



EXECUTIVE SUMMARY
OF
AGGREGATE REVENUE REQUIREMENT
FOR THE
DISTRIBUTION AND RETAIL SUPPLY BUSINESS
IN THE 11 DISTRICTS OF HARYANA

FOR THE FINANCIAL YEAR 2013-14

Submitted to

The Haryana Electricity Regulatory Commission

By:

UTTAR HARYANA BIJLI VITRAN NIGAM LIMITED

Registered Office: Vidyut Sadan, Plot No. C-16, Sector-6, Panchkula

November 2012

EXECUTIVE SUMMARY

- 1.1 This document is the Executive Summary of the Annual Revenue Requirement (ARR) of the Distribution and Retail Supply (D&RS) Business of Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL) for FY 2013-14 filed with the HERC on November 30, 2012. The executive summary presents a gist of the main elements of the filing made by the Nigam to the Hon'ble Commission.
- 1.2 This summary contains formats that include computation of Capital Base, Power Purchase, O&M Costs, Interest & Finance Charges, Overall Expenditure, Non Tariff Income and Revenue for the ensuing financial year at current tariff and other financial formats as per HERC tariff regulations. Other details include audited financial statement as on March 31, 2012 and the basis of projections for FY 2012-13 and FY 2013-14.
- 1.3 This summary is not a part of the filing made by UHBVNL and interested parties are encouraged to examine the documents filed by the licensee for detailed information. In the present filing for FY 2013-14, UHBVNL has also submitted figures for FY 2011-12 (audited actuals).

FINANCIAL FORMS

- 1.4 The Guidelines for filing the ARR require the licensee to provide audited financial statements. The audited financial statements as on March 31, 2012 have been provided. The following forms present the consolidated position for Distribution & Retail Supply Business carried out by UHBVNL and projected for the ensuing year:
 - (a) The first two forms give the P&L and the Balance Sheet;
 - (b) Table 3 gives the cash flow statement of the Nigam;
 - (c) The summary of the ARR detailing the various components of ARR is tabulated as Table 4;
 - (d) Table 5 summarizes the reasonable return for the D&RS business;
 - (e) The allocation of expenditure into fixed, variable and other costs has been detailed out in Table 6; and
 - (f) The energy balance of the system constitutes Table 7.
- 1.5 The audited figures for FY 2011-12 have been provided in the relevant forms along with revised estimates for FY 2012-13 and projections for FY 2013-14.

Profit and Loss Statement

1.6 Abstract of the P&L statement for the period ending March 31, 2012 has been tabulated in below.

Table 1 Summary of the Profit & Loss Account

S. No.	Particulars	Previous Year (Actual) FY 2011-12	Current Year (Estimated) FY 2012-13	Ensuing Year (Projected) FY 2013-14
A	Revenue			
1	Revenue from sale of power	3606.80	4969.88	6305.77
	Within State	3333.61	4457.34	5395.25
	Outside State	273.19	512.53	910.53
2	Other Non-Tariff Income	204.09	117.61	131.69
3	Revenue against Regulatory Assets & FSA	1311.29	0.00	0.00
4	Revenue subsidies (including FSA subsidy)	2007.16	3020.73	3652.52
5	Grant from GoI for AT&C loss reduction			12.00
	Total Revenue or Income	7129.34	8108.22	10101.99
B	Expenditure			
1	Purchase of Power from Own Stations			
2	Purchase of Power from Other Sources	7306.11	8237.23	9820.27
3	Intra-State Transmission Charges			
4	Repairs and Maintenance	41.76	88.25	109.34
5	Employee costs	505.04	581.43	670.95
6	Administration and General expenses	56.78	61.88	67.48
7	Net prior period credit/(charges)	-0.89	0.00	0.00
8	Other Debits, Write-offs	26.00	48.92	58.86
10	Less: Expenses Capitalized	12.72	14.53	16.63
C	PBDIT	-792.74	-894.96	-608.29
D	Depreciation and Related debits	135.54	151.19	175.03
E	PBIT	-928.27	-1046.14	-783.32
1	Interest & Finance Charges	1247.18	1268.67	1677.38
2	Less: Interest Capitalized	164.22	193.02	225.50
F	Net Interest and Finance Charges	1082.96	1075.65	1451.89
G	TOTAL EXPENDITURE	9140.57	10230.02	12337.20
H	Profit/Loss before Tax	-2011.24	-2121.80	-2235.21
I	Income Tax provisions			
J	Profit/Loss after Tax	-2011.24	-2121.80	-2235.21

Balance Sheet

1.7 The audited balance sheet of the Nigam as on March 31, 2012 has been tabulated below:

Table 2 Consolidated Balance Sheet

S.No.	Particulars	Previous Year (Actual) FY 2011-12	Current Year (Estimated) FY 2012-13	Ensuing Year (Projected) FY 2013-14
I.	SOURCES OF FUNDS			
	A) Shareholders' Funds			
	a) Share Capital	1597.41	1728.90	1960.29
	b) Reserves and Surplus	510.68	510.68	510.68
	B) Special Appropriation towards Project Cost			
	C) Loan Funds	10685.46	11393.39	14907.31
	a) Secured Loans	4308.77		
	b) Unsecured Loans	6376.69		
	D) Other sources of Funds			
	a) Capital contributions from consumers		523.89	559.58
	b) Consumers' Security Deposits	539.07	596.08	655.15
	Cash Deficit		0.00	0.00
	TOTAL SOURCES OF FUNDS	13332.62	14752.94	18593.02
II.	APPLICATION OF FUNDS			
	A) Fixed Assets			
	a) Gross Block	4973.25	5723.56	6443.52
	b) Less: Accumulated Depreciation	1098.43	1270.22	1467.93
	c) Net Block	3874.82	4453.33	4975.60
	d) Capital Work in Progress	749.12	357.50	571.00
	B) Investments	31.81	27.74	27.74
	C) Current Assets, Loans and Advances			
	i) Current Assets	5740.10	7358.88	9084.47
	ii) Loans & Advances	79.59	91.63	105.74
	D) Less: Current Liabilities and Provisions			
	i) Current Liabilities	5143.32	5755.31	6936.55
	ii) Provisions			
	E) Net Current Assets	676.37	1695.20	2253.66
	F) Miscellaneous Expenditure to the extent not written off	2169.41	0.00	0.00
	Profit and (Loss) Account (Debit Bal.)	5831.09	8219.16	10765.03
	TOTAL APPLICATION OF FUNDS	13332.62	14752.94	18593.02

Cash Flow Statement

Table 3 Cash Flow Statement

S. No.	Particulars	PY (FY 2011-12)	CY (FY 2012-13)	EY (FY 2013-14)
		Actual	Estimated	Projection
I	Net Funds from Operations:			
1	A. Net Funds from Earnings:			
	Profit before Tax	-2011.24	-2121.80	-2235.21
	Less:			
	Subsidy and Grants	2007.16	3020.73	3652.52
	Income Tax payment during the year			
	Total of A	-4018.39	-5142.53	-5887.73
	B. ADD: Debits to Revenue Account not requiring Cash Outflow:			
	(i) Depreciation	75.00	171.80	197.70
	(ii) Amortisation of Deferred Cost			
	(iii) Amortisation of Intangible Assets			
	(iv) Investment Allowance Reserve			
	(v) Others, if any.			
	Total of B	75.00	171.80	197.70
	C. LESS: Credits to Revenue Account not involving Cash Receipts:			
	(i) Depreciation			
	(ii)			
	Total of C			
	Net Funds from Earnings (A+B-C)	-3943.39	-4970.73	-5690.03
2	Contributions, Grants and Subsidies towards Cost of Capital Assets		523.89	35.69
3	Security Deposit from consumers		57.00	59.08
4	Proceeds from disposal of Fixed Assets			
5	Total Funds from Operations (1+2+3+4)		-4389.84	-5595.26
6	Net Increase/(Decrease) in Working Capital:			
	A. Increase/(Decrease) in Current Assets:			
	a) Inventories		0.00	0.00
	b) Receivables against sale of power		228.75	276.35
	c) Loans and Advances		12.04	14.11
	d) Sundry Receivables		1370.46	1449.24
	Total of A		1611.25	1739.70
	B. Increase/(Decrease) in Current Liabilities:			
	a) Borrowings for working capital		611.98	1181.24
	b) Other Current liabilities - Power purchase			
	- Others			
	Total of B		611.98	1181.24
	Net Increase/(Decrease) in Working Capital (A - B)		999.26	558.45
7	Net Funds from Operations before Subsidies & Grants (5-6)		-5389.11	-6153.71
8	Receipts from Revenue Subsidies and Grants		3020.73	3652.52
Total I	Net Funds from Operations including Subsidies & Grants (7+8)		-2368.37	-2501.19
II	Net Increase/(Decrease) in Capital Liabilities:		707.94	3513.92
	A. Fresh Borrowings:			
	(a) State Loans			
	(b) Foreign currency Loans/Credit			
	(c) Other Borrowings			

