

A1: INTRODUCTION

- 1.1 This staff paper contains summary of the petition filed by BRPL for true up of 2008-09 for the Commission's approval.
- 1.2 The Commission shall true up the uncontrollable parameters (Sales and Power Purchase) vis-à-vis the audited account of distribution licensees after prudence check for the year 2008-09. So far as the controllable parameters are concerned, any variation (up or down) on account of O&M expenses (excluding impact of Sixth pay Commission) is completely to the account of the licensee and is not trued-up. 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 vis-à-vis 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, BRPL has submitted that its actual energy sales in 2008-09 were 7014 MU compared to the approved energy sales of 6824 MU for 2008-09 in the MYT Order.
- 1.4 Since energy sales are treated as an uncontrollable factor, BRPL has requested the Commission to true-up energy sales in 2008-09 based on its audited accounts.

Table 1 Energy sales in 2008-09

Sale of Energy (MU)	2008-09	
	Approved in the MYT Order	As per petition
Domestic	3201	3515
Non Domestic	2543	2417
Industrial	642	636
Agricultural	21	24
Railways	24	23
DMRC	110	73
Street Lighting	171	130
Others	112	196
Total Sales	6824	7014

AT&C Losses

- 1.5 In its petition, BRPL has submitted that its actual AT&C loss figures for 2008-09 are better than the loss level targets set by the MYT Order. As per the profit sharing mechanism laid down in the MYT Regulations, BRPL has asked for the gains from this over-achievement of target are to be shared between the consumers and the Licensee.

- 1.6 Table 2 below shows the actual figures in 2008-09 of energy sales, distribution losses, power purchase in MU, collection efficiency and AT&C losses, along with the figures that were approved for 2008-09 in the MYT Order .

Table 2 AT&C Loss for 2008-09

Particulars	Units	2008-09		
		MYT Order	Actual	Better Achievement
Sales	MU	6,824	7,014	NA
Distribution loss targets	%	22.88%	21.76%	1.12%
Power Purchase at DISCOM periphery	MU	8,849	8,965	NA
Collection Efficiency	%	99.25%	101.50%	2.25%
AT&C Loss Targets	%	23.46%	20.59%	2.87%

- 1.7 BRPL has submitted the benefit on account of over-achievement of AT&C losses for 2008-09 as given in table below:

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

Particulars	FY 2008-09
	As per True Up petition
Total Amount on account of over-achievement of AT&C losses (Rs Cr)	118.27
Benefit to be retained by BRPL (Rs Cr)	59.14
Benefit to be transferred to Contingency Reserve (Rs Cr)	59.14

Power Purchase Requirement

- 1.8 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.
- 1.9 The energy sales for a year are grossed up by the loss levels for the year, to give the required quantum of power purchase for that year in the following manner:

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

Table 4 Actual sales, loss and power purchase for 2008-09 along with the approved sales.

Category	Units	2008-09	
		Approved in the MYT order	Actual
Sales	MU	6824	7014
Distribution Loss	%	22.88%	21.76%
Power Purchase at Periphery	MU	8849	8965

Power Purchase Cost

1.10 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) Central and State generating stations
- (e) Independent Power Producers
- (f) Non-conventional energy generators
- (g) Any generation business of the Distribution Licensee

1.11 BRPL in its petition has submitted that the actual rate at which it purchased power in the year 2008-09 was higher than the rate approved for the year in the MYT Order. It has stated that the actual rate for 2008-09 was Rs. 2.92/unit whereas the approved rate was only Rs. 2.70/unit. Similarly, BRPL has submitted that the actual quantum of power purchased in 2008-09 was also higher than the amount approved for that year in the MYT Order (8965 MU in actual, as opposed to 8849 MU approved). Due to the actual rate as well as the actual quantum of purchase being higher than the respective approved figures, BRPL has submitted that it incurred a higher power purchase cost in 2008-09 than the amount approved in the MYT Order.

