# INTRODUCTION

(1) Regulation 3 of the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017 notified on January 2017, has specified that:

> *"The Commission shall notify Business Plan Regulations for each Control Period based on the Business Plan submitted by the Utility which shall be read as part of these Regulations."*

(2) Accordingly, in exercise of the powers vested under Sections 61 and 181 (2) (s) of the Act and all other enabling powers and in compliance of the requirement under Section 181 (3) of the Act, the Commission had uploaded the draft of DERC Business Plan Regulations, 2017 on its website http://derc.gov.in/.

(3) The Commission had invited comments/suggestions from stakeholders through Public Notices published in leading newspapers of English, Hindi, Urdu and Punjabi which was also uploaded on the Commission's website http://derc.gov.in/. The last date for submission of comments/suggestions from stakeholders on the said Regulations was till 18/07/2017.

(4) The Explanatory Memorandum was issued on 27/06/2017 with the intent of explaining the rationale and objective behind Draft DERC Business Plan Regulations, 2017.

(5) The Public Hearing was held on 19/07/2017 to discuss the issues related to the draft Business Plan Regulations, 2017.

(6) Finally, after considering the comments/suggestions of all stakeholders, the Commission notified Business Plan Regulations, 2017 on 1st September, 2017.

(7) This Statement of Reasons (SOR) is being issued with the intent of explaining the rationale and objective behind stakeholders' comments/suggestions and finalisation of Business Plan Regulations, 2017. However, in case of any deviation/discrepancy in the SOR with respect to Business Plan Regulations, 2017, the provisions of Business Plan Regulations, 2017 shall be applicable.

(8) It may be mentioned for the sake of clarity, that the term *"Commission"* in most of the cases refers to the Officers of the Commission for carrying out the research/due diligence on the available information for preparation of SOR Delhi Electricity Regulatory Commission Business Plan Regulations, 2017.

(9) The Stakeholders' comments/suggestions along-with the Commission's View on various Regulations of the Business Plan Regulations are detailed in the following paras.

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## A. SHORT TITLE, COMMENCEMENT AND EXTENT -Regulation 1

*" (2) These Regulations shall remain in force for a period of 3 (three) years i.e., for FY 2017-18, FY 2018-19 and FY 2019-20, unless reviewed earlier."*

### STAKEHOLDER'S COMMENTS/SUGGESTIONS

1) **BRPL and BYPL:**
   a) Stakeholders have submitted that the Business Plan Regulations have been made pursuant to DERC Tariff Regulations, 2017. Clause-2(24) of DERC Tariff Regulations, 2017 provides that Control period shall be a Multi-Year Period specified in the Business Plan Regulations. Hence, by implication Regulations 1(2) indicates a control period of 3 years, i.e., FY 2017-18, FY 2018-19 and FY 2019-20. However, the Licensees are required to submit Business Plan for 5 years as per Clause-5 of the Tariff Regulations, 2017. Therefore, they have requested the Commission that the Control Period in the Business Plan Regulations to be changed from 3 year period to a 5 year period.

### COMMISSION'S VIEW

1) The stakeholders have submitted that the Control Period should be for 5 year period because as per Regulation 5 of the Tariff, Regulations, 2017, the Utilities have to submit a Business Plan for next 5 (five) years. In this regard, the stakeholders are clarified that as per Regulation 5 and 6 of the Tariff, Regulations, 2017, utilities have to submit audited financial statement including Cost Audit report, wherever applicable and data for the cost, revenue and other operating parameters for preceding 5 (five) years and Business Plan for next 5 (five) years. This information is required by the Commission to weed out any outliers and for setting up operational and financial parameters depending upon the past performance & utilities' projections of these parameters.
2) The Commission clarifies that submission of 5 years' past data and 5 years' future projection shall be utilized for the purpose of weeding out the outlier and has no link in defining/setting up Control Period. As per the Regulation 2 (24) of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017, the definition of Control period will be specified by the Commission in Business Plan Regulations.

3) Accordingly, the Commission has decided not to modify this provision of the draft Business Plan Regulations, 2017 and has retained the Control Period of 3 (three) years i.e., for FY 2017-18, FY 2018-19 and FY 2019-20.

# PART I - GENERATING ENTITY

## B. Rate of Return on Equity- Regulation 3 & 4

*"Return on Equity in terms of Regulation 4(1) of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 for Generating Entity shall be computed at the Base Rate of 14.00% on post tax basis."*

**STAKEHOLDER'S COMMENTS/SUGGESTIONS**

1) **IPGCL/PPCL:**
   a) The Commission to consider allowance of RoE @ 15.5 % post tax in line with CERC and other SERCs.
   b) There is no provision of deferred tax liability in draft Business Plan Regulation, 2017.
2) **TPDDL:**
   a) As per the draft Business Plan Regulations, the Tax applicable is Minimum Alternate Tax or Effective tax rate. The Commission is requested to clarify whether the grossed up Return on Equity is to be trued up on the basis of actual tax paid by the Generating Entity at the end of the year or not.

**COMMISSION'S VIEW**

1) The Commission has indicated in its Explanatory Memorandum of Business Plan Regulations, 2017 that the base rate of RoE being allowed by various Electricity Regulatory Commissions in India were analysed before finalizing the base rate of RoE for the generating entity in Business Plan Regulations, 2017 as follows:

   *"(8) The Commission has observed that base rate of Return on Equity specified by various Electricity Regulatory Commissions (ERCs) is in the range of 14% to 17.50% as follows:*

   *a) 15.50% for thermal generating stations, transmission system including* *communication system and run of the river hydro generating station, and at the base rate of 16.50% post tax basis for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.*

*b) 15.50% for Generating Entities, 15.50% for Transmission Licensees, 15.50% for Distribution Wires Business and 17.50% for Retail Supply Business in Maharashtra Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2015.*

*c) 14% for Generating Entities, Transmission Licensees and Distribution Licensees in Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2016.*

*d) 16% in Uttar Pradesh Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014 for Distribution Licensees.*

*(9) Therefore, after detailed deliberations, and considering the limitations of using any of the financial models like CAPM and the non availability of sufficient volume of historical data for the companies operating in Indian Power Sector, the Commission proposes to continue with the existing base rate of Return on Equity of 14% on post tax basis for Generation, Transmission and Distribution sector with the additional Return on Equity of 2% on post tax basis for risk associated to Retail Supply Business. "*

2) With regards to the stakeholder's submission of truing up on the basis of actual tax paid, the Commission has indicated in its DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 that the effective tax rate shall be considered on the basis of actual tax paid vis-à-vis total income of the Utility in the relevant financial year in line with the provisions of the relevant Finance Acts as follows:

*"72. **Tax on Return on Equity**: The base rate of return on equity as specified by the Commission in the Business Plan Regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall*

*be considered on the basis of actual tax paid vis-à-vis total income of the Utility in the relevant financial year in line with the provisions of the relevant Finance Acts. The actual tax on other income stream shall not be considered for the calculation of "effective tax rate":"*

3) The Commission has, therefore, decided not to modify this provision of the draft Business Plan Regulations, 2017.

**C. <u>OPERATION AND MAINTENANCE EXPENSES – Regulation 6</u>**

*"(1) Normative Operation and Maintenance expenses in terms of Regulation 4(3) and Regulation 92 of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 for the Generating Entity shall be as follows:*

*……………………………………………………………………………………………………………………………………*

*……………………………………………………………………………………..*

*(2) Impact of seventh pay commission on employee cost shall be considered separately, based on actual payment made by the Generation Entity and prudence check at the time of true up of ARR for the relevant financial year."*

**<u>STAKEHOLDER'S COMMENTS/SUGGESTIONS</u>**

**1) <u>IPGCL/PPCL</u>**

a) Normative Operation and Normative (O&M) expenses for PPS-I station is similar and comparable to CERC regulation 2014 but for station GTPS, normative O&M expenses as per draft Regulation 2017 is very low as compared to CERC Tariff Regulations 2014.

b) In DERC Tariff Regulation 2007 and 2011 the expenditure on Sewage Treatment Plant for PPS-I was allowed additionally which has not been included in O&M Expenses of the Draft Business Plan Regulations, 2017.

c) Water Charges have not been provided over and above normative O&M Expenses which is being provided by CERC.

**<u>COMMISSION'S VIEW:</u>**

1) The Commission would like to clarify that the norms of Operation and Maintenance(O&M) Expenses has been determined on the basis of actual expenses for both the generating entities i.e. GTPS & PPS-I which is in-line with methodology

adopted by CERC in its Tariff Regulations, 2014. With regards to the stakeholder submission that the norms for O&M Expenses of GTPS is low as compared to CERC Tariff Regulations 2014, the Commission would like to clarify that the norm for GTPS has been determined as per the actual expenses incurred by it in the past which is not comparable with the actual expenses incurred by the generating stations governed by CERC.

2) Further, the Commission has specified in its Explanatory Memorandum that the O&M expenses excluding the additional R&M i.e. Dry Low NOX, Sewage Treatment Plant and Advance Hot Gas Path Inspections etc. shall be part of the normative O&M expenses of the generating stations which shall not be trued up during the control period, as follows:

*" (50) The Commission has specified the Normative O&M expenses of Generating Stations based on the actual O&M expenses incurred by the Generation Companies as per the audited financial statements for FY 2015-16. It is observed from the audited financial statements of Pragati Power Station I that an expenditure of Rs. 64.46 Cr incurred for conducting Advance Hot Gas Path Inspection has been included under O&M expenses for which the warranty clause has specified that benefit of this expenditure will accrue in next four years from the date of expenditure (FY 2015-16). The Commission has provided additional R&M expenses to PPS I for allowance of the additional R&M to be incurred for which the benefit accrued to the generating stations for more than one year based on the number of running hours of the plant and time period. It is further, clarified that the O&M expenses excluding the additional R&M i.e. Dry Low NOX, Sewage Treatment Plant and Advance Hot Gas Path Inspections etc. shall be part of the normative O&M expenses of the generating stations which shall not be trued up during the control period. Additional R&M expenses shall be trued up based on the prudence check of actual expenditure incurred by the generating stations."*

3) In view of the above, the Commission would like to clarify that additional R&M

expenses including Sewage Treatment Plant (STP) shall be trued up based on the prudence check of actual expenditure incurred by the generating station.

4) Regarding Water Charges, it is clarified that DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 states that the water charges under O&M Expenses will be treated separately if indicated in audited financial statement, as follows:

*"87.*
*………*
*Provided further that the water charges, statutory levy and taxes under O&M expenses if indicated separately in the audited financial statement shall not form part of Normative O&M expenses."*

5) The Commission has, therefore, decided not to modify this provision of the draft Business Plan Regulations, 2017.

## D. CAPITAL INVESTMENT PLAN- Regulation 7

*"(1) The tentative Capital Investment plan for Gas Turbine Power Station for FY 2017-18 to FY 2019-20 is as follows:*

***Table 4: Capital Investment plan (in Rs. Cr.)***

| *Sr. No.* | *Description* | *2017-18* | *2018-19* | *2019-20* | *Efficiency Improvement* |
|---|---|---|---|---|---|
| *1* | *Procurement and commissioning of exhaust plenum for GT # 1* | *1.45* | *0* | *0* | *Reduction in Gross Station Heat Rate* |
| *2* | *Replacement of Steam Ejector with Vacuum Pump Mod-1,2,3* | *0.35* | *0.35* | *0.35* | *Increase in output power* |
| *3* | *Installation of VFD in Condensate Extraction Pump (CEP) Mod-I,2,3* | *0.08* | *0.08* | *0* | *Reduction in Auxiliary Consumption* |
| *4* | *Procurement of steam turbine rotor/GBC/ Inner casing/Steam glands, for steam turbine (34MW)-Mod-2* | *0* | *17* | *0* | *Increase in output power* |
| *5* | *Total* | *1.88* | *17.43* | *0.35* | |

"

**STAKEHOLDER'S COMMENTS/SUGGESTIONS**

**1) TPDDL:**

a) PPA signed between TPDDL and IPGCL for procurement of power from the plant shall expire in 2021. Under such circumstance it is not prudent to allow capital cost to GTPS for the period 2017-18 to 2019-20.

b) The Commission may disallow any capital cost at this stage as has been done in case of R&M expense of GTPS and allow only O&M cost for running of the plant. Any expense at this stage shall not provide the desired benefit in terms of improved efficiency & increased efficiency as only four (4) years are left before the plants useful life finishes. Also the plant being devoid of adequate quantity of cheaper APM gas, rarely figures in the merit order scheduling.

**COMMISSION'S VIEW**

1) The Commission clarifies that the capital investment schemes allowed by the Commission in Business Plan Regulations, 2017 are tentative in nature and will be reviewed during the tariff determination/ true-up exercise.
2) The Commission would like to state that the Capital Investment approved by the Commission will take into account the cost benefit analysis on account of the improvement the efficiency of the existing generating stations and Energy Charge Rate computed with improved operational parameters for the balance period of PPA to avoid any undue burden on consumers.
3) The Commission has, therefore, decided not to modify this provision of the draft Business Plan Regulations, 2017.

**E. NORMS OF OPERATION FOR GENERATING STATIONS – Regulation 8**

*"(1) Normative Annual Plant Availability Factor and Normative Annual Plant Load Factor for existing generating stations of Delhi shall be as follows:*
*I. Normative Annual Plant Availability Factor (NAPAF) : 85%*

*II. Normative Annual Plant Load Factor (NAPLF) : 85%*
*……………………………………………………………………………………………………………………………………*
*……………………………………………………………………………………………………………………………………*
*……………………………………………………………………………………………………………………………………*
*…..*

*b) Variable: 2.0% of the actual generation which shall form part of computation of energy charge rate of the respective month. "*

**STAKEHOLDER'S COMMENTS/SUGGESTIONS**

1) **IPGCL/PPCL:**

a) Plant Load Factor (PLF) of Delhi power generation plants is low and IPGCL/ PPCL are having long term R-LNG contract with take or pay liability. Commission may provide necessary intervention by way of suitable clause in present regulation assuring optimum scheduling from gas based power stations of National Capital in the larger interest of grid security and consumers.

b) Gas Turbine Power Station is very old; the Gas turbines are as old as 30-31 years. The waste heat recovery module has been retrofitted at a later stage by BHEL- a vendor other than OEM. Therefore, the availability has always been an issue for the station. It states that the availability as submitted to the Commission by IPGCL for true-up of expenditure for the period FY 2014-15, 2015-16, 2016-17 (upto Dec 2016) is only 68.80%, 74.81% and 81.21% respectively. However, the availability considered by the Commission is 85%.

c) SHR for GTPS has been considered as 2100 kCal/kWh without considering the past performance, whereas the earlier target vale was 2450 kCal/kWh.

d) Auxiliary Energy Consumption shall be computed in three parts

(i) **Fixed:** 0.5% of the total auxiliary consumption as percentage of generation corresponding to normative availability will be considered as minimum APC consumption in case of total plant backing down and part load operation. This part of APC will be considered as fixed APC while arriving ex-bus scheduled energy at normative availability while arriving at energy charge rate on ex-bus scheduled energy.

(ii) **Variable:** another 2% of APC calculated on actual generation shall be considered as a variable part of APC while arriving at energy charge on ex-bus scheduled energy basis.

(iii) Net APC after deducting a) and b) above from total APC (in MUs) will be considered for arriving at compensation.

2) **TPDDL:**

a) Auxiliary Energy Consumption allowed is adequate when the plant is running under Combined Cycle however, the same needs to be different in case the plant is running under Open Cycle.

**COMMISSION'S VIEW**

1) The Commission would like to state that the scheduling of power in Delhi is done by SLDC which follows the principle of Merit Order Dispatch (MOD) in dispensing cheap power first so that the consumers of Delhi are not burdened with high cost of power. Further the gas based plants are not must run plants therefore the Commission is of the view that optimum scheduling from gas based power stations is not possible and these generating stations have to follow the MOD principle.
2) The Commission has fixed the NAPAF of GTPS based on Actual Availability of FY 2012-13 and FY 2013-14. It is observed that the reason of lower plant availability of GTPS for both FY 2014-15 and FY 2015-16 was due to non functioning of Unit II, therefore availability of GTPS during these 2 years has been considered as outlier. The detailed reasons has been provided in the Explanatory Memorandum as follows:

*"(58) It is observed that GTPS has achieved the target Availability i.e. 80% (for the last Control Period) and has even exceeded the level of 85% in FY 2013-14. Further, as per the submission of IPGCL, the reason of lower availability for of GTPS for both FY 2014-15 and FY 2015-16 was due to non functioning of Unit II which was brought back on board during FY 2015-16.*

| ***Control Period*** | ***Year*** | ***NAPAF (%)*** | ***Actual Availability (%)*** |
|---|---|---|---|
| *1st MYT* | *FY 2007-08* | *70* | *60.98* |
| | *FY 2008-09* | *70* | *70.14* |
| | *FY 2009-10* | *70* | *73.28* |
| | *FY 2010-11* | *70* | *81.91* |
| | *FY 2011-12* | *70* | *79.41* |
| *2nd MYT* | *FY 2012-13* | *80* | *84.22* |
| | *FY 2013-14* | *80* | *85.76* |
| | *FY 2014-15* | *80* | *68.80* |
| | *FY 2015-16* | *80* | *74.81* |

*"*

From the above table, it is observed that GTPS had attained availability of around 85% in FY 13 and FY 14; therefore the Commission has decided to attain target availability of 85% for GTPS station.

3) With regards to the Gross Station heat Rate(GHR) of GTPS, the Commission after considerations and deliberations on the comments submitted by the stakeholder has decided to retain the earlier norm of GHR - 2450 kCal/kWh as approved in previous Control period i.e. FY 2012-15.
4) The Commission has decided to retain the methodology of computation of auxiliary consumption in two parts i.e. fixed and variable wherein the Commission has provided an extra fixed cost based on the fixed auxiliary consumption for those loads which are operational even when the plant is shutdown. However, with regards to the Stakeholder's submission of inclusion of 0.5% in Open cycle mode in variable component of auxiliary consumption , the Commission would like to state that it has considered the submission of the stakeholder and has included the auxiliary consumption of 0.5% in Open cycle mode in Regulation 8 (3) (b) of the Business Plan Regulations, 2017.

**F. <u>INCENTIVE – Regulation 9</u>**

*"Incentive to a Generating Entity or unit thereof shall be payable at a flat rate of 25 Paisa/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Annual Plant Load Factor (NAPLF) as specified in Regulation 8(1) of these Regulations."*

**<u>STAKEHOLDER'S COMMENTS/SUGGESTIONS</u>**

**1) <u>IPGCL/PPCL:</u>**

a) IPGCL/PPCL has requested the Commission to allow incentive of Rs 50 paise /kWh at Par with CERC regulation.

**<u>COMMISSION'S VIEW</u>**

1) As already explained in the explanatory memorandum for Business Plan Regulations 2017, the Commission has considered the NAPLF for both the generating stations i.e. GTPS, PPS-I in-line with the CERC Tariff Regulations, 2014.

The relevant extracts of the explanatory memorandum are explained as below.

*"(63) In line with CERC Tariff Regulations, 2014, the Commission has considered NAPLF for both GTPS and PPS I at 85%, which shall be interpreted as given below:*
*0 < PLF <= NAPLF - No Penalty and No Incentive*

*PLF > NAPLF - Incentive at Paise 25/ kWh for generation over and above NAPLF"*

2) The Commission has decided that since the 25 paise/kWh is an incentive over and above the actual cost, therefore, there is no justification to enhance the incentive, accordingly, the provision of the draft Business Plan Regulations, 2017 has been retained.

## PART II - TRANSMISION LICENSEE

### G. RATE OF RETURN ON EQUITY- REGULATION 10 &11

*"Return on Equity in terms of Regulation 4(1) of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 for Transmission Licensee shall be computed at the Base Rate of 14.00% on post tax basis."*

**STAKEHOLDER'S COMMENTS/SUGGESTIONS**

1) **DTL:**
   a) The Commission to allow Return on Equity of 16% in line with the CERC Regulations , 2014 or Normative IDC to be allowed for construction period for equity portion.

2) **A.K Datta, Hari Prakash Gupta, Sudhir Aggarwal, Saurabh Gandhi:**
   a) Rate of Return on Equity should be 8% instead of 14%

3) **TPDDL:**
   a) As per the draft Business Plan Regulations, the Tax applicable is Minimum Alternate Tax or Effective tax rate. The Commission is requested to clarify whether the grossed up Return on Equity is to be trued up on the basis of actual tax paid by the Transmission Licensee at the end of the year or not.

**COMMISSION'S VIEW**

1) The Commission had indicated in its Explanatory Memorandum of Business Plan Regulations, 2017 that the base rate of RoE being allowed by various Electricity Regulatory Commissions in India were analysed before finalizing the base rate of RoE for the transmission licensee in Business Plan Regulations, 2017 as follows:

*"(8) The Commission has observed that base rate of Return on Equity specified by various Electricity Regulatory Commissions (ERCs) is in the range of 14% to 17.50% as follows:*

*a) 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% post tax basis for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.*

*b) 15.50% for Generating Entities, 15.50% for Transmission Licensees, 15.50% for Distribution Wires Business and 17.50% for Retail Supply Business in Maharashtra Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2015.*

*c) 14% for Generating Entities, Transmission Licensees and Distribution Licensees in Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2016.*

*d) 16% in Uttar Pradesh Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014 for Distribution Licensees.*

*(9) Therefore, after detailed deliberations, and considering the limitations of using any of the financial models like CAPM and the non availability of sufficient volume of historical data for the companies operating in Indian Power Sector, the Commission proposes to continue with the existing base rate of Return on Equity of 14% on post tax basis for Generation, Transmission and Distribution sector with the additional Return on Equity of 2% on post tax basis for risk associated to Retail Supply Business. "*

2) With regards to the stakeholder's submission of truing up on the basis of actual tax paid, the Commission has indicated in its DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 that the effective tax rate shall be considered on the basis of

actual tax paid vis-à-vis total income of the Utility in the relevant financial year in line with the provisions of the relevant Finance Acts as follows:

*"72. **Tax on Return on Equity**: The base rate of return on equity as specified by the Commission in the Business Plan Regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid vis-à-vis total income of the Utility in the relevant financial year in line with the provisions of the relevant Finance Acts. The actual tax on other income stream shall not be considered for the calculation of "effective tax rate":"*

3) The Commission has, therefore, decided not to modify this provision of the draft Business Plan Regulations, 2017.

## H. MARGIN FOR RATE OF INTEREST ON LOAN – REGULATION 12

*"1) The following Margin shall be allowed over and above 1 (one) year Marginal Cost of Fund based Lending Rate (MCLR) of SBI for computation of rate of interest on loan:*

***Table 6: Margin for Rate of Interest on Loan***

| *Sr. No.* | *Particulars* | *2017-18* | *2018-19* | *2019-20* |
|---|---|---|---|---|
| *1* | *Margin for Rate of Interest on Loan* | *1.69%* | *1.69%* | *1.69%* |

"

**STAKEHOLDER'S COMMENTS/SUGGESTIONS**

1) **DTL:**
   a) There is a wide variation between margin approved by the Commission to DTL and to the Delhi DISCOMs. The margin for rate of interest on loan should be at par with other utilities within a same territory/state/region.
   b) It is now largely dependent on plan fund requirement from GONCTD, which currently charge the interest at the fixed rate of 9.5% to 10% p.a.
   c) The Commission to consider actual rate of interest charged by different lending agencies.

2) **A.K Datta, Hari Prakash Gupta, Sudhir Aggarwal, Saurabh Gandhi:**

   a) The stakeholders have submitted that margin for Interest at 1.69% is totally unjustified. The margin shall be kept at 0.1% of Loan subject to maximum Rs. 10,000/-.

**COMMISSION'S VIEW**

1) The Commission would like to clarify that it has decided margin for interest as per Regulation 77 of the DERC Tariff Regulations, 2017, which considers weighted average rate of interest for actual loan portfolio, as follows:

   *" 77. The rate of interest on loan shall be based on weighted average rate of interest for actual loan portfolio subject to the maximum of bank rate as on 1st April of the year plus the margin as approved by the Commission in the Business Plan Regulations for a Control Period:"*

2) The Commission had indicated in its Explanatory Memorandum that it has analyzed the submissions of DTL and decided margin of 1.69%, based on actual rate of interest which varies from 9.40% to 10.00%.
3) The Commission has, therefore, decided to modify this provision of the draft Business Plan Regulations, 2017 to allow the margin based on the rate of interest on actual loan portfolio as on 1st April of the year subject to the rate of interest on loan (MCLR plus Margin) shall not exceed approved base rate of return on equity i.e., 14.00%.

**I. OPERATION AND MAINTENANCE EXPENSES –REGULATION 13**

*" (1) The Normative, Bay wise and Circuit kilometer wise, Operation and Maintenance expenses of a Transmission Licensee, including Own consumption of energy for Transmission Licensee's installations and offices, shall be as follows: ……………………………………………………………………………………………………………..*

*………………………………………………………………………………………………………………………*

*Transmission Licensees and prudence check at the time of true up of ARR for the* *relevant financial year."*

**STAKEHOLDER'S COMMENTS/SUGGESTIONS**

1) **DTL:**

a) It is catering to the electricity needs of Delhi being the capital of country feeding many VIP areas and restoration of power is to be done in minimal possible time for which more resources are required and being the national capital various additional expenditure has to be incurred to maintain 24x7 power supply.

