## Introduction

1.1 The BSES Yamuna Power Limited (BYPL), the Distribution Licensee has filed the Petition for approval of true up for FY 2012-13, Review for FY 2013-14, and Annual Revenue Requirement (ARR) and Tariff determination for FY 2014-15.

1.2 This Staff Paper contains the summary of the Petition filed by BYPL for true up of FY 2012-13 (based on audited accounts), and ARR and tariff of FY 2014-15 (based on projections).

1.3 For the purpose of comparison, the Staff Paper includes figures approved in the MYT Order dated 13th July, 2012 (referred to as 'MYT Order 2012' hereafter), and Order dated July 31, 2013 (referred to as Tariff Order dated 31st July, 2013).

1.4 As per the MYT Regulation 2011, the Tariff for FY 2014-15 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

- Employee Expenses
- Administrative & General (A&G) Expenses
- Repair & Maintenance (R&M) Expenses

c) Return on Capital Employed (ROCE)

d) Depreciation

e) Income Tax

f) Non-Tariff Income

1.5 The Commission shall true up the ARR FY 2012-13 as per MYT Regulations 2011 after prudence check.

1.6 Depreciation and RoCE shall be trued up every year based on actual capital expenditure and actual capitalization vis-a-vis capital investment plan approved by the Commission.

## Truing Up for FY 2012-13

**Energy Sales and Revenue**

1.7 In its Petition, BYPL has submitted that its actual energy sales in FY 2012-13 were 5002.07 MU compared to energy sales of 5244.14 MU approved by the Commission for FY 2012-13 in the July, 2012 Order. Since energy sales are treated as an uncontrollable factor, BYPL has requested the Commission to approve true up for FY 2012-13 based on its audited accounts, as shown below:

**Table 1: Sales and Revenue for FY 2012-13**

| Sl. No. | Category | 13th July, 2012 Order | | Actuals | | |
|---|---|---|---|---|---|---|
| | | Sales (MU) | Revenue (Rs. Cr) | Sales (MU) | Revenue billed (Rs. Cr) | Revenue collected (Rs. Cr) |
| 1 | Domestic | 2701.05 | 1108.71 | 2580.00 | 1330.2 | 1252.7 |
| 2 | Non Domestic * | 1627.97 | 1212.73 | 1539.70 | 1473.5 | 1473.8 |
| 3 | Industrial | 429.33 | 277.15 | 337.00 | 273.2 | 262.0 |
| 4 | Public Lighting | 114.45 | 64.09 | 105.00 | 68.6 | 60.8 |
| 5 | Irrigation & Agriculture | 0.36 | 0.07 | 0.00 | 0.1 | 0.1 |
| 6 | Railway Traction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | DMRC | 150.01 | 60.61 | 127.00 | 68.4 | 70.5 |
| 8 | Others @ | 211.99 | 155.85 | 313.00 | 187.3 | 192.1 |
| *a* | *DIAL* | | | | | 0.00 |
| *b* | *Worship/Hospitals* | | | | | 51.2 |
| *c* | *DJB* | | | | | 107.6 |
| *d* | *DVB Staff* | | | | | 6.2 |
| *e* | *Enforcement* | | | | | 26.4 |
| *f* | *Own Consumption* | | | | | 0.00 |
| *g* | *Temporary* | | | | | 0.00 |
| *h* | *advertisement and Hoardings* | | | | | 0.6 |
| | **Total** | | | **5002.07** | **3401.2** | **3311.9** |
| | Less: Bad Debts written off | | | | 37.7 | |
| **9** | **Total** | **5244.14** | **2879.21** | **5002.07** | **3362.5** | **3311.9** |

| Sl. No. | Category | 13th July, 2012 Order | | Actuals | | |
|---|---|---|---|---|---|---|
| | | Sales (MU) | Revenue (Rs. Cr) | Sales (MU) | Revenue billed (Rs. Cr) | Revenue collected (Rs. Cr) |
| **10** | **Add: Subsidy** | | | | | **66.4** |
| **11** | **Add: SD Release** | | | | | **1.4** |
| **12** | **Add: SD Interest** | | | | | **17.4** |
| **13** | **Ad: Other deemed Collection** | | | | | **36.1** |
| **14** | **Total Collection** | | | | | **3433.3** |
| **15** | Less: Amount collected on account of surcharge | | | | | 158.9 |
| **16** | Electricity Tax | | | | | 136.4 |
| **17** | Less: Late payment Surcharge | | | | | 24.1 |
| **18** | **Net amount to be considered for calculation of Revenue Gap** | | | | | **3113.8** |

* *Excluding DIAL and DJB*
*@ including DIAL & DJB*

The total amount billed (actuals) for FY 2012-13 given in the above Table -1 is including the revenue billed on account of surcharge at 8% of the approved Tariff and Tax which amount to Rs. 163.62 Cr and Rs. 137.80. The amount does not include bad debts written off during the year.

The Petitioner requests the Commission to approve the actual sales at 5002.10 MU and Revenue billed of Rs. 3362.5 Cr and revenue collected at Rs. 3113.8 Cr.

## AT&C Loss for FY 2012-13

1.8 BYPL, in its Petition, has submitted that the actual AT&C loss and Distribution loss figures for FY 2012-13.

1.9 The following Table shows the actual AT&C loss along with Distribution loss and collection efficiency for FY 2012-13 vis-à-vis that approved in the July, 2012 Order.

**Table 2: Approved and Actual AT&C Loss for FY 2012-13**

| Sl. No. | Particulars | Approved in Tariff Order 13th July, 2012 | Actuals as per Petition |
|---|---|---|---|
| 1 | AT&C Loss | 16.82% | 15.70% |
| 2 | Collection Efficiency | 99.50% | 101.72% |
| 3 | Distribution Loss | 16.40% | 20.26% |

## Power Purchase Requirement

1.10 The quantum of Power Purchase is arrived at by the expected energy sales by the licensee, as well as loss levels projected/approved. Higher expected energy sales require a greater quantum of power to be purchased and higher loss level also results in higher quantum of energy to be provided by the licensee.

1.11 The energy sales for the year is grossed up by the loss levels of the that year, to arrive at the required quantum of power purchase for that year in the following manner:

$$\text{Quantum of Power Purchase} = \frac{\text{Energy Sales (MU)}}{\text{1-(Distribution loss(\%)/100)}}$$

1.12 The Table below shows the actual sales, loss level, and power purchase for FY 2012-13, as submitted by licensee.

**Table 3: Power Purchase Requirement for FY 2012-13**

| Sl. No. | Particulars | Approved in Tariff Order dated 13th July, 2012 | Actuals as per Petition |
|---|---|---|---|
| 1 | Sales (MU) | 5244.14 | 5002 |
| 2 | Distribution Loss (MU) | 1028.91 | 1331 |
| | Distribution Loss (%) | 16.04 | 21.01% |
| 3 | Energy available at Discom Periphery (MU) | 6273.05 | 6333 |

## Power Purchase Cost

1.13 As per MYT Regulations, 2011, the licensee is allowed the net cost of power it procures from sources approved by the Commission for supply to its, consumers for retail supply. The following power procurement sources have been approved by the Commission.

a) Intra State and Inter State Trading Licensees.

b) Bilateral Purchase

c) Bulk Supplier

d) State Generation

e) Independent Power Producers

f) Central Generating Stations

g) Non Conventional Energy Sources

h) Any Generation Business of the Distribution Licensee.

1.14 BYPL, in its Petition has submitted that the Petitioner purchases more than 94% of the total quantum from Government Owned utilities. The quantum purchased from these are accounted/metered by Government bodies like NRLDC/SLDC. The price at which the power is to be purchased are governed by independent Regulatory Commissions like CERC/DERC. The price of power from these stations has increased significantly during the last 5 years as given by the Petitioner are shown below:

**Table 4: Source-wise increase in Quantum and Power Purchase Cost**

| Sl. No. | Particulars | Quantum (%) | Increase over last 5 years |
|---|---|---|---|
| 1 | NTPC | 53.94% | 89.88% |
| 2 | NHPC | 4.16% | 66.3% |
| 3 | SGS | 14.47% | 92.29% |
| 4 | Other Government Utilities | 21.47% | 28.92% |
| **5** | **Total** | **94.04%** | **72.65%** |

1.15 The following Table shows the actual Power Purchase Cost submitted by BYPL for FY 2012-13 along with the cost approved by the Commission for FY 2012-13 in Tariff Order dated 13th July, 2012.