1.12 The table below show the power purchase quantum and rate of purchase submitted by BRPL for 2008-09 (actuals) along with the quantum approved in the MYT Order.

Table 5 Power purchase quantum, cost and rate for 2008-09 (actuals) along with the cost approved in the MYT Order

Source	Approved in the MYT Order			Actual as per True Up Petition		
	MU Purchased	Total Charges (Rs Crs)	Avg rate (Rs./kwh)	MU Purchased	Total Charges (Rs Crs)	Avg rate (Rs./kwh)
NTPC	5,703.94	1,283.44	2.25	6,308.59	1,610.12	2.55
NHPC	680.91	118.79	1.74	717.11	127.97	1.78
TEHRI HEP	132.13	46.25	3.50	152.20	69.29	4.55
NJPC (SATLUJ)	283.37	78.51	2.77	298.01	82.60	2.77
TALA HEP	51.00	17.85	3.50	48.93	9.00	1.84
DVC				-	-	-
Nuclear	72.69	15.10	2.08	42.13	9.06	2.15
SGS	1,963.07	456.18	2.32	1,709.91	473.34	2.77

Source	Approved in the MYT Order			Actual as per True Up Petition		
	MU Purchased	Total Charges (Rs Crs)	Avg rate (Rs./kwh)	MU Purchased	Total Charges (Rs Crs)	Avg rate (Rs./kwh)
Future Stations	772.80	220.92	2.86	242.25	67.97	2.81
Power Purchase from other Sources	442.43	242.78	5.49	806.28	381.18	4.73
Less: Power Sold to other Sources	(874.24)	(229.44)	2.62	(904.10)	(466.99)	5.17
Other payments made	-	-	-	-	26.88	-
GRAND TOTAL	9,228.10	2,250.38	2.44	9,421.32	2,390.43	2.54
Inter-State transmission losses/ charges	283.76	77.89	-	308.80	159.91	-
Intra-State transmission losses/ charges	95.75	59.07	-	147.90	65.23	-
SLDC Fees and Charges	-	2.74	-	-	-	-
Total energy input to Distribution Company system	8,848.59	2,390.08	2.70#	8,964.62	2,615.57	2.92#

Impact of Aptel Order

1.13 BRPL appealed to the Appellate Tribunal for Electricity (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 BRPL to recover the Reactive energy charges incurred by it on the basis that these charges are a part of the power procurement cost. BRPL was allowed to recover reactive energy charges of Rs. 0.66 Cr for 2006-07 through tariff. BRPL in its petition has claimed Rs 0.66 Cr as reactive energy charges for 2006-07 along with carrying cost.
- (b) **R&M Expenses:** BRPL in its appeal in Aptel has submitted that the Commission in its MYT Order had not approved its entire R&M expenses for the years 2004-05, 2005-06 and 2006-07. The Aptel in its order held that BRPL's entire R&M expenses, as shown in its audited accounts, should be allowed by the Commission after prudence check. BRPL in its petition has claimed following additional R&M expenses based up on the Aptel order.

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	92.02	75.3	89.49
As approved by DERC	68.99	71.75	70.98

R&M Expenses (Rs. Cr)	2004-05	2005-06	2006-07
Amount to be trued up as per the Aptel Order	23.03	3.55	18.51

Further, this change in the amount of R&M expenses granted to BRPL will have an impact on the value of the “K-factor” computed as per the MYT Regulations, 2007. The K-factor is a constant (expressed in %) governing the relationship between R&M costs of the nth year and Gross Fixed Assets (GFA) in the following manner:

$$R\&M_n = K * GFA_{n-1}$$

BRPL has submitted that since the value of approved R&M expenses will now get revised, consequently the value of K for the MYT period also needs to be revised as shown below:

Table 7 Revision in K factor proposed by BRPL due to change in R&M expenses

Determination of K	Units	2002-03	2003-04	2004-05	2005-06	2006-07	Average
GFA as approved by DERC	Rs. Cr.	1,533	1,552	1,658	1,751	1,883	
Revised R&M Expenses	Rs. Cr.	35.84	52.57	92.02	75.3	89.49	
Revised K Factor	%	2.34%	3.39%	5.55%	4.30%	4.75%	4.07%

Due to this revision in the amount of approved R&M cost and in the value of “K”, BRPL has proposed the following addition to O&M costs.

