2.13 For FY12, HPSEBL has submitted that the Commission had approved employee cost (excluding 6th Pay Commission Arrears by including provision for new recruitments) as Rs 815.68 Cr as against the actual cost of Rs 1086.60 Cr which has resulted in a disallowance of Rs 270.92 Cr.

2.14 The reasons for increase in employee cost submitted by HPSEBL are:

a) In the MYT Order for FY12, the Commission had approved the consolidated Employee Cost for the control period based on the CPI and WPI and had applied an escalation rate for approving the employees cost. But the State Government allows two installments of DA increase of 7% each effective in January and July. HPSEBL passes on the DA increase at the same rate to its employees as the increases in pay & allowances to its existing employees have to be at par with the State Government employees.

b) 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.

2.15 HPSEBL has further submitted that in FY12 its employee cost has increased by

11.27% as compared to the previous year (after considering the Rs 140.15 Cr of 6th Pay Commission arrears that were reimbursed in FY12).

2.16 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.

2.17 The employee cost as per books submitted by HPSEBL for FY12 is detailed below:

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

Particulars	FY12 Actual
Salaries & Allowances	
Salaries (Basic) + Dearness Pay	357.27
Merger of DA with Basic (Proposed)	0.00
Grade pay	76.34
DA	225.52
Employee Arrears – 5th Pay Commission	58.95
Other Allowances	30.10
Overtime	3.08
Bonus	0.21
Salaries – Total	**751.47**
Other Staff Cost	
Medical Expense Reimbursement	10.20
Fee & Honorarium	0.01
Earned Leave Encashment	38.42
Leave Salary Contribution	0.00
Payment under Workmen's Compensation	0.56
LTC	0.04
Staff Welfare Expenses/ employee contribution towards CPS	3.40
Other Staff Cost - Total	**52.63**
Terminal Benefits	
Provident Fund Contribution	0.01
Pension – Base	177.36
Pension - 5th Pay Commission Arrears	81.20
Gratuity	74.60
Any other Items (MRC to pensioners, benevolent fund and DLI)	7.24
Terminal Benefits – Total	**340.41**
Gross Employee Cost	**1,144.52**
Less : Employee Cost Capitalizations	57.91
Less : Employee Attrition Impact	0.00
Net Employee Cost	**1,086.60**

Administrative & General Expenses

2.18 HPSEBL has submitted the actual A&G expenses for FY12 come out to be Rs 44.46 Cr (inclusive of 0.26 Cr of Public Interaction Program) as against Rs 34.28 Cr (plus Rs 0.52 Cr for public interaction programme) approved by the Commission.

2.19 Summary of A&G expenses as per books for FY12 submitted by HPSEBL is given below:

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

Particulars	FY12 Actual
Administration Charges	
Rent, Rates & Taxes	2.69
Telephone, Postage & Telegrams	2.83
Consultancy Charges	0.18
Conveyance & Travel	15.01
Regulatory Expenses	0.98
Income Tax Updating Charges	0.05
Consumer Redressal Forum	0.47
Insurance	0.10
Purchase Related Expenses & Other Charges	3.35
IT and other Initiatives	0.00
Administration Charges – Total	**25.64**
Other Charges	
Fees & Subscriptions, Books & Periodicals	0.35
Printing & Stationery	1.40
Advertisement Expenses	0.70
Electricity Charges	2.65
Water Charges / Cold weather expenses	0.22
Miscellaneous Expenses	2.01
Legal Charges	0.79
Audit Fee	2.41
Freight Material related Expenses	0.00
Entertainment Charges	0.05
Training to Staff	0.15
Public Interaction Program	0.26
Public Expenses / Other professional charges	0.71
GIS / GPS expenses related to High level Committee	0.64
Cost Free Bulb to DIS Consumers	10.25
DSM Program	0.00
A&G - Total	**48.23**
Less: Capitalizations	3.77
Net A&G Costs	**44.46**

Interest & Finance Charges

2.20 HPSEBL has submitted that the actual interest cost for FY12 was Rs 248.14 Cr as against Rs 149.21 Cr approved by the Commission after capitalisation. The reason given for increase is the investment made by HPSEBL in commissioning and up-gradation of generation units, metering, and transmission & distribution system improvement.

2.21 HPSEBL has further submitted that it has paid Rs 110.31 Cr as interest to the banks for financing of working capital which is stated to be higher than approved on account of increase in the short-term rates and power purchase cost in FY12.

2.22 The actual interest on Consumer Security Deposit in FY12 is submitted as Rs 9.74 Cr as against Rs 6.59 Cr allowed by the Commission and the Actual Security Deposit available with HPSEBL as on 31.03.2012 was Rs 232.24 Cr as against the Rs. 284.09 Cr considered by the Commission while computing the working capital requirement.

2.23 The details of interest and financing charges submitted by HPSEBL for FY12 are given in the table below:

Table 9: HPSEBL Submission – Interest and finance charges (Rs Cr)

Particulars	FY12 Actual
RGGVY	3.29
LIC	15.98
REC	51.36
PFC	41.80
Bonds	0.44
Bank Loans	88.11
Interest on State Govt. Loan	1.62
Non SLR Bonds	17.26
Other Negotiated Loan	50.05
Interest on Overdraft	0.00
Interest on GPF & CPF	0.26
Cost of Raising Finances	0.01
Other Charges	1.13
Interest on Consumer Security Deposits	9.74
Charges payable to CTU / NLDC	0.00
Rebate allowed for Timely Payment	0.60
Interest on WC Borrowing & Other Charges	110.31
Interest & Finance Charges - Total	**391.96**
Less: Interest Capitalization	143.82
Net Interest & Financing Costs	**248.14**

Non Tariff Income

2.24 HPSEBL has submitted that the actual non-tariff income in FY12 was Rs 262.46 Cr as against Rs 289.26 Cr approved by the Commission.

2.25 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.

Impact of Interim Order

2.26 HPSEBL has submitted that in its True up petition for FY12 it has also considered the impact of the interim order dated 23 October 2012 on account of Larji Arrears of Rs 26.92 Crores, the true-up amount of Rs 17.99 Crores on account of truing up of interest on working capital for the 1st MYT Control Period and additional ARR of Rs 13.445 Crores on account of actual interest on Consumer Security Deposit. The Petitioner has prayed to the Commission to consider the same.

True up of Annual Revenue Requirement for FY12

2.27 The table below summarizes HPSEBL's Annual Revenue Requirement for FY12 as per the true-up petition:

Table 10: HPSEBL Submission – Aggregate Revenue Requirement for FY12 (Rs Cr)

Annual Revenue Requirement (Rs Cr)	FY12 Approved	FY12 Actual	Deviation
Costs			
Power Purchase Cost	1998.21	2330.17	331.96
Employee Cost	*815.68*	*1086.60*	
Repairs & Maintenance	*30.81*	*55.73*	
Admin & General	*34.28*	*44.46*	
O&M - Distribution	880.77	1186.79	221.65
O&M - Generation	84.37		
Interest – Distribution	87.19	248.14	98.93
Interest – Generation	62.02		
Depreciation – Distribution	89.21	193.38	15.31
Depreciation – Generation	88.86		
Public Interaction Program	0.52	0.00	(0.52)
Extraordinary Item as per B/S & Prior Period Charges	0.00	0.00	0.00
Total Costs	**3291.15**	**3958.48**	**667.33**
Add: Return on Equity – Distribution	30.24	151.63	84.27
Add: Return on Equity – Generation	37.12		
Less: Non-Tariff Income	289.29	262.46	(26.83)
Annual Revenue Requirement	**3069.22**	**3847.65**	**778.43**
Impact of Interim Order Dated 23.10.2012			
Larji Arrears		26.92	
True-up of Interest on Working Capital		17.99	
True-up of Interest on Security Deposit		13.45	
Annual Revenue Requirement + Impact of Order dated 23.10.2012	**3069.22**	**3906.01**	**836.79**

Revenue from Sale of Power at Existing Tariffs

2.28 HPSEBL has submitted that it has earned good revenue in FY12 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.

2.29 Based on accounts of FY12, revenue generated from sale of power within the state and outside the state as submitted by HPSEB is given in the table below:

Table 11: HPSEBL Submission – Revenue from sale of power for FY12 (Rs Cr)

Revenue From Sale of Power (Rs Cr)	FY12 Approved	FY12 Actual	Deviation
Revenue at Approved Tariff	2861.23	2822.75	(38.48)
Revenue from Sale outside state	208.26	157.46	(50.80)
Revenue at Existing Tariff + GoHP Subsidy	**3069.49**	**2980.21**	**(89.28)**

Revenue Gap

2.30 HPSEBL has prayed to the Commission to approve the True up gap of Rs 925.80 Cr for FY12.

Table 12: HPSEBL Submission – Gap to be trued up for FY12

Annual Revenue Requirement (Rs Cr)	FY12 Approved	FY12 Actual	Deviation
Annual Revenue Requirement (including the impact of Interim Order dated 23.10.2012)	3069.22	3906.01	836.79
Revenue at Existing Tariff + GoHP Subsidy	3069.49	2980.21	(89.28)
Revenue (Gap)/Surplus	**0.27**	**(925.80)**	**-**

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

2.31 The petition was filed on December 30, 2012 and appropriate additional information / clarifications were submitted by HPSEBL in response to the deficiency notes issued by the Commission.

2.32 The Annual Performance Review (APR) petition constitutes revised estimates of HPSEBL for FY13 and projections for FY14 for the purpose of determination of the Aggregate Revenue Requirement (ARR) and Distribution & Retail Supply Tariff for the remaining period of the second MYT Control Period i.e. FY14.

Sales Projections

2.33 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 FY13.

(a) For Domestic category, HPSEBL has projected an increase in sales at 7.4%, in line with 4 years' CAGR (with FY13 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 4 year and 5 Year CAGR of 6.2% and 11.4% respectively.

(c) For Small Supply category, licensee has projected sales growth at 0.4%, which is the 5 years' CAGR for this category.

(d) For Medium Supply category, licensee has projected sales growth at 5.7%, which is the 4 years' CAGR for this category.

(e) Under Large Industrial Power Supply category, HPSEBL has projected sales growth for HT and EHT consumers at 8.8% and 7.1% respectively, which is in line with the 4 years' and 3 years' CAGR respectively for these categories taking FY13 as the base year.

(f) For Street Lighting, Water Pumping and Agricultural Supply categories, HPSEBL has projected sales using the 4-year CAGR of the respective categories.

(g) For Temporary Supply and Bulk Supply categories, HPSEBL has projected energy sales using 3 years' CAGR of 8.0% and 2.9% respectively on the estimated sales for FY13.

(h) Accordingly, HPSEBL has estimated the sales of 7459.92 MU for FY13 and projected energy sales of 8025.94 MU for FY14, within the state of Himachal Pradesh, as tabulated hereunder:

Table 13: HPSEBL Projection – Category wise Energy Sales

Sr No.	Consumer Category	FY12	FY13	FY14
		Actual	R.E.	Projection
1	Domestic	1407.29	1615.67	1734.97
2	Non Domestic Non Commercial	98.55	107.74	114.47
3	Commercial	387.20	416.42	463.85
4	Temporary	28.56	25.87	27.93
5	Small & Medium Industrial Power Supply	198.06	207.83	216.36
5a	*Small Industrial Power Supply*	*58.42*	*61.03*	*61.26*
5b	*Medium Industrial Power Supply*	*139.64*	*146.80*	*155.10*
6	Large Industrial Power Supply	4116.50	4404.39	4759.23
6a	*LT/HT*	*2320.83*	*2493.32*	*2712.88*
6b	*EHT*	*1795.67*	*1911.08*	*2046.34*
7	Govt., Irrigation & Water Supply	439.98	457.04	476.06
8	Public Lighting	12.89	13.90	14.26
9	Agricultural	36.17	45.64	48.61
10	Bulk Supply	192.88	165.41	170.20
Total		**6918.08**	**7459.92**	**8025.94**

Transmission and Distribution (T&D) Loss

2.34 For the 2nd Control Period, the Commission has considered the T&D loss reduction trajectory of 0.11%, 0.15% and 0.40% in FY12, FY13 and FY14 respectively to reach a level of 12.00% by the end of the Control Period.

2.35 HPSEBL has submitted that the actual loss level achieved in FY12 was 13.43%.

2.36 Further, HPSEBL has proposed a revised trajectory with loss levels of 13.43%, 13.03% & 12.73% for FY12, FY13 & FY14 respectively.

Table 14: HPSEBL Projection – Distribution loss trajectory

Energy Balance (MUs)	FY12 Actual	FY13 R.E.	FY14 Projection
Power Availability			
Net Power Purchase Sources (CGS, Inter-state etc.)	9453	9724	10900
Total Availability	**9453**	**9724**	**10900**
Sales within the State (MUs)	6918	7460	8026
Proposed T&D Loss % within the State	**13.43%**	**13.03%**	**12.73%**
Power Requirement for sale within the State (MUs)	7991	8578	9197
Inter-State Sale (MUs)	1461	1147	1703
Total Sale within & Outside the State (MUs)	8380	8606	9729
Overall Losses (MUs) - Total availability less Total Sale	1073	1118	1171
Overall T&D Losses %	**11.4%**	**11.5%**	**10.7%**

2.37 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

2.38 Energy is available to HPSEBL from the following sources:

- Own 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 in the State.

Own Generation

2.39 The Petitioner in its APR petition has considered power from only 4 stations viz.

Bassi, Giri, Bhabha and Larji in FY13 and from two additional new stations viz. Uhl-III and Ghanvi-II in FY14. This is on account of the transfer of HPSEBL's Generation function to the Beas Valley Power Corporation Limited (BVPCL) w.e.f. 1 April 2012. However, subsequent to its original APR filing on December 30, 2012, the Petitioner made another submission in which it was conveyed to the Commission that after reconsideration of various aspects, the HPSEBL management had reverted its earlier decision and had decided to restore the status of Operation & Maintenance of Generating units under Chief Engineer (Generation), HPSEBL, Sundernagar as was existing prior to the transfer w.e.f. 1 April 2012.

2.40 In the aforementioned submission, the Petitioner also prayed to the Commission to reconsider the purchase of power from the SHPs of HPSEBL / sale proceeds from the power of SHPs sold by HPSEBL accordingly while approving the ARR for FY14. However, the Petitioner did not submit its own revised projections of power from HPSEBL's generating stations.

2.41 Hence, HPSEBL's projected energy availability from its own generating stations for the Control Period is tabulated hereunder:

Table 15: HPSEBL Projection – Power purchase from own generating stations

Station (MU)	FY12 (Actual)	FY13 (RE)	FY14 (Projections)
Chaba	8.96	-	-
Chamba	0.30	-	-
Nogli	7.22	-	-
Bassi	154.75	178.41	178.41
Giri	210.90	194.08	194.08
Rukti	0.62	-	-
Binwa	34.03	-	-
Rongtong	1.73	-	-
Andhra	72.42	-	-
Bhabha	588.27	581.27	581.27
Killar	0.36	-	-
Throit	9.65	-	-
Sal-II	3.76	-	-
Gumma	6.94	-	-
Holi	5.04	-	-
Gaj	36.68	-	-
Baner	40.48	-	-
Ghanvi	60.85	-	-
Khauli	44.16	-	-
Larji	612.03	612.03	612.03
Bhabha Aug	6.48	-	-
Ghanvi II	0.00	-	51.60
Uhl III	0.00	-	289.64
Total	**1905.63**	**1565.79**	**1907.02**

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

(a) The Petitioner has considered the average actual generation for last 3 years i.e. FY10 to FY12 to project the Energy Availability from Own Stations during the 2nd Control Period. HPSEBL has given the revised estimate of Generation for FY12 based on the trend of actual generation during the first six months of FY12.

(b) The commissioning dates of Ghanvi II and Uhl III are taken as June 2013 and August 2013 respectively and their design energy in a 90% dependable year has been taken as 51.60 MUs and 289.64 MU respectively. Available power from these plants has been considered on the basis of their anticipated commissioning and design energy (assuming 1.28% auxiliary consumption).

(c) 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, Bhabha 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

2.43 The quantum of power availability projected by HPSEBL from various sources has been detailed in the table below:

Table 16: HPSEBL Projection – Total Power purchase quantum (MU)

Stations	FY12 (Actual)	FY13 (Revised)	FY14 (Projections)
BBMB Stations			
BBMB Old	43.92	43.80	43.80
BBMB New	232.45	395.38	395.38
Dehar	81.79	187.62	187.62
Pong	23.78	51.70	51.70
Total	**381.94**	**678.50**	**678.50**
NTPC Stations			
Anta(LNG)	4.50	2.70	2.70
Anta(G)	88.37	86.47	86.47
Anta (L)	0.13	0.77	0.77
Auraiya(LNG)	6.60	3.96	3.96
Auraiya(G)	108.00	126.96	126.96
Auraiya(L)	0.03	1.10	1.10
Dadri(LNG)	5.96	4.64	4.64
Dadri(G)	143.78	148.65	148.65
Dadri(L)	0.02	1.28	1.28
Unchahar-I	55.93	52.75	52.75
Unchahar-II	106.20	93.03	93.03
Unchahar-III	72.08	63.18	63.18
Rihand-1 STPS	309.66	273.34	273.34
Rihand-2 STPS	297.05	261.19	261.19
Kahalgaon	125.18	118.92	118.92

Stations	FY12 (Actual)	FY13 (Revised)	FY14 (Projections)
Singrauli	103.90	0.00	0.00
Dadri II TPS	57.49	0.00	0.00
Jhajjar STPS	10.22	0.00	0.00
Barh I & II	0.00	0.00	36.12
Anta Solar	0.00	0.00	25.00
Total	**1495.11**	**1238.93**	**1300.05**
NHPC Stations			
Chamera-I	75.56	47.69	47.69
Chamera-II	63.02	54.39	54.39
Salal	32.02	29.23	29.23
Tanakpur	15.35	30.21	30.21
Uri	72.86	69.28	69.28
Dhauli Ganga	44.41	14.78	14.78
Dulhasti	9.62	40.02	40.02
Sewa	3.73	0.00	0.00
Chamera-III	0.00	29.23	29.23
Parbati III	0.00	0.00	234.00
Total	**316.58**	**314.83**	**548.83**
Other Stations			
NAPP	65.72	61.00	61.00
RAPP	145.65	83.00	83.00
Nathpa Jhakri SoR	204.78	168.99	168.99
Shanan	5.26	5.26	5.26
Shanan Extn	45.00	45.00	45.00
Yamuna (UJVNL)	428.96	370.73	370.73
Khara	74.41	56.56	56.56
Baspa –II	1050.06	1050.06	1050.06
Baspa II Sec Energy	171.77	155.00	155.00
Tehri I	125.46	70.68	70.68
Koteshwar	17.67	30.98	30.98
Total	**2334.74**	**2097.25**	**2097.25**
Free & Equity Power			
Baira Suil	34.99	39.84	34.64
Chamera-I	91.89	91.15	75.55
Chamera –II	71.26	141.80	58.29
Shanan Share	2.63	2.63	2.63
Ranjeet Sagar Dam	85.13	60.97	60.97
Malana	55.87	37.69	61.00
Baspa – II	166.61	143.19	143.19
Nathpa Jhakri	144.39	396.02	820.00
Nathpa Jhakri Equity	350.34	0.00	204.71
Karcham Wangtoo	79.00	128.20	181.19
Private Micros (Up to 5 MW)	0.51	0.54	0.58
Private Micros (Above 5 MW)	23.42	25.06	36.82
Ghanvi	8.30	8.61	8.61
Baner	5.52	4.83	4.83
Gaj	5.00	4.75	4.75
Larji	83.46	83.46	83.46
Khauli	6.02	4.98	4.98

Stations	FY12 (Actual)	FY13 (Revised)	FY14 (Projections)
AD Hydro	16.76	16.76	41.76
Chamera - III	0.00	20.90	39.80
Parbati III	0.00	0.00	143.02
Malana-II			19.00
Budhil			13.50
Total	**1231.11**	**1211.39**	**2043.28***
Private Micros			
Above 5 MW	127.26	139.99	148.39
Up to 5 MW (Pref. Tariff)	682.47	784.84	863.32
Up to 25 MW (REC Tariff)	44.17	47.26	50.57
Total	**853.90**	**972.09**	**1062.28**
Other Sources			
Banking	740.67	1133.00	1100.00
Market Purchase	211.09	0.00	258.50*
Bilateral Purchase	0.06	0.00	0.00
PXI/IEX	18.55	108.00	0.00
UI Power	209.95	85.16	0.00
Total	**1180.32**	**1326.16**	**1358.50**
Unallocated Share			
Unallocated	-	580.00	480.00
Total	**-**	**580.00**	**480.00**
Grand Total of Power Purchase	**7793.70**	**8419.45**	**9568.69**
Own Generation	**1905.63**	**1565.79#**	**1907.02#**
Gross Power Purchase – Total	**9699.33**	**9984.94**	**11475.71**

* Revised submissions by HPSEBL

\# Petitioner's submission of power from only 4 stations

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

(a) The quantum of power purchase for the first half of the FY13 is based on the actual bills received from each power purchase source/station.

(b) The power purchase quantum for BBMB Old is based on fixed share of HPSEBL from this plant. The power purchase quantum for BBMB New and Dehar in FY13 is based on six months actual energy received. Also as per Hon'ble Supreme Court Judgement, there is an increase in share of HPSEBL in these plants during FY12. Based on this increased share, quantum for FY13 & FY14 has been projected. Similarly, share from Pong HEP is also available from FY12 onwards and power purchase projections are based on allocation to HPSEBL.

(c) Revised Estimates for FY13 and Projections for FY14 of the power purchase quantum from the 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 HPSEBL is then applied to the total month-wise Net

Generation to project the month-wise Net Energy Purchases from the respective stations.

(e) Barh I is assumed to be commissioned in September 2013. Projection for Barh I for FY14 has been done assuming PLF of 80% and an allocation of 20 MW.

(f) A nominal power purchase quantum from the liquid fuel in case of Anta, Auriaya and Dadri has been considered for the control period. This has been 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.

(g) The power purchase quantum from existing as well as new stations of NHPC, for the second half of FY13 and FY14 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 HPSEBL is applied on the total month-wise ex-bus generation to estimate the month-wise energy purchases from the respective stations.

(h) Commissioning schedule considered for new plants of NHPC is Parbati – III in April 2013 with a share of HPSEBL is 92 MW.

(i) The power purchase quantum from the 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.

(j) Shanan & Shanan Extension has fixed share to HPSEB and based on this, projections are made.

(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 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 has been worked out in the similar manner.

(l) In case of Baspa II, as historically high quantum of secondary energy is generated every year, maximum payable secondary energy of 155 MU has been considered. However, there was the availability of 264 MU as Baspa II secondary energy in FY11.

(m) No Equity Power has been considered from Nathpa Jhakri as the same has been surrendered by HPSEBL from FY13 onwards.

(n) Energy Availability from Yamuna (UJVNL) & Khara has been considered at the average generation level of last three years.

(o) HPSEBL has also considered the Energy Availability from the Private Sector Projects namely Patikari, Sarabari II and Toss and also from Private Micros based on actual availability during FY12. For Private Micros commissioned during FY13, the monthly average is considered to project Energy Availability during FY13 to FY14.

(p) The unallocated share from the Central Generating Stations by GoI for the FY13 & FY14 period has been considered at the same level of unallocated share received during the winter months of FY12.

(q) UI Purchase of 85.6 MUs in FY13 is based on the actual six months information. No further UI purchase has been considered in remaining 6 months and balance control period.

(r) HPSEBL would like to highlight that the generation from the new plants has been considered as per the expected COD of each station. In case of delay in the COD of any of the new plants considered during the Second Control Period, it will impact the projected energy availability and the energy deficit within the state will be met through additional market purchase.

(s) Regarding Free Power, considering the rapid increase of demand within the state, HPSEBL had requested the Government of Himachal Pradesh (GoHP) vide letter no. HPSEBL/CE(SO&P)/IS-10A/2012-1293-94 dated 21.11.2012 to provide its share in Free Power during summer months (May to September) also in FY14. A meeting on this issue was held in the Chamber of Principal Secretary Power, Government of Himachal Pradesh, Shimla on 2 February 2013. The same has been communicated by GoHP vide letter No. GoHP/DoE/Sale of Power/2012-8059-61 dated 8 February 2013. On the matter of Free Power, the following has been agreed to by GoHP:

- GoHP shall give free power from Nathpa Jhakri Project for full year.
- GoHP shall give free power from projects directly connected with HPSEBL system for full year
- GoHP shall give Free Power from all projects for winter months i.e. October 2013 to March 2014.
- GoHP will charge flat Rs. 3.50 paise per unit for the power so made available to HPSEBL for full year.
- The Equity Power from Nathpa Jhakri Project will be available from December 2013 onwards after discussion with West Bengal State Electricity Distribution Company Limited at CERC determined rate.

Outside State Sales and Energy Balance

2.45 Considering the power availability and the state's own power requirement during the Control Period, HPSEBL has projected the surplus power available for sale outside the State as 283 MU and 353 MU for FY13 and FY14 respectively.

Table 17: HPSEBL Projection - Outside State Sales Projection (MU)

Energy Sales to Outside State (MU)	FY12 (Actual)	FY13 (Revised)	FY14 (Projection)
Energy available for sale to consumers outside State	1461	1147	1703
Less: Banking Power return	971	863	1350
Net Inter State Sales*	490	283	353

* *Original submission by HPSEBL. The Petitioner made subsequent submissions which impact the quantum of net inter-state sales but the Petitioner did not submit any revised figures for the same.*

2.46 However, subsequent to their original filing, HPSEBL has revised the energy availability on account of Free Power as well as market purchase of power, which would impact the Energy Balance as well as Net energy available for sale outside state accordingly.

Aggregate Revenue Requirement for FY14

Cost of Power Purchase

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

(a) The per unit cost of HPSEBL Stations is considered as per rates approved by the Commission in the Tariff Order dated 19 July 2011.

(b) The per unit cost of BBMB Stations as per 6 months actuals for FY13 has been considered for full year for FY12. An escalation of 5% has been assumed for projecting per unit cost for FY14. Even though there has been substantial increase in cost from FY11 to FY13, HPSEBL has projected only a nominal increase in per unit cost for FY14, considering actual six month purchase cost.

(c) The power purchase cost of NTPC for FY13 and rest of the 2nd MYT Control Period is calculated based on the actual Power Purchase cost for FY12 and the first six months of FY13.

(d) For balance FY13 & FY14, the per unit fixed cost from NTPC stations has been kept at same level as received in 1st 6 months of FY12. However, nominal 5% escalation of 6 months actual per unit variable cost for balance year of FY13. Further, escalation of 5% has been applied on the composite per unit variable cost of FY13 to arrive at the per unit variable cost of FY14. Same has been considered to account for soaring international coal prices and strong depreciation of rupee.

(e) For Barh I & II, the per unit cost has been provisionally considered as 426 paise per unit while the availability from Anta Solar has been considered at 800 paise per unit as it will be bundled with other NTPC stations.

(f) For FY13 & FY14, 5% is assumed over FY12 for Anta, Auraiya and Dadri LNG stations respectively in view of the considerable increase in the fuel prices in the recent years.

(g) For NHPC Stations, keeping in view of actual 6 months bills, an escalation of 5% is assumed for FY13 over FY12 per unit cost. A nominal escalation of 5% has been assumed for projecting the Per Unit cost for FY14 keeping in view of the trend of increase in cost in the past years. Per unit cost of Parbati-III has been provisionally considered at 450 paise per unit.

(h) The per unit variable cost of other stations for FY13 has been kept at same level as received in 6 months actual. Same has been escalated by 5% to arrive at the variable cost for FY14. The fixed cost of NJPC for FY13 & FY14 has been kept at the levels of FY12 only.

(i) The per unit cost of Baspa HEP FY13 & FY14 has been kept at the level of FY12 only. For Free Power in FY13 & FY14, rate of 290 paise per unit as approved by the Hon'ble Commission for FY13 has been considered.

(j) With addition of new HEPs at the rate of 295 paise per unit, power purchase Cost from Private Micros & Unallocated Share in FY11 is assumed to be escalated by 2-3% during FY13 & FY14.

(k) Revised Estimates for PGCIL Charges for FY13 are based on 6 months actual and 6 months estimated power purchase. An escalation of 5% is considered on PGCIL Charges.

(l) HPPTCL Charges are based on approved HPPTCL Order for FY12 to FY14. Nominal escalation of 10% has been considered for ULDC, POSCO and associated charges.

(m) Further, Baspa Arrears for FY12 have been claimed based on actual payout and arrears for FY13 have been considered on the basis of the judgement by the Commission. CPSU Arrears have also been claimed which are accumulated arrears raised by CPSUs in supplementary bills on account of New Tariff Orders issued by CERC.

2.48 The following table summarizes station wise power purchase cost projected by HPSEBL.

Table 18: HPSEBL Projection – Power Purchase Cost

Generating Station	FY12			FY13			FY14		
	MU	Paise/u	Rs. Cr	MU	Paise/u	Rs. Cr	MU	Paise/u	Rs. Cr
BBMB Stations									
BBMB Old	43.92	71	3.11	43.80	76	3.33	43.80	80	3.50
BBMB New	232.45	39	9.04	395.38	51	20.01	395.38	53	21.01
Dehar	81.79	87	7.15	187.62	53	9.90	187.62	55	10.39
Pong	23.78	32	0.77	51.70	30	1.54	51.70	31	1.61
Total	**381.94**	**53**	**20.07**	**678.50**	**51**	**34.77**	**678.50**	**54**	**36.51**
NTPC Stations									
Anta(LNG)	4.50	587	2.64	2.70	604	1.63	2.70	629	1.70
Anta(G)	88.37	364	32.14	86.47	397	34.35	86.47	411	35.56
Anta (L)	0.13	897	0.12	0.77	884	0.68	0.77	923	0.71
Auraiya(LNG)	6.60	683	4.51	3.96	733	2.90	3.96	765	3.03
Auraiya(G)	108.00	336	36.25	126.96	405	51.40	126.96	419	53.22
Auraiya(L)	0.03	1062	0.04	1.10	1026	1.13	1.10	1072	1.18
Dadri(LNG)	5.96	655	3.90	4.64	712	3.30	4.64	744	3.45
Dadri(G)	143.78	319	45.88	148.65	399	59.33	148.65	413	61.46
Dadri(L)	0.02	858	0.02	1.28	1030	1.32	1.28	1074	1.38
Unchahar-I	55.93	332	18.58	52.75	364	19.17	52.75	377	19.88
Unchahar-II	106.20	328	34.85	93.03	386	35.91	93.03	400	37.17
Unchahar-III	72.08	375	27.01	63.18	412	26.05	63.18	426	26.90
Rihand-1 STPS	309.66	218	67.61	273.34	220	60.02	273.34	226	61.73
Rihand-2 STPS	297.05	238	70.58	261.19	221	57.67	261.19	227	59.32
Kahalgaon	125.18	377	47.25	118.92	360	42.86	118.92	372	44.21
Singrauli	103.90	173	17.98	0.00	168	0.00	0.00	174	0.00
Dadri II TPS	57.49	402	23.13	0.00	458	0.00	0.00	473	0.00
Jhajjar STPS	10.22	585	5.98	0.00	538	0.00	0.00	556	0.00
Barh I & II	0.00	0	0.00	0.00	0	0.00	36.12	426	15.38
Anta Solar	0.00	0	0.00	0.00	0	0.00	25.00	800	20.00
Total	**1495.11**	**293**	**438.47**	**1238.93**	**321**	**397.73**	**1300.05**	**343**	**446.27**
NHPC Stations									
Chamera-I	75.56	141	10.66	47.69	148	7.06	47.69	155	7.40
Chamera-II	63.02	309	19.46	54.39	303	16.50	54.39	318	17.32

Generating Station	FY12			FY13			FY14		
	MU	Paise/u	Rs. Cr	MU	Paise/u	Rs. Cr	MU	Paise/u	Rs. Cr
Salal	32.02	87	2.79	29.23	91	2.67	29.23	96	2.80
Tanakpur	15.35	217	3.33	30.21	228	6.87	30.21	239	7.21
Uri	72.86	163	11.87	69.28	171	11.85	69.28	179	12.43
Dhauli Ganga	44.41	335	14.86	14.78	319	4.71	14.78	334	4.94
Dulhasti	9.62	724	6.96	40.02	759	30.39	40.02	797	31.90
Sewa	3.73	446	1.67	0.00	469	0.00	0.00	492	0.00
Chamera-III	0.00	0	0.00	29.23	309	9.02	29.23	324	9.46
Parbati III	0.00	0	0.00	0.00	0	0.00	234.00	450	105.37
Total	**316.58**	**226**	**71.60**	**314.83**	**283**	**89.07**	**548.83**	**362**	**198.84**
Other Stations									
NAPP	65.72	243	15.97	61.00	247	15.06	61.00	259	15.81
RAPP	145.65	341	49.74	83.00	342	28.36	83.00	359	29.78
Nathpa Jhakri SoR	204.78	271	55.42	168.99	267	45.09	168.99	256	43.30
Shanan	5.26	40	0.21	5.26	40	0.21	5.26	42	0.22
Shanan Extn	45.00	21	0.93	45.00	40	1.80	45.00	42	1.89
Yamuna (UJVNL)	428.96	59	25.29	370.73	60	22.18	370.73	63	23.29
Khara	74.41	37	2.75	56.56	37	2.09	56.56	39	2.20
Baspa –II	1050.06	266	279.00	1050.06	266	279.00	1050.06	269	282.82
Baspa II Sec Energy	171.77	297	46.04	155.00	297	46.04	155.00	297	46.04
Tehri I	125.46	453	56.83	70.68	418	29.53	70.68	406	28.69
Koteshwar	17.67	493	8.72	30.98	426	13.20	30.98	437	13.53
Total	**2334.74**	**232**	**540.88**	**2097.25**	**230**	**482.56**	**2097.25**	**232**	**487.57**
Free & Equity Power									
Baira Suil	34.99	296	10.36	39.84	290	11.55	34.64	350	12.13
Chamera-I	91.89	296	27.20	91.15	290	26.43	75.55	350	26.44
Chamera –II	71.26	296	21.09	141.80	290	41.12	58.29	350	20.40
Shanan Share	2.63	296	0.78	2.63	290	0.76	2.63	350	0.92
Ranjeet Sagar Dam	85.13	296	25.20	60.97	290	17.68	60.97	350	21.34
Malana	55.87	296	16.54	37.69	290	10.93	61.00	350	21.35
Baspa – II	166.61	296	49.32	143.19	290	41.53	143.19	350	50.12
Nathpa Jhakri	144.39	296	42.74	396.02	290	114.85	820.00	350	208.27
Nathpa Jhakri Equity	350.34	453	158.71	0.00	0	0.00	204.71	461	94.40

Generating Station	FY12			FY13			FY14		
	MU	Paise/u	Rs. Cr	MU	Paise/u	Rs. Cr	MU	Paise/u	Rs. Cr
Karcham Wangtoo	79.00	296	23.38	128.20	290	37.18	181.19	350	63.42
Private Micros (Up to 5 MW)	0.51	296	0.15	0.54	290	0.16	0.58	350	0.20
Private Micros (Above 5 MW)	23.42	296	6.93	25.06	290	7.27	36.82	350	12.89
Ghanvi	8.30	296	2.46	8.61	290	2.50	8.61	350	3.01
Baner	5.52	296	1.63	4.83	290	1.40	4.83	350	1.69
Gaj	5.00	296	1.48	4.75	290	1.38	4.75	350	1.66
Larji	83.46	296	24.70	83.46	290	24.20	83.46	350	29.21
Khauli	6.02	296	1.78	4.98	290	1.45	4.98	350	1.74
AD Hydro	16.76	296	4.96	16.76	290	4.86	41.76	350	14.61
Chamera - III	0.00	0	0.00	20.90	290	6.06	39.80	350	13.93
Parbati III	0.00	0	0.00	0.00	290	0.00	143.02	350	50.06
Malana II							19.00	350	6.65
Budhil							13.50	350	4.73
Total	**1231.11**	**341**	**419.42**	**1211.39**	**290**	**351.30**	**2043.28***	**323**	**659.17***
Private Micros									
Above 5 MW	127.26	251	31.93	139.99	258	36.17	148.39	266	39.49
Up to 5 MW (Preferential Tariff)	682.47	278	189.79	784.84	284	222.62	863.32	289	249.78
Up to 25 MW (REC Tariff)	44.17	223	9.85	47.26	220	10.40	50.57	220	11.13
Total	**853.90**	**271**	**231.56**	**972.09**	**277**	**269.19**	**1062.28**	**283**	**300.40**
Other Sources									
Banking	740.67	0	0.00	1133.00	0	0.00	1100.00	0	0.00
Market Purchase	211.09	449	94.87	0.00	0	0.00	258.50	350	90.48
Bilateral Purchase	0.06	407	0.02	0.00	411	0.00	0.00	411	0.00
PXI/IEX	18.55	345	6.40	108.00	333	35.97	0.00	333	0.00
UI Power	209.95	352	73.91	85.16	399	33.97	0.00	399	0.00
Total	**1180.32**	**148**	**175.20**	**1326.16**	**53**	**69.95**	**1358.50**	**67**	**90.48**
Unallocated Share									
Unallocated	**0.00**	**0**	**0.00**	**580.00**	**319**	**184.88**	**480.00**	**335**	**160.66**
Other Charges									
PGCIL Charges			209.57			220.05			242.06
HPPTCL Charges			0.00			12.05			11.92
ULDC Charges (Including POSCO)			9.36			9.83			10.81

Generating Station	FY12			FY13			FY14		
	MU	Paise/u	Rs. Cr	MU	Paise/u	Rs. Cr	MU	Paise/u	Rs. Cr
Other Charges			-1.09						
ST Open Access - PTC			24.05			25.25			26.51
Baspa Arrears			6.44			113.84			
CPSU Arrears			175.83			49.01			
Other Arrears (including SHP)			8.80						
Total			**432.97**			**430.03**			**291.30**
Grand Total (without own generation)	**7793.70**	**299**	**2330.17**	**8419.15**	**274**	**2309.48**	**9568.69**	**279**	**2671.20**
External Loss	**3.55%**			**3.50%**			**3.50%**		
Net Power Purchase	**8080.56**			**8724.51**			**9915.74**		
Own generation	**1905.63**	**136**	**258.23**	**1565.79**	**137**	**215.23**	**1907.02**	**188**	**358.64**
Gross Power Purchase	**9699.33**	**267**	**2588.40**	**9984.94**	**253**	**2524.71**	**11475.71#**	**271**	**3108.54#**

** Revised submission*

 # Commission's totalling up of the various submissions made by the Petitioner pertaining to power purchase

Repair and Maintenance Cost

2.49 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.