It is the only transmission utility in Delhi and have comparatively more nos. of GIS substations due to land constraint, higher percentage of U/G cables due to Right of Way (RoW) problem. So the Commission is requested to consider the same and allow suitable increase in the norms being the capital city.

There is no difference in the bays of PGCIL and DTL, so the Commission is requested to increase O&M expenses to the same level as of CERC and to define the O&M values at sub-transmission voltage levels i.e. 66kV, 33kV & 11kV. Also, it submits that DTL system being old, additional expenses must be allowed on account of extra maintenance.

O&M norms for bays of DTL to be same as provided by CERC in its Tariff Regulations 2014.

b) DTL has submitted that the Commission has considered the escalation factor of 5.61% for O&M expenses. However, the Commission in the Tariff Regulations 2017 has specified that the True up for 2016-17 shall be done in accordance with MYT Regulations 2011. The escalation factor approved for 2$^{nd}$ Control Period is 1.0806 therefore same should be considered for FY 2016-17 in O&M Expenses.

c) DTL submitted that through vide letter dated 28.06.2017 it has given details to the Commission regarding the working as well as under-recruitment employee strength (at present). The additional employee expenditure towards the same may also be considered by the Commission.

d) DTL has requested to consider the provisional impact of 7$^{th}$ Pay Commission while finalizing the O&M expenses and also consider the final impact later, when the 7th Pay Commission will be implemented in DTL.

2) **A.K Datta, Hari Prakash Gupta, Sudhir Aggarwal, Saurabh Gandhi:**
   a) Bay-wise charges in Rs. Lakh/ Km are arbitrarily high. Further salary of employees is being admitted on actual basis. Hence annual increase in maintenance charges shall be 1% only.

**COMMISSION'S VIEW**

1) The Commission has already specified in Regulation 139 of DERC Tariff Regulations, 2017 that True up of FY 2016-17 shall be based on DERC MYT Regulations, 2011 wherein escalation factor shall be considered as approved in MYT Order dtd. 13/07/2012.
2) Further, the Commission would like to clarify that the norms of Operation and Maintenance Expenses has been determined on the basis of actual expenses before deriving bay-wise and circuit kilometer norms which is in-line with methodology adopted by CERC in its Tariff Regulations, 2014, as indicated in the Explanatory Memorandum, 2017 as follows:

*"(53) For Transmission Business, the consolidated O&M expenses are typically linked to the number of bays in sub-stations and circuit kilometers of transmission lines. For determination of O&M norms, O&M expenses are needed to be allocated amongst substation bays and ckt-km in some ratio depending on ratio of gross fixed asset (GFA) for substations and transmission lines, and manpower required to cater to bays and lines. While determining the O&M norms, the total O&M expenses have to be allocated in some ratio between transmission bays and transmission lines, based on which, the normative O&M expense per circuit-km and O&M expense per bay has to be calculated.*

*(54)The Transmission Licensee has provided split of R&M Expenses into bay wise and circuit kilometer wise and further into Voltage wise (220 kV and 400 kV). The Commission has considered same ratio for total O&M expenses (excluding Foreign*

*Exchange Currency Fluctuation and External Project Cost).*

| *R&M Expenses* | *FY 2011-12* | *FY 2012-13* | *FY 2013-14* | *FY 2014-15* | *FY 2015-16* |
|---|---|---|---|---|---|
| *Bay* | *26.40* | *19.62* | *19.97* | *37.75* | *29.98* |
| *Ckm* | *4.40* | *2.91* | *3.55* | *6.47* | *5.87* |
| *Total* | *30.80* | *22.53* | *23.52* | *44.22* | *35.85* |
| *Ratio Bay* | *85.71%* | *87.09%* | *84.91%* | *85.37%* | *83.62%* |
| *Ratio Ckm* | *14.29%* | *12.91%* | *15.09%* | *14.63%* | *16.38%* |

| *O&M Expenses* | *FY 2011-12* | *FY 2012-13* | *FY 2013-14* | *FY 2014-15* | *FY 2015-16* |
|---|---|---|---|---|---|
| *Employee Expenses* | *116.43* | *134.40* | *127.47* | *136.94* | *141.68* |
| *A&G Expenses* | *22.26* | *30.42* | *31.37* | *55.61* | *38.07* |
| *R&M Expenses* | *29.70* | *21.14* | *22.35* | *35.70* | *34.93* |
| ***TOTAL*** | ***168.39*** | ***185.96*** | ***181.19*** | ***228.25*** | ***214.67*** |

| ***Voltage Wise – Bay*** | | | | | |
|---|---|---|---|---|---|
| ***Particulars*** | ***FY 2011-12*** | ***FY 2012-13*** | ***FY 2013-14*** | ***FY 2014-15*** | ***FY 2015-16*** |
| *400kV* | *5.09* | *2.90* | *2.89* | *4.36* | *3.14* |
| *220 kV and below* | *21.31* | *16.72* | *17.09* | *33.39* | *26.83* |
| *Total* | *26.40* | *19.62* | *19.97* | *37.75* | *29.98* |
| *Ratio 400 kV* | *19.28%* | *14.79%* | *14.45%* | *11.54%* | *10.48%* |
| *Ratio 220 kV and below* | *80.72%* | *85.21%* | *85.55%* | *88.46%* | *89.52%* |

| *Description* | *Percentage* | *Rounded Percentage* |
|---|---|---|
| *Average 400 kV Bay* | *14.11%* | *14.00%* |
| *Average 220 kV and below Bay* | *85.89%* | *86.00%* |

*(55) The Commission has further computed the ratio of expenditure in 400kV and 220kV as 24% and 76% respectively based on the actual R&M expenditure for FY 2015-16 and considered the same ratio for computation of part of O&M Expenses into ckm wise – voltage wise.*

*(56)In view of the above, the Commission has modified the O&M Expenses methodology and brought it in line with that followed by CERC and other SERCs like GERC, MERC etc. as combination of bay wise and circuit kilometer wise. "*

3) The Commission has, therefore, decided not to alter the bay-wise and circuit-kilometer wise norms for DTL in determining O&M Expenses.
4) Regarding, inflation factor of 5.61%, the stakeholders are clarified that the Commission has analysed the trend of increase in O&M expenditure of the utilities

and it is observed that there is no definite trend available for the expenditure escalation to be considered for the control period. Therefore, the Commission has computed the Escalation Factor by assigning weightage of 50:50 to WPI and CPI for last five years data for actual CPI and WPI. CPI has been considered for "All commodities" which arrives out to be 5.61%.

The Commission has already indicated its methodology for arriving out the inflation factor of 5.61% in its Explanatory Memorandum as follows:

*"(57) The Commission has also analysed the trend of increase in O&M expenditure of the utilities and it is observed that there is no definite trend available for the expenditure escalation to be considered for the control period. It is observed that CERC in its Tariff Regulation, 2014 has determined the escalation factor based on the average increase during the previous years in actual O&M expenses of the Utilities. Therefore, the Commission has computed the Escalation Factor by assigning weightage of 50:50 to WPI and CPI for last five years data for actual CPI and WPI. CPI has been considered for "All commodities". The detailed computation of Escalation Factor computation is as follows:*

| *Sr. No.* | *Year* | *CPI for all commodities* | *%age Growth* | *WPI for all commodities* | *%age Growth* |
|---|---|---|---|---|---|
| *1* | *FY 2011-12* | *195* | | *156.1* | |
| *2* | *FY 2012-13* | *215* | *10.26%* | *167.6* | *7.37%* |
| *3* | *FY 2013-14* | *236* | *9.77%* | *171.6* | *2.39%* |
| *4* | *FY 2014-15* | *251* | *6.36%* | *181.2* | *5.59%* |
| *5* | *FY 2015-16* | *265* | *5.58%* | *176.7* | *-2.48%* |
| *6* | *Average* | | ***7.99%*** | | ***3.22%*** |

Source: RBI

**Escalation Factor = (7.99+3.22)/2 = 5.61%**

"

5) Further, the Commission has also considered various CAGRs for the period from FY 2011-12 to FY 2015-16 and observed that it varies from -5.95% (1 Year CAGR) to +6.26% (4 Year CAGR). Therefore, there is no definite trend in actual O&M Expenses of DTL during last 5 years to establish the escalation factor. Accordingly, the

methodology adopted by the Commission for arriving at the escalation factor is considered prudent.

6) Regarding, additional employee expenses, it is clarified that the Commission has provided O&M Expenses per unit values of bay wise and circuit kilometer wise which take into account the man-power cost. Accordingly, the additional man-power cost for setting up Additional S/s or Transmission Lines will automatically get factored. The Commission has, therefore, decided not to alter this provision in Business Plan Regulations, 2017.

7) Regarding, 7th Pay Expenses, the Commission has considered the submissions of the stakeholders and accordingly following Regulation has been added in the Business Plan Regulations, 2017:

*" (2) Impact of any statutory Pay revision on employee's cost as may be applicable on case to case basis shall be considered separately, based on actual payment made by the Transmission Licensees and shall be allowed by the Commission after prudence check at the time of true up of ARR for the relevant financial year."*

## J. CAPITAL INVESTMENT PLAN – REGULATION 14

*" (1) The tentative Capital Investment Plan for the Transmission Licensee for FY 2017-18 to FY 2019-20 is as follows: ……………………………………………………….*

*……………………………………………………………………………………………………………………..*

*(3) Capital cost shall be trued up annually and financial impact on account of variation in projected capital cost in the tariff order vis-a-vis actual capital cost and scheduled date of commissioning vis-a-vis actual date of commissioning shall be dealt as per the provisions of Regulations 61, 62 and 150 of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017."*

**STAKEHOLDER'S COMMENTS/SUGGESTIONS**

**1) DTL:**

a) DTL has submitted that the Revised Business Plan of DTL for FY 2017-18 to FY 2021-22 is under final stage of preparation and shall be submitted shortly and the Commission to consider the Capitalisation submitted in this Business Plan.

b) DTL in reference to the clause 14(3) has submitted that the said provision of providing the margin of 5% and further the recovery of excess / shortfall due to variation in capitalization at 1.20 /0.80 times of interest rate should not be applicable to DTL due to various reasons like Allocation and allotment of land in Delhi, Right of Way problems, VIP areas/movement, Congested areas etc. Further, DTL submitted that it being the State Transmission Utility of Delhi, Business Plan of DTL is also based upon other power utilities of Delhi i.e., Gencos and Discoms. The Business plan is being prepared for 5 years and in between this period due to various uncontrollable factors such as Land acquisition, Right of Way, Load Growth in any area not envisaged before, future Generation capacity addition etc, so keeping in view of these discussions/ factors, it can be seen that wide gap/variation is unavoidable between the proposed capitalization in the Business plan submitted with MYT petition and the actual capitalization achieved later on.

c) Further the rate of under-recovery /over recovery shall be same as per the interest cost approved by the Commission.

**COMMISSION'S VIEW**

1) DTL had submitted the revised Business Plan Petition on 21/08/2017 to the Commission and the Capitalisation submitted in the said Petition has been considered in Business Plan Regulations, 2017.

2) Regarding the provision of 5% margin on capital cost variation, the Commission has indicated in its SOR of *Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017* that for accurate projections with regard to capital expenditure and in order to limit the impact on consumers in terms of carrying cost the Commission has proposed differential interest rates for refund and recovery as follows:

"(vii) **Capital Cost Variation:** *The Commission is of the view that in case the actual capital expenditure varies substantially with respect to the* *projected/estimated capital expenditure, the impact of the same needs to be allowed at the time of truing up with interest. It is important that the wide variation between projected and actual capital expenditure is controlled. In order to have more accurate projections with regard to capital expenditure and in order to limit the impact on consumers in terms of carrying cost of under recovered or over recovered tariff on account of variation between projected and actual capital expenditure, the Commission has proposed differential interest rates for refund and recovery as the generating or transmission company is in the best position to make realistic projections of capital expenditure. The Commission is of the view that the band of 5% variation between actual capital cost and capital cost considered for tariff is adequate as the projections made by the utilities are based on remaining works to be carried out in case of new projects."*

3) Regarding the refund/recovery of capital cost , the Commission in its *Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017* has stated that refund/recovery will be 1.20/0.80 times of the bank rate as prevalent on 1st April of respective year, as follows:

*"62……*

*………(ii) where the capital cost considered in tariff by the Commission on the basis of projected capital cost as on COD or the projected additional capital expenditure submitted by the Generating Entity or Transmission Licensee, as the case may be,, as the case may be, exceeds the actual capital cost incurred on year to year basis by more than 5%, the Generating Entity or Transmission Licensee, as the case may be, shall refund to the beneficiaries/consumers, the excess tariff recovered corresponding to excess capital cost, as approved by the Commission along with interest at 1.20 times of the bank rate as prevalent on April 1 of respective year; (iii) The Generating Entity or Transmission Licensee, as the case may be, shall file a true up Petition to the Commission, along with all supporting documents for consideration of any upward revision in the tariff, where the capital cost considered in tariff by the Commission on the basis of*

*projected capital cost as on COD or the projected additional capital expenditure falls short of the actual capital cost incurred on year to year basis by more than 5%. The Generating Entity or Transmission Licensee, as the case may be, shall be entitled to recover from the beneficiaries for the shortfall in tariff corresponding to addition in capital cost, as approved by the Commission along with interest at 0.80 times of bank rate as prevalent on 1st April of respective year."*

4) As indicated above, that the above provision is part of *Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017* therefore, the Commission has decided to retain this provision on capital investment of the draft Business Plan Regulations, 2017.

## K. NORMS OF OPERATION FOR TRANSMISSION BUSINESS – REGULATION 15 & 16

*"(1) Normative Annual Transmission System Availability Factor (NATAF) for recovery of Annual Fixed Charges for AC System shall be considered at 98%.*
*(2) Transmission System Availability shall be computed as per the formulae and methodology specified in Appendices-I, II and III of these Regulations.*
*The Transmission Charges (inclusive of incentive) for AC system to be billed, in terms of Regulations 112 to 115 of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017,for a calendar month for transmission system or part thereof shall be computed as follows:*
*a) For TAFM ≤ 98%, AFC x (NDM/NDY) x (TAFM/98%)*
*b) For TAFM: 98% < TAFM < 99%,*
*AFC x (NDM/NDY) x (1)*

*c) For TAFM: 99% < TAFM ≤ 99.75%,*
*AFC x (NDM/NDY) x (TAFM/99%)*

*d) For TAFM ≥ 99.75%,*
*AFC x (NDM/NDY) x (99.75%/99%) where, AFC =Annual Fixed Cost specified for the year in Rupees NATAF =Normative Annual Transmission availability factor, in per cent NDM =Number of days in the month NDY =Number of days in the year*
*TAFM =Transmission System availability factor for the month."*

**STAKEHOLDER'S COMMENTS/SUGGESTIONS**

**1) TPDDL:**

a) The Commission has fixed lucrative target of 98% for transmission companies. In previous years also the transmission company has always overachieved the target of 98% and earned incentives. In order to promote the competitiveness and the efficiency the transmission system availability factor should be considered below at 99% for recovery of full fixed charges.

2) **BYPL:**

a) The formula provides for recovery of Transmission Charges below and above 99% however, the treatment for transmission availability at 99% is not mentioned.

3) **DTL :**

a) DTL has submitted that its transmission system comprising of overhead transmission lines, underground cables and sub-stations exists in thickly populated areas of NCT of Delhi. Unauthorized constructions/ structures are existing in most of the 400kV and 220kV transmission lines. It submits that transient trippings due to unwanted activities of inhabitants residing in the ROW of lines generally takes place. DTL submits that Delhi is a fast developing city and activities like trenchless diggings/excavation in and around cable route cause external damage to the cables. Further, the restoration of underground faulty cables is a time consuming process.

b) DTL has submitted that it has inherited 11kV, 33kV, 66kV system situated at its 220kV sub-stations after unbundling of erstwhile DVB. Any fault on the outgoing distribution and sub-transmission system sometimes get reflected on DTL's transmission system causing unwanted outages.

c) NATAF for recovery of Annual Fixed Charges for AC System has been considered at 98% where as the Transmission Charges (inclusive of incentive) for AC system is to be billed, for a calendar month for transmission system or part thereof shall be computed on monthly basis. Therefore, Transmission charging methodology to be changed to Cumulative Transmission System Availability basis.

d) The incentive should be allowed from 98% on cumulative basis.

e) SIL for 220kV XLPE cables of different sizes (630 sq.mm.,1000 sq.mm.,1200 sq.mm.) and 400kV XLPE cables 2500 sq.mm. size, SIL for 220kV ACCC Drake conductor, SIL for 11kV, 33kV, 66kV O/H line and U/G cable is not mentioned in Appendix-II.

**COMMISSION'S VIEW**

1) The Commission has considered the issues raised by DTL like Right of Way (ROW) and fault clearance time, the Commission had decided to modify Annexure-I for NATAF computation.
2) With regards to the stakeholder submission that monthly charges should be allowed on cumulative basis, the Commission would like to state that the methodology for computation of transmission charges inclusive of incentive is in line with CERC Tariff Regulations, 2014.
3) With regards to stakeholder submission that the Transmission Licensee has been given lucrative targets, the Commission would like to clarify that in previous control period i.e., FY 2012-15 the Transmission Licensee was allowed an incentive if the Transmission System availability factor for the month (TAFM) was more than 98%, whereas, for the control period FY 2018-20, the Commission has raised the bar by not allowing the incentive till TAFM reaches 99%. Further, the Commission has set a cap on incentive to be received by transmission license, by not allowing any additional incentive if TAFM reaches above 99.75%.
4) With regards to the stakeholder's submission that the treatment for transmission availability at 99% is not mentioned, the Commission would like to state that at TAFM of 99% both the clauses i.e. 16 (b), 16 (c) will lead to same result. Therefore, there is no need to amend this clause.
5) With regards to stakeholder's submission on SIL rating, the Commission would like to state that for the SIL rating for various voltage levels and/or conductor configuration not listed in Appendix-II, appropriate SIL will be considered based on the technical considerations and power system analysis considered by SLDC.

# PART III: DISTRIBUTION LICENSEE

## L. RATE OF RETURN ON EQUITY

*(1). Wheeling Business: Return on Equity in terms of Regulations 4(1) of the DERC (Tariff and Conditions for determination of Tariff) Regulation, 2017 shall be computed at the Base Rate of 14% on post-tax basis.*
*(1). Retail Business: Return on Equity in terms of Regulations 4(1) of the DERC (Tariff and Conditions for determination of Tariff) Regulation, 2017 shall be computed at the Base Rate of 2% on post-tax basis."*

### STAKEHOLDER'S COMMENTS/SUGGESTIONS

**1) TPDDL:**

a) There is inconsistency between the draft Business Plan Regulations, 2017 and Explanatory Memorandum as Draft Regulation 17 suggests that the Commission has allowed 2% RoE on Retail supply business, and 14% RoE on wheeling business. wherein in explanatory memorandum the Commission has considered 16% ROE to DISCOMs. Further, in terms of Section 61 (a) of the Electricity Act, 2003, while determining tariff, the Commission has to be guided by the Tariff Policy and the Regulations notified by the Central Commission. In the earlier MYT Regulations 2007 & 2011 the Commission had specified the ROE at the rate of 16%, when the CERC Regulations allowed 14% to generating/ transmission utilities.

b) CERC (Terms and Conditions for Tariff) Regulations, 2014 has approved ROE for generation companies and transmission Companies at rate of 15.5% (+ additional 0.5% for projects commissioned in time). Therefore the rate of return for distribution companies should be allowed at the rate higher than 16% taking into consideration the risks involved in distribution business and without dividing the same into wheeling and retail business.

c) Computation methodology for "Effective Tax Rate" is not in line with the Regulations 72 of DERC Tariff Regulations,2017 as Income Tax is payable on net profits and not on Gross Income. Not only Advance tax but entire tax paid/adjusted should be considered for the purpose of computation of allowance of Income Tax.

d) TPDDL has submitted that the Commission by Draft Regulation 17 (2) has allowed a return on Equity at 14% on pre-tax basis on the Equity portion for the purposes of computation of the carrying cost for the funding of the Revenue Gap through debt and Equity. While allowing the carrying cost on equity component at 14%, the Commission has not considered the fact that the return on Equity of 16% post tax has been allowed to DISCOMs and the return on Equity cannot be different for the equity invested towards funding of the regulatory asset in the same business. The regulatory Asset is an outcome of the deferment/ under recovery of the ARR of the Distribution business and therefore, TPDDL is forced to finance this revenue gap through debt and equity. Accordingly, the Commission in light of the above submissions must allow 16% post tax return on the equity component for the purpose of computation of the revenue gap.

**2) <u>BRPL and BYPL:</u>**

a) The rates of RoE given by other Commissions are not straight way comparable with the RoE being proposed by this Commission because all the other Commissions referred to therein give a return on the "RoE" method where as DERC provides a return on the 'ROCE" method. Hence a rate of return under the ROCE is not straight away comparable with rate of return under the RoE method. Further other Commissions referred to therein provide RoE on the "gross fixed assets" of the entity whereas DERC provides the rate of return on the "net" fixed assets of the entity. Also the working capital loan gets merged in the capital mix under the RoCE approach as specified by the Commission in Tariff Regulations, 2017. This merging of working capital loans in the capital mix distorts debt-equity ratio and decreases equity percentage in capital mix. In other States, the working capital loans are kept separate from capital assets and interest on working capital loans is provided as a line item in ARR separately.

b) A comparison of the two different methods clearly shows that a 14% RoE (in absolute terms) on the basis of the methodology adopted by this Commission gives a lesser return to the licensees then 16% of RoE given by other Commissions. This is exemplified by the following illustration.

| Sr. No. | Particulars | UoM | RoCE | ROE | Reference |
|---|---|---|---|---|---|
| 1 | Capital Employed | Rs Cr. | 1000 | 1000 | 1 |
| 2 | Life of assets | Years | 10 | 10 | 2 |
| 3 | Equity Employed | Rs Cr. | 300 | 300 | 3=1*30% |
| 4 | Debt Component | Rs Cr. | 700 | 700 | 4=1*70% |
| 5 | Working Capital | Rs Cr. | 100 | | 5 |
| 6 | Rate of ROE | % | 16% | 14% | 6 |
| 7 | Rate of Depreciation | % | 9% | 9% | 7=90%/2 |
| 8 | Depreciation | Rs Cr. | 90 | 90 | 8=7*1 |
| 9 | Net Capital Employed | Rs Cr. | 910 | 910 | 9=1-8 |

| Sr. No. | Particulars | UoM | RoCE | ROE | Reference |
|---|---|---|---|---|---|
| A | Equity Portion | Rs Cr. | 300 | 300 | A=3 |
| B | Debt Portion | Rs Cr. | 800 | 700 | B=4+5 |
| C | Effective equity percentage | % | 27% | 30% | C=A/(A+B) |
| D | Equity on which ROE to be given | Rs Cr. | 248 | 300 | D=9*C |
| E | ROE percentage | % | 16% | 14% | E=6 |
| F | ROE allowable | Rs Cr. | 40 | 42 | F=D*E |

c) Business Plan Regulations proposes to segregate the Rate of Return on the wheeling business and Retail Supply Business as if they were two independent businesses. In that event the wheeling business should be compared, at the very least, with a transmission business wherein the CERC and other Commissions also provide a return of at least 15.5%. If the retail business is considered by the Commission as a separate business, then the rate of return of 2% would be unreasonably low.

d) The Commission has determined the RoE for distribution business @ 16% i.e. 14% for Wheeling Business and 2% for Retail Supply Business. It is noteworthy to mention that with the notification of proposed amendments of EA'03 the Distribution business will segregate into Wheeling Business and Retail Supply Business (Carrier and Content). Further, given the fact that the Retail Supply Business is riskier than the Wheeling Business the rate of Return for Retail business to be such that the investors get an appropriate return on their investments. Moreover, the RoE for Retail Business ought to be same as for Distribution Business i.e. 18%. The compounded risk associated with the distribution business is higher than that with the generation and transmission business.

e) BRPL has requested that the rate of return should be as under:-

   a. Distribution wheeling business: 15.5%
   b. Retail business: 17.5%

f) There is no breakup of the Regulatory Assets as to whether it pertains to the Wheeling or Retail Supply Business. None of the previous orders of the Hon'ble Commission in which the Regulatory Assets has been created and/or recognized has given any breakup as to how much of the Regulatory Assets pertains to Wheeling and how much pertains to Retail. Therefore the Regulatory Assets are for the Distribution business as a whole. BRPL submitted that the rate of return for the distribution business as a whole being 16% even as proposed by the Commission, it is submitted that there is no warrant to reduce the RoE to 14% for computing or fixing of the return for the funding of the regulatory assets/revenue gap.

g) RoE for the computation of weighted average rate of interest for deriving the carrying cost for funding of regulatory assets/ revenue gap may kindly be changed to 16%. ROE for the distribution business as a whole please be considered @ 18%.

h) The Licensee has not fully recovered its expenses on account of creation of Revenue Gap/ Regulatory Assets over the last 10 years. As against these Regulatory Assets, the total power purchase dues of Gencos and Transcos is increasing on which the Licensee is being called upon to pay LPSC as per the Regulations of CERC/DERC. The outstanding dues of Gencos and Transcos can be met if the Regulatory Assets are liquidated. Hence while specifying the carrying costs for funding the Regulatory Assets/ Revenue Gaps, the rate of interest should be such that the same adequately enables the Licensee to clear the interest burden of Gencos and Transcos due to outstanding Power Purchase dues.

i) The Regulatory Assets are being created on account of non cost reflective tariffs which in turn constrain the ability of DISCOMs to clear power purchase dues. The DISCOMs are required to pay LPSC @ 1.5% per month to Gencos on non-payment of dues in accordance with Regulation- 137 of DERC Tariff Regulations, 2017.