**Table 5: Power Purchase Cost (Approved vis-a-vis Actual)**

| Sl. No | Source | To dated July 13, 2012 | | | Actual | | | Difference | |
|---|---|---|---|---|---|---|---|---|---|
| | | Quantum (A) MU | Amount (B) Rs. Crores | Rate (C= B*10/A) Rs./unit | Quantum (D) MU | Amount (E) Rs. Crores | Rate (F= B*10/A) Rs./unit | Quantum (D-A) MU | Amount (E-B) Rs. Crores |
| **1** | **Power Purchase from long Term Sources** | | | | | | | | |
| A | NTPC$ | 4490.5 | 1635.8 | 3.6 | 5028.5 | 2127.8 | 4.2 | 538.0 | 492.0 |
| B | NHPC | 430.2 | 108.9 | 2.5 | 387.5 | 136.5 | 3.5 | (42.6) | 27.6 |
| C | DVC | 2642.4 | 1.57 | 4.0 | 1519.6 | 611.5 | 4.0 | (1122.7) | (445.4) |
| D | Other Hydro | 336.5 | 82.4 | 2.4 | 306.7 | 108.6 | 3.5 | (29.8) | 26.2 |
| E | NPCIL | 160.8 | 49.7 | 3.1 | 175.3 | 54.5 | 3.1 | 14.5 | 4.7 |
| F | SGS# | 3161.0 | 1367.0 | 4.3 | 1348.9 | 683.3 | 5.1 | (1812.1) | (683.7) |
| | **Sub Total of 1** | **11221.3** | **4300.7** | **3.8** | **8766.6** | **3722.1** | **4.2** | **(2454.7)** | **(578.6)** |
| **2** | **Credit for Regulated Power 2** | | | | | **(11.8)** | | | |
| **3** | **Other short term sources 3** | | | | | 1.5 | | | |
| A | Short term purchase | | | | 556.0 | 218.2 | | 556.0 | 218.2 |
| B | Short term sale | 4430.5 | 1772.2 | 4.0 | 2634.3 | 821.4 | 3.1 | (1796.2) | (950.8) |
| | **Sub total of 4** | **(4430.5)** | **(1772.2)** | **4.0** | **(2078.3)** | **(603.2)** | **2.9** | **2352.2** | **1169.0** |
| **4** | **Transmission loss/charges** | | | | | | | | |
| | Inter-state | (387.4) | 167.0 | (4.3) | (280.6) | 242.0 | (8.6) | 106.8 | 75.0 |
| | Intra-state | (130.34) | 183.4 | (14.1) | (74.9) | 248.4 | (33.2) | 55.4 | 65.0 |
| | **Sub total of 5** | **(517.74)** | **350.4** | **(6.8)** | **(355.48)** | **490.39** | **(13.8)** | **162.3** | **140.0** |
| **5** | **Power Purchase Rebate** | | **(93.0)** | | | **(24.71)** | | | |
| **6** | **Total (1+2+3+4+5)** | **6273.1** | **2785.9** | **4.4** | **6332.8** | **3574.3** | **5.6** | **59.8** | **788.4** |

*$ Excludes BTPS*
*# Includes BTPS*

## Reversal of R&M Expenses from FY 2007-08 to FY 2011-12

1.16 The Petitioner has requested to consider the R&M expenses already incurred based on the actual of the respective years. In this regard, it is submitted that the Commission in the Tariff Order dated 31st July, 2013 revised R&M Expenses based on the revision in Gross Fixed Assets from FY 2007-08 to FY 2011-12. It is respectfully submitted that the above treatment runs contrary to the MYT Regulations.

It is requested that the R&M Expenses ought not to be revised based on the revision in GFA. The reversal on account of R&M Expenses from FY 2007-08 to FY 2011-12 is tabulated below:

**Table 6: R&M Expenses claimed from FY 2007-08 to FY 2011-12**

**(Rs. crore)**

| Sl. No. | Particulars | FY 2007-08 | FY 2008-09 | FY 2009-10 | FY 2010-11 | FY 2011-12 | Total |
|---|---|---|---|---|---|---|---|
| 1 | R&M Expenses as per Tariff Order | 32.25 | 42.26 | 53.93 | 61.3 | 69.07 | 258.81 |
| 2 | Revised R&M Expenses | 47.56 | 56.78 | 67.02 | 73.99 | 81.72 | 655.56 |
| 3 | R&M Expenses Claimed | 35.25 | 44 | 56.95 | 66.2 | 74.52 | 273.92 |
| 4 | Difference | 0.00 | 1.74 | 3.02 | 4.90 | 5.45 | 15.11 |
| 5 | Carrying Cost | 0.00 | 0.12 | 0.44 | 1.04 | 2.08 | 3.68 |
| 6 | Total amount to be recovered | 0.00 | 1.86 | 3.46 | 5.94 | 7.53 | 18.79 |

Hence the Petitioner requests the Commission to allow Rs. 18.79 crore on account of reversal of R&M Expenses from FY 2007-08 to FY 2011-12.

## O&M Expenses

1.17 The O&M Expenses approved by the Commission in Tariff Order dated 13th July, 2012 and now claimed in the Petition are given in Table below:

**Table 7: O&M Expenses for FY 2012-13**

**(Rs. crore)**

| Sl. No. | Particulars | FY 2012-13 | |
|---|---|---|---|
| | | To dated July 13, 2012 | Petition |
| 1 | Employee Expenses | 213.23 | 218.40 |
| 2 | A&G Expenses | 52.40 | 59.09 |
| 3 | R&M Expenses | 69.85 | 69.85 |
| **4** | **Total O&M Expenses** | **335.48** | **347.33** |
| 5 | Efficiency improvement | 2% | 0% |
| 6 | Add: SVRS Pension | 4.92 | 4.92 |
| **7** | **Net O&M Expenses** | **333.69** | **352.25** |

# Depreciation

1.18 The Petitioner has submitted that the Depreciation has been calculated after excluding consumer contribution from the Gross Fixed Assets in accordance with DERC Tariff Regulations. 2011. The Petitioner has submitted the total depreciation from FY 2007-08 to FY 2012-13 after implementation of ATE Judgements as under.

**Table 8: Amount of Depreciation from FY 2007-08 to FY 2012-13**

**(Rs. crore)**

| Particulars | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 |
|---|---|---|---|---|---|---|
| Opening GFA | 1260.5 | 1500.8 | 1762.8 | 1929.0 | 2079.6 | 2166.5 |
| Additions during FY | 2403.0 | 262.0 | 166.2 | 150.6 | 86.9 | 59.7 |
| Closing GFA | 1500.8 | 1762.8 | 1929.0 | 2079.6 | 2166.5 | 2226.0 |
| Average GFA | 1380.6 | 1631.8 | 1845.9 | 2004.3 | 2123.0 | 2196.4 |
| Depreciation | 53.70 | 63.07 | 70.82 | 76.57 | 81.17 | 84.44 |
| Rate of depreciation | 3.89% | 3.87% | 3.84% | 3.82% | 3.82% | 3.82% |

## Miscellaneous Expenses

1.19 The Petitioner has submitted that the Commission in its Tariff Order dated 13th July, 2013 approved the following Miscellaneous Expenses.

a) Credit Rating
b) Training Expenses
c) Cost of Audited Certificate
d) Incremental Licensee Fees paid to the Commission
e) Licensee Fees paid to GONCTD on assets.
f) Transmission of the Petition in Hindi.
g) Exchange Membership Fees.

A part from the above, the petitioner has claimed the miscellaneous expenses on the following heads as below:

**i) CISF/ Security Expenses**

The Commission has allowed the expenditure incurred by BYPL on account of CISF/Security Expenses as a new initiative during FY 2011-12. The Petitioner has incurred expenses of Rs. 7.69 crore on account CISF/Security Expenses during FY 2012-13.

**ii) Incremental Tender Cost**

The Petitioner has submitted that while procuring any material, the Petitioner is required to follow the procedure in accordance with competitive bidding guide lines issued by the Commission on 11th June, 2009. By following the competitive bidding any benefit of reduction in the cost of procurement of material are being passed on to the consumer. The Petitioner has submitted that the incremental Tender Cost has not been claimed as part of A&G Expenses by the Petitioner as it is a new item not forming part of the costs associated with A&G Expenses. These costs are not really controllable items and these costs are not on any normative basis. It is requested that these costs are to be allowed. The costs are estimated at Rs. 0.73 Cr.

**iii) Incremental Bill Printing**

It is submitted that the consumer base is dynamic in nature and almost 5-10% new consumers are added each year. The Commission has considered Y-o-Y escalation of 8% over the bill printing expenses incurred during FY 2010-11. However the increase in consumer base was not factored in while determination of bill printing expenses. The bill printing is mandatory requirement and varies with the increase with number of consumers. The Petitioner has requested the commission to allow the increments bill printing expenses of Rs. 0.26 Cr.

**iv) Normative Interest on Security Deposit of DPCL**

The Petitioner is claiming the normative interest on Security deposit of DPCL in accordance of the direction of High Court of Delhi in Order No. WP(C) 2396/2008, dated 26th March, 2008.

"The Petitioner will, however, continue to return the security deposit and pay interest to consumers in accordance with law".

Following the direction of the High Court of Delhi the Petitioner claiming the normative interest on security deposit of DPCL as under.

**Table 9: Normative Interest on Security Deposit of DPCL**

**(Rs. crore)**

| Sl. No. | Particulars | UoM | Reference |
|---|---|---|---|
| 1 | Consumer Security Deposit of DPCL | Rs. Crore | 35.38 |
| 2 | CSD transferred to BYPL | Rs. Crore | 8.00 |
| 3 | CSD of DPCL yet to be transferred | Rs. Crore | 27.38 |
| 4 | Interest rate for CSD | % | 15.03% |

| | | | |
|---|---|---|---|
| 5 | **Normative Interest on CSD** | **Rs. Crore** | **4.12** |

It is submitted that in case the interest on security deposit of DPCL is not paid by the Petitioner, the same may lead to violation of the directives of the High Court. The interest may be allowed to be claimed in the ARR which shall be subject to the final outcome of the writ Petition pending in the High Court.