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

Table 19: HPSEBL Projection – R&M Expenses (Rs Cr)

Particulars	FY12			FY13	FY14
	Actual	Generation	Distribution	Projected	Projected
Net R&M Expenses	**55.73**	**19.95**	**35.78**	**26.79**	**31.08**
Opening GFA	4713.64	2243.69	2469.95	3001.78	3482.28
R&M Costs as % of GFA	1.18%	1.13%	1.45%	0.89%	0.89%

Employee Cost

2.51 HPSEBL has considered the actual six monthly employee expenses for FY13 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.

2.52 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.

2.53 The licensee has further submitted that since the generation business has been transferred to BVPCL from 01/04/2012, the Employee Expenses incurred on the Generation Business in FY12 (as per provisional accounts) have been deducted from overall Employee Expenses to arrive at the notional Distribution Business Employee Expenses which is used as the basis for escalation for FY13 & FY14.

2.54 Dearness Allowance (DA) for FY12 to FY14 is calculated as a percentage of Basic & Grade Pay. DA percentage as on 1st January 2012 was 65% which was increased to 72% on 1 July 2012. A nominal 5% increase in DA has been assumed every six months during the 2nd Control Period.

2.55 The balance payout of the 5th Pay Commission Arrears has been considered in FY13 itself.

2.56 Other Allowances, Overtime Payments, Medical Expenses, LTC, Staff Welfare Expenses and Other Items have been increased by average CPI of FY10 to FY12 i.e. 10.40% and no bonus has been considered by HPSEBL during the entire Control Period.

2.57 For projecting Pensions, actual payout of FY12 has been increased by average CPI of FY10 to FY12 i.e. 10.40% and impact of retirements has been added. Projection of Gratuity is based on retirements and increase in DA percentages during the 2nd Control Period.

2.58 HPSEBL has further submitted that in view of provisions of the transfer scheme, complete payout of terminal benefits has not been transferred to Generation Business and consequently the same has been retained with the Distribution Business only.

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

Table 20: HPSEBL Projection - Employee Cost (Rs Cr)

Particulars (As submitted in first True up petition)	FY12 Actual	FY12 Gen.	FY12 Dist.	FY13 R.E.	FY14 Projected
Salaries & Allowances					
Salaries (Basic) + Dearness Pay	357.27	42.20	315.07	324.52	334.26
Grade pay	76.34	7.24	69.10	71.17	73.31
DA	225.52	24.86	200.66	282.92	334.20
Employee Arrears - 5th Pay Commission	58.95	8.38	50.57	20.70	0.00
Other Allowances	30.10	4.52	25.58	28.25	31.18
Overtime	3.08	1.11	1.97	2.17	2.40
Bonus	0.21	0.01	0.20	0.00	0.00
Salaries – Total	**751.47**	**88.32**	**663.15**	**729.73**	**775.35**
Other Staff Cost					
Medical Expense Reimbursement	10.20	1.26	8.94	9.87	10.89
Fee & Honorarium	0.01	0.00	0.01	0.01	0.01
Earned Leave Encashment	38.42	4.10	34.32	47.97	51.22
Payment under Workmen's Compensation	0.56	0.00	0.56	0.56	0.56
LTC	0.04	0.01	0.03	0.04	0.04
Staff Welfare Expenses/ employee contribution towards CPS	3.40	0.41	2.99	3.40	3.75
Other Staff Cost – Total	**52.63**	**5.78**	**46.85**	**61.85**	**66.48**
Terminal Benefits					
Provident Fund Contribution	0.01	0.00	0.01	0.00	0.00
Pension – Base	177.36	0.00	177.36	214.55	256.88
Pension - 5th Pay Commission Arrears	81.20	0.00	81.20	117.70	
Gratuity	74.60	0.05	74.55	104.28	111.34
Any other Items (MRC to pensioners, benevolent fund and DLI)	7.24	0.37	6.87	7.58	8.37
Terminal Benefits – Total	**340.41**	**0.42**	**339.99**	**444.11**	**376.59**
Gross Employee Cost	**1,144.52**	**94.52**	**1,050.00**	**1,235.69**	**1,218.42**
Less : Employee Cost Capitalisation	57.91	21.44	36.47	62.53	61.65
Less : Employee Attrition Impact				55.53	59.03
Net Employee Cost	**1,086.60**	**73.08**	**1,013.52**	**1,117.64**	**1,097.73**

Administrative and General Expenses

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

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

2.61 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 7.43% (by taking into account the actual growth rates in WPI for the period FY09 to FY12) and the same has been used for the escalating A&G Expenses during FY14.

2.62 HPSEBL has submitted that it has considered the actual A&G expenses except Regulatory & Consultancy Charges, Income Tax Updating Charges, Public Interaction Program, Cost Free Bulb to DIS Consumers, DSM Program and IT & Other initiatives for FY12 as the basis for forecasting the A&G expenses for the 2nd Control Period.

2.63 The Licensee has further submitted the A&G expenses incurred on the Generation Business in FY12 (as per provisional accounts) have been deducted from the overall A&G expenses to arrive at the notional A&G Expenses for Distribution Business.

2.64 The summary of proposed A&G expenses is provided below:

Table 21: HPSEBL Projection – A&G Expenses (Rs Cr)

Particulars	FY12			FY13	FY14
	Actual	Gen.	Dist.	Proj.	Proj.
Administration Charges					
Rent, Rates & Taxes	2.69	0.10	2.59	2.78	2.98
Telephone, Postage & Telegrams	2.83	0.28	2.55	2.74	2.94
Consultancy Charges	0.18	0.00	0.18	1.00	1.00
Conveyance & Travel	15.01	4.18	10.83	11.63	12.49
Regulatory Expenses	0.98	0.00	0.98	2.50	2.50
Income Tax Updating Charges	0.05	0.00	0.05	0.05	0.05
Consumer Redressal Forum	0.47	0.00	0.47	0.50	0.54
Insurance	0.10	0.00	0.10	0.11	0.12
Purchase Related & Other Charges	3.35	0.03	3.32	3.57	3.83
IT and other Initiatives	0.00	0.00	0.00	2.00	2.00
Administration Charges - Total	**25.64**	**4.59**	**21.05**	**26.87**	**28.45**
Other Charges					
Fees & Subscriptions, Books & Periodicals	0.35	0.01	0.34	0.37	0.39
Printing & Stationery	1.40	0.11	1.29	1.38	1.49
Advertisement Expenses	0.70	0.09	0.61	0.65	0.70
Electricity Charges	2.65	0.67	1.98	2.13	2.29
Water Charges / Cold weather expenses	0.22	0.01	0.21	0.23	0.25
Miscellaneous Expenses	2.01	0.49	1.52	1.63	1.75
Legal Charges	0.79	0.19	0.60	0.64	0.69
Audit Fee	2.41	0.00	2.41	2.59	2.78
Entertainment Charges	0.05	0.00	0.05	0.05	0.05
Training to Staff	0.15	0.00	0.15	0.16	0.17
Public Interaction Program	0.26	0.00	0.26	0.55	0.55
Public Expenses / Other professional charges	0.71	0.00	0.71	0.76	0.82
GIS/GPS exp related to high level Committee	0.64	0.00	0.64	0.69	0.74

Particulars	FY12			FY13	FY14
	Actual	Gen.	Dist.	Proj.	Proj.
Cost Free Bulb to DIS Consumers	10.25	0.00	10.25	0.00	0.00
A&G – Total	**48.23**	**6.16**	**42.07**	**38.70**	**41.13**
Less: Capitalisation	3.77	0.87	2.90	3.02	3.21
Net A&G Costs	**44.46**	**5.29**	**39.17**	**35.68**	**37.91**

Depreciation

2.65 Depreciation is charged on the basis of straight-line method, on the fixed assets in use at the beginning of the year.

2.66 The Licensee has considered depreciation rates as notified by the Commission in MYT regulations for respective business. The average rate arrived in FY13 has been considered for projection for FY14.

Table 22: HPSEBL Projection – Depreciation (Rs Cr)

Particulars	FY12			FY13	FY14
	Actual	Generation	Dist.	R.E.	Projected
GFA - Opening Balance	4,713.64	2,243.69	2,469.95	3,001.78	3,482.28
Net Additions during the Year	580.17	48.34	531.83	480.50	513.29
GFA - Closing Balance	5,293.81	2,292.03	3,001.78	3,482.28	3,995.57
Depreciation Rate %	3.86%	4.88%	3.02%	3.35%	3.35%
Depreciation for the Year	**193.38**	**110.72**	**82.66**	**108.57**	**125.11**

Interest and Finance Charges

2.67 HPSEBL has assumed interest rate for new loans a 12%. For existing loans, interest payments have been projected based on the actual interest outgoes during the 2nd Control Period.

2.68 The Licensee has submitted that the interest payout on consumer security deposits for FY13 & FY14 has been considered at 9.5% as per the rates notified in FY13 which is in line with provisions of relevant regulations.

2.69 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 timely payment of power purchase bills.

2.70 A rate of interest of 14.75% (SBI Prime Lending Rate as on 1st April 2012) has been considered for working capital loans for the balance of 2nd Control period. HPSEBL has proposed the following interest expenses based on the existing loan agreements and proposed capital expenditure plan for the balance of 2nd Control Period.

Table 23: HPSEBL Projection – Interest & Finance Charges (Rs Cr)

Particulars	FY12 Actual	FY13 Projected	FY14 Projected
RGGVY	3.29	3.86	3.59
LIC	15.98	0.00	0.00
REC	51.36	42.00	32.00
PFC	41.80	0.16	0.12
Bonds	0.44	0.00	0.00
Bank Loans	88.11	27.00	24.00
Interest on State Govt. Loan	1.62	1.54	1.45
Non SLR Bonds	17.26	0.00	0.00
Other Negotiated Loan	50.05	22.24	15.93
Interest on Overdraft	0.00	0.00	0.00
Interest on GPF & CPF	0.26	0.00	0.00
Cost of Raising Finances	0.01	0.00	0.00
Other Charges	1.13	0.00	0.00
Interest on Consumer Security Deposits	9.74	11.32	13.16
Rebate allowed for Timely Payment	0.60	0.60	0.60
Interest on WC Borrowing & Other Charges	110.31	171.29	133.13
Interest & Finance Charges - Total	**391.96**	**280.02**	**223.99**
Additional Debt Infusion due to Capitalization	0.00	540.59	540.59
Interest on Debt		59.46	59.46
Cumulative Interest	0.00	59.46	118.93
Interest & Finance Charges - Total after Capitalization	**391.96**	**339.48**	**342.92**
Less: Interest Capitalisation	143.82	124.57	125.83
Net Interest & Financing Costs	**248.14**	**214.91**	**217.09**

Return on Equity

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

Table 24: HPSEBL Projection – Return on Equity (Rs Cr)

Particulars	FY12			FY13	FY14
	Total	Gen.	Dist.	Projected	Projected
Opening Equity	971.77	770.34	201.43	201.43	251.43
Equity Infusion	0.00	0.00	0.00	50.00	0.00
Closing Equity	971.77	770.34	201.43	251.43	251.43
Return on Equity	**151.63**	**119.40**	**32.23**	**40.23**	**40.23**

Non Tariff Income and Other Income

2.72 Non Tariff and Other Income, as shown in table below, has been estimated by HPSEBL to increase at around 5% p.a. except for Miscellaneous Charges from the Consumers and Miscellaneous Receipts. An escalation of 5% p.a. is applied on FY12 actual figures for future projections.

Table 25: HPSEBL Projection – NTI and Other Income (Rs Cr)

Particulars	FY12 Actual	FY13 Proj.	FY14 Proj.
a) Meter Rent/Service Line Rentals	36.73	38.57	40.49
b) Recovery for theft of Power / Malpractices	30.17	31.68	33.26
c) Wheeling Charges Recovery	64.73	67.97	71.37
d) Miscellaneous Charges from Consumers	5.23	5.49	5.77
Non Tariff Income – Total	**136.87**	**143.71**	**150.89**
Other Income			
a) Interest on Staff loans & Advances	0.46	0.44	0.46
b) Income from Investments	27.96	29.36	30.83
c) Interest on Loans & Advances to Licensees	0.00	0.00	0.00
d) Delayed Payment Charges from Consumers	20.48	21.50	22.58
e) Interest on Advances to Suppliers / Contractors	0.05	0.04	0.04
f) Interest on Banks (other than on Fixed Deposits)	0.00	0.00	0.00
g) Income from Trading	2.04	0.73	0.77
h) Income fee collected against Staff Welfare Activities	0.09	0.05	0.05
i) Miscellaneous Receipts	74.53	76.16	79.97
j) O&M Charges Recovery from HPPTCL	0.00	0.00	0.00
k) Recovery of Investigation & Survey Charges	0.00	0.00	0.00
Other Income – Total	**125.60**	**128.29**	**134.70**
Total Non Tariff Income & Other Income	**262.46**	**272.00**	**285.60**

Aggregate Revenue Requirement

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

Table 26: HPSEBL Projection – Total Aggregate Revenue Requirement (Rs Cr)

Particulars	FY12 Actual	FY13 R.E.	FY14 Projected
Costs			
Power Purchase Cost (including PGCIL Charges)	2330.17	2524.71	2864.24
Employee Cost	1086.60	1117.64	1097.73
Repairs & Maintenance Cost	55.73	26.79	31.08
Administrative & General Expenses	44.46	35.68	37.91
Interest Cost	248.14	214.91	217.09
Depreciation	193.38	108.57	125.11
Total Costs	**3,958.48**	**4,028.30**	**4,373.16**
Add: Return on Equity	151.63	40.23	40.23
Less: Non-Tariff Income	262.46	272.00	285.60
Annual Revenue Requirement	**3,847.65**	**3,796.53**	**4,127.80**

2.74 As seen above, HPSEBL has submitted the actual ARR for FY12 as Rs 3847.65 Cr for both distribution and generation businesses.

2.75 The revised estimate for ARR of Distribution business for FY13 is Rs 3796.53 Cr and projection for FY14 is Rs 4127.80 Cr.

Revenue from Sale of Power at Existing Tariffs

2.76 HPSEBL's revised estimate for revenue from sale of power for FY13 and projections for FY14 are 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 24 April 2012) as shown in the table below:

Table 27: HPSEBL Projection – Revenue from Sale of Power (Rs. Cr)

Consumer Category	FY12	FY13	FY14
	Actual	R.E.	Projected
Domestic	419	586	627
Commercial	228	221	243
Small Supply	27	26	26
Medium Supply	65	64	64
Large Supply	1694	2135	2329
Agriculture/Irrigation	17	16	17
Public Lighting	6	6	7
Bulk Supply	90	101	105
NDNC	55	58	62
Water Works and Sewerage	205	214	223
Temporary Metered Supply	17	20	22
TOTAL	**2823**	**3447**	**3724**

2.77 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 3.00/unit, based on the average sale rate during recent years.

Revenue Gap

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

Table 28: HPSEBL Projection – Revenue Gap at Existing Tariff (Rs. Cr)

Particulars	FY12 Actual	FY13 RE	FY14 Projected
Annual Revenue Requirement	**3847.65**	**3796.53**	**4127.80**
Covered by			
Revenue at Existing Tariff to regulated consumers	2,822.75	3,447.15	3,724.45
Revenue from Sale Outside State	157.46	81.34	106.02
GoHP Subsidy Receivable	0.00	0.00	0.00
Revenue at Existing Tariff + GoHP Subsidy	**2,980.21**	**3,528.49**	**3,830.47**
Revenue Gap / (Surplus)	**867.44**	**268.04**	**297.33**

Wheeling Charges

2.79 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:

(a) Wheeling Tariff for FY12 = Rs 1517 Cr / 6918 MU = Rs 2.19 per unit

(b) Wheeling Tariff for FY13 = Rs 1272 Cr / 7460 MU = Rs 1.70 per unit

(c) Wheeling Tariff for FY14 = Rs 1264 Cr / 8026 MU = Rs 1.57 per unit

CONCLUSION

HPSEBL's Appeal in True-up Petition for FY12

2.80 In its true-up petition for FY12, HPSEBL has appealed to the Commission to:

(a) To admit the application.

(b) To true up the expenditure for FY11-12 based on the actual performance of HPSEB Limited.

(c) To approve the True-up gap of Rs 925.80 Cr for FY12.

(d) To consider the additional pass through as allowed in the interim order dated 23.10.2012.

(e) To true-up the interest on Consumer Security Deposit as per actuals.

(f) To true-up the interest on working capital as per the revised approved values.

(g) To allow additional submissions, if required, once the revised/audited accounts for FY12 are available.

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

2.81 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 & FY14.

(b) Consider to increase the Retail Supply Tariffs applicable from April 1, 2013.

(c) Approve proposed O&M cost that takes cares of the entire proposed Employee Expenses, R&M and A&G Expenses.

(d) To allow taxes, FBT, Cess, etc as pass through on actual basis.

(e) To condone any inadvertent omissions/ errors/ shortcomings and permit the Petitioner to add/ change/ modify/ alter this filing and make further submissions as may be required at a future date

(f) To allow further submissions, addition and alteration to this Petition as may be necessitating from time to time.

(g) To allow further necessary changes in petition when the audited accounts of FY11 & FY12 are available.

(h) Treat the filing as complete in view of substantial compliance as also the specific requests for waivers with justification placed on record;

(i) And pass such other and further orders as are deemed fit and proper in the facts and circumstances of the case.

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

3.1 Pursuant to the public disclosure on the 2nd APR and True-Up petition made by HPSEBL in newspapers dated 2 February, 2013 and 4 February 2013, the Commission vide the Public Notice published in newspapers on 6 February, 2013, had invited objections / suggestions from stakeholders and had fixed the date for filing objections / suggestions by the stakeholders as 1 March, 2013, for filing replies by the petitioner as 7 March, 2013 and for filing rejoinders by the stakeholders as 14 March, 2013.

3.2 The Commission had also published a Public Notice in newspapers on 2 March, 2013, fixing the date of Public Hearing as 13 March, 2013 while also inviting therein objections / suggestions from stakeholders pursuant to the filing of the Tariff Proposal in the Commission by the HPSEB Ltd on date 27 February, 2013, salient features of which were published in the newspapers dated 2 March, 2013 and 4 March, 2013.

3.3 The Public Hearing was held on 13 March, 2013 in the Commission's Court Room at Shimla.

3.4 In all, the following seven objectors had filed written objections to the True-Up (for FY12) and ARR (for 2nd APR of the second MYT control period and Tariff determination for FY14) petitions filed by HPSEBL. The objectors listed at Sr. No 3 (a), (b) and (c) jointly filed their objections. Two objectors appearing at Sr. No. (1) and (2) filed objections/suggestions after the last date notified for filing objections/suggestions. 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 is as follows:

Objections received after the due date:

(1) Ambuja Cements Ltd.

(Vide MA No. 41/2013 dated 11.03.2013)

(2) Shakti Kisan Club – Katyara, PO Devthi, Tehsil and District Solan

(Received on 19.03.2013)

Objections / Suggestions received before due date

(3) (a) The Confederation of Indian Industry (CII), Chandigarh

(b) BBN Industries Association (BBNIA), Baddi

(c) Parwanoo Industries Association, Parwanoo

(Vide MA No. 25/2013 dated 27.02.2013)

(4) Kala Amb Chamber of Commerce and Industries (KACCI)

(Vide MA No. 23/2013 dated 27.02.2013)

(5) M/s Auro Spinning Mills, Baddi

(Objections filed vide MA No. 27/2013 dated 28.02.2013 and rejoinder filed vide MA No. 40/2013 dated 11.03.2013)

(6) Jai Bharat Steel Ltd. Kala Amb

(Vide MA No. 30/2013 dated 01.03.2013)

(7) Laghu Udyog Bharti, Baddi

(Vide MA No. 28/2013 dated 27.02.2013)

3.5 Names of the objecting organization/companies and their respective representatives, who were present to plead their cases before the Commission during public hearing, are given in the table below:

Table 29: List of Objectors present during Public Hearing

S. No.	Objector/Organisation	Represented by
1.	M/s CII, BBNIA, PIA Industries Associations	Sh. Rakesh Bansal, Sh Shailesh Aggarwal, Sh Deepak Bhanot and Sh Rajender Guleria
2.	M/s KACCI	Sh Deepak Garg
3.	M/s Auro Spinning Mills, Baddi	Sh. DR Sharma, Sh. A Puri

3.6 Issues raised by the objectors in their written submissions 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. The objections / suggestions raised by M/s KACCI were not in context of petition 176/2012 filed by HPSEBL and primarily referred to petitions filed by them in the Hon'ble High Court of HP with respect to the previous Tariff Orders issued by the Commission. Only those objections / suggestions received before the due date have been considered by the Commission and are summarised in the following sections.

Objections/Suggestions by Stakeholders

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

a) Objections / Suggestions on True up Petition for FY12:

i. Higher Power Purchase Cost claimed by HPSEBL (59.59 crore more than approved);

ii. Higher T&D losses claimed by HPSEBL (13.43% as against 12.55% approved);

iii. Excess Employee Costs claimed by HPSEBL (270.92 crore more than approved);

iv. High Interest Cost Claimed by HPSEBL (160.95 crore more than approved);

v. Absence of Balance Sheets makes it difficult to ascertain the cost - Audited Accounts have not provided by HPSEBL and absence of which leads to variations in estimation of ARR;

vi. Variation in costs from approved figures for FY12 of Rs 389.80 crores in true up filed by HPSEBL Excess on account of controllable parameters should not be allowed and financial losses arising out of the underperformance in targets which is to be to the licensee's account.

b) Objections / Suggestions on 2nd APR Petition:

i. Category wise Cost of Supply and Cross Subsidy: Tariff should not be based on the category-wise cost of supply; Commission should follow Cost to Serve philosophy rather than Average cost philosophy; Cross subsidy should be phased out in a time bound manner; Tariff of subsidized class of consumers should be brought to 80% of average cost of supply; Tariff for EHT Category (present level cross subsidy not to be increased)

ii. Higher T&D losses claimed by HPSEBL should not be allowed by the Commission on continuous basis;

iii. Excess Employee Costs claimed by HPSEBL should not be allowed; Employee cost should not be allowed to go up;

iv. High Interest Cost Claimed by HPSEBL should not be allowed;

v. Return on Equity should not be approved;

vi. Unapproved gaps to be funded by the State Government;

vii. Accounts of HPSEBL still not segregated into Distribution and Generation;

viii. Non-Transfer of Transmission Network of HPSEBL to STU leads to higher IDC which otherwise would have been recovered through Transmission Tariff;

ix. Design Energy of own generating stations should be incorporated into Tables in the Tariff Order;

x. Power Purchase cost of HPSEBL can be reduced by increasing night time concession which would lead to shifting of load and flattening of system load curve;

xi. Outside State Sale (Banking Power) increased by HPSEBL to 1350 MU for FY14 as against 800 to 900 MU in past years without assigning reasons;

xii. GoHP subsidy has not been separately mentioned in the ARR;

c) Tariff and Other Issues:

i. Connected Load in kW be replaced with contract demand

ii. Chargeable Demand for the levy of Demand Charges should be 80% of Contract demand instead of present 90%; Contract Demand charges should not be levied (either Demand or Energy charges whichever is more should be charged) or Demand charges for HT consumers should be reduced from Rs 300 per kVA to Rs 200 per kVA and energy charges may be increased to make the proposal revenue neutral

iii. Night Time Concession should be increased to 50 paise per unit; Night time concession should be higher on higher voltage levels i.e. night time concession at 132 kV should be at least 2 paise more than that on 66 kV;

iv. Power cuts should be imposed uniformly on all category of consumers; Pro-Rata adjustment of Demand charges in the event of non-supply of power for longer periods; HPSEBL to submit proposal as per paragraph 3.23 of Tariff Order dated 24.04.2012

v. Fee for seeking peak load exemption (should not be charged every year and should be levied on enhanced quantum of power); As per previous Tariff Order, the PLE fees for first and subsequent applications was to be proposed by HPSEBL

vi. Categorization of Industries and character of service should be based on load in kVA rather than on kW basis; Clubbing of two voltages under EHT in Large Industry category is unjust; Tariff at 132 kV should be 2% less than that at 66kV; EHT consumers at 132 kV should be given HV Supply Rebate @ 2% as compared to EHT consumers on 66 kV

vii. No Peak restrictions for SMEs; No Peak load demand charges for SMS category should be levied or Peak load charges should be lowered and PLVC rate should be same as PLEC rate for large industries

viii. Only two Industrial categories should be there i.e. Small (up to 100 kW) and Large (Small should be clubbed with Medium) and tariff of small/medium categories (up to 100 kW) should be made at par with that in Agriculture sector

ix. The IDC charges should be built into the tariff; IDC not should be levied on SMEs

x. Security Deposit in the form of FDR should be accepted by HPSEBL

xi. Contract Demand violation charges should be twice and not thrice that of Demand Charges

HPSEBL's Response

3.8 To the issues mentioned in brief above, the Petitioner has made the following response:

a) Reply by HPSEBL to Objections / Suggestions on True up Petition:

3.9 Power purchase quantum & cost and sale of power are uncontrollable parameters as per the prevailing regulatory framework and hence provision of yearly truing up of these parameters has been kept in the regulations. The approved T&D Losses for FY12 considered by the Commission while determining the tariff order for FY12 was 14% and HPSEBL has achieved the lower T&D Losses of 13.43%. However, actual T&D loss levels have increased in FY12 as compared to FY11. During FY12 HPSEBL had executed a large number of RGVVY Schemes that resulted in increase in the LT/HT Ratio. EHT sales have also reduced by almost 2% in FY12. The status of HT and LT lines (Km) and HT and LT sales (MU) in FY11 & FY12 respectively is as follows:

Table 30: HT-LT line length and sales in FY11 and FY12

	In Ckt (km)				Sales (MU)		
	EHT	**HT**	**EHT+HT**	**LT**	**EHT+HT**	**LT**	**HT/LT Sales Ratio**
FY12	2246.8	29948.5	32195.3	56088.9	4546.2	2371.9	1.9167
FY11	2246.8	29291.7	31538.5	54906.0	4439.5	2184.7	2.0321
Increase	0.0	656.8	656.8	1182.8	106.7	187.2	

3.10 The Employee Cost claimed by HPSEBL is as per actual. The upward revision in per unit employee cost as projected is primarily on account of actual payout of arrears on account of the recommendations of the 6th Pay Commission. While the 5th Pay Commission Arrears had not been approved by the HPERC in the tariff order dated 19th July 2011 for FY12, these had partially been paid by HPSEBL on its own. The Discoms of other states have similarly claimed a hike in allowed expenses for employee cost on the basis of the new Pay Commission recommendation. Also, non-payment of these arrears can lead to potential industrial unrest. After the complete payout of the arrears, the employee cost will substantially reduce. HPSEBL on its part have already taken a number of steps to curtail Employee Costs. In the past many years, despite increased distribution network and consumers there has been absolutely no increase in number of employees, except those allowed by the Commission.

3.11 There have been continuous efforts on the part of HPSEBL to restructure its loan. However, the reason for high interest cost is that in the past:

- HPSEBL was not allowed to recover genuine interest cost on loans taken up for generation projects and other system improvement projects.
- The tariff allowed by the Commission was not adequate to meet the costs of HPSEBL.

- The Commission has not approved the carrying cost for the gaps approved in the previous true-up orders. There is a time lag of two years in the actual expenses incurred and truing up of the actual expenses as against approved expenses.

3.12 The Interest cost not allowed in the past has affected the financial health of HPSEBL. HPSEBL was constrained to raise loans to fund its losses to continue its operations. However, HPSEBL has tried to curtail its costs wherever possible. HPSEBL is not in a position to control the Interest costs at the levels approved by the Commission and the borrowed funds are used to meet these expenses. However, short term loans are being taken to cover the gap in the ARR & Moreover, to comply with the directions/orders of the Commission to pay CPSU, UJVNL & BASPA Arrears and to meet up Employee cost over and above approved by the Commission. To meet up immediate material requirement, the centralized material procurement is being done through CAPEX approved by the Commission.

3.13 Sufficient copies of unaudited Balance Sheets of FY12 have been made available to the Commission over a period of time. The audited balance sheets of FY12 are expected to be available very shortly.

3.14 It is not clear from the table how the reduced Gap of Rs 389.80 crores has been derived. The objector has not considered the key components of Revenue from inter and intra state sales, non tariff income etc. HPSEBL has already submitted that the variation in key parameters from the Commission approved values was because of reasons beyond the control of HPSEBL. HPSEBL further emphasizes that the justification for increase in equity base in FY10 has already been detailed in MYT Petition No. 224/2010 submitted to the Commission. The actual submission for true-up has been provided in the Petitioner's True up Petition (Chapter A2 of this Order).

b) Reply by HPSEBL to Objections / Suggestions on 2nd APR Petition:

3.15 HPSEBL has been proposing the average Cost of Supply model for determination of tariff. HPSEBL shall shift to the category-wise cost of supply in due course of time. Almost all the other States are also following average Cost of Supply model for determination of tariff. HPSEBL, through its constant endeavours during filing of tariff petitions, is trying to bring the level of cross subsidy to ±20% as per the National Tariff Policy. The tariff proposed for FY13 is already in line with the norms stipulated in National Tariff Policy i.e. tariff should be within +/- 20% of Average Cost of Supply. In fact proposed tariff of all categories is within this range.

3.16 The tariff proposal being prepared is also in line with the existing tariff in the neighbouring States. During the first control period there was a marginal increase in tariff except in last year. However, one of the key reason behind the increase in tariff is increase in cost of procurement of power on account of market factors such as increase in prices of coal leading to increase in tariff of Central Power Generating Stations; The impact of new regulations issued by CERC for CGS stations (Terms & Condition of Tariff for 2009 to 2014) and issuance of Tariff Orders by CERC and tariff hike approved for CPSUs as a consequence of issuance of these tariff orders which has resulted in arrear bills being raised by CPSUs and also due to the increase of cost of power in short term market.

3.17 For the years FY11 onwards, HPSEBL had itself proposed increase in tariff for domestic consumers in the tariff proposal. HPSEBL proposed higher increase in tariff for domestic consumers considering that the existing realization from the category was less than the average cost of supply. This year also, unlike other utilities, increase in the tariff of the domestic category is proposed. The year on year increase in tariff is an approach towards reduction of cross subsidy which shall be achieved over a period of time. Moreover, a substantial part of power is purchased at higher rates to meet the demand of Industrial consumers. Therefore, the burden is more this year on the Industrial consumers in terms of increase in tariff. A comparison of increase in sales in Domestic and Industrial category from FY06 is presented in the following Tables '1' and '2' wherein it can be seen that increase in sales is more prominent in the industrial category, that for the industrial category, percent share of sales within the state have grown from 51.41% in FY06 to nearly 63% in FY12 and that there is a rise of 22.62% in FY11 itself as compared to that in previous years, and that the increase in average power purchase cost leading to high tariff has been due to purchase from costlier sources and also short-term market purchase as follows:

Table 31: Year on Year growth in sales

Energy Sales (MU) - A/c	FY06	FY07	FY08	FY09	FY10	FY11	FY12	5 Yr CAGR
Domestic	866	947	1,058	1,089	1,112	1,282	1,407	
YOY Growth	6.91%	9.35%	11.72%	2.93%	2.11%	15.29%	9.77%	8.24%
Industrial	1,835	2,396	2,927	3,204	3,421	4,195	4,315	
YOY Growth	36.23%	30.57%	22.16%	9.46%	6.77%	22.62%	2.85%	12.48%
Total Energy Sales (MU)	**3,569**	**4,300**	**5,029**	**5,461**	**5,814**	**6,641**	**6,918**	
YOY Growth	20.82%	20.48%	16.95%	8.59%	6.46%	14.22%	4.17%	9.98%

Table 32: Percentage of Energy Sales

% of Energy Sales (MU)	FY06	FY07	FY08	FY09	FY10	FY11	FY12
Domestic	24.26%	22.02%	21.04%	19.94%	19.13%	19.30%	20.34%
Industrial	51.41%	55.72%	58.20%	58.67%	58.84%	63.17%	62.37%

3.18 That to cater to rapidly increasing consumer base and sales in Industrial Category, majority of capital expenditure incurred is for capacity augmentation and building new infrastructure for these consumers only.

3.19 The revised projections for T&D losses for the 2nd Control Period have been based on the actual loss level for FY12 and revised estimates for FY13. The actual loss levels have increased in FY12 as compared to FY11. This is attributable to the fact that during FY12 HPSEBL had executed a large number of RGGVY Schemes that resulted in increase in the LT/HT Ratio. EHT sales have also reduced by almost 2% in FY12. The status of HT and LT lines (Km) and HT and LT sales (MU) in FY11 & FY12 respectively has already been depicted in the Table under the Reply by HPSEBL to the foregoing paragraphs on objections/suggestions on the True Up petition. HPSEBL would like to request the Commission to consider the loss trajectory proposed above as it would not be feasible for HPSEBL to achieve the trajectory approved in 1st APR Order.

3.20 The Employee Cost claimed by HPSEBL is as per actual, as detailed in paragraph

3.10 above. 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 the 2nd Control Period which has already been factored appropriately in the tariff order.

3.21 Regarding transfer of the terminal benefits to the generation business, the same has been retained with the Distribution Business in line with the provisions of Transfer Scheme notified by GoHP on 10 June 2010.

3.22 There have been continuous efforts on part of HPSEBL to restructure its loan but the significant interest cost burden, according to the Petitioner, is on account of reasons detailed above in paragraphs 3.11 and 3.12.

3.23 HPSEBL is running in losses and the Return on Equity (RoE) cannot be denied as it will only push it into further losses. The RoE is permitted for generation of internal resources and must be distinguished from actual profits especially in the case of an entity, which is reporting losses in its accounts. The RoE is allowed under the Act and majority of the SERCs like Rajasthan, Kerala, Punjab, Chattisgarh, etc are allowing the return irrespective of the accumulated losses of the utility. The RoE earned during the year/ previous years can be invested to fund some of the equity portion of the capital expenditure in the subsequent years. As per the provisions in the Act, HPSEBL has full liberty to invest equity in any project up to 30%. The RoE earned (through MYT) during the year can be invested to fund some of the equity portion of the capital expenditure in the subsequent years. Commission should not disapprove the equity investment for the control period based on funding pattern adopted by HPSEBL in the previous years. The RoE is currently being claimed on assets already capitalized or those proposed to be capitalized during the year (as per the approved capitalization schedule) only strictly as per the provisions of the regulations.

3.24 In respect of the EHT category, HPSEBL would like the Commission to examine the total costs and allow appropriate increase in tariff to ensure full recovery of approved costs keeping in view the prescribed norms for allowing cross subsidy.

3.25 The estimated sale of power outside State has been projected considering the following reasons:

- Increase in demand of power in the state.
- Limited addition in the quantum of power supply especially from Central Power Generating Stations.
- Lower short term power rates during a few months of winter season.

3.26 Moreover, in line with the advisory received from the Commission, 300 MUs as surplus/buffer is to be used within the State as and when required or else same is to be sold on day ahead basis if not required within State.

3.27 Regarding Design Energy of own generating stations to be incorporated into Tables in the Tariff Order, HPSEBL informs that there is no scientific basis of projecting the hydel generation. The hydel generation varies with the level of snowfall and rainfalls in a particular year. Further, as there has been considerable decrease in generation over the years for most of the older plants, it is more appropriate to consider average of past few years for projection for coming years to have more realistic figures. Further, as there is increase in generation also from some plants like Larji etc (which is more than their design energy), same has been considered accordingly. Overall there has been net increase in projected own generation for MYT second Control Period. In fact **"Report on Declining Generation of Existing Power Houses"** has been prepared and already been submitted to the Commission on its direction. Same is under the review of the Commission. Reasons for decline in generation have been detailed plant-wise in this report. It is also clarified that HPSEBL has considered auxiliary consumption of the total hydel generation as per actual information which is significantly lower than the auxiliary consumption norms specified by the Commission. HPSEBL would also like to submit that consequent to the direction given by the Commission, proposal to revise the Design Energy has been put up for the approval of BOD and subsequently will be submitted to the Commission for their consideration.

3.28 Regarding GoHP Subsidy, HPSEBL informs that all the revenue projections are being done at the Commission approved tariff and not on the subsidized tariff. This further implies that 100% receipt of GoHP subsidy is assumed while projecting revenue from sale of power to Domestic & Agriculture category. Any shortfall in receipt of subsidy is in account of HPSEBL only and not passed on to the consumers.

c) Reply by HPSEBL to Objections / Suggestions on Tariff and Other Issues:

3.29 Regarding replacement of connected Load in kW with contract demand in kVA, HPSEBL informs that the billing of the industrial consumers is on the basis of contract demand which is measured in kVA. The connected load of the consumer premises is maintained by HPSEBL in kW as per the Supply Code of HPERC based on the standard supply voltages.

3.30 Regarding linking of Tariff with supply voltage, HPSEBL informs that while the HT & EHT Consumers have been clubbed in one category, the approved energy charges for EHT Consumers are already lower than the approved energy charges for HT Consumers. The rationale considered by Commission behind approving lower energy charges is same as that proposed by the petitioner.

