

INTRODUCTION

- 1.1 The Distribution licensee viz., BSES Yamuna Power Limited (BYPL) has filed petitions for true up for the FY 2009-10 and Aggregate Revenue Requirements (ARR) for the FY 2011-12.
- 1.2 This staff paper contains summary of the petition filed by BYPL for true up of FY 2009-10 (based on audited accounts) and ARR & Tariff of FY 2011-12 (projections). For the purpose of comparison of trends, the staff paper also contains the figures for true up of FY 2007-08 and revised ARR of FY 2009-10 as approved by the Commission in the tariff order of FY 2009-10 and figures for FY 2008-09 and FY 2010-11 as approved by the Commission in the MYT Order.
- 1.3 As per the MYT Regulations, Tariff for the year 2011-12 shall be based on the ARR approved by the Commission, which broadly has the following components:
 - (a) Power Purchase cost
 - (b) Operation and Maintenance (O&M) expenses
 - (i) Employee expenses
 - (ii) Administrative & General expenses
 - (iii) Repair & Maintenance expenses
 - (c) Return on capital employed
 - (d) Depreciation
 - (e) Income tax
- 1.4 The Commission shall also true up the uncontrollable parameters (Sales and Power Purchase) vis-à-vis the audited account of distribution licensees after prudence check for the year 2009-10.
- 1.5 In so far as the controllable parameters for the FY 2009-10 are concerned, any variation (up or down) on account of O&M expenses is completely to the account of the licensee and is not trued-up (excluding impact of Sixth pay Commission). Depreciation and ROCE shall be trued-up at the end of the control period based on the capital expenditure and capitalization undertaken by the licensees for each year of the control period viz-a-viz approved capital expenditure and capitalization by the Commission in the MYT order. Income Tax shall be considered at actual in accordance with the Regulations.

Energy Sales

- 1.6 In its petition, BYPL has submitted that its actual energy sales in FY 2009-10 were 4330 MU compared to energy sales of 4445 MU approved by the Commission in its

Tariff Order for FY 2009-10 issued in May 2009. BYPL in its tariff petition has revised estimates of energy sales as 4688 MU in FY 2010-11 and projected the same at 5244 MU in FY 2011-12.

- 1.7 Since sales is treated as an uncontrollable factor, BYPL has requested the Commission to approve the revised estimates for FY2010-11 and true-up for FY2009-10 based on its audited accounts.

Table 1: Energy sales in FY 2007-08, FY 2008-09, FY 2009-10 (actual), FY 2010-11 and FY 2011-12 (projected) along with the approved sales

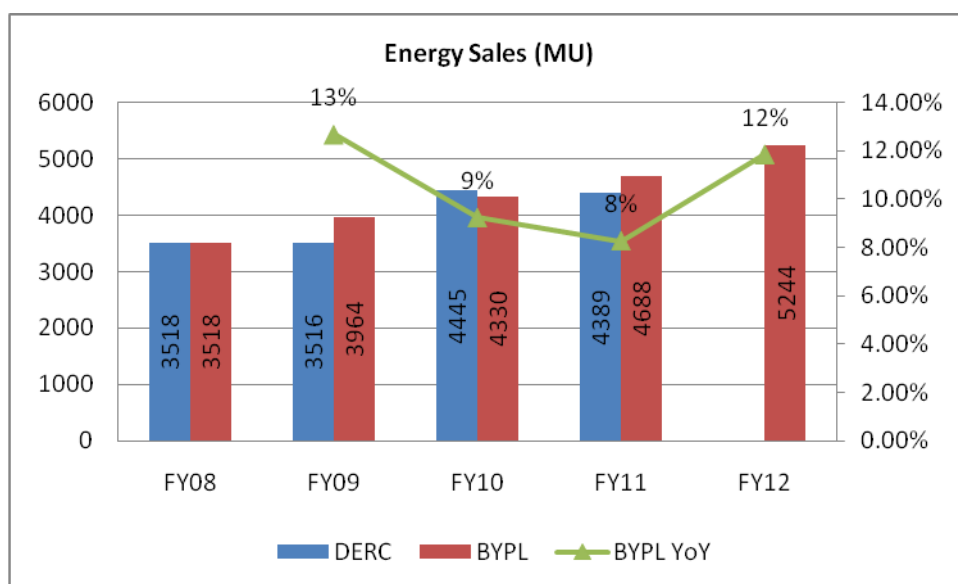
Sale of Energy (MU)	FY 2007-08	FY 2008-09		FY 2009-10		FY 2010-11		FY 2011-12
	Actual Sales Trued Up by Commission	Approved in the MYT order	Actual Sales as per True Up petition	Approved in the May 2009 order	Actual Sales as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Domestic	1714	1631	1917	2193	2205	1817	2440	2723
Non Domestic	1077	1281	1293	1476	1281	1651	1351	1533
Industrial	434	386	449	482	455	392	429	429
Agricultural	1	0.30	0	0	0	0	0	0
Railways	0	0	0	0	0	0	0	0
DMRC	50	33	65	80	81	316	91	150
Street Lighting	76	103	85	103	92	129	89	94
Others	166	82	155	111	216	83	288	316
Total Sales	3518	3516	3964	4445	4330	4389	4688	5244

- 1.8 The category wise annual sales growth calculated in reference to BYPL's submissions is given in Table 2 below:

Table 2: Annual Sales Growth Rates from BYPL Submissions

Growth Rate	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Actual	Actual	Projected	Projected
Domestic	11.84%	15.02%	10.66%	11.60%
Non Domestic	20.06%	-0.93%	5.46%	13.47%
Industrial	3.46%	1.34%	-5.71%	0.00%
Agricultural	-	-	-	-
Railways	-	-	-	-
DMRC	30.00%	24.62%	12.35%	64.84%
Street Lighting	11.84%	8.24%	-3.26%	5.62%
Others	-6.63%	39.35%	33.33%	9.72%
Total Sales	12.68%	9.23%	8.27%	11.86%

Figure 1: Energy Sales (MUs) (Approved, Actuals, Revised Estimates)



AT&C Losses

1.9 In its petition, BYPL has submitted the actual AT&C loss/ Distribution loss figures for FY 2009-10, which are better than the loss level targets set in the MYT Order. As per the profit sharing mechanism laid down in the MYT Regulations, the gains from this over-achievement of target are to be shared between the consumers and the Distribution Licensee. BYPL has also submitted revised estimates of AT&C loss / Distribution loss for FY 2010-11 and projections for FY 2011-12.

Table 3: Actual vs. approved figures for FY 2007-08, FY 2008-09, FY 2009-10 and projections for FY 2010-11 and FY 2011-12

Particulars	FY 2007-08		FY 2008-09		FY 2009-10		FY 2010-11		FY 2011-12
	MYT Order	Actual Trued Up by the Commission	Approved in MYT Order	Actual as per True Up petition	Approved in the May 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Distribution loss	34.11%	33.42%	29.99%	24.95%	25.89%	24.12%	21.61%	22.50%	20.20%
Collection Efficiency	99.00%	104.79%	99.25%	101.23%	99.50%	101.34%	99.50%	102.50%	99.50%
AT&C Loss	34.77%	30.23%	30.52%	24.02%	26.26%	23.11%	22.00%	20.64%	20.64%

Figure 2: AT&C Loss (Approved, Actuals, Revised Estimates and Projections)