**v) Ombudsman Expenses**

The Petitioner is claiming the incremental ombudsman expenses of Rs 0.02 crore which is beyond the control of the Petitioner as it is provided at the instance of the Commission.

**vi) Bank Charges**

The Commission in the Tariff Order dated 31$^{st}$ July, 2013 disallowed the bank charges on the basis of that RoCE and Carrying Cost on Regulatory Asset, have been allowed which cover all borrowing costs. In this regard Clause 5.6 of DERC Tariff Regulations, 2011 states as under:

"*5.6. Return on Capital Employed (RoCE) shall be used to provide a return to the Distribution licensee and shall cover all financing costs, without providing separate allowance for interest on loans and interest on working capital* ".

It is submitted that Bank charges i.e., the syndicating fees is charged by the Banks/ Financial institutions for completing various formalities like documentation, legal formalities, processing fees, Service Charges etc., such charges are required to be paid upfront by the Petitioner apart from interest during the year.

It is submitted that payment of such cost is beyond the control of the Petitioner. Therefore the Petitioner is claiming the Bank charges of Rs. 35.52 crore borne during FY 2012-13.

**vii) Fees for Geo – Spatial Access**

It is submitted that the Petitioner vide its letter No. RA/2013-14/01/A/271, dated 12th July, 2013 as informed the Commission regarding the mandatory fees to be paid for Geo-Spatial Access. The Petitioner has claimed Rs. 0.25 crore as fees for Geo- Spatial Access as MISC Expenses.

Based on the discussions above the Miscellaneous Expenses claimed during FY 2012-13 are tabulated as under:

**Table 10: Miscellaneous Expenses claimed during FY 2012-13**

**(Rs. crore)**

| Sl. No | Particulars | Amount |
|---|---|---|
| 1 | CISF/Security Expenses | 7.69 |
| 2 | Credit Rating | 0.20 |
| 3 | Trading Expenses | 0.49 |
| 4 | Incremental cost of Auditor Certificates | 0.00 |
| 5 | incremental Licensee fees paid to DERC | 0.11 |
| 6 | Incremental Tender Cost | 0.73 |
| 7 | Incremental Bill Printing Expenses | 0.26 |
| 8 | Normative Interest on SD of DPCL | 4.12 |
| 9 | ombudsman Expenses | 0.02 |
| 10 | Translation of the Petition in Hindi | 0.00 |
| 11 | syndication and documentation fees (cost of borrowing) | 35.52 |
| 12 | fees for geo-spatial access | 0.25 |
| 13 | membership fees | 0.09 |
| **14** | **Total** | **49.49** |

The Petitioner has requested the Commission to consider the above miscellaneous expenses incurred during FY 2012-13 for calculation of ARR during FY 2012-13.

## Return on Capital Employed

1.20 The Petitioner has furnished the Return on Capital Employed during FY 2012-13 as tabulated below:

**Table 11: Return on Capital Employed (RoCE)**

(Rs. crore)

| Sl. No. | Particulars | FY 2012-13 |
|---|---|---|
| 1 | Equity | 422.22 |
| 2 | Debt | 1009.03 |
| 3 | Rate of Return on Equity | 14.00% |
| 4 | Rate of Return on Debt | 14.71% |
| 5 | WACC (RoE 14%) | 14.50% |
| 6 | RRB (i) | 1460.12 |
| 7 | RoCE | 211.72 |
| 8 | WACC (RoE 16%) | 15.09% |
| 9 | RoCE (at 16%) | 220.34 |

## Income Tax

1.21 The Petitioner has submitted that the Commission in its Tariff Order dated 31st July, 2013 compared the Income Tax entitlement based on the Return on Equity and Actual Income Tax paid during respective financial year and allowed lower of the two as Income Tax from FY 2007-08 to FY 2011-12.

It is further submitted that the Petitioner is currently availing Tax benefit of tax holiday under section 81-A of the Income Tax Act, 1961 and the past un-absorbed losses. However once the period of Tax holiday is over and past unabsorbed losses are adjusted the Petitioner will be required to pay higher rate/amount which will increase the Tax liability of the Petitioner. In case the same approach is adopted, the Income Tax allowed will be as actual basis in the current financial year as the tax paid is lesser than the entitlement as per RoE approach. It is submitted that the Commission deals with Regulatory accounts of the Petitioner. Therefore the Commission may compute as per regulatory accounts and adjust the Income Tax (to be allowed on the Annual Revenue Requirement) on the return earned as per Regulatory Accounts.

Ideally the Petitioner's ARR out to have been so determined that income generated from Retail Business is equal to all expenses, Return on Equity and Tax payable.

It is submitted that such a situation does not exist due to absence of cost reflective Tariff and various disallowances by the Commission. Therefore the Income Tax ought to be allowed on RoE approach and not on comparative approach between RoE and actual Income Tax basis.

The Petitioner has submitted that the Petitioner is claiming the Income Tax during FY 2012-13 on RoE approach as a part of Truing up requirement during FY 2012-13 as tabulated below without pre-judicial to the appeal to ATE.

**Table 12: Projected Tax Expense for FY 12-13**

**(Rs. crore)**

| Particulars | Reference | FY 2012-13 |
|---|---|---|
| A | RB (Average) | 1768.14 |
| | | |
| Equity | B | 513.39 |
| Debt | C | 1807.85 |
| % Equity | D=B/(B+C) | 22% |
| Equity Considered for Income Tax | E=D*A | 391.06 |
| Rate of Return | F | 16% |
| Return on Equity | G=F*E | 62.57 |
| MAT rate | H | 20.01% |
| Income Tax | I=H*G | 12.52 |

**Table 13: Actual Income Tax during FY 2012-13**

**(Rs. crore)**

| Sl. No. | Particulars | Reference | FY 2012-13 |
|---|---|---|---|
| 1 | Average Equity | A | 422.22 |
| 2 | Average Debt | B | 1009.03 |
| 3 | % Equity | C=A/(A+B) | 29.50% |
| 4 | RRB | D | 1460.12 |
| 5 | Amount of Equity | E=C*D | 430.73 |
| 6 | Rate of Return | F | 16.00% |
| 7 | Rate of Equity | G=E*F | 68.92 |
| 8 | Income-Tax Rate | H | 20.01% |
| 9 | Income-Tax calculated | I=G/(1-H)-G | 17.24 |
| 10 | Actually paid | J | 5.28 |
| **11** | **Income-Tax to be allowed** | **K=I** | **17.24** |

## Non Tariff Income

1.22 The Petitioner has submitted that the Petitioner has excluded the following items from Non - Tariff Income in addition to items excluded by the Commission in the Tariff Order 31st July, 2013.

i) Bad debts recovered – The Petitioner has already considered bad debts recovered under amount collected during the year.

ii) Sale of scrap.

(iii) Connection /Reconnection charges

The Non Tariff Income claimed by the Petitioner in the True up for FY 2012-13 is as under:

**Table 14: Non-Tariff Income during FY 2012-13 (Rs. crore)**

| SI. No. | Particulars | FY 2012-13 | |
|---|---|---|---|
| | | Tariff Order dated July 13, 2012 | Actuals |
| **I** | **As per Audited Accounts** | | |
| a | As per Note 26: other Operating revenues | | 94.8 |
| b | As per Note 27: other Income | | 25.6 |
| **II** | **Total (A+B)** | **78.95** | **120.46** |
| c | Income from normative interest on Consumer Security Deposit | | 28.8 |
| **IV** | **Total Non-Tariff Income** | **78.95** | **149.23** |
| | **Less: Income from other business (a+b+c)** | | **17.61** |
| 1 | Reap Benefits | | 0.60 |
| 2 | ED collection business | | 4.09 |
| 3 | Street light maintenance | | 12.91 |
| **V** | **Net Non-Tariff Income** | | **131.62** |
| 1 | Less: Interest on loans and Advances to staff | | 0.00 |
| 2 | Less: Financing cost of LPSC | | 19.60 |
| 3 | Less: Rebate on Power Purchase and Transmission Charges | | 24.71 |

| SI. No. | Particulars | FY 2012-13 | |
|---|---|---|---|
| | | Tariff Order dated July 13, 2012 | Actuals |
| 4 | Less: write-back of Miscellaneous provisions | | 1.93 |
| 5 | Less: Short term gain | | 5.57 |
| 6 | Less: Recoveries from employees | | 0.03 |
| 7 | Less: Bad Debts recovered | | 2.95 |
| 8 | Less: scale of Scrap | | 5.77 |
| 9 | Less: Connection/Reconnection charges | | 0.04 |
| 10 | Less: Pole shifting + Pole numbering | | 0.17 |
| **V** | **Non-Tariff Income** | **78.95** | **70.85** |

## Reversal of amount on account of Bad Debts Recovered from FY 2010-11 to FY 2011-12

1.23 The Petitioner has submitted that in regards to Bad Debts recovered, the Commission in Tariff Order dated 31st July, 2013 viewed as under:

*"3.116 The Petitioner has submitted the bad debt recovery Rs. 9.77 crore to be reduced from Non Tariff Income for FY 2011-12. As per Regulation 5.23 of MYT Regulations, 2007 the miscellaneous receipts from the consumer shall constitute non Tariff Income of the licensee. Therefore the Commission finds no justification for reducing this amount from Non Tariff Income".*

The bad debts recovered is already been considered as an amount collected during respective year. The consideration of amount of bad debts recovered as a part of non Tariff Income will lead to double accounting of the same. Therefore, amount pertaining to bad debts recoverable is required to be recovered along with carrying cost as tabulated under:

**Table 15: Bad debts recovered along with carrying cost**

| Sl. No | Particulars | UoM | FY 2012 |
|---|---|---|---|
| 1 | Opening Balance | Rs. Crore | 0.00 |
| 2 | Additions | Rs. Crore | 9.77 |
| 3 | Closing Balance | Rs. Crore | 9.77 |
| 4 | Carrying cost-rate | % | 14.88% |
| 5 | Carrying cost | Rs. Crore | 0.73 |
| 6 | Grand Closing Balance | Rs. Crore | 10.49 |

## Income from Other Business

1.24 The summary of total income received from other business and proposed to be retained by the Petitioner is tabulated below:

**Table 16: Other Income**

| Sl. No. | Particulars | FY 2012-13 | | | |
|---|---|---|---|---|---|
| | | Total income (Rs. Crore ) | % Proposed to be retained (%) | Amount retained (Rs. Crore) | Amount to be passed on to consumers (Rs. Crore) |
| 1 | REAP Benefits | (0.02) | 66.67% | (0.02) | 0.00 |
| 2 | ED Collection Business | 4.09 | 66.67% | 2.73 | 1.36 |
| 3 | Street Light Maintenance charges | 12.91 | 66.67% | 8.61 | 4.30 |
| **4** | **Total** | **16.98** | | **11.31** | **5.67** |

## Annual Revenue Requirement

1.25 Based on the above discussion the Annual Revenue Requirement during FY 2012-13 vis-à-vis the approved in the Tariff Order dated 13th July, 2012 as submitted by the petitioner is tabulated below:

**Table 17: Annual Revenue Requirement during FY 2012-13**

**(Rs. crore)**

| Sl. No. | Particulars | FY 2012-13 | |
|---|---|---|---|
| | | Tariff Order dated July 13, 2012 | Actuals |
| **A** | **Expenses** | | |
| 1 | Power Purchase Cost from Gencos | 2442.5 | 3083.7 |
| 2 | Inter-State Transmission Charges | 163.6 | 242.0 |
| 3 | Intra-State Transmission Charges | 179.7 | 248.4 |
| 4 | O&M Expenses | 333.7 | 352.3 |
| 5 | RoCE | 193.9 | 220.3 |
| 6 | Depreciation | 141.0 | 127.4 |
| 7 | Loss on Retirement of Assets | 0.00 | 15.4 |
| 8 | Other Miscellaneous Expenses | 0.00 | 49.5 |
| 9 | Income Tax | 12.5 | 17.2 |
| 10 | Fixed cost against Regulated power during FY 2012 | 0.00 | 13.1 |
| 11 | Amount of CSD pertaining to DVB Era | 0.00 | 76.9 |
| 12 | Reversal of R&M Expenses (FY 2008 to FY 2012) | 0.00 | 18.8 |
| 13 | Reversal of bad debts from FY 2008 to FY 2012 | 0.00 | 10.5 |
| 14 | Difference on account of over dues | 0.00 | 0.1 |
| **15** | **Total Expenses** | **3466.9** | **4475.5** |
| **B** | **Income** | | |
| 1 | Revenue from sales | 3347.5 | 3113.8 |
| 2 | Non-Tariff Income | 79.0 | 70.8 |
| 3 | Income from other business | 0.00 | 5.7 |
| **4** | **Total Income** | **3426.5** | **3190.3** |
| **c** | **Revenue (Gap)/Surplus** | **(40.5)** | **(1285.3)** |

The Petitioner requests the Commission to consider the Revenue Gap shown in the above Table.

## Implementation of ATE's Judgement

1.26 The Petitioner has submitted that Hon'ble ATE while disposing the Appeals 37 of 2008, 147 of 2009 and 153 of 2009 filed against the Tariff Orders issued by the Commission on some specific issues, has directed the Commission dated 23rd February, 2008 and

28th May, 2009 respectively, to implement the directives and True up the entitlement of the Petitioner in terms of the principles set-out in the respective ATE Orders. The Commission vide its affidavit filed before Hon'ble ATE in Appeal No. 14 of 2012 has explained its willingness to implement the directives of Hon'ble ATE.

The financial impact due to implementation of ATE's judgment is tabulated below:

| Sl. NO. | Particulars | Impact (Rs. Cr.) |
|---|---|---|
| **1** | **Employee Expenses** | **258.97** |
| **a** | **Payment towards SVRS Optees** | **83.58** |
| **b** | **Hike-6th pay commission for non-DVB employees** | **91.2** |
| **c** | **Increase in consumer base** | **84.19** |
| **2** | **Capital Expenditure** | **746.76** |
| **3** | **True-up (11 Months)-12.1** | **297.82** |
| **4** | **Re-determination of distribution loss** | **109.59** |
| **5** | **R&M Expenses and A&G Expenses for policy direction period** | **69.95** |

The Petitioner has listed the issues to be implemented as per the directives of the Hon'ble ATE as under:

**Table 18: Issues to be implemented as per ATE Judgement**

| Sl. No. | Issue | Direction of Hon'ble ATE |
|---|---|---|
| 1 | **Employee Expenses** | |
| *a* | Payment towards retirement of SVRS Optees | The Commission shall allow the expenses incurred towards the retirement benefit of SVRS optees pending decision of the Actuarial Arbitration Tribunal and shall true up the employee expenses to the extent of increase caused by increase in the consumer base. |
| *b* | Hike comparable to 6th pay commission for non-FRSR Employees | The Commission shall allow the hike comparable to the recommendations of 6th pay commission to employees other than DVB Employees in truing-up process in case expenditure has been actually incurred |
| *c* | Expenses on increase in employee expense on account of increase in | The Commission shall allow the expenses incurred towards the retirement benefit of SVRS optees pending decision of the Actuarial |

| Sl. No. | Issue | Direction of Hon'ble ATE |
|---|---|---|
| | consumer base | Arbitration Tribunal and shall true up the employee expenses to the extent of increase caused by increase in the consumer base. |
| 2 | **Capital Expenditure and Capitalisation** | |
| *a* | Electrical Inspector Certificate | For capitalisation of fresh assets the DISCOM shall make appropriate applications to the Electrical Inspector and the capitalisation of such assets will be allowed w.e.f. 16th day of filing of the application and payment of necessary fee. |
| *b* | REL Purchases | Price paid to REL to be compared with NDPL, if NDPL > REL prices may be allowed; if NDPL < REL Prices+5% profit margin, lower price may be allowed |
| 3 | A&G and R&M Expenses pertaining to Policy Direction period | R&M Expenses and A&G Expenses should be allowed on actuals subject to prudence check of the commission |
| 4 | Re-determination of Distribution Losses | The appellant may make an appropriate representation to the Commission in this regard within one month hereof and that if a representation is so made the Commission shall dispose it of in two months |
| 5 | Truing-up of expenses for Pre-MYT Period | The State Commission is directed to true up the financials for the period 1.4.2007 to 28.2.2008 at the earliest and allow the same with carrying cost |
| 6 | Funding of working capital in ration of 70:30 | Working capital to be allowed in the ratio of 70:30 |
| 7 | Financing cost of LPSC | LPSC to be allowed based on prevalent market lending rate during that period keeping in view prevailing prime lending rate |

1.27 The impact on implementation of the directions of ATE on each of the issues listed above are detailed in the Tables below:

**a) Payment towards retirement of SVRs Optees**

Petitioner has submitted that as per directive of Hon'ble ATE, the Petitioner requests the Commission to allow the amount paid to pension Trust along with carrying cost as below:

**Table 19: Amount paid to pension Trust along with carrying costs**

**(Rs. crore)**

| Particulars | FY2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 |
|---|---|---|---|---|---|
| Opening | 0.00 | 47.69 | 70.16 | 63.86 | 72.59 |
| Cost Incurred / (Retained) | 44.64 | 14.89 | (14.55) | 0.17 | 0.18 |
| Carrying Cost | 3.05 | 7.58 | 8.24 | 8.56 | 10.81 |
| Closing | 47.69 | 70.16 | 63.86 | 72.59 | 83.58 |

### b) Hike Comparable to 6th Pay Commission for Non DVB Employees

It is submitted that the Hon'ble ATE in its judgement dated 6th October, 2009, had directed the Commission to consider salary hike to the extent of hike comparable to the recommendation of 6th pay Commission to employees other than erstwhile DVB employees as tabulated below:

**Table 20: Incremental salary for Non DVB Employees**

**(Rs. crore)**

| Particulars | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 |
|---|---|---|---|---|---|---|---|
| Opening | - | 2.9 | 12.6 | 23.7 | 37.0 | 52.5 | 70.4 |
| Additional Salary $ | 2.7 | 9.1 | 9.5 | 9.9 | 10.4 | 10.9 | 11.4 |
| Carrying Cost | 0.1 | 0.7 | 1.6 | 3.4 | 5.1 | 7.0 | 9.4 |
| Closing | 2.9 | 12.6 | 23.7 | 37.0 | 52.5 | 70.4 | 91.2 |

### c) Increase on account of increase in consumer base

It is submitted that the Commission has already trued up the consumer base of the Petitioner for the first MYT Control period but is yet to implement the judgement of Hon'ble ATE. The cumulative impact of increase in consumer base on employee cost is given below:

**Table 21: Cumulative Impact of increase in consumer base on employee costs**

**(Rs. crore)**

| Particulars | FY2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 |
|---|---|---|---|---|---|
| Opening | 0.00 | 13.94 | 28.56 | 43.80 | 64.84 |
| Additional Salary # | 13.04 | 11.89 | 10.78 | 14.23 | 9.03 |
| Carrying Cost | 0.89 | 2.73 | 4.45 | 6.81 | 10.32 |
| Closing | 13.94 | 28.56 | 43.80 | 64.84 | 84.19 |

### d) Capital Expenditure and Capitalisation

The impact of capitalisation based on electrical inspector certificate and disallowance of capital expenditure since some goods were purchased by the BYPL from REL is estimated by BYPL at Rs. 746.76 crore.