3.31 Regarding amending the Chargeable Demand for the levy of Demand Charges from 90 to 80 percent, HPSEBL informs that there is 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 quite reasonable as the consumer has the flexibility of reducing or enhancing the demand in case he is not able to meet the contract demand sanctioned earlier.

3.32 Regarding increase in Night Time Concession for the application of night time tariff, HPSEBL informs that the hike in night time concession has already been proposed in the current tariff proposal. Regarding linking of Night Time Concession to supply voltages, HPSEBL informs that night time hours have already been increased and now this period range is from 10:00 pm to 06:00 am. However, the night time concession is being proposed considering the nature of industries/consumers which can actually shift the load from day to night thereby flattening the load curve which may or may not depend on the supply voltage.

3.33 Regarding pro-rata reduction in levy of Demand Charges for period of Non availability of power (Power cuts), HPSEBL informs that proposal of pro rate adjustment for demand charges for Non Supply of power has not been submitted to the Commission as the power cuts being currently imposed is mainly on account either of scheduled maintenance or to maintain Grid Frequency which is essential for network stability and availability. The cuts other than the reasons mentioned above are very limited in nature and segregating same feeder wise for individual concession is very difficult. HPSEBL also informs that while it is desirable that a consumer should get continuous power supply, it is a fact that 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 its consumers and power cuts are imposed for reasons beyond its control, which can also be judged by the frequency or duration of power cuts prevalent in the neighbouring 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 charged 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. Moreover, power cuts not only affect the consumers but also HPSEBL as it results in loss of revenue.

3.34 Regarding fee for seeking peak load exemption, HPSEBL informs that these charges have already been approved by the Hon'ble Commission through a Clarificatory Order. HPSEBL submits that the fee for peak load exemption charges are fair and charged to recover the cost incurred to HPSEBL to process such requests. These costs are incurred towards maintenance of data and energy record at head office and substation/field offices. These charges are also justified as it encourages genuine consumers whose industrial operations really necessitate such peak load exemption.

3.35 Regarding Very High Peak Load Tariff, HPSEBL informs that the determination of peak load exemption charges is in the preview of Commission and that that the Peak Load Exemption charges are quite nominal in the present scenario.

3.36 Regarding doing away with peak load restrictions and for non levy of peak demand charges, HPSEBL informs that peak load restrictions 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 HPSEBL levies the penalty even in case of a single instance of peak load violation

3.37 Regarding Contract Demand Violation Charges, HPSEBL informs that the Contract Demand Violation Charges are basically the penalty to discourage the consumers from violating sanctioned contract demand. Keeping in view the fact that the industries have the provision of revising their contract demand twice a year, there is no point the penalty charges should be lowered for such violations.

3.38 Regarding Very High Demand Charges, HPSEBL informs that the categorization of industries exists on the basis of connected load and supply voltages. The demand charges are quite nominal considering the fixed costs being borne by HPSEBL and that while the proposal being made by the petitioner be beneficial for the consumers with lower load factor, this may adversely affect the consumers with higher load factor. However, HPSEBL has proposed for bifurcation of HT Consumers in 2 separate categories with connected load up to 1 MW and connected load of 1 MW and above wherein the consumers with lower load factor will automatically be segregated. Based on the consumption pattern that will be available from next year onwards, further rationalization of demand charges will be considered in the subsequent tariff proposals.

3.39 Regarding acceptance of security deposit in the form of FDR, HPSEBL informs that the amount to be collected and mode of payment is guided by HPERC (Security Deposit) Regulations

3.40 Regarding Tariff of SMEs to be made at par with Agriculture sector, HPSEBL informs that differentiation in tariff and creation of various tariff categories has been done on the basis of the relevant provisions of Electricity Act 2003 and National Tariff Policy. Any change in the existing definition of the particular category is in the preview of the Commission.

3.41 Regarding waiver of IDC charges, HPSEBL informs that Infrastructure Development Charges are being collected in line with the provisions of HPERC (Recovery of Expenditure for Supply of Electricity) Regulation, 2012 and HPSEBL can not deviate from the provisions of prevailing regulations.

Commission's Views:

3.42 Regarding 'Cost to Serve' model being used for tariff setting, 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. A '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 tariffs being pegged to a voltage-based Cost to Serve model.

3.43 GoHP subsidy comes under the jurisdiction of the State Government and the Commission is informed in the event of the State Government deciding to provide subsidy on tariff or for the purpose of meeting unmet revenue gap. If the nature and extent of GoHP subsidy is intimated to the Commission with prior notice, the same is detailed in the Tariff Order for the relevant year. For instance, in the Tariff Order for FY13 dated 24 April 2012, details had been provided in paragraphs 8.82 to 8.84 regarding the subsidy to be provided by GoHP for domestic and agricultural consumers.

3.44 Regarding allowance of Return on Equity, the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 provide for return on equity to be allowed to the distribution licensee @ 16% (post tax) on the paid up equity capital determined in accordance with regulation 19 of the said regulations. Therefore, return on equity is allowed to HPSEBL under the regulatory framework that envisages due return on the equity base of the company.

3.45 Regarding the power purchase cost being higher than approved, the Commission has time and again impressed upon the management of HPSEBL the need for devising a mechanism for short term sale and purchase of power so as to reduce the power purchase cost of HPSEBL. As summarised in the Tariff Order for FY13 dated 24 April 2012, 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, along with a management level team for periodic decision making and review. It is essential for HPSEBL to carry out accurate near-term demand forecasting in order to make adequate arrangements for procuring power and economise on its power purchase cost. In the present Tariff Order as well, directives have been given to HPSEBL to ensure prudence in power purchase and the Commission has also introduced an efficiency factor in power purchase cost with the expectation that the utility would be able to save at least Rs 30 Crores in FY14 by following the Commission's directives and suggestions and focusing on its power purchase strategy.

3.46 Regarding T&D losses being higher than approved, the Commission views with concern the higher T&D losses reported in FY12 and the revised (higher) T&D loss trajectory proposed by the Petitioner for FY13 and FY14. HPSEBL has mentioned certain reasons for the spike in T&D losses in FY12, such as the fact that the utility executed a large number of RGGVY Schemes that resulted in increase in the LT/HT ratio, which increases losses associated with LT level supply. However, the Commission expects the utility to make even stronger compensatory efforts to rein in the increase in losses due to such factors, and hence the Commission has retained the T&D loss reduction trajectory set down in the 1st APR Order and expects the utility to make all efforts to achieve the same.

3.47 Regarding actual employee cost being higher than approved, the Commission realises that certain costs such as Pay Commission impact on salary and terminal benefits cannot be forecast with a precise accuracy and hence the Commission had specified in its previous orders that any increase in employee cost on account of such uncontrollable factors would be eligible for true-up once actual figures are available. However, the Commission is mindful of the fact that HPSEBL's employee cost per unit of sales ranks among the highest (as compared to neighbouring states) and therefore strict norms have to be followed in allowing employee cost to the utility. Therefore, in the true up for FY12, the Commission has disallowed employee expenses on account of 'Projects' wings on the grounds that these should be on account of the respective projects, and should work on self sustaining basis and be a source of additional income for the HPSEBL. Once the uncertainty in projections with regard to impact of arrears and terminal benefits is over with the completion of the arrear-payout period, the Commission expects that actual employee costs should be controlled and brought close to the approved norm.

3.48 The Commission observes with concern that HPSEBL has submitted only the provisional accounts for FY12. The Commission in the Tariff Order for FY13 dated 24 April 2012 had said that the True-Up for FY11 was a provisional True-Up and once Audited Accounts become available, the Commission shall carry out a review. The Commission reiterates that once the Audited Accounts of FY11 become available HPSEBL shall file a True-up petition in the Commission. As regards for FY12, Commission has included the true up in present Tariff Order on provisional basis.

3.49 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. The Commission agrees with consumers on the desirability of following the 'Cost to Serve' model. Based on the provisions of the National Tariff Policy the Commission shall base the tariff fixation exercise mainly on the average cost of supply and shall duly keep 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 1st APR Tariff Order of 2nd MYT, dated April 24, 2012, Commission has reached ±20% level and the level of cross-subsidization of tariff to the Large Industrial consumer (EHT) category was Rs. 0.13 per unit (3%) and Commission shall consider progressively moving towards the 'Cost to Serve' philosophy from the next control period onwards depending on the availability of data.

3.50 With respect to the suggestion by the consumer that unapproved gaps should be funded by the State Government, the Commission wishes to emphasise that this is at the discretion of the State Government and does not fall within the purview of the Commission and the state govt is already looking at Financial Restructuring Plan (FRP) which covers such losses.

3.51 The Commission in the past has already imparted Directions to HPSEBL to segregate the accounts of Distribution and Generation business vide Direction in paragraph 9.23 of Tariff Order dated 19 July 2011. HPSEBL has complied with the directions by segregation of accounts.

3.52 The re-vesting of transmission assets and liabilities of HPSEB into the STU viz. HPPTCL, is as per GoHP notification dated 10.06.2010, 21.06.2010 and 19.11.2010, in conformity with the act. This is hence, an administrative decision of the State Govt.

3.53 The Commission in the last Tariff Order has already clarified its stand on the connected load in kW versus the Contract Demand in kVA. It is reiterated here that both the connected load and the Maximum Demand have different perspectives. At the time of creating infrastructure for release of connections, the distribution licensee designs the electrical system based on the connected load (in kW) which is the maximum load that may be required by the consumer getting connected to the system. 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 remains constant over larger periods of time unlike the Maximum Demand (in kVA) which is based on production factors of the respective industry and may accordingly vary seasonally. The provision for levy of Demand Charges on the basis of Contract Demand helps the consumers to reduce its cost by managing his demands during various hours of the day. The provision regarding levy of Demand Charges on the basis of 90% of Contract Demand in respect of full demand further takes Care of the marginal variations in his assessment of demand vis-à-vis the actual demand. The proposal regarding levy of Demand Charges on the basis of 80% of Contract Demand is however, considered inappropriate as sufficient flexibility is already available to the consumer. In this connection, it is also worth mention here that Contract Demand Violation Charges are applicable only, if he exceeds the Contract Demand, thereby meaning if his actual demand is between 90% and 100% of the Contract Demand he shall be liable to pay Demand Charges at normal rates only.

3.54 HPSEBL has proposed that facility regarding change of Contract Demand twice a year should be subjected to a provision that the consumer shall not be allowed to reduce his contract demand under this mechanism to less that 60% of Sanctioned Contract Demand. The Consumer associations were however, of the opinion that this proposed limit of 60% should not be more than 30%. **The Commission shall keep this limit as 50% of the sanctioned Contract Demand**.

3.55 Regarding night time concession, the Commission shall consider the proposals given by HPSEBL and Consumer Associations while finalising the tariff.

3.56 With respect to pro-rata reduction in Demand charges as a result of power cuts; the Standard of Performance (SOP) Regulations are already in place. This is a subject matter of SOP regulations and not of the tariff determination.

3.57 With respect to fixing a longer period for allowing Peak Load Exemption in respect of consumers who apply for availing Peak Load Exemption, HPSEBL has confirmed that Peak Load Exemption is being issued for a period of one year at a time. **However, HPSEBL agreed to consider extending it to a longer duration of once in three years.**

3.58 The levy of Peak Load charges also facilitates that the Industrial Consumers who restrict their energy consumption during Peak Load hours pay lower average rate as the Peak Load charges are levied for the demand and consumption which is specifically got sanctioned for that period. The Commission accordingly does not find it appropriate to withdraw these charges for any category of Industrial Consumers. As regards the PLVC, in the shape of additional Demand Charges, the Commission shall rationalise the provisions during determination of tariff.

3.59 Appropriate provisions for higher voltage supply rebate are already in place.

3.60 There already are only two categories of industrial consumers viz. SMS (Small Medium) and LS (Large) categories. The differentiation between categorization of industrial and agricultural loads is based on nature of usage as mandated by the Act.

3.61 Regarding suggestions on IDC to be built in the Tariff / not be levied on SMEs and regarding suggestion on Security Deposit in form of FDR, in this context necessary Regulations have already been framed by the Commission.

3.62 Suggestion for reducing the Contract Demand Violation Charges to twice of the Demand Charges will be looked in to and the Commission shall rationalise the rates for Contract Demand Violation Charges during determination of tariff.

3.63 In accordance with the provisions of Section 42 of the Electricity Act and the Ministry of Power letter dated November 11, 2011 on operationalising Open Access to consumers requiring power above 1 MW, the Commission in its Tariff Order dated April 24, 2012 had given direction for evolving objective, transparent and equitable mechanism for Open Access, capacity enhancement of SLDC and resolving metering & wheeling arrangements. The Commission also directed HPSEBL to file tariff petition for FY14 in two parts i.e. Part-A comprising of requirement of total ARR & retail supply tariff for consumer requiring power up to 1 MW and tariff for standby supply to Open Access consumer and Part-B for wheeling tariff and cross subsidy surcharge including additional surcharge, if any. The Commission has already issued the Himachal Pradesh State Electricity Regulatory Commission(Grant of Connectivity, Long-term and Medium-term intra-state Open Access and Related Matters)(First Amendment) Regulations, 2012, notified on December 7, 2012 for operationalising Open Access. HPSEBL submitted that there were around 240 consumers having demand more than 1MW and there were various technical, metering, operational and financial issues that were yet to be addressed. In addition the strengthening of Himachal Pradesh Load Despatch Society (HPLDS) performing the function of SLDC was needed to handle the additional work. HPSEBL accordingly requested that the operationalising of Deemed Open Access may be deferred due to their unpreparedness to handle various issues and to give HPSEBL and SLDC ample time to prepare for it and at the same time Deemed Open Access may be synchronized with the 3rd MYT Control Period so that issues related to tariff and T&D loss trajectory can be addressed accordingly in the next MYT. Various Industrial Associations have also requested for the deferment of the implementation of operationalisation of Open Access. Accordingly HPSEBL submitted a single petition for determination of Retail and Wheeling Tariff in line with previous year patterns. The Commission has accepted the petition of HPSEBL for determining the ARR and retail supply tariff for FY14. Since the Commission has issued the relevant regulations, before operationalising Open Access objections and suggestions shall be invited in the Public hearing. Since the State Government has also not given its views regarding the operationalisation of Open Access, the Commission shall determine the tariff accordingly after getting the views from the Stakeholders and take decision accordingly.

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

Introduction

4.1 The Commission held formal interaction with the CMD, Directors and officers of the HPSEBL on 5 March, 2013 to enable the Commission to understand the constraints, strengths and future vision of HPSEB Ltd and evolve a common future strategy for the benefit of both the consumers as well as HPSEBL The interactive session further enabled the Commission to know the initiatives taken by HPSEBL to improve its performance on various fronts.

4.2 The issues that were discussed during the interactive session are summed up below.

ARR Projections by HPSEBL and Related Issues

4.3 It has been observed that the HPSEBL has projected R&M expenditure of Rs 31 crores (0.7% of the projected ARR for FY14) or approximately 4 paise per unit for the FY14. This means that the amount spent by HPSEBL for maintenance and upkeep of its assets is quite low. HPSEBL needs to review the projections on this front in future so that improper upkeep of the infrastructure does not affect the quality and reliability of power supply to the consumers.

4.4 In the ARR projections for the FY14, the interest component has been projected by HPSEBL at Rs 121 crores (2.7% of the projected ARR for FY14). This component reflects the investment made by HPSEBL for building new infrastructure for future requirements. HPSEBL while formulating the future Capital Expenditure Plans needs to link the proposed capital works to improvement in quality and reliability of power, AT&C loss levels etc.

4.5 The employee cost of HPSEBL is very high at Rs 1098 crores (24.7% of the projected ARR for FY14). The Commission advised the HPSEBL that the productivity of employees needs to be increased by various means such as adopting state of the art training facilities, redeployment of employees based on their skills, qualifications, experience, etc.

Power Purchase Cost

4.6 Since 65 to 70% of the ARR of HPSEBL accounts for the power purchase cost, efficient and economic management on this front can lead to substantial savings for HPSEBL. Hence, HPSEBL was advised to strengthen its power purchase cell by developing/ deploying a dedicated team of professionals and adopting latest available technologies.

4.7 HPSEBL was advised that the power purchase has to be in merit order and therefore, cheaper power should be purchased for distribution and costlier power should be traded to recover cost or surrendered/ diverted without surrendering the SoR share rights. Availability of state Govt. free power and its rate should also be kept in view for power purchase planning. While working out the profitability, all costs up to interstate point for sale should be taken into account i.e. rate at interconnection point of discom/generator, wheeling charges, losses etc. Therefore sale rate of power from HPSEBL's own stations at interstate point should be higher than purchase rate of power in merit order at interstate point i.e. inclusive of power grid charges and losses. Therefore, power purchase planning has to be recast to ensure that cheaper power is purchased.

4.8 The total power purchase of HPSEBL accounts for 75% of power purchase through long term sources. HPSEBL needs to increase this share to at least 95% and the purchase from short term sources should be used for the purpose of power balancing.

4.9 HPSEBL should evolve some mechanism wherein the actual rate of power banked i.e. costliest power at the margin in merit order, being surplus is also considered while entering in to banking agreements. At the same time the baking arrangements should be such that the cost of surplus power banked is recovered.

Financial Restructuring Plan (FRP)

4.10 HPSEBL informed that it was planning to avail the benefits of the Financial Restructuring Plan (FRP) notified by the Government of India on 5 October 2012. HPSEBL is planning for debt restructuring of eligible amount of Rs 1398.66 crores through this scheme.

4.11 HPSEBL informed that it has fulfilled the mandatory conditions which were pre-requisites for availing the FRP and it also planned to avail the benefits of performance based Transitional Finance Mechanism (TFM) available under the scheme.

4.12 The proposal summary has been approved and forwarded by the Government of Himachal Pradesh to the Ministry of Power, Government of India on 17 January, 2013 and HPSEBL is holding detailed deliberations with the Nodal Bank (UCO Bank) regarding identifications of loans to be restructured.

4.13 The Commission agreed in-principle to support the FRP and advised HPSEBL to pursue the proposal vigorously for early approval and send the proposal to Commission for consideration/approval.

T&D Losses

4.14 HPSEBL informed that the losses of the utility for FY12 within the state with EHV consumptions were around 13.5% whereas the figure stood at 17.6% without EHV consumption.

4.15 The Commission advised HPSEBL that the overall T&D loss figures reflected by HPSEBL in its tariff filings do not give clear picture of the actual loss levels as these include EHT sales involving zero or very low losses.

4.16 In order to know the real loss levels HPSEBL needs to segregate the losses in to the categories of losses at voltage levels of above 33 kV (transmission & EHT losses) and losses at voltage levels of 33 kV and below.

4.17 The targets should be fixed for various field units at respective voltage levels and their performance can accordingly be judged on the basis of loss levels achieved. While fixing up the targets for field units various factors such as industrialization, load concentration in the area etc. should also be considered. In order to achieve the set targets at these voltage levels and to find out the areas with high losses, the field units will have to analyze the distribution system at lower voltage levels and take corrective steps accordingly.

A5: TRUE UP FOR FY12 UNDER THE 2ND MYT CONTROL PERIOD (FY12 – FY14)

5.1 HPSEBL has submitted a petition for true up of expenses for FY12 on the basis of difference in actual expenses and revenue in FY12 vis-à-vis the expenses and revenue approved for FY12 in the MYT Order dated 19 July 2011. It has also provided provisional accounts for the period April 1, 2011 to March 31, 2012.

5.2 The Commission has reviewed the operational and financial performance of HPSEBL for FY12 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, 2011 (hereinafter referred to as the 'MYT Regulations, 2011'), taking into account all the information, data submissions and necessary clarifications submitted by the licensee as well as views expressed by stakeholders.

5.3 The Commission is 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 01.04.2011 to 31.3.2012, this is a provisional true-up and may be reviewed once the audited accounts are made available for the entire period of FY12.**

5.4 As per Clause 11 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011:

"

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

(a) Variation in revenue / expenditure on account of uncontrollable sales and power purchase shall be trued up every year. Truing-up shall be carried out based on the actual/audited information and prudence check by the Commission:

Provided that if such variations are large, and it is not feasible to recover in one year alone, the Commission may take a view to create a regulatory asset, as per the guidelines provided in clause 8.2.2 of the National Tariff Policy;

Provided further that under business as usual conditions, the Commission, to ensure tariff stability, may include the opening balances of uncovered gap / trued-up costs in the subsequent control period's ARR instead of including in the year succeeding the relevant year of the control period after providing for transition financing arrangement or capital restructuring.

(b) for controllable parameters -

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

(ii) 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.

Notwithstanding anything contained in these regulations, the gains or losses in the controllable items of ARR on account of force majeure factors after adjusting for proceeds from any insurance scheme, if any, shall be passed on as an additional charge or rebate in ARR over such period as may be specified in the order of the Commission."

5.5 The following sections contain details of true-up for FY12, based on the provisional accounts of HPSEBL.

Energy Sales and Revenue

5.6 HPSEBL in its true up petition for FY12 has submitted the actual sales for FY12 as 6918.07 MU as compared to 7090.18 MU approved by the Commission for FY12. The Commission accepts the actual figures given by utility at this stage.

5.7 The following table shows the sales approved by the Commission in the MYT Order for FY12, sales submitted as actual by HPSEBL in its true up petition for FY12, and trued up (approved) sales for FY12.

Table 33: Energy sales in FY12 within the state (MU)

Category	Approved in MYT Order	True-up petition	Now Approved (Trued up)	%age of Total
Domestic Supply other than BPL	1289.81	1406.20	1406.20	20.33%
BPL Domestic	0.55	1.09	1.09	0.02%
Non Domestic Non Commercial Supply	98.89	98.55	98.55	1.42%
Commercial Supply	388.95	387.20	387.20	5.57%
Small & Medium Industrial Power Supply	213.89	198.06	198.06	2.86%
Large Industrial Power Supply	4304.85	4116.50	4116.50	59.50%
Water Pumping & Irrigation Supply	470.16	476.14	476.14	6.88%
Street Lighting Supply	12.95	12.89	12.89	0.19%
Bulk Supply	285.75	192.88	192.88	2.79%
Temporary Supply	24.38	28.56	28.56	0.41%
Total Sales	**7090.18**	**6918.07**	**6918.07**	**100%**

Revenue from Sale of Power

5.8 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).

5.9 Based on the data provided by HPSEBL for FY12, the revenue generated from sale of power within the state is presented in the table below.

Table 34: Revenue from sale of power within state (Rs Crores)

Categories	Total sales in FY12 as per accounts	%age of Total
Domestic	418.91	14.84%
Non Domestic Non Commercial	55.12	1.95%
Commercial	227.79	8.07%
Small & Medium Industrial Power Supply	91.93	3.26%
Large Industrial Power Supply	1694.23	60.02%
Water Pumping & Irrigation Supply	222.04	7.87%
Street Lighting Supply	6.21	0.22%
Bulk and Grid supply	89.64	3.18%
Temporary Supply	16.87	0.60%
Total Sales as per accounts	**2822.75**	**100%**

5.10 Revenue from sale of power outside state (excluding banking) is shown as Rs 157.46 Cr. @ Rs. 3.21 per unit.

Table 35: Revenue from sale of power in FY12 (Rs Cr)

Particulars	Approved in MYT Order	True Up Petition	Now Approved (Trued Up)
Revenue at existing tariff	2861.23	2822.75	2822.75
Revenue from sale outside state	208.26	157.46	157.46
Revenue at existing tariff + GoHP Subsidy	**3069.49**	**2980.21**	**2980.21**

5.11 The Commission approves the revenue of Rs 2980.21 Cr for FY12 arising out of sale of power both within the state and outside the state.

Power Purchase

5.12 HPSEBL in its true up petition for FY12 had submitted that the actual power purchase cost for FY12 was Rs 2330.17 Crores, as against Commission's approved power purchase cost of Rs 1998.21 Crores (including PGCIL and other charges). The actual quantum of power purchase for FY12 is given as 9699.32 MU.

5.13 HPSEBL has submitted that the following reasons are attributable for higher power purchase cost incurred in FY12:

(a) Actual UI purchase of 209.95 MUs (Rs 73.91 Cr) resulting in net increase in cost by Rs 73.91 Cr;

(b) CPSU Arrears of Rs 175.83 Cr;

(c) Baspa-II arrears of 6.44 Cr;

(d) Secondary Energy from Baspa II was 171.77 MU resulting increase in cost by Rs 46.04 Cr;

(e) 880.77 MU from GoHP Free Power Share and Equity Power share was available to HPSEBL as against approved 658.78 MU;

(f) 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.

5.14 HPSEBL has submitted actual power purchase quantum and cost for FY12 as shown below:

Table 36: Actual Power purchase for FY12

Stations	Power Purchase Quantum (MU)	Power Purchase Cost (Rs Cr)
BBMB		
BBMB Old	43.92	2.64
BBMB New	232.45	32.14
Dehar	81.79	0.12
Pong	23.78	4.51
NTPC		
Anta(LNG)	4.50	2.64
Anta(G)	88.37	32.14
Anta(L)	0.13	0.12
Auraiya(LNG)	6.60	4.51
Auraiya(G)	108.00	36.25
Auraiya(L)	0.03	0.04
Dadri(LNG)	5.96	3.90
Dadri(G)	143.78	45.88
Dadri(L)	0.02	0.02
Unchahar-I	55.93	18.58
Unchahar-II	106.20	34.85
Unchahar-III	72.08	27.01
Rihand-1 STPS	309.66	67.61
Rihand-2 STPS	297.05	70.58
Kehalgaon	125.18	47.25
Singrauli	103.90	17.98

Stations	Power Purchase Quantum (MU)	Power Purchase Cost (Rs Cr)
Dadri II TPS	57.49	23.13
Jhajjar STPS	10.22	5.98
NHPC		
Chamera-I	75.56	10.66
Chamera-II	63.02	19.46
Salal	32.02	2.79
Tanakpur	15.35	3.33
Uri	72.86	11.87
Dhauli Ganga	44.41	14.86
Dulhasti	9.62	6.96
Sewa	3.73	1.67
Other Stations		
NAPP	65.72	15.97
RAPP	145.65	49.74
Nathpa Jhakri SoR	204.78	55.42
Shanan	5.26	0.21
Shanan Extn	45.00	0.93
Yamuna (UJVNL)	428.96	25.29
Khara	74.41	2.75
Baspa –II	1050.06	279.00
Baspa II Sec Energy	171.77	46.04
Tehri I	125.46	56.83
Koteswar	17.67	8.72
Free Power & Equity		
Bairasiul	34.99	10.36
Chamera-I	91.89	27.20
Chamera –II	71.26	21.09
Shanan Share	2.63	0.78
Ranjeet Sagar Dam	85.13	25.20
Malana	55.87	16.54
Baspa – II	166.61	49.32
Nathpa Jhakri	144.39	42.74
Nathpa Jhakri Equity	350.34	158.71
Karcham Wangtoo	79.00	23.38
Private Micros (Up to 5 MW)	0.51	0.15
Private Micros (Above 5 MW)	23.42	6.93
Ghanvi	8.30	2.46
Baner	5.52	1.63
Gaj	5.00	1.48
Larji	83.46	24.70
Khauli	6.02	1.78
AD Hydro	16.76	4.96
Private Micros		
Above 5 MW	127.26	31.93
Up to 5 MW (Pref. Tariff)	682.47	189.79

Stations	Power Purchase Quantum (MU)	Power Purchase Cost (Rs Cr)
Up to 25 MW (REC Tariff)	44.17	9.85
Banking & UI Power		
Banking	740.67	0.00
Market Purchase	211.09	94.87
Bilateral Purchase	0.06	0.02
PXI/IEX	18.55	6.40
UI Power	209.95	73.91
Other Charges		
PGCIL Charges		209.57
HPPTCL Charges		0.00
ULDC Charges (Including POSCO)		9.36
Other Charges		-1.09
ST Open Access – PTC		24.05
Baspa Arrears		6.44
CPSU Arrears		175.83
Other Arrears (including SHP)		8.80
Grand Total	**7793.69**	**2330.17**
External Loss	**246.36**	
Net Power Purchase from non-HPSEBL sources for sale within state (A)	**7547.33**	**2330.17**
Own generation (B)	**1905.63**	**0.00**
Total power purchase available for sale (A+B)	**9452.96**	**2330.17**

5.15 The Commission observes that HPSEBL has purchased equity power from Nathpa Jhakri at a rate of Rs. 4.53 per unit during winter season when the rate of hydro power is very high, rather than purchasing it from market or from thermal stations.

5.16 Distribution Loss is a controllable parameter and reflects the performance of the Distribution Licensee. Clauses 4 (c) to (e) of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 state that:

*"**Trajectory for specific parameters** shall be stipulated by the Commission, where the performance of the applicant is sought to be improved through incentives and disincentives; and **Annual review of performance** shall be conducted vis-à-vis the approved forecast and categorization of variations in performance into controllable factors and uncontrollable factors; **and Profit sharing** shall be applied on the profits arising from the distribution licensee's better performance vis-à-vis distribution loss targets and targets for the other controllable parameters specified by the Commission. The distribution licensee shall be free to utilise its share in the profit."*

Further Clause 7 (a) of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 states that:

"The Commission shall set targets for each year of the control period for the items or parameters that are deemed to be "controllable" and which will include- ***Distribution losses****, which shall be measured as the difference between total energy input for sale to all its consumers and sum of the total energy billed in its licence area in the same year."*

5.17 The Commission observes that T&D losses achieved by the Petitioner for sale of energy within state is 13.43% vis-à-vis the approved T&D loss level of 12.55% for FY12 (which was based on T&D losses of 12.66% in FY11). HPSEBL has submitted that increase in T&D loss levels in FY12 as compared to FY11 is due to the to the increased the LT/HT Ratio and lower EHT sales in FY12 which is not relevant. The Commission directed the Petitioner to substantiate its claim with the details like voltage-wise losses, LT/HT Ratio, past trends etc, which Petitioner failed to provide. These losses were decided with the consensus of HPSEBL and there is no merit to revise the trajectory. Therefore, Commission does not accept HPSEBL submission and has retained the T&D loss trajectory as 12.55% for FY12.

5.18 The Commission approves the power purchase quantum at 9372.38 as shown below:

Table 37: Approved Power Purchase Quantum

Particulars	Now Approved (Trued Up)
Energy Sales within state (MU)	6918.08
T&D Losses (%)	12.55%
Power Purchase Requirement to meet state requirement (MU)	7910.90
Inter – State Sale (MU)	1461.48
1. For Banking arrangements	971.00
2. Sale outside state	490.23
a) Sale through UI Mechanism	*323.22*
b) Sale through IEX	*151.59*
c) Sale through PIEX	*15.28*
d) Bilateral Sales	*0.14*
Total Power Purchase Quantum Approved at State Periphery (MU)	**9372.38**
Actual Power Purchase Quantum at State Periphery (MU)	**9452.96**
Disallowed Power Purchase Quantum (MU)	**80.58**

Out of 1461 MU shown against interstate sale; 971 MU has been towards baking whereas 490 MU have been sold at an average rate of Rs. 3.21 per unit.

5.19 The Petitioner has submitted total power purchase (excluding own generation, other charges and arrears) as Rs 1897.20 Cr. Total power purchase quantum at state periphery (excluding own generation) is 7547.33 MU. The average rate of this power purchase is Rs 2.51/unit. The Commission, therefore, disallows power purchase cost of Rs 20.26 Cr on account of disallowance in power purchase quantum at average power purchase rate. Commission would have disallowed the power purchase quantum at the rate of merit order at the margin but has considered the average power purchase rate and directs HPSEBL to improve the performance in future.

5.20 The Commission further observes that PGCIL charges of Rs 209.57 Cr include Rs 56.44 Cr on account of transmission charges recovered from PTC. The transmission charges payable by HPSEBL on own account was Rs 153.13 Cr and has been considered while truing up power purchase.

5.21 The power purchase cost as approved by the Commission in the MYT Order, as submitted by the Petitioner in its true-up Petition of FY12 and now provisionally approved by the Commission while truing-up for FY12 is given below:

Table 38: Break up of Power Purchase cost in FY12 (Rs Cr)

Particulars	Approved in MYT Order	True up petition	Approved Now (True up)
Power Purchase excluding own Generation	1824.84	1897.20	1876.94
Own Generation Cost	272.37	-*	-*
PGCIL Charges	161.66	209.57	153.13
HPPTCL Charges	11.71	-	-
Other Charges (ULDC, Open Access etc)	-	32.32	32.32
Arrears pertaining to previous years	-	191.07	191.07
Total	**2270.58**	**2330.17**	**2253.46**

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 FY12 stood at 13.43%.

5.23 The energy balance for FY12, based on the data submitted by HPSEBL and the accounts for the year, and approved by the Commission is shown in the table below:

Table 39: Energy balance for FY12 (MU)

Energy balance for FY12	True up petition	Approved true up
Power Availability		
Net own Generation Sources + HPPCL	1906	1906
Net Power Purchase from Other Sources (CGS, Inter-state etc.)	7547	7467
Total Availability at Discom periphery	**9453**	**9373**
Inter-State Sales (MU)	1461	1461
Power Requirement for sale within the State (MU)	7991	7911
Sales within the State (MU)	6918	6918
T&D Loss % within the State	**13.43%**	**12.55%**

True up of Controllable Parameters

O&M expenses

5.24 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).

5.25 In the Tariff Order for FY13 dated 24 April 2012, 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

5.26 The Commission had approved the following Employee Expenses for FY12:

Table 40: Employee Expenses for FY12 approved in 2nd MYT Order (Rs Cr)

Particulars	FY12
Employee Cost for Distribution	
Salaries & other expenses	*616.78*
Terminal benefits	*228.31*
Arrears	*0.00*
Less: Capitalization	*29.41*
Net Employee Cost for Distribution	**815.68**
Employee Cost for Generation	**66.94**

5.27 The Commission had approved Employee Expenses for the second Control Period based on data collected from HPSEBL on March 2011 salary, assuming that it reflected the impact of revision in pay due to the Pay Commission's recommendations. However, the Commission observes that the impact of pay revision due to Pay Commission recommendations was not implemented fully in March 2011 salary and revisions kept happening during FY12 as well. Therefore, the Commission has reviewed the Employee Expenses for FY12.

5.28 In respect of terminal benefits, the Commission had escalated these at the rate of 5%, and is subject to true-up at the end of every year during the Control Period.

5.29 HPSEBL has now submitted actual total Employee Expenses (including generation) for FY12 as Rs 1086.60 Cr as shown below:

Table 41: HPSEBL submission – Employee Expenses for FY12 (Rs Cr)

Particulars	FY12
Salary and other expenses	745.15
Terminal Benefits	259.21
Arrears	140.15
Less: Capitalization	57.91
Net Employee Cost submitted	**1086.60**

5.30 The Commission observes that net Employee Expense of Rs 1086.60 Cr includes employees cost of the Projects and I&P wings (Rs 6.79 Cr and Rs 2.94 Cr respectively). The Commission is of the opinion that employee expenses on account of Projects wing should be on account of the respective projects and I&P wing should work on self sustaining basis and in fact should be a source of additional income for HPSEBL. The Commission, therefore, has not considered these expenses while approving the employee expenses.

5.31 Therefore, the Commission approves the following trued up Employee Expenses for FY12:

Table 42: Employee Expenses for FY12 Now Approved (Rs Cr)

Particulars	FY12
Salary and Other Expenses for Distribution	668.48
Terminal Benefits	259.21
Arrears	140.15
Less: Capitalisation	57.91
Net Employee Cost for Distribution now approved	**1009.93**
Employee Expenses for Generation	**66.94**
Total Employee Expenses Approved	**1076.87**

Administrative and General (A&G) Expenses

5.32 Summary of A&G expenses approved by the Commission for FY12 is shown below:

Table 43: A&G Expenses for FY12 approved in 2nd MYT Order (Rs Cr)

Particulars	FY12
A&G Cost Approved for Distribution	36.26
Less: Capitalisation	1.98
Net A&G Cost approved for Distribution	**34.28**
A&G expenses for Generation	**2.57**
Total A&G Expenses Approved	**36.85**
Public Interaction program	**0.52**

5.33 In addition to A&G Expenses, the Commission approved addition Rs 0.52 Cr for public interaction program.

5.34 The Petitioner has submitted gross A&G Expenses of Rs 48.23 Cr which include Rs

10.25 Cr on account of Cost of Free CFL Bulbs to domestic consumers and Rs 0.26 Cr on public interaction program. Net A&G Expenses submitted by the Petitioner is Rs 44.46 Cr.

5.35 As per Regulation 11 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011, A&G expense is a controllable parameter and any surplus or deficit on account of actual A&G expense compared shall be to the account of the Petitioner and shall not be trued up.

5.36 The Petitioner in its petition has also submitted an expenditure of Rs 10.25 Cr as a part of A&G cost for providing cost-free CFL bulbs to domestic consumers. As the initiative of providing cost-free CFL bulbs to domestic consumers was taken by HPSEBL on the direction of the Government of Himachal Pradesh, the Commission requests the Government of Himachal Pradesh to bear the cost and has not considered this as a part of A&G Expenses.

5.37 Accordingly, the A&G expenses are approved at the same level as provided in the MYT Order, as shown as follows:

Table 44: A&G expenses for FY12 Now Approved (Rs Cr)

Particulars	Approved in MYT Order	True-up petition	True-up by Commission
A&G Cost Approved for Distribution	*36.26*		*36.26*
Less: Capitalisation	*1.98*	-	*1.98*
Net A&G Cost approved for Distribution	34.28		34.28
A&G expenses for Generation	2.57		2.57
Total A&G Expenses Approved	**36.85**	**33.95***	**36.85**
Public Interaction program	**0.52**	**0.26**	**0.26**

**Excluding expense on providing cost-free bulbs to consumers and public interaction program*

Repair and Maintenance (R&M) Expenses

5.38 The R&M Expenses approved by the Commission for FY12 in MYT Order for the second Control Period is shown below:

Table 45: R&M Expenses for FY12 approved in 2nd MYT Order (Rs Cr)

Particulars	FY12
GFA (Opening)	3455.27
K Factor	0.89%
R&M Expenses for Distribution Business	**30.81**
R&M Expenses for Generation Business	**14.86**
Total R&M Expenses Approved	**45.67**

5.39 The Petitioner has submitted R&M Expenses of Rs 55.73 Cr. As per Regulation 11 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011, R&M expense is a controllable parameter and any surplus or deficit on account of actual

R&M expense compared shall be to the account of the Petitioner and shall not be trued up.