Table 8 Addition to O&M costs proposed

Particulars	Units	2007-08	2008-09
Opening GFA approved in the MYT Tariff Order	Rs. Cr.	2,030.14	2,558.38
K factor	%	4.07%	4.07%
Revised R&M Expenses	Rs. Cr.	82.54	104.02
R&M Expenses approved in the Tariff Order	Rs. Cr.	72.08	90.84
Efficiency factor	%	0%	2%
Additional amount added to O&M Costs	Rs. Cr.	10.46	12.91

- (c) **SVRS Pension:** As per the Aptel Order, the Commission must allow BRPL 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 SVRS amount claimed by BRPL in the petition is shown below.

Table 9 SVRS expenses to be included in ARR calculations

Particulars	Units	2007-08	2008-09
SVRS Payment (in terms of High Court Order)	Rs. Cr.	62.60	20.80

- (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 BRPL incurred due to increase in its consumer base. Aptel in its order

has also allowed the impact of Sixth Pay Commission for all employees of BRPL against only for DVB employees allowed by the Commission. On account of these, the additional O&M expenses projected by BRPL after factoring in the increase in consumers up to 2008-09 are shown below.

Table 10 Additional O&M expenses projected after factoring in the increase in consumers upto 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	-	10.91	11.72	13.94
Increase in Consumers	%	$C = \frac{B_{(n)} / B_{(n-1)} - 1}{1} * 100$	0.00%	0.00%	7.43%	18.97%
Employee Cost with Revised Base	Rs. Cr.	D	121.13	137.6		
10% Escalation due to Sixth Pay Commission on all employees w.e.f. 1 Jan 2006	Rs. Cr.	$E = D * 10\%$	4.04	13.76		
Revised Employee Expenses with Inflation and Increase in Consumers	Rs. Cr.	$F = F_{(n-1)} X (1+C) X A$	125.17	151.36	169.36	209.85
Arrears	Rs. Cr.	G	-4.04	-13.76	-14.33	32.13
Employee Cost with Revised Base	Rs. Cr.	$H = F + G$	121.13	137.6	155.03	241.98
Less: Capitalized	Rs. Cr.	I	-	-	6.76	9.55
Net Employee Costs in terms of Aptel Order	Rs. Cr.	$J = H - I$	-	-	148.27	232.43
Employee Costs allowed in the MYT Order	Rs. Cr.	K			136.55	168.46
Gross Additional amount added to O&M Costs	Rs. Cr.	$L = J - K$			11.72	63.97
Efficiency factor	%	M			0%	2%
Net Additional amount added to O&M Costs	Rs. Cr.	$N = L X (1-M)$			11.72	62.69

- (e) **A&G expenses:** BRPL in its appeal to Aptel has submitted that the Commission in its MYT Order had not approved the entire A&G expenses of BRPL for 2004-05. The Aptel in its order has directed the Commission to approved entire A&G expenses for 2004-05 after prudence check. Based on the Aptel Order, the Licensee has submitted the remaining amount of A&G expenses to be trued up, as shown below.

Table 11 Additional A&G expenses to be trued up as per Aptel Order

A&G Expenses	Units	2004-05
As per Audited Accounts	Rs. Cr.	38.54
As approved by DERC	Rs. Cr.	29.04
Amount to be trued up in terms of Aptel Order	Rs. Cr.	9.50

- 1.14 The total year on year impact due to implementation of the Aptel Order as submitted by BRPL in its petition is shown below.