**3) <u>A.K Datta, Hari Prakash Gupta, Sudhir Aggarwal, Saurabh Gandhi:</u>**

a) The proposed Return on Equity at 14% is abnormally high and shall be kept at 8%. The Licensee is given assured return on all expenses and debt. Hence Equity return in excess of 8% in such low inflation condition will create adverse condition on economy of Stake holders.

**4) <u>GONCTD:</u>**

a) The Return on Equity allowed to DISCOMs is 14% for Wheeling business +2% on Retail business on post tax basis, i.e. total 16% on post tax basis, which is higher than return in any other business. Further, carrying cost proposed at 14% on pre-tax appears on higher side which is direct burden on the consumers in tariff. Therefore, carrying cost should be reviewed keeping in view best performance for the purpose of procurement of loan from financial institution by the DISCOMs.

b) The collection of tax on return should be consistent with the provisions of Income Tax to avoid any arrears/dues due to difference of calculation of methodology on tax. It later on reflects on retail consumer in terms of carrying cost etc. Therefore, the formula for arriving on tax rate on the basis of MAT should be in line with analogy of Income Tax Department.

**<u>COMMISSION'S VIEW</u>**

1) The Commission has indicated RoE at the rate of 16.00% to DISCOMs in its Explanatory Memorandum of Business Plan Regulations, 2017 which includes base rate of return on Equity for Wheeling Business (14.00%) and base rate of return on Equity for Retail Business (2.00%). Therefore, there is no inconsistency between the

draft Business Plan Regulations, 2017 and its Explanatory Memorandum.

2) The Commission has indicated in its Explanatory Memorandum of Business Plan Regulations, 2017 that the base rate of RoE being allowed by various Electricity Regulatory Commissions in India were analysed before finalizing the base rate of RoE for the distribution licensee in Business Plan Regulations, 2017 as follows:

*"(8) The Commission has observed that base rate of Return on Equity specified by various Electricity Regulatory Commissions (ERCs) is in the range of 14% to 17.50% as follows:*

*a) 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% post tax basis for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.*

*b) 15.50% for Generating Entities, 15.50% for Transmission Licensees, 15.50% for Distribution Wires Business and 17.50% for Retail Supply Business in Maharashtra Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2015.*

*c) 14% for Generating Entities, Transmission Licensees and Distribution Licensees in Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2016.*

*d) 16% in Uttar Pradesh Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014 for Distribution Licensees.*

*(9) Therefore, after detailed deliberations, and considering the limitations of using any of the financial models like CAPM and the non availability of sufficient volume of historical data for the companies operating in Indian Power Sector, the Commission proposes to continue with the existing base rate of Return on Equity of 14% on post tax basis for Generation, Transmission and Distribution sector with the additional Return on Equity of 2% on post tax basis*

*for risk associated to Retail Supply Business. "*

3) With regards to the stakeholder's submission on actual tax paid, the Commission has indicated in its DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 that the effective tax rate shall be considered on the basis of actual tax paid vis-à-vis total income of the Utility in the relevant financial year in line with the provisions of the relevant Finance Acts as follows:

   *"72. **Tax on Return on Equity**: The base rate of return on equity as specified by the Commission in the Business Plan Regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid vis-à-vis total income of the Utility in the relevant financial year in line with the provisions of the relevant Finance Acts. The actual tax on other income stream shall not be considered for the calculation of "effective tax rate":"*

4) With regards to the stakeholder submission that distribution business is more riskier than generation entity or transmission licensee, the Commission would like to clarify that an additional RoE of 2% has already been allowed for retail business over and above the RoE allowed for generation entity /transmission licensee in Business Plan Regulations, 2017 which factors this additional risk. The Commission has, therefore, decided not to modify this provision of the draft Business Plan Regulations, 2017.
5) With regards to the stakeholder submission that the dues of Discoms to generation/transmission companies are increasing and carrying cost of regulatory assets may be increased to 16%, the Commission would like to state that cost of power purchase submitted by the Discom in its petition every year is allowed after scrutiny in the True-up Order and the Discom should pay its dues to the respective generation/transmission licensee from the power purchase cost allowed by the Commission. Further, the Commission has allowed a regulatory surcharge of 8% to be levied in the electricity bills so that the Regulatory assets may be recovered by the DISCOMs in a phased manner.

6) Regarding stakeholders' submissions of post tax return on equity for computation of carrying cost, it is clarified that the Hon'ble APTEL in its judgment dated 20.06.2016 in Appeal No. 271 of 2013 has upheld the methodology of the Commission for computation of rate of return on equity @ 14% for the purpose of carrying cost. The relevant extracts of the APTEL Order is reproduced as below.

*" 17.2)* ***It appears from paragraph 3.187 of the Impugned Order, that rate of return on equity has been considered at 14%, for the purpose of carrying cost in the Impugned Tariff Order dated 31.07.2013****, in accordance with Regulation 5.10 of MYT Regulations 2007 by learned Delhi Commission. It appears from record and earlier tariff orders that Learned Delhi Commission had revised carrying cost for FY 2007-08 to FY 2011-12 in the debt equity ratio of 70:30 in compliance with directives of this Appellate Tribunal in Appeal No.153 of 2009 in NDPL Vs. DERC. The learned Delhi Commission after going through Regulations 5.9, 5.10, 5.38 and 5.39 of the MYT Regulations 2007 has considered the return on equity at 14% holding on the basis that from the perusal of MYT Regulations 2007, the return on equity cannot be more than 16%, however, it has to be prescribed by the Delhi Commission.*

*17.3) Regulation 5.9 deals with computation of Return on Capital Employed, prescribing a formula for such kind of computation. Regulation 5.10 provides for computation of Weighted Average Cost of Capital (WACC) for each year of the control period, clearly providing that "cost of equity for wheeling business shall be considered at 14% post tax." Regulation 5.39 clearly states that the return from the wheeling business and retail supply business shall not exceed 16% of equity. Thus, there is a rider restricting that the return from the wheeling business and retail supply business shall not exceed 16% of the equity. Thus, the maximum limit is 16% which cannot be allowed to exceed under any circumstances. Appellant is claiming 16% of equity on the basis of 14% RoE + 2% supply margin****. In view of the above discussion, we do not find any illegality or perversity in the finding recorded in the Impugned Order on this issue and we***

***approve the approach adopted by the Delhi Commission in deciding this issue.*** *We find and observe that the learned Delhi Commission has correctly, in the impugned tariff order, considered the rate of return on equity at 14% to which we also agree. Hence, this issue is decided against the appellant."*

7) The Commission has, therefore not modified this provision of the draft Business Plan Regulations, 2017.

## M. MARGIN FOR RATE OF INTEREST ON LOAN

### STAKEHOLDER'S COMMENTS/SUGGESTIONS

**1) TPDDL:**

a) The Commission in draft regulations has proposed high margins on Capex loans to BRPL in the range of 5.34% and 6.05% as against a very low margin of 1.73% to TPDDL. As such TPDDL is not getting incentivized for being efficient in managing its business. The Commission has considered separate Margin for rate of Interest on loan for different DISCOMs which violates:-

   1) Article 14 of the Constitution of India which promotes equality
   2) Section 61 of the Electricity Act, 2003 which provides for encouraging competition, efficiency, economical use of resources, good performance and optimum investments and principles rewarding efficiency in performance and consumers interest.

b) Rate of interest is not only dependent on the MCLR/ Base rate of lenders, instead it is a combination of MCLR/ Base Rate and Margin. Margin is applied by lenders according to their own internal rating assigned to any borrower depending upon health of the sector, the financial and operational, health of the organization, past dealings, brand etc. The financial health of the company is a resultant of its operational efficiency over a period of time.

c) In the past, TPDDL has always performed well on the targets as set by the

Commission from time to time and has been able to borrow funds at a low level of margin in contrast to its counterpart DISCOMs. This difference in performance levels is also evident from the vast difference in the actual borrowing rates of TPDDL and other DISCOMs. Therefore, the spread/margin is an important criteria in fixation of interest rate. However, there is a vast difference in the margins approved for all the 3 DISCOM's as given in these Regulations, which is arbitrary and against mandate and object of the Electricity Act, 2003 which provides that a Commission should ensure transparency and promote efficient and competitive environment.

d) It has already brought a lot of efficiency into the system and reduced the interest rate to large extent in comparison to loan availed in the market based on economic conditions. If one DISCOM can achieve such high efficiency levels in the same economic, geographical and political conditions, it is possible for the other DISCOMs also to reach the same efficiency levels. It has set a clean track record of never defaulting in the repayment of installments as well as Interest with no breach of any of the covenants.

e) Margins allowed even to IPGCL/PPCL are much higher than those proposed for TPDDL.

f) The actual borrowing rates of TPDDL has been always 2%-3% lower than the borrowing rates of other two Discoms, i.e., BRPL and BYPL. Despite the same, the Commission has been allowing the interest rates almost with difference in the approved margins in the range of 0.25% -0.50% on the concept of the level playing field.

g) The Hon'ble Central Commission has defined "Bank Rate" in the CERC Tariff Regulations 2014, to mean:

> ***"Bank Rate** means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points".*

h) As evident from above, that, even the CERC has approved the margin at 350 basis points, i.e., which is same for all the generating and transmission Companies, thereby leaving generating and transmission companies to account for their efficiency/ inefficiency, as against this Commission approach of allowing a differential margin of 1.7% to the efficient DISCOM and a higher margin of 5%-6.5% to other DISCOMs of Delhi, despite their poor performance.

i) The Commission in the Draft Business Plan regulation, has for the first time introduced the concept of sharing of the savings on refinancing of the expensive loans equally between the consumers and the DISCOM. However, it may be appreciated that TPDDL, through its effective negotiation in the past has brought down its cost of borrowings, and the ultimate benefit of the same is being passed to the consumers in the form of lower interest costs in the ARR. In contrast to this, the counterparts are still borrowing at very high interest rates and the consumers, will have to face a higher burden in the form of higher interest costs through allowance of such high margins. Further, the Commission has also rewarded the Other generating companies/ transmission companies/ Other DISCOMs by giving them opportunity to earn higher incentives with refinancing option. Thus the proposed rate of interest (MCLR) mechanism in the current draft Regulations would result in unjust enrichment of the Other Discom. It is already at very low level and has hardly any scope for earning any savings on account of refinancing. Commission is requested to allow some compensation mechanism on account of efficiency already brought in by TPDDL in the past on account of parity principle and level playing field.

j) Credit rating agency ICRA in its last rating has also expressed his concerns on the liquidation prospects of regulatory assets. Even a one notch down in credit rating from existing level will impact our interest rate by around 150-200 basis points. Also, absence of clear cut roadmap for the liquidation of regulatory asset severely impacts the future lending rates.

k) If the credit rating comes down, then the rate of interest may go up by further 1%-2%.

   1) It is enclosed in the Business Plan, some of the reset letters of Banks like

Dena Bank, Canara Bank (page no 158 to 160 of Annexure – 1 of Business Plan FY 2017-18 to FY 21-22 ) where the applicable rate of borrowing for a company with similar rating has been mentioned. However, due to effective negotiation by TPDDL, it has managed to avail concessions on its current borrowing rates.

However, this situation may not continue in future in the absence of definite plan on the liquidation of regulatory asset.

2) The Applicable interest rates of the State Bank of India for the term loans/ working capital borrowing limits is enclosed Page no 161 to 171 of Annexure – 2 of Business Plan FY 2017-18 to FY 21-22) which clearly reflects the variation in the spread/ margin in the range of around 3%-3.35% for the secured loans and if loan is unsecured then the spread is further increased by around 1%.

l) The capital intensive nature of power sector requires raising debt for longer tenor which can be supported by life of the Power Project (around 25 years). However, there is wide disparity between the maturity profiles of assets and liabilities of banks exposing them to serious Asset Liability Maturity mismatch (ALM). In order to match the funding requirements for a longer period of power sector there is corresponding availability of funds for lender also. The fundamental principle of management accounting provided that the cost of every source of funding is based on risk and return. Both Risk and Return are directly related to each other i.e. if risk increase return should also increase and if risk decrease return should also decrease. Risk is further related with tenor of funds. While fixing any lending rates banks charged some margin on account of term premium with the increase in period of loan as the risk also increases.

m) The Commission while finalizing the Business Plan Regulations is requested to consider the above submissions of TPDDL, at the time of determination of the margin.

While fixing the spread for new loans, the Commission should first compute the weighted average rate of interest of all utilities. Then reduce the said weighted average rate with the weighted average MCLR rate of loans. The resulting figure should be treated as benchmark spread/margin for all utilities during the next control period irrespective of the actual rate of borrowing of the utilities. Accordingly a benchmark margin of 2.87% (11.37%-8.50%) should be approved for the each year of the control period for all the DISCOMs. This concept will provide a level playing field and platform of equity, where efficiencies and inefficiencies will be to the account of utility

**2) GONCTD :**

a) Wide variation has been proposed in margin for computation of rate of interest on loan which varies from 0.1% to 6.10%.

b) Such a large variation in MCLR leads to an impression that in-efficient power companies are being promoted whereas efficient companies in terms of financial management are being penalized. As per prudent practice, regulations should be such that they are able to promote efficiency in promoting low interest rate loans for capital works as well as routine works. The regulation should encourage power companies to achieve higher efficiency in terms of procuring loan on more competitive rate rather than fixing MCLR from 2017-18 to 2019-20. There is no target for DISCOMs to reduce its borrowing cost in future years. Methodology for calculating different rate of interest for Capex / other than Capex loans DISCOM-wise should be explained and put up in public domain for clarity and transparency.

c) To bring transparency for inviting open tender, reverse bidding option should also be included in tender.

**3) A.K Datta, Hari Prakash Gupta, Sudhir Aggarwal, Saurabh Gandhi:**

a) It is submitted that margin on Capex Loan/ non-Capex loan shall be kept at 1% over SBI base rate. There is no reason to allow any higher interest to DISCOM because of low credit rating attributable to BSES group of Companies.

**COMMISSION'S VIEW**

1) The Commission would like to clarify that it has decided margin for interest as per Regulation 77 of the DERC Tariff Regulations, 2017, which considers weighted average rate of interest for actual loan portfolio, as follows:

   *" 77. The rate of interest on loan shall be based on weighted average rate of interest for actual loan portfolio subject to the maximum of bank rate as on 1st April of the year plus the margin as approved by the Commission in the Business Plan Regulations for a Control Period:"*

2) The Commission had indicated in its Explanatory Memorandum that it has analyzed the submissions of DISCOMs and accordingly has decided the margin for CAPEX and NON-CAPEX Loan.

3) Also the stakeholder's submission that the CERC has approved the margin at 350 basis points on loan, the Commission would like to state that the margin of 350 basis points has been approved by CERC for rate of interest on working capital and not for interest on CAPEX loan. Various SERCs has approved the rate of interest on loan on the basis of actual loan portfolio at the beginning of the year which is in-line with the regulation approved by DERC in its Business Plan Regulations, 2017. The Regulation approved by various SERCs with respect to Rate of Interest on loan is as follows:

| SERC | Extract of the Regulations |
|---|---|
| MERC, MYT Regulations 2015 | *"The rate of interest shall be the weighted average rate of interest computed on the basis of the actual loan portfolio at the beginning of each year"* |
| GERC, MYT Regulations 2016 | *"The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the Generating Company or the Transmission Licensee or SLDC or the Distribution Licensee"* |
| APSERC, MYT Regulations 2013 | *"The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the Generating Company or the Transmission Licensee or the Distribution Licensee"* |

4) The Commission has, therefore, decided to modify this provision of the draft Business Plan Regulations, 2017 to allow the margin based on the rate of interest on actual loan portfolio as on 1st April of the year subject to the rate of interest on loan (MCLR plus Margin) shall not exceed approved base rate of return on equity i.e., 14.00%.
5) Further, the Commission has made provisions to pass through the actual cost of financing subject to the rate of interest on loan (MCLR plus Margin) shall not exceed approved base rate of return on equity i.e., 14.00% and at the same time there should be incentive for efficient management of the business by the Utilities which have now been benchmarked at 2.00%plus (+) SBI MCLR.
6) The Commission has considered the suggestion of GoNCTD and has modified its Regulations for open tendering of loan as follows:

   *"(3) The Distribution Licensee shall endeavour to invite open tender for availing loans."*

   modified as

   *"(2) The Distribution Licensees shall follow* ***transparent mechanism*** *to avail Loans and, to the extent possible, shall endeavour to invite open tender for availing Loans."*

## N. OPERATION AND MAINTENANCE EXPENSES

### STAKEHOLDER'S COMMENTS/SUGGESTIONS

1) **TPDDL**
   a) O&M costs per unit realized at the actual AT&C loss levels achieved by the DISCOMs in comparison to the O&M costs per unit realized at the target AT&C loss levels in the last MYT control period (FY 13-14 to FY 15-16) is as follows:

| | BYPL | | | BRPL | | | TPDDL | | |
|---|---|---|---|---|---|---|---|---|---|
| | **FY 16** | **FY 15** | **FY 14** | **FY 16** | **FY 15** | **FY 14** | **FY 16** | **FY 15** | **FY 14** |
| A. Input | 7024 | 6976 | 6848 | 12455 | 12419 | 11985 | 8610 | 8423 | 8040 |
| B. Billed unit | 5676 | 5405 | 5215 | 10464 | 10144 | 9626 | 7854 | 7616 | 7179 |
| **C. O&M / unit- Rs kWh** | **0.92** | **0.85** | **0.84** | **0.68** | **0.65** | **0.64** | **0.71** | **0.67** | **0.68** |

| | BYPL | | | BRPL | | | TPDDL | | |
|---|---|---|---|---|---|---|---|---|---|
| D. Distribution Loss Level = (1-B/A) | 19% | 23% | 24% | 16% | 18% | 20% | 9% | 10% | 11% |
| E. Target Distribution Loss Level as per MYT | 13% | 14% | 15% | 11% | 12% | 13% | 11% | 11% | 12% |
| F. Unit required to be sold based on target AT&C loss level | 6,119 | 5,994 | 5,804 | 11,056 | 10,921 | 10,440 | 7,701 | 7,491 | 7,111 |
| **G. O&M / unit – Rs kWh (Based on target DL Loss)** | **0.85** | **0.77** | **0.76** | **0.65** | **0.61** | **0.59** | **0.72** | **0.68** | **0.68** |
| **H. Loss in O&M Cost/unit (C-G) – Rs kWh** | **0.07** | **0.08** | **0.08** | **0.03** | **0.04** | **0.05** | **-** | **-** | **-** |

b) The per unit cost of O&M of BYPL for FY 2015-16 is Rs 0.92 per unit on its actual AT&C loss level target whereas the O&M costs per unit would have been Rs 0.85 per unit if the target AT&C loss level would have been achieved. This clearly shows that the O&M cost per unit of it is higher than what it should have incurred. Similar is the case with BRPL for all the years. However, actual O&M cost per unit in case of TPDDL is similar to the O&M per unit cost at the target level. This reflects the efficiency brought in by TPDDL as compared to its counterparts.

c) Actual O&M expenses of last 5 years has been considered for the purpose of deriving the per circuit km rates and per MVA rates. Therefore, actual O&M costs of BSES which are actually higher has been considered as base for deriving the O&M rates for the next control period resulting in allowance of higher O&M cost per unit to underperforming DISCOMs. Therefore, if the distribution loss level for base year is fixed at a higher level than the corresponding O&M expenses should be reduced from the base year's O&M expenses to fix the O&M expenses for next control period.

d) The Commission in the past applicable Regulations had always computed Inflation factor by assigning the weightage of CPI: WPI in the ratio of 55:45. However, in the Draft Business Plan regulations, the Commission has changed the CPI: WPI mix to 50:50 while calculating the inflation factor from 55:45 to 50:50 for CPI: WPI.

e) The Commission at Para 43 of the Explanatory Memorandum has stated that the legal expenses incurred on cases filed against the Commission in any of the Courts and Forums shall not be allowed in the ARR. As already stated in the Preliminary Objections that the same amounts to curtailment of Statutory Right of the TPDDL to challenge the decisions of the Commission and is against the principle of natural justice as well the same is against Article 14 of the Constitution of India. The distribution business is a regulated business under the aegis of this Commission. The majority of issues in Distribution Business will arise out of orders/ directions issued by the Commission. In all such case, TPDDL and other utilities have right to challenge the same before the Hon'ble Appellate Tribunal for Electricity and Hon'ble Supreme Court thereafter. The final Judgment passed at the Appellate stage will be binding on both the DISCOM as well as the Hon'ble Commission. Therefore, all legal expenses without any distinction should be allowed as an expense in the ARR on actuals.

f) The Commission has adopted a new methodology for allowance of O&M expenses at circuit km at voltage level. This methodology has considered partial increase in O&M on account of Load growth due to electrification of new areas; however, it has failed to consider the impact of following:

***A. Increased O&M for meeting Stringent Performance standards***

g) In order to fulfill its obligations under the Electricity Act, 2003 and other performance stringent standards/ regulations issued thereunder, skilled and efficient manpower and increase in manpower and provision of adequate infrastructure for operations is a necessity, which cannot be achieved if the distribution licensee is unable to induct additional skilled and efficient manpower and infrastructure. Thus, any additional cost that may be incurred by the Tata Power-DDL has a direct nexus with the fulfillment of its statutory obligations.

***B. Increased O&M required for sustenance of the AT&C loss levels:***

h) The position is even more acute with respect to the Tata Power-DDL, since the Tata Power-DDL has already reduced its AT&C loss levels significantly and further reduction or even maintaining such low AT&C loss levels requires proportionate O&M expenditure on both maintenance front as well as employee front.

***C. Inflation of 5.61% inadequate to cover the annual actual increase***

i) Increase in O&M Expenses considered by the Commission year on year is 5.61% which is not sufficient to meet the future O&M expenses. Thus it is requested to the Commission either to increase the escalation factor of 5.61% to at least 8% equivalent to average CPI or build in some additional parameters to determine the O&M expenses like career growth, retention of employees etc. The Increase of 5.61% as considered by the Commission will grossly insufficient to meet the annual increment of the employees. The employees have to be given minimum annual increment equivalent to the increase in CPI growth, in addition to the same, it is important to meet the increasing cost of living and encourage retention of the expertise in the sector by providing for an additional increment over and above the normal inflation rate.

j) Delhi government has revised the minimum wages of industrial workers in the Capital by about 37% across various categories as per Delhi Government notification no. F. Addl.LC/ Lab/ MW/ 2016/ 4859. Therefore, the Commission is requested to consider the impact of such increase in Minimum wages as uncontrollable under the head statutory levy and allow the corresponding amount over and above the normative O&M expenses for next control period. Such an increase has an impact on the OPEX expenses.

k) DERC Tariff Regulations, 2017 do not have a penalty clause, However, the Commission by Para 28 of the Explanatory Memorandum has introduced a new clause, providing for penalties. On the one hand the Commission has proposed to impose penalty for any over recovery of the O&M expenses along with interest rate @1.20 times of bank rate and on the other hand the Commission has proposed to allow any under recovery of O&M expenses without any carrying cost. The said approach is arbitrary. It is submitted that the Commission should keep consistent approach in either case.

l) It is imperative upon this Commission to consider following aspect while allowing O& M Expenses:

    1) Inflation for the purpose of O&M expense should be computed by considering 55% weightage to CPI and 45% to WPI.

    2) To allow the impact increase in Minimum wages as uncontrollable under the head statutory levy and allow the corresponding amount over and above the O&M expenses allowed for next control period.