5.40 Accordingly, the R&M expenses are approved at the same level as provided in the MYT Order, as shown as follows:

Table 46: R&M expenses for FY12 Now Approved (Rs Cr)

Particulars	Approved in MYT Order	True-up petition	True-up by Commission
R&M expenses for Distribution business	30.81		30.81
R&M expenses for Generation business	14.86		14.86
Total R&M expenses approved	**45.67**	**55.73**	**45.67**

Review of Capital Investment & Capitalization

5.41 According to Clause 11 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011:

"(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."

5.42 As per the HPERC MYT Regulations, 2011, 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.

Depreciation

5.43 The Commission had approved depreciation charges of Rs. 89.21 Cr for FY12 towards distribution business and Rs 88.86 Cr towards generation business. The Petitioner has submitted a claim of Rs. 193.38 Cr towards depreciation charges for FY12.

5.44 In accordance with principles of Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011, depreciation has been provided as per the approved Capital Expenditure and capitalization schedule for the Control Period and would be subject to true up at the end of the Control Period. Hence, the Commission approves depreciation charges of Rs 89.21 Cr for FY12 towards distribution business and Rs 88.86 Cr towards generation business, as tabulated hereunder:

Table 47: Depreciation for FY12 (Rs Cr)

Particular	Approved in MYT Order	True-up petition	Now Approved
Depreciation for distribution	89.21		89.21
Depreciation for generation	88.86		88.86
Total Depreciation	**178.07**	**193.28**	**178.07**

Interest & Financing Charges

5.45 The Commission had approved the net interest and financing charges of Rs 87.19. Cr for FY12 towards distribution business and Rs 62.02 Cr towards generation business. The Petitioner has submitted net interest and financing charges of Rs. 248.14 Cr for FY12 as per the audited accounts.

5.46 As per MYT Regulations financing cost shall be reviewed at the end of the Control Period. However, interest and financing charges include interest on consumer security deposit of Rs 9.74 Cr against Rs 6.59 Cr considered by the Commission in MYT Order. While approving interest on consumer security deposit, the Commission had considered applicable interest rate @ 6% while the applicable interest rate was 9%.

5.47 The Commission in its review order dated 23 October, 2012 had agreed to true up additional interest paid on consumer security deposit while truing up for FY12. The Commission has approved additional interest of Rs 3.15 Cr towards interest on consumer security deposit in this Order.

5.48 Accordingly, the Commission approves the interest and financing charges of Rs. 152.36 Cr for FY12, as tabulated hereunder:

Table 48: Interest Charges approved for FY12 (Rs Cr)

Particulars	Approved in MYT Order	True Up Petition	Now Approved
Interest and Finance Expenses for Distribution Business	87.19		87.19
Interest and Finance Expenses for Generation Business	62.02		62.02
Additional interest on consumer security deposit			3.15
Total Interest and Finance Expenses	**149.21**	**248.14**	**152.36**

Return on Equity

5.49 The Commission had approved return on equity of Rs 30.24 Cr for Distribution business and Rs 37.12 Cr for generation business for FY12. The Petitioner has claimed an amount of Rs 151.63 Cr as RoE for FY12.

5.50 As per Regulation 11 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 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.

5.51 Accordingly, for the purpose of true-up for FY12, the Commission retains return on equity at Rs 30.24 Cr for Distribution business and Rs 37.12 Cr for generation business.

Table 49: Return on Equity for FY12 (Rs Cr)

Particulars	Approved in MYT Order	True-up petition	Now Approved
Return on equity on distribution business	30.24		30.24
Return on equity on generation business	37.12		37.12
Total Return on Equity	**67.36**	**151.63**	**67.36**

Impact of Review Order

5.52 The Petitioner had filed a Review Petition before HPERC for revisiting certain parameters like Larji arrears, Interest on Working Capital, etc. approved by the Commission while truing up for FY11 in the Tariff Order for FY13 dated 24 April 2012.

5.53 The Commission, in its Order on the said review petition, had approved additional Rs 26.92 Cr towards Larji arrears, Rs 17.99 Cr on account of truing up of interest on working capital and Rs 13.445 Cr towards interest on consumer security deposit. The Commission has included these expenses (total impact Rs 58.36 Cr) in the ARR requirement of the Petitioner for FY12.

Non Tariff Income

5.54 As per Clause 25 and sub clause (2) of the MYT Regulations, 2011:

"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."

5.55 The above clause indicates that Non Tariff Income, being an integral part of the revenue requirement, shall be trued up at the end of each year of the Control Period.

5.56 The Commission observes that the Non tariff Income submitted by the Petitioner also includes recovery of Rs 56.44 Cr from PTC on account of PGCIL charges. As the Commission has not considered this while truing up the PGCIL charges for FY12, the Commission has deducted this recovery from the Non Tariff Income.

5.57 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.

5.58 As per information supplied by HPSEBL that Rs. 467.00 Cr is recoverable from various agencies on account of the work done by this agency as well as other agencies of the Petitioner towards survey and investigation and project preparation activities. Therefore, Commission directed the Petitioner to make all efforts to recover these dues in a time bound manner and also prepare a strategic plan for future activities of this Wing so that it not only functions on self-sustaining basis but also becomes source of income for distribution activities. Accordingly HPSEBL was directed to recover Rs. 100.00 Cr. during FY12 out of Rs. 467.00 Cr. It seems that Petitioner has not taken any concrete steps to recover this amount. Commission, wants that 50% of this amount on account of Survey and Investigation i.e. Rs. 50.00 Cr. should be carried forward and recovered by HPSEBL in addition to the specified recovery under Non Tariff Income for FY14. Commission, however, approves non tariff income for FY12 at Rs 206.02 Cr as per the accounts of HPSEBL.

Annual Revenue Requirement

5.59 The ARR approved by the Commission in the MYT Order, ARR as submitted by the Petitioner in its true-Petition and ARR now approved by the Commission for FY12 are shown in the table below:

Table 50: Trued up ARR of FY12 (MU)

Particulars	Approved in MYT Order	True up petition	Now Approved (Trued up)
Power Purchase cost pertaining to FY12 (excluding own generation)	1824.84	1897.20	1876.94
PGCIL charges	161.66	209.57	153.13
HPPTCL charges	11.71	-	-
Other charges (ULDC, Open Access, etc.)	-	32.32	32.32
Arrears pertaining to previous years	-	191.07	191.07
Total Power Purchase Cost	**1998.21**	**2330.17**	**2253.46**
Employee cost for Distribution Business (without Terminal benefits and arrears)	616.78	745.15	668.48
Employee Cost for Generation Business	66.94*		66.94
Terminal benefits	228.31	259.21	259.21
Arrears	-	140.15	140.15
Less: Employee Expense Capitalization	29.41	57.91	57.91
Total Employee Expenses	**882.62**	**1086.60**	**1076.87**
R&M Expenses for Distribution Business	30.81		30.81
R&M Expenses for Generation Business	14.86*		14.86
Total R&M Expenses	**45.67**	**55.73**	**45.67**
A&G Expenses for Distribution Business	36.26		36.26
A&G Expenses for Generation Business	2.57*		2.57
Less: A&G Expenses capitalized	1.98		1.98
Total A&G Expenses	**36.85**	**44.20[#]**	**36.85**
Provision for Public Interaction	**0.52**	**0.26**	**0.26**
Interest & Financing Charges for Distribution Business	87.19		87.19
Interest & Financing Charges for Generation	62.02		62.02

Particulars	Approved in MYT Order	True up petition	Now Approved (Trued up)
Business			
Additional Interest approved on interest on consumer security deposit			3.15
Total Interest and Financing Charges	**149.21**	**248.14**	**152.36**
Depreciation for Distribution Business	89.21		89.21
Depreciation for Generation Business	88.86		88.86
Total Depreciation	**178.07**	**193.28**	**178.07**
Return on Equity on Distribution Business	30.24		30.24
Return on Equity on Generation Business	37.12		37.12
Total Return on Equity	**67.36**	**151.63**	**67.36**
Impact of Review Order		**58.36**	**58.36**
Less: Non Tariff Income	289.29	262.46	206.02
Aggregate Revenue Requirement	**3069.22**	**3906.01**	**3663.24**

**Part of approved O&M Expenses of Rs 84.37 Cr*

#Includes Rs 10.225 Cr towards CFL and excludes Rs 0.26 Cr towards public interaction

Revenue Gap

5.60 The Commission approves the trued up gap of Rs 683.03 Cr for FY12. The ARR approved by the Commission in the MYT Order and ARR now approved by the Commission for FY12 is shown in the table below:

Table 51: Trued up Revenue Gap of FY12 (Rs Cr)

Particulars	Approved in MYT Order	True Up Petition	Approved Now (Trued up)
Annual Revenue Requirement	3069.22	3906.01	3663.24
Revenue from sale of power	3069.49	2980.21	2980.21
Revenue Surplus / (Gap) for FY12	**0.27**	**(925.80)**	**(683.03)**

Discussion on Reasons for Revenue Gap

5.61 The total revenue gap of Rs 683.03 Cr has the following components:

(a) Power purchase cost is an uncontrollable parameter on which there is no control of the Licensee. The gap in power purchase cost is Rs 255.25 Cr for FY12, out of which Rs 191.07 Cr is on account of arrears pertaining to past periods up to FY12 which are due to revision of tariff of Central Sector Generating Stations and PGCIL charges by the Central Electricity Regulatory Commission (CERC) retrospectively and Rs 64.18 Cr is on account of additional cost of power purchase for FY12, which is about 2.85% of the total power purchase cost for FY12, which was required to meet the requirement of power supply.

(b) On account of Employees expense there is a gap of Rs. 194.25 Cr which is due to the impact of pay revision due to the Pay Commission's recommendations w.e.f. 01.01.2006, which was not incorporated fully in the March 2011 salary on the basis of which the Commission's projections for FY12 were made. As the Commission observed, revisions in pay continued during FY12 and FY13 as well. Out of the true up amount on account of Employee Expense, Rs. 140.15 Cr are arrears of past period w.e.f. 01.01.2006 to 31.03.2011 which were paid out in FY12 and the balance true up amount is mainly due to periodic revisions in pay after the main revision. Although employee cost is a controllable parameter, HPSEBL has no control on employee cost increase to the extent of increased salaries and arrears on account of revision due to Pay Commission recommendations.

(c) There was a gap of Rs 58.36 Cr due to impact of the Review Order which was allowed by the Commission subsequently on account of Larji arrears, interest on working capital and interest on consumer security deposit. HPSEBL in its True-Up petitions of FY11 and APR had not agitated or prayed for the balance arrears of Rs. 26.92 Cr against Larji Project approved by the Commission. Similarly the Petitioner had not submitted in the true up petition filed for FY11 and/or True up petition filed for the First Control Period, for true-up of interest on working capital (including interest on consumer security deposit actually paid out to consumers) and the same had not been considered by the Commission. In its Review Order the Commission allowed the aforementioned Larji arrears of Rs 26.92 Crores, true-up amount of Rs 17.99 Crores on account of truing up of interest on working capital as well as additional ARR of Rs 13.445 Cr on account of actual interest on consumer security deposit. This gap of Rs 58.36 Cr could have been avoided if HPSEBL had claimed this amount in the Petition for FY13 as this amount would have been recovered from the tariff of FY13.

(d) There is a gap of Rs 89.28 Cr on account of reduction in actual revenue vis-à-vis approved revenue for FY12 out of which Rs 50.80 Cr are on account of projection of sales outside state which was envisaged at a higher rate, while Rs 38.48 Cr are on account of sale of power within the state. The main reason for decrease in revenue from sales within state is that there is a significant increase in the sales to Domestic category and a decrease in sales to other categories as compared to projected sales. This amount could have also been avoided if projections of sales could have been made near to actual.

(e) There has been a decrease in Non Tariff Income due to non-collection of amount recoverable towards Survey and Investigation activities to the tune of Rs 83.27 Cr. In the MYT Order dated 19 July 2011, the Commission had directed the Petitioner to recover from other agencies Rs 100.00 Cr of Survey & Investigation charges out of the total outstanding amount of Rs 467.00 Cr as informed by HPSEBL. Had HPSEBL made sincere efforts to recover this amount of Rs 100.00 Cr, the Non Tariff Income of HPSEBL would have increased by Rs 116.63 Cr and this gap of Rs 83.27 Cr could have been avoided.

Carrying Cost

5.62 The increase in employee expenses is due to pay revision due to Pay Commission's recommendations and arrears on account of the same, and the Government of Himachal Pradesh has agreed to provide suitable funding mechanism to avoid carrying cost on the same. In the Tariff Order dated 24 April 2012, the Commission had provisionally allowed Rs 106 Cr paid by HPSEBL towards arrears in FY12 and Rs 189 Cr to be paid out in FY13. In the MYT Order dated 19 July 2011, the Commission had allowed Rs 295.85 Cr on account of Pay Commission arrears, and in the Tariff Order for FY13 dated 24 April 2012, Rs 76.71 Cr were allowed on account of additional employee expenses approved for FY11 after accounting for past adjustments. The audited balance sheet of FY12 is not yet available and actual payments of arrears of pay and pension for FY12 are hence approved provisionally. This amount on account of pay and pension arrears (due to pay revision) is allowed to be spent by HPSEBL as per GoHP financing mechanism mentioned under items 8.82 and 8.83 of the Tariff Order for FY13 dated 24 April 2012. The Commission, therefore, is not providing carrying cost towards increased employee cost.

5.63 With reference to increase in power purchase cost, the Commission is yet to establish if HPSEBL has made payment to the Government of Himachal Pradesh on account of free/equity power or not. Therefore, the Commission in this order is not providing any carrying cost towards higher power purchase cost.

5.64 The Commission also notices that HPSEBL has not put in efforts to ensure recovery of amount recoverable towards Survey and Investigation activities. The Commission had directed HPSEBL to recover Rs 100 Cr towards amount payable on account of Survey and Investigation activities. As HPSEBL has not collected any amount towards this, the Commission in not allowing any carrying cost on Rs 100 Cr.

5.65 The Commission is allowing carrying cost on remaining Rs 133.80 Cr for a period of 2 years (average 'incurred period' being 6 months in FY12, 12 months of FY13 and average of recovery period being 6 months in FY14). The SBI Advance Rate as on 1 April 2011, 1 April 2012 and 1 April 2013 was 14.75%, 14.75% and 14.45% respectively. Therefore, the carrying cost approved is shown below:

Table 52: Carrying Cost (Rs Cr)

Particulars	FY12	FY13	FY14	Total
Opening Principal Amount	133.80	143.33	164.47	
Interest Rate	14.75%	14.75%	14.45%	
Period	6 Months	925.80	683.03	
Carrying Cost	**9.53**	**21.14**	**11.48**	**42.15**

5.66 The Commission will consider revenue gap of Rs 683.03 Cr and carrying cost of Rs 42.15 Cr while approving the tariff for FY14.

A6: ANALYSIS OF THE ANNUAL PERFORMANCE REVIEW (APR) FOR FY14

Introduction

6.1 The Commission has analyzed the 2nd Annual Performance Review (APR) petition filed by HPSEBL for approval of revised Aggregate Revenue Requirement (ARR) and determination of Wheeling and Retail Supply Tariffs for FY14.

6.2 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 FY12 and the Petitioner's responses to various queries raised during the Technical Validation session, subsequent discussions as well as during the public hearing.

6.3 This section contains details of the Commission's Annual Performance Review of various parameters for determination of revised ARR for HPSEBL for FY14.

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

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

Table 53: Approved ARR in the 2nd MYT Order for Distribution business (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 Second Annual Performance Review under the 2nd MYT Control Period

6.5 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 FY14.

6.6 The Commission in its second MYT Order (FY12 to FY14) dated 19 July 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.

6.7 In light of the above, the Commission has considered the revision of ARR on account of uncontrollable parameters for FY14, while other components of costs are considered as per the figures approved by the Commission in the second MYT Order. The distribution loss trajectory is considered as per the 1st APR Order dated 24 April 2012.

Sales Forecast

6.8 For projecting the energy sales of HPSEBL for FY14, the Commission has used the actual trend of past sales and estimated sales for the current year i.e. FY13 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.

6.9 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 FY14, as detailed in the subsequent sections.

6.10 HPSEBL has estimated its energy sales within the state during FY13 at 7460 MU and projected energy sales of 8026 MU for FY14.

6.11 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 FY12 and FY13 (till December), in response to which HPSEBL submitted the actual sales for FY12 and FY13 (till November).

6.12 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 (last year, 2 years, 3 years, 4 years, 5 years, 6 years, 8 years and 10 years). While calculating the CAGR for various period, sales till FY12 is considered as the actual sales figures are available till then only and the Commission did not find merit in including FY13 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 7427.72 MU for FY13 and 8007.66 MU for FY14, which shows a growth rate of 7.37% and 7.81% respectively as compared to the previous year.

6.13 For estimating the annual sales of FY13, the Commission has taken into account actual sales till November 2012 based on the data made available by HPSEBL and has estimated the energy sold in the last four month of FY13 based on the trend in the last year.

6.14 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 17.55%. The actual growth rate of sales in FY12 over FY11 sales was 9.73%. The 2-year, 3-year CAGR, 4-year, 5-year, 8-year and 10-year CAGR for the category comes out to be 13.57%, 8.92%, 7.57%, 8.21%, 7.84% and 7.78% respectively.

(b) Considering this, the Commission has projected an increase of 7.57% in FY14 over FY13, which is 4 year CAGR for this category. While projecting the sales for FY14, the Commission has considered the estimated sales for FY13 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 FY14 to be the same proportion as the ratio of estimated sales to BPL category to total domestic sales in FY13.

(d) On this basis, the Commission has projected total sales of 1755.62 MU to the domestic category in FY14, including sales of 2.29 MU to the BPL category.

NDNCS

(a) The NDNCS category was created in the Tariff Order for FY02. An analysis of the trend in sales to NDNCS category shows that the year-on-year variation in sale ranges from 3.65% to 35.20%. The long term (8-year) CAGR for sales is 26.45%, medium term (4-year) CAGR is 6.69% while the short term (2-year) CAGR is 8.62%. The actual growth rate of sales in the sales of FY12 over FY11 is observed to be 10.06% and estimated growth rate in FY13 is 9.81%.

(b) Considering all this, for FY14, the Commission has projected an increase in sales to this category at 6.69%, which is 4 year CAGR for this category.

(c) Therefore, based on the above methodology, the Commission has projected sales of 115.46 MU to this category in FY14.

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 3.46% and 19.71%. The long term (8 years) CAGR for sales is 8.16%, medium term (4 year) CAGR is 11.91% while the short term (2 years) CAGR is 14.02%. The actual growth rate of sales in the estimated sales of FY12 over FY11 is observed to be 8.60% and estimated growth rate in FY12 is 6.43%.

(b) The sales growth in this category is showing a reducing trend over last two years. Considering all this, for FY14, the Commission has projected an increase in sales to this category at 8.60%, which is equal to actual growth in FY12 over FY11 and closer to long term CAGR of 8.16%.

(c) Therefore, based on the above methodology, the Commission has projected sales of 447.58 MU to this category in FY14.

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 -1.68% to 11.20%. Further the long term CAGR (8 years) for this category is 5.71%, medium term CAGR (4 year) is 3.44% while short term CAGR (2 year) works out to 4.56%.

(b) After detailed analysis of the trend in sales, pending applications for new connections and the economic outlook of the State, for FY14 the Commission has projected an increase in sales to this category at 3.44% which is 4-year CAGR for this category, over the estimated sales of FY13.

(c) Therefore, the Commission has projected sales of 216.07 MU to this category for FY14.

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 3.09% to 35.93%. The long term (8 years) CAGR for sales is 16.53%, medium term CAGR (4 year) is 8.9% while the short term (2 years) CAGR is 9.06%. The actual growth rate in sales for FY12 was 3.09% while the expected growth rate for FY13 is 5.74%.

(b) The Commission notices the recent lower growth in the industrial consumption on account of economic downtrend. However, based on the positive outlook of the economic growth vis-à-vis the Commission expects growth in industrial consumption at bit higher rate than last two years.

(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 FY14 at 8.71% which is 3 year CAGR for this category.

(d) Therefore, the Commission has projected sales of 4731.71 MU for this category for FY14.

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 -2.69% to 15.61%. The long term (8 years) CAGR for sales is 7.39%, medium term (4 year) CAGR is 7.12% while the short term (2 years) CAGR is 2.03%.

(b) Considering the past trend in sales to the two sub-categories that comprise of 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 3-year CAGR of 4.16% and to the Agricultural Pumping category at the 5-year CAGR of 6.49%. The sum of projected energy sales to these two sub-categories is taken to the demand projection for the consolidated Water Pumping and Irrigation Supply category for FY14.

(c) On this basis, the Commission has projected sales of 538.74 MU for this category for FY14.

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 -9.87% to 11.25%. The long term (8 years) CAGR for sales is 3.26%, medium term (4 year) CAGR is 0.56% while the short term (2 years) CAGR is 4.85%.

(b) For FY14, the Commission has projected increase in sales to this category at 2.61% which is in line with the 5-year CAGR for this category.

(c) Therefore, the Commission has projected sales to this category at 13.94 MU for FY14.

Bulk Supply

(a) The year-on-year variation in sales to this category ranges from -18.12% to 20.85%. The long term (8 years) CAGR for sales is 6.51%, medium term (4 year) CAGR is 7.12% while the short term (2 years) CAGR is -3.34%. The actual growth in sales of FY12 over FY11 is negative at 18.12% vis-à-vis increase of 14.12% increase in FY11 over FY10.

(b) Considering the recent trends in energy demand by this category, for FY14 the Commission has projected increase in sales to this category at 2.90% which is based on 3-year CAGR for sales to this category.

(c) Therefore, the Commission has projected sales to this category at 163.38 MU for FY14.

Temporary Supply

(a) The year on year growth for this category has widely varied over the years. The Commission has approved temporary sales at revised estimates for FY14 as 25.16 MU.

6.15 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 54: Approved sales for FY14 (MU)

Particulars	FY14		Approved sales as a % of total
	Petition	Approved	
Domestic Supply	1734.97	1755.62	22%
Non Domestic Non Commercial	114.47	115.46	1%
Commercial Supply	463.85	447.58	6%
Temporary Supply	27.93	25.16	0.3%
Small & Medium Industrial Power	216.36	216.07	3%
Large Industrial Power Supply	4759.23	4731.71	59%
Water Pumping and Irrigation Supply	524.67	538.74	7%
Street Lighting Supply	14.26	13.94	0.2%
Bulk Supply	170.20	163.38	2%
Total	**8025.94**	**8007.66**	**100%**

T&D Losses

6.16 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 truing-up.

6.17 Subsequently, after data was made available on the actual T&D losses of FY11, the Commission revised the T&D loss trajectory in the 1st APR Order dated 24 April 2012, laying 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 55: Revised T&D trajectory for the Control period

Losses (%)	FY12 Approved	FY13 Approved	FY14 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%**

6.18 Therefore, for projecting the energy balance for FY14, the Commission has considered the revised T&D loss target of 12.00% set for HPSEBL.

Energy Requirement

6.19 The Commission's estimates of energy requirement at distribution periphery for FY14 are based on the energy sales figures and T&D loss reduction trajectory approved for the year in this Order, as shown below:

Table 56: Approved Energy Requirement for the Control Period

Energy Requirement	FY13 Approved	FY14 Approved
Sales (MU)	7427.72	8007.66
T&D losses (%)	12.40%	12.00%
Energy Requirement at distribution periphery (MU)	**8479.13**	**9099.61**

Power Purchase

6.20 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.

6.21 For the Annual Performance Review (APR) of FY14, the Commission has updated the station-wise projection of energy availability and power purchase cost for FY14 taking into consideration the actual normative parameters achieved by generating stations in FY12 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.

Sources of Power

6.22 The following generating stations have been considered for the purpose of estimation of power availability for FY14:

(a) HPSEBL's own generating stations;

(b) Purchase from Central Generating Stations of National Thermal Power Corporation (NTPC), National Hydroelectric Power Corporation (NHPC), Tehri Hydro Development Corporation (THDC), Satluj Jal Vidyut Nigam Limited (SJVNL) and Nuclear Power Corporation Limited (NPCIL);

(c) Purchase from Baspa, Patikari HEPs and private SHPs up to 5 MW;

(d) Purchase from BBMB and shared stations;

(e) Purchase of Free Power from GoHP;

(f) Purchase through bilateral short term arrangements, if required;

(g) New Plants expected to be commissioned during FY14;

(h) Banking arrangements; and

(i) Purchase from SHPs under Renewable Energy Certificate (REC) mechanism.

Allocation in Generating Stations

A. Allocation from HPSEBL's own stations

6.23 The Commission has considered the following allocation from HPSEBL's own generating stations while estimating the power availability from these stations. The Government of Himachal Pradesh (GoHP) has free power entitlement in five generating stations viz. Ghanvi, Baner, Gaj, Larji and Khauli and hence HPSEBL's allocation in these five stations is reduced by the free share quota of 12%.

Table 57: Allocation from HSPEB own stations

Station	FY14 Allocation
Bhabha	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%
Khauli	88.00%
Nogli	100.00%
Chaba	100.00%
Rukti	100.00%
Rongtong	100.00%
Chamba	100.00%
Killar	100.00%
Sal-II	100.00%
Bhabha Augmentation	100.00%

B. Allocation from BBMB Stations

6.24 As per 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), the allocation of energy from Bhakra-Nangal and Beas Projects has been changed w.e.f. November 2011. The present allocation from these stations is shown below:

Table 58: Allocation from BBMB Stations

Station	FY14 Allocation
BBMB (Old)	Fixed[1]
BBMB (New)	7.19%[2]
Dehar	7.19%[3]
Pong	7.19%[4]

C. Allocation from Shared Stations

6.25 HP has firm allocated share in Shanan, Shanan (extension), UJVNL and Khara. The allocation from these stations considered for FY14 is shown below:

Table 59: Allocation from Shared Stations

Station	FY14 Allocated
Shanan	Fixed[5]
Shanan Ext	Fixed[6]
Yamuna (UJVNL)	24.68%
Khara	20.00%

D. Allocation from IPP with Long Term PPA

6.26 HPSEBL has executed a long term PPA for purchase of entire power (excluding Free Power share to be given to GoHP) generated by the 300 MW Baspa-II HEP.

Table 60: Allocation from IPPs & Private projects

Stations	FY14 Allocated
Baspa-II	88.00%

[1] BBMB (old) share: 1.2 LU per day
[2] After deducting Rajasthan's share of 15.22% from generation busbar availability
[3] After deducting Rajasthan's share of 20.00% from generation busbar availability
[4] After deducting Rajasthan's share of 59.00% from generation busbar availability
[5] Shanan Share: Fixed share of 1000 kW at 60% PLF
[6] Shanan Ext: Fixed share of 45 MU per annum

E. Allocation from IPPs and Renewable (Non Solar) Sources

6.27 HPSEBL's allocation in the energy generated by IPPs / Private projects and renewable sources of energy is summarized below:

Table 61: Allocation from IPPs & Private projects

Stations	FY14 Allocated
SHP - Above 5 MW	As per PPA
SHP - Up to 5 MW (Preferential Tariff)	As per PPA
SHP - Up to 25 MW (REC Tariff)	As per PPA

F. Allocation from Solar Renewable Source

6.28 HPSEBL and NTPC had entered into a Power Purchase Agreement in November 2011 for supply of 15 MW bundled power from a 15 MW Solar thermal power plant. The Petitioner has received intimation from NTPC that the generator is taking up Singrauli Solar PV Power Project (15 MW) for bundling with thermal power, in which 15 MW of power would be made available to HPSEBL from December 2013 onwards (expected commissioning of the plant). The bundling ratio of solar & conventional thermal would be 1:1 in MW terms which works out to be 1:4.5 in terms of energy.

Table 62: Allocation from Solar Renewable Source

Stations	FY14 Allocated
Singrauli Bundled Solar power	100.00%

G. Firm Allocation from Central Sector Generating Stations (CSGS)

6.29 Himachal Pradesh has firm allocated share in Central Sector Generating Stations (CSGS) of NTPC, NHPC, THDC, SJVNL and NPCIL.

6.30 The Commission has considered allocation of firm power from CSGS in accordance with the allocations effective from March 16, 2013 as has been specified in notification no. NRPC/OPR/103/02/2012-13 (Revision#17/2012-13) dated 15 March, 2013 issued by the Northern Regional Power Committee, Ministry of Power, Government of India.

6.31 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. HPSEBL's share in unallocated quota of CSGS is discussed in sub-section I below.

6.32 The State's share in Central Sector Generating Stations is summarized below:

Table 63: Firm Allocation from Existing Central Sector Generating Stations (CSGS)

Station	FY14 Allocation	Station	FY14 Allocation
NPCIL		**SJVNL**	
NAPP	3.18%	Nathpa Jhakri HEP	2.47%
RAPP (V & VI)	3.40%	**NHPC**	
NTPC		Salal	0.99%
Anta GPP	3.58%	Tanakpur	3.84%
Auriya GPP	3.32%	Chamera I	2.90%
Dadri GPP	3.01%	Chamera II	3.67%
Unchahar-I	1.67%	Chamera III	4.36%
Unchahar-II	2.86%	Uri I & II	2.71%
Unchahar-III	3.81%	Dhauliganga	3.57%
Rihand-1 STPS	3.50%	Parbati-III	2.75%
Rihand-2 STPS	3.30%	**THDC**	
Rihand-3 STPS	3.37%	Tehri	2.80%
Kahalgaon – II	1.53%	Koteshwar	2.51%
Barh-I & II	1.53%		

H. Allocation of Free Power

6.33 GoHP has free power entitlement in several stations as shown in the table below.

Table 64: Free Power Entitlement from GoHP

Station	FY14 Allocation	Station	FY14 Allocation
Bairasiul	12.00%	Baner	12.00%
Chamera-I	12.00%	Gaj	12.00%
Chamera –II	12.00%	Larji	12.00%
Shanan Share	Fixed[7]	Khauli	12.00%
Ranjeet Sagar Dam Share	4.60%	Allian Duhangan	12.00%
Malana	15.00%	Karcham Wangtoo	12.00%
Baspa – II	12.00%	Toss	15.00%
Patikari	12.00%	Sarbari	12.00%
Nathpa Jhakri	12.00%	Upper Joiner	15.00%
Ghanvi	12.00%	Tangling	3.00%

I. Unallocated Power

6.34 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. 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 firm share in CSGS, the Commission has

[7] Shanan Free Power Share: Fixed share of 500 kW at 60% PLF

considered the monthly share of HP from firm & unallocated sources as average of past three years i.e. FY10 to FY12, as shown below:

Table 65: Unallocated Share from Central Sector Generating Stations (CSGS)

Stations	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
NTPC												
Anta GPP	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	1.5%	1.5%	1.5%	1.5%
Auriya GPP	1.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	1.0%	1.0%	1.0%	1.1%
Dadri GPP	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.7%	0.7%	0.7%	0.7%
Unchahar-I	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.5%	0.4%	0.4%	0.4%
Unchahar-II	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	1.4%	1.4%	1.3%	1.3%
Unchahar-III	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	1.4%	1.3%	1.2%	1.3%
Rihand-1 STPS	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	1.4%	1.4%	1.3%	1.3%
Rihand-2 STPS	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	1.4%	1.4%	1.3%	1.3%
Singrauli STPS	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	1.4%	1.4%	1.3%	1.3%
Rihand-3 STPS	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%
Dadri-II TPS	1.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	1.4%	1.4%	1.4%	1.3%
Jhajjar TPS	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.8%	0.8%	0.8%	0.8%
NPCIL												
NAPP	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	1.5%	1.5%	1.5%	1.5%
RAPP	2.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	1.5%	1.5%	1.5%	2.5%
NHPC												
Chamera II	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	1.7%	1.7%	1.7%	1.7%
Dhauliganga	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.4%	1.4%	1.4%	1.4%
Dulhasti	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.4%	1.4%	1.4%	1.4%
THDC												
Tehri	1.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.2%	1.1%	1.1%	1.1%	1.1%	1.1%
SJVNL												
Nathpa Jhakri	1.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.2%	1.1%	1.1%	1.1%	1.1%	1.0%

J. Allocation from New Projects

6.35 The Commission has considered HPSEBL's entitlement in upcoming projects while projecting the availability to HPSEBL from these stations in FY14. 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 true-up for the 2nd Control Period.

Table 66: Allocation from New Projects

Station	Anticipated COD	FY14		
		Allocated	Unallocated	Total
Rihand-III Unit 6	May'13	3.37%	0.00%	3.37%
Parbati-III	Jan'13, March'13, May'13, Sept'13	2.75%	15.00%	17.75%
Uri-II	May'13	3.33%	0%	3.33%
Singrauli Bundled Solar	Dec'13	100% of 15 MW bundled power (1:1 ratio)		

Energy Availability

A. Energy Available from HPSEBL's own stations

6.36 With the exception of Bassi and Bhabha Augmentation plants, the Commission has retained the operational parameters of energy available from HPSEBL's generating stations the same as approved in the 2nd MYT Order. The availability from these stations has been projected taking into consideration the actual generation from these plants in the past three years i.e. FY10, FY11 and FY12. This is a conservative estimate, particularly in view of higher design energy and better snowfall during this winter.

6.37 For Bassi station, which has undergone renovation & modernization and is hence expected to achieve a higher generation in FY14, the Commission has projected net availability from this station at 340 MU which is close to its design energy. For Bhabha Augmentation unit, the Commission has considered HPSEBL's submission of 23.44 MU as gross energy available to HPSEBL.

6.38 The projected energy available from HPSEBL's own stations is as shown:

Table 67: Energy Available from HPSEB Own Stations in FY14 (MU)

Station	FY14			
	Generation	Aux Consumption	Allocation	HPSEB Share
Bhabha	622.06	1.20%	100.00%	614.59
Bassi	342.40	0.70%	100.00%	340.00
Giri	233.50	0.70%	100.00%	231.87
Andhra	56.19	1.00%	100.00%	55.62
Ghanvi	66.73	1.20%	88.00%	58.02
Baner	39.70	1.00%	88.00%	34.58
Gaj	37.67	1.00%	88.00%	32.82
Binwa	29.86	0.70%	100.00%	29.04
Thirot	8.95	0.70%	100.00%	8.88
Gumma	2.54	0.70%	100.00%	2.52
Holi	8.31	0.70%	100.00%	8.25
Larji	654.64	1.20%	88.00%	569.17
Khauli	41.45	0.70%	88.00%	36.22
Nogli	7.38	1.00%	100.00%	7.31
Chaba	8.18	1.00%	100.00%	7.56
Rukti	0.55	1.00%	100.00%	0.54
Rongtong	1.51	1.00%	100.00%	1.49
Chamba	0.24	1.00%	100.00%	0.24
Killar	0.54	0.70%	100.00%	0.54
Sal-II	3.99	0.70%	100.00%	3.96
Bhabha Aug	23.44	N.A.	100.00%	23.00
Total (MU)	**2189.82**	**-**	**-**	**2067.39**

B. Energy Available from BBMB stations

6.39 Energy availability from BBMB stations has been approved as shown below:

Table 68: Energy Available from Central Sector Generating Stations (CSGS)

Station	Capacity (MW)	Availability (MU)	Auxiliary Consumption	Energy sent out (MU)	HPSEB share (MU)
BBMB Old	1480.3	-	-	-	43.80
BBMB New	1480.3	6343.17	1.00%	6279.73	342.25
Dehar	990	3172.89	1.00%	3172.89	180.68
Pong	396	1123.00	1.00%	1111.77	44.42
Total	**4346.60**				**611.15**

C. Energy Available from Shared Stations

6.40 Energy availability from shared stations has been approved as shown below:

Table 69: Energy Available from Shared Stations

Station	Capacity (MW)	Availability (MU)	Aux Consumption	Energy sent out (MU)	HPSEB share (MU)
Shanan (available to HPSEB)	60.00	5.26	NA	5.26	5.26
Shanan Extension (available to HPSEB)	50.00	45.00	NA	45.00	45.00
Yamuna	474.75	1528.68	1.00%	1513.39	373.51
Khara	72.00	332.71	1.00%	329.38	65.88
Total	**656.75**	**1911.65**			**489.65**

D. Energy Available from IPP with Long Term PPA

6.41 The total energy available from Baspa-II HEP has been considered at design energy of Baspa i.e. 1213 MU and energy available to HPSEBL out of it has been considered as per the existing PPA i.e. 1050.05 MU. Secondary energy from Baspa-II has been taken to be 155 MU in line with the actual secondary energy being received.

Table 70: Energy Available from Baspa

Station	Capacity (MW)	Design Energy (MU)	HPSEB Share (MU)
Baspa-II	300.00	1213.00	1050.05
Baspa-II Secondary energy	-	155.00	155.00
Total			**1205.05**

E. Energy Available from IPPs and Renewable (Non Solar) Sources

6.42 Energy from private micro hydel projects has been projected on the basis of projections provided by HPSEBL regarding the total energy likely to be available in FY14.

6.43 Power from IPPs/SHPs under REC mechanism has also been considered on the basis of information on available/projected capacity in eligible projects.