S. No.	Particulars	PY (FY 2011-12)	CY (FY 2012-13)	EY (FY 2013-14)
		Actual	Estimated	Projection
	Total of A			
	B. Repayments:			
	Repayment of Principal			
	(a) State Loans			
	(b) Foreign currency Loans/Credit			
	(c) Other Borrowings			
	Total of B			
Total II	Net Increase/(Decrease) in Capital Liabilities (A - B)		707.94	3513.92
III	Increase/(Decrease) in Equity Capital		131.49	231.39
IV	Total Funds available for Capital Expenditure (I+II+III)		-1528.95	1244.12
V	Funds Utilised on Capital Expenditure:			
	(a) On Projects		750.31	719.97
	(b) Released Assets reissued to works		-391.61	213.49
	(c) Intangible Assets			
	(d) Deferred Costs			
	Total of V		358.69	933.46
VI	Net Increase/(Decrease) in Investments		-4.07	0.00
VII	Net Increase/(Decrease) in Cash & Bank Balance (IV - V - VI)		-1883.57	310.66
VIII	Add: Opening Cash & Bank balances		51.79	71.36
IX	Closing Cash & Bank Balances (VII+VIII)		-1831.78	382.02

Annual Revenue Requirement**Table 4 Statement of the Annual Revenue Requirement**

S. No.	Particulars	Previous Year (Actual) FY 2011-12	Current Year (Estimated) FY 2012-13	Ensuing Year (Projected) FY 2013-14
	Power Purchase (MU)	17737	20127	23988
	Sale of Power outside State (MU)	992	1630	2880
	Sale of Power within State (MU)	11521	12993	15294
	Distribution Loss %	31.2%	29.8%	27.54%
1	Receipts			
a	Revenue from sale of power & Misc. Charges	3810.89	4858.74	6161.12
b	Revenue subsidy (excl FSA subsidy)	1998.78	2968.03	3425.63
c	Revenue against regulatory assets	1311.29	0.00	0.00
d	Grant from GoI for AT&C loss reduction	0.00	0.00	12.00
	Total Receipts	7120.96	7826.77	9598.75
2	Expenditure			
a	Purchase of Power from Own Stations	7306.11	8237.23	9820.27
b	Purchase of Power from Other Sources			
c	Intra-State Transmission Charges			
d	R&M Expense	41.76	88.25	109.34
e	Employee Expenses	505.04	581.43	670.95
f	A&G Expense	56.78	61.88	67.48
g	Depreciation	135.54	151.19	175.03
h	Interest & Finance Charges	1247.18	1268.67	1677.38
i	Less: Interest & other expenses capitalized	176.94	207.54	242.13
j	Other Debits	26.00	48.92	58.86
k	Extraordinary Items	0.00	0.00	0.00
l	Other (Misc) - Net prior period expenses	-0.89	0.00	0.00
	Total	9140.57	10230.02	12337.20
3	Reasonable Return		266.27	298.66
4	Other Income	0.00	0.00	0.00
5	Annual Revenue Requirement (2)+(3)-(4)	9140.57	10496.29	12635.86
6	Revenue Gap for the Year	-2019.61	-2669.51	-3037.11
7	True up for employee cost (including terminal benefits) for FY 2011-12			-232.55
8	True-up of Delayed Payment Surcharge			69.50
9	Surplus(+) / Shortfall (-) after Adjusting for Past True Up	-2019.61	-2669.51	-2874.06
10	Implementation of APTEL judgment: True up for FY 2011-12			624.15
11	Cumulative Revenue Gap	-2019.61	-2669.51	-3498.21

Reasonable Return on Equity

Table 5 Reasonable Return

Particulars	Rate of Return	Current Year (Estimated) FY 2012-13	Ensuing Year (Projected) FY 2013-14
Shareholders' Funds			
Share Capital		1901.90	2133.29
Total Equity		1901.90	2133.29
Return as % of Equity (14%)	14%	266.27	298.66

Expenditure Allocation into Fixed, Variable and Other Costs

Table 6 Allocation of expenditure into Fixed, Variable and Other Costs for the past and current years

	Expenditure	Ratios			PY (FY 2011-12)				CY (FY 2012-13)			
		Fixed	Variable	Others	Fixed	Variable	Others	Total	Fixed	Variable	Others	Total
1	Power Purchase	14.60%	85.40%	0%	1067	6239	0	7306	1203	7035	0	8237
2	Transmission Charges	100%			0	0	0		0	0	0	
3	Repairs and Maintenance	90%		10%	38	0	4	42	79	0	9	88
4	Employee Costs	46%		54%	232	0	273	505	267	0	314	581
5	Admin and General Expenses	68%		32%	39	0	18	57	42	0	20	62
6	Depreciation and related debits	90%		10%	122	0	14	136	136	0	15	151
7	Interest & Finance charges	90%		10%	1122	0	125	1247	1142	0	127	1269
8	Interest on Working Capital	20%	80%		0	0	0		0	0	0	
	Sub-Total				2620	6239	433	9292	2869	7035	485	10389
	Less: Expenses capitalized				0	0	0		0	0	0	
	- Interest & Finance Charges capitalized	90%		10%	148	0	16	164	174	0	19	193
	- Other Expenses capitalised	50%		50%	6	0	6	13	7	0	7	15
	Sub-Total				154	0	23	177	181	0	27	208
9	Other Debits (incl. Bad debts)	100%			25	0	0	25	49	0	0	49
10	Extraordinary Items	100%			0	0	0	0	0	0	0	0
11	Provision for Bad Debts	100%			0	0	0	0	0	0	0	0
12	Return on Equity	95%	5%		0	0	0	0	253	13	0	266
13	Total Expenditure				2491	6239	411	9141	2990	7048	458	10496

ESTIMATION OF ENERGY SALES

1.8 The energy balance projected for FY 2012-13 and FY 2013-14 is shown below:

Table 7 Energy Balance

S. No.	Particulars	CY (FY 2012-13)	EY (FY 2013-14)
		Estimated	Projection
1	Purchase of Power (MU)		
	Power from Own Stations (HPGCL)	18044.41	18044.41
	Power from Other Sources	25690.67	34173.30
	Total	43735.08	52217.70
	New Projects within Haryana	1606.17	
	New Projects outside Haryana	4688.38	9282.72
	Total	6294.55	9282.72
	Short Term Power Purchase	1786.44	0.00
	Total Power Available for Sale or Energy Input	21243.22	26927.03
2 (i)	Energy Sales within the state		
	a) LT Sales	10316	11970
	b) HT Sales	2677	3324
	c) EHT Sales		
2(ii)	Inter-State Energy Sales	1630	2880
	Total Energy Sales	14622	18175
	Distribution Loss (MU)	6322	7417
3	Distribution Loss (%)	29.76%	27.54%
4	Intra State Transmission Loss (MU)	1177.72	1398.40
	Intra State Transmission Loss (%)	2.73%	2.72%
5	Net Energy Requirement for sale in state (MU)		
6	Energy available for inter state sale (MU)	1629.72	2880.36
7	Inter State Transmission Loss (MU)	627	844
	Inter State Transmission Loss (%)	3.50%	3.45%

1.9 The actual total energy sales by UHBVNL in FY 2011-12 were 11521 MU (taking 16% line losses on segregated AP feeders). For UHBVN, the sales mix has changed significantly in FY 2011-12 as compared to the previous years. This has been due to the restatement of sales to the agriculture category. The sales figure for agriculture for FY 2011-12 have now been taken based on the input units to all AP feeders after adjusting for a normative line loss level of 16% which was taken by the Commission in its tariff orders. This in turn has also led to an overall increase in the distribution loss level of the utility.

1.10 The energy sales projections for certain consumer categories viz. Non-Domestic, Agriculture Unmetered, MITC, Lift Irrigation, Public Water Works, Railways, Bulk Supply and Street Light have been based on the specific consumption approach. For these categories, the growth in number of consumers, growth in per consumer

connected load and the specific consumption have been used to derive the future sales.

$$\text{Projected Units sold (for a particular category)} = \text{Projected number of consumers} \\ * \text{Projected connected load per consumer} * \text{Projected Units sold per KW}$$

- 1.11 For other categories i.e. Domestic (Rural and Urban), LT Industrial, HT Industrial and Agriculture metered, the unit sales have been projected based on the expected running hours for the particular category. In this approach, the total sales have been arrived at by calculating the units consumed at the average connected load for a particular year as per the expected running hours, taking into account the appropriate load factor and diversity factor.

