

A1: INTRODUCTION

- 1.1 This staff paper contains summary of the petition filed by BYPL for true up of 2008-09 (based on audited accounts) updated till 30th September 2010. For the purpose of comparison, the staff paper also contains the figures for the year as approved by the Commission in the MYT Order.
- 1.2 The Commission shall true up the uncontrollable parameters (Sales and Power Purchase) viz-a-viz the audited account of distribution licensees after prudence check and as far as the controllable parameters 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

- 1.3 In its petition, BYPL has submitted that its actual energy sales in 2008-09 were 3964 MU compared to approved energy sales of 3516 MU approved in the MYT Order for that year. Since sales are treated as an uncontrollable factor, BYPL has requested the Commission to approve these revised projections instead of the comparatively lower sales approved for the year in the MYT Order.

Table 1 Energy sales in 2008-09

Sale of Energy (MU)	2008-09	
	Approved in the MYT Order	As per petition
Domestic	1631	1917
Non Domestic	1281	1293
Mixed load		
Industrial	386	449
Agricultural	0	0
Railways	0	0
DMRC	33	65
Street Lighting	103	85
Others	82	155
Total Sales	3516	3964

AT&C Losses

- 1.4 In its petition, BYPL has submitted the actual loss figures for 2008-09, which are better than the loss level targets set by 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 Licensee.
- 1.5 The table below shows the actual figures in 2008-09 of certain parameters, along with what was approved in the MYT Order.

Table 2 Actual vs. approved AT&C Losses for 2008-09

Particulars	Units	2008-09		
		MYT Order	As per Petition	Better Achievement
Sales	MU	3516.09	3964.79	NA
Distribution loss targets	%	29.99%	24.95%	5.05%
Power Purchase at Discom periphery	MU	5022.26	5282.59	NA
Collection Efficiency	%	99.25%	101.23%	1.98%
AT&C Loss Targets	%	30.52%	24.02%	6.50%

- 1.6 BYPL has submitted the benefit on account of over-achievement of AT&C losses for 2008-09 as given in Table 3:

Table 3 Benefits on account of overachievement of AT&C loss targets for 2008-09

Particulars	2008-09
	As per true-up petition
Total Amount on account of over-achievement of AT&C losses (Rs Cr)	154.17
<i>Benefit to be retained by BYPL (Rs Cr)</i>	<i>77.085</i>
<i>Benefit to be transferred to contingency reserves</i>	<i>77.085</i>

Power Purchase Requirement

- 1.7 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.
- 1.8 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:

$$\text{Quantum of power purchase (MU)} = \frac{\text{Energy sales}}{(1 - \text{Distribution Loss (\%)/100})}$$

- 1.9 The table below shows the actual sales, loss levels and power purchase for the year 2008-09 by the Licensee.

Table 4 Actual Sales, Loss & Power Purchase for 2008-09

Category	Units	2008-09	
		MYT Order	As per petition
Sales	MU	3516	3964
Distribution Loss	%	29.99%	24.95%
Power Purchase at Periphery	MU	4943.0	5282.59

Power Purchase Cost

- 1.10 As per the MYT Regulations, 2007, 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

- 1.11 BYPL in its petition has submitted that the actual rate at which it purchased power in the year 2008-09 was lower than the rate approved for the year in the MYT Order, but the quantum of power purchase in 2008-09 was much higher than the approved quantum in the MYT Order. BYPL has stated that the actual rate for 2008-09 was Rs. 2.43/unit as opposed to the approved rate of Rs. 2.56/unit, but the actual quantum of power purchased in 2008-09 was 5282.6 MU which is much more than the 4943 MU approved for that year in the MYT Order. Hence, BYPL has submitted that it incurred a higher power purchase cost (Rs. 1282 Cr) in 2008-09 than the amount approved in the MYT Order (Rs. 1267 Cr).

- 1.12 The table below shows the power purchase quantum and rate of purchase submitted by BYPL for the Commission's approval for 2008-09 and that approved by the Commission in the MYT Order.