6.44 Energy available from private SHPs during FY14 as considered by the Commission is shown in the table below.

Table 71: Energy Available from Private SHPs (MU)

Station	FY14
Micros – Above 5 MW	148.39
Micros – Up to 5 MW (Preferential Tariff)	863.32
Micros – Up to 25 MW (REC Tariff)	50.57
Total	**1062.28**

F. Energy Available from Renewable (Solar) Sources

6.45 Energy available to HPSEBL in FY14 from the Singrauli bundled solar power project, expected to be available from December 2013, is considered as shown below:

Table 72: Energy availability in FY14 from Singrauli Bundled Solar Power (MU)

Station	Capacity (MW)	PLF* (%)	Auxiliary Consumption*	HPSEB share (MU)
Singrauli bundled power	15.00	50%	7.36%	16.48

* Weighted average of 7.5 MW thermal generation at 90% PLF (as conveyed by NTPC to HPSEBL) and 9% auxiliary consumption and 7.5 MW solar generation at 19% capacity utilization factor

G. Energy Available from Firm Share in Central Sector Generating Stations (CSGS)

6.46 For all generating stations that are in the Northern Region and whose power comes through PGCIL network to HP, regional losses of 3.50% have been considered by the Commission. For power from Kahalgaon-II and Barh I & II, Eastern Region losses of 3.0% have also been considered.

6.47 While the methodology of projecting energy availability from CSGS for FY14 remains the same as followed in the 2nd MYT Order, the Commission has taken into account updated information on PLF, availability, past trend of actual generation and allocation notified by NRPC. Thereafter, the SOR share of HPSEBL is applied on the energy sent out to estimate the energy available to HPSEBL from each station.

6.48 Energy sent out from the CSGS and HPSEBL's firm share of energy in each station are summarized below in the table:

Table 73: Firm Energy Available from Central Sector Generating Stations (CSGS)

Station	Capacity (MW)	PLF (%) / Availability(MU)	Auxiliary Consumption	Energy sent out (MU)	HPSEB share (MU)
NUCLEAR					
NPCIL					
NAPP	440	50.14%	9.50%	1748.83	55.61
RAPP (V & VI)	440	80.56%	9.50%	2810.12	95.54
Total NPCIL					***151.16***
THERMAL					
NTPC					
Anta (G)	419.33	71.03%	3.00%	2530.84	90.60
Auraiya (G)	663.36	71.64%	3.00%	4038.41	134.08

Station	Capacity (MW)	PLF (%) / Availability(MU)	Auxiliary Consumption	Energy sent out (MU)	HPSEB share (MU)
Dadri (G)	829.78	73.30%	3.00%	5168.46	155.57
Unchahar-I	420	91.87%	9.00%	3075.99	51.37
Unchahar-II	420	90.70%	9.00%	3036.84	86.85
Unchahar-III	210	89.05%	9.00%	1490.76	56.80
Rihand-1 STPS	1000	89.82%	8.50%	7199.39	251.98
Rihand-2 STPS	1000	94.84%	6.50%	7767.80	256.34
Rihand-3 STPS	1000	80.00%	9.00%	5580.12	188.05
Kahalgaon-II	1500	66.91%	9.00%	8000.70	122.68
Total NTPC					***1394.31***
HYDEL					
NHPC					
Salal	690	3149.52	1.00%	3118.02	30.87
Tanakpur	94.2	474.90	1.00%	470.15	18.05
Chamera I	540	2228.22	1.20%	2201.48	63.84
Chamera II	300	1425.99	1.20%	1408.88	51.71
Chamera III	231	910.60	1.00%	901.50	39.27
Uri	480	2850.26	1.20%	2816.06	76.32
Dhauliganga	280	1131.56	1.20%	1117.98	39.91
Parbati III	520	1622.79	1.00%	1606.56	44.18
Uri II	240	394.20	1.20%	389.47	10.55
Total NHPC					***374.70***
SJVNL					
Nathpa Jhakri SoR	1500	6848.94	1.20%	6766.76	167.14
THDC					
Tehri	1000	3151.17	1.20%	3113.35	98.72
Koteshwar	400	1360.90	1.00%	1347.29	42.98
Total THDC					***141.69***
NTPC Hydro					
Barh II	1980	2312.64	1.00%	2289.51	35.03
Grand Total of Firm Share from CSGS					**2264.04**

H. Energy Available from Free Power

6.49 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 Shanan (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.

6.50 As detailed in paragraph 2.44(s) of this Order, the GoHP has agreed to provide its entitlement of Free Power from projects directly connected with HPSEBL system as well as from Nathpa Jhakri for the entire year, while Free Power from other stations would be sold to HPSEBL during the winter months (October to March) when HPSEBL is deficit in energy. Sale of Free Power to HPESBL has been considered at the Commission-determined free power rate for FY13. The order on rate of Free Power for FY14 shall be issued separately by the Commission.

6.51 Regarding Equity Power, the Commission has analyzed the cost of Nathpa Jhakri equity power received by HPSEBL and observes that the average cost of energy received at interface point in FY12 ranged between 350 paise/ kWh to 571 paise/kWh with an average rate of 523 paise/ kWh. In contrast, the rate for Nathpa Jhakri SoR power in FY12 was 271 paise/ kWh, which is substantially lower than Nathpa Jhakri equity power. The rate of equity power comes out to be so high because this power is received during winter months (November to April in 2012) when the rate of hydel power comes out to be formidably high.

6.52 **Therefore, the Commission directs the Petitioner to use commercial prudence while purchasing equity power from Nathpa Jhakri HEP and other hydel projects in winters. However, as a prudent practice and policy flowing from aims and objectives of investment in capacity creation, the Commission highlights the issue of assignment of PPA of Equity Power by GoHP to HPSEBL on long-term basis.**

6.53 The Commission's estimate of Free Power available to HPSEBL is shown below:

Table 74: Energy Available from Free Power (MU)

Station	Total Energy Available (MU)	Auxiliary Consumption (%)	GoHP Share (%)	Free Power Available to HPSEBL
Bairasiul	730.60	0.70%	12.00%	34.85
Chamera-I	2228.22	1.20%	12.00%	81.48
Chamera-II	1425.99	1.20%	12.00%	55.77
Shanan Share	2.63		Fixed	2.63
Ranjeet Sagar Dam	1749.13	1.00%	4.60%	79.66
Malana	350.00	1.00%	15.00%	51.98
Baspa-II	1213.00	1.64%	12.00%	143.17
Private Micros			12.00%	37.40
Nathpa Jhakri	6848.94	1.20%	12.00%	812.01
Ghanvi	66.73	1.20%	12.00%	7.91
Baner	39.70	1.00%	12.00%	4.72
Gaj	37.67	1.00%	12.00%	4.47
Larji	654.64	1.20%	12.00%	77.61
Khauli	41.45	0.70%	12.00%	4.94
Budhil	275.94	1.00%	12.00%	12.18
Allian Duhangan	139.63	1.00%	12.00%	16.59
Parbati-III	1622.79	1.00%	12.00%	71.65
Chamera-III	910.60	1.00%	12.00%	40.21
Karcham Wangtoo	3942.00	1.20%	12.00%	166.33
Malana-II	394.20	1.20%	15.00%	11.56
Total	**22691.39**			**1717.13**

I. Unallocated Energy Available

6.54 The energy available to HPSEBL in FY14 from the unallocated quota of Central Sector Generating Stations (CSGS), in line with the unallocated power received from the respective stations in the past three years i.e. FY10, FY11 and FY12, is projected the Commission as shown below:

Table 75: Unallocated Energy Available from CSGS

Station	HPSEB share (MU)
NPCIL	
NAPP	12
RAPP (V & VI)	7
NTPC	
Anta (G)	19
Auraiya (G)	21
Dadri (G)	18
Unchahar-I	7
Unchahar-II	21
Unchahar-III	10
Rihand-1 STPS	48
Rihand-2 STPS	52
Singrauli STPS	102
Dadri-II	49
Jhajjar TPS	22
NHPC	
Chamera II	7
Dhauliganga	3
Dulhasti	14
Sewa II	3
SJVNL	
Nathpa Jhakri	11
Total	**425**

J. New Projects

6.55 HPSEBL has submitted a commissioning schedule for new projects as part of additional information submitted along with the APR petition.

6.56 Energy available from future stations has been considered as per the allocation share specified in Table 66 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). While projecting power from hydel stations expected to get commissioned later during the year, it has been taken into consideration that hydel stations achieve maximum generation only during the summer/monsoon months and least during winter.

6.57 Energy availability to HPSEBL in FY14 from future projects as considered by the

Commission is given below. It may be noted that availability from these sources has also been shown in earlier tables along with other stations of the same company.

Table 76: Energy availability in FY14 from new projects (MU)

Station	HPSEBL share (MU)
Rihand-III	188.05
Chamera-III	39.27
Parbati-III	44.18
Uri-II	10.55
Singrauli bundled power	16.48
Total	**298.53**

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

6.58 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 FY14, as it had done earlier in earlier Tariff Orders as well.

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

Table 77: Monthly Demand Supply Position (MU) in F14

Particulars (MU)	Total	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Sales	**8008**	609	636	646	654	659	657	666	646	663	696	699	777
Losses	**1092**	83	87	88	89	90	90	91	88	90	95	95	106
Demand at Discom Periphery	**9100**	692	722	734	743	749	746	756	734	754	791	794	883
Availability at Discom Periphery	**9629**	735	888	968	1101	1085	1051	833	641	555	525	511	738
Deficit Power at Discom Periphery	**988**	0	0	0	0	0	0	0	94	199	267	283	146
Deficit Power Ex Bus	**1024**	0	0	0	0	0	0	0	97	206	276	294	151
Surplus Power at Discom Periphery	**1517**	43	166	233	358	335	305	76	0	0	0	0	0
Surplus Power Ex Bus	**1572**	45	172	242	371	347	316	79	0	0	0	0	0
Net Surplus Ex Bus	**549**	**45**	**172**	**242**	**371**	**347**	**316**	**79**	**(97)**	**(206)**	**(276)**	**(294)**	**(151)**

6.60 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.

Power Purchase Cost

6.61 The cost of power available from various sources has been projected considering the following:

A. Generation cost of HPSEBL's own stations

6.62 The cost of generation from HPSEBL's own generating stations was determined by the Commission in the 2^{nd} MYT Order. The same shall not be revised by the Commission before the end of the 2^{nd} MYT Control Period because it forms a part of the controllable operational norms specified for the generation function for the 2^{nd} MYT Control Period.

6.63 The cost of own generating stations has been calculated in line with the approach specified the HPERC Generation Tariff Regulations, 2011, wherein it is deemed that half of the Annual Fixed Charge of each station would be recovered through a fixed-cost component and the remaining half would be recovered in the form of variable charges imposed on the net generation available to HPSEBL. The cost of own generation has been calculated on the basis of station wise Annual Fixed Charges and variable energy charge rates as determined in the MYT Tariff Order dated 19 July 2011. Since there is no Commission-determined Annual Fixed Charge or tariff for Bhabha Augmentation, the rate for power from this plant has been taken as 295 paise/unit.

B. Cost of Power from BBMB Stations

6.64 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 FY13 up to December 2012 and has escalated the same by 3 Paise/unit, as per HPSEBL's submission made in its MYT petition.

6.65 The weighted average per unit rate of power from BBMB stations is reflected in the bills received up to December 2012, which have been taken as the basis for projection for FY14 after applying an escalation rate of 3 paise/unit.

Table 78: Variable Charges (P/unit) considered for BBMB Stations for FY14

Station	Weighted Average Cost (p/unit)
BBMB (old)	79.00
BBMB (new)	52.92
Dehar	68.00
Pong	30.25

C. Cost of Power from Shared Stations

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

Table 79: Variable Charges (P/unit) considered for Shared Stations

Station	Average Cost (p/unit)
Shanan	40.00
Shanan (Ext)	40.00
Yamuna (UJVNL)	65.22
Khara	42.25

D. Cost of Power from IPP with Long Term PPA

6.67 The Commission has considered the tariff for Baspa-II for FY14 as approved for the year in the 2nd MYT Order and subsequent revisions based on review orders of APTEL and/or this Commission.

E. Cost of Power from IPPs and Renewable (Non Solar) Sources

6.68 Cost of power from private SHPs has been considered at the same rates as proposed by the Petitioner.

6.69 Cost of power under REC mechanism is considered at the average power purchase cost estimated for the previous year i.e. FY13 in line with the Commission's projection methodology, subject to a formal order on Average Power Purchase Cost (APPC) for FY14 by this Commission.

F. Cost of Power from Renewable (Solar) Source

6.70 For Singrauli bundled solar power, the following has been intimated by NTPC to HPSEBL: "The levelised tariff for Solar PV as per CERC regulations is lower than Solar thermal projects and comes to Rs 10.39/kWh (without accelerated depreciation) and the present average tariff of unallocated power from NTPC coal stations in Northern region is around Rs 3/kWh. Taking CUF of Solar PV stations as 19% and PLF of NTPC coal stations as 90%, the indicative bundled tariff for Singrauli Solar PV Project works out to be around Rs 4.50/kWh". Hence, the same has been considered by the Commission for projection of cost of power from this source.

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

- **Nuclear Plants (NPCIL)**

6.71 For NPCIL plants, based on the actual power purchase bills for FY13 up to December 2012, single part tariff has been considered.

6.72 The summary of the composite variable charges considered by the Commission for NPCIL stations for FY14 is shown in the table below.

Table 80: Variable Charges (P/unit) considered for NPCIL Stations

Station	Average cost (Paise/unit)
NAPP	247.03
RAPP	341.76

- **Thermal Plants (NTPC)**

6.73 The Commission has derived annual fixed charges (in proportion to HPSEBL's share) applicable in FY14 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.

6.74 The variable cost including Fuel Price Adjustment (FPA) for FY14 is based upon the actual variable cost incurred up to December 2012 by HPSEBL, and an escalation of 8% (in view of the high coal cost at present) has been applied on the same to arrive at the projected variable cost for FY14.

6.75 Other Charges has been considered as the average of other charges paid in actual per unit in FY10, FY11 and FY12 by HPSEBL.

6.76 The summary of the variable charges (including FPA), fixed charges and other charges considered by the Commission for NTPC stations for FY14 is shown in the table below:

Table 81: Variable Charges (P/unit) considered for NTPC Stations

Station	FY14 (Paise/unit)
Anta GPP	307.45
Auriya GPP	335.82
Dadri GPP	317.06
Unchahar-I	264.60
Unchahar-II	265.35
Unchahar-III	266.09
Rihand-1 STPS	121.15
Rihand-2 STPS	100.19
Singrauli STPS	109.00
Kahalgaon - II	219.49
Rihand-3 STPS	332.55

Table 82: Fixed & Other Charges considered for NTPC Stations for FY14

Station	Fixed Cost payable by HPSEBL (Rs Cr)	Variable Cost payable by HPESBL (Rs Cr)	Any Other Charges (Rs Cr)
Anta GPP	9.95	33.60	0.31
Auriya GPP	12.44	51.95	0.18
Dadri GPP	15.34	54.97	0.59
Unchahar-I	5.43	15.33	0.31
Unchahar-II	10.48	28.49	0.34
Unchahar-III	10.36	17.75	0.32
Rihand-1 STPS	26.47	36.39	1.20
Rihand-2 STPS	29.71	30.94	0.86
Singrauli STPS	5.61	11.14	0.16
Kahalgaon-II	15.93	26.87	0.01
Rihand-3 STPS	20.25	62.54	0.00

- **Hydel Plants**

NHPC

6.77 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.

6.78 The summary of the fixed charges considered by the Commission for NHPC stations for FY14 is shown in the table below.

Table 83: Fixed Charges considered for NHPC Stations for FY14

Station	Design energy (MU)	Total AFC approved for the station (Rs Cr)	Projected Availability for the year (MU)	Fixed Component (Rs Cr)	Variable charges (Paise/unit)
Salal	3082.00	248.56	3149.52	144.32	46.29
Tanakpur	452.19	87.76	474.90	52.37	111.38
Chamera I	1664.56	268.11	2228.22	203.92	92.63
Chamera II	1499.89	336.03	1425.99	181.52	128.84
ChameraIII	1030.00	333.75	910.60	167.65	185.97
Uri	2587.38	338.88	2850.26	212.11	75.32
Dhauliganga	1134.69	271.40	1131.56	153.78	137.55
Dulhasti	1906.80	956.42	2184.17	622.53	288.48
Sewa	533.53	187.90	491.76	98.40	202.13

SJVNL (Nathpa Jhakri)

6.79 For Nathpa Jhakri HEP the annual fixed charge of 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 2012.

THDC

6.80 For Tehri HEP, the Commission has considered a composite variable rate of 475.79 paise/unit for FY14, taking into account variable charges paid in the current year up to December 2012.

6.81 For Koteshwar, on the same lines, the Commission has considered a composite variable rate of 445.74 paise/unit for FY14, on the basis of actual bills received up to December 2012.

NTPC Hydro

6.82 For the Barh-II unit scheduled to be commissioned in September 2013, a composite rate of 450 paise/unit has been considered, as has been assumed for all new thermal and hydro plants.

H. Cost of Free Power

6.83 The rate of free power considered is at the rate of 292 paise/unit, in line with the Commission's order on Free Power for FY14 issued separately along with this order.

I. Cost of Unallocated Power

6.84 The Commission has estimated the cost of power from all stations taking the composite share (firm share plus unallocated quota, in line with the actual share received in the past three years) and hence the rate shown of unallocated power is a weighted average of the rates of the respective stations.

6.85 However, in general, it is observed that unallocated power often comes to the utility at a significantly higher rate than allocated power. In particular, unallocated power from hydro stations such as Sewa-II and Dulhasti is usually received in the winter months, when the sparse generation of these hydel stations makes the per unit rate of such unallocated power extremely uneconomical.

6.86 **The Commission directs the Petitioner to reconsider the power received under unallocated quota from CSGS, especially the power received from hydel stations in winter months.**

J. Cost of Power from New Projects

6.87 Since power from Rihand-3 Unit-5 is already being received by HPSEBL, the average rate projected from Units 5 & 6 of Rihand-3 in FY14 is taken on the basis of actual bills received up to December 2012.

6.88 The rate for new thermal as well as hydro stations is considered to be 450 paise/unit.

6.89 The summary of composite rate considered by the Commission for the new projects is shown in the table below:

Table 84: Variable Charges (P/unit) of New Projects

Station	Variable charges (P/unit)
Barh-II	450.00
Rihand-III Unit-6	440.21
Chamera-III	450.00
Parbati-III	450.00
Uri-II	450.00
Singrauli bundled power	450.00

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

6.90 The Commission has analyzed the power purchase and sale data submitted by HPSEBL for FY12 and FY13 up to January 2013 and observed that the utility has purchased power through market / bilateral sources / exchange / UI at average rates ranging from 345 paise/unit to 445 paise/unit. On the other hand, surplus power is sold at much lower rates, resulting in an overall loss to the utility.

6.91 **The Commission wishes to issue a strict directive to HPSEBL to be prudent with its banking and power procurement arrangements. The utility should plan its demand & procurement such that it relies more on hydel power during summer months and thermal or nuclear power during winter months.** Thermal and nuclear power should be procured for meeting base load, and marginal purchases should be made either through more economical source of power or through strategic day/week ahead purchases.

6.92 Moreover, the cost of power procured during summer months to be (forward) banked should be carefully strategized. Banking occurs when surplus available is lent to other entities for return during deficit times and such surplus comes at a cost. Such cost is the most expensive power at the margin in the merit order. The utility ought to avoid banking of costly power that is procured from thermal sources in summer, relying instead on buying economical power that is available for purchase during winter months. For instance, the utility need not buy power at an average rate of above Rs 4.00/unit during summer months from CSGS, only to bank it with other states with the assurance of getting back the same quantum of power during winter months. Instead, the utility can find alternate buyers for this quantum of power during summer months when other states in the Northern Region face a power deficit. Once winter approaches, the utility should plan its power purchase in such a way that it is able to procure the same quantum of power for meeting its own demand at a lower rate, say, Rs 3.50 to Rs 4.00/unit. However, if banking is considered prudent then the Petitioner should buy extra Free Power from GoHP, if available at cheaper rates or from any other cheaper source.

6.93 Such saving of around Rs 0.50 to Rs 1.00 per unit would yield net savings of close to Rs 20 to 30 Crores in a year to the utility. Any margin over the CERC rate can be retained by the utility. Such arrangements can be done by HPSEBL and the utility can charge its administrative cost over CERC rates.

6.94 Similarly, at present HPSEBL receives unallocated power from various hydel sources in winter months. Himachal Pradesh already has a rich hydel profile, with nearly 70% of its power procured from hydro sources. In this scenario, the utility should reconsider being allocated power from hydel sources in winter months, when hydel generation is at its lowest and consequently this power comes to HPSEBL at extremely uneconomical rates. Instead of receiving unallocated quota of power from hydel sources, the utility should attempt to procure power from thermal sources in winter, for the sake of commercial prudence. Reducing procurement from hydel sources like Dhauliganga, Dulhasti, Sewa, etc. between the months of October to March can result in additional Rs 14-15 Crores of saving for the utility, in view of the higher rates at which power is available from these sources in winter months.

6.95 **Hence, the Commission expects that the Petitioner would be able to save approximately Rs 30 Crores following the Commission's directives as elaborated above. With this in mind, the Commission has decided to reduce the approved power purchase cost by Rs 30 Crores in FY14 as a means to incentivize efficiency and prudence in power management by HPSEBL.**

6.96 The utility is also directed to maintain a contingency surplus of about 300 MU in the entire year, particularly during 8 months of deficit period, to meet contingencies arising out of unforeseen demand or unexpected problems in power availability, in order to ensure 24x7 supply to all consumers without resorting to power cuts. This buffer/contingency surplus shall also help in reducing the marginal power purchase cost of the utility and, if not required for demand within state, can be disposed of through inter-state sales. It will also help in avoiding over-drawl from the system for maintaining grid discipline.

6.97 In its projections for FY14, the Commission has considered a quantum of 1023.72 MU for banking purposes, and has maintained a contingency buffer of 300 MU which, in the event of not coming into use for supply within state, is taken as inter-state sale at an average rate of Rs 2.50/unit. This sale rate is deemed as realistic since sale of contingency buffer would be a last resort sale for the utility, on a day-ahead basis. Over and above this contingency buffer, the Commission also expects an additional surplus of 248.69 MU in view of increased availability of power from HPSEBL stations of HPSEBL and increased quantum of Free Power as conveyed by GoHP to HPSEBL. The sale rate for this quantum has been considered to be Rs 3.00/unit.

6.98 Based on these observations and analysis, the summary of power purchase cost approved by the Commission for FY14 is shown in the table below:

Table 85: Approved Power Purchase Cost (Rs Cr) for FY14

Station	Quantum (MU)	Cost (Rs Cr)	Rate (P/unit)
HPSEB			
Bhabha	614.59	23.66	38.49
Bassi	340.00	21.19	62.31
Giri	231.87	12.49	53.87
Andhra	55.62	4.80	86.32
Ghanvi	58.02	6.20	106.80
Baner	34.58	6.27	181.19
Gaj	32.82	7.05	214.90
Binwa	29.65	3.99	134.61
Thirot	8.88	2.94	331.34
Gumma	2.52	1.29	509.82
Holi	8.25	1.67	202.69
Larji	569.17	140.33	246.55
Khauli	36.22	7.31	201.92
Nogli	7.31	1.61	220.59
Chaba	8.10	1.43	176.83
Rukti	0.54	0.31	570.67
Rongtong	1.49	0.67	448.54
Chamba	0.24	0.19	792.75
Killar	0.54	0.61	1131.55
Sal-II	3.96	0.58	145.88
Bhabha Augmentation	23.00	6.79	295.00
Total – HPSEB Stations	**2067.39**	**251.37**	**121.59**
BBMB Stations			
BBMB Old	43.80	3.46	79.00
BBMB New	342.25	18.11	52.92
Dehar	180.68	12.29	68.00
Pong	44.42	1.34	30.25
Total – BBMB Stations	**611.15**	**35.2**	**57.60**
Shared Stations			
Shanan	5.26	0.21	40.00
Shanan Ext	45.00	1.80	40.00
Yamuna	373.51	24.36	65.22
Khara	65.88	2.78	42.25
Total – Shared Stations	**489.64**	**29.15**	**59.53**
IPP - Long Term			
Baspa-II	1050.05	267.04	254.31
Baspa-II Secondary Energy	155.00	48.90	315.48
Total – Long term IPP	**1205.05**	**315.94**	**262.18**

Station	Quantum (MU)	Cost (Rs Cr)	Rate (P/unit)
Non Solar Renewable			
SHPs – Above 5 MW	148.39	39.47	266.00
SHPs – Up to 5 MW (Preferential Tariff)	863.32	249.50	289.00
SHPs – Up to 25 MW (REC Tariff)	50.57	11.13	220.00
Total – Non Solar Renewable	**1062.28**	**300.1**	**282.51**
Solar Renewable			
Singrauli bundled Solar	16.48	7.42	450.00
CSGS - SoR (Allocated)			
Nuclear - NPCIL			
NAPP	55.61	16.82	302.51
RAPP (V & VI)	95.54	35.09	367.30
Total – NPCIL	**151.16**	**51.91**	**343.43**
Thermal - NTPC			
Rihand-2 STPS	256.34	51.05	199.16
Rihand-1 STPS	251.98	53.74	213.28
Kahalgaon-II	122.68	42.91	349.76
Unchahar-I	51.37	18.69	363.76
Unchahar-II	86.85	31.80	366.19
Anta (G)	90.60	36.37	401.37
Dadri (G)	155.57	63.62	408.91
Auraiya (G)	134.08	55.96	417.37
Unchahar-III	56.80	24.21	426.22
Rihand-3 Units-1,2	188.05	82.78	440.21
Total – NTPC	**1394.31**	**461.13**	**330.72**
Hydel			
NHPC			
Salal	30.87	3.06	99.00
Uri	76.32	12.29	161.01
Chamera I	63.84	12.64	198.00
Tanakpur	18.05	4.30	238.06
Chamera II	51.71	14.94	288.89
Dhauliganga	39.91	12.12	303.62
Uri II	10.55	4.75	450.00
Chamera III	39.27	17.67	450.00
Parbati III	44.18	19.88	450.00
Total – NHPC	**374.70**	**101.65**	**271.28**
SJVNL			
Nathpa Jhakri	167.14	42.64	255.12
THDC			
Koteshwar	42.98	19.16	445.74
Tehri	98.72	46.97	475.79
NTPC - Hydro			
Barh I & II	35.03	15.76	450.00

Station	Quantum (MU)	Cost (Rs Cr)	Rate (P/unit)
Total – Hydel Stations	**718.56**	**226.18**	**314.76**
Total – CSGS SoR (Allocated)	**2264.03**	**739.22**	**326.50**
Free Power			
Baira Siul	34.85	10.18	292.00
Chamera-I	81.48	23.79	292.00
Chamera-II	55.77	16.29	292.00
Shanan Share	2.63	0.77	292.00
Ranjeet Sagar Dam Share	79.66	23.26	292.00
Malana	51.98	15.18	292.00
Baspa-II	143.17	41.81	292.00
Private Micros	37.40	10.92	292.00
Nathpa Jhakri	812.01	237.11	292.00
Ghanvi	7.91	2.31	292.00
Baner	4.72	1.38	292.00
Gaj	4.47	1.31	292.00
Larji	77.61	22.66	292.00
Khauli	4.94	1.44	292.00
Budhil	12.18	3.56	292.00
Allian Duhangan	16.59	4.84	292.00
Parbati-III	71.65	20.92	292.00
Chamera-III	40.21	11.74	292.00
Karcham Wangtoo	166.33	48.57	292.00
Malana II	11.56	3.38	292.00
Total – Free Power	**1717.13**	**501.40**	**292.00**
NJPC Equity Power			
Nathpa Jhakri	0	0	0
TOTAL ALLOCATED	**9433.16**	**2179.80**	**231.08**
UNALLOCATED			
Unallocated Power	424.73	124.38	292.84
Sub Total	**9857.89**	**2304.18**	**233.74**
Banking Purchase			
Banking purchase	1023.72	358.30	350.00
GROSS TOTAL POWER PURCHASE	**10881.61**	**2662.48**	**244.68**
Less: Return of Banking Power	1023.72	358.30	350.00
POWER PURCHASE NET OF BANKING RETURN	**9857.89**	**2304.18**	**233.74**

6.99 As opposed to the Petitioner's submission of 11475.71 MU gross power purchase quantum for FY14, the Commission is allowing 10881.61 MU (before accounting for return of banking quantum), in line with the Commission's view expressed earlier in this Chapter that HPSEBL should be prudent in purchase of energy especially from unallocated sources.

6.100 Moreover, the above detail of approved power purchase does not include certain gas/ LNG based stations of NTPC and certain Central Generating Stations such as Dulhasti, Sewa, Anta (L), Anta (LNG), Auraiya (L), Auraiya (LNG), Dadri (L), Dadri (LNG), Jhajjar, etc. because of their higher rates. The Commission cautions HPSEBL that wherever there are PPAs with CSGS the power is scheduled in natural course and billed accordingly; whether HPSEBL utilizes it or not. Therefore advance planning and action is required for transfer of its share to other beneficiary states through proper channels and approvals in advance. **The Commission reiterates that an efficiency factor is imposed upon the power purchase cost approved for FY14, as mentioned in paragraphs 6.92 to 6.95 above, in the form of deduction of Rs 30 Crores from allowed cost, in order to incentivize efficiency, planning and commercial & operational prudence in procurement of power by HPSEBL.**

Energy Balance

6.101 The Commission has made conservative estimates of availability of power from various sources, particularly from its own generation, shared generation, BBMB projects, etc. With very heavy snowfall during the winter of FY13 and with forecast of normal monsoon in FY14, hydel generation may be more than estimated and 75% of HPSEBL's availability is from hydel stations. Therefore, the conservative surplus of 548.69 MU may go up. Hence, there is all the more reason to avoid purchase of costly power during summer and monsoon seasons from Central Govt. Generating Stations and if required even free power because actual cost of free power is higher than the rate determined by the Commission because power drawn from interstate system involve other costs like transmission cost, losses, system operation cost etc. Any surplus on this count should fetch a price higher than loaded cost of free power also. The utility ought to avoid purchase of costly power, particularly hydel power, under special allocation by GoI unallocated share quota and should reduce the quantum of banking of costly power unless cheaper power during surplus period is available.

6.102 The month wise energy balance projected for HPSEBL for FY14 is shown in the following table:

Table 86: Energy Balance for FY14 (MU)

		Total	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
A	Power Purchase from Outside	**6406.65**	507.77	596.29	641.60	678.59	644.87	631.72	523.58	455.75	426.02	404.84	390.27	505.36
B	Deficit/Banking Power Purchase	**1023.72**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97.17	205.85	276.18	293.52	150.99
C = A+B	Total Purchase outside state	**7430.37**	507.77	596.29	641.60	678.59	644.87	631.72	523.58	552.92	631.87	681.02	683.79	656.35
D	Less: PGCIL Losses	**209.59**	16.59	15.23	14.35	11.13	10.78	11.42	15.93	19.74	22.52	24.24	24.29	23.37
E = C-D	Net Purchased for state	**7220.78**	491.18	581.06	627.25	667.46	634.09	620.30	507.65	533.18	609.35	656.78	659.50	632.98
F	Power Sold Outside State	**1572.41**	44.92	171.95	241.88	371.32	347.48	315.70	79.16	0.00	0.00	0.00	0.00	0.00
G = E-F	Balance Available	**5648.38**	446.26	409.11	385.37	296.13	286.61	304.60	428.50	533.18	609.35	656.78	659.50	632.98
H	Power Purchase within state	**3451.24**	245.27	313.37	349.12	446.52	462.77	441.78	327.83	201.12	144.35	134.27	134.39	250.44
I = C+H	Total Power Purchase Ex-Bus	**10881.61**	753.04	909.66	990.72	1125.11	1107.64	1073.50	851.42	754.04	776.22	815.29	818.18	906.79
J = G+H	Power Available at Transco Periphery	**9099.61**	691.53	722.48	734.49	742.66	749.39	746.38	756.33	734.30	753.70	791.05	793.89	883.42
K	Less: Intra State Transmission Losses	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L = J-K	**Net Available for sale**	**9099.61**	**691.53**	**722.48**	**734.49**	**742.66**	**749.39**	**746.38**	**756.33**	**734.30**	**753.70**	**791.05**	**793.89**	**883.42**

PGCIL Charges and HPPTCL Charges

6.103 For FY14, PGCIL charges have been approved taking the same per unit charge as submitted by HPSEBL for FY12 and taking into consideration the increased quantum of energy projected to be transmitted through the network in FY14.

6.104 In the formats submitted along with the APR filing, the Petitioner has shown that out of the total PGCIL charges of Rs 209.57 Cr shown for FY12, an amount of Rs 56.44 Cr was recovered from PTC on account of PGCIL wheeling charges. Therefore, for FY14, the Commission approves the net PGCIL charges estimated to be payable by HPSEBL in FY14.

6.105 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.

6.106 HPPTCL charges have been considered as approved in the 2nd MYT Order dated 19 July 2011 viz. Rs 11.92 Crores.

Table 87: Approved PGCIL Charges (Rs Cr) for FY14

Particulars (Rs Crores)	FY14
Total PGCIL Charges	272.68
Less: Charges recovered through PTC	73.44
Net PGCIL charges for the year	**199.24**
HPPTCL charges for the year	**11.92**

Other Power Purchase related charges

6.107 For FY14, the Petitioner has submitted certain other charges for consideration by the Commission, viz. Rs 10.81 Crores for ULDC Charges (including POSOCO) and Rs 26.51 Crores on account of Short Term Open Access (PTC) Charges. The same have been proposed by the Petitioner after nominally escalating the charges borne on these accounts by the utility in FY12.

6.108 Therefore, the Commission has approved ULDC and Open Access charges for FY14 as proposed by the utility. The same would be trued up along with other power purchase cost, based on actual amount paid at the end of each year.

Table 88: Approved ULD and Open Access Charges (Rs Cr) for FY14

Particulars (Rs Crores)	FY14
ULDC Charges (Including POSCO)	10.81
ST Open Access – PTC	26.51
Total – Other Charges	**37.32**

Operation and Maintenance (O&M) Expenses

6.109 In its APR petition, HPSEBL has claimed higher employee expenses, A&G expenses and R&M expenses for FY14 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.

6.110 As per the MYT Regulations, 2011, O&M expense is a controllable factor and hence the O&M expenses approved for the Control Period are not subjected to true-up in APRs. However, in view of the information furnished by HPSEBL related to employee cost in FY12, as per provisional accounts, the Commission has decided to review the employee cost approved for FY14 so as to fully provide for these costs, including pension, so that there is no liability carried for truing up later.

6.111 For revising the employee cost allowed for FY14, the Commission has considered the base salary cost, base terminal benefits and arrears of pay & terminal benefits paid out in FY12, and then used the following methodology:

(a) Employee cost pertaining to the Generation function has been reduced from the overall employee cost submitted by HPSEBL as actual for FY12 because these are a part of the power purchase cost already taken care of;

(b) The base salary cost allocated to Distribution function has been increased @ 3% p.a. in line with actual;

(c) Increase in Dearness Allowance (as a percentage of basic salary and grade pay) is taken @ 7% every 6 months, with the hikes being implemented in July and then January of each financial year;

(d) Other costs (grade pay, overtime, bonus, LTA, medical & other allowances) have been pegged to the basic salary (including grade pay) and projected in the same proportion to basic salary and grade pay as the actual proportion observed in FY12;

(e) Base terminal benefits have been increased @ 5% p.a. as there would be deletions in the list of pensioners as well, in the normal course;

(f) Further addition to terminal benefits on account of attrition of employees and their consequent pension liability is considered in the form of 50% of the impact of employee attrition in the respective year, taking broad assumptions;

(g) Arrears of terminal benefits and Pay Commission in FY14 have been taken to be nil as proposed by HPSEBL;

(h) Impact of employee attrition in terms of reduction in employee cost is considered as proposed by the Petitioner;

(i) Capitalization of employee expenses is calculated in the same percentage of gross employee cost (without terminal benefits and arrears) as observed in FY12;

(j) The Commission expects a receipt of Rs 6.00 Cr from borrowing organizations as pension contribution of deputationists and Rs 6.00 Cr from Generation and Project wings including BVPCL as pension contribution, which shall be adjusted at the true up stage.

6.112 Hence, the revised approved employee cost for FY14 is as shown below:

Table 89: Employee Cost approved for FY14 (Rs Cr)

	Employee Cost (Rs. Cr)	FY14
A	**Break up of Gross Employee Cost for Distribution Function**	
1	Salaries (Basic) + Dearness Pay	334.26
2	Grade pay	73.31
3	DA	327.00
4	Other Allowances	27.14
5	Overtime and Bonus	2.30
6	Other Staff Cost	49.70
A-Total	**Gross Employee Cost for Distribution - Total**	**813.71**
B	**Break up of Terminal Benefits**	
	Base Terminal Benefits	285.32
	Addition on account of employee attrition	28.96
	Arrears of Terminal Benefits	0.00
B-Total	**Terminal Benefits – Total**	**314.28**
C-Total	**Pay Commission – Arrears**	**0.00**
A+B+C	**Gross Employee Cost for Distribution**	**1127.98**
	Less: Employee Cost Capitalization	45.00
	Less: Employee Attrition Impact	57.92
	Net Employee Cost for Distribution Function	**1025.06**

6.113 The other two components of O&M expenses for the Distribution function, i.e. A&G expenses and R&M cost, have not been reviewed in keeping with the MYT Regulations, 2011, and shall be trued up if necessary along with the employee cost once final audited accounts are available for the respective years, as part of the annual true-up exercise.

6.114 The Commission wishes to clarify that in the gross amount of Rs 42.33 Crores approved in the MYT Order for A&G expenses in FY14, an amount of Rs 2.5 Crores had been earmarked as “Regulatory expenses”. This component “Regulatory expenses” is now revised and reduced to Rs 1.50 Cr. Of the remaining amount of Rs 1.00 Cr, an expense of Rs 0.35 Cr is provided as expenditure for Electricity Ombudsman under a separate head, on similar lines as provided separately for Forum of Redressal of Consumer Grievance. The remaining amount of Rs 0.65 Cr may be utilized by the licensee under A&G expenses as a whole.