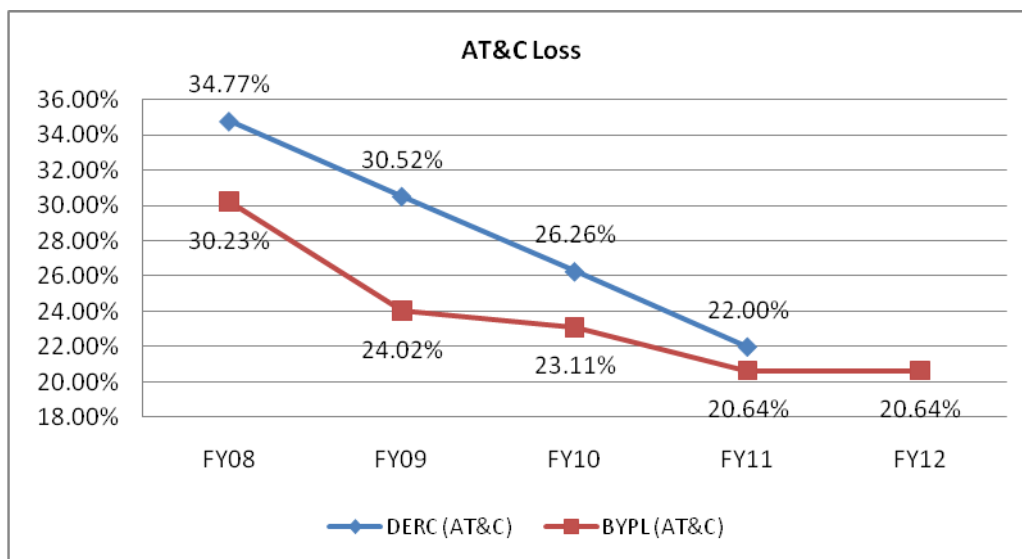
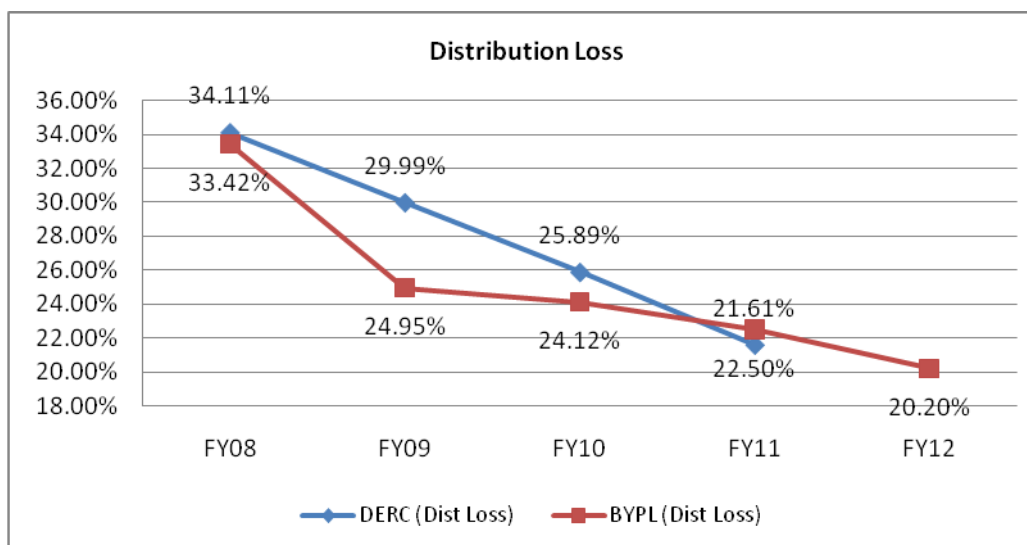


Figure 3: Distribution Loss (Approved, Actuals, Revised Estimates and Projections)



1.10 BYPL has submitted the benefit on account of over-achievement of AT&C losses for FY 2009-10, along with figures submitted in the petitions for FY 2007-08, FY 2008-09 as given in Table 4:

Table 4: Benefits on account of overachievement of AT&C loss targets for FY 2007-08, FY 2008-09 and FY 2009-10

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved/ trued up in the May 2009 order	As per true-up petition	As per true-up petition	Revised estimates as per petition	Estimates as per petition
Total Amount on account of over-achievement of AT&C losses (Rs Cr)	105.48	154.17	80.75	37.2	-
Benefit to be retained by BYPL (Rs Cr)	52.74	77.085	40.38	18.6	-
Benefit to be transferred to contingency reserves	52.74	77.085	40.38	18.6	-

Power Purchase Requirement

- 1.11 The quantum of power purchase is decided by the expected sales of energy by the Licensee, as well as the loss levels projected/approved. Higher expected sales require a greater quantum of power to be purchased. Similarly, higher loss levels also require a proportionately greater amount of power purchase by the Licensee because it needs to meet the expected sales (in MU) after accounting for various losses in the process of supplying electricity.
- 1.12 The energy sales for a year is grossed up by the loss levels for that year, to arrive at the required quantum of power purchase for that year to supply own consumers in the following manner:

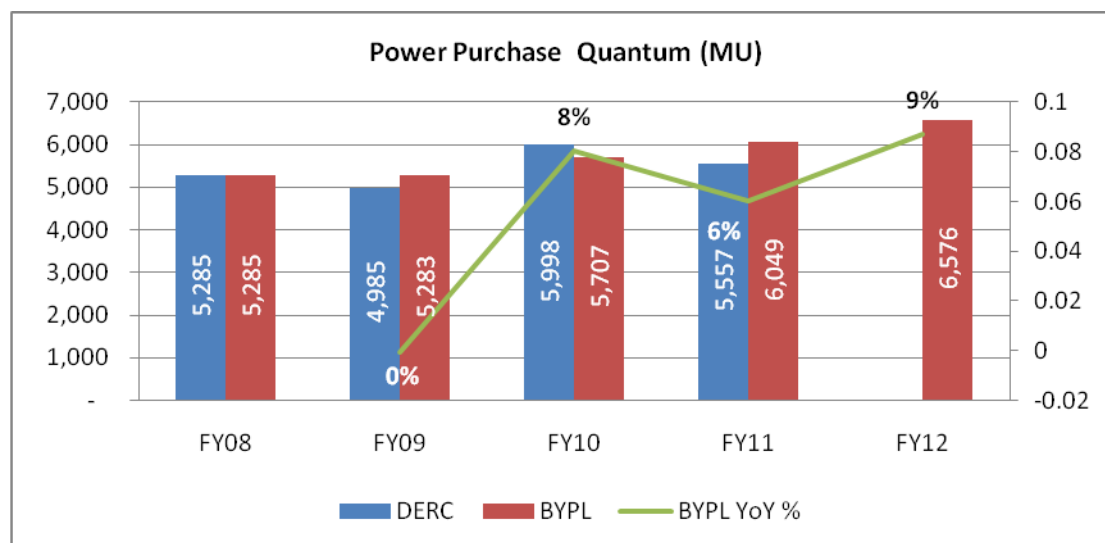
$$\text{Quantum of power purchase (MU)} = \frac{\text{Energy sales}}{(1 - \text{Distribution Loss (\%)})}$$

- 1.13 The Table 5 below shows the actual sales, loss levels and power purchase for the year FY 2007-08, FY 2008-09, FY 2009-10, and the projections for FY 2010-11 and FY 2011-12 as submitted by the BYPL.

Table 5: Power Purchase Requirement for FY 2007-08, FY 2008-09, FY 2009-10 projections for FY 2010-11 & FY 2011-12

Particulars	FY 2007-08	FY 2008-09		FY 2009-10		FY 2010-11		FY 2011-12
	Approved/ trued up in the May 2009 order	MYT Order	True Up petition	Approved in the May 2009 order	True Up petition	MYT Order	Revised estimates	Revised estimates
Sales (MU)	3518	3516	3964	4445	4330.1	4389	4688	5244
Distribution loss	33.42%	29.99%	24.95%	25.89%	24.12%	21.61%	22.50%	20.20%
Power Purchase Discom periphery (MU)	5283.87	5022.14	5281.81	5997.84	5706.72	5598.93	6049.1	6575.7

Figure 4: Power Purchase Quantum (MU) (Approved, Actuals, Revised Estimates and Projections)