Agriculture Sales

- 1.12 Regarding agricultural sales, the Commission in its previous tariff orders for FY 2011-12 and FY 2012-13 has estimated consumption of AP consumers on the basis of the actual consumption recorded by the energy meters installed on 11 kV segregated AP feeders at the grid substations as reported by the Nigam as well as a small percentage of consumption of AP consumers connected on feeders other than the segregated AP feeders has been suitably accounted for after adjusting for a loss of 16%. However, the line loss of 16% assumed by the Commission on segregated AP feeders is on the higher side, in view of the fact that after HVDS (High Voltage Distribution System), feeder losses have reduced substantially.
- 1.13 In a recent study by Deloitte Touche Tohmatsu India Private Limited on the cost-benefit analysis of HVDS in UHBVN, it has been found that line losses have come down to 13% post-HVDS. The study was carried out to assess the impact of HVDS implemented in four circles (Kaithal, Kurukshetra, Karnal and Rohtak) of UHBVN, by carrying out focused analysis on 52 sample feeders selected from these circles. The study found that post-HVDS implementation, T&D losses for the sample feeders have come down to 13%. This reduction in losses have mainly occurred on account of high voltage distribution and plugging of unauthorised use of electricity.
- 1.14 Therefore, the Nigam proposes that the Commission should deduct 13% on account of distribution losses from the metered reading of segregated agricultural feeders to arrive at the billed sales to agricultural consumers and should use the same for projections of sales from FY 2013-14 onwards.
- 1.15 The sales to agricultural consumers arrived at using the data from segregated feeders and applying a 13% loss on the same is shown below.

Table 8: Month wise AP consumption for segregated feeders for FY 2011-12 with 13% loss

Month	Total consumption on AP feeder meters (LUs)	Using 13% Losses on the same	AP Billing of consumers on non-AP feeder (LUs)	Total AP Consumption (LUs)
April	2710.68	2358.29	98.29	2456.58
May	1621.57	1410.76	113.97	1524.73
June	2823.90	2456.80	142.68	2599.48

Month	Total consumption on AP feeder meters (LUs)	Using 13% Losses on the same	AP Billing of consumers on non-AP feeder (LUs)	Total AP Consumption (LUs)
July	3881.43	3376.84	86.33	3463.17
August	8133.75	7076.36	166.54	7242.90
Sept	7147.33	6218.18	171.82	6390.00
Oct	5275.63	4589.80	166.18	4755.98
Nov	4867.32	4234.57	121.12	4355.69
Dec	2112.74	1838.08	90.07	1928.15
Jan	2581.04	2245.51	101.96	2347.47
Feb	2104.51	1830.92	137.94	1968.86
Mar	2898.59	2521.77	122.67	2644.44
Total	46158.49	40157.89	1519.57	41677.45
AP – Metered Sales				15374.79
AP – Unmetered Sales				26302.66

- 1.16 It can be seen from the above table that the sales to the agriculture metered connections were 1537 MU on the basis of 13% loss. The sales for Agriculture Metered category for FY 2012-13 and FY 2013-14 have thus been projected on the basis of the running hours as calculated from AP sales determined in the above manner, and on basis of the expected number of agricultural consumers (including new connections released during the year) and average connected load per consumer. It has also been taken into account that there has recently been a load extension of approx 66 MW in UHBVN metered category, attributable to the Voluntary Disclosure Scheme in October 2012.
- 1.17 Sales to Agriculture Metered connections have accordingly been projected at 2233 MU in FY 2013-14. Sales to Agriculture Unmetered category have been assumed to increase by a nominal load growth of 5% per annum in FY 2012-13 and FY 2013-14.

Total Sales

- 1.18 Based on the methodology as detailed earlier and the projected growth rates for each consumer category, the energy sales forecast for each consumer category for UHBVN has been summarised in the table below. The growth rate for FY 2013-14 over the sales of FY 2012-13 is estimated at 18%, in view of improved availability of power and increased supply hours to consumers, along with natural consumer-end factors such as increase in the consumer base and higher specific consumption.

Table 9: Energy sales forecast (in MU) for UHBVN

Consumer Category	FY 2012-13	FY 2013-14
Domestic	2923	3620
Non-Domestic	968	1114
LT Industrial	810	1008
HT Industrial	2565	3212
Agriculture Metered	1896	2233
Agriculture Un-Metered	2762	2900

Consumer Category	FY 2012-13	FY 2013-14
MITC/Societies	6	6
Lift Irrigation	58	63
Public Water Works	500	576
Railways	112	113
Bulk Supply	330	377
Street Light	63	73
Total	12993	15294

Inter-State Sales

- 1.19 The two distribution utilities UHBVN and DHBVN purchase power through the Haryana Power Purchase Centre (HPPC). Hence, in order to arrive at the inter-state sales projections, the licensee has considered the energy available with HPPC at the state boundary, the projected drawal by UHBVN (48% of total energy availability at state periphery, in line with past trends) and the Nigam's sale of power to consumers.
- 1.20 In view of the significant increase in power available to UHBVN in FY 2012-13 and FY 2013-14, the Nigam proposes inter-state sale of 1630 MU in FY 2012-13 and 2880 MU in FY 2013-14

Revenue from Sale of Power at Existing Tariffs

- 1.21 Revenue is projected on the basis of slab-wise projection of sales and connected load for various categories and currently approved tariff (notified in the Commission's ARR & Tariff Order for FY 2012-13 dated 31 March 2012). It is submitted that revenue from sale of power within state as well as non tariff income have been taken at 95% collection efficiency (including arrears) towards meeting the ARR.
- 1.22 Revenue assessment for FY 2012-13 and FY 2013-14 has been summarized below:

Table 10: Category-wise sales and revenue assessment for FY 2012-13 (Rs. Cr)

Consumer Categories	Annual Sales (MU)	Revenue from Energy Charges	Revenue from fixed Charges	Total Revenue
Domestic	2922.90	1270.44	0	1270.44
0-40 units/m	876.87	236.75	0	236.75
41-250 units/m	730.72	328.83	0	328.83
251-400 units/m	906.10	475.70	0	475.70
401 & above units/m	409.21	229.16	0	229.16
Non Domestic	968.27	516.33	6.86	523.20
0-5 kW	658.42	345.67	0.00	345.67
5-20 kW	242.07	133.14	0.00	133.14
20 - 50 kW	48.41	26.63	4.80	31.43
Existing 50-70 kW on LT	14.52	8.35	1.11	9.46
New 50-70 kW on HT	4.84	2.54	0.96	3.50
LT industry	809.91	422.63	63.19	485.82
0-20 kW	364.46	194.99	0.00	194.99
20-50 kW	413.06	210.66	58.60	269.26
Existing 50-70 kW on LT	32.40	16.98	4.60	21.58

Consumer Categories	Annual Sales (MU)	Revenue from Energy Charges	Revenue from fixed Charges	Total Revenue
HT industry	2564.50	1268.75	176.87	1445.63
Agriculture metered	1895.86	45.50	0.00	45.50
With motor up to 15 BHP	1516.69	37.92	0.00	37.92
With motor above 15 BHP	379.17	7.58	0.00	7.58
Agriculture unmetered	2761.78	0.00	94.67	94.67
With motor up to 15 BHP	2209.42	0.00	77.96	77.96
With motor above 15 BHP	552.36	0.00	16.71	16.71
MITC	5.61	2.86	0.17	3.04
Lift Irrigation	57.93	29.54	4.92	34.46
Public water works	499.96	254.98	25.57	280.54
Railways (66 or 132 kV)	112.50	57.37	7.82	65.19
Bulk supply	330.10	161.75	15.82	177.57
Domestic	66.02	25.75	1.39	27.14
Others	264.08	136.00	14.43	150.43
Street Light	63.21	31.29	0	31.29
Total	12992.52	4061.44	395.90	4457.34

Table 11: Category-wise sales and revenue assessment for FY 2013-14 (Rs. Cr)

Consumer Categories	Annual Sales (MU)	Revenue from Energy Charges	Revenue from fixed Charges	Total Revenue
Domestic	3619.79	1573.34	0	1573.34
0-40 units/m	1085.94	293.20	0	293.20
41-250 units/m	904.95	407.23	0	407.23
251-400 units/m	1122.13	589.12	0	589.12
401 & above units/m	506.77	283.79	0	283.79
Non Domestic	1113.98	594.03	7.60	601.63
0-5 kW	757.51	397.69	0.00	397.69
5-20 kW	278.50	153.17	0.00	153.17
20 - 50 kW	55.70	30.63	5.31	35.95
Existing 50-70 kW on LT	16.71	9.61	1.23	10.83
New 50-70 kW on HT	5.57	2.92	1.06	3.99
LT industry	1008.18	528.07	73.37	601.44
0-20 kW	433.52	231.93	0.00	231.93
20-50 kW	534.34	272.51	68.22	340.73
Existing 50-70 kW on LT	40.33	23.63	5.15	28.78
HT industry	3211.63	1597.32	205.24	1802.56
Agriculture metered	2233.21	53.60	0.00	53.60
With motor up to 15 BHP	1786.57	44.66	0.00	44.66
With motor above 15 BHP	446.64	8.93	0.00	8.93
Agriculture unmetered	2899.87	0.00	97.87	97.87
With motor up to 15 BHP	2319.89	0.00	80.60	80.60
With motor above 15 BHP	579.97	0.00	17.27	17.27
MITC	5.58	2.84	0.17	3.01
Lift Irrigation	62.75	32.00	4.92	36.92
Public water works	575.91	293.71	27.58	321.30