    3) To allow the actual legal fees incurred by TPDDL at the time of True up without any discrimination

m) In view of the Hon'ble Tribunal's Judgement passed in Appeal No. 36 of 2008, the Commission shall true the impact of 7$^{th}$ Pay Commission for employees other than the erstwhile DVB employees.

n) The Commission in per clause 32 of September 2015 Tariff order, had re-determined O&M expenses for base year considering few parameter among which Performance on account of reduction in AT&C Loss levels is one of them, as under:

*"(32) Further, the Commission in its Tariff Order dtd. 29/09/2015 has analysed the directions of Hon'ble APTEL in Appeal No. 36 & 37 of 2008, 171, 177 & 178 of 2012 and re-determined the O&M expenses for base year considering the following parameters for Distribution Licensees:*
*1) Actual Sales growth,*
*2) Increase in CPI and WPI,*
*3) Increase in Consumer Base and*
*4) Performance on account of reduction in AT&C Loss levels."*

o) The O&M expense allowed for 2nd Control Period was directly linked to AT&C loss levels performance of the DISCOMs. Thus, in case a DISCOM is not achieving defined AT&C loss targets then excess O&M expenses is allowed to them. In effect the Commission is allowing extra O&M expenses to utilities who have failed to achieve the specified targets. This kind of inefficiencies is directly passed on to the consumers in form of twofold O&M expenses.

p) The Commission has ignored the high performance levels of Tata Power-DDL in the past as compared to other two DISCOMs by allowing lower O&M expenses Every 1% reduction in AT&C loss brings an average of Rs. 55 to 60 Cr saving/ benefit to the consumers account, therefore by overachieving the AT&C loss reduction target from 53%. TPDDL has contributed approx. Rs. 26000 Cr till date for the benefit of consumers which otherwise would have increased the tariff to meet shortfall in ARR. Other DISCOMs who are unable to achieve AT&C loss level are allowed higher O&M expenses despite the fact that they are passing on higher loss and higher O&M expenses to the consumers. it is worthwhile to mention that this additional generation of revenue has been possible by incurring additional O&M expenses over and above normative O&M expenses which was never allowed to TPDDL.

q) The over achievement in reduction of AT&C losses can't be only linked with overachievement incentive earned by TPDDL as normative approved O&M expenses which have been allowed to all 3 DISCOMs to achieve target level AT&C loss reduction. In other words to say, no reduction/ penalty has been carried out in O&M expenses for those other DISCOMs who have not achieved their AT&C loss reduction targets. No additional O&M expenses have been allowed to TPDDL in last two MYT periods which has always overachieved AT&C loss reduction targets and cumulative benefit is passed on to the consumers at large. It is further stated that the incentive for overachievement is given only in the year of overachievement however benefit to consumers for that overachievement is passed on cumulatively, year after year. However, the Commission in this Draft Business Plan Regulation has passed the benefit to the Other DISCOMs both ways by fixing a higher Distribution Loss Target and a higher O&M, in contract to the a very low Distribution Loss level target fixed for Tata Power-DDL along with a lower O&M allowance. This approach violative of the principles of equity and level playing field.

r) TPDDL has submitted that it is performing better than the targets in the interest of consumers while on the other hand it is getting penalized in the form of non-allowance of adequate O&M expenses to perform better.

s) Tata Power-DDL has consistently over-achieved its regulatory AT&C loss targets and has one of the lowest AT&C loss levels among Indian DISCOMS. Tata Power-DDL has achieved the highest delta loss reduction among all DISCOMS in Delhi since inception. This has resulted in Tata Power-DDL's recognition at both national and international forums.

t) Section 61 of the Act provides that the Appropriate Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity. Section 61 of the Electricity Act, 2003 also provides that the Appropriate Commission shall specify the terms and conditions for determination of tariff, and in doing so, shall be guided by the following:

*a) …………*
*b) the generation, transmission, distribution and supply of electricity are conducted on commercial principles;*
*(c) the factors which encourage competition, efficiency, economical use of resources, good performance and optimum investment;*
*(d) safeguarding consumers' interest and at the same time recovery of cost of*

*electricity in a reasonable manner;*
*(e) the principles rewarding efficiency in performance;*
*…………………………..*
*(i) the National Electricity Policy and tariff policy.*

| | **BYPL** | | | **BRPL** | | | **TPDDL** | | |
|---|---|---|---|---|---|---|---|---|---|
| | FY17-18 | FY 18-19 | FY 19-20 | FY17-18 | FY 18-19 | FY 19-20 | FY17-18 | FY 18-19 | FY 19-20 |
| Capacity | | | | | | | | | |
| LT voltage level (ckt km) | 8.29 | 8.756 | 9.247 | 5.17 | 5.46 | 5.766 | 6.372 | 6.73 | 7.107 |
| HT voltage level – 11kv | | | | | | | | | |
| 8% in lines (ckt km) | 1.857 | 1.961 | 2.071 | 1.001 | 1.058 | 1.117 | 0.862 | 0.91 | 0.961 |
| 12% in grid (MVA) | 2.296 | 2.425 | 2.561 | 2.209 | 2.333 | 2.464 | 1.326 | 1.4 | 1.479 |
| EHT voltage level – 66/33 kv | | | | | | | | | |
| 4% in lines (ckt km) | 4.421 | 4.669 | 4.931 | 3.454 | 3.648 | 3.853 | 3.297 | 3.482 | 3.678 |
| 6% in grid (MVA) | 1.045 | 1.104 | 1.166 | 0.933 | 0.986 | 1.041 | 0.927 | 0.979 | 1.034 |

u) From the table above wide variation in O&M expenses can be seen among various DISCOMs operating in same geographical and has suggested that in the proposed Model, either:

1) The rates as allowed to BYPL should be allowed to Tata Power-DDL
2) Average rate of all three Discoms may be allowed
3) Higher O&M to the utility with lower AT&C should be allowed in view of higher risks of sustenance in contrast to the proposed methodology by the Commission.

**2) BYPL and BRPL:**

a) The entire system load runs through EHT network and only the residual load runs through HT and LT networks therefore EHT network undergo more wear and tear. Also, the assets at EHT level are high value assets and therefore their corresponding cost of installation and maintenance is also higher. Further, other major area of failure is the DTs which is at HT level. Collectively, DTs and the 11 kV line failures are more with higher expenses in DT maintenance and cable jointing. LT line failure numbers are high but the expenses in each incidence are low. In view of the above fact, the Commission is requested to revise the voltage wise allocation ratio as follows:

| Particulars | % of O&M Expenses | Applicability |
|---|---|---|
| LT Voltage level | 25% | N.A. |
| HT Voltage level | 55% | 20% in line and 35% in grid |
| EHT Voltage level | 20% | 10% in line and 10% in grid |

b) In terms of Regulation 88 of DERC Tariff Regulations, 2017 escalation to be allowed for adjustment towards increase in inflation, consumer price index (CPI), wholesale price index (WPI) etc. in the Business Plan Regulations for the respective Control Period. The escalation factor determined by the Commission is not indicated in the Draft Business Plan Regulations but indicated in the Explanatory Memorandum of 5.61% y-o-y based on the growth in CPI and WPI for the last 4 years. Since, the Commission has considered the O&M expenses the last five years i.e FY 2011-12 to FY 2015-16 for computing per unit O&M expenses for next control period the inflation during five years need to be taken i.e. 6.21% as shown below:

| **Sr. No.** | **Year** | **CPI for all commodities** | **%age Growth** | **WPI for all commodities** | **%age Growth** |
|---|---|---|---|---|---|
| 1 | FY 2011-12 | 195 | 8.33% | 156.1 | 8.93% |
| 2 | FY 2012-13 | 215 | 10.26% | 167.6 | 7.37% |

| Sr. No. | Year | CPI for all commodities | %age Growth | WPI for all commodities | %age Growth |
|---|---|---|---|---|---|
| 3 | FY 2013-14 | 236 | 9.77% | 171.6 | 5.97% |
| 4 | FY 2014-15 | 251 | 6.36% | 181.2 | 2.03% |
| 5 | FY 2015-16 | 265 | 5.58% | 176.7 | -2.50% |
| 6 | Average | | **8.06%** | | **4.36%** |
| | **Escalation Factor = (8.06+4.36)/2 = 6.21%** | | | | |

**** for FY 2010-11; CPI- 180 & WPI-143.3***

c) Regulation 20 (1) of Draft Business Plan Regulations, 2017 provides for the calculation of O&M Expenses on normative basis based on line length in ckt. Kms and MVA of the distribution system however, it has not considered true up of the capitalization which has not been done since FY 2004-05. If base capex and consequently assets is still subject to true up and also subject to implementation of various judgments of the Hon'ble Tribunal, it is obvious that the base capex which forms the foundation of the O&M norm will undergo large changes upon the implementation of the Tribunal judgments and true up of capex and consequently capex of all these years.

d) Further neither the proposed Business Plan Regulation, nor the explanatory memorandum makes it clear as to how the base number of capex and consequently assets etc on the basis of which the norms are proposed, has been arrived at. BYPL submitted that the asset base as proposed by us in our respective submissions vide letter dated June 2, 2017 may kindly be considered for incorporation in the final business plan regulation, subject to adjustment on account of the aforesaid factors.

e) Para 7 (43) of the explanatory memorandum pertaining to the legal fee is a matter of some concern to the licensee. The said proposal is a direct and immediate threat not only to the independence of the licensee but also to the right of the licensee to avail its Constitutional remedies under Article 226 and 227 of the Constitution as also its statutory remedies of an Appeal available under the Electricity Act. The long history of arbitrary and unreasonable tariff determinations and wilful refusal to implement the binding judgments of the

APTEL continues to constrain the licensee to approach the APTEL time and again against the orders of the Commission. The right to avail the statutory remedies available under the Act are a right given to the licensee by the Act. The right to avail a statutory remedy is also a right guaranteed under Article 14 and 19 of the Constitution. The right to do business under Article 19 (1) (g) includes the right to avail of statutory legal remedies to protect and safeguard the business which is part and parcel of the right to do business. The proposal by the Commission to disallow the legal costs where Commission is a Respondent is, it is most respectfully submitted that a clear attempt to prevent the licensee to challenge the correctness and validity of the actions of the Commission. As such the said proposal would be entirely arbitrary and violative under Article 14 of the Constitution. Further the proposal emanates from a direct conflict of interest in the Commission making any such proposal. If any such proposal to disallow legal costs when proceedings are conducted against the Commission is to be made part of the business plan regulation then equally a suitable mechanism may be incorporated in the Regulations that if the licensee were to succeed in a litigation against the Commission and not be allowed to recover the legal costs thereof as part of the tariff, the financial benefits and legal costs accruing to the licensee would be defrayed by the Commission from its funds as also adjusted from the licensee fee and other charges payable by the licensee to the Commission.

f) O&M expenses should not only be relatable to line length in circuit kilometers but also to number of consumers. For example the line length in circuit kilometers may end at the distribution transformer in a group housing society but the number of consumers who are connected to the distribution transformer through service lines beyond the transformer may increase or decrease. If the number of consumers increases, the O&M expenses required to service such increase would also necessarily go up. But since the normative O&M expenses are pegged only to the circuit kilometer of line length (the line length remaining the same), the normative O&M expenses will remain the same. BYPL has submitted that the norms of O&M expenses must take into account not only the line length in circuit kilometer but also the number of consumers being serviced by the licensee. In this connection it is submitted that the norms of O&M expenses on per circuit kilometer basis is usually applied to the transmission licensee where there is no dynamic movements in consumers for the simple reasons that the transmission licensees do not have any consumers. But in distribution where there is a dynamic shift (either increase or decrease) in the number of consumers being serviced, it is submitted that to restrict the O&M expenses only to per circuit kilometer basis would not be reasonable.

g) Regulation 20 (4) provides that impact of seventh pay commission on employee cost shall be considered separately, based on actual payment made by the Distribution Licensees and prudence check at the time of true up of ARR for the relevant financial year. The proposed norms in Rs. Lakh/ Ckt. Km and Rs. Lakh/MVA do not capture the impact of 7$^{th}$ pay commission. Once the impact of 7$^{th}$ pay commission shall be given, the same will also lead to revision in base. Therefore either the norm is required to be revised or the impact of the revision in base employee expenses along with inflation thereof, is to be given on recurring basis during each year of the control period.

**3) <u>GONCTD:</u>**

a) The draft regulation has the provision of O&M expenses on the basis of individual asset assessment for the distribution licensee. Year-wise asset register after physical verification of existing asset are yet to be finalized after prudence check by DERC. In such circumstances O&M expenses cannot be calculated on the basis of individual assets when the asset base itself is not known. Year-wise variation in additional assets in distribution is also required for comparison of year wise O&M expenses. The year-wise O&M expenses of DISCOMs should be allowed after getting documentary evidence of assets capitalized by DISCOMs subjected to physical verification and prudence check by Commission.

b) Many idle/reserve assets are also lying in distribution network which may also be accounted for the purpose of O&M expenses resulting extra burden to the consumer on the tariff especially in 11kv line, LT line/cable and DTs which may feed a particular area as a back feed arrangements. Such methodology should be adopted so as to optimize and limit the O&M expenses to the extent possible.

c) All assets of DISCOMs may be put on the website of respective DISCOM and DERC before considering & deciding the O&M expenses. Only live assets should be considered for the purpose of O&M expenses for the transparency, efficiency and satisfaction of the stakeholders.

d) Further, there is wide variation in the amount decided for DTL and different DISCOMs.

| Particulars | O&M allowed in FY 2017-18 (Rs Lakh/ckt km) |
|---|---|
| 220 kV line | 2.030 (DTL) |
| 66 kV line | 4.421 (BYPL) |
| 33 kV line | 4.421 (BYPL) |
| 66 kV line | 3.454 (BRPL) |
| 33 kV line | 3.454 (BRPL) |

e) Optimum variation within ±1% may be allowed to DISCOM so that efficient Company(ies) are not discouraged and it should be linked with performance parameters.

**4) A.K Datta, Hari Prakash Gupta, Sudhir Aggarwal, Saurabh Gandhi Comment:**

a) The suggested expenses for all DISCOM shall be as follows:-

66 KV line
233 KV Line - 2.00 Lakh/ Km

11 KV line system - 1 Lakh/ Km
66/ 11 KV Grid slab
33/11 KV - Rs.0.50 lakh annually
11 KV/ 0.415 KV distribution - Rs.1.00 lakh/ MVA

To be enhanced 5% annually

b) No impact of 7th Pay Commission can be attributed to the Private DISCOM as their Gradation of employees rank and salary is totally at variance with PSU norms. The enhancement of 5% annually shall cover all such expenses. In case of specific instances of enhanced expenses, the Commission can deal it separately on case to case basis.

**COMMISSION'S VIEW**

1) It is observed that concerns raised by various stakeholders with respect to O&M Expenses are classified as follows:
    a) Impact of 7$^{th}$ Pay Commission and minimum wage revision
    b) Variation in O&M Expenses of DTL and DISCOMs
    c) Disallowance of Legal expenses
    d) Change in methodology of O&M Expenses.

2) With regards to the 7$^{th}$ Pay Commission and minimum wage revision, the Commission has considered the submissions made by the stakeholder and has modified the Business Plan Regulations 2017, by replacing *"7$^{th}$ Pay Commission"* of draft Regulation with *"Statutory Pay"* which factors in minimum wage component , as follows:

    *"(4) Impact of any statutory Pay revision on employee's cost as may be applicable on case to case basis shall be considered separately, based on actual payment made by the Distribution Licensees and shall be allowed by the Commission after prudence check at the time of true up of ARR for the relevant financial year."*

3) With regards to variation in O&M Expenses of DTL and Discoms, it is observed that at the time of unbundling no mapping of health of assets/age falling in the jurisdiction of various DISCOMs. Since, these factors have bearing on O&M Expenses therefore same has been determined by taking into account the actual expenses of past year and network details based on the audited accounts for DTL and respective DISCOMs.

4) Further, O&M expenses per circuit kilometer of DTL cannot be compared with O&M expenses per circuit kilometer of DISCOMs as the Employee Expenses, A&G Expenses and R&M Expenses for these entities are different depending upon the spread of network, approachability, space constraints etc. for network at different voltage levels.

5) With regards to the stakeholder's submission that Legal Expenses is not allowed to be recovered through ARR, the Commission has examined and is of the view that no modification to be allowed from the draft Regulation in this regard. The Commission has provided the treatment of Legal Expenses in its Explanatory Memorandum as follows:

*"(43) The Commission has not considered the expenditure incurred on account of legal fee. Further, the Commission is of the view that legal expenses incurred on cases filed against the decisions of the Commission in any of the Courts and Forums shall not be allowed as pass through in the ARR. The legal expenses incurred on cases other than aforesaid, shall be claimed by the DISCOMs in Tariff petitions which may be allowed separately after prudence check in true-up order for respective year."*

6) With regards to other suggestions/comments submitted by the stakeholder for change in methodology of O&M Expenses and non-consideration of unapproved schemes of past years, the Commission would like to state that the suggestions/comments made have been clarified in the Explanatory Memorandum, 2017 as follows:

*"(27) The Commission has considered the principle whether the normative O&M expenses should be specified in a consolidated manner or separately, as Employee Expenses, A&G expenses, and Repair & Maintenance Expenses for Generation Business, Transmission Business and Distribution Business.*

*(28) In case the O&M expenses are specified in a consolidated manner, then the utility has the flexibility to manage its expenditure through own resources (which will increase the employee expenses) or through outsourcing (which will increase the*

*R&M expenses), as per their cost benefit analysis. However, under this methodology the variation in the individual heads of Expenses (Employee Expenses, A&G Expenses, and Repair & Maintenance Expenses) due to change in law, force majeure etc may not be assessed at the time of implementation of increase or decrease in individual head of expenditure. For instance, 7th Pay Commission revision has already been recommended by 7th Pay Commission which has to be implemented from 1/1/2016 for all the DVB employees based on the recommendations of pay committee formed by GoNCTD. However, the impact for the same has yet not been submitted by the utilities to the Commission. Therefore, the Commission has indicated in Draft Business Plan Regulations, 2017 this item as a separate item over and above the normative O&M Expenses as the same is expected to be implemented during the Control Period, as follows:*

*" (2) Impact of seventh pay commission on employee cost shall be considered separately, based on actual payment made by the Generation Entity and prudence check at the time of true up of ARR for the relevant financial year. ...*

*Impact of seventh pay commission on employee cost shall be considered separately based on actual payment made by the Transmission Licensees and prudence check at the time of true up of ARR for the relevant financial year.*

*...*

*Impact of seventh pay commission on employee cost shall be considered separately, based on actual payment made by the Distribution Licensees and prudence check at the time of true up of ARR for the relevant financial year. "*

*(29) In case the O&M expenses are specified separately as Employee Expenses, A&G expenses, and Repair & Maintenance Expenses then the benchmarking of these expenses for different Licensees/Utilities of same sector may not be feasible as has also been indicated by the Hon'ble APTEL in its various judgments indicated in the subsequent paras.*

*(30) The Hon'ble APTEL in its judgement in Appeal No. 36 of 2008 dtd. 06/10/2009*

*has examined the methodology of O&M Expenses of the Commission as follows:*

*" 74) Having gone through the impugned order we do find that the Commission has not considered the issue of possible increase in the number of employees consequent on increase in the consumer base. Nor has the Commission ruled on the appellant's proposal to increase the salaries etc. The Commission has nonetheless assured to true up the employees expenses subject to prudence check. The Commission shall also take care of the related carrying cost. This should satisfy the appellant.*

*75) It may be stated here that the recommendations of salary hike made by the 6th Pay Commission takes into account the need to retain & attract talent. The appellant has not justified the need for any further hike by any factual data. One may expect better talent to be attracted to the sector in case salaries are further hiked. Yet one cannot lose sight of the fact that the consumers will have to bear the burden of such salary hike. Any hike in salary, not comparable to 6th Pay Commission's recommendation and not sufficiently justified cannot be allowed as pass through in tariff. We thus conclude the issue of employees' expenses by saying that the Commission shall allow the expenses incurred towards the retirement benefit of SVRS optees pending decision of the Acturial Arbitration Tribunal and shall true up the employee expenses to the extent of increase caused by increase in the consumer base. So far as salary hike is concerned to the extent hike comparable to the recommendations of 6th Pay Commission to employees other than the erstwhile DVB employees shall also be allowed in the truing up process in case expenditure in that account has actually been incurred.*

*76) A word of caution. The consumer respondents have submitted that the purpose behind any VRS Scheme is to rationalize employees cost and so the expenditure on account of VRS should not be more than the eventual cost saving by reducing the number of employees. Some consumers have said that the expenditure on VRS should be tariff neutral. There is much strength on the contention of the consumers. The Commission as well as the appellant have to ensure that SVRS eventually lead to* *cost saving and further that such cost saving is passed on to the consumers."*

*(31) Further, the Hon'ble APTEL in its judgement in Appeal No. 171 of 2012 dtd. 10/02/2015 has examined the methodology of O&M Expenses of the Commission as follows:*

*" 10.6 As per the 2011 Tariff Regulations, the base year O&M expenses have to be approved taking into account the latest available audited accounts, business plans filed by the licensee, estimates of actual for the base year and any other factor considered appropriate by the Commission. The base year for the control period 2012-13 to 14-15 is 2011-12. However, in the impugned order the State Commission has adopted an altogether new methodology for fixing the employees cost and A&G expenses for the base year, without considering the audited accounts, business plan and the estimates of the licensee, in contravention to the 2011 Tariff Regulations. Admittedly, the Regulation 5.4 also provides for 'any other factor considered appropriate by the Commission' but this does not permit use of an altogether new method on the basis of average %age increase of employees expenses and A&G expenses per unit sale and per consumer of the three distribution licensees for the period from FY 2006-07 to 2010-11, ignoring other factors specified in the Regulations.*

*10.7 We find deficiencies in the methodology used by the Commission. The methodology adopted by the Commission is based on the average %age increase of the cost per unit sales and cost per consumer from 2006-07 to 2010-11. The methodology does not account for comparative cost per unit sale and cost per employees in the FY 2006-07 and FY 2010-11. Thus, if the cost per employee or cost per unit sale of a distribution company is lower in the FY 2006-07 but its % age increase is higher, the company will be penalized. This methodology also does not take into account the comparative cost per unit sales and cost per consumer in FY 2010-11, but only accounts for %age increase from 2006-07 to 2010-11.*

*10.8 We find that the A&G expenses per unit sales of the Appellant is the lowest of* *all the Discoms in FY 2006-07 and FY 2010-11 but its %age increase in cost is the highest. Therefore, despite the lowest cost, it will be penalized for higher %age increase. Similarly A&G expenses per consumer of the Appellant is the lowest in FY 2006-07 and is also lower than BRPL in FY 2010-11, despite this, since its %age increase in cost per consumer is the highest, it will be penalized. Similar discrepancy is also found in employees cost per unit sale and per consumer. The Commission should have considered the cost per unit sale and per employee instead of %age increase from 2006-07 to 2010-11. Higher percentage of increase may also be due to cost incurred in improvement in loss levels and quality of supply for 2006-07 to 2010-11. Therefore %age increase is an incorrect benchmark.*

*10.9 The methodology adopted by the Commission also does not take into account the different modes of works carried out by the distribution licensee. For example if a distribution licensee carries out more repaired maintenance work through third party contracts instead of own employees, then its maintenance will be higher. This company will be considered more efficient as per the norms adopted by the Commission even though its overall O&M expenses may be higher than other companies. Comparison of O&M expenses per consumer or per unit sale which includes employees expenses, R&M expenses and A&G expenses will be correct and like to like comparison.*

*10.10 The performance of the three distribution licensees may also be different. For example the employees and A&G expenses of a licensee who maintains higher system availability/reliability of supply and better consumer services may be higher. These factors have not been considered by the State Commission.*

*10.11 We are, however, not convinced by the contention of the Appellant that indexation factor should have been 8.6% instead of 8% as determined by the State Commission. As per the Regulations, the indexation has to be combination of CPI and WPI for immediately preceding five years before the base year. The Commission has* *correctly considered the CPI & WPI increase from 2006-07 to 2010-11 to determine the indexation factor as per the Regulations.*

*10.12 We find that the employees cost and A&G expenses have been determined in violation of the Tariff Regulations and, therefore, these are set aside along with the methodology used in determination of these expenses with direction to re-determine the same as per the Regulations."*

*(32) Further, the Commission in its Tariff Order dtd. 29/09/2015 has analysed the directions of Hon'ble APTEL in Appeal No. 36 & 37 of 2008, 171, 177 & 178 of 2012 and re-determined the O&M expenses for base year considering the following parameters for Distribution Licensees:*

*1) Actual Sales growth,*

*2) Increase in CPI and WPI,*

*3) Increase in Consumer Base and*

*4) Performance on account of reduction in AT&C Loss levels.*

*(33) The relevant extract of the Tariff Order dtd. 29/09/2015 is as follows:*

*" 3.149 The Commission has re-determined the Employee, A&G and R&M Expenses as per the directions of the Hon'ble APTEL in Appeal No. 171, 177 & 178 of 2012. Relevant extracts from the said judgments is as follows:*

*"10.12 We find that the employees cost and A&G expenses have been determined in violation of the Tariff Regulations and, therefore, these are set aside along with the methodology used in determination of these expenses with direction to re-determine the same as per the Regulations. … The State Commission has determined the 'K' factor for the control period 2012-13 to 2014-15 as average of 'K' factor for the period 2008-09 to 2011-12 ignoring the FY 2007-08 …. Therefore the 'K' factor for the control period has to be recalculated on the basis of 'K' factor for the FY 2007-08 to 2011-12."*

*3.150 One of the major objective of unbundling of Delhi Vidyut Board (DVB) was to* *provide for the constitution of an Electricity Regulatory Commission, restructuring of the electricity industry (rationalization of generation, transmission, distribution and supply of electricity), increasing avenues for participation of private sector in the electricity industry and generally for taking measures conducive to the development and management of the electricity industry in an efficient, commercial, economic and competitive manner in the National Capital Territory of Delhi and for matters connected therewith or incidental thereto. The relevant extract of the Delhi Electricity Reform Act, 2000 is as follows: "To provide for the constitution of an Electricity Regulatory Commission, restructuring of the electricity industry (rationalisation of generation, transmission, distribution and supply of electricity), increasing avenues for participation of private sector in the electricity industry and generally for taking measures conducive to the development and management of the electricity industry in an efficient, commercial, economic and competitive manner in the National Capital Territory of Delhi and for matters connected therewith or incidental thereto."*

*3.151 As indicated above in Delhi Electricity Reforms Act, 2000, the Distribution Licensees should manage their expenses & operations in an Efficient, Commercial, Economic and Competitive manner. O&M expenses are one of the major indicators to judge whether efficiency has been brought into the system by controlling and managing day to day company's expenses which comprises of Employees, Administrative & General and Repair & Maintenance Expenses.*