Power Purchase Cost

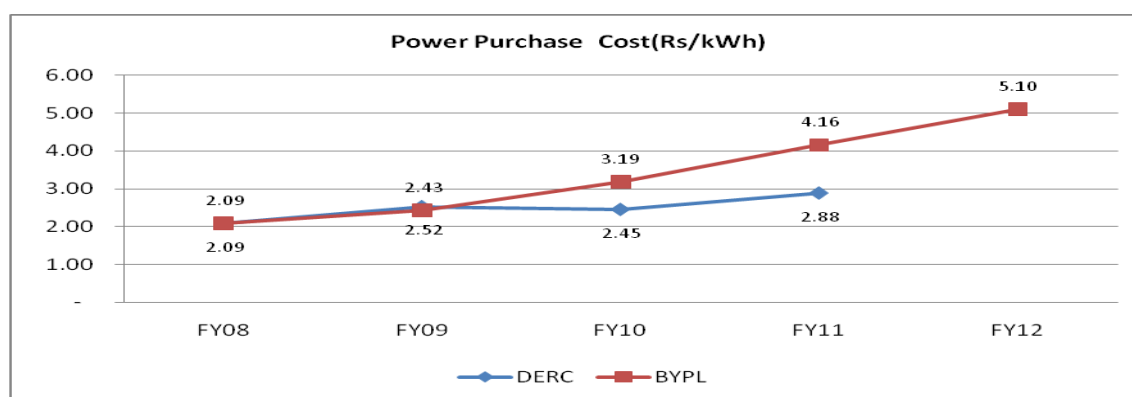
1.14 As per the MYT Regulations, 2007, power purchase cost is uncontrollable and the Licensee is allowed to recover the cost of power procurement from sources approved by the Commission for supply to its consumers. The following power procurement sources are approved by the Commission:

- (a) Intra-state and Inter-state Trading Licensees
- (b) Bilateral Purchases
- (c) Bulk Suppliers
- (d) State generators
- (e) Independent Power Producers
- (f) Central generating stations
- (g) Non-conventional energy generators
- (h) Any generation business of the Distribution Licensee

1.15 BYPL has shown that as against an estimated average power purchase cost of Rs 2.45/Unit by the Hon'ble Commission, the utility has actually incurred Rs 3.19/Unit in FY 2009-10. Hence, BYPL incurred a higher power purchase cost (Rs. 1818.57 Cr) in FY 2009-10 than the amount approved by the Commission in its Order for True-Up for FY 2007-08 and Tariff for FY 2009-10 (Rs. 1470.91 Cr).

1.16 BYPL has estimated revised power purchase cost for FY 2010-11 at Rs 2514 Cr (average power purchase cost of Rs 4.16/unit) as against Rs 1612.45 Cr as approved in the MYT order (average power purchase cost of Rs 2.9/Unit). BYPL has also estimated power purchase cost for FY 2011-12 at Rs 3355.71 Cr (average power purchase cost of Rs 5.10 /unit).

Figure 5: Power Purchase Cost (Rs/kWh) (Approved, Actuals, Revised Estimates and Projections)



1.17 The tables below show the power purchase quantum and rate of purchase for FY 2007-08, FY 2008-09, FY 2009-10 (actuals), FY 2010-11 and FY 2011-12 (projected).

Table 6: Power purchase for FY 2007-08 (as approved in order issued in May 2009), FY 2008-09 (actuals) along with approved in the MYT Order

Source	FY 2007-08			FY 2008-09								
	Approved/ trued up in the May 2009 order			Approved in the MYT Order of 23 Feb 2008			Actual as per True Up Petition			Diff in %		
	MU Purchased /generated (ex-bus)	All Charges Total in Rs Crs	Avg rate (Rs./kwh)	MU Purchased /generated (ex-bus)	All Charges Total in Rs Crs	Avg rate (Rs./kwh)	MU Purchased /generated (ex-bus)	All Charges Total in Rs Crs	Avg rate (Rs./kwh)	MU Purchased /generated (ex-bus)	All Charges Total in Rs Crs	Avg rate (Rs./kwh)
NTPC	4,665.34	1,015.81	2.18	4,207.88	966.88	2.30	4,481.27	1,152.90	2.57	5%	17%	12%
NHPC	438.80	80.45	1.83	425.61	74.25	1.74	447.54	79.98	1.79	5%	8%	2%
TEHRI HEP	77.95	35.07	4.50	82.59	28.91	3.50	95.13	43.33	4.55	15%	50%	30%
NJPC (SATLUJ)	178.11	46.27	2.60	177.12	49.07	2.77	186.27	51.64	2.77	5%	5%	0%
TALA HEP	25.71	4.71	1.83	31.88	11.16	3.50	30.58	5.63	1.84	-4%	-50%	-47%
Nuclear	21.53	4.64	2.16	45.43	9.44	2.08	26.32	5.66	2.15	-42%	-40%	3%
SGS	1,810.95	434.16	2.40	1,664.23	386.73	2.32	1,306.14	367.43	2.81	-22%	-5%	21%
Future Stations	-	-	-	483.04	138.08	2.86	70.84	22.73	3.21	-69%	-69%	-2%
Power Purchase from other Sources	303.21	211.63	6.98	251.11	137.80	5.49	54.96	36.93	6.72	-78%	-73%	22%
Power Sold to other Sources	1,967.78	870.81	4.43	2,083.37	633.14	3.04	1,139.92	597.08	5.24	-45%	-6%	72%
Other payments made	-	-	-	-	-	-	-	(34.84)	-			
GRAND TOTAL	5,553.81	961.93	1.73	5,285.54	1,169.18	2.21	5,559.14	1,134.31	2.04	5%	-3%	-8%
Inter-State transmission losses/ charges	385.26	86.79	-	193.41	53.30	-	166.54	103.47	-	-14%	94%	
Intra-State transmission losses/ charges		53.22	-	69.87	43.35	-	110.00	44.22	-	57%	2%	
SLDC Fees & Charges	-	-	-	-	2.01	-	-	-	-			
Total energy input to Distribution Company system	5,284.74	1,101.94	2.09#	5022.26	1,267.84	2.52#	5,282.59	1,282.00	2.43#	5%	1%	-4%

Inclusive of transmission charges

Table 7: Power purchase for FY 2009-10 (revised estimates) along with approved in the Tariff order for FY 2009-10

Source	FY 2009-10								
	Approved in May 2009 Order			Actuals as per True Up Petition			Diff in %		
	MU Purchased /generated (ex-bus)	All Charges Total in Rs Crs	Avg rate (Rs./kwh)	MU Purchased /generated (ex-bus)	All Charges Total in Rs Crs	Avg rate (Rs./kwh)	MU Purchased /generated (ex-bus)	All Charges Total in Rs Crs	Avg rate (Rs./kwh)
NTPC	4,038.37	981.66	2.43	4,196.50	1,147.52	2.73	4%	17%	12%
NHPC	438.43	83.03	1.89	438.00	95.67	2.18	0%	15%	15%
TEHRI HEP	76.70	36.13	4.71	62.32	36.58	5.87	-19%	1%	25%
NJPC (SATLUJ)	192.58	51.54	2.68	195.72	51.68	2.64	2%	0%	-1%
TALA HEP	35.09	6.58	1.87	26.66	4.90	1.84	-24%	-26%	-2%
Nuclear	47.66	10.00	2.10	25.12	5.54	2.21	-47%	-45%	5%
SGS	1,306.49	333.33	2.55	1,194.44	336.29	2.82	-9%	1%	10%
Future Stations	1,145.17	327.94	2.86	243.02	75.42	3.10	-79%	-77%	8%
Power Purchase from other Sources	382.04	175.31	4.59	567.22	263.29	4.64	48%	50%	1%
Power Sold to other Sources	1,392.99	680.85	4.89	922.41	366.79	3.98	-34%	-46%	-19%
Other payments made	-	-	-	-	4.96	-			
GRAND TOTAL	6,269.55	1,324.68	2.11	6,026.59	1,655.06	2.75	-4%	25%	30%
Inter-State transmission losses/ charges	175.90	99.87	0.00	219.76	118.08	-	25%	18%	-
Intra-State transmission losses/ charges	95.43	44.53	0.00	100.09	45.43**	-	5%	-2%	-
SLDC Fees and Charges	0.00	1.87	0.00	-	-	-	-	-	-
Total energy input to Distribution Company system	5,998.22	1,470.95	2.45*	5,706.74	1,818.57	3.19*	-5%	24%	30%