Table 12 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.	-	-	0.66		
R&M Expenses	Rs. Cr.	23.03	3.55	18.51		
SVRS Payment (in terms of High Court Order)	Rs. Cr.				62.6	20.8
Net O&M Expenses for the MYT Period	Rs. Cr.				22.17	75.6
<i>R&M Expenses</i>	<i>Rs. Cr.</i>				<i>10.46</i>	<i>12.91</i>
<i>Employee Expenses</i>	<i>Rs. Cr.</i>				<i>11.72</i>	<i>62.69</i>
A&G Expenses	Rs. Cr.	9.5				
Total	Rs. Cr.	32.54	3.55	19.17	84.77	96.4

- 1.15 Applying a carrying cost @ 9% p.a, the net impact of the Aptel Order has been given by BRPL as shown below.

Table 13 Impact on revenue gap due to Aptel Order with carrying costs (pre-MYT period)

Particulars	Units	2004-05	2005-06	2006-07	2007-08
Net Impact of Aptel Order during the year	Rs. Cr.	32.54	3.55	19.17	84.77
Opening Revenue Gap	Rs. Cr.	-	34.00	40.77	64.47
Expenses Incurred during the year	Rs. Cr.	32.54	3.55	19.17	84.77
Carrying Costs @ 9%	Rs. Cr.	1.46	3.22	4.53	9.62
Closing Revenue Gap	Rs. Cr.	34.00	40.77	64.47	158.86

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, Licensee in its petition has requested the Commission to allow true up of O&M costs.

- 1.17 BRPL 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. BRPL has now submitted that it has already paid a sum of Rs. 78.27 Cr (Rs. 8.35 Cr in 2008-09 and Rs. 69.92 Cr in 2009-10) but has considered Rs. 31.49 Cr in 2008-09 as per the methodology adopted by the Commission read with the Aptel Order.

- (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. BRPL 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 BRPL 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 14 Proposed O&M expenses for 2008-09 along with approved expenses*

O&M Expenses* (Rs. Cr)	2008-09	
	Approved in the MYT order	As per petition
Employee Expenses	178.87	262.36
R&M Expenses	89.02	101.94
A&G Expenses	66.33	66.33
Total O&M expenses	334.22	430.60

*The figures are 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, BRPL has assumed the same depreciation as allowed by the Commission in its MYT Order for the purpose of ARR computation.
- 1.21 The Licensee has submitted the following figure as the depreciation cost incurred for year 2008-09. The Licensee has proposed the same amount as was approved in the MYT order.

Table 15 Depreciation in 2008-09

Depreciation (Rs. Cr)	2008-09	
	Approved in the MYT order	As per petition
Depreciation	103.3	103.3

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

Return on Capital Employed (RoCE)

- 1.22 Like 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, BRPL has assumed the same RoCE as allowed by the Commission in its MYT Order.
- 1.23 The Regulated Rate Base (RRB) 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 (R_d) have also been computed as per the MYT Regulations, according to the Licensee's submission.
- 1.24 It has submitted the following amounts as the Return on Capital Employed for the years 2008-09.

Table 16 Return on capital employed for 2008-09*

RoCE including additional Supply Margin (Rs. Cr)	2008-09	
	Approved in the MYT order	As per petition
RoCE	201.87	201.87
Supply margin	13.05	13.05
Total RoCE including additional Supply Margin	214.92	214.92

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

Other Expenses

- 1.25 BRPL has submitted the following additional expenses for consideration in ARR computation. These include expenses on things like:
- (a) **DVB Arrears:** BRPL has submitted that DVB arrears of Rs. 3.09 Cr were collected by DPCL in 2008-09 which are considered as part of the revenue realized by the Petitioner. It has submitted that expenses on this account be included in its ARR as the same are to be paid to DPCL. BRPL has requested to include Rs. 3.09 Cr in ARR calculations, which is equivalent to 100% of DVB arrears (Government) collected.