*3.152 The Hon'ble APTEL has directed to re-determine O&M expenses by taking into consideration following factors: a. MYT Regulations, 2011 b. Audited Financial Statements for FY 2011-12, c. R&M expenses for FY 2007-08, d. Different modes of work carried out by the Distribution Licensees, e. Performance of Distribution Licensees.*

*3.153 In view of the above directions of the Hon'ble APTEL, the Commission has re-*

*determined the O&M Expenses i.e., Employee Expenses, A&G Expenses and R&M Expenses by considering the following factors:*

***a. MYT Regulations, 2011 and***

***b. Audited Financial Statements for FY 2011-12***

*3.154 The O&M Expenses has been determined as per Regulation 5.4 of the MYT Regulations, 2011 reproduced as follows: "…The O&M expenses for the Base year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the licensees, estimates of the actuals for the Base year, prudence check and any other factor considered appropriate by the Commission.*

*3.155 Accordingly, the Commission has now considered the Audited Financial Statements for FY 2011-12 for determination of base year O&M Expenses.*

***c. Different modes of work carried out by the Distribution Licensees and***

***d. Performance of Distribution Licensees***

*3.156 The Commission has re-determined the O&M Expenses for the Petitioner without comparing with other Distribution Licensees operating in the area of GoNCTD.*

*3.157 The base year (FY 2011-12) O&M Expenses has been determined considering the actual O&M expenses incurred by the Petitioner during 1st MYT Control Period (FY 2007-08 to FY 2011-12). The actual growth in individual parameters (Employee Expenses, A&G Expenses and R&M Expenses) has been analyzed with the:*

*1) Actual Sales growth,*

*2) Increase in CPI and WPI,*

*3) Increase in Consumer Base and*

*4) Performance on account of reduction in AT&C Loss levels.*

*(34) In view of the above, the Commission had two options for computation of O&M expenses either on the basis of individual weightage of Actual Sales growth, Increase in CPI and WPI, Increase in Consumer Base and Performance on account of reduction in AT&C Loss levels or considering the Network details (Capacity of S/s and Line*

*Lengths) which indirectly covers the all the parameters except increase in CPI and WPI.*

*(35) The Commission calculated the employee cost per unit of sales and employee cost per consumer served for previous years to take into account the impact of sales and number of consumers on the employee cost of the DISCOMs. The detailed methodology for computation of O&M expenses is detailed in the MYT Tariff Order for FY 2012-13 to FY 2014-15 of the respective DISCOMs.*

*(36) The Commission has notified Delhi Electricity Regulatory Commission (Terms and Conditions for determination of Tariff) Regulations, 2017 on 31/01/2017. Relevant extracts for determining O&M expenses of Distribution Licensees is as under:*

***" OPERATION AND MAINTENANCE (O&M) EXPENSES***

*The Utilities shall be allowed Operation and Maintenance expenses on normative basis including expenses for raising the loan for funding of Working Capital and Regulatory Asset as specified by the Commission in the Business Plan Regulations for the respective Control Period:*

*Provided that the Normative O&M expenses for the respective Control Period shall not be trued up;*

*Provided further that the water charges, statutory levy and taxes under O&M expenses if indicated separately in the audited financial statement shall not form part of Normative O&M expenses.*

*Escalation to be allowed for adjustment towards increase in inflation, consumer price index (CPI), wholesale price index (WPI) etc. shall be as specified in the Business Plan Regulations for the respective Control Period.*

*Normative Operation and Maintenance expenses of a new Generating Entity shall be as per the norms approved by the CERC in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 as amended from time to time, for respective year unless specifically approved by the Commission.*

*Normative Operation and Maintenance expenses of existing Generating Entity shall be as specified in the Business Plan Regulations for the respective Control Period.*

*The Commission shall specify the target for Normative Operation and Maintenance expenses of the Transmission Licensee in the Business Plan Regulations for the respective Control Period.*

*Provided that the Commission may specify Normative Operation and Maintenance expenses target of a Transmission Licensee on the basis of number of Bays and Circuit Kilometres.*

*Normative Operation and Maintenance expenses of a Distribution Licensee shall consist of:*

*(a) Employee Expenses,*
*(b) Administrative and General Expenses; and*
*(c) Repair and Maintenance Expenses.*

*Normative Operation and Maintenance expenses of a Distribution Licensee for a Control Period shall be derived on the basis of audited Operation and Maintenance expenses for last five (5) completed Financial Years vis-à-vis normative Operation and Maintenance expenses allowed by the Commission during the corresponding period based on the following parameters:*

*(a) Load growth,*

*(b) Consumer growth,*

*(c) Commercial loss,*

*(d) Distribution loss,*

*(e) Inflation,*

*(f) Efficiency,*

*(g) Capital base and,*

*(h) Any other factor."*

*(37) It is observed that the O&M expenses are directly related to actual assets installed at site and its maintenance to provide services to the consumer. O&M Expenses varies as per the consumer mix i.e., Domestic/Non Domestic/Industrial etc. & supply at different voltage levels i.e., LT/11kV/33kV/66kV. It is pertinent to state that the O&M Expenses upto 11kV level majorly varies as per the line length of the network whereas for LT level the Consumer mix play a vital role. Therefore, the Commission proposes to compute the O&M expenses on the basis of capacity of assets installed at site i.e., per circuit km of line & per MVA capacity of transformation at various voltage levels without comparing the O&M Expenses of individual DISCOMs.*

*(38) The Commission had sought the data from the Distribution Licensees about their distribution network capacities installed at site for last five years, as on 31st March for respective financial years, and the projections of the capacities to be installed to meet the demand in future.*

*(39) The DISCOMs have submitted the actual O&M expenses incurred during the last five years from FY 2011-12 to FY 2015-16. However, the exact allocation of these expenses in various components of network i.e. lines and grids for various capacities & voltage levels, is not available with the DISCOMs. Therefore, the Commission felt that the allocation of O&M expenses may be done on the different voltage levels as under:*

| ***Particulars*** | ***% of O&M Expenses*** | ***Applicability*** |
|---|---|---|
| *LT Voltage level* | *70%* | *N.A.* |
| *HT Voltage level* | *20%* | *8% in line and 12% in grid* |
| *EHT Voltage level* | *10%* | *4% in line and 6% in grid* |

*(40) Accordingly, per unit values have been computed based on the above methodology and data submitted by the Distribution licensee is as under:-*

*(i) In the actual expenditure incurred by DISCOMs, the expenditure incurred towards legal fee, legal claims, rebate paid to the consumer on monthly bills, provisions, loss on sale of retired assets have not been considered.*

*(ii) The balance actual expenditure incurred by DISCOMs on Employee Expenses, Administrative and General Expenses and Repair and Maintenance Expenses from FY 2011-12 to FY 2015-16 was allocated to various capacities of network at EHT, HT & LT level, in the aforesaid proportion.*

*(iii) Per unit expenses on various components were worked out on the basis of allocated Employee Expenses, Administrative and General Expenses and Repair and Maintenance Expenses and the installed capacity of the component as on 31st March of respective financial year.*

*(iv) The average of these per unit factors were computed and the average values were considered to be the values for FY 2013-14 (mid-year of FY 2011-12 to FY 2015-16).*

*(v) In order to arrive at the values for FY 2017-18, an escalation of **5.61%** (indicated in the subsequent paras on the basis of CPI & WPI), on year to year basis was provided.*

*(vi) Per unit values for the network for Employee Expenses, Administrative and General Expenses and Repair and Maintenance Expenses have been computed for FY 2017-18, FY 2018-19 and FY 2019-20 by providing an escalation of 5.61% on year to year basis.*

*(vii) Per unit values for O&M expenses have been computed by adding the per unit values for Employee Expenses, Administrative and General Expenses and Repair and Maintenance Expenses for FY 2017-18, FY 2018-19 and FY 2019-20.*

*(41) The normative unit rates of O&M expenses for distribution lines have been worked out as per **circuit km length** of distribution lines and **MVA transformation capacity** basis for the sub-stations. The per unit values have been derived on the basis of actual O&M expenses and the network capacities of a distribution licensee, therefore, these per unit values are different for different distribution licensees.*

*(42) The additional impact of 7th Pay Commission has not been considered while determining these O&M expenses. The actual impact of 7th Pay Commission for FY 2017-18 shall be allowed based on the claim of the DISCOM and prudence check by*

*the Commission in the year of actual payment. The impact for subsequent years shall be allowed on normative basis by proving an escalation of 5.61% on year to year basis.*

*(43) The Commission has not considered the expenditure incurred on account of legal fee. Further, the Commission is of the view that legal expenses incurred on cases filed against the decisions of the Commission in any of the Courts and Forums shall not be allowed as pass through in the ARR. The legal expenses incurred on cases other than aforesaid, shall be claimed by the DISCOMs in Tariff petitions which may be allowed separately after prudence check in true-up order for respective year.*

*(44) Due to non-submission of data by NDMC, the Commission has considered minimum per unit values under each head of all the three DISCOMs as per unit values in ckm and in MVA for NDMC.*

*(45) The Commission has not considered the expenditure incurred towards rebate paid to the consumers on energy bills, based on the explanation as provided in the Tariff Order for FY 2013-14, wherein the Commission has followed the approach of providing rebate to the consumers instead of revising interest on working capital.*

*(46) The loss or gain on account of sale of retired assets shall be dealt as per the provisions of Delhi Electricity Regulatory Commission (Terms and Conditions for determination of Tariff) Regulations, 2017.*

*(47) It is also observed that this methodology has been adopted for the first time for determination of O&M expenses based on the network capacities installed by the distribution licensees. Since, the Distribution Licensees have not been allocating the O&M expenses on the basis of capacities & voltage levels, therefore the DISCOMs are directed to book the actual O&M expenses in future as per the actual expenditure incurred in such heads.*

*(48) The Commission may get verified the network data furnished by Distribution Licensee. In case, it is found that the Distribution Licensee has over recovered the O&M expenses due to incorrect network data furnished by them, and may require the Distribution Licensee to refund the excess amount recovered along with interest*

*rate @ 1.20 times of the bank rate as prevalent on 1st April of the respective year. However, any under recovery of O&M expenses on account of the incorrect network data furnished by DISCOM, the Commission may consider to allow the same to be recovered by the Distribution Licensee without any carrying cost."*

7) It is clarified that per unit rates of O&M Expenses as specified in the DERC Business Plan Regulations, 2017 shall be applicable on normative basis for computation of O&M Expenses in the respective year's Tariff Order the Control Period.

## O. CAPITAL INVESTMENT PLAN

### STAKEHOLDER'S COMMENTS/SUGGESTIONS

**1) A.K Datta, Hari Prakash Gupta, Sudhir Aggarwal, Saurabh Gandhi**

a) Provision of smart meter may be made for new connection. For existing connection the existing meters are smart excepting meter reading activity. Hence cost benefit analysis must justify the replacement of the existing smart meter.

b) Remote control of Meter by Consumer for advance/ delayed operation, in his absence from the residence, such exercise is undesirable for existing consumers who would not require such system and would not be able to manage it. Those interested for such gadget can do special arrangement. No existing Consumers must be coerced into adopting the new Smart meter considering the hacking efficiency of undesired consumer having proficiency with manipulation by neighbor/line man/staff. Old uneducated and gullible consumers must be protected and their existing working meter must not be replaced by Smart meter which has scant use. Investment of the Small meter may be introduced on a limited scale for acceptance of the system and on a voluntary basis.

c) All Fixed Asset must be GIS compliant physically verified before new investment plan and the invested Asset shall be subjected to Physical verification quarterly.

**2) TPDDL:**

a) As per present practice, Network Engineering Group, which is dedicated to study and analysis of LT, HT & EHV network, provides Capital Investment required for maintaining the network based on peak load. Schemes are finalized after various levels of approvals. This procedure normally takes 7-8 months after determining peak loads to complete Detailed Project Reports (DPRs) for all schemes. The stipulated time of completion is specified in DPRs. Also, Date of Commissioning depends on stipulated time of completion and date of "in-principle" approval. Therefore, the scheduled date of commissioning cannot be provided at the time of scheme submission along with Annual Tariff Petition. Any excess or deficit recovery of tariff due to variation in the actual capital cost vis a vis projected capital cost as per Regulation 61 & 62 of DERC Tariff regulations is applicable only to the generating and transmissions companies and hence, was not applicable to the Distribution utilities. The Commission may take cognizance of the explanation herein and delete the proposed Regulation 21(4) of the Draft Business Plan Regulations in accordance with the parent Regulations, i.e., Regulation 61 & 62 of DERC Tariff Regulations, 2017. Further, TPDDL reserves its rights to challenge the DERC Tariff Regulations, 2017 in accordance with law.



3) **GONCTD :**

a) The impact of capitalization should only be given after commissioning of capital works scheme on annual basis rather than allowing impact to capitalization in advance due to which DISCOMs take the liberty. To bring more transparency and optimize capital cost of such work option of reverse bidding should be included in open tender. For transmission system in MYT regulation 2017, ±5% Capex variation is allowed but in case of distribution system of business regulation ± 10% capex variation is allowed. There should be uniformity for all the power utilities. For more accurate and précised projection of Capex, only ±5% variation should be allowed in case of distribution network also.

4) **BRPL and BYPL:**

a) The capital Investment is capital employed in the business for the purpose of creation of assets and includes Work-In-Progress whereas capitalization is the assets which are actually supplying electricity to consumers. Unlike Gencos and Transcos, there is no single date of Commissioning in case of DISCOMs. Distribution network contains various class of assets and therefore it is difficult for DISCOM to ascertain capitalization of assets in advance. The Business Plan Regulations may include capital investment plan instead of capitalization in accordance with Regulation-4 of DERC Tariff Regulations, 2017.

b) CERC in Tariff Regulations, 2014 has defined bank rate as SBI base rate plus 350 basis points. CERC has uniformly used the same terminology for every expense. It is submitted that the aforesaid proposed treatment is not in line with DERC Tariff Regulations, 2017 which states the following:

   (i) Definition-15: Carrying cost means cost for funding of Regulatory Assets/ accumulated revenue gap;
   (ii) Definition-16: Carrying cost rate means the weighted average rate of interest for funding of Regulatory Asset/ accumulated revenue gap through debt and equity in an appropriate ratio, as specified by the Hon'ble Commission in relevant orders;
   (iii) Regulation-116: The ARR for the retail supply and wheeling business of the Distribution Licensees for each year of the Control Period, shall contain the following items:

c) The proposed regulation provide for different basis of carrying costs for different items in the ARR is impractical.

d) The words "bank rate prevalent on 1st April of respective year" as appearing in Regulation-21 (4) may be replaced with "carrying cost for the respective year".

**COMMISSION'S VIEW**

1) The Commission is of the view that delay in allowance of capitalisation has a direct

bearing on the consumer's tariff due to Carrying Cost on such delayed recovery at the time of true up of ARR. Therefore, in the overall public interest, the Commission has allowed capitalisation based on projection of capitalisation of utilities and appropriate provision has been made for any over/under projection of the Capitalisation to safeguard the interest of the consumer.

2) With regards to the stakeholder's submission on smart meters, the Commission would like to clarify that the National Tariff Policy notified by the Central Government on January 28$^{th}$, 2016 has laid down the timelines for installation of Smart Meters as follows:

   *"**8.4 Definition of tariff components and their applicability***

   *3. The Appropriate Commission may provide incentives to encourage metering and billing based on metered tariffs, particularly for consumer categories that are presently unmetered to a large extent. The metered tariffs and the incentives should be given wide publicity. Smart meters have the advantages of remote metering and billing, implementation of peak and off-peak tariff and demand side management through demand response. These would become essential in future for load-generation balancing due to increasing penetration of intermittent type of generation like wind and solar power.*

   ***Appropriate Commission shall, therefore, mandate smart meters for:***

   ***(a) Consumers with monthly consumption of 500 units and more at the earliest but not later than 31.12.2017;***

   ***(b) Consumers with monthly consumption above 200 units by 31.12.2019**."*

3) In view of the above, the Commission has allowed around Rs. 650 Crore as Capex for installation of smart meters to Delhi Discoms for the period from FY 2017-18 to FY 2019-20 as indicated in Regulation 24(1) of Business Plan Regulations, 2017.

4) With regards to the stakeholder's submission on deletion of provision on capital cost variation, the Commission would like to state that for accurate projections with regard to capital expenditure and in order to limit the impact on consumers in terms

of carrying cost the Commission has proposed differential interest rates for refund and recovery. The same has also been explained in detail in the SOR for DERC Tariff Regulations, 2017 wherein Capital Cost variation of ± 5% has been indicated by the Commission for Generating Entities and Transmission Licensee as follows:

*"(vii)* ***Capital Cost Variation:*** *The Commission is of the view that in case the actual capital expenditure varies substantially with respect to the projected/estimated capital expenditure, the impact of the same needs to be allowed at the time of truing up with interest. It is important that the wide variation between projected and actual capital expenditure is controlled. In order to have more accurate projections with regard to capital expenditure and in order to limit the impact on consumers in terms of carrying cost of under recovered or over recovered tariff on account of variation between projected and actual capital expenditure, the Commission has proposed differential interest rates for refund and recovery as the generating or transmission company is in the best position to make realistic projections of capital expenditure. The Commission is of the view that the band of 5% variation between actual capital cost and capital cost considered for tariff is adequate as the projections made by the utilities are based on remaining works to be carried out in case of new projects."*

5) The stakeholder's have further submitted that there is allowed variation of ±5% on projected capital cost and actual capital cost for Generating Entities & Transmission Licensee whereas it is ±10% for Distribution Licensee and it has to be same for all Utilities. In this regard, the Commission would like to clarify that probability of quantity and cost variation in percentage terms is higher in case of DISCOMs as compared to that of Generating Entities & Transmission Licensee.

6) Regarding Geographical Information System (GIS) mapping, the stakeholder is clarified that the Commission in its DERC Tariff Regulations, 2017 has already mentioned that it will approve capital cost of any project or scheme considering GIS mapping of assets as follows:

*" 30. The following principles shall be adopted for approval of capital cost of any project or scheme:*

*(1) Prudence Check of capital cost considering:*

*….*

*(d) Geographical Information System (GIS) mapping of the assets, and ”*

7) With regards to other suggestions/comments submitted by the stakeholder for change in methodology of Capital Investment Plan, the Commission would like to state that the suggestions/comments made have been clarified in the Explanatory Memorandum, 2017 as follows:

*“(22) The Commission has indicated tentative Capital Investment plan as submitted by the utilities during the Control Period FY 2017-18 to FY 2019-20.*

*(23) The Licensee shall submit the Capital investment plan along with scheduled date of Commissioning in the Annual Tariff Petition for the relevant year, which shall form the basis for computing the Fixed Cost/Tariff for various Utilities.*

*(24) Further, the Capital cost for Generating Entity and Transmission Licensee shall be trued up annually and financial impact on account of variation in projected capital cost in the Tariff Order vis-a-vis actual capital cost and scheduled date of commissioning vis-a-vis actual date of commissioning shall be dealt as per the provisions of DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017.*

*(25) The Distribution Licensee shall submit an application including details of actual Capitalisation on quarterly basis for physical verification and true up of capital cost within 1 (one) month of the completion of the relevant quarter, to avoid any delay in True up process of the Capital investment.*

*(26) The quarterly Capital Cost submitted by the Distribution Licensee shall be trued up by the Commission and financial impact on account of variation in projected capital cost in the tariff order vis-a-vis actual capital cost & scheduled date of commissioning vis-a-vis actual date of commissioning shall be adjusted in annual tariff order.”*

## P. TARGET FOR DISTRIBUTION LOSS

### STAKEHOLDER’S COMMENTS/SUGGESTIONS

1) **TPDDL:**

a) In order to set the target level for next MYT Control period, the Commission has considered the following:

1) The actual distribution loss level till FY 2015-16 (As the audited FY 2016-17 data has not been submitted)
2) Ujwal DISCOM Assurance Yojana Targets, MOP, Govt. of India memorandum dated 13/4/2017: The pro-rated distribution loss has been calculated considering 99.50% as collection efficiency.
3) In view of above, the Commission has fixed the end target of Distribution loss for the control period for BRPL as 9.50%, BYPL as 10.50%, TPDDL as 8.00% and NDMC as 9.00%, as given in the Regulation 22 of Business Plan Regulations, 2017:

b) TPDDL has submitted that different methodology has been adopted by the Commission in the fixation of AT&C loss targets

**Comparative Chart - Distribution Loss Level**

| Particulars | FY 15-16 Actual | FY 16-17 Target | FY 17-18 Target | Diff 2017 target v/s 2018 target |
|---|---|---|---|---|
| | A | B | C | D=B-C |
| NDMC | 9.62% | 9.35% | 10.30% | **-0.95%** |
| TPDDL | 8.78% | 10.06% | 8.38% | **1.68%** |
| BRPL | 12.57% | 10.39% | 10.93% | **-0.54%** |
| BYPL | 16.07% | 11.72% | 13.00% | **-1.28%** |

c) TPDDL has submitted that from the above table, it is evident that:

1) T&D Loss target for BSES Discoms for FY 2017-18 and onwards have been fixed above the target level of FY 2016-17 and it is only in the case of TPDDL the T&D loss target for FY 2017-18, has been fixed below the target level of FY 2016-17.
2) T&D Loss target for FY 2017-18 and onwards in case of NDMC has also been fixed above the actual level of T&D for FY 2015-16. However, only in the case of TPDDL, Commission has followed a differential treatment by fixing a T&D loss target for FY 2017-18 below the actual level of T&D loss for FY 2015-16. This differential treatment by the Commission is violative of Article 14 of the

Constitution of India as well as Section 61 of the Electricity Act, 2003.

3) Fixation of T&D loss target in the above manner reflects differential treatment for similarly placed Discoms operating in same geographical area, governed by same set of regulations and law application of one territory.

4) The differential treatment by the Commission is unwarranted and against the mandate of Section 61 of the Electricity Act, 2003 which mandates the Commission to consider factors which encourage competition, efficiency, economical use of resources, good performance and optimum investments and principles rewarding efficiency in performance and consumers interest.

d) TPDDL has submitted that the Commission in its Explanatory Memorandum has relied upon tariff Orders passed by Bihar State Electricity Regulatory Commission ("Hon'ble BERC") and Maharashtra Electricity Regulatory Commission ("Hon'ble MERC") to state that:

1) Bihar State Electricity Regulatory Commission in its tariff order dated 24/3/2017 for determination of Tariff for FY 2017-18 has revised the distribution loss trajectory for 2nd MYT control period for FY 2017-19 which was approved in its earlier order dated 21/03/2016. The relevant extract of the said Order is as follows:

*" The Commission had approved a Distribution loss trajectory for the second control period FY 2016-17 to FY 2018-19 vide its order dated 21.03.2016*

| ***Particular's*** | ***FY 2016-17*** | ***FY 2017-18*** | ***FY 2018-19*** |
|---|---|---|---|
| *Distribution Loss* | *19.25%* | *18.25%* | *17.00%* |

*...................................*
*Accordingly, the revised Distribution loss trajectory approved by the commission is as given in the table below:*
*Table 6.54: Revised Distribution Loss Trajectory approved by the Commission*

| ***Particular's*** | ***FY 2016-17*** | ***FY 2017-18*** | ***FY 2018-19*** |
|---|---|---|---|
| *Distribution Loss* | *30%* | *22%* | *15%* |

"

2) Bihar State Electricity Regulatory Commission has revised the figures based on the tri-party MOU by SBPDCL, the Govt. of Bihar and the Govt. of India signed under UDAY on 22.06.2016 to get the assistance/benefit arise under UDAY scheme. Further, the Bihar Commission in its same tariff order has clearly mentioned that it is not proper to revise the T&D losses.