*Inclusive of transmission charges **inclusive of SLDC charges

Table 8: Power purchase for FY 2010-11 and FY 2011-12 (proposed) along with approved in the MYT Order

Source	FY 2010-11									FY 2011-12		
	Approved in the MYT Order			Revised Estimates as per petition			Diff in %			Estimates as per petition		
	MU Purchased /generated (ex-bus)	All Charges Total in Rs Crs	Avg rate (Rs./kwh)	MU Purchased /generated (ex-bus)	All Charges Total in Rs Crs	Avg rate (Rs./kwh)	MU Purchased /generated (ex-bus)	All Charges Total in Rs Crs	Avg rate (Rs./kwh)	MU Purchased /generated (ex-bus)	All Charges Total in Rs Crs	Avg rate (Rs./kwh)
NTPC	3883.55	928.88	2.39	3,590.52	953.65	2.66	-8%	3%	11%	3,915.55	1,280.42	3.27
NHPC	425.61	74.25	1.74	441.44	129.13	2.93	4%	74%	68%	409.19	96.71	2.36
TEHRI HEP	82.59	28.91	3.50	88.38	38.63	4.37	7%	34%	25%	68.17	35.38	5.19
NJPC (SATLUJ)	177.12	49.07	2.77	184.70	47.72	2.58	4%	-3%	-7%	170.11	53.79	3.16
TALA HEP	31.88	11.16	3.50	28.99	5.33	1.84	-9%	-52%	-47%	18.11	3.33	1.84
Nuclear	45.43	9.63	2.12	48.17	10.15	2.11	6%	5%	-1%	34.64	8.10	2.34
SGS	1443.57	345.95	2.40	1,029.96	338.61	3.29	-29%	-2%	37%	887.25	318.04	3.58
Future Stations	1354.79	410.19	3.03	1518.29	577.23	3.80	12%	41%	26%	3233.98	1262.91	3.91
Power Purchase from other Sources	279.95	153.62	5.49	1426.30	713.63	5.00	409%	365%	-9%	23.16	11.59	5.00
Power Sold to other Sources	1815.57	592.09	3.26	1808.27	561.55	3.11	0%	-5%	-5%	1790.44	413.56	2.31
Other payments made	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	0.00	350.69	0.00
GRAND TOTAL	5908.93	1419.58	2.40	6548.48	2252.52	3.44	11%	59%	43%	6969.71	3007.40	4.31
Inter-State transmission losses/charges	236.64	91.41	-	390.83	162.44	-	12%	59%	42%	275.96	209.08	-
Intra-State transmission losses/charges	73.25	101.46	-	108.56	98.93	-	65%	78%	-	118.09	139.24	-
SLDC Fees and Charges	-	1.92	-	0.00	0.00	-	48%	-2%	-	0.00	0.00	-
Total energy input to Distribution Company system	5599.04	1612.45	2.88*	6049.09	2513.89	4.16*	8%	56%	44%	6575.66	3355.71	5.10*

* Inclusive of transmission charges

Operation & Maintenance (O&M) Expense

1.18 The Commission has approved the O&M expense for BRPL for year FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11 in its MYT order as shown in the table below. In accordance with MYT Regulations, O&M expense is a controllable factor and any losses / gains on O&M expenses will be to the account of the utility. However, the Commission, at the time of issuing MYT order, had assumed 10% increase on account of recommendations of Sixth pay Commission and provided for true up of employee expenses to the extent of Sixth Pay Commission recommendations for the DVB employees as and when they are incurred by the utility.

Table 9: Proposed and approved O&M expenses for FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 & FY 2011-12

Particulars (Rs. Cr)	FY 2007-08	FY 2008-09		FY 2009-10		FY 2010-11		FY 2011-12
	Approved/ trued up in the May 2009 order	Approved in the MYT order	Actual as per True Up petition	Approve d in the May 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimate s as per petition	Estimates as per petition
Employee Expenses	117.38	139.81	186.35	127.47	275.56*	129.72	267.60	244.10
A&G Expenses	40.01	40.84	40.84	42.10	42.10	43.39	45.13	50.91
R&M Expenses	32.25	43.12	43.12	55.24	55.24	63.55	131.81	154.57
O&M Expenses	189.64	223.76	270.31	224.81	372.90	236.66	444.54	449.58

*Includes Sixth Pay Commission impact

1.19 BYPL's submissions for O&M expenses for the FY 2009-10, FY 2010-11 and FY 2011-12 have been further divided into the three heads of expenditure viz. Employee Cost, Repair & Maintenance (R&M) and Administrative & General (A&G) and discussed in details in the following sections.

Employee expense

1.20 The Commission had approved total employee cost for BYPL for FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11, against which BYPL has submitted the following Net Employee Expense for FY 2009-10, FY 2010-11 and FY 2011-12 (as shown in the table below):

Table 10: Total employee Expenses of BYPL for FY 2007-08, FY 2008-09, FY 2009-10 (actual) and FY 2010-11 and FY 2011-12 (projected)

Particulars (Rs Cr)	FY 2007-08	FY 2008-09		FY 2009-10		FY 2010-11		FY 2011-12
	Approved/ trued up in the May 2009 order	Approved in the MYT order	Actual as per True Up petition	Approved in the May 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimate s as per petition	Estimates as per petition
Net Employee Cost (Rs Cr)	117.38**	139.81**	186.35	127.47**	275.56*	129.72**	267.6	244.1

* This includes Sixth Pay Commission Arrears ** Net of Efficiency factor @ 0%, 2%, 3%, 4% and 0% for FY2007-08, FY2008-09, FY2009-10, FY2010-11 and FY2011-12 respectively.

- 1.21 **Sixth Pay Commission Arrears pay out for FY 2009-10:** BYPL has submitted that the Commission, while approving the Employee Cost for MYT Period as well as for Truing UP for FY 07 has considered 10% increase in salaries for BYPL – FR/SR pay structure on implementation of 6th Pay Commission recommendations with the rider that the it shall be trued based on the actual impact. BYPL has submitted that as per the audited accounts for FY2009-10, the total impact of this payout has come to an amount of Rs 123.99 Cr, pertaining to the period 1st January, 2006 to 31st March, 2010.
- 1.22 Employee Expense for FR/SR employee: BYPL has submitted that the Commission too vide para 4.108 of the MYT Order had recognized that the Salary / promotions etc. of FR/SR Structure employees are governed by rules and pay scales as specified by the GoNCTD and post privatization the terms of their service shall in no way be less favorable than of inferior to that applicable to them immediately before the transfer. Thus, the same is not within the control of the utility and needs to be trued up based on actual increase in their salaries.
- 1.23 Employee Expense for non FR/SR employee: As per the Hon’ble ATE order, the Commission to allow BYPL the employee cost on a normative basis by linking such cost to inflation index and has also trued up such cost to the extent of increased cost by increase in consumer base. Also, as per the Aptel Order, a salary hike comparable to the Sixth Pay Commission’s recommendations for employees other than ex-DVB employees shall also be allowed in true up process in case expenditure in that account has already been incurred. BYPL is yet to release any amount on this account.
- 1.24 Pension payment to SVRS optees: As per the Hon’ble ATE Order, the Commission is to allow BYPL the expenses incurred towards retirement of those who opted for the Special Voluntary Retirement Scheme (SVRS) and include the same in its ARR computation.

Table 11: Employee Expense Details for FY2009-10, FY2010-11 and FY2011-12.