- (b) **New initiatives:** BRPL has submitted that it has taken several new initiatives such as installation of kiosk machines for accepting payment of bills by consumers (around Rs. 18.24 lakhs), installing Minc Bill Boxes for accepting bill payments, at a cost of Rs. 5392, Project Jeevan for multi-utility payments by consumers, etc. The combined cost of these new initiatives is submitted to be Rs. 0.2 Cr for 2008-09.
- (c) **CISF Forces:** BRPL has submitted that it has deployed additional CISF forces in order to prevent electricity theft, at a cost of Rs. 3.37 Cr in 2008-09.
- (d) **Provision for Tax:** BRPL has shown Rs. 1.7 Cr as the provision for tax in 2008-09.
- (e) **Incremental expenses:** BRPL 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 incurred costs are shown in the table below, along with the costs approved for 2008-09 in the MYT Order.

Table 17 Other expenses proposed for 2008-09.

Other Expenses (Rs. Cr)	2008-09	
	Approved in the MYT Order	As per petition
Income tax	5.0	1.7
FBT		
DVB arrear	0.0	3.09
New initiatives	0.0	0.2
Expenses towards bifurcation of shared services	0.0	0.0
Energy conservation	0.0	0.0
Training expenses	0.0	0.0
CISF expenses	0.0	3.4
Additional expenses due to uncontrollable factors	0.0	0.41
<i>(i) Incremental bill printing expenses</i>	<i>0.0</i>	<i>0.25</i>
<i>(ii) License fee paid to DERC</i>	<i>0.0</i>	<i>0.16</i>
Total Cost for Other Expenses	5.0	8.8

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 BRPL has submitted the following NTI for 2008-09.

Table 18 Non Tariff Income for 2008-09.

Non Tariff Income (Rs. Cr)	2008-09	
	Approved in the MYT Order	As per petition
Non Tariff Income	48.2	167.0

Annual Revenue Requirement (ARR)

1.29 On the basis of its costs incurred in the year 2008-09 and after subtracting the Non Tariff Income for the year, BRPL has submitted the following Annual Revenue Requirement (ARR) as shown in the table below, along with the ARR approved in the MYT order.

Table 19 Submitted ARR for 2008-09

Annual Revenue Requirement (Rs. Cr)	2008-09	
	Approved in the MYT order	As per petition
Power purchase cost	2,390.08	2,615.50
O&M expenses	334.22	430.60
Depreciation	103.32	103.30
Interest expense capitalized	(12.48)	(12.48)
ROCE including supply margin allowed	214.92	214.92
Past Period Aptel Order		158.87
Other Expenses	5.00	8.80
Less: Non Tariff Income	(48.21)	(167)
Annual Revenue Requirement	2,986.85	3,352.57

Revenue from Sale of Power

1.30 BRPL 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.

Table 20 Energy sales and ABR in 2008-09

Energy Sales	2008-09	
	Approved in the MYT order	As per petition
Sales (MU)	6824	7014
Revenue Billed (Rs. Cr)	3318	3223
ABR (Rs./unit)	4.90	4.59

Revenue available towards ARR

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

Table 21 Revenue available towards ARR for 2008-09

Particular	2008-09
Revenue Available for ARR	2989.08

Revenue Gap

1.32 BRPL has submitted in its petition that even after reducing the revenue obtained from tariff and the Non Tariff Income, it is facing a revenue gap as shown below.

Table 22 Computation of revenue gap by BRPL

Computation of Revenue Gap (Rs. Cr)	2008-09
Opening Gap as per Tariff Order for 2009-10	575.63
Gap during the Year	363.49
<i>Annual Revenue Requirement during the year</i>	<i>3,352.57</i>
<i>Less: Revenue available towards ARR</i>	<i>(2,989.08)</i>
Carrying Cost @ 9%	75.32
Gap adjusted during the year	(10.81)
Closing Gap (Rs. Cr)	1,003.68