The Petitioner has requested the Commission to allow capital expenditure already incurred by the Petitioner as per ATE judgement dated 6th December, 2009.

Disallowance of capital expenditure and revised capitalisation are provided as below:

**Table 22: Disallowance of Capital Expenditure**

**(Rs. crore)**

| Financial Year | Amount Disallowed |
|---|---|
| FY 05 | 6.37 |
| FY 06 | 41.08 |
| FY 07 | 65.92 |
| FY 08 | 57.47 |
| FY 09 | 0.00 |
| Total | 170.84 |

**Table 23: Revised Capitalisation and Capital Expenditure**

**(Rs. crore)**

| Sl. No. | Particulars | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Revised Capitalisation | 225.79 | 360.78 | 237.35 | | | | | |
| 2 | Revised Capital Expenditure | 420.79 | 340.00 | 275.00 | | | | | |
| 3 | Depreciation | 0.00 | 3.40 | 23.63 | 14.08 | 14.08 | 14.08 | 14.08 | 14.08 |
| 4 | Interest | 0.40 | 2.99 | 7.14 | | | | | |
| 5 | ROE | 0.31 | 2.28 | 5.44 | | | | | |
| 6 | ROCE | 0.00 | 0.00 | 0.00 | 75.31 | 91.92 | 87.67 | 81.78 | 83.64 |
| 7 | Carrying Cost | 0.03 | 1.85 | 2.7 | 11.73 | 26.00 | 42.42 | 61.39 | 64.33 |

### e) Truing of Expenses for Pre-MYT Period

The Petitioner has submitted the impact of non Truing up for the Pre- MYT Period in accordance with the provisions under Regulation 12.1 of MYT Regulations, 2007 as well as directive issued by ATE is tabulated as below:

**Table 24: Financial Impact of True up of Pre MYT Period**

**(Rs. crore)**

| SI. No. | Particulars | Impact in Rs. Crore |
|---|---|---|
| 1 | True-up-FY 08-Reg. 12.1 | 118.15 |
| 2 | Impact on a/c of revision of O&M Expenses | 77.17 |
| 3 | Carrying cost from FY 08 to FY 12 | 102.50 |
| 4 | Total | 297.82 |

### f) Financial Impact of Re-determination Distribution Loss Trajectory

The Petitioner has submitted that the adverse financial impact on account of non revision of Distribution loss trajectory as per the direction of Hon'ble Tribunal is as below:

**Table 25: Financial Impact on account of non-revision of Distribution Losses trajectory**

**(Rs. crore)**

| Particulars | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | Total |
|---|---|---|---|---|---|---|
| Difference on account of revision in targets | 34.71 | 23.09 | 11.50 | 0.03 | 0.00 | 69.33 |
| Carrying Cost | 2.05 | 5.88 | 8.67 | 10.61 | 13.05 | 40.26 |
| **Total** | **36.77** | **28.96** | **20.17** | **10.64** | **13.05** | **109.59** |

### g) R&M Expenses and A&G Expenses for Policy Direction Period

The Petitioner has submitted that the financial impact as per Hon'ble ATE judgement on disallowance of R&M and A&G Expenses from FY 2005 to FY 2007 is as given below:

**Table 26: R&M Expenses and A&G Expenses for FY 2005, 2006 and FY 2007**

**(Rs. crore)**

| SI. No. | Particulars as per Audited Accounts | FY 2005 | FY 20 06 | FY 2007 | FY 2008 to 2012 | Total |
|---|---|---|---|---|---|---|
| 1 | R&M Expenses and A&G Expenses | 24.50 | 7.44 | 0.10 | 0.00 | 32.04 |
| 2 | Carrying Cost | 1.10 | 2.64 | 3.22 | 30.96 | 37.91 |
| A | Total | 25.60 | 10.08 | 30.32 | 30.96 | 69.95 |

### h) Financial Impact due to erroneous calculation of working capital

The Hon'ble ATE in its judgement dated 30.07.2010 in Appeal No. 153 of 2009 directed the Commission to consider debt/equity ratio of 70:30 for financing of working capital and apply to respective year.

The financial Impact of implementation of ATE judgement is estimated at Rs. 175.36 as below:

**Table 27: Financial Impact due to erroneous calculation of Working Capital**

**(Rs. crore)**

| Sl. No | Particulars | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | Total |
|---|---|---|---|---|---|---|---|
| 1 | Increase in Return on Capital Employed | 9.86 | 20.19 | 16.14 | 8.01 | 1.14 | 55.34 |
| 2 | Carrying Cost | 0.58 | 2.50 | 5.00 | 7.20 | 9.47 | 24.74 |
| 3 | **Total** | **10.44** | **22.68** | **21.14** | **15.20** | **10.60** | **80.08** |

### i) Financial Impact due to Consideration of lower financing cost of LPSC

The Commission in the last Tariff Order has erroneously allowed the financing of LPSC at the lower than the prevailing PLR from FY 2007-08 to FY 2011-12. The adverse financial impact on the aforesaid issue is to the tune of Rs. 20.69 crore as below:

**Table 28: Financial Impact due to consideration of lower financing cost of LPSC**

**(Rs. crore)**

| Sl. No | Particulars | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | Total |
|---|---|---|---|---|---|---|---|
| 1 | Delayed Payment Charges | 26.66 | 20.68 | 20.86 | 17.33 | 28.35 | 113.88 |
| 2 | Principal Amount | 148.11 | 114.89 | 115.89 | 96.23 | 157.50 | 632.67 |
| 3 | Financing Cost-LPSC claimed | 18.80 | 14.69 | 13.76 | 11.80 | 22.07 | 81.12 |
| 4 | Financing Cost allowed for LPSC | 14.07 | 10.91 | 11.01 | 9.14 | 20.96 | 66.09 |
| **5** | **Difference** | **4.73** | **3.78** | **2.75** | **2.66** | **1.11** | **15.03** |
| 6 | Carrying Cost | 0.28 | 0.84 | 1.33 | 1.86 | 2.54 | 6.85 |
| **7** | **Total** | **5.00** | **4.62** | **4.08** | **4.52** | **3.64** | **21.88** |

1.28 The total impact on account of implementation of ATE Judgement is tabulated below:

**Table 29: Impact on account of Implementation of ATE Judgments**

**(Rs. crore)**

| Sl. No | Particulars | Impact |
|---|---|---|
| 1 | Employee Expenses (a+b+c) | 258.97 |
| *A* | *Payment towards SVRS Optees* | *83.58* |
| *B* | *hike-6th pay Commission for non-DVB employees* | *91.2* |
| *C* | *Increase in consumer base* | *84.19* |

| Sl. No | Particulars | Impact |
|---|---|---|
| 2 | Capital Expenditure | 746.76 |
| 3 | True-up (11 Months)-12.1 | 297.82 |
| 4 | Re-determination of distribution loss | 109.59 |
| 5 | R&M Expenses and A&G Expenses for policy direction period | 69.95 |
| 6 | Funding of working capital | 80.08 |
| 7 | Financing cost of LPSC | 21.88 |
| **8** | **Total** | **1585.05** |

## ARR of FY 2014-15

## Energy Sales and Revenue

1.29 BYPL has projected the energy sales at 6294.80 MU for FY 2014-15 and has requested the Commission to approve the same.