6.115 Therefore, the O&M expenses approved for FY14 (with the amount of employee cost revised in this Order) are shown below:

Table 90: O&M expenses approved for FY14 (Rs Cr)

Particulars	FY14
Employee expenses (Gross)	1127.98
Less: Impact of employee attrition	57.92
R&M expenses	36.45
A&G expenses (Gross)	42.33
Total O&M Expenses (Gross)	**1148.84**
Less: Capitalization on account of employee cost and A&G cost	48.05
Total O&M expenses (Net)	**1100.79**

6.116 Commission acknowledges that the employee cost of HPSEBL is very high as compared to other distribution utilities of the country. The position of establishment/ employee cost of HPSEBL during FY12 vis-à-vis other distribution utilities of neighboring states is as shown in the table below:-

Table 91: Establishment/ Employee cost in electricity supply in H.P. by HPSEBL

Indicator	National# Average	H.P.*	Punjab#	Haryana#	Uttarakhand#
Share of administrative/ Establishment cost in total cost (%)	11.3	30.75	19.50	8.57	6.85
Number of employees per million unit of power sold	1.17	2.28	1.78	0.89	---
Number of employees per thousand consumers	0.38	0.95	0.84	0.60	---
Employees cost per unit of power sold (paise)	N.A.	115.04	81.76	61.49	25.94

 # As per Planning Commission's Annual Report FY12
**As per HPERC Tariff Order for FY12*

6.117 Whereas the employee expenses of HPSEBL excluding payouts of pension and terminal benefits have nearly stabilized, the liabilities on account of pension and terminal benefits are increasing. These liabilities were 26% of total Employee Expenses in FY12 and are expected to increase to 31% in FY14. The position of payouts on account of pension and terminal benefits vis-à-vis total employee expenses during FY12 and FY14 has been shown in the table below:

Table 92: Pension & Terminal benefits during FY12 & FY14 (Rs Cr)

Particulars	FY12	FY14
Total Employee Expenses Approved (Rs. Cr.)	1009.93	1025.06
Terminal benefits and pension payouts (Rs. Cr.)	259.21	314.28
% of Total Employee Expenses	**25.67**	**30.66**

6.118 The Commission observes with concern the increasing pension liabilities of HPSEBL from year to year. While it is recognized that these liabilities are uncontrollable for the utility, HPSEBL is required to be better prepared to deal with its liability payouts on this account. While terminal benefits like leave encashment, gratuity, etc. can be met as a current cost, but pension payouts of pre-2003 retirees require an assured revenue mechanism to meet the full expenses of pension, medical reimbursement, etc. Therefore, the Commission directs the Petitioner to submit a Position Paper on this matter three months from the date of issue of this Order. The Position Paper must comprise a year-wise plan for the next 15 years with a thorough projection of the amount of pension liability in each year as well as funding options for the same. The Petitioner is also directed to explore all possible options for funding its projected pension liability in the next 15 years, including State Government support, setting up of a Pension Trust (with funding and outflow projections for the same) and/or Tariff measures, etc.

Capital Investment

6.119 The Commission, vide its 2nd MYT Tariff Order dated 19 July 2011, had provisionally approved the Capital Investment Plan of Rs 1485.50 Cr for the control period. The same was reiterated by the Commission vide its letter HPERC/476-Vol-VI/2011-12/2493 dated 4 November 2011 while disallowing the Capital Investment for 400 kV sub-station at Kunihar and IT schemes. The list of works in hand to be completed by FY14 at a total cost of Rs. 1510.11 Cr is annexed at Annexure III HPSEBL has prepared a list of works with cost of about Rs 350.00 Cr to be approved by the Government of India under National Electricity Fund (NEF) Interest Subsidy scheme wherein 7% interest subsidy is provided to all schemes for distribution reforms up to 66 kV systems. The scheme of subsidy is admissible for only those schemes which are approved by the Government of India till March, 2014. HPSEBL has taken a good initiative to send the first batch of schemes for Government of India approval. The Commission directs HPSEBL to prepare all such proposals/ schemes that are required within next few years and send them well in time for approval of Government of India. If such proposals include schemes which are not approved by Commission for the second MYT period, HPSEBL will send these schemes for prior approval of the Commission to be rolled over to third MYT period for execution. The Commission also makes it clear that it will not approve any scheme in the next MYT period under CAPEX unless they are approved in NEF interest subsidy scheme. However, if any scheme is eligible under revised guidelines of R-APDRP or RGGVY, these may be proposed in R-APARP/ RGGVY on first priority because these are grants and only when not covered, these may be proposed under NEF Interest subsidy scheme.

6.120 The capital investment of HPSEBL for FY14 shall be the same as approved in the 2nd MYT Order dated 19 July 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

6.121 The asset capitalization for FY14 shall be the same as approved in the 2nd MYT order dated 19 July 2011.

6.122 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

6.123 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.

6.124 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.

6.125 The depreciation approved for FY14 remains the same as approved for the year in the second MYT Order dated 19 July 2011.

Working Capital Requirement

6.126 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.

6.127 Hence, the working capital approves for FY14 remains the same as approved for the year in the 2nd MYT Order and shall be trued up at the end of the Control Period.

Interest & Financing Charges

6.128 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.

6.129 The summary of means of finance approved by the Commission for HPSEBL remains the same as approved in the 2nd MYT Order.

Return on Equity (RoE)

6.130 In the MYT Order dated 19 July, 2011, the Commission did 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.

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

Non Tariff Income (NTI)

6.132 The non tariff income approved by the Commission for FY14 has been kept at the same level as approved in the second MYT Order (FY12 to FY14), with an additional Rs 50 Crores being added to the utility's expected Non Tariff Income, which is 50% of the amount that was recoverable from various agencies in FY12 for survey & investigation activities.

6.133 In the MYT Order dated 19 July 2011, the Commission had noted that about Rs. 467 Cr was recoverable from various HEPs on account of survey & investigation work done by HPSEBL. The Commission had advised the Petitioner to make all efforts to recover these dues in a time-bound manner and had projected recovery of Survey & Investigation Charges as Rs 100 Cr for FY12, Rs 150 Cr for FY13 and Rs 50 Cr for FY14 respectively. However, HPSEBL has now submitted that there has been no recovery on this account in FY12 and hence it has considered nil recovery under this head for FY14. However, the Commission feels that it is high time that HPSEBL makes all-out efforts to recover outstanding dues on this account from various agencies, and hence deems it fit to consider an additional Rs 50 Crores (50% of the amount that was to be recovered in FY12 viz. Rs 100 Cr) in the Non Tariff Income of the Petitioner in FY14.

Table 93: Approved NTI for FY14 (Rs Cr)

Particulars	FY14
Interest Income from Investments	11.62
Interest on loans and Advances to staff	0.67
Interest on Advances to Suppliers / Contractors	0.21
Income from Trading (other than Electricity)	1.35
Income/Fee/Collection against staff welfare activities	0.07
Miscellaneous receipts	42.86
Delayed payment charges from consumers	13.41
Meter Rent	46.22
Recovery from theft of energy	35.42
Wheeling charges	47.08
Misc. charges from consumers	4.59
Survey & Investigation cost reimbursement	50.00
O&M Charges from HPPTCL	5.69
Sub Total	**259.20**
Add: 50% of survey & investigation cost reimbursement recoverable in FY12	50.00
Total NTI	**309.20**

Aggregate Revenue Requirement of HPSEBL

6.134 On account of various expenses approved by the Commission for FY14 as detailed in this chapter, the Commission approves an ARR of Rs 3574.71 Crores for HPSEBL for FY14.

6.135 The table given below provides a summary of the Aggregate Revenue Requirement as approved by the Commission under Annual Performance Review for FY14.

Table 94: Approved ARR of Distribution business for FY14 (Rs Cr)

Particulars	FY14
Total Power Purchase Cost	2522.66
Cost of electricity purchase including own generation (Net of banking return)	*2304.18*
PGCIL Charges (Net of charges recovered from PTC)	*199.24*
HPPTCL Charges	*11.92*
ULDC and ST Open Access Charges	*37.32*
Less: Reduction in cost on account of efficiency in purchase	*30.00*
Operation & Maintenance Costs	1148.84
Gross Employee Cost	*1070.06*
R&M Cost	*36.45*
Gross A&G Cost	*42.33*
Interest & Financing Charges	121.19
Depreciation	109.02
Return on Equity	30.24
Public Interaction Program	0.00
Less: Non Tariff Income	309.20
Less: Capitalization of Expenses	48.05
Capitalization of Employee Cost for Distribution	*45.00*
Capitalization of A&G Cost for Distribution	*3.05*
ARR for FY14	**3574.71**

6.136 Taking into account the trued-up revenue gap of Rs 683.03 Crores for FY12 as well as carrying cost on the same of Rs 42.15 Cr, as detailed in Chapter A5 of this Order, the Petitioner has to recover Rs 4299.89 Crores through revenue in FY14.

Allocation of Distribution ARR into Wheeling and Retail Supply

6.137 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.

6.138 The Commission has allocated the Distribution ARR for FY14 i.e. Rs 3574.71 Crores into Wheeling and Retail Supply business based on the allocation statement approved by the Commission in the Second MYT Order.

Table 95: Allocation of ARR of Distribution business for FY14

Particulars	Wheeling	Retail Supply
Power Purchase Expenses	0%	100%
PGCIL Charges	0%	100%
HPPTCL Charges	0%	100%
Employee Expenses	70%	30%

Particulars	Wheeling	Retail Supply
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%

6.139 The summary of Wheeling and Retail Supply ARR for FY14 is shown as follows.

Table 96: Approved ARR of Wheeling business for FY14 (Rs Cr)

Particulars	FY14
Operation & Maintenance Costs	807.25
Interest & Financing Charges	121.19
Depreciation	109.02
Return on Equity	30.24
Less: Capitalisation of Expenses	33.45
Aggregate Revenue Requirement	**1034.24**

Table 97: Approved ARR of Retail Supply business for FY14 (Rs Cr)

Particulars	FY14
Cost of Power Purchase	2274.18
PGCIL and HPPTCL Charges	211.16
Other Power Purchase Charges	37.32
Operation & Maintenance Costs	341.60
Less: Non Tariff Income	309.20
Less: Capitalisation of Interest & Expenses	14.60
Aggregate Revenue Requirement	**2540.46**

Wheeling Charges

6.140 Based on the ARR approved for Wheeling function, the Commission has determined the Wheeling charges for FY14 as per the methodology specified in the MYT Regulations, 2011. The summary of the approved Wheeling charges for FY14 is shown as follows.

Table 98: Approved Wheeling Charges for FY14

Particulars	FY14
Wheeling ARR (Rs Cr)	1034.24
Energy Sales (MU)	8007.66
Wheeling Charges (Rs/ unit)	**1.29**

6.141 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.

A7: TARIFF PHILOSOPHY AND DESIGN

7.1 Most states follow the Average Cost of Supply model for determination of tariff. In this regard, 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 ± 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."

7.2 The Commission had accordingly based the tariff fixation exercise mainly on the average cost of supply and had duly kept in mind the need for progressively moving towards the targeted roadmap of +20% of the average cost of supply, which we have been achieving 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 as well as general perception on aspects for which no data is available. However, this voltage wise cost to serve has been worked out for indicative purposes only. The Commission does not find it prudent to fix 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.

Approach in Previous Years

7.3 Before arriving at the Cost to Serve model for the ensuing year, the Commission analyzed data for previous years on various aspects such as average cost of supply for each year, category wise revenue recovery through tariff and proportion of the same to average tariff approved for the year, etc. as a means of studying the movement of tariffs vis-à-vis average cost of supply over the years, in view of the broad principles laid down in the National Tariff Policy on tariff fixation.

7.4 A summary of the Commission's analysis is provided in Table 99 and Table 100 below. The tables show that the Commission's attempts at trying to reduce the levels of cross subsidy and trying to bridge the gap between category-wise tariffs and Average Cost of Supply is in accordance with the National Tariff Policy over the years. The CAGR of Tariffs per unit- category wise w.e.f FY09 to FY13 are also depicted. The tables also validate the Commission's approach in tariff determination and rationalization of tariff, since the levels of cross subsidy each year have been progressively reducing.

Table 99: CAGR Growth in Approved Average Tariff (AT) Category-wise (Rs/Kwh)

Average Tariff Rate (Rs/Kwh)										
	Domestic	Non Domestic Non Commercial	Commercial	Small Medium Industry	Large Industry			Water Irrigation & Pumping	Street Light	Average
MYT Order					**HT**	**EHT**	**Overall**			
FY 2008-09	2.77	4.43	4.89	3.93	3.73	3.24	3.54	4.31	3.62	**3.54**
FY 2012-13	3.69	5.22	5.21	4.50	4.97	4.46	4.77	4.45	4.53	**4.59**
CAGR (%)	**7.43**	**4.19**	**1.60**	**3.44**	**7.41**	**8.32**	**7.74**	**0.80**	**5.77**	**6.71**

Table 100: Year - wise Category-wise Cross Subsidy (%age) w.r.t. Average Tariff

Cross Subsidy (Percentage)									
	Domestic	Non Domestic Non Commercial	Commercial	Small Medium Industry	Large Industry			Water Irrigation & Pumping	Street Light
MYT Order					**HT**	**EHT**	**Overall**		
FY 2008-09	-21.75%	25.14%	38.14%	11.02%	5.49%	-8.45%	0.00%	21.75%	2.26%
FY 2012-13	-19.61%	13.73%	13.51%	-1.96%	8.28%	-2.81%	3.92%	-3.05%	-1.31%

7.5 In view of the fact that over the years, the Commission's methodology of tariff fixation and rationalization of tariffs has been yielding positive results, the Commission has decided to retain the methodology of assessing the Average Cost to Serve for FY14 in line with the approach followed previously.

Assumptions

7.6 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) The Commission has distributed the loss levels uniformly across various voltage levels on the basis of methodology explained in Para 7.7.

(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

7.7 The Commission observes that at least the following factors are relevant for allocation of power purchase cost amongst various categories of consumers-

(i) Supply voltage and associated T & D losses. The Commission however also finds that the quantum of purchase of power at 22 kV and 33 kV levels is increasing with the commissioning of more and more SHPs. The bi-lateral flows for meeting the requirement of HT & EHT consumers can therefore not be ruled out. Accordingly, some part of the T&D losses on HT Systems may need to be allocated to EHT sales also.

(ii) The typical load factors for various categories of consumers. The Commission observes that the load factor of HT and EHT supplies is much higher than that for LT supplies. The incremental cost of power purchase beyond a minimum common level of load factor therefore needs to be allocated to the categories having higher load factors. The per unit power purchase cost for HT & EHT categories therefore needs to be higher than the same for LT categories.

7.8 In view of above stated factors which have counter balancing effect the total cost of power purchase and over generation (recovered by the component of the sales outside the state) has been distributed over the energy sales on per unit basis.

7.9 Wherever considered, the amount of past gap has also been uniformly distributed over the entire energy sales on per unit basis.

7.10 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 only has been considered for sales at 66 kV on account of expenses on metering and billing related infrastructure / manpower cost only for 66 kV sales. Idle/ redundancy capacities of EHV levels are needed to be allocated to EHV consumers because such network augmentation is largely to cater to EHV consumers except in case of evacuation network.

7.11 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 only has been considered for HT sales on account of expenses on 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.

7.12 Cost of Supply for consumers at Low Tension (below 11 kV) level has been estimated by assessing the distribution cost (below 11 kV) and sales to LT consumers. It also includes the proportional costs incurred for wheeling power at higher voltage levels (from 220 kV till 11 kV).

7.13 Arrears to the extent covered through tariff hike have been considered in the ARR.

Sales at various voltage levels

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

Table 101: Sales at Different Voltage Levels (MU)

S. No	Category	Total Sales (MU)	EHT (≥ 66 kV)	HT (≤ 11 kV)	LT (< 11 kV)
1	Domestic	1755.62	0.00	0.00	1755.62
2	NDNCS	115.46	0.00	34.64	80.82
3	Commercial	447.58	0.00	67.14	380.44
4	Small and Medium Industrial Power	216.07	0.00	0.00	216.07
5	Large Industrial Power Supply (LIPS)	4731.71	1824.33	2907.38	0.00
6	Water and Irrigation Pumping	538.74	0.00	154.36	384.38
7	Street Lighting	13.94	0.00	0.00	13.94
8	Bulk supply	163.38	0.00	105.06	58.33
9	Temporary Supply	25.16	0.00	0.00	25.16
	Total (inside State)	**8007.66**	**1824.33**	**3268.57**	**2914.76**

Cost Segregation

7.15 The Commission has continued the same practice of cost segregation as last year. In order to validate the voltage-wise per unit Distribution cost allocated to different voltage levels, the Commission also assessed the same based on certain other relevant parameters including the pattern of usage of the system by consumers at various voltages, and found the rates worked out in Table 102 below to be reasonable.

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

(a) **Generation and Power purchase cost:**

- ***Current Cost Recovery Model:*** The Commission has considered the approved revenue requirement for consumers of the State at Rs 3425.10 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 347.17 Cr based on EHV component of the GFA.

(c) **Distribution cost:** The Commission has considered the distribution cost of Rs 694.87 Cr after deducting Rs 10 Cr towards the metering, billing and collection cost incurred on consumers at the EHT system from the Wheeling and Retail Supply cost of Rs 704.87 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 the distribution cost of Rs 694.87 Cr, Rs 367.31 Cr has been apportioned to sales at HT level and Rs 327.55 Cr apportioned to sales at LT level. Approximately Rs 40 Cr has been allocated only to sales at HT level since these are deemed as costs specific to the 11 kV & above level.

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

Current Cost Recovery Model

Table 102: Cost to Serve as per Current Cost Recovery model

S. No.	Particulars	Generation bus bar	EHT (≥66 kV)	HT (≥11 kV)	LT (<11 kV)	Total
1	Energy Input (MU)	9099.61	9099.61	7275.28	4007.20	
2	Sales at respective level (MU)		1824.33	3268.08	2915.25	8007.66
3	Cost at respective level (Rs Cr)	2373.06	347.17	337.31	327.55	3425.10
4	Average Power Purchase Cost for per unit of sales (Rs/unit)	2.96				
5	**Cost Allocation (Rs/unit)**					
a	Power Purchase Cost		2.96	2.96	2.96	
b	EHV Transmission Cost		0.49	0.43	0.43	
c	Distribution Cost (≥ 11 kV)			0.64	0.55	
d	Distribution Cost (< 11 kV)				1.12	
6	**Cost of Supply (Rs/unit)**		**3.45**	**4.03**	**5.07**	**4.28***

**Rs 4.28 per unit is the average cost of supply without considering past gap and carrying cost*

7.18 The above cost does not include the impact of the expenses pertaining to the past periods which have been approved at Rs. 683.03 Cr. (on account of True up for FY12) and Rs. 42.15 Cr. (on account of carrying cost allowed on the past gap). These amounts of the past gap shall also have to be loaded to the above stated costs and shall increase the average cost of supply by about 91 paise per unit. If the past gap i.e. true up amount of Rs 683.03 Cr is taken into account along with carrying cost approved on the same i.e. Rs 42.15 Cr, the average cost of supply comes out to be Rs 5.18 per unit as opposed to Rs 4.28 per unit as shown in the table above.

Tariff Principles

7.19 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, Government of India, 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.

7.20 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.

7.21 Based on the analysis of Cost to Serve it is seen that the average cost of supply to the licensee as determined for FY14, after taking into account the true up amount of Rs 683.03 Cr and carrying cost Rs 42.15 Cr, comes to Rs. 5.18 per unit, whereas the average realization from revenue at existing tariffs in FY14 is estimated to be only Rs. 4.52 per unit.

7.22 Further, at existing tariffs, the revenue gap of the Petitioner for FY14 as estimated by the Commission, after taking into account the past gap i.e. true up of FY12 and carrying cost on the same, comes out to be Rs 528.11 Cr.

Table 103: Revenue in FY14 at Existing Tariff (Rs. Cr)

Category	Petitioner's Submission	Commission's Analysis
Domestic	627	638
NDNCS	62	61
Commercial Supply	243	232
Small and Medium Supply	90	97
Large Supply	2,329	2,242
Water and Irrigation Pumping Supply	240	238
Street Lighting	7	6
Bulk Supply	105	91
Temporary Supply	22	18
Total	**3,724**	**3,623**

Revenue from Sale of Power Outside State

7.23 The Petitioner has projected the energy available for sale outside the State as 1703 MU which takes into account banking power return of 1350 MU. The proposed revenue from net sale of power outside the State (353 MU) is Rs 106.02 Cr at an average sale rate of Rs 3.00/unit. It may be noted that the above submission was made by the Petitioner in its APR petition, after which the Petitioner has submitted revised estimates of energy availability in FY14 (on account of free and equity power) which would accordingly impact the Petitioner's estimates of inter-state sales.

7.24 The Commission has projected the power available for sale outside the State (Ex-Bus) during FY14 and a summary of the same is shown as follows:

Table 104: Surplus Power Available for Sale in FY14 (MU)

Particulars	FY14
Total Surplus at Discom Periphery (MU)	1517.37
Inter State Transmission Losses (%)	3.50
Total surplus at Ex-Bus (MU)	**1572.41**

7.25 The Commission in Chapter A6 of this Tariff Order has talked about the need for HPSEBL to show commercial prudence in its power arrangements. Since the rate of sale of power has historically been lower than the power procurement rates, the

Commission has directed the Petitioner to avoid procuring power that works out to be commercially unviable, e.g. unallocated hydel power in winter months. Therefore, the Commission envisages a contingency buffer of about 300 MU to be maintained by the utility which, if not required, is estimated to be sold at an average rate of Rs 2.50/unit which is deemed to be a realistic sale rate since sale of contingency power would be a last resort sale for HPSEBL on a day ahead basis. Further, as per the power purchase projections made by the Commission for FY14, the utility is expected to have an additional 248.69 MU of power, in view of availability likely from already tied up sources as well as some quota of unallocated power that the utility historically receives from central generating stations. This surplus power over and above the contingency buffer is expected to be sold at an average rate of Rs 3.00/unit.

7.26 The revenue from sale of power outside State is tabulated as follows:

Table 105: Revenue Projection for Sale of Power outside State for FY14

Parameters	Units	FY14
Sale of Contingency Buffer	MU	300.00
Rate of Sale	Rs/unit	2.50
Revenue from sale of Contingency Buffer (A)	***Rs Cr***	***75.00***
Sale of Surplus Power (over & above Contingency Buffer)	MU	248.69
Rate of Sale	Rs/unit	3.00
Revenue from sale of Surplus Power (B)	***Rs Cr***	***74.61***
Revenue from sale of power outside State (Rs Cr) [A+B]	**Rs Cr**	**149.61**

Revenue Gap at Existing Tariff for FY14

7.27 Taking into account the revenue from sale within state and outside state projected for FY14 at existing tariffs, the Commission estimates revenue gap in FY14 as follows:

Table 106: Commission's Analysis of HPSEBL's Gap in FY14 at Existing Tariff (Rs. Cr)

Parameters	FY14
Annual Revenue Requirement for FY14	3574.71
Trued up Revenue Gap of FY12	683.03
Carrying Cost on past gap	42.15
Total Revenue Requirement	**4299.89**
Less: Revenue From Sale of Power within State at Existing Tariff	3623.17
Less: Revenue From Sale of Power outside State	149.61
Revenue Surplus/(Gap)	**(527.11)**

7.28 In view of the fact that the utility is well placed in FY14 considering only the expenses and revenue projected for FY14, the Commission feels that the entire gap of Rs 527.11 Cr can be recovered by the utility through a reasonable tariff hike of 13.29% over the last approved tariff of Rs 4.59 per unit (in the Tariff Order for FY13), which would not pose a tariff shock to any consumer category.

7.29 Accordingly, the Commission in this Tariff Order hereby increases tariff to recover Rs 544.64 Cr so as to recover the entire revenue requirement of the utility and leave it in a comfortable position in FY14.

7.30 The category-wise tariffs approved for FY14 are detailed as follows.

Approved Tariff

DS: Domestic Supply

7.31 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 up to 2 kW; 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 (125*10) units would be charged at Rs 3.50 per kWh, the next 1250 (125*10) at Rs 4.40 per unit and the balance 500 units at Rs. 4.70 per unit. Consumer service charge shall be Rs. (40x10).*

7.32 The Petitioner has proposed the following for the consumers in the domestic category:

a) No increase in tariff for BPL consumers;

b) 20% increase in energy charges for lower consumption slabs of 0-40 units/month and 0-125 units/month;

c) 25% increase in energy charges for the remaining consumption slabs;

d) Tariff of Prepaid Consumers proposed at par with proposed tariff for 0-125 slab;

e) Increase in consumer service charges from existing Rs 30/connection/month to Rs 60/connection/month.

7.33 The comparison of existing tariff and tariff proposed by the Petitioner for domestic category is given in the table below. The Commission, after a detailed analysis, approves the tariff for Domestic category as under:

Table 107: Existing, Proposed and Approved Tariff for Domestic Category

Description	Existing		Proposed		Approved	
Units/month	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 Consumers (Up to 40 units per month)	2.50	10.00	2.50	10.00	Merged with Lifeline consumers	
Other						
0 -40 (Lifeline consumers)	2.85	30.00	3.42	60.00	2.85	30.00
0-125	3.00	30.00	3.60	60.00	3.50	40.00
126-250	3.90	30.00	4.88	60.00	4.40	40.00
251 & above	4.00	30.00	5.00	60.00	4.70	40.00
Pre-paid meter	3.00		3.42		3.50	

7.34 Electricity Act, National Electricity Policy and Tariff policy mandates that all efforts shall be made to provide access to electricity to all and also that tariff should be affordable to very poor and marginalized people who require life line consumption support of about 30 unit or so per month. In this direction Commission had made as separate category of consumers i.e. BPL category consuming up to 40 unit per month but has noticed that although there are about 2.5 lac BPL families in the State, only about 2000 consumers, who are only new consumers under Rajiv Gandhi Gramin Vidyutikaran Yojna are getting benefited. Already connected BPL consumers are not benefited because either they are unaware or there are formalities to be done for enlistment as BPL consumers. Moreover, BPL list is dynamic and additions and deletion will always be on extra activity for consumer as well as Board. Hence , in order to give intended benefit to marginalized category of consumers, the Commission has made only one category in the slab of 0-40 units per month as life line consumer, most of whom will be very poor, marginalized and BPL families. Number of such consumers is about 3.00 lacs which is almost aligned with number of BPL families. Tariff for this category has not been increased and it is about 68 % of average tariff.

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

Non Domestic Non Commercial Supply

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

7.37 The Petitioner has proposed the following for the consumers in the Non Domestic Non Commercial supply category:

a) 15% hike in Energy Charges & Demand Charges;

b) 10% hike in Consumer Service Charges;

c) Street Lighting Supply is proposed to be merged with Non Domestic Non Commercial Category.

7.38 The Commission, after a detailed analysis, 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 108: 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	5.12	66.00	5.00	70.00

Table 109: 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)
4.00	120.00	120.00	4.50	132.00	138.00	4.60	140.00	120.00

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

Commercial Supply (CS)

7.40 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.

7.41 The Petitioner has proposed the following for the Commercial Supply category:

a) 15% hike in Energy Charges has been proposed for all slabs;

b) 10% hike in Consumer Service Charges has been proposed for all slabs;

c) Demand Charges have been proposed to be raised to Rs 83 & Rs 132 per kVA per month from existing Rs 75 & Rs 120 per kVA per month respectively.

7.42 The Commission, after a detailed analysis, 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 110: 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	5.29	66.00	5.25	70.00

Table 111: 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	4.20	120	75	4.83	132	83	4.85	140	90
Above 100kW	4.10	240	120	4.72	264	132	4.75	275	140

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

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

Small and Medium Industrial Power Supply (SMS)

7.45 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.

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

a) 20% hike in energy charges has been proposed for all the slabs;

b) Consumer Service Charges have been proposed to be raised to Rs 92 & Rs 173 per connection per month from existing Rs 80 & Rs 150 per connection per month respectively;

c) Demand Charges have been proposed to be raised to Rs 81 per kVA per month from existing Rs 70 per kVA per month.

7.47 The Commission, after a detailed analysis, 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 112: 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)
4.10	80.00	4.92	92.00	4.70	90.00

Table 113: 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)
3.70	150	70	4.44	173	81	4.50	175.00	80.00

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

Large Industrial Power Supply (LIP)

7.49 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".

7.50 The Petitioner has proposed the following in its petition:

(a) An increase of 35% in energy charges has been proposed for all slabs;

(b) No hike is proposed in Consumer service charge;

(c) Demand Charges have been proposed to be raised to Rs 400 per kVA per month from existing Rs 300 per kVA per month for all slabs.

7.51 **The Commission, after a detailed analysis, has introduced a new tariff slab in response to concerns raised by several consumers about the per unit impact of demand charges on smaller LIP consumers whose consumption is comparatively low in view of their contract demand. Hence, the Commission has created a separate category for LIP consumers with connected load up to 1 MW, viz. "HT-1", for whom demand charges have been kept lower than the demand charges for the "HT-2" category in order to mitigate the impact of demand charges for smaller LIP consumers. The energy charges of the newly created HT-1 category have been determined with a view to rationalizing the overall revenue realization of HPSEBL from such consumers.**

7.52 The Commission 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 114: 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 per month	3.35	350.00	300.00	4.56	438.00	300.00	4.05	400.00	350.00
Balance kVAh during the month	3.60	350.00	300.00	4.88	438.00	300.00	4.30	400.00	350.00
HT-1 (up to 1 MW)									
Up to 300 kVAh/kVA per month	3.45	350.00	300.00	4.66	350.00	400.00	4.50	400.00	200.00
Balance units during the month	3.70	350.00	300.00	5.00	350.00	400.00	4.75	400.00	200.00
HT-2 (More than 1 MW)									
Up to 300 kVAh/kVA per month	3.45	350.00	300.00	4.66	350.00	400.00	4.15	400.00	350.00
Balance kVAh during the month	3.70	350.00	300.00	5.00	350.00	400.00	4.40	400.00	350.00

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

Bulk Supply

7.54 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.

7.55 The Petitioner in its tariff proposal 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 264 per kVA per month from existing Rs 240 per kVA per month.

7.56 The Commission, after a detailed analysis, 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 115: 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	4.50	150.00	240.00	5.40	165.00	264.00	4.85	175.00	260.00
HT	4.00	150.00	240.00	4.80	165.00	264.00	4.35	175.00	300.00
EHT	3.80	150.00	240.00	4.56	165.00	264.00	4.15	175.00	300.00

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

Street Lighting Supply

7.58 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.

7.59 The Petitioner has proposed this category be merged with Non Domestic Non Commercial Category in view of the fact that it is one of the essential services to be provided to general public but not on commercial basis.

7.60 The Commission, after a detailed analysis, retains Street Lighting as a separate category and approves the tariff for this category as shown in the tables below. The comparison of existing tariff and tariff proposed by the Petitioner is also given below.

Table 116: 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)
4.60	60.00	Proposed to be merged with NDNCS		5.00	70.00

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

Temporary Metered Supply

7.62 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 s hall be covered under Water and Irrigation Pumping Supply (WIPS) even for temporary connection.

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

7.64 The Commission, after a detailed analysis, 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 117: 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)
7.00	140.00	8.05	161.00	7.50	140.00

Table 118: 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)
5.50	200.00	350.00	6.33	230.00	403.00	6.00	200.00	350.00

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

Water and Irrigation Pumping Supply (WIPS)

7.66 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).

7.67 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.

7.68 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.

7.69 The Petitioner has proposed an increase of 20% in energy charges, 10% in consumer service charges and 15% in demand charges for this category.

7.70 The Commission, after a detailed analysis, 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 119: 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)
3.00	40.00	3.60	44.00	3.50	50.00

7.71 The two-part tariff applicable for WIPS for connected load above 20 kW shall be as shown in the table as follows:

Table 120: 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	4.00	140.00	50.00	4.80	154	58	4.60	150.00	80.00
HT	4.25	200.00	220.00	5.10	220	253	4.50	225.00	300.00
EHT	3.95	250.00	220.00	4.74	275	253	4.30	300.00	300.00

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

Railway Traction

7.73 The Petitioner has not proposed any change in this category.

7.74 The two-part tariff applicable for Railway Traction shall be as shown in the table as follows:

Table 121: Tariff for Railway Traction

Slab	Existing			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	4.50	350.00	300.00	5.00	400.00	350.00

Revenue Projection at Approved Tariff

7.75 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

7.76 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. 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.

7.77 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 122: Projection of Revenue from Sale of Power within State for FY14 (Rs. Cr)

Category	Petitioner's Submission		Commission's Analysis		Revenue Mobilization as per Commission
	Existing Tariff	Proposed Tariff	Existing Tariff	Approved Tariff	
Domestic	627	813	637.5	713.3	75.8
NDNCS	62	80	60.6	68.1	7.5
Commercial Supply	243	278	231.5	266.4	34.8
Small and Medium Supply	90	108	97.2	115.5	18.3
Large Industrial Power Supply	2,329	3,059	2,241.9	2,604.9	362.9
Water and Irrigation Pumping	240	287	238.2	272.0	33.8
Street Lighting	7	-	6.5	7.3	0.8
Bulk Supply	105	123	91.3	100.9	9.6
Temporary Supply	22	25	18.4	19.5	1.2
Total	**3,724**	**4,772**	**3,622.2**	**4,167.2**	**544.64**

Revenue from Sale of Power Outside State

7.78 The revenue from sale of power outside State has been tabulated in Table 105 earlier, and is shown again in the following table:-

Table 123: Revenue Projection for Sale of Power outside State for FY14

Parameters	Units	FY14
Sale of Contingency Buffer	MU	300.00
Rate of Sale	Rs/unit	2.50
Revenue from sale of Contingency Buffer (A)	***Rs Cr***	***75.00***
Sale of Surplus Power (over & above Contingency Buffer)	MU	248.69
Rate of Sale	Rs/unit	3.00
Revenue from sale of Surplus Power (B)	***Rs Cr***	***74.61***
Revenue from sale of power outside State (Rs Cr) [A + B]	**Rs Cr**	**149.61**

Overall Revenue–Expenditure Position of HPSEBL at Approved Tariff

7.79 The overall revenue and expenditure position of HPSEBL at the approved tariff is given in the table below:

Table 124: Overall Revenue-Expenditure position of HPSEBL in FY14 at Approved Tariffs (Rs. Cr)

	Parameters	FY14
A	Annual Revenue Requirement for FY14	3574.71
B	Trued up Revenue Gap of FY12	683.03
C	Carrying Cost on past gap	42.15
D	**Total Revenue Requirement [A+B+C]**	**4299.89**
E	Less: Revenue From Sale of Power within State at Revised Tariff	4167.81
F	Less: Revenue From Sale of Power outside State	149.61
G	**Revenue Surplus/(Gap) [E+F-D]**	**17.53**

7.80 Thus, the Commission has approved a revenue surplus of Rs 17.53 Cr in FY14 after revision of tariff.

Treatment of Revenue Surplus

7.81 The Commission directs the Petitioner to transfer any surplus revenue realised in FY14 at approved tariffs to the MYT Contingency Reserve as per Regulation 12 of the HPERC (Terms and Condition for determination of Wheeling Tariff and Retail Supply Tariff) Regulation, 2011. Any surplus transferred to the MYT Contingency Reserve would be utilized to meet the gap at truing up stage because the Commission has already authorised the utility through Regulations to adjust tariff on account of fuel costs adjustments and revisions in tariff by CERC with respect to Central Sector Generating Stations, PGCIL, etc. midway through the year.

Subsidy by Government of Himachal Pradesh

7.82 HPSEBL has conveyed to the Commission vide its letter No. HPSEB/CE (Comm)/ SERC-Subsidy/2013-1996 dated 24 April, 2013 that the Govt. of Himachal Pradesh has approved Rs. 320 Cr. as rollback subsidy for FY14. This amount is approximately Rs. 50 Cr. more than the amount of Rs. 270 Cr. provided by Govt. of H.P as rollback subsidy for the FY13. HPSEBL has requested that any amount left out of this amount of Rs. 320 Cr. during FY14 after maintaining slab-wise subsidy rates of FY13, may be adjusted for providing additional subsidy in the lower tariff slab of 0-125 kWh per month.

7.83 In accordance with provisions of Section 65 of the Electricity Act, 2003, the Commission in terms of sub-regulation (5) of Regulation 42 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 in giving effect to the subsidy hereby makes the following provisions:

(a) The effective energy charges for Domestic Supply category, as proposed by the GoHP after accounting for Government subsidy, shall be as given in the table below:-

Table 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)
Lifeline consumers	0-40	2.85	1.85	1.00
Other Consumers	0-125	3.50	2.20	1.30
	126-250	4.40	1.70	2.70
	Above 250	4.70	0.75	3.95
	Prepaid consumers	3.50	2.20	1.30

(b) With respect to agricultural consumers under Water and Irrigation Pumping Supply (WIPS) category, the energy charges shall be Rs 1.00 per kWh to the consumer category up to 20 kW under single part tariff and Rs. 1.00 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, 2013. HPSEBL shall give appropriate adjustments in consumer bills for the subsidy amount.

7.84 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.

A8: DIRECTIONS AND ADVISORIES

8.1 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.

8.2 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.

Status of Compliance of Previous Directions as submitted by HPSEBL

8.3 The HPSEBL in this Tariff Filing for 2nd APR of 2nd MYT, has not reported on the compliance of Directions imparted by the Commission in its past Tariff Orders. The Commission shall review the progress against each Direction before the end of the 2nd MYT Control Period (FY12 - F14) for which the HPSEBL is directed to file the compliance status on quarterly basis during 2013-14 in the first week of next month for every quarter ending.

New Directions Issued in this Order

Direction No. -1:

Power Procurement Planning, the challenge of managing surpluses and deficits:-

8.4 Success of a DISCOM lies in its being competitive in supply business and key to competitiveness lies in its capacity to supply quality power on affordable price on sustained basis. This essentially demands long term visibility of availability of power, both in quantum and price, ensured through long term unequivocal supply contracts, for quantum and price, from defined sources, so that customer can choose the DISCOM as its long term supplier. Therefore HPSEB Ltd; needs to have a strategy of power procurement based on its prudent demand forecast and supply estimates from each source, not only on year to year basis, but also on time to time basis.