Employee Cost (Rs Cr)	FY 2009-10	FY 2010-11	FY 2011-12
Total employee Cost as approved in MYT order (Excl SVRS Pension)	129.65	135.03	-
DVB Employees			
Increase in FR/SR Salary	166.12	162.00	172.00
Increase in Consumer Base			
Impact of Sixth Pay Commission for the year			
Non DVB Employees			
Increase in Non- FR/SR Salary	61.78	77.95	
Increase in Consumer Base			
Impact of Sixth Pay Commission for the year			
Sixth Pay Commission Arrears for Past Period for DVB employees	123.99		
Sixth Pay Commission Arrears for Past Period for Non-DVB employees*		51.13	
SVRS pensions pay-out		6.5	6.5
Total Gross Employee Cost as per Petition (incl. SVRS pension)	290.11	281.41	256.45
Less: Expenses Capitalised	-	13.7	12.3
Employee Expense (Net)	290.11	267.7	244.1

*The Commission has appealed in Supreme Court on this issue against ATE judgement

R&M Expense

1.25 BRPL has submitted that as per the Hon’ble ATE Order, the R&M expense for FY 2004-05, FY 2005-06 and FY 2006-07 gets revised as per the rules set out in the Hon’ble ATE order, the corresponding value of “K” also gets revised from an existing 3.70% to 7.67%. Thus , with a revised value of K, BYPL has projected the R&M expenditure for FY 2010-11 and FY 2011-12 as given in the table below:

Table 12: Summary of R&M Expenses for FY2007-08, FY2008-09, FY2009-10, FY2010-11 and 2011-12

R&M (Rs Cr)	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
R&M as approved in the MYT order	32.25	44	56.95	66.2	-
Efficiency Factor	0%	2%	3%	4%	
Approved R&M Expenses after efficiency factor	32.25	43.12	55.24	63.55	
Revised R&M expense claimed on account of revised K factor as per petition	32.25	44	56.95	137.30	154.57
Efficiency Factor as per the petition	0%	2%	3%	4%	0%
Revised R&M Expenses claimed after efficiency factor	32,25	43.12	55.24	131.81	154.57
Additional R&M on account of revised K factor as per petition				68.26	

A&G Expense

1.26 **Correction of inflation-linked indexation for A&G expenses:** The MYT Regulations, 2007 say that Employee Expense and A&G expenses shall be linked to an inflation-based index that takes into account the inflation indices of the immediate past five years. As per BYPL’s submission, while fixing the tariff for FY 2007-08, the Commission had taken inflation figures for FY 2001-02 to FY 2005-06 because the figures for FY 2006-07 were not available then. However, now that inflation indices for FY 2006-07 are available, the utility has asked the Commission to replace the provisional computation for FY 2007-08 with confirmed figures by correcting the indexation. BYPL has projected the A&G expense for FY 2010-11 and FY 2011-12 as given in the table below:

Table 13: Summary of A&G Expenses for FY2007-08, FY2008-09, FY2009-10, FY2010-11 and FY2011-12

A&G (Rs Cr)	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Gross A&G as approved in the MYT order	40.01	41.67	43.4	45.20	-
Efficiency Factor	0%	2%	3%	4%	
Approved A&G Expenses after efficiency factor	40.01	40.84	42.10	43.39	
Gross A&G expense as per petition	40.01	41.67	43.4	47.01	50.91
Efficiency factor	0%	2%	3%	4%	0%
Net A&G expense as per petition	40.01	40.84	42.10	45.13	50.91
Increase in A&G Expenses due to correction of inflation factor	-	-	-	1.74	

Capital Expenditure

- 1.27 BYPL has submitted that an analysis of load growth suggests that the peak demand in the utility's area would be 1769 MW in FY 2014-15 which is 571 MW more when compared to FY 2010-11. The average increment of peak load figure over the period is 143 MW. The system is therefore required to be designed adequately to cater to the load requirement continually as also to meet the requirement in emergency conditions such as sudden peaks etc. As submitted by the utility, considering that the capital requirement for development of power transmission & distribution system @ Rs 2 Cr per MW, the average capital requirement shall be Rs 286 Cr per year upto FY 2014-15.
- 1.28 BYPL has submitted additional capital expenditure requirement for FY 2011-12 under the following broad categories:

Table 14: Detail-wise Proposed Capital Expenditure for FY 2011-12

Capital Expenditure (Proposed)	Amount (Rs Cr)
Spill Over Works	65
Loss reduction work to be started in FY 2011-12	15
Load Growth work to be started in FY 2011-12	35
System improvement work to be started in FY 2011-12	30
Infrastructure Development (IT, Building, Office)	8
New Consumers (metering points)	35
Demand Side management	2.5
Other works (conversion of oil DT to dry DTs and repair of DTs)	40
Energy Conservation	2.5
Research and development (Pilot projects)	2.0
BYPL share in deposit works	15
Total	250

- 1.29 BYPL has submitted the proposed capitalisation for FY 2010-11 as per the MYT order. Further, for FY 2011-12, the Capitalisation has been assumed as per the Hon'ble Commission's letter no. F.3 (130-A)/Tariff/DERC/2006-07/C.F.No.2787/Pt. File-I/5089 dated 08.03.2011 as tabulated below:

Table 15: Capital expenditure and Capitalisation for FY 2007-08, FY2008-09, FY2009-10, FY 2010-11 and FY 2011-12*

Proposed amounts in Rs Cr	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Capital Expenditure	117.53	300.00	300.00	200.00	250.00
Capitalisation schedule					
Opening CWIP	554.84	354.84	304.84	399.00	374.00
Addition during the year	117.53	300.00	300.00	200.00	250.00
Capitalisation	317.53	350.00	250.00	225.00	228.50
Closing CWIP	354.84	304.84	354.84	374.00	395.50

* As approved by the Commission in the MYT order

Depreciation

- 1.30 The Depreciation for FY 2007-08, FY 2008-09 and FY 2009-10, FY 2010-11 and FY 2011-12, as submitted by BYPL, is given in the table below.

Table 16: Depreciation for FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 and FY 2011-12*

Particular	FY 2007-08	FY 2008-09		FY 2009-10		FY 2010-11		FY 2011-12
	Approved/ trued up in the May 2009 order	Approved in the MYT order	Actual as per True Up petition	Approved in the May 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
Depreciation including AAD (Rs Cr)	56.63	87.31	87.31	101.1	101.13	114.36	114.36	131.29

* Depreciation and RoCE shall be dealt with as per Regulation 4.16 (ii) of MYT Regulation 2007.

Return on Capital Employed (RoCE)

1.31 The Return on capital employed for FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 and FY 2011-12 is given in the table below:

Table 17: Return on capital employed for FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 & FY 2011-12*

Particulars	FY 2007-08	FY 2008-09		FY 2009-10		FY 2010-11		FY 2011-12
	Approved/ trued up in the May 2009 order	Approved in the MYT order	Actual as per True Up petition	Approved in the May 2009 order	Actual as per True Up petition	Approved in the MYT Order	Revised estimates as per petition	Estimates as per petition
RoCE (Rs Cr)	82.98	114.54	114.54	137.26	137.26	152.4	152.4	180.6

*Depreciation and RoCE shall be dealt with as per Regulation 4.16 (ii) of MYT Regulation 2007.

Income Tax

1.32 BYPL has shown the provision for tax in FY 2007-08, FY 2008-09, FY 2009-10 (actuals) and FY 2010-11 and FY 2011-12 (projected), vis-a-viz that approved in the MYT order, as given in the table below:

Table 18: Income Tax for FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 & FY 2011-12*

Particulars	FY 2007-08	FY 2008-09		FY 2009-10		FY 2010-11		FY 2011-12
	Approved/ trued up in the May 2009 order	Approved in MYT Order	Actual as per True Up petition	Approved in the May 2009 order	Actual as per True Up petition	Approved in MYT Order	Revised estimates as per petition	Revised estimates as per petition
Tax (Rs. Cr)	1.23	2.00	2.29	2.00	3.51	2.00	31.75	35.71

*Income Tax shall be dealt with as per Regulation 5.20, 5.21 and 5.22 of MYT Regulation 2007.

Other Expenses

Expense pertaining to the period before July 2002

1.33 **Litigation expenses:** BYPL has submitted that in FY 2010-11 it has incurred an amount of Rs 11.81 lakhs (up to December, 2010) on the account litigations inherited by BYPL from DVB. BYPL has proposed the same figure for FY 2010-11 and FY 2011-12.