3) Similarly, Maharashtra Electricity Regulatory Commission (MERC) in its Order dated 03/11/2016 for Multi Year Tariff for 3rd control period for FY 2016-17 to FY 2019-20 for Maharashtra State Electricity Distribution Company Ltd. (MSEDCL) has restated the distribution loss target for the base year as 18.24% as against its target of 13.50% approved earlier.

e) TPDDL has submitted that while fixation of loss target for 2nd MYT control period, the Commission had considered the value of target loss level of base year (i.e. FY 11-12) and thereafter the said target is further reduced by the proposed loss reduction trajectory for next control period. Relevant information of the MYT Tariff Order are given below:

| Particulars | FY 2011-12 Target AT&C Loss Level | FY 2012-13 | FY 2013-14 | FY 2014-15 |
|---|---|---|---|---|
| **Tata Power Delhi Distribution Limited** | | | | |
| Previous year distribution loss level | 13.00% | 12.56% | 12.06% | 11.56% |
| Less- Approved Y-o-Y Loss Reduction trajectory | | 0.50% | 0.50% | 0.50% |
| Distribution Loss Level for respective year | | 12.06% | 11.56% | 11.06% |
| **BSES Rajdhani Power Limited** | | | | |
| Previous year distribution loss level | 15.00% | 14.57% | 13.73% | 12.89% |
| Less- Approved Y-o-Y Loss Reduction trajectory | | 0.84% | 0.83% | 0.83% |
| Distribution Loss Level for | | 13.73% | 12.89% | 12.06% |

| | | | | |
|---|---|---|---|---|
| respective year | | | | |
| **BSES Yamuna Power Limited** | | | | |
| Previous year distribution loss level | 18.00% | 17.57% | 16.40% | 15.24% |
| Less- Approved Y-o-Y Loss Reduction trajectory | | 1.17% | 1.16% | 1.17% |
| Distribution Loss Level for respective year | | 16.40% | 15.24% | 14.07% |

f) The Commission used to consider, the target set for the base year, and thereafter proposed a trajectory. TPDDL submitted the following

1) The Commission should either set target level of T&D loss for 2017-18 for TPDDL more than the target set for FY 2015-16/2016-17 which will be in line with the target fixed for NDMC and BSES Discoms. In this manner the Commission will create a level playing field.; OR
2) In the alternative, the Commission should follow the same methodology of fixing the target for FY 17-18 and onwards from the target of the FY 16-17 being the base year and the target loss level should not be below the target of 9.30% as specified by the Ministry of Power, Government of India vide its letter dated 13/04/2017; OR
3) The Commission may fix the T&D loss level Target for FY 17-18 at the existing levels and retain the same loss level for FY 2018-19 with 0.10% reduction target for the FY 2019-20 in the event the Commission does not consider any additional O&M towards any further reduction in the loss levels.

g) TPDDL has submitted some of the issues for consideration to the Commission have been summarized herein below:-

1) *Fixation of Higher Distribution Loss level against the base year target level*

*means the Commission is withdrawing the penalties awarded for underachievement in earlier years which is against the public interest:*

2) *It is submitted that the incentive for overachievement is given only in the year of overachievement. Benefit to consumers for that overachievement is passed on cumulatively, year after year.*
3) *TPDDL submitted that however, the utility has to pay penalty for not achieving the target loss level in case of underachievement. Accordingly, by setting higher distribution loss level with respect to base year target loss level, the Commission is in effect has again offered a chance to the utility to recover the penalty paid in previous year on account of underachievement. The same is contrary to the incentive sharing provision of Tariff Regulations, 2017 and also against the interest of consumer and Electricity Act, 2003 as the Commission's Draft Business Plan Regulations in its current form has ensured that other Discoms should be rewarded for their inefficiencies despite such other Discoms not being able to achieve their targets and unable to pass on benefits to the consumers.*

h) Non-achievement of target loss level with the approved O&M expenses means that the consumers of the respective utility has to bear more expenses in terms of per unit of electricity sale.

i) The utility achieved target loss level, its per unit of sale O&M expenses would be lower as expenses are proportionally divided on large number of sold units. The positive impact of the same would be pass through to consumers in next MYT control period in the shape of lower O&M expenses per unit for base year and corresponding lower O&M expenses for upcoming year also.The Commission has already formulated and issued Regulations for allowing open access to consumers whose contract demand is 1MW and above. In current year, the expected annual billing loss due to consumers already who have already migrated to Open Access is about 55 MU. This Loss due to Open Access has increased by 538% over a period of just one year i.e. (From 8.6 MUs to 55 MU's) and is further expected to increase several folds in the coming years. TPDDL submitted that it is worthy to mention that high end consumers moving under Open Access are having “Negligible” Distribution Loss with “100%” Collection Efficiency. In other words, they help in creating balance in AT&C Loss levels when compared with High Loss Low Tension Consumers. Such migration of consumers shall impact AT&C losses for the future year.

j) TPDDL submitted that the DERC (“NET Metering Regulations, 2014”) and the guidelines provides for the adjustment of energy purchased and energy consumed by the net metering consumers. The impact of net metering is loss of profitable & low loss customer base, therefore, AT&C Loss levels will be affected as they balance other categories of the consumers and as such this migration will affect AT&C in the times to come.

k) Percentage (%) share of industrial consumers in the total consumption mix shows decreasing trend, whereas the percentage (%) share of domestic consumers shows increasing trend in the overall consumption mix. This change in consumer consumption mix, with increase in consumption of domestic consumers, will adversely impact the AT&C losses of TPDDL. Almost all consumption of domestic consumers occurs at LT level thereby, increasing the technical losses. Losses due to theft etc. are associated more with domestic consumers which would adversely impact the AT&C loss level.

l) It has already reduced its AT&C loss level below the normal sustenance level of 11%. The remaining losses are majorly due to technical losses and theft in village/Notorious areas. There are certain areas where there is a law and order issue which is more than the simple electricity theft. Enforcement teams get mishandled in these areas (like Bawana/ Narela/ Mangolpuri etc.). There is hardly any support from the local police authorities for extending any security to the raiding teams in such areas. Further, there has been no progress in setting up of the special police stations as per the Electricity Act, 2003 to act as a deterrent against cases of repeated theft by same set of consumers time and again. Also, there has been an increasing growth in the electricity intensive appliances in all these residential areas.

There has been a substantial increase in air conditioners and other electricity intensive appliances in the entire village areas. As a result of these issues, crackdown of remaining thefts in village/Notorious areas require support from Regulator and Government. There has been a consistent drop in collection from enforcement bookings as depicted in the table below. Therefore, further reduction of AT&C losses is quite difficult.

m) Despite the rigorous efforts of TPDDL towards reducing the distributions losses and improving collection efficiency in JJ cluster, the results have not been consistent. The same has been an area of concern since the very inception. There has been a load growth in the JJ Clusters with the increased use of air conditioners and other electrical appliances. It has been further observed that JJ cluster residents resorts to newer ways of manipulating the meters tampering the actual reading. Further, schemes like the recent amnesty schemes discourage the honest consumers who have been regularly paying in the past. Therefore, there has been a drop in the collection efficiency, post closure of the amnesty schemes. Therefore, it is not possible to maintain such high collection efficiency.

n) TPDDL submitted that with the following initiatives of Delhi Government, more migration of lower income class families to Delhi would be expected resulting into more population in JJ clusters and unauthorized colonies, where the distribution loss level is very high:

(a)Reducing electricity tariff by 50 percent, via subsidy;

(b) Providing free water upto 20000 liter per month;

(c) Enhancement of Minimum Wages by around 37% for unskilled and semi-skilled workers;

(d) 736 more buses under cluster scheme during 2017-18;

(e) 11 bus depots are at various stages of completion at Dichauon Kalan-II, Dwarka Sector-22, Bawana Sector-1, Bawana Sector-5, Rewla Khanpur, Kharkhari Nahar, Rani Khera-I, Rani Khera-II, Rani Khera-III of Rohini

Phase-V, Narela, East -31

(f) Construction of Parallel road on other side of nallah from Sanjay Gandhi Transport Nagar to Wazirabad Chowk will facilitate local residents of Bhalaswa, Mukundpur, Burari, Jagatpur, and Wazirabad and nearby colonies.

(g) Promotion of non-polluting battery operated vehicles in Delhi.

o) TPDDL submitted that two major challenges of Housing for Urban Poor and temporary creation of Unauthorized colonies have emerged in the wake of the developments as outlined above relate to the phenomenon of unauthorized colonies and squatter/jhuggis jhompri settlements. This reality will have to be dealt with not only in its present manifestation, but also in terms of future growth and proliferation.

1) **Housing for urban poor:** The category of urban poor for purpose of the Plan would mainly comprise the inhabitants of squatter settlements and informal service providers. Such services could include domestic help, hawkers and vendors, low paid workers in the industrial, commercial and trade / business sectors, etc. These include both existing population and future migrants. In terms of housing requirements of the city, this continues to be the single biggest challenge and would require a mix of approaches and innovative solutions.

2) **Temporary creation of Unauthorized Colonies:** In cases of relocation, the sites should be identified with a view to develop relatively small clusters in a manner that they can be integrated with the overall planned development of the area, particularly keeping in view the availability of employment avenues in the vicinity. Very large resettlement sites could lead to a phenomenon of planned slums. Suitable arrangement for temporary transit accommodation for families to be rehabilitated should be made. This may preferably be near or at the same site and the utilization of these may be synchronized with the phases of implementation of the scheme of in-situ up-gradation.

p) TPDDL submitted that the wholesale markets are to be developed at (a) Rohini Ph-IV/V and (b) Narela Sub-City, in Urban Extension, about 8-10 ha. of land for about one million population should be provided for such Sub-City level markets. Accordingly, it is estimated that in line with the other urban areas the distribution losses would be higher.

q) Due to limitation of space in Delhi, a massive programme for developing rooftop solar power capacity has been launched. Delhi is targeting for 1000 MW Solar Photovoltaic installation in next 5 years and 2000 MW till 2025. Such installation of Rooftop Solar plants will result in movement of Low Loss consumers which will ultimately result in increased distribution loss levels.

r) In view of the above explanations, the Commission, by adopting differential parameters for different Discoms, has not only acted contrary to the principles laid down in the Electricity Act, 2003 for encouraging competition, efficiency and rewarding the performance but has also created uncertainty by deviating from past practice of setting the T&D loss target for 3rd MYT Control Period. Therefore, the Commission is requested to consider the following:

    1) Fix the T&D Loss target of FY 2017-18 from the target level of FY 2015-16/2016-17 for TPDDL in line with NDMC and BSES Discoms.
    2) Allow Additional O&M expenses to TPDDL in comparison other DISCOMs in the event proposed AT & C loss targets are retained
    3) To consider Licensee filings, submissions and material placed before the Commission and analysis of various factors and not on ad-hoc basis as done in the present case.

s) The Commission is requested to provide clarification with respect to incentive sharing mechanism for overachievement of Distribution Loss target above (100%) of previous year's target and current year's target. Further, the above formula for incentive sharing mechanism appears to be complicated. Since, the AT&C loss target for the company is already at a very low level, it is proposed to maintain a single sharing mechanism of 2/3rd for the DISCOM and 1/3rd for the consumers in case of the actual Distribution loss achievement upto 100% of the Target loss reduction.

2) **BRPL and BYPL:**

a) The proposed annual loss reduction targets needs to be reviewed in view of the network condition, geographical spread, consumer mix, unauthorized area / usages and the approved Capex at the present level of loss. Further it submitted that the acceleration of reduction in losses gets reduced y-o-y after reaching a lower level of losses.

b) The loss reduction target given to BYPL seems to be very high vis-à-vis the achievable reduction targets. This is comparatively higher than the recommendation of Abraham Committee as well as the earlier order of this Commission.

c) BYPL submitted that it can be observed that the recommendations of the Abraham Committee regarding AT&C loss reduction has appreciated the fact that high loss reductions are possible in initial years when losses are very high i.e. more than 40%. However, if losses are below 20%, then the effective yearly reduction in the AT&C losses is bound to be less and recommended as 1% and if the reduction of distribution loss to be considered it would be very much lower than 1%. Such annual loss reduction target has been envisaged after considering the APDRP support from Government of India. It is noteworthy that BYPL does not get any Government support of APDRP and other funds to supports its loss reduction effort. Moreover the severe cash crunch situation faced by BYPL is likely to affect its Investment Plan and loss reduction effort.

d) BYPL submitted that the distribution loss targets and reduction approved by the Commission for TPDDL and BRPL from the level of 13% and below in MYT Order dated July 13, 2012 and Order dated September 29, 2015 is as follows:

| Particulars | FY 12-13 | FY 13-14 | FY 14-15 | FY 15-16 | Reference |
|---|---|---|---|---|---|
| Loss Target | 13.73% | 12.89% | 12.06% | 11.23% | Respective Tariff Orders for BRPL |
| Absolute Reduction | | **0.84%** | **0.83%** | **0.83%** | |
| Loss Target | 12.06% | 11.56% | 11.06% | 10.56% | Respective Tariff Orders for TPDDL |
| Absolute Reduction* | | **0.50%** | **0.50%** | **0.50%** | |

| Particulars | FY 12-13 | FY 13-14 | FY 14-15 | FY 15-16 | Reference |
|---|---|---|---|---|---|
| * Loss reduction target for BYPL in draft Regulation is 1.31% & 1.19% whereas from the same base level loss of 12% , 0.50% reduction was given to TPDDL | | | | | |

e) The targets of 10.5% to be achieved at the end of the control period and year on year reduction proposed by the Commission in the Draft Business Plan Regulations for BYPL are as under:

| Particulars | FY 17-18 | FY 18-19 | FY 19-20 |
|---|---|---|---|
| Distribution Loss Target | 13% | 11.69% | 10.50% |
| Y-o-Y Reduction | | 1.31% | 1.19% |
| % age Reduction over PY | | **10.08%** | **10.18%** |

f) This may kindly be seen that the expected percentage reduction of above 10% from the base year loss is much higher than any standard. The Commission will appreciate that reduction in the losses after a threshold, becomes more and more difficult to reduce it further with a given set of environment.

g) Not only the initial loss level for BYPL was the highest (BYPL-63%, BRPL-51%, TPDDL-48%) and so the current loss level due to various uncontrollable reasons and natural disadvantages as stated below and further loss reduction is even most difficult among Discoms:

- BYPL distribution area is the old walled city where renovation/ upgradation of the network are a gigantic task for any change in the network
- Aged, dilapidated Network with highest LT/HT ratio (BYPL- 2.5, TPDDL-1.6, BRPL-1.4)
- Highly disturbing law & order areas
- Difficulty in attaining higher loss reduction in areas like Paharganj, Selampur, Karawal nagar, Daryaganj, Chandini Chowk and most parts of old Delhi, etc. due to socio political environment .
- Comparatively higher LT:HT+EHT ratio of energy sales in BYPL distribution area vis-a-vis other Discoms. (BYPL-6.19, TPDDL- 5.36, BRPL-3.78)

h) Therefore the loss reduction trajectory determined for BYPL needs to be reviewed in line with the adversarial positions of BYPL with regard to the consumption profile, network, geographical challenges, law and order situations, consumer profiles etc. BYPL has submitted that while setting the targets, it should be considered the year on year loss reduction targets approved by the Commission in its earlier orders at the same base level losses keeping realistic achievable loss reduction target.

i) BYPL has requested that year on year absolute reduction targets be kept at 0.8% - 0.5% from the base year loss level to reach the Distribution loss target of 2019-20.

**3) <u>A.K Datta, Hari Prakash Gupta, Sudhir Aggarwal, Saurabh Gandhi:</u>**

a) The Proposal excludes the Loss Target for period 2016-17, when the 2015-16 extended MYT period got automatically extended to 2016-17. Hence the Loss Reduction of 1.16% for BYPL and corresponding level for TPDDL Loss reduction is applicable. Hence Loss level at beginning of 2017-18 shall come to:

| Licensee | 2017-18 | 2018-19 | 2019-20 |
|---|---|---|---|
| BYPL | 12.36% | 10.62% | 9.22% |
| BRPL | 9.36% | 8.56% | 7.37% |
| TPDDL | 7.36% | 7.10% | 6.90% |
| NDMC | 10.00% | 9.50% | 9.00% |

b) Loss Reduction is a mandatory provision achievable with huge Capex made so far. DISCOM's inability to utilize Capex allowed by the Commission shall not be a reason for less Loss Reduction. In any event all old meter have been changed and the existing meter which are substantially smart to indicate pattern of consumption and pilfer proof. All connections are metered and possibly of theft has been totally curbed. Hence there shall be steady progress of Loss Reduction target which actually the DISCOMs are understood to have achieved.

c) For over achievement of Target the DISCOM shall be allowed 100% revenue upto 1% above target. Beyond 1% revenue the extra shall be shared with Consumer at 50:50 basis. For under achievement of Target, the loss shall be to DISCOM's account.

**4) GONCTD:**

a) Central Electricity Authority (CEA), Ministry of Power (MoP), Govt. of India ,has revised methodology for computation of AT&C losses in order to streamline the process of calculation of AT&C losses throughout the Country. In the past, in case of over achievement by DISCOMs, 50% benefit was passed on the consumers in ARR whereas if DISCOMs under achieved the target, the entire loss was on account of the distribution licensee.

b) In draft business regulation, it has been proposed that in case of under achievement by distribution licensee the consumer has to bear 1/3rd of the losses which is undesirable and injustice to the consumers. It is the duty, responsibility and business of DISCOMs to meet the distribution losses target decided by DERC and consumer has no role to play in it. Moreover, DISCOMs are at liberty to take action under DERC (Supply Code and Performance Standards) Regulations, 2007 to achieve the targets.

**COMMISSION'S VIEW**

1) With regard to the DISCOMs submission that fixation of Distribution Loss target has been set stringent for them, the Commission observes that electric power Transmission and Distribution Losses of various countries from the World Bank website for top 50 countries is in the range of 2.03% to 6.70% indicated in the table below.

| Country Name | ELECTRIC POWER TRANSMISSION AND DISTRIBUTION LOSSES (%) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Singapore | 5.51 | 5.89 | 3.12 | 2.69 | 2.87 | 2.54 | 1.79 | 2.85 | 2.54 | 1.90 | 2.30 | 2.03 |
| Trinidad and Tobago | 4.85 | 5.72 | 5.51 | 3.81 | 3.31 | 2.90 | 3.71 | 3.12 | 2.77 | 2.62 | 2.46 | 2.31 |
| Slovak Republic | 6.26 | 4.33 | 5.38 | 4.48 | 5.18 | 3.49 | 3.02 | 3.12 | 1.82 | 4.50 | 2.67 | 2.46 |
| Iceland | 5.76 | 4.43 | 4.39 | 4.16 | 4.13 | 3.50 | 3.02 | 4.10 | 2.92 | 2.77 | 2.06 | 2.75 |
| Israel | 3.05 | 2.93 | 2.86 | 2.72 | 2.65 | 2.10 | 3.20 | 2.76 | 2.75 | 2.76 | 4.19 | 2.86 |
| Gibraltar | 2.99 | 2.94 | 2.76 | 3.31 | 3.23 | 3.01 | 2.87 | 2.82 | 2.92 | 2.84 | 3.17 | 3.03 |
| Korea, Rep. | 3.21 | 3.49 | 3.54 | 3.63 | 3.60 | 3.63 | 3.71 | 3.63 | 3.35 | 3.26 | 3.40 | 3.35 |
| Germany | 4.47 | 4.62 | 4.76 | 4.49 | 4.63 | 4.75 | 4.24 | 3.83 | 4.08 | 3.94 | 3.87 | 3.88 |
| Bahrain | 1.93 | 2.46 | 2.12 | 2.05 | 1.88 | 8.49 | 9.03 | 6.77 | 6.42 | 5.72 | 5.21 | 3.94 |
| Cyprus | 3.92 | 5.07 | 3.75 | 4.75 | 4.41 | 3.01 | 3.62 | 4.13 | 3.25 | 2.90 | 4.34 | 3.98 |
| Finland | 4.09 | 3.49 | 4.31 | 3.71 | 3.75 | 4.31 | 3.85 | 3.43 | 3.67 | 4.14 | 3.66 | 4.07 |
| Japan | 4.61 | 4.40 | 4.27 | 4.25 | 4.22 | 4.46 | 4.52 | 4.14 | 4.36 | 4.10 | 4.49 | 4.39 |
| Czech Republic | 6.14 | 6.07 | 6.14 | 5.84 | 5.60 | 5.61 | 5.49 | 5.23 | 5.07 | 4.82 | 4.76 | 4.53 |
| Malta | 13.15 | 13.13 | 11.43 | 12.21 | 13.68 | 14.36 | 15.64 | 6.53 | 7.02 | 8.41 | 6.97 | 4.68 |
| Netherlands | 5.34 | 5.30 | 5.41 | 5.51 | 5.25 | 5.06 | 4.61 | 4.72 | 4.56 | 5.03 | 5.05 | 4.77 |
| Sweden | 7.88 | 7.21 | 7.39 | 7.58 | 7.16 | 7.33 | 7.25 | 7.13 | 7.03 | 6.59 | 6.54 | 4.78 |
| Australia | 6.54 | 7.55 | 6.72 | 6.75 | 6.02 | 6.09 | 5.90 | 6.48 | 6.52 | 5.80 | 5.34 | 4.78 |
| Slovenia | 6.19 | 5.72 | 6.30 | 5.71 | 5.76 | 4.95 | 5.44 | 6.04 | 5.18 | 5.63 | 5.36 | 4.78 |
| Austria | 5.67 | 5.53 | 5.36 | 5.12 | 5.26 | 5.00 | 5.40 | 4.93 | 5.31 | 4.89 | 5.25 | 5.33 |
| East Asia & Pacific | 6.28 | 6.16 | 6.25 | 6.10 | 5.94 | 5.90 | 5.84 | 5.82 | 5.70 | 5.61 | 5.61 | 5.42 |
| Belgium | 4.50 | 4.80 | 4.85 | 4.95 | 4.64 | 5.10 | 4.53 | 4.56 | 4.67 | 5.06 | 4.87 | 5.43 |
| China | 6.60 | 6.45 | 6.82 | 6.49 | 6.28 | 6.17 | 6.08 | 6.12 | 5.74 | 5.81 | 5.78 | 5.47 |

**Source:** World Bank website
http://data.worldbank.org/indicator/EG.ELC.LOSS.ZS?end=2014&locations=SG&start=2003&year_high_desc=false

2) It is also observed from the performance of various Indian Distribution companies like Torrent- Ahmadabad, Noida Power Company Ltd. etc. have Distribution Loss levels in the range of 7%-8%.

3) The relevant extract of the Gujarat Electricity Regulatory Commission's (GERC) Order dated 31/03/2016 for Torrent Power Limited – Distribution, Ahmadabad, in Case No. 1552 of 2015 is as follows:

*"The Commission has observed that the actual distribution loss (in %) in FY 2014-15 is less than the approved distribution losses in the MTR Order, read with APTEL Judgement dated 16th February, 2015 in Appeal Nos. 148 & 149 of 2014.*

***The Commission approves the Distribution losses at 7.34%** for Truing up for FY 2014-15."*

4) The relevant extract of the Uttar Pradesh Electricity Regulatory Commission's (UPERC) Order dated 01/08/2016 for Noida Power Company Limited (NPCL) in Petition No. 1057 of 2015 is as follows:

*" Commission's Analysis*

*5.2.7 The actual Distribution Losses of the Petitioner are more than the losses approved by the Commission in its Tariff Order for FY 2014-15. Considering the submissions made by the Petitioner, the Commission for the purpose of Truing up approves the Distribution Losses as approved in the Tariff Order for FY 2014- 15, as shown in the Table below:*

***Table 5:3: DISTRIBUTION LOSSES AND EHV LOSSES APPROVED BY THE COMMISSION FOR FY 2014-15***

| *Particulars* | *Approved vide T.O. 01/10/2014* | *True up Petition* | *Approved upon Truing Up* |
|---|---|---|---|
| *Distribution Loss%* | *8.00%* | *8.10%* | *8.00 %* |
| *EHV Losses %* | *0.60%* | *0.00%* | *0.00%* |

"

5) With regards to the stakeholder's submission that NDMC target for FY 2017-18 has been set less than the target of FY 2015-16, it is clarified that the Commission in true up for FY 2015-16 had observed that the energy sales in FY 2015-16 has declined owing to demolition of old central government residential colonies, which are under

reconstruction in to multi-storey. Therefore, the methodology adopted for fixation of Distribution Loss target of NDMC cannot be compared with other DISCOMs.

6) It is apparently the role of DISCOMs to reduce the Distribution Loss in its area however, the consumers' awareness play an important role in reduction of Distribution Loss by informing the DISCOMs about any power theft in their area. The consumers are working as eyes and ears for the DISCOMs to achieve their loss reduction target and indirectly reducing their own tariff due to reduction in power theft.