Consumer Categories	Annual Sales (MU)	Revenue from Energy Charges	Revenue from fixed Charges	Total Revenue
Railways (66 or 132 kV)	112.82	57.54	7.83	65.37
Bulk supply	376.77	184.62	17.22	201.83
Domestic	75.35	29.39	1.51	30.90
Others	301.42	155.23	15.70	170.93
Street Light	73.49	36.38	0	36.38
Total	15293.97	4953.45	441.80	5395.25

Revenue from inter-state sales

- 1.1 In order to project revenue from inter-state sales, the rate per unit for inter-state sales is assumed to be equal to 80% of the bulk supply tariff of UHBVN for power purchase. Revenue projections from inter-state sales is given in the table below:

Table 12: Revenue projected from inter-state sales

Parameters	FY 2012-13	FY 2013-14
Inter-state Sales (MU)	1630	2880
BST (Rs./unit)	3.14	3.16
Revenue from Inter-state Sales (Rs. Cr)	512.53	910.53

Distribution Losses

- 1.23 Concerted effort by the Nigam has resulted in a gradual decrease in distribution losses. However, after completion of the exercise of segregation of AP feeders, sales to the Agriculture category have been revised from FY 2010-11 onwards (using data recorded on segregated AP feeders). This resulted in the distribution loss for FY 2010-11 getting restated to 33.30% and by the end of FY 2011-12, the distribution losses reduced to 31.20%.
- 1.24 The distribution loss reduction targets for FY 2013-14 have been set based on the mandatory conditions as per the Central FRP Scheme for receiving matching grant from the Central Government on account of accelerated AT&C loss reduction. The main assumption is to continue to pursue the loss reduction programs initiated in earlier years and also increasingly use improved technology to target erring consumers and reduce the losses further during the projection period. The investments being made under R-APDRP schemes are also expected to aid in the reduction of distribution loss, especially in urban pockets.
- 1.25 The distribution and AT&C loss reduction target envisaged for UHBVN for FY 2013-14 has been summarised below:

Table 13: Loss Reduction target for UHBVN for FY 2013-14 (%)

Loss (in %)	FY 2012-13 (Based on current realistic estimate)	FY 2013-14 (Planned in the FRP)
Distribution Loss	29.76%	27.54%
AT&C Loss	34.68%	31.5%

Energy Requirement

- 1.26 Based on the projected energy sales, distribution loss and inter-state sales, the energy balance for FY 2012-13 and FY 2013-14 is shown in the table below:

Table 14: Energy Balance

Particulars	Units	FY 2012-13	FY 2013-14
Estimated sales	MU	12992.52	15293.97
Distribution Losses	%	29.76%	27.54%
Energy Requirement	MU	18496.93	21107.98
Energy availability at DISCOM periphery	MU	20126.65	23988.34
Energy surplus/ (deficit)	MU	1629.72	2880.36

ESTIMATION OF POWER PURCHASE

- 1.2 The major external sources from which power is procured by the HPPC for the two distribution companies are:
- NTPC
 - NHPC
 - NPCIL
 - SJVNL
 - BBMB
 - Co-generation
 - Short-term power arrangements: PTC, NVVNL, TATA etc

Quantum of Purchase

- 1.27 For FY 2011-12, actual power purchase from various long term as well as short term sources is being submitted.

FY 2012-13

- 1.28 The average rate of power from each station in the current year, i.e. from April 2012 to October 2012, has been taken as the average rate of power from that station for the entire year. This station-wise actual rate has been multiplied with the quantum of power estimated to be received from each station, in order to arrive at the estimated power purchase cost for FY 2012-13.
- 1.29 Per unit power purchase cost from HPGCL has been taken as per the tariff approved by the Commission for HPGCL for FY 2012-13, with an added per unit cost of 60 paise/unit to account for the Fuel Surcharge Adjustment (FSA) component being passed on to the Nigam by HPGCL in this current year.

FY 2013-14

- 1.30 For HPGCL, the Nigam has considered the per unit tariff projected by HPGCL for the ensuing year in their tariff filing for FY 2013-14, i.e. an average rate of Rs 4.19 per unit.
- 1.31 For other stations, the increase in fuel cost, fixed O&M and other expenses during the projection period has been factored in through an increase of 2.5% in the rate (per unit) of power purchase cost. For BBMB, an escalation factor of 4% has been considered from FY 2012-13 to FY 2013-14. The actual generation and power purchase cost would be dependent upon the regulatory orders for the generation cost and/or the specific provisions of the power purchase agreement with the generators.
- 1.32 For Ultra Mega Power Projects (UMPP), the purchase rates have been considered as per the tariff calculated by the developer for each year.
- 1.33 The rate for upcoming thermal generating stations in the first year of commissioning has been considered at Rs 4/kWh and that for hydel stations as Rs 4.25/kWh (keeping in view the high fixed cost in the first few years of a hydel station). The rates for all new stations have also been escalated @ 2.5% every year to provide cushion for the ever increasing fuel cost.
- 1.34 Transmission charges as considered for FY 2012-13 have been escalated by 5% for FY 2013-14.
- 1.35 Based on the analysis of energy availability from various sources and the requirement of power for sale, the Nigam has estimated that there will be surplus power in FY 2012-13 and FY 2013-14 majorly due to upcoming plants in future. Therefore, the Nigam has not projected any short-term purchase of energy for FY 2013-14. The short-term purchase in the current year has been retained at the same quantum as already purchased in the current year till October 2012.
- 1.36 The Nigam has assumed that the surplus power available will be sold entirely as 'inter-state sales' in both FY 2012-13 and FY 2013-14.
- 1.37 On the basis of the above mentioned projections from external and internal sources of Haryana, the energy to be purchased by Haryana has been projected at 43735 MU for FY 2012-13 and 52217 MU for FY 2013-14.
- 1.38 The total power purchase cost for FY 2012-13 and FY 2013-14 for Haryana from external and internal sources has been assessed as Rs 15,970 Crores and Rs 19,046 Crores respectively.
- 1.39 After taking into account inter-state and intra-state transmission losses and charges, as well as wheeling and SLDC charges, the bulk supply tariff and power purchase tariff for UHBVNL (50% share of power purchase cost and quantum) is tabulated below:

Table 15: Average Power Purchase cost for UHBVNL

Particulars	FY 2011-12	FY 2012-13	FY 2013-14
Gross energy procured from outside the state sources	8123	8597	11738
Inter-state transmission losses (%)	3.55%	3.50%	3.45%
Inter-state transmission losses (MU)	288	301	405
Net energy available from outside the state	7,834	8,296	11,333
Add energy generated within the state	10,402	12,396	13,327
Net energy available for use in Haryana	18,237	20,692	24,660
Intra-state transmission losses (%)	2.74%	2.73%	2.72%
Intra-state transmission losses (MU)	500	565	671
Energy available for sale to distribution licensee	17,737	20,127	23,988
Power purchase cost (Rs Cr)	6,233	7,665	9,142
Inter-state transmission charges (Rs Cr)	228	247	337
Intra-state transmission charges (Rs Cr)	443	325	341
Total bulk purchase and transmission charges (Rs Crs)	6,904	8,237	9,820
Power purchase per unit (Rs/kWh)	3.51	3.81	3.81
Inter-state transmission charges (per unit)	0.13	0.12	0.14
Intra-state transmission charges (per unit)	0.25	0.16	0.14
Average BST for UHBVN	3.89	4.09	4.09

OTHER EXPENSES

Capital Expenditure and GFA

- 1.3 The Commission had approved a total capital outlay of Rs 354.29 for FY 2012-13.
- 1.4 For FY 2013-14 the Nigam has proposed an estimated capital outlay of Rs 1151.66 Cr. The Capital investment planned for the current and ensuing year is as below:

Table 16 Year wise Investment Plan vs. Approved Outlay (Rs. Cr)

S. No.	Year	Originally proposed by the Nigam	Approved by the Commission
1.	FY 2012-13	548.29	354.29
2.	FY 2013-14	1151.66	NA

Progress of Capex work for FY 2012-13

- 1.40 The Hon'ble Commission had approved a capital expenditure plan of Rs 354.29 Crores for the FY 2012-13:

Table 17 Approved Capital expenditure plan for FY 2012-13

S. No	Description	Approved Amount (Rs Cr.)
1.	Creation of New 33 kV substation with switch house building and allied civil and electrical works	67.85
2.	Augmentation of existing 33 kV substation	22