- 1.34 **Directions of the Hon'ble Supreme Court in SLP no. 4270/2006:** The Hon'ble Supreme Court of India vide its judgment dated 3.5.2010 in SLP No. 4270/2006 has held that BYPL along with other distribution utilities are responsible for meeting the liabilities relating to employees who ceased to be the employees of erstwhile Delhi Electric Supply Undertaking (Predecessor of Delhi Vidyut Board-DVB) prior to 1.7.2002 on account of their retirement, removal, dismissal or compulsory retirement in accordance with the provisions of Delhi Electric Reforms Act 2000. BYPL has submitted an expense of Rs 90 lakhs for FY 2010-11 on this account. Also, BYPL has requested the Commission to allow the amount incurred on this account on actual while determining the ARR for FY 2011-12.
- 1.35 **Interest Capitalised:** BYPL has submitted that as per the Hon'ble ATE order, the Commission must not deduct capitalised interest as the Commission already follows the principle of Return on Capital Employed in which it allows return on equity and interest on loan under ROCE only for the assets capitalized. Any interest cost incurred before capitalization is considered as IDC (Interest during Construction) and would be included in the asset base only after capitalization.
- 1.36 **Carrying Cost:** BYPL, in Appeal No. 147 Of 2009, has requested the Hon'ble ATE to reconsider the carrying cost at the SBI PLR rate. Pending the decision on the same, BYPL in the present petition has relied upon the judgment of the ATE in Appeal no. 153 of 2009 where the ATE has held the judgment that the Commission should reconsider the rate of carrying cost at the prevalent market rate keeping in view the prevailing Prime Lending Rate
- 1.37 BYPL has further submitted the following additional expenses for consideration in ARR. computation. These proposed costs are shown in the table below detail-wise for FY 2009-10, FY 2010-11 and FY 2011-12.

Table 19: Other expenses proposed for FY 2009-10, FY 2010-11 & FY 2011-12

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
	True-Up petition	ARR petition	ARR petition
CISF Expenses	0.44	0.1	0.1
Credit Rating	0.17	0.2	0.2
Cost of Auditors Certificate		0.17	0.17
Training Expense		4.01	3.66
Tender Cost for procurement of Material		0.04	0.04
Incremental License Fees paid to DERC		0.36	0.44
Incremental Bill printing expenses		0.11	0.17
Consumer Awareness		0.42	2
Total (Rs Cr)	0.61	5.41	6.78

Implications of ROCE and Depreciation due to disallowance of Capital Expenditure and Capitalisation

- 1.38 BYPL has submitted that the Commission (DERC) in its MYT Order dated 23rd February 2008 has disapproved the Capital Expenditure and Capitalization on the

following grounds:

- (a) Disallowance of expenditure on account of delay in certification by the Electrical Inspector – Rs 391 Cr.
- (b) Disallowance of capital expenditure and asset capitalization on account of transaction with sister concern namely M/s. Reliance Energy Ltd (REL) – Rs 170 Cr.
- (c) Disallowance of Capital Expenditure due to other reasons not indicated in the tariff order – Rs 19 Cr.

1.39 BYPL has further submitted that the consequent impact of Rs. 229.61 Cr on depreciation and RoCE due to the disallowance of capital expenditure and capitalization by the DERC for each year (as shown in the table below). As per the petition for true-up for FY 2009-10, the total gap due to such disallowance including carrying cost thereon up to FY 2009-10 is Rs 278.27 Cr.

Table 20: Implications of ROCE and Depreciation due to disallowance of Capital Expenditure and Capitalisation in FY 2009-10

Expenditure and Capitalisation	Amount (Rs Cr)
FY 2006-07	54
FY 2007-08	82.63
FY 2008-09	57.75
FY 2009-10	35.23
Sub Total	229.61
Carrying Cost on the above up to 31.03.2010	
FY 2006-07	19.08
FY 2007-08	19.96
FY 2008-09	8.03
FY 2009-10	1.59
Sub Total	48.66
Total	278.27

Past period Expenses due to Implementation of ATE Order

1.40 BYPL, in the true-up petition for FY 2009-10, has submitted the net impact of ATE order as given in the table below:

Table 21: Details of expense due to ATE order

Particulars (Rs Cr)	FY 2008-09	FY 2009-10
Opening Expense up to FY 2007-08	100.62	158.32
Expense during the year	46.54	19.12
Carrying Cost on above	11.15	15.11
Closing	158.31	192.55
Expense during the year (Details are shown below)	46.54	19.12
Employee Expense as per MYT order	133.57	123.42
SVRS	9.09	7.99
A&G	41.67	43.4

Particulars (Rs Cr)	FY 2008-09	FY 2009-10
R&M	44	56.95
Total O&M as per MYT	228.33	231.76
Efficiency Improvement	2%	3%
Net O&M Exp. Approved in MYT order (A)	223.76	224.81
O&M as per ATE order		
Employee Expense as per ATE order	165.87	158.13
A&G as per MYT order	41.67	43.4
R&M as per MYT order	44	56.95
SVRS as per MYT order	9.09	7.99
Total O&M as per ATE order	260.63	266.47
Efficiency improvement	2%	3%
Net O&M Exp. As per ATE impact (B)	255.42	258.48
SVRS payment as per High court (C)	14.89	-14.55
Net Expense during the year (B+C-A)	46.54	19.12

Non Tariff Income (NTI)

- 1.41 Apart from the revenue earned in accordance with the tariff schedule from supplying power to consumers, Distribution Licensees also earn income from other sources such as interest received on deposits, loans and advances; charging meter rent from consumers; delayed payment surcharge levied on bills that are paid late; sale of scrap, etc. This income is called Non-Tariff Income (NTI) and it needs to be subtracted from the average revenue requirement of the Licensee.
- 1.42 BYPL has submitted the detail-wise Non-Tariff Income for FY 2009-10 as given in the table below:

Table 22: Non-tariff Income for FY 2009-10

Particulars	As approved by Commission in the ARR Order	As per petition
Interest on fixed deposits		0.01
Interest on Government of India Securities		0.46
Interest on loans and advances to staff		0.01
Interest on loans and advances to other licensees		-
Interest on loans and advances to lesser street light maintenance charges		1.11
Miscellaneous charges from consumers (on energy)		11.93
Commission on collection of electricity duty for MCD	46.81	26.94
Write back of miscellaneous provisions		2.46
penalties from contractors		6.37
sale of scrap		0.06
sale of material		6.43
Miscellaneous income		1.99
Gain on sale of fixed asset		4.88
		0.04
Total	46.81	62.71

- 1.43 BYPL has proposed the following amounts as NTI for the years FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 and FY 2011-12. The table below shows the NTI for FY

2007-08, FY 2008-09, FY 2009-10, FY 2010-11 and FY 2011-12.

Table 23: Non-Tariff Income for FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 and FY 2011-12

Particulars (Rs. Cr)	FY 2007-08	FY 2008-09		FY 2009-10		FY 2010-11		FY 2011-12
	Approved/ trued up in the May 2009 order	Approved in MYT Order	Actual as per True Up petition	Approved in the May 2009 order	Actual as per True Up petition	Approved in MYT Order	Revised estimates as per petition	Estimates as per petition
Non Tariff Income	67.55	44.09	139.52	46.81	62.71	49.76	49.76	49.76

Aggregate Revenue Requirement (ARR)

1.44 On the basis of the costs incurred in the year FY 2009-10, and projections for FY 2010-11 and FY 2011-12, and after subtracting the Non Tariff Income for each of the three years, BYPL has projected the following Annual Revenue Requirement:

Table 24: Proposed ARR (Rs Cr) for FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 and FY 2011-12