Table 5 Power purchase quantum, cost and rate of purchase for 2008-09

Stations	2008-09					
	Approved in MYT Order			As per petition		
	Quantum	Amount	Avg. Rate	Quantum	Amount	Avg. Rate
	MU	Rs. Cr	Rs. /kWh	MU	Rs. Cr	Rs. /kWh
NTPC	4,128.60	966.9	2.34	4,400.70	1,133.20	2.57
NHPC	425.6	74.3	1.74	447.5	80	1.79
Other Hydro	292	89	9.8	312	100.6	9.16
NPCIL	45.4	9.5	2.08	26.3	5.7	2.15
SGS	1,664.20	386.7	2.32	1,306.10	367.4	2.81
Future Stations	483	139.1	2.88	80.5	19.7	2.45
Power Purchased from other Sources	251.1	137.8	5.49	125.8	59.7	4.74
Less: Power Sold to other Sources	(2,083.40)	(633.1)	3.04	(1,139.90)	(597.1)	5.24
Gross Total	5,206.30	1,170.20	2.25	5,559.10	1,169.20	2.10
Transmission Losses/Charges						
(i) Inter State	193.4	53.3		110	103.47	
(ii) Intra State	69.9	43.4		166.5	44.22	
Past Period Expenses/ Other Expenses	-	-			-34.84	
Total	4,943.00	1,267.00	2.56[#]	5,282.60	1,282.00	2.43[#]

[#] Inclusive of transmission charges

Impact of Aptel Order

- 1.13 BYPL appealed to the Appellate Tribunal for Electricity (hereinafter referred to as 'Aptel') seeking review of the MYT Order issued by the Commission, after which the Aptel issued an Order dated October 6, 2009. The salient features of the Aptel Order are detailed below:

- (a) **Reactive energy charges:** The Aptel allowed BYPL to recover the Reactive Energy Charges incurred by it on the basis that these charges are a part of the power procurement cost. Hence, BYPL was allowed to recover reactive energy charges of Rs. 0.98 Cr through tariff.
- (b) **R&M Expenses:** BYPL has submitted that the Commission in its MYT Order had not approved its entire R&M expenses for 2004-05, 2005-06 and 2006-07. On

appealing to the Aptel, the Aptel Order held that BYPL's entire R&M expenses, as shown in its audited accounts, should be allowed by the Commission. Due to this the following amounts now need to be trued up.

Table 6 Additional R&M expenses to be trued up as per Aptel Order

R&M Expenses (Rs. Cr)	2004-05	2005-06	2006-07
As per Audited Accounts	64.59	55.48	47.83
As approved by DERC	46.88	48.04	47.73
Amount to be trued up as per the Aptel Order	17.71	7.44	0.10

- (c) **SVRS Pension:** As per the Aptel Order, the Commission must 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. The same has been shown below.

Table 7 SVRS expenses to be included in ARR calculations

Particulars	Units	2007-08	2008-09
SVRS Payment (in terms of High Court Order)	Rs. Cr.	44.64	14.89

- (d) **Increase in employee expenses corresponding to expansion in consumer base:** The Aptel Order held that the Commission shall true up the additional employee expenses of BYPL incurred due to increase in its consumer base. On account of this, the additional O&M expenses projected by BYPL after factoring in the increase in consumers up to 2008-09 are shown below.

Table 8 Additional O&M expenses projected after factoring in the increase in consumers up to 2008-09