7) With regards to the stakeholder's submission on under achievement of distribution loss target, the Commission would like to state that the Tariff Regulations, 2017 clearly specifies that any financial impact on account of underachievement with respect to Distribution Loss targets shall be to the Distribution Licensee's account as follows:

   *"161. Any financial impact on account of underachievement with respect to Distribution Loss targets shall be to the Distribution Licensee's account."*

8) With regards to the methodology of fixation of Distribution Loss of BRPL, BYPL and TPDDL and its sharing mechanism, the Commission has already detailed in its Explanatory Memorandum as follows:

   ***"EXPLANATORY NOTES***

   *"(111) The Commission has analyzed the past performance of the distribution licensees on account of AT&C loss target vis-à-vis actual performance since unbundling. It is observed that there are two components of AT&C loss i.e., Technical Loss and Commercial Loss.*

   *(112) Every element in a power system (a line or a transformer, etc.) offers resistance to power flow and thus consumes some energy while performing the duty expected of it. The cumulative energy consumed by all these elements is classified as **"Technical Loss".***

   *(113) Losses that occur on account of non-performing and under-performing meters, wrong application of multiplying factors, defects in CT and PT circuitry, meters not read, pilferage by manipulating or by-passing of meters, theft by direct tapping, etc., correspond to energy consumed but not metered or billed*

*and are hence, categorized as "**Commercial Loss**".*

*(114) It is also observed from the data submitted by DISCOMs on monthly basis to the Commission that there are few divisions in every Distribution Licensee's area, where distribution loss level is above the acceptable limit. The following table depicts various divisions where the distribution loss levels are on the higher side:*

***March 2016 TPDDL***

| *Name of Division* | *Energy Input (MU)* | *Energy Billed (MU)* | *Distribution Losses (%)* |
|---|---|---|---|
| *Bawana* | *88.00* | *78.56* | *10.73%* |
| *Mangolpuri* | *46.58* | *38.51* | *17.33%* |
| *Model Town* | *28.52* | *24.86* | *12.86%* |
| *Rohini* | *52.76* | *46.03* | *12.75%* |
| *Shakti Nagar* | *22.61* | *19.81* | *12.39%* |

***March 2016 BYPL***

| *Name of Division* | *Energy Input (MU)* | *Energy Billed (MU)* | *Distribution Losses (%)* |
|---|---|---|---|
| *Chandni Chowk* | *16.48* | *12.49* | *24.21%* |
| *Darya Ganj* | *42.68* | *31.17* | *26.97%* |
| *Pahar Ganj* | *23.25* | *18.38* | *20.97%* |
| *Yamuna Vihar* | *39.23* | *28.14* | *28.26%* |
| *Karawal Nagar* | *38.98* | *29.63* | *23.99%* |

***March 2016 BRPL***

| *Name of Division* | *Energy Input (MU)* | *Energy Billed (MU)* | *Distribution Losses (%)* |
|---|---|---|---|
| *Najafgarh* | *32.46* | *18.97* | *41.55%* |
| *Jaffarpur* | *12.80* | *5.30* | *58.58%* |
| *Mundka* | *26.64* | *20.70* | *22.31%* |
| *Tagore Garden* | *38.84* | *31.61* | *18.61%* |
| *Sarita Vihar* | *62.82* | *54.11* | *13.86%* |

*(115) The Delhi DISCOMs have submitted the actual distribution loss levels in their True up Petitions for FY 2015-16 is as follows:*

***Actual distribution loss levels for FY 2015-16***

| *Name of the DISCOM* | *Target* | *Achievement* |
|---|---|---|
| *BRPL* | *11.23%* | *12.57%* |
| *BYPL* | *12.90%* | *16.07%* |

| *Name of the DISCOM* | *Target* | *Achievement* |
|---|---|---|
| *TPDDL* | *10.56%* | *8.78%* |

*(116) The Ministry of Power (MOP), Govt. of India vide its memorandum dated 13/04/2017 has finalized the AT & C trajectory for all the distribution licensees across the country up to FY 2019-20., the AT&C loss trajectory submitted by Delhi Distribution Licensee in the said memorandum is as follows:*

***AT & C Loss trajectory as per Delhi Distribution Licensee by MOP, GOI***

| *Name of the DISCOM* | *FY 2017-18* | *FY 2018-19* | *FY 2019-20* |
|---|---|---|---|
| *BRPL* | *12.40%* | *12.30%* | *12.00%* |
| *BYPL* | *14.70%* | *14.35%* | *14.00%* |
| *TPDDL* | *9.75%* | *9.75%* | *9.75%* |

*(117) The comparative statement of target and achievement of distribution loss levels for previous MYT period is as follows:*

***Distribution loss levels for previous MYT period***

| *Name of the DISCOM* | *2012-13* | | *2013-14* | | *2014-15* | | *2015-16* | |
|---|---|---|---|---|---|---|---|---|
| | *Target* | *Achievement* | *Target* | *Achievement* | *Target* | *Achievement ** | *Target* | *Achievement ** |
| *BRPL* | *13.73%* | *16.43%* | *12.89%* | *16.14%* | *12.06%* | *14.73%* | *11.23%* | *12.57%* |
| *BYPL* | *16.40%* | *20.26%* | *15.24%* | *20.96%* | *14.07%* | *19.54%* | *12.90%* | *16.07%* |
| *TPDDL* | *12.06%* | *10.23%* | *11.56%* | *10.63%* | *11.06%* | *9.58%* | *10.56%* | *8.78%* |

** As per True up Petition submitted by Utilities*

*(118) It is pertinent to state that some of the State Electricity Regulatory Commissions have revised the targets at the end of the control period by considering the actual achievement of distribution loss levels and various other parameters of the previous control period.*

*(119) For instance the Bihar Electricity Regulatory Commission (BERC) in its Tariff Order dated 24/03/2017 for determination of Tariff for FY 2017-18 has revised the distribution loss trajectory for 2nd control period for FY 2017-19 which was approved in its earlier Order dated 21/03/2016. The relevant extract of the said Order is as follows:*

*"The Commission had approved a Distribution Loss trajectory for the second control period FY 2016-17 to 2018-19 vide its order dated 21.03.2016 as below :*

| ***Particulars*** | ***FY 2016-17*** | ***FY 2017-18*** | ***FY 2018-19*** |
|---|---|---|---|

| | | | |
|---|---|---|---|
| *Distribution Loss* | *19.25 %* | *18.25 %* | *17.00 %* |

*……………………*

*Accordingly, the revised Distribution loss trajectory approved by the commission is as given in the table below:*

*Table 6.54: Revised Distribution Loss Trajectory approved by the commission*

| ***Particulars*** | ***FY 2017-18*** | ***FY 2018-19*** | ***FY 2019-20*** |
|---|---|---|---|
| *Distribution Loss* | *30 %* | *22 %* | *15 %* |

*"*

*(120) Similarly, Maharashtra Electricity Regulatory Commission (MERC) in its Order dated 03/11/2016 for Multi Year Tariff for 3rd control period for FY 2016-17 to FY 2019-20 for Maharashtra State Electricity Distribution Company Ltd. (MSEDCL) has restated the distribution loss target for the base year as 18.24% as against its target of 13.50% approved earlier. The relevant extract of the said Order is as follows:*

*" Table 5-16: Distribution Loss trajectory approved by the Commission for 3rd Control Period*

| ***Particulars*** | ***FY 2015-16 Base year*** | ***FY 2016-17*** | ***FY 2017-18*** | ***FY 2018-19*** | ***FY 2019-20*** |
|---|---|---|---|---|---|
| *Distribution Loss (including EHV sales)* | *18.24%* | | | | |
| *Distribution Loss (excluding EHV sales)* | *19.26%* | *17.76%* | *16.26%* | *14.76%* | *13.26%* |

*Table 4-9: Distribution Loss for FY 2015-16 as approved by the Commission*

| ***Particulars*** | ***Previous MYT Order*** | ***MSEDCL*** | ***Approved in this Order*** |
|---|---|---|---|
| *Distribution Loss* | *13.50%* | *14.51%* | *18.24%* |

*"*

*(121) In view of above, the Commission has analysed the past performance of the Distribution licensees and fixed the target for distribution loss considering:*

*i. The actual distribution loss levels till FY 2015-16 (As the audited FY 2016-17 data has not been submitted)*

*ii. Ujwal DISCOM Assurance Yojana (UDAY) Targets, MOP, Govt. of India memorandum dated 13/04/2017 : The pro-rated distribution loss calculated (considering 99.50% as collection efficiency) is as follows:*

| *Name of the DISCOM* | *FY 2017-18* | | *FY 2018-19* | | *FY 2019-20* | |
|---|---|---|---|---|---|---|
| | *AT&C Loss* | *Distribution Loss* | *AT&C Loss* | *Distribution Loss* | *AT&C Loss* | *Distribution Loss* |
| ***BRPL*** | *12.40%* | *11.96%* | *12.30%* | *11.86%* | *12.00%* | *11.56%* |
| ***BYPL*** | *14.70%* | *14.27%* | *14.35%* | *13.92%* | *14.00%* | *13.97%* |
| ***TPDDL*** | *9.75%* | *9.30%* | *9.75%* | *9.30%* | *9.75%* | *9.30%* |

*(122) In view of the above, the Commission by considering the actual past performance upto FY2015-16 and targets indicated in Ministry of Power, Government of India memorandum dated 13/04/2017 has judiciously fixed the end target of Distribution Loss for the Control Period for BRPL as 9.50%, BYPL as 10.50%, TPDDL as 8.00% and NDMC as 9.00%. Yearly reduction percentages for each DISCOM has been fixed on the basis of equal percentage reduction for each year from the target/actual of the previous years."*

9) Considering that Delhi being the Capital of the country it has to set a benchmark for Distribution Loss as there is 100% metering. Further, the Commission has allowed around Rs. 650 Crore as Capex for Smart Meter for 3 year period from FY 2017-18 to FY 2019-20 in Business Plan Regulations, 2017 in addition to approving various augmentation schemes to minimize losses and to improve quality & reliability of power supply.

10) The Commission has, therefore not modified this provision of the draft Business Plan Regulations, 2017.

## Q. TARGET FOR COLLECTION EFFICIENCY

*"(1) The targets for Collection Efficiency for FY2017-18 to FY2019-20 of the Distribution Licensees shall be 99.50%.*

*(2) The financial impact on account of Collection Efficiency target shall be computed as per the formula specified in the Regulation 163 of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 for the Distribution Licensee.*

*(3) The financial impact on account of over-achievement in terms of in the Regulation 164 of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 for the Distribution Licensee, from 99.50% to 100% shall be shared equally between Consumers and the Distribution Licensees."*

**STAKEHOLDER'S COMMENTS/SUGGESTIONS**

1. **GONCTD:**
   a) It is primarily responsibility of DISCOMs to maintain 100% collection efficiency to neutralize financial impact on account of loss in recovery of revenue i.e. non-billing/pilferage of revenue impacting to entire power sector. In such a scenario, there is no logic to make the concept of incentive for over achievement in collection beyond 99.50%, it is rather than loss of revenue due to inefficiency of DISCOMs for collection efficiency less than 100%and therefore DISCOMs should be penalized for collection efficiency less than 100%.

2. **A.K Datta, Hari Prakash Gupta, Sudhir Aggarwal, Saurabh Gandhi:**
   a) The Collection Efficiency shall be 100%. Unit bill is collected or collected with late payment surcharge. Extra amount collected with surcharge is already compensated and hence no incentive can be offered.

**COMMISSION'S VIEW**

1) With reference to the stakeholder's submission that target for collection efficiency should be 100%, the Commission would like to clarify that the Hon'ble APTEL in its judgment in Appeal No. 195 of 2013 has already upheld the target set by the Commission for Collection Efficiency as 99.50% in its earlier MYT Regulations. The Commission has retained the same target in its Business Plan Regulations, 2017. The relevant extract of the judgment in Appeal No. 195 of 2013 is as follows:

   *"11.4 .. Therefore, there should be some incentive available to the licensee to improve their AT&C loss. If the target is fixed at 100% then it will render Regulation 4.8 meaningless. The issue of lowering the collection efficiency as sought by the Respondent no.2 shall be dealt by us separately in Appeal no. 178 of 2012. Therefore, we do not find any reason to interfere with the order the State Commission to increase the collection efficiency above 99.50% as decided by the Commission."*

2) With regards to the methodology of sharing mechanism on account of over/underachievement of Collection Efficiency, the Commission has already detailed in its Explanatory Memorandum as follows:

*“ (108) The Commission has set the target for the Collection Efficiency as 99.50% which has been considered by the Commission since FY 2012-13 onwards as approved in the 2nd MYT Order dtd. 13/07/2012.*

*(109) The target for the Collection Efficiency cannot be fixed at 100.00% as there should always be scope for bad debts. Further, the Commission has safeguarded the consumers’ interests by providing incentive mechanism for overachievement of Collection Efficiency from 99.50% to 100.00% to be shared equally between the consumers and Distribution Licensees.*

*(110) It is also pertinent to state that any overachievement of the Collection Efficiency above 100% should be passed to the Licensee’s account as reason for over achievement above 100% in any financial year is due to under achievement in previous financial years for which the Distribution Licensee has been already penalised.“*

3) The Commission has, therefore not modified this provision of the draft Business Plan Regulations, 2017.

## R. TARGET FOR RENEWABLE PURCHASE OBLIGATION

### STAKEHOLDER’S COMMENTS/SUGGESTIONS

**1. TPDDL:**

a) Draft Regulations have proposed a very high and steep Renewable Purchase Obligation for Distribution Licensees. The Solar RPO target has been increased by 2.40% from FY 16-17 to FY 17-18 and thereafter it has been increased by 2.00% per year. Total Target has also been increased by 2.50% from FY 16-17 to FY 17-18 and thereafter it has been increased by 2.75% per year.

b) Delhi is a renewable deficient state and the ratio of area (1483 sq.km, third lowest among Indian States/UTs) under Delhi to the energy consumed by it is very low. Accordingly, Delhi has very limited scope of developing its own source of Renewable Power apart from Solar Roof top. Further, Solar Roof Top alone is not sufficient to meet the very high and steep renewable target set. Accordingly, the Distribution Licensees shall be bound to procure power from other states or purchase REC with an additional cost in terms of transmission charges/operating charges and REC cost respectively. The additional cost will have to be borne by the consumers of Delhi NCR, which is already under a power surplus scenario. The comparison of RPO target of other SERCs is as follows:

| Sl. No. | State | Technology (Non-Solar / Solar) | FY17 - 18 | FY18-19 | FY19-20 |
|---|---|---|---|---|---|
| 1. | Haryana | Solar | 0.86 | 1.30 | 1.96 |
| | | **Total** | 4.50 | 5.00 | 5.50 |
| 2. | Maharashtra | Solar | 2.00 | 2.75 | 3.50 |
| | | **Total** | 12.50 | 13.75 | 15.00 |
| 3. | Punjab | Solar | 1.80 | 2.20 | 2.50 |
| | | **Total** | 6.00 | 6.50 | 7.00 |
| 4. | Uttarakhand | Solar | 2.50 | NA | NA |
| | | **Total** | 10.50 | NA | NA |
| 5. | West Bengal | Solar | 0.3 | NA | NA |
| | | **Total** | 6.0 | NA | NA |
| 6. | Delhi | Solar | 2.75 | 4.75 | 6.75 |
| | | **Total** | 11.50 | 14.25 | 17.00 |

c) RPO obligation proposed by the Commission for Delhi vis-à-vis similar states like Haryana, Punjab and West Bengal is very high. It is also higher than Uttarakhand (FY 17-18) and Maharashtra (FY 18-19 & 19-20) which are renewable rich states and have huge source of Renewable Power.

d) In view of the above it is requested to the Commission to reduce the RPO targets and in the event of non-meeting of the same on account of justified reasons, penal action should not be initiated by Commission. Further, the Commission has proposed to allow the costs of REC procurement at the floor price notified by CERC which may not always be the case considering the enforcement of RPO by all SERC's. Taking cognizance of the same, the Commission is requested to allow any variation in procurement price of REC's for any quarter through modification of the existing PPAC formulae.

e) Discoms are already at the end of quarter 1 of FY 2017-18, there is not enough time left to procure any physical RE power through establishment of new capacities under Competitive Bidding. The RPO targets for period beyond FY 2020-21 may be decided considering the availability of RE power and impact on consumer tariffs through purchase of RECs which is estimated as 14p/kWh (with existing REC rates) and 7p/kwh (with withheld rates of REC at Rs.1/unit) for FY 17-18 and shall progressively increase with increasing RPO targets.

2. **<u>BRPL and BYPL:</u>**

a) The Commission has adopted the RPO growth trajectory for 2016- 7 to 2018-19 as proposed by MoP (GoI) vide order dated 22$^{nd}$ July, 2016.

b) As regards aforesaid, it is submitted that MoP (GoI) vide order dated 22 July-2016 proposed the Long Term Growth Trajectory of Renewable Purchase obligation, uniformly for all states and suggested that accordingly the state SERCs may consider notifying the RPO targets for their respective states.

c) The Commission may not straight away adopt the targets mentioned in the aforesaid policy and orders for the very simple fact that the aforesaid policy and orders did not contemplate the licensee having thousand of crores of regulatory assets. The aforesaid policy and orders contemplates the Commission fixing a reasonable and cost reflective tariff and then fixing high RPO tariff/targets. BRPL submitted that if the Commission were pleased to determine a full cost reflective tariff then the Commission may be further pleased to adopt high RPO targets.

d) The RPO trajectory determined in the Draft Business Plan Regulation did not account the availability of renewable energy in the Delhi State and has considered the RPO trajectory of MoP, GoI. It would be pertinent to mention that Delhi being a smaller state in area, the RPO target set is higher in comparison to other states. Further, the projected supply gap for resource-deficient stales based on MNRE- assessed RE potential the RE generation in states like Delhi, Goa & other north-eastern states are negligible as compared to the other states.

e) Further, BRPL has submitted that the National Tariff Policy mandates SERCs to fix a minimum percentage for purchase of solar energy at 8% of total consumption of energy, excluding Hydro Power, to be achieved by March 2022, whereas the Commission in its Draft Regulation suggested achieving the minimum target of 6.75 % by FY 2019-20 which is 85 % of target suggested in National Tariff Policy. The solar target should be proportionally allocated to achieve 8% by 2021-22.

f) Delhi Discoms are already power surplus and constrained to offtake the surplus power under the long term PPAs. In view of the same BYPL has also filed a petition before CERC which was disposed off on 17.04.2017 against the Discoms. The report released by MoP under U.S-India bilateral programme on 29.06.2017 mentions that the existing power supply contracts between generation and distribution companies should be renegotiated to ensure flexibility in the supply of coal bases electricity in order to make new way for renewables.

g) Regulation-24 (5) provides for penalty for non-compliance of RPO Targets. However Regulation-124 of DERC Tariff Regulations, 2017 provides that penalty for noncompliance of RPO Targets shall be fixed in Tariff Order. Hence Regulation- 24(5) of draft Business Plan Regulations is contrary to Regulation-124 of DERC Tariff Regulations, 2017.

***3.*** **GONCTD:**

a) MoP, Govt. of India has already specified target for various States for RPO. It is suggested to consider the same while finalizing the target for each DISCOM for RPO.

**COMMISSION'S VIEW**

1) The Commission would like to state that the GoNCTD has notified Delhi Solar Policy, 2016 wherein they have considered solar power to be the most viable form of green energy in Delhi. The targets set by the Delhi Solar Policy 2016 are as follows:

| Fiscal Year | New Solar Energy (MW) | Cumulative Solar Energy (MW) | Annual Growth (%) | Percentage of peak grid load | Percentage of total electricity consumption |
|---|---|---|---|---|---|
| FY 16 | 30 | 35 | 700% | 1% | 0.15% |
| FY 17 | 84 | 119 | 240% | 2% | 0.56% |
| FY 18 | 193 | 312 | 162% | 5% | 1.43% |
| FY 19 | 294 | 606 | 94% | 9% | 2.66% |
| FY 20 | 385 | 991 | 63% | 14% | 4.16% |
| FY 21 | 285 | 1275 | 29% | 17% | 5.10% |
| FY 22 | 228 | 1503 | 18% | 19% | 5.73% |
| FY 23 | 187 | 1690 | 12% | 20% | 6.14% |
| FY 24 | 161 | 1850 | 10% | 21% | 6.40% |
| FY 25 | 145 | 1995 | 8% | 21% | 6.57% |

2) The Commission would like to state that the Delhi Solar Policy, 2016 notified by GoNCTD has set the solar installation targets as mentioned in table above. The high targets for solar energy set by GoNCTD refutes the claim by the stakeholder that Delhi NCR has very limited scope of developing its own source of Renewable Power.

3) The Hon'ble APTEL in its judgment dated 20.04.2015 in OP no.1 of 2013 has held that the State Commission should monitor the compliance of RPO regulations by obligated entities and in case of default in fulfilling of RPO by obligated entity, the penal provision as provided for in the Regulations should be exercised as follows:

> *"(iv)The State Commission shall give directions regarding, carry forward/review in RPO and consequential order for default of the distribution licensees/other obligated entities as per the RPO Regulations. If the Regulations recognise REC mechanism as a valid instrument to fulfill the RPO, the carry forward/review should be allowed strictly as per the provisions of the Regulations keeping in view*

*of availability of REC. In this regard the findings of this Tribunal in Appeal no. 258 of 2013 and 21 of 2014 may be referred to which have been given with regard to RE Regulations of Gujarat Commission but the principles would apply in rem. In case of default in fulfilling of RPO by obligated entity, the penal provision as provided for in the Regulations should be exercised."*

4) In view of above, the Commission has specified the RPO targets for the MYT Control Period from FY 2017-18 to FY 2019-20 by taking reference from the trajectory issued by Ministry of power, Govt. of India. The detailed mechanism for RPO is indicated in the Explanatory Memorandum as follows:

*"(102) The Electricity Act, 2003 entrusts on the appropriate Commission the responsibility of promotion of co-generation and generation based on renewable energy sources. The policy framework of the Government of India also stresses on the encouragement of renewable energy sources keeping in view the need for energy security of the country. Relevant provisions of the Act are reproduced as below:*

***Section 86(1)(e): 86. Functions of State Commission** (1) The State Commission shall discharge the following functions, namely:- (e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;*

*(103) Further, Government of India notified the revised Tariff Policy which was published vide Gazette of India, dated 28.01.2016 and Para 6.4 (1) of the policy provides that pursuant to provisions of section 86(1)(e) of the Act, the Appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from renewable energy sources, taking into account availability of such resources and its impact on retail tariffs. It also provides that within the*

*percentage so made applicable, to start with, the SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification of the policy which shall be such that it reaches 8% of total consumption of energy, excluding hydro power, by March 2022 or as notified by the Central Government from time to time.*

*(104) Ministry of Power, Govt. of India in consultation with MNRE, vide order dated 22.07.2016 notified the long term growth trajectory of Renewable Power Purchase Obligations (as given below) for Non-Solar and Solar, uniformly for all States / Union Territories initially for three years from 2016-17 to 2018-19, in order to achieve the target of 175 GW renewable capacity by March 2022.*

| ***Long term Trajectory*** | ***FY 2016-17*** | ***FY 2017-18*** | ***FY 2018-19*** |
|---|---|---|---|
| *Non Solar* | *8.75%* | *9.50%* | *10.25%* |
| *Solar* | *2.75%* | *4.75%* | *6.75%* |
| *Total* | *11.50%* | *14.25%* | *17.00%* |

*(105) Since the earlier trajectory for RPO under the Delhi Electricity Regulatory Commission (Renewable Purchase Obligation and Renewable Energy Certificate Framework Implementation) Regulations, 2012 ended on 31 March, 2017, the Commission proposes to specify the RPO targets for the MYT Control Period from FY 2017-18 to FY 2019-20 by taking reference from the trajectory issued by Ministry of power, Govt. of India.*

*(106) Further, the Commission has also considered the relevant provision of RPO form the Tariff Policy dtd. 28/01/2016 as follows:*

***"6.4 Renewable sources of energy generation including Co-generation from renewable energy sources:*** *(1) Pursuant to provisions of section 86(1)(e) of the Act, the Appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from renewable energy sources, taking into account availability of such resources and its impact on retail tariffs. Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs. Long term growth* *trajectory of Renewable Purchase Obligations (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE."*

*(107) In view of the above provisions of the Tariff Policy and Order of Ministry of New and Renewable Energy (MNRE), the Commission has proposed the target for FY 2017-18 to FY 2019-20 for Delhi Distribution Licensees."*

5) The Commission clarifies to the stakeholders that total RPO target for FY 2016-17 as specified in its *DERC (Renewable Purchase Obligation and Renewable Energy Certificate Framework Implementation)* Regulations, 2012 was 9.00% whereas MNRE has specified total RPO target of 11.50% which is higher than that indicated in DERC Regulations, 2012. Therefore, the Commission has considered MNRE's FY 2016-17 target, as target for FY 2017-18 and so on.
6) The Commission has, therefore not modified this provision of the draft Business Plan Regulations, 2017.

**S. <u>CONTINGENCY LIMIT FOR SALE OF POWER THROUGH DEVIATION SETTLEMENT MECHANISM (UNSCHEDULED INTERCHANGE CHARGES)</u>**

**<u>STAKEHOLDER'S COMMENTS/SUGGESTIONS</u>**

**1. <u>TPDDL:</u>**

a) While calculating the quantum of power (MU) sold under UI, beyond the prescribed limit, the Commission should exclude:-
   I. MU sold in UI on account of factors beyond the control of TPDDL such as forced scheduling of power;
   II. Sudden decrease in demand due to extreme weather conditions;
   III. MU underdrawn on account of load reduction owing to transmission line outage/tripping/grid disturbance; and
   IV. Other force majeure conditions.

b) The proposal of DERC to restrict the sale rate to average rate of power purchase/sale through exchange needs clarification in terms of the periphery (boundary) at which exchange rate would be considered.

c) The limit of 5% power should be clearly specified as 5% of energy scheduled during the month to avoid any confusion.

2. **BRPL:**
   a) UI surplus or deficit cannot be predicted beforehand, as the DISCOM does not know with certainty the exact extent of its surplus but only as an approximation, as it does not have a final say in the accounting/scheduling of the same.
   b) DISCOM cannot be penalized for disposing off surplus power in UI, where the DISCOM cannot with 100% freedom decide its drawal (as it has to follow SLDC directions) or account for the surplus power in its system for disposal (as it is dependent upon the SLDC's accounting of the same)
   c) The Contingency Limit should exclude:
      I. Over-drawal and Under-drawal by Open Access Consumers;
      II. Standby power arrangement made by Licensee for Open Access Consumers;
      III. Any force scheduling by SLDC/ NRLDC;
      IV. Any force-majeure condition.

3. **BYPL:**
   a) BYPL has submitted that the Contingency Limit ought to be subject to some necessary exceptions which are beyond the control of the Licensee either due to Open Access Transactions, Grid Conditions, or force-majeure condition. The Contingency Limit should exclude:
      I. Over-drawal and Under-drawal by Open Access Consumers;
      II. Stand-by power arrangement made by Licensee for Open Access Consumers;
      III. Any force scheduling by SLDC/ NRLDC;
      IV. Any force-majeure condition.