8.5 Demand forecasts and supply estimates can never match on real time in power supply business. The impact of this uncertainty is further compounded by the fact that power cannot be stored and any real time surplus may not fetch the cost and any deficit will entail either extra cost to meet the gap, leading to either loss or tariff increase; or entail power cut impacting on quality and reliability of service.

8.6 On the price competitiveness front also, management of procurement is very critical. Cost is increasing at increased rate and presently if constitutes 66% of the local operational cost. Of the remaining, about 27% is the employees cost on which Board has no control and balance costs are small and unavoidable. Hence, cost efficiency lies only in prudent and efficient management of power procurement, which is from varying sources and at varying costs.

8.7 Some of the key strengths of HPSEB Ltd; in procurement are:-

(i) There are large number of sources of supply and hence dependency risk is very low.

(ii) About 583 MW is its own generation capacity, including Uhl and Ghanvi and hence has enough manoeuvrability.

(iii) 80% of source is hydel generation, which in addition to peaking power advantage, generates huge surplus during summer/monsoon when demand is lean in the State and peak in region and generates very low when demand is peak in winters in H.P. and lean in the neighbouring States.

(iv) State of the Region share and unallocated quota of G.O.I is available from thermal and nuclear plants in the region to meet base load requirement.

(v) While prices of thermal sources are rising, yet in hydel, except during initial and terminal period, price is low and stable.

(vi) Non-Solar renewable source of supply is adequate and competitive.

8.8 Availability of supply over a long term period is not a constraint. Apart from purchase from upcoming IPPs, State Govt. sources are substantial. About 10,000 MW capacities are likely to added in next 10 to 15 years which is will provide average free power of 15% to 20%. This will include generation of 3000 MW of HPPCL, which power can be fully purchased. GoHP equity share in Rampur, Luhri and Dauhasidh projects will give about 1500 MUs share to State. SOR share in the projects in north India and15% unallocated share in NHPC and Koldam projects coming up will provide additional 15% unallocated share. Therefore, against current requirement of about 9100 MUs, additional power of more than 25,000 MUs will be available from these sources.

8.9 Therefore HPSEB Ltd; has a huge opportunity to meeting customers demand of power on competitive rates, by a prudent management in a situation to be a cost sensitive, customer centric and reliable supplier in terms of quantum, quality, price and service, instead of being a monopoly public sector. Hence prudent management of procurement on long term basis in general and management of seasonal surpluses and deficits are key to excellence in performance.

8.10 Commission had been concerned about this issue and in its MYT order dated 9.07.2011 and 24.04.2012 also issued directions on this issue. Commission had series of discussion with management of HPSEB Ltd. Matter was discussed in SAC meeting as a formal agenda also. Based on all these deliberations and discussions in the above paras, Commission would like to highlight certain points for consideration as its directions and follow up action as a strategic policy of the Company.

8.11 Aims and objectives and the consequent strategy for power procurement management, including managing surpluses, should be to ensure availability of power, that requires long term visibility of supply from sources; such availability be at affordable prices, that require stability of price from long term sources which is competitive also; and that such availability of affordable power is accessible, that require quality transmission and distribution network requiring continuing investments for upgrade and maintenance. This would broadly call for :-

a) To ensure 24x7 supply, without any conditionalities like reliability charges, Board needs provision of contingent surplus of about 3 to 5% of its total requirement.

b) Availability of power on long term agreement basis should be 100% of its demand projection. However, up to 5% of its unforeseen demands can be met from short-term sources, which can be reviewed after market matures and is stable.

c) For long-term supply, in addition to state of the Region share in the Centre Govt. power stations, power available with State against its equity share in SJVNL projects and also from HPPCL projects should be obtained with long term PPAs because the objective behind such investment by Govt., apart from commercial revenue income on equity, is to produce power for consumption in the State for its economic and social development. It has long-term visibility of price also, which is fixed lawfully by the Appropriate Commission.

d) All free power of the State Govt. from HPSEBL's own projects and those private projects connected to HPSEBs distribution system should be purchased by Board on long-term basis for the whole lives of the project. Apart from operational and administrative convenience, it is in the interest of the Board because inter-State charges are not required to be paid. Govt. also gains because if Govt. sells such power outside State, it has to pay wheeling charges to Board, in addition to interstate charges.

e) Balance free power of the State, if required can be purchased, also again on long term basis only, on the principles of price fixing being followed by HP Commission because the rate so determined is aligned with market rates and comparable or sometimes even better than the rates at which Govt. is selling outside the State.

f) Invest in renovation and modernisation and repairs of existing plants of Board to generate extra power on cheaper rates.

g) Provision of 15% unallocated quota to be allotted to HPSEBL fully in Parvati, Kol Dam, Chamera etc. should be incorporated in PPAs. However, to get entire share during winters needs to be examined from tariff angle because going purely by CERC tariff principles, it is unacceptable to buy power in winter at such exorbitant rates. Hence it should be on weighted average annual rate, failing which, 15% should be made available on actual generation throughout the year.

h) Board should review the progress/status of projects where PPA have been signed and projects are yet to be constructed, not only for the purposes of availability of power but from the point of view of tariff also and review PPAs if costs are inefficient.

i) All purchases should be made in the merit order. During the monsoon months, Board has surplus power due to better generation from various hydel sources of supply, simplest option during such surplus period is quantum equal to surplus generation should not be purchased from long term sources which are the costliest at the margin in the merit order; e.g. if 800 MUs are surplus during monsoon, most expensive 800 MUs from CGGS should not be purchased.

j) If Board continues to buy power from costliest sources during surplus period and banks the surplus power for winter requirement, the cost of such power banked is the cost of costliest power in the merit order so purchased. For accounting purpose it may be being treated as cashless transaction, but the real cost of banked power is cost of costliest power at the margin.

k) These costliest powers from central generating stations are under long term PPA and therefore, its disposal should also be as per provisions of PPA without any financial implications and without losing the rights. Such power can be sold or transferred to other shareholder States in the power station, at CERC rate plus some additional administrative cost of 5% or so.

l) To meet the winter deficit, timely exploration of cheaper power either to be procured in winter only or to be procured during monsoon season at cheaper rate as surplus, beyond requirement, for banking for return during winter. If the State Govt. free power and NJPC equity power or any other bilateral arrangement yields cheaper power, in such event, it is prudent to dispose power share in Central Government generating stations to other utilities without any financial loss and loss of its right of share in these stations.

m) Board can also explore disposal of surplus power on higher rates, including renewable power, which should attract premium. If Board sells surplus power, its sale price (bus bar rate) should not be less than Average Cost of Supply (ACS) and if it is at the interstate periphery it should be ACS plus transmission cost and scheduling cost. If there is surplus power to be sold, its sale price at bus bar should be the cost of power purchased at the margin in merit order e.g. if 100 MU surplus power is being sold, its minimum sale price on bus bar should be average price of costliest 100 MU power being purchased at that time under PPA.

n) In case there is adequate availability on competitive rates from the State Government or other sources, special allocations during winter from unallocated quota may be obtained from thermal stations or cheaper hydel stations to avoid costly power from hydel stations having two-part tariff.

o) To get best offers for banking of surplus power during summer/monsoon, when market rate is high, competitive bidding process may be followed. To avoid PGCIL Charges, incoming banking to HPSEBL may be attempted directly from BBMB network and Punjab network of Shanan /RSD Projects

Direction No. -2:

Energy audit and Distribution losses

8.12 It is no doubt that the aggregate transmission and distribution losses in Himachal is much lower than the national average. While the management and the staff of HPSEBL deserve due credit for their efforts to bring down losses on continuing basis, the credit largely goes to the people of the State, consumers and staff, where respect of law and personal integrity is ingrained in the moral fabric of the society. People pay for what is due, though in exceptional cases misappropriation by consumers and staff have been detected also. Reduced losses are also on account of load and consumption pattern because about 65 percent of the consumption is in industry, mainly in EHT & HT levels, where losses are very low. However, Commission has noticed that losses at LT & HT levels up to 33 KV are very high by prudent industry standards of electricity distribution, which need multipronged intervention of audit, system improvements, accountability and effective governance.

8.13 In the Tariff Order for FY12, under the section 'Ádvisories now issued to HPSEBL in lieu of Old Directions' the original Directions on - T&D Losses (Tariff Orders FY02 and FY05) , Energy Audit (Tariff Order FY09), Loss Making Circles and Feeders (Tariff Order FY09) Break-up of voltage-wise losses in Distribution Network (Tariff Orders FY09) were clubbed and converted into a single Advisory to - "Conduct Energy Audit and determine technical and commercial losses at each voltage level, Identify loss making feeders and Circles and the reasons for losses and consequently formulate Schemes and Undertake Investment for improvement and augmentation of the existing Distribution Network so as to reduce T&D / AT&C Losses. Since the basis for above is contained in the Energy Audit, it is advised that the present schema and process of conducting Energy Audit may be re-visited and suitably corrected for enabling an accurate audit."

8.14 Subsequently the Commission in para 9.17 to 9.19 of Tariff Order for FY12 vide fresh Directions, had issued the following Directions to the HPSEBL on Energy Audit and Distribution Losses:-

(a) To take steps to carry out Energy audit in a more effective manner and take remedial steps wherever required in a time bound manner.

(b) To take steps for segregation of losses by providing suitable metering arrangements and/or entering into suitable agreement with the HPPTCL based the system parameters and normal flows within next six months so that segregated losses are available for FY12 onwards and separate trajectories can also be fixed for the Transmission losses and Distribution losses from the next control period.

(c) To take effective steps to ensure that by the end of third control period, the Transmission and Distribution Losses (i.e. including the Intra-state Transmission losses on the HPPTCL system) are less than 10%. The Commission shall however revisit this target at the beginning of next control period as follows:-

(i) To take steps to ensure completion of R-APDRP and RGGVY schemes and to meet other targets of these schemes and that in the event that any part of the loan convertible to grant remains unconverted due to non-compliance of condition by the HPSEBL, the Commission shall not allow such unconverted loans as pass through in ARR.

(ii) Prepare schemes, duly supported by 'cost-benefit analysis', aimed at reduction of losses in the areas not covered by R-APDRP and implement the same after obtaining requisite regulatory and other approvals. The loss reduction target for each component of the scheme should be worked out separately. The components having higher and quick benefits should be implemented on top priority.

(iii) All the dead stop/defective meters must be replaced immediately.

(iv) Fix the Division-wise or at least circle-wise targets for reduction of losses in an objective manner and monitor the same regularly. The inadequacies, if any, in the metering arrangements should be addressed. The Commission may also consider fixing the circle wise targets, apart from the utility level targets, from the next control period.

(v) In order to identify the cost effective remedial measures, the HPSEBL should compile and monitor voltage-wise losses also, rather than relying upon the average losses alone which may not capture the realistic position.

(vi) Review of the progress on periodical basis on management level.

(d) Now, the Commission reiterates the above and adds that –

(i) In the petition for the true up of annual revenue requirement for 2010-11, the HPSEBL reported that actual T&D losses (within the State) for 2010-11 were 12.66% as against 14.25% reported earlier on the basis of estimates. Based on these actual, the trajectory for T&D losses for 2011-12, 2012-13 and 2013-14 was approved by the Commission as follows.

	2011-12	**2012-13**	**2013-14**
Proposed by HPSEBL	12.56%	12.41%	12.26%
Approved by Commission	12.55%	12.40%	12%

(ii) The Commission thus virtually accepted the HPSEBL's proposal for the T&D losses levels to 2011-12 and 2012-13. The loss level target for 2013-14 was however reduced by 0.25%. This provided sufficient time to HPSEBL to take appropriate measures for reduction of losses and also to account for the expected loss reduction due to implementation of R-APDRP schemes (Part-B). HPSEBL has now proposed a revised trajectory for T&D losses (within the state) as follows :-

	2011-12	**2012-13**	**2013-14**
(Actual)	13.43%	13.03%	12.73%

(iii) The revised projections of the T&D losses as filed by HPEBL for 2011-12 to 2013-14 reveal that there is a significant slippage ranging from 0.88% (2011-12) to 0.73% (2013-14). HPSEBL has mainly advanced the following reasons for the increase in the losses.

(iv) The sales under domestic category have increased significantly beyond the projected levels.

(v) The sale under EHV category did not touch the projected levels and remained short by about 2%.

(vi) With the construction of more LT line under RGGVY scheme, the HT, LT ratio has deteriorated.

(vii) During interaction with HPSEBL officers, it was brought out that HPSEBL has fixed separate circle wise targets of T&D loss for the sales or EHV level and other voltages. The HPSEBL has however neither submitted any road map for reduction of losses nor have submitted the steps taken by it to reduce the losses. The HPSEBL has also not submitted any detailed analysis about the voltage wise losses and the reduction, if any, achieved for certain voltage levels and areas etc. The Commission feels that inspite of these factors, it is possible to achieve the target level of 12% during 2013-14 if effective steps are taken to reduce the losses particularly when the major part of the Capex Plan approved for the current control period is yet to be implemented. The Commission has accordingly retained the targeted loss level for 2013-14 at 12% and directs the HPSEBL to achieve the same by taking appropriate steps including the following:

– Carryout the energy audit in a more effective manner rather than restricting the same to energy accounting only. The high consumption high loss feeder be identified and immediate steps be taken for strengthening etc. to achieve loss reduction.

– Expedite implementation of sanctioned R-APDRP schemes which includes provision of replacement of meters, strengthening of conductors, additional lives HVDS shunt capacitors etc. etc.

– Expedite Commissioning of the other priortized works (i.e. other than R-APDRP) for strengthening of system as included in the Capex Plan already approved.

(viii) The Commission also directs HPSEBL to -

– maintain data of voltage wise and circle wise losses and suggest the year wise targets for the distribution losses for the sales at each voltage for next five years beyond 2013-14. A mechanism for automatic adjustment of target levels in case of significant changes in sales pattern be also submitted. The commission would like to consider a proposal which restricts the average losses exclusively for the LT, HT and EHT systems to at least 10%, 5% and 3% respectively and also simultaneously facilitates reduction in the overall losses within the state by 0.25% every year beyond the targeted level of 12% for 2013-14.

– Prepare separate road maps for reduction of losses at LT level and each of the higher voltage (HT ad EHT level) to meet the proposed target levels for next 5 years beyond 2013-14.

– The CAPEX plan for next 5 years beyond 2013-14 must also prioritize the works, particularly for 33 kV and below voltages for strengthening of system on the basis of cost benefit analysis and the improvement in quality of supply.

– Replace all electromechanical consumer meters with efficient, high precision and quality electronic meters in one go in a time bound manner. For doing so, HPSEBL may go for quality criteria for procurement instead of L1 criteria to source the best, if so required.

Direction No. -3:

Implementation of I.T. Initiatives and Computerised Billing

8.15 The Commission through its series of Directions in Tariff Orders had discussed that although the HPSEBL had taken IT initiatives, but the results had not started flowing fully and therefore the Commission had directed the HPSEBL to expedite the implementation of the initiatives already taken so that result start flowing in without any further delay. The Commission had also directed that the mechanism of E-billing and E-payment should be operationalised in all the areas for which such mechanisms are envisaged.

8.16 With approval from the Commission, the HPSEBL had taken the IT Initiative to improve the services to consumers and has in its endeavour spent crores of Rupees. The Commission having observed the performance of Computerised Billing through grievances expressed in media reports and having satisfied itself through the quality of bills raised to consumers, now feels that this computerisation has gravely placed the pre-existing revenue management system / structure of the HPSEBL at high risk owing to the bad performance of the Billing software Application that has been adopted by the HPSEBL.

8.17 Some of the disturbing issues on the IT / Billing Application in the knowledge of the Commission are highlighted below:-

(a) The HPSEBL despite knowing well that the Consumer Billing Application is snagged, has clearly gone ahead with its roll over to other stations outside the pilot area of test and even if HPSEBL was compelled to execute the roll over, the same could have been restricted to the revenue focus consumers (1 MW and above consumers, consumers in townships);

(b) Whereas the Electrical Network Management System module of the software Application is not functional, the Management Information System (MIS) Module is not being made use of;

(c) The generation of Consumer Leger / Accounting Schedules and other MIS Reports from the software Application are problematic. The correctness of these Legers / Schedules / Reports should be a matter of concern for the Utility;

(d) Other issues plaguing the Billing software are those like Receipt of Payments through Kiosk Machines, Interface issues between HT Meters – CMRI – Metering software – Billing software etc;

(e) IT Applications such as ERP and GIS are not being made use of.

8.18 The Commission now therefore Directs the HPSEBL to take immediate steps to get all snags / glitches removed from the existing Billing software Application, preferably getting this IT Application tested for performance, reliability, system and stability from third party as well as in-house from the operating officials, so that it does not result in loss of Revenue to the HPSEBL, while such a step would also ensure the simplification of the working of the field units without burdening these units with unnecessary troubleshooting of errors arising out of the use of a bad software Application.

8.19 While the HPSEBL takes necessary steps for the removal of technical snags / glitches in the software Application, the field units of the HPSEBL shall also take corrective steps at the time of issue of bills to consumers so that wrong bills are not served upon them. The field units shall also evolve suitable mechanism for the feedback of software malfunction and related issues to the IT cell and their respective higher offices, so that the problem reporting and corrective actions may be expedited without any delay.

Direction No. -4:

Quality of Power in Domestic Sector

8.20 Section 6 of the Electricity Act, 2003 and National Electricity Policy, cast responsibilities for providing access to electricity to all areas, including villages and hamlets, through the rural Electricity Infrastructures and electrification of households. In our state significant progress has been made in this direction and access to electricity has been provided to almost all the areas and consumers. Availability of power is not an issue because Himachal Pradesh is surplus in power. The quality and reliability of power is however an issue and much needs to be done in this direction. Accordingly, HPSEBL must take steps to improve the quality and reliability of power supply in all the areas of the State. The distribution system has to be capable of meeting the requirements round the clock in a qualitative and reliable manner. The Commission feels that once the consumers are assured of quality and reliable power round the clock, at an affordable price, it may lead to use of efficient electrical appliances, particularly for cooking purposes, in view of policy changes in pricing of cooking gas by Government of India.

8.21 This is an opportunity as well as a challenge to the HPSEBL.. On one hand, this can optimise the per unit operating costs of HPSEBL and can make the investments on strengthening of systems economically viable. On the other hand, the Consumers shall get power at affordable prices, which will help in improving their quality of lives.

8.22 HPSEBL, on its part, has to be ready to meet such additional requirements. This could require certain technological and capacity up-gradations. In this context, the Commission directs HPSEBL to- (i) carryout studies about the impacts of such additional loads of the distribution system (ii) assess its level of preparedness for meeting such loads (iii) assess the technical and financial requirements for the strengthening of the distribution system for meeting such loads and (iv) study the commercial aspects concerning availability and procurement of power at sustainable rates so that the consumers find it economical to use such energy efficient appliances.

8.23 of all the gadgets as the consumers may like to use for lighting, heating and cooking etc. with the introduction more than more technological improvements and ability of energy efficiency gadgets particularly for cooking etc. it can be assumed that many domestic consumer may like to shift to such energy efficiency gadgets for particularly cooking instead from the conventional method. Use at present the HPSEBL has to be prepared for meeting the increase demands for on account of such addition load which may consumers like to use.

ANNEXURE-I

SCHEDULE OF GENERAL AND SERVICE CHARGES

S. No.	Description	Approved by the Commission
1. Particulars:		
A. Meter Inspection and Testing Charges (Challenge of Correctness of Meter by Consumer)		
(i)	Single Phase	Rs. 55/- per meter
(ii)	Poly phase (LT)	Rs. 225/-
(iii)	HT or special meter (MDI or Trivector meter)	Rs. 550/-
		Rs. 1100/- with CT/PT combined unit
Note:- This amount shall be deposited by the consumer along with his application for the inspection of the meter and will be refunded to him in case the meter is not found to be correct within the prescribed limits.		
B. Testing Charges of Transformers or other equipment of consumer or private party		
(I)	Protective Relays:	
	Testing including current and Time Setting of protective relays	Rs. 1100/- per Relay
(II)	Power and Distribution Transformers	
(a)	Insulation resistance tests of winding	Rs. 770/- per Transformer
(b)	General checking of breather and other accessories	Rs. 400/- per Transformer
(c)	Dielectric strength test of oil	Rs. 220/- per Transformer
(d)	Testing of buchuolz relay and temperature indicators functioning	Rs. 800/- each
(III)	Circuit Breaker 400 volts and 11/33kV	
	General checking of breaker and testing of the tripping mechanism	Rs. 800/- each
(IV)	Current transformer and Potential transformers and meters:	
(a)	Testing of single phase LT current transformer	Rs. 165/- each
(b)	Current Testing of 3 phase LT current transformer	Rs. 440/- each
(c)	Testing of single phase 11kV & 33kV CTs	Rs. 550/- each
(d)	Testing of three phase 11kV & 33kV CTs	Rs. 1100/- each
(e)	Testing & recalibration of single phase LT energy meter	Rs. 90/- per meter
(f)	Testing & recalibration of three phase energy meter w/o CT	Rs. 330/- per meter
(g)	Testing & recalibration of 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
(b)	Earth test of substation	Rs. 220/- per earth

S. No.	Description		Approved by the Commission
(c)	Insulation resistance of cables/insulation of various equipment /installations		Rs. 220/- per cable/ equipment
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 (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).			
(i)	11/22 kV	**Substations**	Rs. 10,000/-
(ii)	33 kV		Rs. 15,000/-
(iii)	66 kV		Rs. 50,000/-
(iv)	132 kV		Rs. 1,00,000/-
(v)	220 kV		Rs. 3,00,000/-
(vi)	SHP Capacity (up to 2.5 MW)	**Small Hydro Plants**	Rs. 25,000/-
(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/-
	Poly phase (LT) with CT		Rs. 440/-
(iii)	HT or special meter		Rs. 1100/-

S. No.	Description	Approved by the Commission
3. Resealing charges		
(i)	Meter cupboard	Rs. 25/-
(ii)	Meter Cover or Terminal Cover (single phase)	Rs. 110/- for meter terminal cover and full cost of the meter where M&T seal is found broken.
(iii)	Meter cover or terminal cover (three phase)	Rs. 350/- for meter terminal cover and full cost of the meter where M&T seal is found broken.
(iv)	Cutout (where it has been independently sealed)	Rs. 25/-
(v)	Maximum demand indicator	Rs. 550/-
(vi)	Potential fuse(s) time switch/CT chamber	Rs. 550/-
4. Monthly meter/equipment rentals:		
(i)	Single phase energy meter low tension	Rs. 15/- per month
(ii)	Polyphase energy meter low tension (up to 50 Amps.)	Rs. 30/- per month
(iii)	a) Polyphase low tension meters with CTs (up to 20 kW)	Rs. 35/- per month
	b) Polyphase low tension meters with CTs(above 20 kW)	Rs. 50/- per month
(iv)	Polyphase 11kV meter with CT/PT without any breaker of HPSEBL	Rs. 550/- per month
(v)	Polyphase 11kV meter with CT/PT with one 11kV breaker of HPSEBL	Rs. 4000/- per month
(vi)	Single phase Pre Paid energy meter low tension	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/-
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

S. No.	Description	Approved by the Commission
(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 whichever is higher
(b)	Three phase	Rs. 1500/- *or the actual cost of meter, whichever is higher.
	Note-1: This amount will be charged without prejudice to the right of HPSEBL to take any other action or impose penalty on the consumer as per the prevailing rules. Since in such cases, the meter has to be sent to M&T lab, the meter changing charges shall be levied additionally.	
	* This is without prejudice to HPSEBL's right to recover the estimated cost of theft of energy. Principles of natural justice shall invariably be followed and opportunity of being heard given to the consumer before levying such charge.	
10. Supply of duplicate copies of the bills/ review of bills:		
(i)	Review of bills (all Categories)	Nil
(ii)	Supply of duplicate copies of bills	
(a)	Domestic/NDNCS/Commercial	Rs. 5/-
(b)	Medium and large power supply	Rs. 5/-
(c)	All other categories	Rs. 5/-
(iii)	Supply of duplicate copies of Demand notice:	
(a)	Domestic consumers	Rs. 10/-
(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/-

S. No.	Description	Approved by the Commission
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: -

In pursuance of the tariff order dated 27 April, 2013 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 2013.**

PART - I – GENERAL

A. This Schedule may be called the **'Himachal Pradesh State Electricity Board Limited Schedule of Electricity Tariff, 2013'.**

B. This Schedule of Tariff shall come into force with effect from **1st April 2013** and will be applicable throughout the State of Himachal Pradesh.

   i) Provided that the arrears, if any, arising on account of revised tariffs for the billing months of April 2013 shall be adjusted in the future bill 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, 2012 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 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 Availed Supply Voltage.

Standard Supply Voltage	Actually Availed 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 Availed Supply Voltage is less than 11 kV, then the number of step downs shall be two (2) and the rate of LVSS applicable shall be 8% (5%+3%).*

J. Higher Voltage Supply Rebate (HVSR): 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 Availed Supply Voltage.

Standard Supply Voltage	Actually Availed 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 Availed 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/day) 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/day) 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. <u>Demand Charge (DC)</u>: Consumers under two (2) part tariff, whose energy consumption during non-peak load hours of the month is billed/ charged in Rs/kVAh, shall in addition to the kVAh charges, be also charged at the 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 but up to a ceiling of contract demand as currently applicable or in the absence of contract demand, up to connected load (computed in kVA assuming 0.9 power factor). The demand in excess of Contract Demand or sanctioned connected load as applicable will be charged under clause "P" relating to Contract Demand Violation Charges (CDVC).

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. <u>Contract Demand Violation Charge (CDVC)</u>: In the event, the actual Maximum Demand (in kVA) recorded on the energy meter during any consecutive 30 minute block period of non peak hours of the month, exceeds the Contract Demand (in kVA) or in the absence of the Contract Demand, exceeds sanctioned 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 in excess of the Sanctioned Connected Load (computed in kVA assuming 0.9 power factor).

NOTE: In cases where the Contract Demand has been got reduced temporarily as per applicable provisions; such reduced Contract Demand shall be considered as the Contract Demand for the purpose of determining the Contract Demand Violation Charges (CDVC); if any.

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:

Power Factor = kWh / kVAh

In case of defective tri-vector meter/bi-vector meter/two part tariff meter, power factor will be assessed on the basis of average power factor recorded during last three consecutive months when the meter was in order. In case no such readings are available then the monthly average power factor of three months obtained after installation of correct tri-vector meter/ bi-vector meter/ two part tariff meter shall be taken for the purpose of power factor surcharge during the period the tri-vector meter/ bi-vector meter/ two part tariff meter remained defective.

iii) The said power factor surcharge shall be independent of the supply voltage.

iv) The consumer service charge, 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. The Consumers to whom two part tariff is applicable shall be entitled to revise their Contract Demand twice in a financial year without surrendering their lien of total Contract Demand subject to the following conditions:

(a) The Contract Demand shall not be reduced to less than 50% of the total Contract Demand.

(b) The provision under a) shall come in force from 1 July, 2013 in cases where any consumer has got his Contact Demand reduced to less than 50% of the total Contract Demand under the existing mechanism. In such cases Financial Year shall be construed from 1 July, 2013 for the purpose of the number of revisions in a Financial Year.

In the meanwhile the HPSEBL and consumers shall take suitable action during the interim period. However, in cases where the existing Contract Demand being availed by the consumer is more than 50% of the original Contract Demand; the same shall not be allowed to reduce it below 50% even during the interim period. In cases where the consumer gets his Contract Demand reduced permanently, the limit under clause a) and b) shall be considered with respect to such reduced Contract Demand.

W. In case any dispute regarding interpretation of this tariff order and/or applicability of this tariff arises, the decision of the Commission will be final and binding.

DEFINITIONS

1. **Act:** means The Electricity Act, 2003 as amended from time to time;

2. **Average Power Factor:** means the ratio of kWh (kilo Watt hour) to the kVAh (kilo Volt Ampere hour) registered during a specific period;

3. **HPSEBL:** means the Himachal Pradesh State Electricity Board Limited;

4. **Commission**: shall mean the Himachal Pradesh Electricity Regulatory Commission;

5. **Connected Load**: expressed in kW, means aggregate of the manufacturer's rated capacities of all energy consuming devices or apparatus connected with the distribution licensee's service line, on the consumer's premises, which can be simultaneously used;

6. **Consumer Service Charges**: shall mean the fixed amount to be paid by the consumer as defined in the respective tariff schedule;

7. **Contract demand**: expressed in kVA units means the maximum demand contracted by the consumer in the agreement with the licensee and in absence of such contract, the contract demand shall be determined in accordance with the relevant sections of this Tariff Order;

8. **Demand Charges**: for a billing period shall mean the amount chargeable based upon the recorded maximum demand in kVA or the contract demand; whichever is higher 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:

(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 (125*10) units would be charged at Rs 3.50 per kWh, the next 1250 (125*10) at Rs 4.40 per unit and the balance 500 units at Rs. 4.70 per unit. Consumer service charge shall be Rs. (40*10).*

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)
Lifeline consumers	30.00
Other consumers	40.00

b) Energy Charge (Charges-2a) [Other Than Pre-Paid Metered]

Description	Slabs (kWh per month)	Energy Charge (Rs./kWh)
Lifeline consumers	0-40	2.85
Other consumers	0-125	3.50
	126-250	4.40
	Above 250	4.70

Note:

1. In the case of **Lifeline consumers** the concessional tariff will be available for use of electricity by these families up to a maximum of 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 0-125, 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	3.50

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 lowest slab of consumers, other than 'lifeline 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 State Government subsidy, shall be as follows:

Table 125: Subsidized tariff for Domestic category

Description	Units per month (kWh)	Approved Tariff for FY14 (Rs/kWh)	GoHP Subsidy for FY14 (Rs/kWh)	Effective Tariff after Subsidy (Rs/kWh)
Lifeline consumers	Upto 40 KWh	2.85	1.85	1.00

Description	Units per month (kWh)	Approved Tariff for FY14 (Rs/kWh)	GoHP Subsidy for FY14 (Rs/kWh)	Effective Tariff after Subsidy (Rs/kWh)
Other consumers	0-125	3.50	2.20	1.30
	126-250	4.40	1.70	2.70
	Above 250	4.70	0.75	3.95
	Prepaid consumers	3.50	2.20	1.30

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)	70.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	5.00

4. Two Part Tariff for connected Load > 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	140.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	4.60

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	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-I General of 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 (DLP):** *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 – 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 shall also include all other categories which are not covered by any other tariff schedule.

Note: *Resale of electricity to tenants, adjoining houses and to other parties is strictly prohibited.*

1. 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

2. Single Part Tariff for connected load ≤ 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	70.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	5.25

3. Two Part Tariff for connected Load > 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	
20 – 100 kW	140.00
Above 100 kW	275.00

b) Energy Charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
20 -100 kW	4.85
Above 100 kW	4.75

c) **Demand Charge (Charges-3)**

Demand Charge (Rs/kVA/month)	
20 -100 kW	90.00
Above 100 kW	140.00

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 (HVSR):** *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:** *Applicable as specified under 'Part-1 General' of this Annexure II.*
12. **Peak Load Exemption Charges (PLEC):** *Not Applicable.*
13. **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). 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)	90.00

b) **Energy Charge (Charges-2)**

Energy Charge (Rs./kWh)	4.70

4. Two Part Tariff for connected Load > 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	175.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	4.50

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	80.00

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 (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/day)	PLVC (Rs./kVAh)
>20 kW	20	9.90

Note

i) *Peak Load Violation Charges shall be applicable to the demand as well as consumption recorded during 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 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. **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 @ 40 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 supply is taken at a single point. Such consumption shall be charged for the energy consumed at the following rates:

a) During Normal times and night time: Normal Rate subject to the condition that the night time concession as per 11 above shall be given on the consumption during night time.

b) During Peak Times: During peak times the consumer will be charged as follows:

i. In cases where the consumer has not obtained any peak load exemption but his maximum demand during peak load hours remains within the connected load (computed in kVA using 0.9 power factor) of bonafide factory lighting and colony supply forming part of the sanctioned connected load, he shall be charged at the rate of Peak Load Exemption Charges (both energy and demand) for his actual consumption and demand as per relevant category under this schedule of tariff.

ii. In cases where the consumer has not obtained any peak load exemption and his maximum demand during peak load hours exceeds the connected load (computed in kVA using 0.9 power factor) of bonafide factory lighting and colony supply forming part of the sanctioned connected load, he will be charged Peak Load Exemption Charges (both energy and demand) to the extent of his connected load (computed in kVA using 0.9 power factor) and Peak Load Violation Charges (for the demand and energy) for consumption and demand in excess of the connected load (computed in kVA using 0.9 power factor) as per relevant category under this schedule of tariff.

iii. In cases where consumer has obtained separate peak load exemption such exemption will be deemed to be inclusive of his requirements for bonafide factory lighting and colony supply.

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 - 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	400.00
HT-1 (Connected load up to and including 1 MW)	400.00
HT-2 (Connected load above 1 MW)	400.00

b) Energy charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
EHT	
1. Up to 300 kVAh/kVA of contract demand/month	4.05
2. Remaining energy during the month	4.30
HT-1	
1. Up to 300 kVAh/kVA of the contract demand/month	4.50
2. Remaining energy during the month	4.75
HT-2	
1. Up to 300 kVAh/kVA of the contract demand/month	4.15
2. Remaining energy during the month	4.40

c) Demand Charge (Charges-3)

Description	Demand Charge (Rs/kVA/month)
EHT	350.00
HT-1	200.00
HT-2	350.00

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	Additional Demand Charge on exempted load (Rs/kVA/month)	Energy Charge (Rs./kVAh)
EHT	60	6.00
HT-1	60	6.70
HT-2	60	6.20

b) Peak Load Violation Charge (Charge-2)

Description	Demand Charge	Energy Charge
	PLVC (Rs./kVA/day)	PLVC (Rs./kVAh)
EHT	20	9.00
HT-1	20	10.05
HT-2	20	9.30

Note

i) Peak Load Violation Charges shall be applicable to the demand as well as consumption recorded during 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.

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 as specified under 'Part-1 General of this Annexure II' at following rates:-*
    a) *@ 40 p/kVAH for HT1 category.*
    b) *@ 20 p/ kVAH for HT2 and EHT category.*
11. **Power Factor Surcharge (PFS):** *Not Applicable*.
12. **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 supply is taken at a single point. Such consumption shall be charged for the energy consumed at the following rates:
    a) During Normal times and night time: Normal Rate subject to the condition that the night time concession as per 10 above shall be given on consumption during night time.
    b) During Peak Times: During peak times the consumer will be charged as follows:

i. In cases where the consumer has not obtained any peak load exemption but his maximum demand during peak load hours remains within the connected load (computed in kVA using 0.9 power factor) of bonafide factory lighting and colony supply forming part of the sanctioned connected load, he shall be charged at the rate of Peak Load Exemption Charges (both energy and demand) for his actual consumption and demand as per relevant category under this schedule of tariff.

ii. In cases where the consumer has not obtained any peak load exemption and his maximum demand during peak load hours exceeds the connected load (computed in kVA using 0.9 power factor) of bonafide factory lighting and colony supply forming part of the sanctioned connected load, he will be charged Peak Load Exemption Charges (both energy and demand) to the extent of his connected load (computed in kVA using 0.9 power factor) and Peak Load Violation Charges (for the demand and energy) for consumption and demand in excess of the connected load (computed in kVA using 0.9 power factor) as per relevant category under this schedule of tariff.

iii. In cases where consumer has obtained separate peak load exemption such exemption will be deemed to be inclusive of his requirements for bonafide factory lighting and colony supply.