**Table 30: Energy Sales for FY 2014-15**

| Sl. No. | Category | FY 2014-15 | | | |
|---|---|---|---|---|---|
| | | Sales as per MYT Order (MU) | Sales as per Petition (MU) | Expected Revenue as per MYT Order (Rs. Cr)# | Expected Revenue as per Petition (Rs. Cr) |
| 1 | Domestic | 3205.19 | 3236.8 | 1309.97 | 1803.3 |
| 2 | Non Domestic * | 1952.15 | 1931.3 | 1465.86 | 1941.7 |
| 3 | Industrial | 419.79 | 353.9 | 270.98 | 311.2 |
| 4 | Public Lighting | 134.52 | 121.9 | 75.33 | 94.1 |
| 5 | Irrigation & Agriculture | 0.35 | 0.2 | 0.07 | 0.1 |
| 6 | Railway Traction | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | DMRC | 200.00 | 290.1 | 79.61 | 175.8 |
| 8 | Others @ | 238.42 | 360.6 | 176.17 | 243.9 |
| *a* | *DIAL* | | 0.00 | | 0.00 |
| *b* | *Worship/Hospitals* | | 77.5 | | 59.4 |
| *c* | *DJB* | | 152.3 | | 134.1 |
| *d* | *DVB Staff* | | 29.1 | | 14.0 |
| *e* | *Enforcement* | | 34.5 | | 22.5 |
| *f* | *Own Consumption* | | 52.5 | | 0.00 |
| *g* | *Temporary* | | 0.5 | | 0.00 |
| *h* | *advertisement and Hoardings* | | 14.1 | | 13.9 |
| | **Total** | **6150.42** | **6294.8** | **3377.99** | **4570.1** |

** Excluding DIAL and DJB*
*@ Including DIA and DJB*
*# Revenue base upto tariff applicable as on 30.6.12*

## AT&C Losses

1.30 BYPL has submitted that the Petitioner is seeking revision for AT&C loss trajectory from FY 2012-13 to FY 2014-15. Therefore Petitioner has considered the following AT&C loss during FY 2014-15 for further computation.

**Table 31: AT&C Loss during FY 2014-15**

| Sl. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | Approved in MYT Order | As per Petition |
| 1 | T&D Loss | 14.07% | 17.35% |
| 2 | Collection efficiency | 99.50% | 98.50% |
| 3 | AT&C Loss | 14.50% | 18.59% |

## Power Purchase Requirement

1.31 The quantum of Power Purchase is arrived at by the estimated sales of energy and Distribution losses as projected /approved. Higher sales require greater quantum of power. Similarly higher losses result in higher quantum of power purchase to meet the expected sales.

1.32 The energy sales for the year is grossed up by the loss levels for the year, to arrive at the required quantum of power purchase for that year in the following manner.

$$\text{Quantum of Power Purchase (MU)} = \frac{\text{Energy Sales (MU)}}{\text{1-(Distribution loss(\%)/100)}}$$

1.33 The sales, loss level and power purchase for FY 2014-15 as submitted by the licensee is given in Table below:

**Table 32: Approved Energy Requirement (MU)**

| Particulars | As per Tariff Order dated 13.7.2012 | FY 2014-15 |
|---|---|---|
| Sales | 6150.41 | 6295 |
| Distribution losses | 14.07% | 17.4% |
| Energy Requirement at Discom Peripery in MU | 7157.50 | 7616 |

**Table 33: Energy Balance projected during FY 2014-15**

| Sl. No | Particulars | UoM | FY 2014-15 |
|---|---|---|---|
| 1 | Sales | MU | 6295 |
| 2 | Distribution loss | MU | 1321 |
| 3 | Distribution loss | % | 17.4% |
| 4 | Energy at DISCOM periphery | MU | 7616 |
| 5 | Intra-State Transmission Loss | MU | 90 |
| 6 | Intra-State Transmission Loss | % | 1.17% |
| 7 | Energy at DTL periphery | MU | 7706 |
| 8 | Inter-State Transmission Loss | MU | 432 |
| 9 | Inter-State Transmission Loss | % | 5.31% |
| **10** | **Energy requirement at Ex-bus** | **MU** | **8138** |

## Purchase Cost

1.34 BYPL has submitted in its Petition that the actual power purchase cost available from April, 2013 to September, 2013 (H1) has been considered. BYPL also submitted that Fixed cost for FY 14(H2) & FY 15 is calculated based on CERC tariff regulation 2009. The fixed cost for FY 2014-15 has been projected with 15% escalation over fixed cost of FY 2013-14. The variable cost for FY 2013-14 (H2) has been escalated at 5% over variable cost in the latest bills and variable cost for FY 2014-15 is escalated at 10% over variable cost projected for FY 2013-14 (H2).

The revised estimated quantum of power purchase and cost of purchase for FY 2014-15 as submitted by BYPL is shown in Table below:

**Table 34: Power Purchase Details for FY 2014-15**

| Sl. No. | Name of Generating Station | Approved in MYT Order | | As per the Petition | |
|---|---|---|---|---|---|
| | | Quantum (MU) | Cost (Rs. Crore) | Quantum (MU) | Cost (Rs. Crore) |
| **A** | **NTPC Station** | | | | |
| 1 | Anta Gas | 74.72 | 27.59 | 61.40 | 33.10 |
| 2 | Auraiya Gas | 125.78 | 48.90 | 91.20 | 50.30 |
| 3 | BTPS | 1010.50 | 513.91 | 813.70 | 453.60 |

| Sl. No. | Name of Generating Station | Approved in MYT Order | | As per the Petition | |
|---|---|---|---|---|---|
| | | Quantum (MU) | Cost (Rs. Crore) | Quantum (MU) | Cost (Rs. Crore) |
| 4 | Dadri Gas | 168.99 | 64.53 | 130.70 | 71.10 |
| 5 | Farakka | 36.42 | 16.34 | 33.30 | 18.80 |
| 6 | Kahalgaon | 72.96 | 30.82 | 78.40 | 35.80 |
| 7 | NCPP-Dadri | 1267.70 | 533.02 | 1104.30 | 578.40 |
| 8 | Rihand-I | 212.40 | 45.26 | 185.70 | 55.70 |
| 9 | Rihand-II | 273.00 | 61.05 | 222.60 | 67.80 |
| 10 | Rihand-III | 239.95 | 107.98 | 245.90 | 63.70 |
| 11 | Singrauli | 319.19 | 71.98 | 284.70 | 55.80 |
| 12 | Unchahar-I | 49.85 | 18.09 | 45.20 | 17.40 |
| 13 | Unchahar-II | 97.25 | 35.60 | 89.20 | 36.70 |
| 14 | Unchahar-III | 60.72 | 25.13 | 53.60 | 23.40 |
| 15 | Kahalgaon Stage-II | 231.34 | 97.32 | 232.50 | 103.80 |
| 16 | Dadri Ext. | 1430.20 | 653.00 | 1333.20 | 732.80 |
| 17 | Aravali Power corporation Ltd | 0.00 | 0.00 | 446.90 | 309.30 |
| | **Sub-Total** | **5670.97** | **2350.52** | **5452.50** | **2707.50** |
| **B** | **NHPC Stations** | | | | |
| 1 | Bairasul | 23.19 | 3.40 | 19.70 | 3.50 |
| 2 | Chamera-I | 35.39 | 6.48 | 30.50 | 7.90 |
| 3 | Chamera-II | 55.96 | 14.37 | 46.70 | 13.60 |
| 4 | Chamera-III | 33.51 | 15.08 | 29.40 | 10.10 |
| 5 | Dhauliganga | 41.69 | 11.45 | 7.00 | 8.60 |
| 6 | Dulhasti | 68.11 | 39.51 | 56.60 | 45.10 |
| 7 | Salal | 96.58 | 8.80 | 81.80 | 19.70 |
| 8 | Tanakpur | 15.62 | 3.44 | 12.90 | 4.10 |
| 9 | Uri | 76.88 | 11.49 | 63.70 | 19.30 |
| 10 | Sewa-II | 12.60 | 8.09 | 16.60 | 10.00 |
| | **Sub-Total** | **459.53** | **122.11** | **364.90** | **141.90** |
| | **Other Stations** | | | | |
| C | Tehri | 88.24 | 21.54 | 63.20 | 39.70 |
| D | NJPC | 183.53 | 39.67 | 148.50 | 48.30 |
| E | Koteshwar | 32.81 | 14.77 | 24.70 | 6.00 |
| F | Mejia (Unit-6) | 55.76 | 22.30 | 144.20 | 85.30 |
| G | Mejia (Unit-7 & 8) | 1659.40 | 663.76 | 1262.00 | 296.60 |
| H | Chandrapur (Ext-7 and 8) | 553.72 | 221.49 | 433.70 | 195.60 |
| I | Tala | 31.88 | 6.44 | 38.50 | 9.00 |
| | **Sub-Total** | **2605.34** | **989.97** | **2114.80** | **680.50** |
| **J** | **Nuclear Stations** | | | | |

| Sl. No. | Name of Generating Station | Approved in MYT Order | | As per the Petition | |
|---|---|---|---|---|---|
| | | Quantum (MU) | Cost (Rs. Crore) | Quantum (MU) | Cost (Rs. Crore) |
| 1 | RAPS -5 & 6 | 108.57 | 37.04 | 100.20 | 40.00 |
| 2 | NPCIL -NAPS | 52.23 | 12.68 | 57.40 | 16.60 |
| | **Sub-Total** | **160.8** | **49.72** | **157.60** | **56.60** |
| **K** | **SGS** | | | | |
| 1 | IP Station | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | Rajghat | 227.53 | 123.03 | 182.50 | 117.70 |
| 3 | Gas Turbine | 534.13 | 238.75 | 314.60 | 209.10 |
| 4 | Pragati-I | 526.39 | 184.60 | 439.60 | 240.10 |
| 5 | Pragati-III, Bawana | 1911.8 | 860.31 | 737.90 | 322.10 |
| | **Sub-Total** | **3199.85** | **1406.69** | **1674.60** | **889.00** |
| **L** | **Future Stations** | | | | |
| 1 | Prabati-III | 44.65 | 20.09 | 32.50 | 14.60 |
| 2 | Sasan UMPP | 138.43 | 16.56 | 199.80 | 23.90 |
| 3 | Uri -II | 37.89 | 17.05 | 78.50 | 35.30 |
| 4 | Solar Rooftop | 0.00 | 0.00 | 0.50 | 0.30 |
| | **Sub-Total** | **220.97** | **53.7** | **311.40** | **74.10** |
| **M** | **Power Purchase from Other Sources** | **0.00** | **0.00** | **43.60** | **17.10** |
| **N** | **Power sold to other sources** | **-** | **-** | **1981.20** | **353.40** |
| **O** | **Grand Total** | **12317.46** | **4972.71** | **8138.10** | **4213.30** |