S. No	Description	Approved Amount (Rs Cr.)
3.	Erection of new 33 kV lines	11.04
4.	Erection of new 11 kV lines	4.6
5.	Augmentation of existing 33 kV lines	8.8
6.	Bi/Trifurcation of 11 kV feeders having more than 150 Amps load	20
7.	Release of new connections, Procurement of Transformers, Cables, Conductors etc.	100
8.	Tube well connections	75
9.	R-APDRP (Part-A)	10
10.	R-APDRP (Part-B) - 20 towns	25
11.	Pilot Projects	5
12.	Civil Works -O&M	5
	Total	354.29

Capex Plan for FY 2013-14

- 1.5 The table below shows the outlay plan for FY 2013-14, classified according to different sub-heads for investment:

Table 18: Proposed Capital expenditure plan for FY 2013-14 (Rs. Cr)

Description	Debt	Equity	Grant	Consumer Contribution	Total
<i>Load growth schemes</i>					
Construction of new 33/11 kV Sub-stations	11.16	4.78			15.94
Augmentation of existing 33/11 kV Sub-stations	20.18	8.65			28.83
Erection of new 33 kV Lines	4.69	2.01			6.70
Augmentation of existing 33 kV Lines	1.66	0.71			2.38
Erection of new 11 kV Lines	1.26	0.54			1.80
Bifurcation / Trifurcation of overloaded 11 kV feeders	94.78	40.62			135.41
Sub Total	133.74	57.32	0.00	0.00	191.05
<i>AT&C Loss reduction & reliability improvement</i>					
R-APDRP Part - A	72.00	0.00			72.00
R-APDRP Part - B	250.00	0.00			250.00
Sub Total	322.00	0.00	0.00	0.00	322.00
<i>Release of connections & replacement of old assets</i>					
Material for release of Non-AP connections & replacement of old assets	358.32	153.57			511.89
Release of AP connections	35.00	15.00		50.00	100.00
Sub Total	393.32	168.57	0.00	50.00	611.89
<i>Pilot projects</i>					
Smart Grid pilot in Panipat	5.85	2.51	8.36		16.72
AMR on large NDS and LT consumers	7.00	3.00			10.00
Sub Total	12.85	5.51	8.36	0.00	26.72
Grand Total	861.91	231.39	8.36	50.00	1151.66

*The above proposed capital expenditure plan for FY 2013-14 does not include spill over from FY 2012-13.

Funding for Capital Expenditure

- 1.41 For FY 2013-14, the capital expenditure is projected to be Rs 1151.66 Crores.
- 1.42 The following table shows the funding options for the proposed capital expenditure plan for FY 2013-14. Assumptions have been made on the following basis:
- Financing through customer contribution is taken to be Rs 50 Crores corresponding to the estimated cost of tube well connections;
 - Equity investments are proposed to be around 30% of the remaining project cost, amounting to 231.39 Crores;
 - Part funding for the Pilot Smart Grid project is envisaged through a grant from the Ministry of Power to the extent of Rs 8.36 Crores; and
 - The remaining balance of Rs 861.91 Crores is to be financed through debt.

Table 30: Funding Sources for capital expenditure (Rs. Cr)

Particulars	Previous Year (Actual)	Current Year (Estimated)	Ensuing Year (Projected)
	FY 2011-12	FY 2012-13	FY 2013-14
Total Capital Outlay	343.24	548.29	1151.66
Funding			
Equity (including share application money)	173.00	131.49	231.39
Consumer Contribution	89.76	75.00	50.00
Grants for Capital Expenditure	0.00	0.00	8.36
Loans from FI/Banks/etc	80.48	341.80	861.91
Total Funding	343.24	548.29	1151.66

Capital Work in Progress

- 1.43 Capital work in progress (CWIP) has been calculated as shown below:

Table 19: Summary of CWIP (Rs. Cr)

Particulars	Previous Year (Actual)	Current Year (Estimated)	Ensuing Year (Projected)
	FY 2011-12	FY 2012-13	FY 2013-14
Opening Balance of CWIP	943.26	749.12	357.50
Total capital outlay	343.24	548.29	1151.66
Net addition to GFA	537.39	939.90	938.17
Closing balance of CWIP	749.12	357.50	571.00

- 1.44 Capitalization of assets is assumed to be based on the following asset capitalisation schedule.

Table 20: Capitalisation Schedule

Details of Capitalization	2011-12	2012-13	2013-14
Percentage of Total Capex transferred to Fixed Asset	70%	70%	70%
Percentage of Total Capex transferred to CWIP	30%	30%	30%

Gross Fixed Asset

1.45 The following table shows the opening balance, addition and deletions in the fixed assets.

Table 21: Summary of GFA (Rs. Cr)

Particulars	Previous Year (Actual)	Current Year (Estimated)	Ensuing Year (Projected)
	FY 2011-12	FY 2012-13	FY 2013-14
Opening Balance	4435.86	4973.25	5723.56
Transfer from CWIP (Including Exp capitalised) during the year	765.45	939.90	938.17
Total	5201.31	5913.15	6661.72
Less: Retirement/ Disposal of assets	228.06	189.60	218.20
Net GFA at the end of the year	4973.25	5723.56	6443.52
Less: Total Assets funded from Consumer Contribution	469.50	454.73	504.73
GFA net of Consumer Contribution	4503.75	5268.82	5938.79

1.46 Asset-wise addition to GFA has been projected on the actual pattern of additions in FY 2010-11 and FY 2011-12. The following tables shows the break up of assets added during the projected years:

Table 22: Asset wise additions for FY 2012-13 (Rs. Cr)

S. No.	Asset Category	Opening Balances as on 1-4-2012	Addition during the year	Disposal during the year	Closing Balance as on 31-03-2013
1	Land	41.96	2.80	2.00	42.75
2	Building and Civil Structure	194.45	44.19	1.26	237.38
3	Plant & Machinery-T&D	4707.99	889.75	185.58	5412.16
4	Vehicles	11.42	0.36	0.49	11.29
5	Furniture and Fixtures	17.43	2.81	0.27	19.97
	Total	4973.25	939.90	189.60	5723.56

Table 23: Asset wise additions for FY 2013-14 (Rs. Cr)

S. No.	Asset Category	Opening Balances as on 1-4-2012	Addition during the year	Disposal during the year	Closing Balance as on 31-03-2013
1	Land	42.8	2.79	2.31	43.24
2	Building and Civil Structure	237.4	44.10	1.45	280.03
3	Plant & Machinery-T&D	5412.2	888.10	213.58	6086.68
4	Vehicles	11.3	.36	0.56	11.10
5	Furniture and Fixtures	20.0	2.80	0.31	22.47
	Total	5723.6	938.17	218.20	6443.52

Interest & Finance Charges

- 1.47 Interest expenses represent interest on loans taken to finance capital investment programs and to support working capital. For capex loans, the existing interest rates of lending institutions have been used to calculate the interest cost.
- 1.48 With respect to existing loans, the details of interest on existing loans are based on the actual. With respect to new loans, interest charged is based on current market conditions.
- 1.49 Total net interest expense (after capitalization) is projected to be Rs 1663.13 Cr for FY 2012-13 and Rs 1790.6 Cr for FY 2013-14, as shown below:

Table 24: Interest & Finance Charges (Rs. Cr)

S. No.	Particulars	Previous Year	Current Year	Ensuing Year
		(Actual) FY 2011-12	(Estimated) FY 2012-13	(Projected) FY 2013-14
1	Interest & Finance Charges	1247.18	1856.15	2016.10
2	Less: Interest Capitalized	164.22	193.02	225.50
	Net Interest and Finance Charges	1082.96	1663.13	1790.6

Depreciation

- 1.50 The Nigam has proposed depreciation charges of Rs 151.19 Cr and Rs 176.43 Cr for FY 2012-13 and FY 2013-14 respectively.

Operation & Maintenance Expenses

- 1.51 UHBVNL has estimated its O&M expenses (net of capitalization) for FY 2013-14 at Rs. 864.4 Cr. The actual O&M expenses for FY 2011-12 are Rs 590.86 Cr.

Table 25: Summary of O&M Expenses (Rs. Cr)

Particulars	Previous Year	Current Year	Ensuing Year
	(Actual) FY 2011-12	(Estimated) FY 2012-13	(Projected) FY 2013-14
R&M Expenses	41.76	88.25	109.34
Employee cost	505.04	581.43	670.95
A&G Expenses	56.78	61.88	67.48
Less: Expenses capitalized	12.72	14.53	16.63
Total O&M Cost (Net)	590.86	746.09	864.4

- 1.52 Increase in O&M expenses from FY 2011-12 to FY 2012-13 and FY 2013-14 has mainly been on account of the following factors:
- Increased Repair and & Maintenance cost as a result of increase in Gross Fixed Assets of the Nigam;
 - Increase in the working employee strength in FY 2012-13 and FY 2013-14; and

(c) Inflationary impact.