Particulars	Units	Formula	2005-06	2006-07	2007-08	2008-09
Index (n)/ Index (n-1)		A	-	-	1.0415	1.0415
Number of Consumers	Lakhs	B		8.95	9.68	10.45
Increase in Consumers	%	$C = (B_{(n)} / B_{(n-1)} - 1) * 100$			8.17%	7.93%
Employee Cost with Revised Base	Rs. Cr.	D	92.95	107.09		
10% Escalation due to 6 th Pay Commission on all employees w.e.f. 1 Jan 2006	Rs. Cr.	$E = D * 10\%$	3.10	10.71		
Revised Employee Expenses with Inflation and after factoring Increase in Consumers	Rs. Cr.	$F = F_{(n-1)} X (1+C) X A$	96.05	117.80	132.71	149.18
Arrears	Rs. Cr.	G	(3.10)	(10.71)	(11.15)	24.96
Employee Cost with Revised Base	Rs. Cr.	$H = F + G$	92.95	107.09	121.55	174.14
Less: Capitalized	Rs. Cr.	I	-	-	4.23	8.27
Net Employee Costs in terms of Aptel Order	Rs. Cr.	$J = H - I$	92.95	107.09	117.32	165.87
Employee Costs allowed in the MYT Order	Rs. Cr.	K			107.29	133.57
Gross Additional amount added to O&M Costs	Rs. Cr.	$L = J - K$			10.03	32.30
Efficiency factor	%	M			0%	2%
Net Additional amount added to O&M Costs	Rs. Cr.	$N = L X (1-M)$			10.03	31.66

- (e) **A&G expenses:** The Commission in its MYT Order had not approved the entire A&G expenses proposed by BYPL for 2004-05 and 2005-06. Following the Aptel Order on the same, the Licensee has submitted the remaining amount of A&G expenses to be trued up, as shown below in Table below.

Table 9 Additional A&G expenses to be trued up as per Aptel Order

A&G Expenses	Units	2004-05	2005-06
As per Audited Accounts	Rs. Cr.	22.62	30.44
As approved by DERC	Rs. Cr.	16.62	29.69
Amount to be trued up in terms of Aptel Order	Rs. Cr.	6.00	0.75

1.14 Hence, the total year on year impact due to Aptel Orders as claimed in the True Up petition is shown in the table below.

Table 10 Total year-on-year impact of the Aptel Order

Particulars	Units	2004-05	2005-06	2006-07	2007-08	2008-09
Reactive Energy Charges	Rs. Cr.	-	-	0.98		
R&M Expenses	Rs. Cr.	17.71	7.44	0.10		
SVRS Payment (in terms of High Court Order)	Rs. Cr.				44.64	14.89
Net O&M Expenses for the MYT Period (Employee expenses)	Rs. Cr.				10.03	31.66
A&G Expenses	Rs. Cr.	6.00	0.75	-		
Total	Rs. Cr.	23.71	8.19	1.08	54.67	46.54

- 1.15 On a carry-forward basis, the net impact of the Aptel Order has been shown by BYPL in its petition as given below.

Table 11 Revenue gap as on April 1, 2008 due to Aptel Order (with carrying costs)

Particulars	Units	2004-05	2005-06	2006-07	2007-08
Net Impact of Aptel Order during the year	Rs. Cr.	23.71	8.19	1.08	54.67
Opening Revenue Gap	Rs. Cr.	-	24.77	35.57	39.90
Expenses Incurred during the year	Rs. Cr.	23.71	8.19	1.08	54.67
Carrying Costs @ 9%	Rs. Cr.	1.07	2.60	3.25	6.05
Closing Revenue Gap	Rs. Cr.	24.77	35.57	39.90	100.62

O&M Expenditure

- 1.16 As detailed in the previous section, although O&M expenditure has been considered to be a “controllable” element according to the MYT Regulations, 2007, due to various factors outside the Licensee’s control, several deviations from the planned trajectory may be taken into account by the Commission.
- 1.17 BYPL has stated the following reasons in its petition for true-up of O&M costs:

- (a) **Impact of Sixth Pay Commission on the pay of DVB employees:** The Commission in its MYT Order had recognised the uncontrollable nature of Sixth Pay Commission recommendations in determination of employee expenses incurred on ex-DVB employees during the Control Period. It has accordingly considered a provisional increase @10% in the total employee expenses w.e.f. January 2006 and had stated that a true-up would be done later based on the actual impact. BYPL has submitted that it has already paid a sum of Rs. 67.78 Cr (Rs. 7.26 Cr in 2008-09 and Rs. 60.52 Cr in 2009-10) but has considered Rs. 24.50 Cr in 2008-09 as per the methodology adopted by the Commission read with the Aptel Order. The balance for ex-DVB employees will be paid in 2009-10 and has been considered accordingly.
- (b) **Impact of Sixth Pay Commission on the pay of non-DVB employees:** 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.