***Notes:***

*For comparison with approved values wherever required, the stations under various heads have been reshuffled on the basis of Petitioner projection.*

## Renewable Purchase Obligation

1.35 The Petitioner has submitted that as per DERC Renewable Purchase Obligation Regulations, 2012, the Petitioner is required to purchase 0.25% of that energy sales through solar energy sources during FY 2014-15. It is submitted that renewable energy sector is in development stage and in the absence of adequate availability of solar energy, the Petitioner is proposed to achieve the renewable energy obligation target through purchase of Renewable Energy Certificates (REC) as given below:

**Table 35: Cost of meeting Solar RPO**

| Sl. No | Particulars | UoM | FY 2014-15 |
|---|---|---|---|
| 1 | Energy Sales | MU | 6294.8 |
| 2 | RPO Target-Solar | % | 0.25% |
| 3 | RPO Target-Solar | MU | 15.7 |
| 4 | Availability from 0.345 MW Solar | MU | 0.52 |
| 5 | Required to be met through RECs | MU | 15.2 |
| 6 | REC Rates | Rs./kWh | 10.1 |
| 7 | Cost for REC Purchase | Rs. Crore | 15.4 |

**Table 36: Cost of REC Purchase for meeting Non-Solar RPO**

| Sl. No | Particulars | UoM | FY 2014-15 |
|---|---|---|---|
| 1 | Energy Sales | MU | 6294.8 |
| 2 | RPO Target-non-Solar | % | 5.95% |
| 3 | RPO Target-non-Solar | MU | 374.5 |
| 4 | Required to be met through RECs | MU | 374.5 |
| 5 | REC Rates | Rs./kWh | 1.5 |
| 6 | Cost for REC Purchase | Rs. Crore | 56.2 |

## Transmission Charges

1.36 The Petitioner has projected the Intra State & Inter State Transmission charges for FY 2014-15 as below:

**Table 37: Transmission charges during FY 2014-15**

**(Rs. crore)**

| Sl. No | Particulars | FY 2014-15 | Approved in MYT Order dated 13.7.2012 |
|---|---|---|---|
| 1 | Intra-State Transmission Charges | 179.81 | 184.06 |
| 2 | Inter-State Transmission Charges | 251.60 | 178.67 |
| 3 | Open Access Charges | 41.53 | - |
| **4** | **Total** | **472.94** | **362.73** |

## Other Components of ARR

1.37 The Other Components of ARR are;

a) O&M Expenses

b) Depreciation

c) Advance Against Depreciation

d) RoCE

e) Income Tax

f) Other Expenses including new initiation

g) Other Income ( including Income from wheeling charges)

## Non Tariff Income

1.38 The Petitioner has submitted that the Commission in its Order dated 13th July, 2012 has considered Non Tariff income during FY 2013-14 and FY 2014-15 equal to Rs. 78.95 crore. However Non Tariff Income has been reduced during FY 2012-13 as compared to FY 2011-12. Therefore the Non Tariff Income during FY 2014-15 is calculated at Rs. 78.85 crore.

## O&M Expenses

1.39 The Petitioner has submitted that Employee Expenses and A&G Expenses are escalated at 8%.

R&M Expenses have been claimed in accordance with Tariff Order dated 13th July, 2012.

The O&M Expenses approved in MYT Order and projected by the Petitioner are shown in Table below:

**Table 38: O&M Expenses during FY 2014-15**

**(Rs. crore)**

| Sl. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | Tariff Order dated 13th July , 2012 | Petition |
| 1 | Employee Expenses | 248.92 | 254.7 |
| 2 | A&G Expenses | 61.17 | 68.9 |
| 3 | R&M Expenses | 89.36 | 89.4 |
| 4 | Total O&M Expenses | 399.45 | 413.0 |
| 5 | Efficiency Improvement | 4.00% | 0.00% |
| 6 | Add: SVRS Pension | 4.92 | 4.92 |
| **7** | **Net O&M Expenses** | **388.4** | **417.9** |

## Depreciation

The Petitioner has projected the depreciation for the FY 14-15 as tabulated below.

**Table 39: Depreciation**

| Sl. No. | Particulars | FY 14 | FY 15 |
|---|---|---|---|
| I | Rate of depreciation | 3.69% | 3.70% |
| II | Depreciation Amount | 90.87 | 100.85 |

## Advance Against Depreciation (AAD)

The Petitioner has submitted that Advance Against Depreciation (AAD) from FY 12-13 to FY 14 – 15 for repayment of loans has been calculated in accordance with clause 5.21 of DERC MYT regulation 2011:-

**Table 40: Advance against depreciation**

**(Rs. Cr.)**

| Particulars | FY 14 | FY 15 |
|---|---|---|
| Advance Against Dereciation (AAD) | | |
| 1/10 of the Loan (A) | 99.78 | 113.42 |
| Debt Repayment (B) | 99.78 | 113.42 |
| Minimum of A&B | 99.78 | 113.42 |
| Depreciation as per ARR routed for repayment of loans | 63.61 | 70.59 |
| Excess of Min of (A,B) over Depreciation | 36.17 | 42.82 |
| Cumulative Repayment (C) | 860.40 | 973.82 |
| Cumulative Depreciation (D) | 824.23 | 931.00 |
| Excess of (C) over (D) | 36.17 | 42.82 |
| AAD | 36.17 | 42.82 |

## Return on Capital Employed

The Petitioner has submitted the Return on Capital Employed from FY 2013-14 and FY 2014-15 as tabulated below:

**Table 41: Return on Capital Employed (RoCE)**

**(Rs. Cr.)**

| Particulars | FY 14 | FY 15 |
|---|---|---|
| Equity | 463.58 | 521.90 |
| Debt | 1066.00 | 1162.58 |
| Rate of Return on Equity | 16.00% | 116.00% |
| Rate of Return on Debt | 14.71% | 14.71% |
| RRB (i) | 1596.96 | 1704.78 |
| WACC (RoE 16%) | 15.10% | 15.11% |
| RoCE (at 16%) | 241.16 | 257.59 |

## Non Tariff Income

1.39 The Petitioner has submitted that the Commission in its Order dated 13th July, 2013 has considered Non Tariff income during FY 2013-14 and FY 2014-15 equal to Rs. 78.95 crore. However Non Tariff Income has been reduced during FY 2012-13 as compared to FY 2011-12. Therefore the Non Tariff Income during FY 2014-15 has been considered at Rs. 70.85 crore.

## Annual Revenue Requirement

1.40 The Petitioner has projected the Revised Annual Revenue Requirement (ARR) for FY 2014-15 are shown in the Table below:

**Table 42: Annual Revenue Requirement (ARR) during FY 2014-15**

**(Rs. crore)**

| Sl. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | Tariff Order dated July 13, 2012 | Petition |
| 1 | Power Purchase Cost from Gencos | 3111.6 | 4213.4 |
| 2 | Cost of REC Purchase | 0.00 | 71.6 |
| 3 | Inter-State Transmission Charges | 180.4 | 293.1 |
| 4 | Intra-State Transmission Charges | 172.81 | 179.8 |
| 5 | O&M Expenses | 388.4 | 417.9 |
| 6 | RoCE | 232.2 | 257.6 |
| 7 | Depreciation | 176.5 | 143.7 |
| 8 | Income-Tax | 14.9 | 21.1 |
| **9** | **Annual Revenue Requirement** | **4278.9** | **5598.3** |

| Sl. No. | Particulars | FY 2014-15 | |
|---|---|---|---|
| | | Tariff Order dated July 13, 2012 | Petition |
| 10 | Less: Non-Tariff Income | 79.0 | 70.8 |
| **11** | **Net ARR** | **4200.0** | **5527.4** |

## Retail Supply and Wheeling Charges

1.41 The Petitioner has submitted that the total distribution ARR is allocated to wheeling and Retail supply based on for FY 2012-13 to FY 2014-15 as tabulated as below:

**Table 43: Retail Supply and Wheeling ARR**

**(Rs. crore)**

| Sl. No. | Particulars | FY 2012-13 | FY 2013-14 | FY 2014-15 |
|---|---|---|---|---|
| 1 | Wheeling ARR | 508.0 | 519.8 | 565.5 |
| 2 | Retail Supply ARR | 3891.0 | 4271.8 | 4962.0 |
| **3** | **Total** | **4399.0** | **4791.7** | **5527.4** |

1.42 The wheeling cost allocated to different voltage levels has been divided by the energy sales at corresponding voltage levels to arrive at wheeling charge per unit for different voltages.