Employee Cost

1.53 The projections for employee costs has been made based on following main assumptions:

- Per annum growth in Salaries is assumed at 5.72%.
- Dearness allowance is 10% of Basic Pay and Dearness Pay
- Other allowance, Bonus & Incentive are assumed to be 12.58%, 0.14% and 0.19% of Basic Pay and Dearness Pay.

1.54 Employee cost is the most important constituent of O&M expenses. Employee cost includes the cost incurred on working employees as well as retirees. The cost of working employees includes salary, dearness allowance payable to them and other allowances such as HRA, LTC, medical reimbursement etc. In the case of retired employees and those retiring during the year, the Nigam has to discharge liabilities towards pension, gratuity and leave encashment benefits etc, as applicable.

1.55 Details of employee cost in FY 2011-12, FY 2012-13 and FY 2013-14 are given in the table below:

Table 26: Employee Cost (Rs. Cr)

Particulars		Previous Year (Actual) FY 2011-12	Current Year (Estimated) FY 2012-13	Ensuing Year (Projected) FY 2013-14
1	Salaries	236.80	255.04	287.35
2	Dearness Allowance	116.80	182.36	235.62
3	Other Allowances & Relief	33.61	25.50	28.73
4	Medical Expenses Reimbursement	4.93	5.33	5.60
5	Leave Travel Assistance	2.63	2.76	2.90
6	Fee & Honorarium	0.22	0.00	0.00
7	Incentives/Awards Including that In Partnership Project	-	-	-
8	Earned Leave Encashment	0.36	0.36	0.36
9	Tuition Fee Re-Imbursement	-	-	-
10	Leave Salary Contribution	0.11	0.11	0.12
11	Payment Under Workman's Compensation And Gratuity	0.13	0.14	0.15
12	Subsidised Electricity To Employees	3.04	3.18	3.32
13	Staff Welfare Expenses	2.71	2.85	2.99
	Total B	401.50	477.64	567.16
	Apprentice And Other Training Expenses			
	Payment/Contribution To PF Staff Pension And Gratuity			
1	Terminal Benefits	100.13	100.13	100.13
	a) Provident Fund Contribution			
	b) Provision for PF Fund - Invested			
	- Not Invested			

Particulars		Previous Year (Actual) FY 2011-12	Current Year (Estimated) FY 2012-13	Ensuing Year (Projected) FY 2013-14
	c) Pension Payments	0.20	0.21	0.22
	d) Gratuity Payment			
	e) Leave Encashment Payment			
2	Any Other Items			
	Total D	100.33	100.34	100.35
	Bonus/Ex-gratia to Employees	0.72	0.00	0.00
	Grand Total	505.04	581.43	670.95
	Chargeable To Construction Works	10.78	12.41	14.33
	Net Employee Expenses	494.26	569.01	656.63

Repair & Maintenance Expenses

- 1.56 The Nigam has projected the R&M expenses at base rate (1.65%) of average gross fixed assets for FY 2012-13 and base rate (1.65%) increased by increase in WPI during FY 2011-12 (8.93%) i.e. 1.80% multiplied by average of gross fixed assets for FY 2013-14. This is in line with the draft MYT regulations circulated for stakeholder comments.
- 1.57 The R&M expenses are thus estimated to be Rs 88.25 Cr and Rs 109.34 Cr for FY 2012-13 and FY 2013-14 respectively.

Table 27: Repairs & Maintenance Expenses (Rs. Cr)

S.No.	Particulars	Previous Year (Actual) FY 2011-12	Current Year (Estimated) FY 2012-13	Ensuing Year (Projected) FY 2013-14
1	Plant and Machinery	26.05	53.67	66.50
2	Building	1.56	4.04	5.01
3	Civil Works	0.00	0.01	0.01
4	Transformers and sub-stations			
5	Lines, Cables Net Works etc.	13.29	28.73	35.59
6	Vehicles	0.77	1.67	2.07
7	Furniture and Fixtures	0.02	0.02	0.02
8	Office Equipments	0.05	0.11	0.14
	Total	41.76	88.25	109.34

Administration & General Expenses

- 1.58 The Nigam has projected A&G expenses for FY 2012-13 and FY 2013-14 considering assumed increases in the different components of A&G expenses, based on past trends.
- 1.59 Capitalization of A&G expenses has been estimated on the same percentage to total A&G expenditure as in the last audited financial year i.e. FY 2011-12.
- 1.60 The table given below summarizes the actual A&G expenses for FY 2011-12 as well as projected A&G expenses for FY 2012-13 and FY 2013-14.

Table 28: A&G Expenses (Rs. Cr)

S. No.	Particulars	Previous Year (Actual) FY 2011-12	Current Year (Estimated) FY 2012-13	Ensuing Year (Projected) FY 2013-14
A)	Administration Expenses			
1	Rent, rates and taxes (Other than all taxes on income and profit)	2.45	2.63	2.83
2	Insurance of employees, assets, legal liability	0.49	0.53	0.58
3	Telephone, Postage, Telegram, Internet Charges	1.46	1.49	1.52
4	Incentive & Award To Employees/Outsiders	-	-	-
5	Legal, Professional and Consultancy fee	4.53	4.98	5.48
6	Conveyance And Travel (vehicle hiring, running)	16.04	17.72	19.58
7	Service Charges Paid To Outside Agencies	21.22	23.20	25.36
8	HERC Fee / Regulatory Expenses	1.00	1.00	1.00
	Sub-Total of Administrative Expenses	47.19	51.55	56.34
B)	Other Charges			
1	Fee And Subscriptions Books And Periodicals			
2	Printing And Stationery	1.83	2.01	2.21
3	Advertisement Expenses (Other Than Purchase Related) Exhibition & Demo.	0.86	0.95	1.04
4	Electricity & Water Charges To Offices	3.23	3.39	3.56
5	Any Other expenses	2.46	2.68	2.92
	Sub-Total of other charges	8.38	9.03	9.73
C)	Auditor's Fee	0.01	0.01	0.01
D)	Store/Material Related Expenses	1.19	1.29	1.39
E)	Taxes	0.01	0.01	0.01
F)	Total Charges	56.78	61.88	67.48
G)	Total Charges Chargeable To Capital Works	1.94	2.11	2.31
H)	Total Charges Chargeable to Revenue Expenses	54.84	59.77	65.17

1.61 The increase in A&G costs can be attributed to increase in the service charges and training regarding computerization etc. This will help in the better management and business operations making the employees efficient in their normal course work.

Reasonable Return / Return on Equity

1.62 The Nigam requests the Commission to provide a return on the equity at a rate of 14% as specified in Regulation 16 of the Tariff Regulation. This will be helpful in improving the financial health of the Nigam.

1.63 Return on Equity is a vital source of funding the capital expenditure planned by the utility. Moreover, disallowance of return on equity would put both the Discoms at a severe disadvantage for receiving interest subsidy from the Government of India, as per the guidelines and rules of the National Electricity Fund (Interest Subsidy Scheme) which is expected to become operational soon. The National Electricity Fund (NEF) is being set up to provide interest subsidy on loans to be disbursed to

Discoms and the preconditions for eligibility as well as amount of interest subsidy are linked to certain reform measures taken by the States. **Being allowed a return on equity is one of the important parameters (worth 5 marks) for judging Discoms for eligibility to obtain interest subsidy, and hence any disallowance of RoE makes the Haryana Discoms unduly disadvantaged, when compared with other state utilities.**

- 1.64 Reasonable return for UHBVNL amounts to Rs. 266.27 Cr for FY 2012-13 based on equity of Rs. 1901.90 Cr. For FY 2013-14, a reasonable return of Rs. 298.66 Cr against equity of Rs. 2133.29 Cr.
- 1.65 The Nigam requests the Commission to approve reasonable return/return on equity.