- (c) **Correction of inflation-linked indexation for employee cost and A&G expenses:** The MYT Regulations, 2007 say that employee cost 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. However, while fixing the tariff for 2007-08, the Commission had taken inflation figures for 2001-02 to 2005-06 because the figures for 2006-07 were not available then. However, now that inflation indices for 2006-07 are available, the Commission has to replace the provisional computation for 2007-08 with confirmed figures by correcting the indexation.

1.18 BYPL has submitted that due to the above mentioned reasons, the O&M costs it incurred in year 2008-09 are much higher than what was approved in the MYT Order. Hence it has requested the Commission for a true-up of costs and revision of ARR.

1.19 The table below shows the proposed O&M expenses for year 2008-09 along with the expenses approved in the MYT Order.

Table 12 Proposed and approved O&M expenses for 2008-09*

Particulars (Rs. Cr)	2008-09	
	Approved	As per petition
Employee Expenses	139.81	186.35
A&G Expenses	40.84	40.84
R&M Expenses	43.12	43.12
O&M Expenses	223.76	270.31

*Net of efficiency factor@ 2%

Depreciation

1.20 According to the MYT Regulations, 2007, depreciation charges are not to be trued up on an annual basis and shall be trued up only once at the end of the control period. Hence, BYPL has assumed the same depreciation as allowed by the Commission in its MYT Order for the purpose of ARR computation.

1.21 The table below shows the depreciation cost as submitted by the Licensee for 2008-09. The petition figures shown in the table below are the amounts that were proposed in the Licensee's petition before the issue of the MYT Order. The amounts shown as approved are the amounts approved earlier in the MYT Order issued by the Commission.

Table 13 Depreciation for 2008-09*

Depreciation (Rs. Cr)	2008-09	
	Approved	As per petition
Depreciation (including AAD)	87.31	87.31

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

Return on Capital Employed (RoCE)

- 1.22 As in the case of Depreciation, Return on Capital Employed is not reviewed on an annual basis and will be trued up only once at the end of the control period. Hence, for the purpose of ARR calculation, BYPL has assumed the same RoCE as allowed by the Commission in its MYT Order.
- 1.23 The Regulated Rate Base on which the return is calculated includes the original cost of Fixed Assets and the Working Capital less the accumulated depreciation. The Licensee has submitted that it has calculated the RRB after considering the methodology specified by the MYT Regulations, 2007. The Weighted Average Cost of Capital (WACC) and the Cost of Debt have also been computed as per the MYT Regulations, according to the Licensee's submission.
- 1.24 It has submitted the following amount as the Return on Capital Employed for the year 2008-09 along with the RoCE approved in the MYT Order.

Table 14 Return on capital employed for 2008-09*

RoCE including additional Supply Margin (Rs. Cr)	2008-09	
	Approved	As per petition
RoCE	114.54	114.54
Supply margin	5.04	5.04
Total RoCE including additional Supply Margin	119.58	119.58

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

Other Expenses

- 1.25 BYPL has submitted the following additional expenses for consideration in ARR computation. These include expenses on:
- (a) **DVB arrears:** BYPL has submitted that DVB arrears of Rs. 3.89 Cr were collected by DPCL in 2008-09 which are considered as part of the revenue realized by the Petitioner. The Petitioner has submitted that expenses on this account be included in its ARR as the same are to be paid to DPCL. BYPL has requested to include Rs. 3.89 Cr in ARR calculations, which is equivalent to 100% of DVB arrears (Government) collected.