The wheeling charge and Retail Supply Charges per unit for different voltages is tabulated below:

**Table 45: Wheeling and Retail Supply Charges per unit at different voltage levels (Paisa)**

| Sl. No. | Particulars | Wheeling Charge | | Retail Supply Charge | |
|---|---|---|---|---|---|
| | | FY 2013-14 | FY 2014-15 | FY 2013-14 | FY 2014-15 |
| 1 | Above 66 kV level | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | At 66/33 kV level | 0.76 | 0.75 | 6.27 | 6.57 |
| 3 | At 11 KV level | 0.77 | 0.76 | 6.34 | 6.64 |
| 4 | At LT level | 0.96 | 0.93 | 7.87 | 8.19 |

## Tariff Proposals and Treatment of Revenue Gap during FY 2014-15

## Revenue Gap

1.43 The Petitioner has submitted that the Revenue has been estimated based on the category –wise tariff approved by the Commission in Tariff Order dated 31st July, 2013.

The estimated Revenue includes 8% surcharge. The revenue gap arrived at is given in Table.

**Table 45: Revenue Gap during FY 2013-14 and FY 2014-15**

| Sl. No. | Particulars | FY 2013-14 | FY 2014-15 |
|---|---|---|---|
| 1 | ARR | 4791.7 | 5527.4 |
| 2 | Revenue including surcharge | 4061.2 | 4570.1 |
| 3 | Less: Surcharge | 296.5 | 336.9 |
| 4 | Revenue during FY | 3764.7 | 4233.2 |
| 5 | Revenue (Gap)/Surplus | (1026.9) | (1294.3) |

## Revenue Gap during Financial Year and Tariff Proposals

1.44 As regards Tariff determination, BYPL has proposed to recover the Revenue Gap during the financial year through corrected Power Purchase Adjustment Cost (PPAC) proposed as under.

**Table 46: Tariff Proposal**

**(Rs. crore)**

| Sl. No. | Particulars | FY 2014-15 |
|---|---|---|
| 1 | Revenue Gap during the year | (1294.28) |
| 2 | Power Purchase variations | (1290.92) |
| 3 | Revenue Gap to be absorbed by Power Purchase variations | (1290.92) |
| 5 | Revenue Gap considered for Tariff hike | (3.36) |
| 6 | Tariff hike proposed | 0.00% |

Apart from variation on account of PPAC to be recovered through corrected PPAC Formula, there is no remaining gap which is required to be recovered from Retail Tariff.

## Revenue Gap during Financial Year due to Power Purchase Price Variation

1.45 The Petitioner has submitted as under:

"It is respectfully submitted that any variation in power purchase price from that approved by the Hon'ble Commission, is uncontrollable in nature. In order to supply electricity to its consumers, the Petitioner is required to pay towards cost of power purchase and transmission charges thereon regular basis. The power purchase cost is an uncontrollable expense as recognised in the MYT Regulations, 2011. The Petitioner merely acts as a collecting agent on behalf of the agencies charging towards the power purchase cost and transmission charges thereon.

The Power Purchase Cost consists of;

a) Fixed and Variable Cost of the long term generation contracts or of Regulated plants.
b) Transmission Costs.
c) Change in the quantum and price of short term power (bilateral. power exchange/UI).
d) Loss on sale of surplus power on account of wise variation in the load curve during the day & year on account of huge difference in actual sale price and that considered in the Tariff Order.
e) Arrears payable to Genco/ Transco on account of retrospective adjustment of tariff pursuant to orders of the appropriate Commission.

The Distribution licensee has to pay for the power purchase each month. If there are variation, in any of the above factors, Distribution licensee has to arrange short term financing for making such additional payment which ultimately burdens the consumers in the form of carrying cost.

It is therefore, proposed to modify the existing power purchase adjustment mechanism to account for such variation in line with directions issued by Hon'ble ATE and various committee reports".

1.46 BYPL has suggested modification of power purchase adjustment mechanism to enable timely recovery of power purchase cost. The Petitioner has proposed PPA formula as under:

The Petitioner suggests the monthly Revenue Gap during the FY 2014-15 due to variation in Power Purchase and Transmission Costs:

**"PPA= ((F-G)/G)*100%**

Where,

A=Net Long Term costs during the previous month.

B=Net Short Term Costs during the previous month.

C= Transmission charges during the previous month.

D=Total Power Purchase Cost = A+B+C

E= Total Units Billed during the previous month.

F= Average Power Purchase = (D/E).

G= Base Power Purchase Cost for the financial year approved in the Tariff Order.

The above formula takes into account any variation in the Power Purchase Cost on a monthly basis.

The PPA cost is proposed to be calculated on monthly basis and passed on the cost credit/debit in consumer bills of the subsequent month. The post facto reconciliation and approval of the Commission is proposed to be on quarterly basis.

The Petitioner requests Commission to adopt the above formula for determination and passing on the variation on month to month basis".

## Recovery of Regulatory Assets

1.47 The Petitioner has submitted that the Commission has to execute the judgement of ATE given in OP-1 of 2011 and provide the plan for recovery of Regulatory Assets. Based on computation of Truing up requirement for FY 2012-13 and revised estimates for FY 2013-14, the Regulatory Assets upto FY 2014-15 (only carrying cost added during FY 2014-15) is tabulated below:

**Table 47: Regulatory Assets upto FY 2014-15**

**(Rs. crore)**

| Sl. No. | Particulars | FY 2012-13 | FY 2013-14 | FY 2014-15 |
|---|---|---|---|---|
| 1 | Opening Balance of Regulatory Assets | (2995.70) | (6489.23) | (8249.94) |
| 2 | Add: ATE judgments | (1585.05) | 0.00 | 0.00 |
| 3 | Previous claims added in opening balance | (119.30) | 0.00 | 0.00 |
| 4 | Revised Opening balance | (4700.04) | (6489.23) | (8249.94) |
| 5 | Amount of RA added during FY | (1165.98) | (1026.95) | 0.00 |
| 6 | RA recovery during the year | 158.92 | 269.49 | 336.94 |
| 7 | Closing balance | (5707.11) | (7219.68) | (7913.00) |
| 8 | Rate of carrying cost | 15.03% | 15.03% | 15.03% |
| 9 | Carrying cost | (782.12) | (1030.26) | (1214.68) |
| **10** | **Grand Closing Balance** | **(6489.23)** | **(8249.94)** | **(9127.68)** |

## Other Tariff Rationalisation Proposals

**a) Increase in cash limit for payment of electricity Bills:**

1.48 The Petitioner requests the Commission to increase the amount of payment of Electricity bills from Rs. 4000/- to 20, 000/-.

The Petitioner has quoted the practice adopted by nine other State Electricity Regulatory Commission where there is no limit on cash payment.

**b) Extension Time of Day Tariff for loads upto 10 KW for all consumers:**

1.49 The Petitioner has submitted that the current applicability of ToD is for all consumers (Other than Residential) whose sanctioned load/MDI (whichever is higher) is 10 KW/ 108 KVA and above. This has although has some impact on the peak load but much required to be done by implementing ToD even for the lower loads.

The Petitioner has proposed to introduce ToD Tariff to all consumers having load more than 10 KW. This will result in chapping the peak load. It is submitted that presently, for all loads more than 10 KW, three phase meters are installed have capacity to record energy consumption in pre defined time slots.

**c) Adjustment of Consumer Security Deposit:**

1.50 The Petitioner has submitted that presently charging consumers security deposit as per Section 29 of the "Delhi Electricity Supply Code and Performance Standards Regulations, 2007" where for all new consumers are to be charged a fixed rates based on their load. The current methodology of collecting security deposit is discriminatory.

Ideally, Consumer Security Deposit as to be linked with the consumption of individual consumer, the prevailing tariff as well as billing cycle.

It is therefore, proposed that the security deposit collected from consumer to be linked to the consumption profile and applicable Tariff of individual consumer i.e., to the bill amount and bill amount equivalent to billing cycle. The proposed mechanism will also benefit lowend consumers as they will have to pay lower deposits.

The Petitioner has also quoted seven other SERCs where Security Deposit is linked with the consumption/billing amount.

**d) Open Access to 1 MW and above consumers:**

1.51 The Petitioner has submitted that the Commission vide its order dated 24$^{th}$ December, 2013 has determined Transmission and Wheeling charges, cross subsidy surcharge, additional surcharge and other applicable charges under Open Access for the consumers having connected load of more than 1 MW.

While promoting the Open Access, the issue of Regulatory Assets which is nothing but the past accumulated revenue gap, is required to be addressed as the consumers moving out on open access were also the part of the system during that period and Regulatory Assets need to be recovered from them so as to avoid any burden on remaining consumers of the DISCOMs.

**Disclaimer:**

All the figures have been taken from the tariff petition submitted by the DISCOM's. In case of any discrepancy in the staff paper, the same may be referred from the original petition uploaded on the DERC website.