Table 29: Reasonable Return on Equity (Rs. Crores)

Particulars	Rate of Return	Current Year (Estimated) FY 2012-13	Ensuing Year (Projected) FY 2013-14
Shareholders' Funds	14%		
Share Capital		1901.90	2133.29
Total Equity		1901.90	2133.29
Return as % of Equity (14%)		266.27	298.66

Other Debits

- 1.66 Other debits basically include cost of trading activities, provision for doubtful debts, miscellaneous losses and write-off etc.
- 1.67 In a service business like the electricity sector where the consumer base is high, a large number of consumers default on payments and these amounts remain outstanding. In the books of UHBVN, the amount of old outstanding dues is a huge amount. Therefore, the Nigam has considered a provision for bad & doubtful debts under 'Other Debits', amounting to 1% of the revenue from sale of power to state consumers during the year.
- 1.68 The Nigam has made nominal assumptions for loss or obsolescence of stores, provision for amount of theft of property pending investigation, deferred revenue expenditure written off, etc. Details of other debits proposed by the Nigam for FY 2012-13 and FY 2013-14 are given below:

Table 30: Other Debits (Rs Cr)

S. No.	Particulars	Previous Year (Actual) FY 2011-12	Current Year (Estimated) FY 2012-13	Ensuing Year (Projected) FY 2013-14
1	Material Cost Variance			
2	Bad Debt Written Off / Provided For	0.25	0.27	0.30
3	Compensation for injury, death and damage	1.34	1.47	1.62
4	Loss of Obsolescence of Assets & Stores	0.19	0.22	0.25
5	Provision for amount recoverable from employees	0.06	0.06	0.07
6	Provision for amount of theft of property pending Investigation	0.89	1.06	1.28

7	Deferred Revenue expenditure Written Off	0.08	0.08	0.08
8	Provision for Bad & Doubtful Debts Others	23.20	45.75	55.27
9	Loss on sale of scrap	0.00	0.00	0.00
	Total	26.00	48.92	58.86

Total Expenditure

1.69 The total expenditure of the Nigam amounts to Rs 10230.02 Cr for FY 2012-13 and Rs 12337.20 Cr for FY 2013-14, as shown below:

Table 31: Total Expenditure (Rs Cr)

S. No.	Particulars	Previous Year (Actual) FY 2011-12	Current Year (Estimated) FY 2012-13	Ensuing Year (Projected) FY 2013-14
1	Purchase of Power from Own Stations	7306.11	8237.23	9820.27
2	Purchase of Power from Other Sources			
3	Intra-State Transmission Charges			
4	R&M Expense	41.76	88.25	109.34
5	Employee Expenses	505.04	581.43	670.95
6	A&G Expense	56.78	61.88	67.48
7	Net Prior Period Expenses	-0.89	0.00	0.00
8	Other Debits (including Provision for Bad debts)	26.00	48.92	58.86
9	Depreciation	135.54	151.19	175.03
10	Interest & Finance Charges (Gross)	1247.18	1268.67	1677.38
11	Less: Interest charges capitalized	176.94	193.02	225.50
12	Less: Other expenses capitalized	12.72	14.53	16.63
	Total	9142.46	10230.02	12337.20

Special Appropriations

Payment to HPGCL on account of Delayed Payment Charges

1.70 Due to the financial crunch in the Nigam, it has not been able to make payment on time to generators for power purchase. Due to delay in payment, HPGCL has raised delayed payment charges of Rs. 69.50 Cr. for the period from FY 2008-09 to FY 2011-2012. Thus, the Nigam requests the Hon'ble Commission to consider the same while approving the expenditure for FY 2013-14.

True up of Employee Expenses for FY 2011-12 including Terminal Benefits

1.71 The Nigam wishes to draw the Commission's attention to the difference in actual employee cost incurred and the amount approved earlier by the Commission for FY 2011-12, on account of terminal benefits. The approved employee cost for FY 2011-12 was Rs 232.55 Cr more than the actual amount which the Nigam has booked to its accounts for the year, the substantial chunk being the difference between regulatory approval of terminal benefits and actual payout.

Non-Tariff and Other Income

- 1.72 Non-Tariff Income except delayed payment surcharge and meter rent has been calculated by considering a year on year increase of 10 or 15% keeping in view recent trends of increase in Non Tariff Income. Meter rent has been computed on the basis of estimated addition to consumer base.
- 1.73 The Nigam has not projected delayed payment charges for FY 2012-13 and for FY 2013-14. The Nigam submits that delayed payment surcharge is collected against the receivables from the consumers that are not received in time. As there is a delay in receiving the revenue, the Nigam has to procure additional working capital. Therefore, the revenue received on account of delayed payment surcharges is not income of the Nigam, rather it's a carrying cost recovered from consumers to pay the interest on the increased portion of working capital which occur because of delay in receiving the revenue. Since the Commission approves the working capital for the Nigam on a normative basis, assuming that all receivables of the Commission are received in time, it is requested that the revenue from delayed payment surcharge should not be considered as income of the Nigam.
- 1.74 No projection has been made for holding cost of FSA, since neither any revenue nor any expenditure on account of FSA is being included in the ARR review process. All claims relating to FSA would be submitted to the Commission separately for consideration as part of the separate FSA review.

Table 32: Non-Tariff Income (Rs. Cr)

S. No.	Particulars	Previous Year	Current Year	Ensuing Year
		(Actual) FY 2011-12	(Estimated) FY 2012-13	(Projected) FY 2013-14
A	Income from Investment, Fixed & Call Deposits			
1	Interest Income from Investments	2.67	2.67	2.67
2	Interest on fixed deposits	0.14	0.14	0.15
3	Interest from Banks other than Fixed Deposits	0.00	0.00	0.00
A	Sub-Total	2.81	2.82	2.83
B	Non Tariff Income			
1	Interest on loans and Advances to staff	2.72	0.00	0.00
2	Income from Trading (other than Electricity)	1.95	2.05	2.15
3	Income/Fee/Collection against staff welfare activities	0.04	0.04	0.04
4	Miscellaneous receipts (Penalties and Fines)	13.18	13.83	14.53
5	Rental from Staff Quarters	0.38	0.40	0.42
6	Delayed payment charges from consumers	20.32	0.00	0.00
7	Meter Rent	25.82	28.40	31.24
8	Recovery from theft of energy	13.13	16.95	20.44
9	Misc. charges from consumers	28.10	29.03	30.00
10	Income from Other Business	19.08	23.84	29.81
11	Excess found on physical verification of Stock	0.25	0.25	0.25
12	Discount for timely payment of Energy Charges	17.58	0.00	0.00
	Holding cost of FSA	58.75	0.00	0.00
B	Sub-Total	201.28	114.79	128.87
	TOTAL (A+B)	204.09	117.61	131.69

Accumulated Gap on account of Regulatory Assets

- 1.75 In its previous ARR & Tariff Orders, the Hon'ble Commission has allowed certain regulatory assets to the Nigam in view of the large unmet revenue gap which was not addressed through an adequate tariff hike. As per the ARR & Tariff Order of FY 2012-13, the accumulated revenue gap of UHBVN that remained unaddressed even after the tariff hike notified vide the ARR & Tariff Order of FY 2012-13 was as substantial as Rs 2027.16 Crores.
- 1.76 The Nigam requests the Commission to allow this entire amount to be amortized vide recovery from consumers in the form of a Regulatory Asset Surcharge (details in Section 6 of this Volume) since the Nigam currently has no means to meet this huge deficit. Because of its heavily constrained financial situation, the Nigam is not able to raise funds through borrowing since banks are not willing to lend to the Nigam in view of its poor financial health. Hence, the Nigam requests the Commission to either allow the entire past regulatory gap to be recovered from consumers through a special one-time levy.
- 1.77 In this context, clause 8.2.2 of the National Tariff Policy also categorically mandates that regulatory assets should not be carried forward for more than three years, and that the carrying cost of regulatory assets (i.e. interest on the working capital borrowing) should be allowed to the utilities.

“8.2.2. The facility of a regulatory asset has been adopted by some Regulatory Commissions in the past to limit tariff impact in a particular year. This should be done only as exception, and subject to the following guidelines:

a. The circumstances should be clearly defined through regulations, and should only include natural causes or force majeure conditions. Under business as usual conditions, the opening balances of uncovered gap must be covered through transition financing arrangement or capital restructuring;

b. Carrying cost of Regulatory Asset should be allowed to the utilities;

c. Recovery of Regulatory Asset should be time-bound and within a period not exceeding three years at the most and preferably within control period;

d. The use of the facility of Regulatory Asset should not be repetitive.

e. In cases where regulatory asset is proposed to be adopted, it should be ensured that the return on equity should not become unreasonably low in any year so that the capability of the licensee to borrow is not adversely affected.”

True up for FY 2011-12 in compliance with APTEL Order

- 1.78 In its judgment in Appeal No. 204 of 2010 (Faridabad Industrial Association vs HERC & Others) dated 11 August 2011, the Hon'ble Appellate Tribunal for Electricity (APTEL) has directed the Commission to true up the financials including

capital expenditure, depreciation, interest and finance charges, O&M expenses, etc. of the distribution licensees.

- 1.79 The table below provides an overview of the difference between the approved expenditure for FY 2011-12 under consideration vis-à-vis the actual expenditure incurred by the Nigam, under all heads except power purchase cost and employee cost since these two are already trued up by the Commission in the form of FSA and special appropriations respectively. Subject to prudence checks by the Commission, it is requested that this difference in approved and actual expenditure may be allowed to the Nigam to the extent decided by the Commission.