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 and 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	50.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	3.50

4. Two Part Tariff for connected load above 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	
LT	150.00
HT	225.00
EHT	300.00

b) Energy Charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
LT	4.60
HT	4.50
EHT	4.30

c) Demand Charge (Charges-3)

Maximum Demand Charge (Rs/kVA/month)	
LT	80.00
HT	300.00
EHT	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.*

5. Peak load exemption charges (PLEC) and peak load violation charges (PLVC)

a) Peak Load Exemption Charge (Charge-1)

PLEC	Addl. Demand Charges on exempted load (Rs./kVA/month)	Energy Charges (Rs./kVAh)
LT	60	7.20
HT	60	7.20
EHT	60	7.20

b) Peak Load Violation Charge (Charge-2)

Description	Demand Charge	Energy Charge
	PLVC (Rs./kVA/day)	PLVC (Rs./kVAh)
LT	20	10.35
HT	20	10.35
EHT	20	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 1.00 per kWh to the consumer category up to 20 kW under single part tariff and Rs. 1.00 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 (HVSR):** *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	175.00
HT	175.00
EHT	175.00

b) Energy Charge (Charges-2)

Description	Energy Charge (Rs./kVAh)
LT	4.85
HT	4.35
EHT	4.15

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	
LT	260.00
HT	300.00
EHT	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. Higher Voltage Supply Rebate (HVSR): 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)	70.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kWh)	5.00

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 (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):** *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

b) Energy Charge (Charges-2))

Energy Charge (Rs./kWh)	7.50

4 Two Part Tariff for connected Load > 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	200.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	6.00

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	350.00

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 (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

3 Two Part Tariff for connected Load > 20 kW

a) Consumer Service Charge (Charges-1)

Consumer Service Charge (Rs/month)	400.00

b) Energy Charge (Charges-2)

Energy Charge (Rs./kVAh)	5.00

c) Demand Charge (Charges-3)

Demand Charge (Rs/kVA/month)	350.00

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.*

ANNEXURE-III

List of Schemes for inclusion in the National Electricity Fund (Intrest Subsidy) Scheme

Sr. No.	Name of the Scheme	Category	District	Scheme Code No.	Loan Amount Sanctioned (Rs in Lakh)
1	2	3	4	5	6
1	Construction of 33 KV D-C Link line between Khauli HEP and 33 KV S/Stn. at Gaj in Kangra Distt.	P:SI (Distribution)	Kangra	HP-TD-SEB-006-2010-3665	229.78
2	Scheme for augmentation of 2x3.15 MVA, 33/11 KV S/Stn. To 2x6.3 MVA at Haroli in Distt. Una.	P:SI (Distribution)	Una	HP-TD-SEB-006-2009-3201	32.47
3	Creation of 1x3.15 MVA, 33/11 KV Unmanned S/S at Khairi under E/Divn Rajgarh in Sirmaur Distt. Of HP.	P:SI (Distribution)	Sirmaur	HP-TD-SEB-006-2010-3685	412.61
4	Aug. of 1x1+1x2.5 MVA , 33/11 KV to 2x3.15MVA, 33/11 KV S/S at Jhandutta in Bilaspur District of HP.	P:SI (Distribution)	Bilaspur	HP-TD-SEB-006-2010-3922	123.12
5	SI scheme for construction of 2x3.15 MVA, 33/11 KV unattended S/S at Rehan under ED Jawali (Kangra).	P:SI (Distribution)	Kangra	HP-TD-SEB-006-2010-3925	405.49
6	Construction of 1x3.15 MVA, 33/11 KV (unattended type) S/S at Attara (Gangath) in Kangra District of HP.	P:SI (Distribution)	Kangra	HP-TD-SEB-006-2010-3924	318.88
7	Construction of 2x3.15 MVA, 33/11 KV S/S at Barma Papri in Sirmaur Distt. Of HP.	P:SI (Distribution)	Sirmaur	HP-TD-SEB-006-2010-3926	351.93
8	Augmentation of 1X3.5 MVA,33/11 KV to 2x3.15 MVA 33/11 KV S/S at Puruwala under ED HPSEB Paonta Sahib in Sirmaur Distt. Of HP.	P:SI (Distribution)	Sirmaur	HP-TD-SEB-006-2010-3688	148.70
9	Augmentation of 2x5 MVA,33/11 KV to 2x10 MVA, 33/11 KV S/Stn. at Prini in Kullu Distt. Of HP.	P:SI (Distribution)	Kullu	HP-TD-SEB-006-2010-3684	324.99

Sr. No.	Name of the Scheme	Category	District	Scheme Code No.	Loan Amount Sanctioned (Rs in Lakh)
10	Construction of 2x3.15 MVA,33/11 KV S/Stn. at Chack Sarai in Una Distt.	P:SI (Distribution)	Una	HP-TD-SEB-006-2010-3780	429.22
11	Aug. of 33/11 KV S/S from 2x3.15 MVA to 2x6.3 MVA at Dhaula Kuan in Sirmaur Distt. Of HP.	P:SI (Distribution)	Sirmaur	HP-TD-SEB-006-2010-4215	201.96
12	Construction of 2x3.15 MVA, 33/11 KV S/S at Bhareri in Hamirpur Distt. Of HP.	P:SI (Distribution)	Hamirpur	HP-TD-SEB-006-2010-4218	375.38
13	Augmentation of 1x1.0 to 1x1 MVA (+) 1x3.15 MVA 33/11 KV S/Stn.at Chadhiar in Kangra Distt. Of HP.	P:SI (Distribution)	Kangra	HP-TD-SEB-338-2010-4334	185.54
14	Augmentation of 33/11 KV S/Stn. Jabli from 2x2.5 MVA to 2x6.3 MVA in Bilaspur Distt. Of HP.	P:SI (Distribution)	Bilaspur	HP-TD-SEB-338-2010-4333	282.25
15	Construction of 1 No. 33/11 KV, 1X3.15 MVA S/Stn at Bharoli Jadid in Kangra District of HP.	P:SI (Distribution)	Kangra	HP-TD-DIS-338-2010-4368	321.73
16	Augmentation of 2x1.6 MVA to 2x3.15 MVA , 33/11 KV S/S at Sarahan in Sirmaur Distt of H.P.	P:SI (Distribution)	Sirmaur	HP-TD-DIS-338-2011-4566	122.52
17	Construction of Un-manned 33/11 KV, 2x3.15 MVA S/S at Holta in Tehsil Palampur, district kangra of Himachal Pradesh	P:SI (Distribution)	Kangra	HP-TD-DIS-338-2011-5520	353.35
18	Augmentation of 33/11 KV S/S Bhunter from 2x4 MVA to 2x6.3 MVA in Kullu district of Himachal Pradesh	P:SI (Distribution)	Kullu	HP-TD-DIS-338-2011-5368	129.98
19	Augmentation of 33/11KV S/S at Thakurdwara from 2x3.15 MVA to 2x6.3 MVA in Kangra district.	P:SI (Distribution)	Kangra	HP-TD-DIS-338-2011-5622	83.87
20	Aug. of 7.783Km 33KV Line between Una and Mahatpur in Una district of HP	P:SI (Distribution)	Una	HP-TD-DIS-338-2011-5623	37.08

Sr. No.	Name of the Scheme	Category	District	Scheme Code No.	Loan Amount Sanctioned (Rs in Lakh)
21	Creation of 10.5KM 33KV Line between chadiar and Jaisinghpur in Kangra District of HP	P:SI (Distribution)	Kangra	HP-TD-DIS-338-2011-5624	109.82
22	Construction of 2.3.15 MVA,33/11KV S/St at Santokhgarh in Una district of HP	P:SI (Distribution)	Una	HP-TD-DIS-338-2011-5625	454.12
23	Replacement of old equipment 2x4MVA+1x2.5MVA 33/11KV S/S Maranda in Kangra District of HP	P:SI (Distribution)	Kangra	HP-TD-DIS-338-2011-5668	95.35
24	Aug. of 1x1.0 VA to 2x1.6 MVA, 33/11KV S./S at Darang in Kangra district of HP	P:SI (Distribution)	Kangra	HP-TD-DIS-338-2011-5755	271.19
25	Creation of 13.29 Kms., 33 KV line between Darkata/Lunj in distt. Kangra	P:SI (Distribution)	Kangra	HP-TD-DIS-338-2012-6106	129.63
26	SI scheme for augmentation fo 33/11 KV S/s at Badukhar from 2x2.5 MVA to 2x6.3 MVA under Elect. Divn. Jawali in Kangra district of HP.	P:SI (Distribution)	Kangra	HP-TD-DIS-338-2012-6175	117.82
27	System Improvement scheme for replacement of overhead conductor of HT/LT lines with Arial Bunched Conductor (ABC) in Municipal area of Sh. Naina Devi Ji under Elect. Sub-Division, HPSEBL, Ganguwal in District Bilaspur.	P:SI (Distribution)	Bilaspur	HP-TD-DIS-338-2012-6178	80.23
28	System Improvement scheme for Construction of 2x1.6 MVA,33/22 KV Sub-Station (manned) at Karsog in Mandi district of HP.	P:SI (Distribution)	Mandi	HP-TD-DIS-338-2012-6181	489.10
29	Pumpset energisation works in Una (OP) Circle in Una District of HP State	SPA : PE	Una	HP-TD-SEB-006-2010-3907	625.44

Sr. No.	Name of the Scheme	Category	District	Scheme Code No.	Loan Amount Sanctioned (Rs in Lakh)
30	Replacement of 22 KV OCBs with VCBs at 22 KV Control Point at Kotkhai in Shimla Distt. Of H.P.	P:SI (Distribution)	Shimla	HP-TD-DIS-338-2010-4363	75.96
31	Release of GSC connections in Solan Circle	P:IE	Solan	HP-TD-DIS-338-2011-5695	2711.42
32	Release of GSC connections in Nahan Circle	P:IE	Solan	HP-TD-DIS-338-2011-5699	1859.81
33	Release of GSC connections in Shimla Circle	P:IE	Shimla	HP-TD-DIS-338-2011-5700	1966.75
34	Release of GSC connections in Dalhousie Circle	P:IE	Chamba	HP-TD-DIS-338-2011-5701	2075.95
35	Release of GSC connections in Hamirpur Circle	P:IE	Hamirpur	HP-TD-DIS-338-2011-5702	671.23
36	Release of GSC connections in Kangra Circle	P:IE	Kangra	HP-TD-DIS-338-2011-5703	3915.10
37	Release of GSC connections in Mandi Circle	P:IE	Mandi	HP-TD-DIS-338-2011-5704	742.39
38	Release of GSC connections in Una Circle	P:IE	Una	HP-TD-DIS-338-2011-5705	1375.71
39	Release of GSC connections in Bilaspur Circle	P:IE	Bilaspur	HP-TD-DIS-338-2011-5706	719.12
40	Release of GSC connections in Kullu Circle	P:IE	Kullu	HP-TD-DIS-338-2011-5707	856.62
41	Release of GSC connections in Rampur Circle.	P:IE	Shimla	HP-TD-DIS-338-2012-6524	1607.57
42	Release of GSC connections in Rohru Circle.	P:IE	Shimla	HP-TD-DIS-338-2012-6525	1203.03
43	Augmentation of 66/22 KV, 2x6.3 MVA transformer to 2x10 MVA at 66/22 KV Sub-Station at Hulli.	P:SI (Distribution)	Shimla	HP-TD-DIS-006-2010-3686	216.15
44	Creation of 66/22kV, 2x10MVA Sub Station at Anni in Kulu District of Himachal Pradesh	P:SI (Distribution)	Kullu	HP-TD-SEB-006-2009-3286	1169.06

Sr. No.	Name of the Scheme	Category	District	Scheme Code No.	Loan Amount Sanctioned (Rs in Lakh)
45	C/o 66/22kV, 2x6.3 MVA Sub Station at Bago Sandhu along with 66kV line from Gazeri to Bago Sandhu	P:SI (Distribution)	Shimla	HP-TD-DIS-338-2012-6105	1179.78
46	C/o 66/22kV, 2x6.3 MVA Sub Station at Chopal along with 66kV line from Sainj to Chopal	P:SI (Distribution)	Shimla	HP-TD-DIS-338-2011-5270	2121.14
47	C/o 66/22kV, 2x10 MVA GIS Sub Station at Bhoktoo in Kinnour of Himachal Pradesh	P:SI (Distribution)	Kinnaur	HP-TD-DIS-338-2012-6104	1660.77
48	Scheme for evacuation of power from small HEPs (upto 25 MW) in Chamba Zone of HPSEBL in Himachal Pradesh	P:SI (Distribution)	Chamba	HP-TD-DIS-338-2011-5299	1604.44
Total					**34975.55**

LIST OF EHV Distribution Schemes (66 kv & above) executed during FY 12-13 and proposed for FY 13-14

Sr.No.	Description of Scheme/works	Estimated cost (Rs. In lacs)	Targetted for FY 12-13	Targetted for FY 13-14
1	**2**	**3**	**4**	**5**
1.	Prov. 132/33 KV, 2x25/31.5 MVA S/Stn. At Maliana & LILO of 132 KV D/C line from Kunihar to Jutogh (REC CODE60458)	2144.44		6/13
2.	SOP to HPSIDC Davni C/o 66kv line from 66 kv S/stn. Akanwali to Davni a/w 66/11kv, 2x10MVAS/stn. At Davni (Partial 50:50 deposits) REC CODE 3117)	1488.35	3/13	
3.	C/O 220KVD/C line from T-61 of 132 kv Giri-Solan line near Jamta (initially to be charged on 132 kv) to Kala-Amb via Devani (REC Code 3910)	2242.15	3/13	
4.	C/O 400 KV D/C T/L from Nalagarh to Kunihar and 400/220/132 KV S/Stn at Kunihar	17429		12/13
5.	Const. Of 220 kv D/C line from .220 kv S/Stn. Nalagarh to Baddi (REC CODE 4068)	4530	1/13	
6.	Aug. Of 132/33 kv,8 MVA Trf to 16 MVA at Kunihar Sub-Station (REC CODE 4567)	248.68	Energised	
7.	Aug. of 66/22 kv, 2x6.3 MVA trf.2x10MVA at Hulli Sub-Station (REC CODE 3686)	240.18	12/12	
8.	Aug. of 220/66kv, 2x80/100MVAtransformer to	1238	Energised	

Sr.No.	Description of Scheme/works	Estimated cost (Rs. In lacs)	Targetted for FY 12-13	Targetted for FY 13-14
1	2	3	4	5
	3x80/100MVA at Baddi S/Stn. By providing addl. T/F of capacity 220/66 kv, 1x80/100MVA			
9.	Aug. of 220/132 kv, 2x80 MVA Trf. Bank at Kunihar S/Stn. By installing additional Trf of capacity 220/132kv, 1x160/200 MVA(REC CODE 3617)	2896	Energised	
10.	Aug of 220/132kv, 2x63 MVA Trf to 2x80/100 MVA at Girinagar S/Stn. (REC CODE 5180)	1326.3	Energised	
11.	C/O 66/22 kv Sub-Stn at Anni a/w66kv LILO line from 66 kv Gumma-Kumarsain line near Baragaon. (REC CODE 3386)	1299		5/13
12.	Aug of Ino. 220/66kv, 25/31.5 MVA to 80/100 MVA & 1x6.3 MVA,66/22kv to 25/31.5 MVA T/Fs at Kotla S/Stn.	1944		6/13
13.	Addl. Of 132/33kv, 1x25/31.5 MVA T/F at 132/33kv S/Stn. Kala Amb.	563		6/13
14.	C/O 66/22kv, 10 MVA S/Stn. In between Narkanda and Theog.	1857.5		3/14
15.	C/o 66/22kv, 2x6.3 MVA S/Stn. At Chopal a/w 66kv S/C line from 66kv S/Stn. Sainj to Chopal	2378		3/14
16.	Augmentation of one no. 132/11kv S/stn. At Barotiwala with 1x25/31.5 MVA T/F to replace 1x16/20MVA T/F. (Code 60439)	315.2	2/13	
17.	Add. Of 1 No. 1x16 MVA, 132/33 kv Transformer at Gaura S/Stn.	712.5	2/13	
18.	Installation of 25 MVAR Capacitor banks in Baddi-Barotiwala area (REC CODE 3918)	134.26	3/13	
19.	C/O 132kv, 25/31.5MVA S/Stn. Jahoo by LILO of 132kv Mattansidh- Kangoo line (REC CODE 3296)	1909.34		12/13
20.	Addl. Of 220/132kv, 3x26.67/33.33 MVA Power Trf. Bank a/w Aug. of 132 kv Bus Bar from Zebra Contd. To twin Tarantula conductor at 220 kv S/Stn. Mattansidh (Hamirpur) for evacuation of Generation of 100 MW of Uhal-III HEP from M/Sidh (REC CODE 3909)	1302.91	3/13	
21.	Const. Of 132/33 kv, 2x25/31.5MVA S/Stn. At Tataliwala by prov. 132 kv S/C line on D/C tower from Una to Tahliawala (REC CODE 3917)	3280	3/13	
22.	Prov. Addition of 220/132 kv, 1x50/63 MVA T/F Bank at 220 kv Sub-Stn. Jassure.	1850	3/13	
23.	C/O 132 kv S/C line of D/C tower from 132 kv S/Stn. Dehan to 132 kv S/Stn. Kangra & Aug of 2x16 MVA, 132/33 kv T/F to 2x25/31.5 MVA T/F at Dehan	3137.55		3/14
24.	Prov. 220/132kv , 2x100MVA Sub-station in between Una and Amb area a/w 220 kv D/C line by LILOing of existing 220kv D/C line from Jallandhar to Hamirpur and 132 kv D/C line from Amb to Una & 132 kv S/C line from Una to Tahliwala.	9090.2		3/14
25.	Prov. Spare transformer and alliedequipments for various existing EHV & HV S/Stns. (REC CODE	2178.09		9/13

Sr.No.	Description of Scheme/works	Estimated cost (Rs. In lacs)	Targetted for FY 12-13	Targetted for FY 13-14
1	2	3	4	5
	3735)			
26.	Add. Of 1x80/100 MVA, 220/66kv Trf at 220/66kv S/Stn. Uperla Nangal.	U/s		6/13
27.	C/O 220kv D/C line from Rauri to Kunihar (50:50 basis)	5200	3/13	
28.	Aug. of 132/66kv, 3x10.5 MVA (31.5) to 132/66kv, 3x16.63 MVA (50) with one spare 16.63 MVA T/F at Jutogh.	977.94		6/13
29.	Addition of 132/33 kv, 1x25/31.5MVA T/F at Maliana a/w 132 kv D/C line from Jatia to Kunihar	U/s	3/13	
30.	C/O 220kv D/C line from Kangoo to Mattansidh with twin zebra conductor.	6328.11		9/13
31.	Extension of 220kv yard for additional power arrangement at 220kv Sub/stn. Kangoo	--		9/13
32.	C/o of 132/33kv, 2x16/20MVA Sub/Stn. At Kanghain (Jaisinghpur)	2873.73		9/13
33.	C/o 132/33kv, 2x25/31.5 MVA Sub/Stn. At Shahpur Chambi by LILOing of 132kv D/C line from Dehra – Kangra line.	2824		3/14
34.	Aug. of 132/33kv, 2x16 MVA power Trf to 2x25/31.5 MVA a/w associated equipments at 132/33kv Sub/Stn. Kandrori	665.14	3/13	
35.	Aug. of 132/33kv T/F from 1x16+20MVA power T/F to 2x25/31.5 MVA capacity at 132/33kv Sub/Stn. Bijni	340.16	3/13	
36.	Add. Of 132/33kv, 25/31.5 MVA T/F at 220/132kv Sub/stn. Kangoo	--		6/13
37.	Add. Of 1 no. 220/66kv 80/100 MVA T/F at 220/66kv Sub/stn. Mandhala.	--		6/13
38.	Replacement of defective 132/66kv, 3x10.5 MVA, +1 No. As stand by -1-Q Transformers bank with 132/66kv 25/31.5 MVA, 3-Q Transformer a/w replacement of old 66kv allied equipments at 132/66/33 kv Substation at Saproon Solan.	300.00		6/13
	Total	**85243.73**	**18**	**20**

LIST OF HV & LV Distribution Schemes (33 kv & below) executed during FY 12-13 and proposed for FY 13-14

Comm. S.N.	S.N.	Description of scheme/works	Estimated cost	Targeted for FY13	Targeted for FY14
	1	2	3	4	5
	a)	33kv new Sub-station and its associated lines			
		CHIEF ENGINEER (OP) SOUTH			
		Operation Circle Solan:			
1.	1.	Construction of 2x3.15 MVA, 33/11kv Sub/stn. At Oachghat (Code-3662)	373.58	3/13	
2.	2.	Construction of 33/11 kv, 1x3.15 MVA	408.44	3/13	

		sub/stn.at Arki (Code-3597)			
3.	3.	Construction of 33/11kv, 2x3.15 MVA (unmanned) s/stn at Dharampur (Approved in STC)	460.84		3/14
4.	4.	Construction of 33/11kv, 1x3.15 MVA sub/stn at Goela (Approved in STC)	491.69		
5.	5.	Construction of 2x1.6 MVA 33/11kv, sub/stn at Chail (approved in STC)	502.00		
6.	6.	Construction of 2x3.15 MVA 33/11kv, sub/stn at Basal (approved in STC)	318.00		
		Operation circle Nahan:			
7.	1.	Construction of 33/11kv, 1x3.15 MVA sub/stn at Khairi,(Baru Sahib) (code-3685)	458.45		12/13
8.	2.	Construction of 33/11 kv, 2x 3.15 MVA sub/stn at Burma papri (code-3926)	391.04		10/13
9.	3.	S.O.P. to Tubewell in Distt Sirmaur under (OP) circle, Nahan (code-3440)	332.12	Completed	
10.	4.	Construction of 33/11kv, 1x3.15 MVA sub/stn at Sheelabag	350.00		12/13
11.	5.	Construction of 33/11kv, 2x6.3 MVA sub/stn at Jagatpur Johoron (approved in STC)	753.00		3/14
12.	6.	Construction of 33/11kv,2x1.6 MVA sub/stn at Panog under ESD Panog	225.00		
13.	7.	Construction of 33/11kv, 1x106 MVA substation (unmanned) at Haripurdhar ESD Charna	200.00		3/14
		Operation circle Rohru:			
14.	1.	Construction of 33kv, 2x 106 MVA (manned) sub-station at Kupvi with 33kv line from Charna to Kupvi under electrical division Chopal	533.86		3/14
		Operation Circle Shimla:			
15.	1.	Providing 22kv VCBs along with C.R. panels at Chaba providing pole mounted auto re-closure at Basantpur Khadarghat under electrical division Sunni.	140.00		12/13
16.	2.	Providing 22kv VCBs along with C.R. penal at Theog and providing pole mounted auto re-closure under electrical division Theog	180.00		12/13
		CHIEF ENGINEER (OP) NORTH			
		OPERATION CIRCLE KANGRA			
17.	1.	C/O 33/11kv 2x3.15 MVA un-manned substation at Totarani (Mcleodganj) along with associated 33 & 11kv HT lines (code No. 3218)	328.986	11/12	
18.	2.	C/O 33/11kv 2x3.15 MVA un-manned substation at Pattii (Pachrukhi) along with associated 33 & 11kv HT lines (code No. 3216)	356.171	Completed	
19.	3.	C/O 33kv/11 2x1.6 MVA un-manned sub-station at Gopalpur (Nagri) along with associated 33 & 11 kv HT lines (code No. 3217)	322.707	Completed	
20.	4.	C/o 33/11kv 2x 3.15 MVA un-manned sub-station at Khaira along with associated 33 & 11 kv HT lines (code No.-3200)	407.496	12/12	
21.	5.	Construction of 33kv double circuit link line between Khauli HEP and 33/11kv sub-station	255.308		3/14

		Gaj (code No. 3665)			
22.	6.	C/O 33/11kv 1x3.15 MVA un-manned sub-station at Bharoli Jadid along with associated with 33 & 11 kv HT lines (code No. 4368)	357.480		3/14
23.	7.	C/O 33/11kv 2x3.15 MVA un-manned sub-station at Holta a/w associated 33 & 11kv HT lines (code No. 5520)	392.590		3/14
24.	8.	Construction of 33kv link line from 33/11kv s/stn Jaisinghpur to 33/11kv s/stn Chadiar (code No. 5624)	122.020		3/14
25.	9.	Construction of 33kv link line from 33/11kv sub/st Ranital to 33/11kv sub/stn Lunj	144.030		9/13
		Operation Circle Una:			
26.	1.	Construction of 33/11 kv 2x 106 MVA un-manned substation at Thana-kalan a/w 33 & 11 kv HT lines (code No. 060459)	358.737	3/13	
27.	2.	Const. Of additional 33 kv HT lines from 132/33kv sub-station Rakkar (Una) to 33/11 kv sub-station Tahliwala (code no. 3416)	432.388	Completed	
28.	3.	Const. Of 33/11kv 2x3.15 MVA un-manned sub-station at Chak Sarai a/w associated 33 & 11 kv HT lines (code No. 3780)	476.910		6/13
29.	4.	Pumpset energization in operation circle, Una (code No. 3907)	694.490		9/13
30.	5.	Construction of 33/11kv 2x3.15 MVA un-manned sub- station at Santokhgarh a/w associated 33 & 11 kv HT lines (code No. 5625)	504.580		
31.	6.	Const. of 33/11 2x 3.10 MVA un-manned sub-station at Gondpur a/w associated 33 & 11 kv HT lines	684.210		
		OPERATION CIRCLE DALHOUSIE			
32.	1.	Const. Of 33/11 kv 2x3.15 MVA un-manned sub-station at Rehan a/w associated 33 & 11kv HT lines (code No. 3925)	450.540	3/13	
33.	2.	Const. Of 33/11 kv 1x3.15 MVA un-manned sub-station at Attra (Gangath) a/w associated 33 & 11 kv HT lines (code No. 3924)	354.310	3/13	
	3.	S.I. Scheme for Trans. & Dist. Works for evacuation of power from small HEPs (up to 25 MW) in Chamba zone	1780.709		
34.	a)	Const. Of 33 kv D/C line with WOLF conductor from 33/11 kv sub-station Salooni to 33/11 kv sub-station Koti.	290.109		3/14
35.	b)	Const. Of 33 kv S/C line on D/C structures and cross arms with Wolf conductor from 33/11 kv sub-station Holi to 33/11 kv sub-station Gharola	620.100		3/14
36.	c)	Const. Of 33kv S/C line on D/C structures and cross arms with WOLF conductor from 33/11 kv sub-station Bharmour to 33/11 kv sub-station Gharola	162.150		3/14
37.	d)	Const. Of 33kv D/C line for LILO of 33kv Chamba-Gharola line at proposed 33/132/220kv sub-station Karian	130.130		3/14
	4.	S.I. Scheme for trans. & dist. Wroks (remaining	267.340		

		part) for evacuation of power from small HEPs (up to 25 MW) in Chamba- Dalhousie zone			
38.	a)	Const. Of 33kv D/C line for LILO of 33kv Chamba-Gharola line at 33/11 kv sub-station Jarangla.	70.900		12/13
		Chief Engineer (Central Zone)			
		Operation Circle, HPSEB Ltd. Mandi			
39.	1.	Construction of 33/11kv 2x1.6 MVA sub-stn. at Mandap under ED-D/pur (3605)	410.030	3/13	
40.	2.	Construction of 33/11kv 2x3.15 MVA sub-stn. at Kalkhar under ED-S/Ghat (3923)	527.060		9/13
41.	3.	Construction of 33/11kv 2x1 MVA sub-stn at Bharaoo under ED-J/Nagar (4217)	329.854	3/13	
42.	4.	Const. of 33kv HT line from 33/22 kv sub-stn Gohar to 33/11 kv sub-station Panodh under ED-Gohar	233.460		3/14
43.	5.	Construction of 33kv HT line from 33/11 1x106 MVA Makriri to 33/11kv 2x2.5 MVA sub-station Lad Bharol under ED Jogindernagar.	212.870		
44.	6.	Construction of 33kv HT line from proposed 132/33 kv sub-station Jahu to 33/11kv sub-station Barchwar under ED Sarkaghat	126.500		2/14
		Operation Circle, HPSEB Ltd. Bilaspur			
45.	1.	C/O 33/22kv, 2x 1.6 MVA new sub-station at Karsog and its associated lines	545.00		2/14
46.	2.	C/O 33/11 kv, 1x3.15 MVA new sub-station at Jai Devi and its associated lines	411.00		3/14
		Operation Circle HPSEB Ltd. Kullu			
47.	1.	Prov. 33kv 2x 3.15 MVA sub-station sarabai	343.00		3/14
		Operation Circle HPSEB Ltd. Hamirpur			
48.	1.	Const. of 33/11kv 2x 3.15MVA S/Stn Bhareri (Naltu) (4218)	417.09		8/13
49.	2.	Const. of 33/11kv HT lines for inter linking of 33/11 kv s/station Jakhu and 33/11 kv s/stn. Kakkar.	138.67	3/13	
50.	3.	C/O 33 kv,HT line for interlinking of 33/11 kv s/stn. Tauni Devi and 33/11kv sub-station Bhoranj district-Hamirpur	104.52		12/13
51.	4.	Const of 33kv HT line fron Jahu to Naltu			3/14
	b)	**AUGMENTATION OF 33 KV SUB STATION & LINES**			
		CHIEF ENGINEER (OP) SOUTH			
		Operation Circle Solan:			
52.	1.	Aug. of 33/11 kv, 1x6.3+1x4 MVA s/stn at Manjholi (Approved in STC)	520.13		9/13
53.	2.	Aug. of 33/11 kv, 2x3.15 to 2x6.3 MVA s/stn at Baglehar (Approved in STC)	115.77		6/13
		Operation Circle Nahan:			
54.	1.	Aug. of 2x3.15 MVA to 2x6.3 MVA at Dhaulakuan (code-4215).	224.40		9/13
55.	2.	Aug. of 1x3.15MVA to 2x3.15 MVA 33/11kv, s/stn at Puruwala (Code-3688)	165.22		9/13
56.	3.	Aug. of conductor (existing ACSR 6/1/4.72 mm	145.58	3/13	

		to 37/2.59 mm0 of 33 kv line from Giri nagar to Nahan under ESD Nahan (Code-3920)			
57.	4.	Aug. of 2x1.6 MVA to 2x3.15 MVA 33/11 kv, s/stn at Sarahan	107.45	3/13	
58.	5.	Aug. of 1x3.15 MVA to 2x3.15 MVA 33/11kv, s/stn at Sarahan	136.14		6/13
59.	6.	Aug. of 1x3.15MVA to 2x3.15 MVA at Sataun.	140.00		12/13
60.	7.	Augmentation & up gradation of power system (11kv & 33kv) in industrial area Kala Amb.	1421.00		
61.	8.	Augmentation of 2x1.6MVA to 2x3.15 MVA at 33/11kv s/stn Charna (Manned to unmanned)	295.00		
		Operation Circle Shimla:			
62.	1.	Augmentation of 1x2.5MVA to 2x2.5MVA at 33/11kv sub-station Ghandal (Dhami).	200.00		12/13
		CHIEF ENGINEER (OP) NORTH			
		OPERATION CIRCLE KANGRA			
63	1.	Augmentation of 33/11 kv substation shahpur from 2x2.5 MVA to 2x6.3 MVA (code No. 3912)	156.740	3/13	
64.	2.	Aug. of 33/11 kv s/stn Chadiar from 1x1 MVA to 1x1+1x3.15 MVA (Code no. 4334)	206.150		9/13
65.	3.	Augmentation of 33/11kv un-manned substation Darang from 1x1 MVA to 2x1.6 MVA	315.770		9/13
		OPERATION CIRCLE UNA			
66.	1.	Augmentation of 33/11 kv sub station Bhaira (Baruhi) from 2x3.15 MVA to 2x6.3 MVA (code no 3668)	142.600	Completed	
67.	2.	Augmentation of 33/11 kv substation Haroli from 2x3.15 MVA to 2x6.3 MVA (code no. 3201)	36.080	3/13	
68.	3.	Augmentation of 33/11 kv Sub Station Bharwain from 2x1.6 MVA to 2x3.15 MVA (code no. 3978)	88.290	Completed	
69.	4.	Augmentation of 33/11 kv Sub Station Khad from 1x2.5MVA to 1x6.3 MVA	189.310		3/14
70.	5.	Re-conductoring of 33kv HT line Una to Mehatpur from ACSR 6/1/4.72 Dog conductor to ACSR 30/7/2.59 150mm to WOLF conductor (code No. 5623)	41.200	3/13	
71.	6.	Re-conductoring of 33kv HT line Una to Amb from ACSR 6/1/4.72 Dog conductor to ACSR 30/7/2.59 150mm 2 WOLF conductor	--		9/13
		OPERATION CIRCLE DALHOUSIE			
72.	1.	Augmentation of 33/11kv substation Jawali from 2x1.6 MVA to 2x3.15 MVA along with reconductoring of 33kv Jassure-Bharmar feeder from DOG conductor to Wolf (code No. 3915)	216.550		12/13
73.	2.	Augmentation of 33/11kv Sub Station from 2x3.15 MVA 2x6.3 MVA S/stn Thakurdwara (code No. 5622)	93.190		9/13
74.	3.	Augmentation of 33/11 kv Sub Station from 2x2.5 MVA to 2x6.3 MVA Sub Station Bhadukhar	130.910		9/13
75.	4.	Augmentation of 33/11 kv Sub Station from	48.310		9/13

		2x1.6 MVA to 2x3.15 MVA substation Thapkaur			
	5.	S.I. Scheme for trans. & dist works for evacuation of power from small HEPs (up to 25MW) in Chamba Zone	1782.709		
76.	a)	Augmentation of DOG conductor with WOLF conductor of 33kv Bathri-Koti-Chamba line (1st feeder) along with strengthening bus bar system at 33/11kv Sub Station Chamba	245.100	Completed	
77.	b)	Augmentation of DOG conductor with WOLF conductor of 33kv Bathri-Koti-Chamba line (2nd feeder) along with strengthening of bus bar system at 33/11kv Sub Station Koti and Jarangla	335.120	Completed	
	6.	S.I. Scheme for trans. & dist. Works (remaining part) for evacuation of power from small HEPs (up to 25MW) in Chamba- Dalhousie Zone	267.340		
78.	a)	Augmentation of DOG conductor with WOLF conductor of 33kv line from Lahru to 220/132kv Sub-Station Jassore	196.440		3/14
		CHIEF ENGINEER (CENTRAL ZONE) MANDI			
		Operation Circle, HPSEB Ltd. Mandi			
79.	1.	Aug. of 33/22kv 2x3.15 MVA into 33/11kv 2x5MVA S/Stn at Saulikhad under ED- Mandi	225.00		3/14
80.	2.	Aug. of 33/11kv 2x1.6 MVA to 2x3.15MVA S/stn at Khudla under ED-S/Ghat	94.87	3/13	
		Operation Circle, HPSEB Ltd. Kullu			
81.	1.	Aug. of 2x4 MVA to 2x6.30 MVA power transformer along with others equipment of 33/11kv substation at Bhuntar under ED-Kullu	146.00		12/13
82.	2.	Aug. of 33/11 kv 2x5MVA to 2x 10 MVA Sub-station Prini under ED-Manali	361.10	2/13	
83.	3.	Aug. of 33kv 2x2.5 MVA to 2x500 MVA Naggar	87.60	3/13	
84.	4.	Aug. of conductor 100 to 150 mm Sq. In existing 33kv HT line from Bajoura to Naggar	0.00		
		Operation Circle HPSEB Ltd. B/pur			
85.	1.	Aug. of 33/11kv, 2x2.5MVA to 2x 6.30 MVA power trans. At Jabli	313.61	Completed	
86.	2.	Augmentation of 1x1MVA less 1x2.5 MVA to 2x3.15 MVA s/stn Jhandutta (3922)	135.64	3/13	
87.	3.	Re-Cond. Of 33kv HT line Kangoo to Sundernagar on rail pole with ACSR 6/1/4.72mm to 30/7/2.59mm	130.00		2/14
		Operation Circle HPSEB Ltd H/Pur			
88.	1.	Aug. of 33/11kv Sub Station (1x1.0 into 2x1.6 MVA) Dhaneta (4216)	137.62	12/12	
89.	2.	Aug. of 33/11 kv Sub Station (2x1.0 into 2x3.15 MVA) Galore	93.32	Completed	
90	3.	Re-conductoring of 33kv Bangana feeder from Anu to Barsar	128.00		1/14
	c)	Renovation and modernization of 33/11kv Sub Station			
		CHIEF ENGINEER (OP)SOUTH			

		Operation Circle Rampur:			
91.	1.	Renovation and modernisation and replacement of 22kv damaged defective OCBs with VCBs and allied accessories in various control point under electrical division Reckongpeo	100.00		9/13
		CHIEF ENGINEER (OP)NORTH			
		OPERATION CIRCLE UNA			
92	1.	Replacement of old equipment (Switchgear) at 33/11kv s/stn Mehatpur, Banagana & Bhaira (3911)	268.070	Completed	
		CE(OP) C ZONE			
	3.	**Operation Circle HPSEB Ltd. B/pur**			
93.	1.	Renewal/replacement of 33kv, 22kv and 11kv switchgear panel and oil circuit breakers and allied accessories of 33/11kv s/stn (2x5.00 MVA) & 33/22 kv S/stn (2x2.50+1x3.15) at Sundernagar under s/stn. S/division HPSEBL Sundernagar	173.54		1/14
94.	2.	S.I. Scheme for replacement of overhead conductor of HT/LT with AB cable in MC area of Sh. Naina Devi	89.15		6/13
95.	3.	Conversion of 22kv DTR System into 11kv DTR system sub-division, Ner-Chowk	200.00		3/14
		OPERATION CIRCLE HPSEB Ltd H/pur			
96.	1.	R/R 33/11kv C & R panel and allied accessories at 33/11 kv sub/stn Barsar	63.94	2/13	
97.	2.	Prov. Auto re-closures at different solid T-Offs on 33kv lines under (OP) circle Hamirpur	200.00		3/14
		Total	**30791.874**	**32**	**55**

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	HPLDS	Himachal Pradesh Load Despatch Society
30	HEP	Hydro Electric Project
31	HPSEB	Himachal Pradesh State Electricity Board
32	HT	High Tension
33	HVPNL	Haryana Vidyut Prasaran Nigam Limited
34	IPP	Independent Power Producers
35	IR	Interim Relief
36	kV	Kilo Volt
37	kVA	Kilo Volt-Ampere
38	kVAh	Kilo Volt-Ampere Hour
39	kW	Kilo Watt
40	kWh	Kilo Watt Hour
41	LT	Low Tension

No	Abbreviation	Description
42	MU	Million Units
43	MW	Mega Watt
44	MYT	Multiyear tariff
45	NAPS	Narora Atomic Power Station
46	NFA	Net fixed assets
47	NHPC	National Hydro-electric Power Corporation
48	NPCIL	Nuclear Power Corporation of India Limited
49	NTPC	National Thermal Power Corporation
50	OT	Overtime
51	PGCIL	Power Grid Corp. of India Ltd.
52	PLF	Plant Load Factor
53	PPA	Power Purchase Agreement
54	PSEB	Punjab State Electricity Board
55	PSPCL	Punjab State Power Corporation Ltd
56	PSTCL	Punjab State Transmission Corporation Ltd
57	R&M	Repair and Maintenance
58	RAPS	Rajasthan Atomic Power Station
59	REA	Regional Energy Accounts
60	REC	Renewable Energy Certificate
61	ROE	Return on equity
62	SHP	Small Hydro Projects
63	SJVNL	Satluj Jal Vidyut Nigam Limited
64	State Govt	Government of Himachal Pradesh
65	STPS	Super Thermal Power Station
66	STU	State Transmission Utility
67	T&D	Transmission and Distribution
68	THDC	Tehri Hydro Development Corporation Limited
69	ToD	Time of Day
70	UJVNL	Uttaranchal Jal Vidyut Nigam Limited
71	UPSEB	Uttar Pradesh State Electricity Board
72	WPI	Wholesale Price Index