- (b) **New initiatives:** BYPL has submitted that it has taken several new initiatives such as installation of kiosk machines for accepting payment of bills by consumers (around Rs. 13.42 lakhs), installing Minc Bill Boxes for accepting bill payments, at a cost of Rs. 4196, Project Jeevan for multi-utility payments by consumers, etc. The combined cost of these new initiatives is proposed to be Rs. 0.2 Cr for 2008-09.
- (c) **CISF Forces:** BYPL has submitted that it has deployed additional CISF forces in order to prevent electricity theft, at a cost of Rs. 3.46 Cr in 2008-09.
- (d) **Provision for Tax:** BYPL has submitted that compared to the amount of Rs. 2 Cr approved in the MYT Order, it incurred a tax liability of Rs. 9.29 Cr in 2008-09.
- (e) **Incremental expenses:** BYPL has submitted that it is facing additional expenses due to uncontrollable factors like increase in the cost of bill printing, and in the license fee paid to DERC.

1.26 These costs are shown in the table below. The table also shows the approved costs as per the MYT Order.

Table 15 Additional expenses proposed for 2008-09

Other Expenses (Rs. Cr)	2008-09	
	Approved in the MYT Order	As per petition
Income tax	2.00	9.29
DVB arrears		3.89
New initiatives		0.13
Expenses towards bifurcation of shared services		
Energy conservation		
Training expenses		
CISF expenses		3.46
Additional expenses due to uncontrollable factors		0.16
<i>(i) Incremental bill printing expenses</i>		<i>0.07</i>
<i>(ii) License fee paid to DERC</i>		<i>0.09</i>
Total Cost for Other Expenses	2.00	16.94

Non Tariff Income (NTI)

1.27 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.

1.28 BYPL has submitted the following amounts as NTI for the years 2008-09.

Table 16 Non Tariff Income for 2008-09

Non Tariff Income (Rs. Cr)	2008-09	
	Approved in the MYT Order	As per petition
Non Tariff Income	44.09	139.52

Annual Revenue Requirement (ARR)

1.29 On the basis of the costs incurred in the year 2008-09 and after subtracting the Non Tariff Income for the year, BYPL has projected the following Annual Revenue Requirement:

Table 17 Proposed ARR for 2008-09

Annual Revenue Requirement (Rs. Cr)	2008-09	
	Approved in the MYT Order	As per petition
Power purchase cost	1,267.84	1,282.00
O&M expenses	223.76	270.31
Depreciation	87.31	87.31
ROCE including supply margin allowed	119.58	119.58
Past Period Gap due to Aptel Order		100.62
Other Expenses	2.00	16.94
<i>Less:</i>		
Non Tariff Income	44.09	139.52
Interest capitalized	10.54	10.54
Annual Revenue Requirement	1,645.86	1,726.71

Revenue from Sale of Power

1.30 BYPL has submitted that it achieved greater sales in the year 2008-09 than projected in the MYT Order and has shown the energy sales of 2008-09 as given below in the table below.

Table 18 Energy sales in 2008-09

Energy Sales	Unit	2008-09	
		Approved in the MYT Order	As per petition
Energy Sales	MU	3516	3964
Revenue Billed	Rs. Cr		1781.3

Energy Sales	Unit	2008-09	
		Approved in the MYT Order	As per petition
Average Billing Rate	Rs./unit	4.79	4.49

Revenue available towards ARR

1.31 For calculating the revenue gap for 2008-09, BYPL has submitted revenue available towards ARR as given in the table below:

Table 19: Revenue available towards ARR for 2008-09

Particulars (Rs Cr)	FY 2008-09
	Actual as per True Up petition
Revenue available for ARR	1553.93

Revenue Gap

1.32 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 20 Computation of revenue gap by BYPL

Computation of Revenue Gap (Rs. Cr)	2008-09
Opening Gap as per Tariff Order for 2009-10	116.62
Gap during the Year	172.77
<i>Annual Revenue Requirement during the year</i>	<i>1,726.71</i>
<i>Less: Revenue available towards ARR</i>	<i>-1,553.93</i>
Carrying Cost @ 9%	22.8
Gap adjusted during the year	-76.7
Closing Gap	235.50