Particulars	FY 2007-08	FY 2008-09		FY 2009-10		FY 2010-11		FY 2011-12
	Approved/ trued up in the May 2009 order	Approved in MYT Order	Actual as per True Up petition	Approved in the May 2009 order	Actual as per True Up petition	Approved in MYT Order	Revised estimates as per petition	Revised estimates as per petition
Expenditure								
Cost of power purchase	939.35	1267.84	1282.01	1,324.70	1655.06	1419.6	2252.52	3,007.40
Inter-State Transmission charges	86.79			99.9	118.08	91.4	162.44	209.1
Intra-state Transmission (Delhi Transco + SLDC) charges	53.22			46.4	45.43	101.5	98.93	139.2
O&M Expenses	189.64	223.76	270.31	224.8	243.93	236.7	393.43	449.6
Arrears of Sixth Pay Commission		-	-	-	123.99	-	51.13	-
Depreciation + AAD	56.63	87.31	87.31	101.1	101.13	114.36	114.36	131.29
Any other Expense/ New Initiatives	-	-	7.91	-	2.19	2	5.41	6.8
RoCE (incl. supply margins)	86.58	119.58	119.58	137.26	137.26	152.42	152.42	180.6
Additional Return	-	-	-	6.59	6.59	8	7.96	9.3
Income Tax	1.23	2	9.29	2.00	3.51	2	31.75	35.7
Net impact of past true-up	-	-	100.62	-	-	-	-	-
Prior Period Item for rebate before FY 06-07	-	-	-	-	-	-	3.25	
Expenses in terms of ATE order no 153 of 2009	-	-	-	-	91.92	-	5.81	6.49
Implications of ROCE and Depreciation due to disallowance of Capital	-	-	-	-	278.26	-		

Particulars	FY 2007-08	FY 2008-09		FY 2009-10		FY 2010-11		FY 2011-12
	Approved/ trued up in the May 2009 order	Approved in MYT Order	Actual as per True Up petition	Approved in the May 2009 order	Actual as per True Up petition	Approved in MYT Order	Revised estimates as per petition	Revised estimates as per petition
Expenditure and Capitalisation								
Energy Conservation	-	-	-	10.00	-	-		15.00
Litigation Expense	-	-	-			-	1.0	0.10
DVB Arrears	27.40							
Less								
Other Income (Including income from wheeling charges)	67.55	44.09	139.52	46.8	62.71	49.76	49.8	49.8
Interest Capitalised	2.31	10.54	10.54	10.3	-	9.06	0.0	0.0
Annual Revenue Requirement	1,371.1	1,645.86	1,726.97	1,895.65	2,744.64	2,069.16	3,230.7	4,140.8

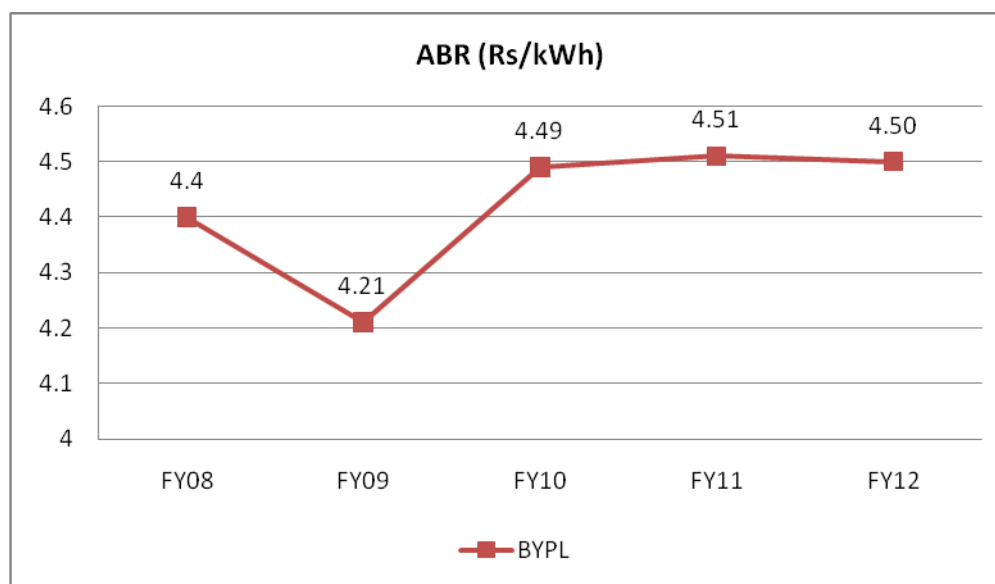
Revenue from Sale of Power

1.45 BYPL has submitted that actual energy sales for the year FY 2009-10, vis-à-vis that approved in the true-up order for FY08 and has shown the energy sales of FY 2007-08, FY 2008-09, along with projections for FY 2010-11 and FY 2011-12, as given below in the table below:

Table 25: Energy sales in FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 and FY 2011-12

Energy Sales	FY 2007-08	FY 2008-09		FY 2009-10		FY 2010-11		FY 2011-12
	Approved/ trued up in the May 2009 order	Approved in MYT Order	Actual as per True Up petition	Approved in the May 2009 order	Actual as per True Up petition	Approved in MYT Order	Revised estimates as per petition	Revised estimates as per petition
Energy Sales (MU)	3518	3516	3964	4445	4330	4389	4688	5244
Revenue Billed (Rs Cr)	1547.96	1651.92	1669.6	2052.09	1,944		2,114	2359.04
Average Billing Rate (Rs/kWh)	4.4	4.70	4.21	4.62	4.49		4.51	4.50

Figure 6: ABR (Rs/ kWh) (Approved, Actuals, Revised Estimates and Projections)



Revenue available towards ARR

1.46 For calculating the revenue gap for FY 2009-10, FY 2010-11 and FY 2011-12, BYPL has submitted revenue available towards ARR as given in the table below:

Table 26: Revenue available towards ARR for FY 2007-08, FY 2008-09, FY 2009-10, FY 2010-11 and FY 2011-12

Particulars (Rs Cr)	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved/ trued up in the May 2009 order	Actual as per True Up petition	Actual as per True Up petition	Revised Estimates as per petition	Estimates as per Petition
Amount Collected	1622.1	1669.6	1969.8	2165.1	2347.2
Less : E Tax	65.22	38.58	82.07	87.9	100.1
Less: LPSC	26.66				
Less: Amount to be retained by BYPL for over- achievement of targets	105.48	77.085	40.38	18.6	0
Revenue available for ARR	1424.74	1553.93	1847.34	2058.7	2247.1

Revenue Gap

1.47 BYPL has submitted that is even after reducing the revenue obtained from tariff and the Non Tariff Income, it is facing a revenue gap as shown below.

Table 27: Computation of revenue gap by BYPL

Computation of Revenue Gap (Rs Cr)	FY 2007-08	FY 2008-09		FY 2009-10		FY 2010-11		FY 2011-12
	Approved/true up in the May 2009 order	Approved in MYT Order	Actual as per True Up petition	Approved in the May 2009 order	Actual as per True Up petition	Approved in MYT Order	Revised estimates as per petition	Revised estimates as per petition
ARR for the year	1371.01	1645.86	1726.97	1895.65	2744.64	2069.16	3230.7	4140.8
Revenue available towards ARR	1424.73	1651.92	1553.93	2052.09	1806.97	-	2058.70	2247.2
Revenue Gap during the year	53.72	6.06	(173.04)	156.47	(937.67)		(1171.0)	(1893.6)

1.48 BYPL has filed an Appeal No 142 of 2009 before the Hon'ble ATE requesting consideration of carrying cost on the revenue gap at SBI PLR. The decision on the appeal is pending.