Table 33 True up for FY 2011-12 as per APTEL Order (Rs. Cr)

S. No.	Particulars	Approved Expenditure	Actual Expenditure	Difference
1.	R&M Expenses	88.59	41.76	-46.83
2.	A&G Expenses	56.70	54.84	-1.86
3.	Interest cost on borrowings:	435.49	1082.96	647.47
4.	Depreciation	135.27	135.54	0.27
5.	Other Expenditure	0.00	26.00	26.00
6.	Income Tax / FBT provisions	0.00	0.00	0.00
7.	Net Prior Period Expenses	0.00	-0.89	-0.89
8.	Total	716.06	1340.20	624.15

Aggregate Revenue Requirement

- 1.80 The following table summarizes the aggregate revenue requirement of UHBVN for FY 2013-14.

Table 34: Summary of Aggregate Revenue Requirement (Rs. Cr)

S. No.	Particulars	Previous Year (Actual) FY 2011-12	Current Year (Estimated) FY 2012-13	Ensuing Year (Projected) FY 2013-14
	Power Purchase (MU)	17737	20127	23988
	Sale of Power outside State (MU)	992	1630	2880
	Sale of Power within State (MU)	11521	12993	15294
	Distribution Loss %	31.2%	29.8%	27.54%
1	Receipts			
a	Revenue from sale of power & Misc. Charges	3810.89	4858.74	6161.12
b	Revenue subsidy from Govt. (excl FSA subsidy)	1998.78	2968.03	3425.63
c	Revenue against regulatory assets	1311.29	0.00	0.00
d	Grant from GoI for AT&C loss reduction	0.00	0.00	12.00
	Total Receipts	7120.96	7826.77	9598.75
2	Expenditure			
a	Purchase of Power from Own Stations			
b	Purchase of Power from Other Sources			
c	Intra-State & Inter-State Transmission Charges	7306.11	8237.23	9820.27

S. No.	Particulars	Previous Year (Actual) FY 2011-12	Current Year (Estimated) FY 2012-13	Ensuing Year (Projected) FY 2013-14
d	R&M Expense	41.76	77.63	88.58
e	Employee Expenses	505.04	581.43	670.95
f	A&G Expense	56.78	61.88	67.48
g	Depreciation	135.54	151.19	175.03
h	Interest & Finance Charges	1247.18	1268.67	1677.38
i	Less: Interest & other expenses capitalized	176.94	207.54	242.13
j	Other Debits (including Provision for Bad debts)	26.00	48.92	58.86
k	Extraordinary Items	0.00	0.00	0.00
l	Other (Misc) - Net prior period expenses	-0.89	0.00	0.00
	Total	9140.57	10230.02	12337.09
3	Reasonable Return		266.27	298.66
4	Other Income	0.00	0.00	0.00
5	Annual Revenue Requirement (2)+(3)-(4)	9140.57	10496.29	12635.86
6	Revenue Surplus / (Gap) for the Year	-2019.61	-2669.51	-3037.11
7	True up for employee cost (including terminal benefits) for FY 2010-11			-232.55
8	True-up of Delayed Payment Surcharge			69.50
9	Surplus(+) / Shortfall (-) after Adjusting for Past True Up	-2019.61	-2669.51	-2874.06
10	Implementation of APTEL judgment in Appeal 204 of 2010			
	True up of expenses for 2011-12			624.15
11	Consolidated Revenue Surplus / (Gap) at the end of FY 2012-13		(8) - (9)	-3498.21

Consolidated Revenue Gap and Tariff Proposal

1.81 The table below shows the cumulative revenue gap faced by the Nigam, which includes the revenue gap projected for FY 2013-14 along with true-up of Employee Cost and Terminal Benefits for FY 2011-12 and true up of other expenses (except power purchase cost and employee cost) of FY 2011-12 as per the directions given by Hon'ble APTEL in Appeal 204 of 2010.

Table 35: Consolidated Revenue Gap (Rs Cr)

S. No.	Description	Current Year (Estimated) FY 2012-13	Ensuing Year (Projected) FY 2013-14
A	Aggregate Revenue Requirement	10496.29	12635.86
B	Revenue from Tariff and Other Miscellaneous Charges	4858.74	6161.12
C	Subsidy by Government of Haryana	2968.03	3425.63
D	Grant from GoI for AT&C loss reduction	0.00	12.00
D	Net Revenue Gap (A - B - C)	2669.51	3037.15
E	True up for Terminal Benefits and Employee Cost for FY 2011-12		-232.55
F		-	69.50
G	Surplus(+) / Shortfall (-) after Adjusting for Past True Up (D - E)	-2669.51	-2874.06
H	Implementation of APTEL judgment in Appeal 204 of 2010: True-up for FY 2011-12		624.15
I	Consolidated Revenue Gap at the end of FY 2013-14¹ (F - G)		-3498.21

- 1.82 It is pertinent to mention here the judgment of the Hon'ble Appellate Tribunal for Electricity (APTEL) in OP No. 1 of 2011 dated 11 November, 2011, wherein the Hon'ble APTEL has treated as a suo-moto petition a letter received from the Ministry of Power highlighting the problems of inadequate and infrequent electricity tariff revisions in various states of the country and the consequent poor financial health of the State distribution utilities. In this regard, the Hon'ble APTEL has directed the following to State Electricity Regulatory Commissions:

“Every State Commission has to ensure that Annual Performance Review (APR), True up of past expenses, Annual Revenue Requirement and tariff determination is conducted year to year basis (...)”

“In determination of ARR/tariff, the revenue gaps ought not to be left and Regulatory Asset should not be created as a matter of course except where it is justifiable, in accordance with the Tariff Policy and the Regulations. The recovery of the Regulatory Asset should be time bound and within a period not exceeding three years at the most and preferably within Control Period. Carrying cost of the Regulatory Asset should be allowed to the utilities in the ARR of the year in which the Regulatory Assets are created to avoid problem of cash flow to the distribution licensee. Carrying cost of the Regulatory Asset should be allowed to the utilities in the ARR of the year in which the Regulatory Assets are created to avoid problem of cash flow to the distribution licensee.”

“Truing up should be carried out regularly and preferably every year. For example truing up for the financial year 2009-10 should be carried out along with the ARR and tariff determination for the financial year 2011-12.”

- 1.83 In view of the Hon'ble APTEL's judgment, the Nigam prays to the Commission to carry out a true up of FY 2011-12 and pass appropriate orders to cover the

¹ Excluding true up, if any, of revenue gap incurred in FY 2011-12

accumulated revenue gaps of the Nigam and address the poor financial health of the utility. It may be appreciated that the current financial distress of the distribution utilities of Haryana is attributable to a large extent to the electricity tariff being woefully lower than the cost of supplying power, thereby rendering the electricity distribution business utterly unviable.

Subsidy Requirement

- 1.84 The subsidy required for FY 2012-13 and FY 2013-14 has been worked out in line with the methodology adopted for subsidy estimation in the Financial Restructuring Plan prepared for the Haryana Discoms. Subsidy has estimated by calculating the revenue gap between the projected regulator-approved Average Cost of Supply (ACoS) of the Nigam and the assessed revenue from the sale of power to the Agriculture category.

Table 36: Projected Subsidy Requirement for FY 2013-14

Description	Formula	FY 2013-14
Net Expenditure	A	12337
Sales (MU)	B	15294
ACoS (As per Discom)	C = B/A*10	8.07
IWC considered	D	1330
WC Allowed	E	934
IWC allowed	F = 12.75% * E	119
Interest on Capex Loan considered	G	214
Interest on Capex Loan Allowed	H	214
Net Expenditure as per HERC	I = A-D-G+E+H	11126
ACoS (As per HERC)	J= I/B*10	7.27
Agriculture tariff	K	0.25
Gap	L = J - K	7.02
Agriculture Sales (MU) considered	M	5133
Agriculture Sales (MU) allowed	N = 95% of M	4876
Amount of RE Subsidy (Rs. Cr)	O = L*N/10	3425.63

- 1.85 The Commission is requested to approve adequate RE subsidy for FY 2013-14 in order to help the utility meet the category-wise cost of supply incurred in supplying power to the agricultural sector.
- 1.86 The Nigam has requested the Commission for suitable orders to mitigate the gap for FY 2013-14 and to allow recovery of the un-recovered revenue gap for FY 2009-10, 2010-11 and FY 2011-12.
- 1.87 Further, the Nigam has proposed certain changes/proposals for the tariff structure for the kind consideration of the Hon'ble Commission, on the following matters:
- (a) Proposal for implementation of Time of Day (ToD) Tariff in the State of Haryana

- (b) Single Point Supply to Group Housing Societies and Residential Colonies or Office/Commercial cum Residential Complexes of Employers/Developers;
- (c) Reliability Charges for uninterrupted supply;
- (d) Measures to prevent gaming in Open Access;
- (e) Plea to pass suitable order(s) for levy of Fuel Surcharge Adjustment for FY 2011-12; and
- (f) Plea to pass suitable order(s) for levy of Regulatory Asset Surcharge to recover the outstanding regulatory assets at the of FY 2012-13, as notified in the tariff order for FY 2012-13 dated 31 March 2012.