1.49 The revenue gap considering carrying cost at SBI PLR will be as shown in Table 28:

Table 28: Revenue Gap with Carrying Cost

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Opening Revenue Gap	(158.50)	(121.25)	(236.69)	(1359.86)	(3868.88)
Revenue Surplus / (Gap) for the year	53.72	(173.04)	(937.67)	(1171)	(1893.6)
SBI PLR Rate	13%	13%	12%	12%	13%
Carrying Cost	(16.47)	(26.22)	(95.75)	(241.26)	(482.68)
Closing Revenue Gap with Carrying Cost	(121.25)	(320.51)	(1353.93)	(2766.16)	(5142.36)

Figure 7 : Computation of revenue gap by Petitioner

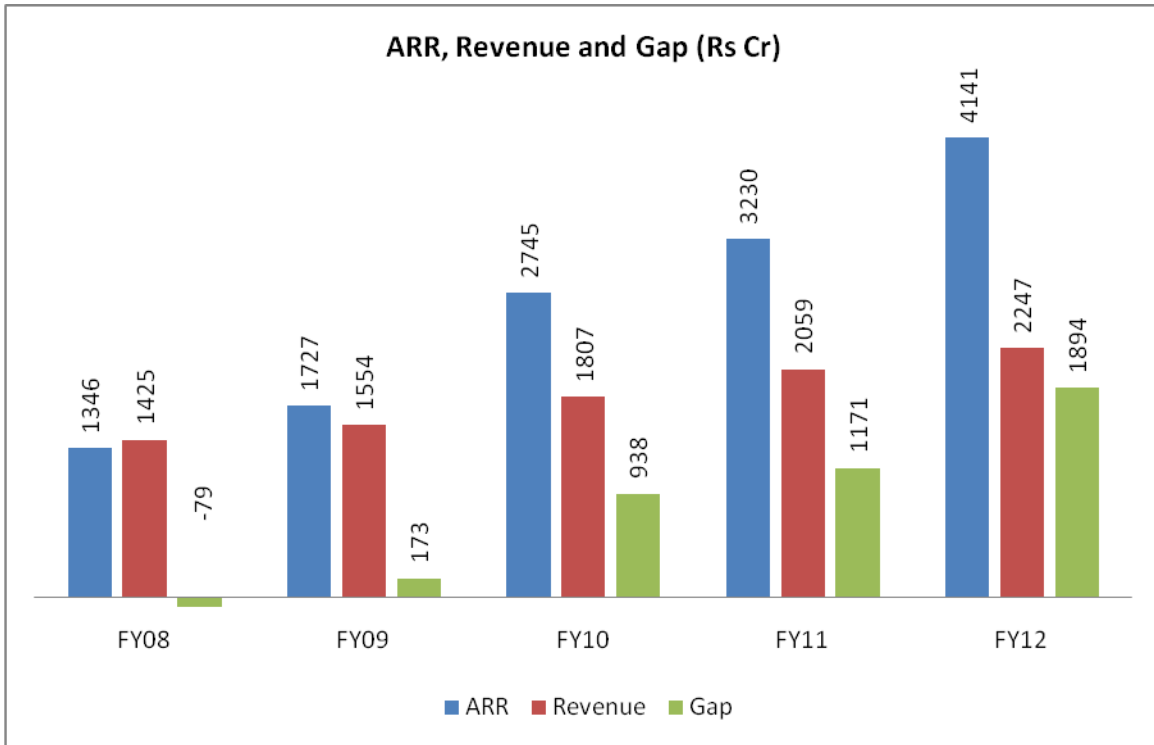
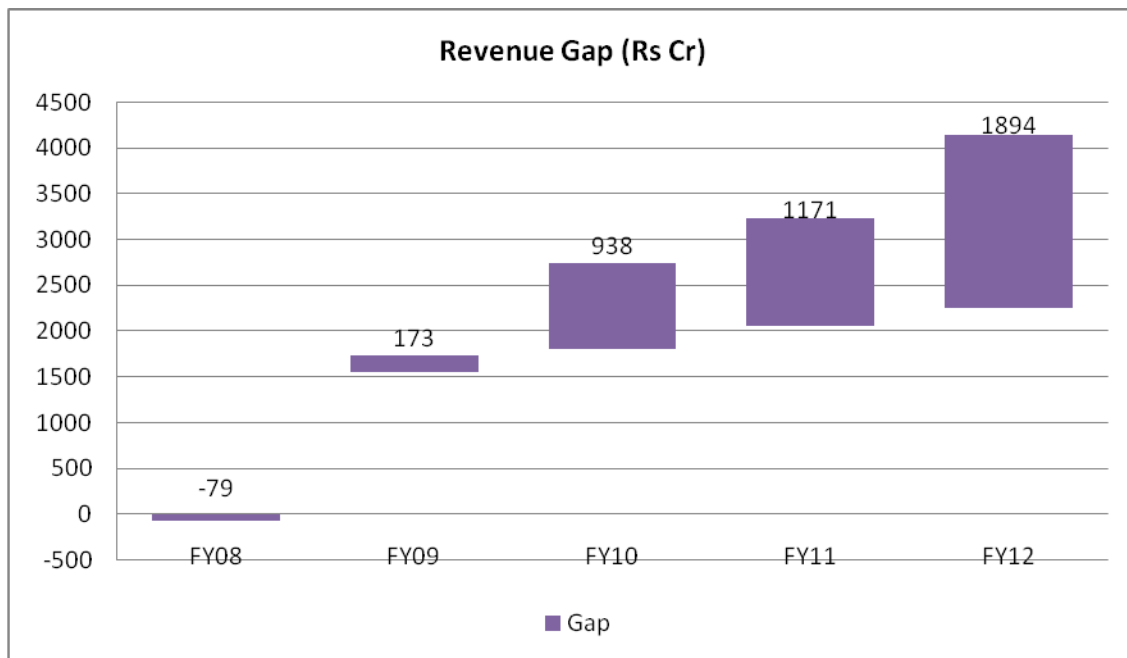


Figure 8: Revenue Gap (Petitioner’s Submission)



Tariff Proposal

1.50 For recovering the entire gap of Rs 1893.64 Cr for FY 2011-12 as submitted by BYPL, the tariff (fixed and energy charges) need to be increased by 84.3%. BYPL has proposed to entirely recover the revenue gap for FY 2011-12 through a uniform increase in Retail

supply tariff of 84.3% across all categories in fixed and energy charges. It may be noted that in its petition, BYPL has sought for a tariff revision to amortize the revenue gap during the FY 2011-12, without considering any carrying cost on the accumulated revenue gap of the previous years.

1.51 BYPL has further submitted that the revenue gaps till FY 2009-10, after being adjudicated by the Commission, may be given in the form of a one-time surcharge independent of tariff as fixed in the present petition. Also, BYPL has requested the Commission to allow a carrying cost on this accumulated gap, which should be determined in terms of ATE's order in Appeal no. 153 of 2009. To meet the entire revenue gap of 5142.36 Cr, an average tariff hike of 228.8% will be required.

1.52 BYPL has also suggested some tariff rationalization measures, as given below:

- (a) **Enhancement of limit for cash payment of energy bills by consumers:** BYPL has proposed that the restriction of acceptance of cash payments up to the existing limit of Rs 4, 000 should be reviewed and enhanced to a limit of Rs 20,000 for a better revenue recovery.
- (b) **Applicability of tariff with load above 100kW for residential use:** BYPL has proposed that there should be a different treatment tariff for individuals with load above 100kW for residential use; like it is for other categories e.g. Non-Domestic, Industrial etc. with load above 100kW.
- (c) **Uniform fixed charges till the load of 5 kW:** BYPL has stated that the majority of Domestic consumers have a connected load greater than 2 kW although their sanctioned load less than 2 kW. BYPL has submitted that this gives undue advantage to consumers who have not increased their declared load to the actual connected load, while consumers of other billed load are paying the fixed charges. To avoid this, the Licensee has requested the Commission to rationalize the slab-based fixed charges.
- (d) **kVAh billing for industrial and non-domestic consumers with MDI greater than 10 kW:** The Licensee has requested that for industrial and non-domestic consumers with MDI greater than 10 kW, it should be entitled to charging kVAh tariff since it encourages consumers to improve their power factor which eventually helps the system by less loading and reduction in losses.
- (e) **Introduction of time differential tariffs for Consumers with Load > 10 kW for demand side management:** BYPL has submitted that Time Differential Tariffs would result in smoothening of demand curve which ultimately results in savings for the consumers by way of lower power purchase cost. BYPL has suggested that the Commission may review the possibility of introduction of time differential tariffs for consumers, say for load > 10 kW to start with, through informed deliberations with stakeholders.