4. **GONCTD:**
   a) The contingency limit for DSM should be in line with the CERC Regulations considering over-all Delhi Power scenario.

5. **A.K Datta, Hari Prakash Gupta, Sudhir Aggarwal, Saurabh Gandhi:**
   a) As per existing norms this Power sale through UI shall be limited to 5% of the surplus Power or 3% of the Gross Power purchase whichever is less.

**COMMISSION'S VIEW**

1) With regards to the stakeholder's submission that force scheduling should not be considered while calculating the quantum of power sold under UI, the Commission would like to state that DERC Tariff Regulations 2017 has already excluded force scheduling of power in determining sale of power through Deviation Settlement mechanism as follows:

   *"Provided that Sale through Deviation Settlement Mechanism (Unscheduled Interchange) transactions **other than forced scheduling of power** as certified by SLDC on monthly basis shall be limited to the contingency limit as specified by the Commission in the Business Plan Regulations in order to promote Grid Discipline and optimise Power Purchase Cost;"*

2) With regards to the stakeholder's submission on contingency limit on sale of surplus power in UI being 3%, the Commission would like to state that a contingency limit of 3% was being applied on Gross Power Purchase for every month in its earlier Tariff Orders. However the Commission has changed the contingency limit to 5 % on net power purchase in its Business Plan Regulations 2017 as follows:

   ***"28. CONTINGENCY LIMIT FOR SALE OF POWER THROUGH DEVIATION SETTLEMENT MECHANISM (UNSCHEDULED INTERCHANGE CHARGES)***

   *(1) The Contingency Limit for disposing off of Power through Deviation Settlement Mechanism in terms of the Regulation 152 (c) of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 from FY 2017-18 to FY 2019-20 of the Distribution Licensees shall be 5% of Net Power Procured by the Distribution Licensee for the relevant month."*

3) With regards to the methodology of fixation of contingency limit for Sale of Power through Deviation Settlement Mechanism, the Commission has already detailed in

its Explanatory Memorandum as follows:

*"(98) It was brought to the notice of the Commission by the stakeholders that sale under UI is dependent on the efforts of Distribution licensee to forecast the demand in a scientific manner and margin of error may be minimised.*

*(99) The Commission has also observed from the Press Information Bureau Government of India Ministry of Earth Science dtd. 05/09/2012 that level of operational acceptability of* ***error of margin is 5%*** *for the forecasts of all India seasonal monsoon rainfall. The relevant extract is as follows:*

*" India Meteorological Department (IMD) has been issuing forecast for the arrival of the monsoon (onset over Kerala) successfully since 2005 with an error of ± 4 days. The operational forecasts issued during all the last three years (2010 to 2012) are presented below: .....*

*Monsoon projections of IMD for the last three years and for current Monsoon2012 so far are presented in Annexure. The present level of operational acceptability of error margin is of 5% for the forecasts of all India seasonal monsoon rainfall. The forecast verification of last 3years suggests that only during 2009 the error margin was higher than 5% due to persistence of warmer sea surface temperature anomaly over equatorial Pacific Ocean (El Nino) beyond the expected duration as envisaged at the time (April 2009) of finalizing Monsoon2009 seasonal rainfall forecast."*

*(100) Therefore, the Contingency Limit for Sale of Power through Deviation Settlement Mechanism in terms of the Regulation 152 (c) of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 from FY 2017-18 to FY 2019-20 of the Distribution Licensees has been considered as 5% as an error in predicting monsoon by India Meteorological Department indicated above.*

*(101) In case the Distribution Licensee sell power in Deviation Settlement Mechanism (Unscheduled Interchange Charges) more than 5% of Gross Power procured by the Distribution Licensee for the relevant month such sale rate shall be restricted to the average rate of power purchase/sale through exchange*

*during same month for Delhi region."*

4) The Commission has, therefore not modified this provision of the draft Business Plan Regulations, 2017.

## T. INCENTIVE SHARING MECHANISM FOR SALE RATE OF SURPLUS POWER

### STAKEHOLDER'S COMMENTS/SUGGESTIONS

**1. TPDDL:**

a) TPDDL has submitted that the Power purchased by the utility is from several Generators/sources. The surplus power with the utility after meeting the slot wise demand is sold as surplus power. This surplus power also varies on a slot wise basis. It is not possible to ascertain the source of surplus power which is sold in exchange on a slot wise basis. Hence, it is impossible to consider variable cost of a particular plant while computing the incentive. As such it will be prudent if monthly weighted average V.C (variable cost) is considered for calculation of incentive on surplus sale.

b) On many instances, forcefully scheduled power is also being bid on exchange to avoid any DSM penalty on account of underdrawal. In such case to get rid of the forcefully scheduled power, the bid/sale rates has to be aligned with the prevailing exchange rates rather than linking the same with the variable cost of the specific generating plants of our portfolio. Such a scenario occurs during off peak hours for all months of the year & the surplus power so accumulated is a "must sale" kind of power. In such a scenario power has to be sold at a rate lower than V.C also to avoid extensive underdrawal which can result in grid instability and consequential DSM penalty.

c) As per the guidelines for short term Purchase/sale of power, any short term purchase/sale has to be mandatorily done through DEEP portal. Here, rates are discovered through competitive bidding during the reverse auction and the rates are primarily dependent on the market conditions and cannot be linked to the variable cost of any specific generating station.

d) TPDDL has submitted that it is necessary that the Commission clarify as to how incentive/loss sharing would be calculated if the per unit sale rate achieved by the utility is less than the sum total of Fixed Cost & Variable Cost for any given period. As the utility will intend to sell power above the V.C (variable cost) and not necessarily towards recovering of the F.C (Fixed cost) during the proposed process.

e) TPDDL has submitted that full fixed charges are to be paid to the generators, irrespective of whether power is scheduled by the utility or not. Hence, any gain realized on account of power sold by the utility beyond the variable cost or any other benchmark specified by the commission should be used first to offset the fixed charges liability of the utility and then only sharing of the same should be allowed with the consumers. Further, in case the achieved sale rate is more than the variable cost (V.C) and below the sum total of per unit fixed charges & variable charges, the same should not be treated as a penalty for the utility.

**2. <u>BRPL and BYPL:</u>**

a) Since the accounting of energy is done on slot-wise basis, the surplus power available from respective power plants and the rate at which the surplus power is being sold through various sources will only be available on slot-wise basis. Therefore the Incentive Sharing Mechanism for sale rate of surplus power is required to be computed on slot-wise basis so as to arrive at the correct incentive.

**3. <u>GONCTD:</u>**

a) It is primarily responsibility of distribution licensee to cover the revenue gap due to cost of surplus power and sale of surplus power to meeting regulatory assets if the rate of sale is less than its cost of purchase. DISCOMs are already taking 14% + 2% return in such a scenario, difference/loss due to sale of surplus power is to be trued up in ARR. All the PPAs has been done by DISCOMs with Generating Stations and therefore, there is no logic for providing incentive to distribution licensee as it has to fill up revenue gap due to loss in over-all power purchase cost and target/benchmark for sale of power should be fixed so that DISCOMs make all out efforts to sale surplus power.

**COMMISSION'S VIEW**

1) In order to promote optimization of Power Purchase Cost related to better realisation towards Sale Rate of Surplus Power, the Commission has provided the mechanism for Incentive/Dis-incentive to the Distribution Licensees towards Sale of Surplus Power in the Regulation 123 of the DERC Tariff Regulations, 2017.
2) The Commission has indicated in the Regulation that for Bilateral and Banking transactions, the rate of variable cost of the generating station will be one month earlier billed Variable Cost at the time of entering such Bilateral and Banking Sale transaction. The DISCOMs while entering such contracts are aware of the previous month Variable Cost of the Generating Station and this Variable Cost has to be used as benchmark for incentive purpose.
3) Due to dynamic pricing at Power Exchanges based on the demand-supply scenario prevailing at relevant slot, the utilities have to furnish the data slot wise as indicated in Regulation 123 of the DERC Tariff Regulations, 2017 for computation of incentive. The slot wise computation of incentive has also been indicated by the stakeholder above.
4) Therefore, the Commission has benchmarked Sale Rate of Surplus Power by considering next higher variable cost of the generating stations from which power is surplus and to be sold after meeting the demand in order to compute the Incentive/Dis-incentive to the Distribution Licensees.
5) The Commission clarifies to the stakeholder that this provision is applicable only for Sale Rate over/under the Variable Cost of the Generating Stations and not to the sum total of Fixed Charges and Variable Charges as submitted by the stakeholder. The incentive is the product of Rate difference (Actual Sale Rate-Variable Cost) and Quantum of Power actually sold. This incentive is shared with the consumers by the DISCOMs depending upon its realization upto 100% Fixed Cost or above 100% Fixed

Cost as follows:

***"29. INCENTIVE SHARING MECHANISM FOR SALE RATE OF SURPLUS POWER***

*(2) The incentive computed under sub-clause (1) above shall be shared between the Consumers and the Distribution Licensees in the following prescribed manner: -*

*i. The incentive realisation upto 100% recovery of Average Fixed Cost per unit of all Generating sources of relevant year, projected by the Commission in the relevant Tariff Order, prorated to actual sale of Surplus Power shall be shared in the ratio of 2/3rd to the Consumers and 1/3rd to the Distribution Licensees.*

*ii. The incentive realisation above 100% recovery of Average Fixed Cost per unit of all Generating sources of relevant year, projected by the Commission in the relevant Tariff Order, prorated to actual sale of Surplus Power shall be shared in the ratio of 1/3rd to the Consumers and 2/3rd to the Distribution Licensees."*

6) The Commission has, therefore not modified this provision of the draft Business Plan Regulations, 2017.

## U. <u>MECHANISM FOR RECOVERY OF POWER PURCHASE COST ADJUSTMENT CHARGES</u>

**<u>STAKEHOLDER'S COMMENTS/SUGGESTIONS</u>**

1. **<u>TPDDL:</u>**
   a) An application has to be filed for prior approval of the Commission with respect to PPAC claim if the PPAC exceeds 5% for any quarter. In this regard it is submitted that we may be allowed to charge 90% of PPAC till 5% during the period when the approval is under consideration by the Commission.
2. **<u>BRPL and BYPL:</u>**
   b) Licensee may be allowed to levy 90% of computed PPAC on automatic basis subject to limit of 5% in any case. In the event, the PPAC computed is more than 5%, the Licensee may be allowed to levy 5% on automatic basis and seek approval of the Commission for the balance incremental percentage.
3. **<u>GONCTD:</u>**
   a) In the present scenario wherein surplus generation is available in across India on reasonable fuel cost, there is no logic to allow suo-moto 5% PPCA on the basis of

computed formula without prudence check by the Commission. The Commission should allow PPAC only after prudence check and true up at the end of year.

**COMMISSION'S VIEW**

(1) The Commission is of the view that any delayed recovery in Power Purchase Cost of the Distribution Licensee due to delay in allowing PPAC has a direct bearing on the consumer's tariff due to Carrying Cost on such under recovered Power Purchase Cost at the time of true up of ARR. Therefore, in the overall public interest, the Commission has allowed a part of PPAC to be recovered without regulatory proceedings so as to minimise Carrying Cost on this delayed recovery in Power Purchase Cost.

(2) Further, the Commission had analysed the methodology for PPAC of various SERCs and it is observed that Uttar Pradesh, Assam, Jharkhand and Tripura has adopted a policy of levy of PPAC without going through the regulatory proceedings upto a ceiling limit.

(3) For instance, extract of PPAC methodology of Uttar Pradesh Electricity Regulatory Commission in Uttar Pradesh Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014 for Fuel and Power Purchase Price Adjustment Formula Regulations, 2010 is as follows:

*"a) The Distribution Licensee shall recover the incremental cost incurred due to the following:*

*1. Cost due to variation in fuel surcharge rate*

*2. Cost of incremental power required over and above the plan approved by the Commission*

*3. Increase in Bulk Supply Tariff (BST) as may be specified by the Hon'ble Commission in the Tariff Order.*

*….*

*(c) The incremental cost due to incremental power purchase for reasons stipulated in clause (d) of Regulation 19, shall be computed on the basis of formula provided in Regulation 20.2 below, and shall be charged for the quarter (n), on the consumer from the first month of the (n+2) quarter itself within the ceiling of* ***10% of variable component of tariff, without prior approval of the Commission*** *and under or over recovery shall be carried forward to the next quarter. "*

(4) Extract of PPAC methodology of Assam Electricity Regulatory Commission in Regulation

for Fuel and Power Purchase Price Adjustment Formula Regulations, 2010 is as follows:

*"…..*

*5.2 The FPPPA charge shall not exceed 25% of the variable component of tariff or such other ceiling as may be stipulated by the Commission from time to time…..*

*5.3 The formula will be applied at the end of each quarter by Distribution Licensee **without making it necessary to go through the regulatory proceedings**. The Distribution Licensee shall, however, be obligated to provide all relevant information to the Commission simultaneously and in any case where the Commission observes any discrepancies, the same will be adjusted during the next quarter. This mechanism will provide administrative and regulatory simplicity.*

(5) Extract of PPAC methodology of Tripura Electricity Regulatory Commission in Regulation for Fuel and Power Purchase Price Adjustment Formula Regulations, 2010 is as follows:

***"These regulations may be called the Tripura Electricity Regulatory Commission (Fuel and Power Purchase Price Adjustment Formula) Regulations, 2011.***

*..*

*5.1 The FPPPA will be recovered in the form of an incremental energy charge (Rs/KWh) in proportion to the energy consumption and will be forming a part of the energy bill to be served on monthly or any other periodical basis.*

*5.2 The FPPPA charge shall not exceed 25% of the variable component of tariff or such other ceiling as may be stipulated by the Commission from time to time, where the variable component of tariff is defined as total estimated revenue from energy charges (EC) in a year approved in the last Tariff Order divided by total estimated sales of the year. When FPPPA charges exceed 25% of the variable component of tariff, the Licensee shall make a petition to the Commission for recovery of the charges over the specified cap which shall be recovered after Commission's scrutiny and directives.*

***5.3 The formula will be applied at the end of each quarter by Distribution Licensee without making it necessary to go through the regulatory proceedings**. The Distribution Licensee shall, however, be obligated to provide all relevant information to the Commission simultaneously and in any case where the Commission observes any discrepancies, the same will be adjusted during the next quarter. This mechanism will provide administrative and regulatory simplicity."*

(6) Further, the Commission has protected the interest of consumers at large and

mentioned in Regulation that no Carrying Cost shall be allowed to DISCOMs due to under-recovery of revenue for the same year and Carrying Cost shall be at 1.20 times of interest rate on the excess revenue recovered for the same year, as follows:

*" (6) Revenue billed on account of PPAC by the Distribution Licensee, without going through the regulatory proceedings, shall be trued up along-with the Power Purchase Cost of the relevant year and no Carrying Cost shall be allowed due to under-recovery of revenue for the same year.*

*(7) Revenue billed on account of PPAC by the Distribution Licensee, without going through the regulatory proceedings, shall be trued up along-with the Power Purchase Cost of the relevant year and Carrying Cost shall be at 1.20 times of interest rate on the excess revenue recovered for the same year. "*

(7) The Commission had analysed the methodology for PPAC of various SERCs indicated above and accordingly the detailed mechanism has been indicated in the Explanatory Memorandum as follows:

> *"(88) As defined in the DERC Tariff Regulations 2017, the PPAC are allowed to recover the incremental Power Procurement Cost on quarterly basis due to variation in price of fuel for long term sources and variation in fixed cost on account of regulatory orders from long term sources and variation in transmission charge. The relevant extract of Tariff Regulations' 2017 is quoted as below:*
>
> *"134 The Distribution Licensee shall be allowed to recover the incremental Power Procurement Cost on quarterly basis, over and above the Power Procurement Cost approved in the Tariff Order of the relevant year, incurred due to the following:*
>
> *(a) Variation in Price of Fuel from long term sources of Generation;*
>
> *(b) Variation in Fixed Cost on account of Regulatory Orders from long term sources of Generation;*
>
> *(c) Variation in Transmission Charges.*
>
> *135 The Commission shall specify the detailed formula and procedure for recovery of such incremental Power Procurement Cost as Power Purchase Cost*

*Adjustment Charges (PPAC) formula in the Tariff Order;*

*136 To avoid the tariff shock for consumers, the Commission may carry forward PPAC of one quarter into more than one quarter on provisional basis;"*

*(89) Section 62 (4) of the Electricity Act, 2003 specifies that the Tariff may be revised more than once in any Financial Year in respect of variation in fuel prices as follows:*

*"(4) No tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified. "*

*(90) The Hon'ble APTEL in its Judgment in OP No. 1 of 2011 dated 11/11/2011 had made mandatory for all SERCs to implement variation of Fuel and Power Purchase cost formula/mechanism. The relevant extract of the said judgment is as follows:*

*"(vi) Fuel and Power Purchase cost is a major expense of the distribution Company which is uncontrollable. Every State Commission must have in place a mechanism for Fuel and Power Purchase cost in terms of Section 62 (4) of the Act. The Fuel and Power Purchase cost adjustment should preferably be on monthly basis on the lines of the Central Commission's Regulations for the generating companies but in no case exceeding a quarter. Any State Commission which does not already have such formula/mechanism in place must within 6 months of the date of this order must put in place such formula/ mechanism"*

*(91) The Commission has analysed the methodology for PPAC of various State Commissions and it is observed that various State Electricity Commissions like Uttar Pradesh, Assam, Jharkhand and Tripura has adopted a policy of levy of PPAC based on :*

*a) Ceiling Limit : Ranging from 10% to 25%*

*b) Without going through the regulatory proceedings upto a ceiling limit*

*(92) In view of the above, the Commission has also specified the mechanism of levying PPAC by Distribution Licensee without going through the regulatory*

*proceedings upto 5% as actual PPAC allowed by the Commission in recent past is also majorly in the same range. The Distribution Licensee shall upload the detailed calculations on its websites with a copy for information to the Commission.*

*(93) In case the PPAC computed is more than the ceiling limit of 5 %, then Distribution Licensee shall file an application before the Commission for prior approval of PPAC of the relevant quarter."*

(8) The Commission has, therefore not modified this provision of the draft Business Plan Regulations, 2017.

## V. INCENTIVE SHARING MECHANISM FOR RE-FINANCING OF LOAN

### STAKEHOLDER'S COMMENTS/SUGGESTIONS

1. **TPDDL:**

a) Due to re-financing, there could be reduction in interest rate. However, there is some incidental expenditure linked to refinancing. Therefore, the same needs to be allowed additionally on actual basis and Draft Regulation be amended accordingly.

b) The net savings in ARR should be calculated on the current savings for the remaining period of the loan which has been refinanced as these are the permanent savings which will flow in the ARR. Therefore, the benefit of the re-financing should be allowed to the TPDDL till the completion of the tenure of the loan.

c) The Commission is requested to give detailed methodology for computation of sharing of the savings as the sharing mechanism is not clear from Regulation 28 (1) of the Draft Business Plan Regulations, 2017.

2. **GONCTD:**

a) It is primarily responsibility of DISCOMs to arrange finance on competitive rate and to re-arrange on cheaper rate. It is the responsibility of DERC to make a prudence check at the end of year whether DISCOM has made adequate efforts to get the re-financing of loan on cheaper rate to optimize minimum cost. In such a scenario, it is the responsibility of DERC & DISCOMs to be aware for minimizing the revenue gap.

In case, DERC concludes that DISCOMs has not made adequate efforts of re-financing of loan, the DISCOMs may be penalized to the extent cheaper rate of loan is available. The incentives may be allowed if loan is re-financed at least 2% lower than SBI PLR rate (or incentive may be linked with SBI PLR Rate).

**COMMISSION'S VIEW**

1) The Commission has considered the suggestion of the stakeholders and has indicated the methodology for incentive due to re-financing of loan as the product of total quantum of loan availed and difference of weighted average rate of interest on actual loans versus margin of 2.00% plus (+) SBI MCLR as follows:

   ***"31. INCENTIVE SHARING MECHANISM FOR RE-FINANCING OF LOAN***

   *(1) The incentive due to lower rate of interest on account of re-financing of loan in terms of Regulation 71 of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 from FY 2017-18 to FY 2019-20 of the Distribution Licensee shall be computed as the product of total quantum of loan availed and difference of weighted average rate of interest on actual loans versus margin of 2.00% plus (+) SBI MCLR."*

   *(2) The incentive on account of re-financing of loan computed as per sub clause (1) above shall be shared equally between the Consumers and the Distribution Licensee."*

2) The Commission has, therefore not modified this provision of the draft Business Plan Regulations, 2017.

## W. RATIO OF ALLOCATION OF ARR INTO WHEELING & RETAIL SUPPLY

**STAKEHOLDER'S COMMENTS/SUGGESTIONS**

1. **GONCTD:**

   a) There is a variation in allocation of expenses among different DISCOMs which is un-desirable. The reason for different allocation of expenses for different DISCOMs should be explained in SOR.

**COMMISSION'S VIEW**

1) The Commission has retained the same ratio of allocation of ARR into wheeling &

retail as approved in the 2nd MYT Order dtd. 13/07/2012 for the Distribution Licensees as mentioned in Explanatory Memorandum of Business Plan Regulations, 2017 as follows:

*"The Commission has observed that TPDDL has suggested to retain the ratio of allocation of ARR into wheeling & retail supply as provided in the 2nd MYT Order dtd. 13/07/2012 and other utilities have not provided complete information in this regard. Therefore, on account of non-availability of actual data for ratio of allocation of ARR into wheeling & retail supply, the Commission has decided to retain the same ratio as approved in the 2nd MYT Order dtd. 13/07/2012 for the Distribution Licensees. "*

2) The Commission may revisit the allocation of ARR wheeling & retail if the information in the stipulated manner is furnished by the Distribution Licensees.

## X. TREATMENT OF REVENUE GAP/SURPLUS

### STAKEHOLDER'S COMMENTS/SUGGESTIONS

**1) TPDDL:**

a) The Commission has considered Bank Rate for the purpose of adjustment of variation in Power Purchase Cost. Without prejudice to the submissions on the adjustment of variation in Power Purchase costs, any rate for adjustment in the revenue Gap should be considered at carrying cost rate as defined in Regulation 17 (3) in Draft Business Plan Regulations 2017. Different methodology for consideration of variation of different components of ARR is not in line with MYT Regulations and CERC methodology. The Commission has not mentioned the treatment of allowance of carrying cost on variation in Non-Tariff Income, True up of controllable expenses etc., Incentive/ disincentive etc.

b) In case of truing up of capitalization referred Regulation 21, the utility has to pay penalty of 20% of bank rate i.e. 1.60% +8% of bank rate; effective comes to 9.60% on the excess tariff recovered when the actual capitalization is less than by 10% from the target capitalization and vis-à-vis if the utility has done excess capitalization by 10% the variation should be trued up by 80% of Bank rate which effectively come to 6.40% on the existing MCLR of SBI.

2) **BRPL:**

a) Regulation-30 (2) does not provide any treatment of revenue gap arising on account of Operation and Maintenance Expenses. Further, separate treatment of revenue *gap/* surplus has been proposed on account of variations in power purchase cost and capital cost. The carrying cost as per Regulation-17(2) for variations in power purchase cost is in terms of debt-equity ratio of 70:30, where 14% shall be the rate on Equity Component and Bank Rate plus margin on non-capex loans. However, the carrying cost for variations in capitalization of assets is 0.80 (while receiving interest on over-capitalization) and 1.20 times (for refunding interest on under-capitalization) of bank rate. There is discrimination in these two carrying cost rates without any basis. Kind reference is drawn to the explanation submitted in para 5(b).

b) In view of the above, BRPL submitted that the single rate of carrying cost ought to be applied on total revenue gap for the year instead of applying different rates for different components of revenue gap.

**COMMISSION'S VIEW**

1) The Commission in its Tariff Regulations, 2017 has defined the carrying cost rate as the weighted average rate of interest for funding of Regulatory Asset/accumulated Revenue Gap through debt and equity in an appropriate ratio, as specified by the Commission in the relevant Orders, as follows:

   *" (16) **"Carrying Cost Rate"** means the weighted average rate of interest for funding of Regulatory Asset/accumulated Revenue Gap through debt and equity in an appropriate ratio, as specified by the Commission in the relevant Orders:"*

2) Accordingly, the Commission in its Tariff Order dtd. 31/08/2017 has specified the Carrying Cost Rate as debt: equity :: 70:30 on weighted average interest rate and pre tax RoE for funding of revenue gap.

3) Further it is clarified that during the year of any gap/surplus will be governed by Marginal Cost of Fund based Lending Rate (MCLR) of SBI and accumulated revenue

gap will be governed by Carrying Cost Rate. The stakeholders are clarified that during the year gap for Capitalisation and Power Purchase Cost is governed by appropriate mechanism of 1.20/0.8 times in case of over/under recovery and PPAC, therefore, the treatment of different ARR components is different.

4) With regards to Carrying Cost on revenue, the stakeholders are clarified that Revenue was not being trued in earlier MYT Regulations regime only till the extent the penalty on account of under-achievement of AT&C Loss. However, from FY 2017-18 now this aspect is also restricted till Collection Efficiency Target as Distribution Loss True up is linked to Power Purchase and not Revenue.
5) The Commission has, therefore not modified this provision of the draft Business Plan Regulations, 2017.

**Y. <u>NORMS FOR RITHALA COMBINED CYCLE POWER PLANT</u>**

**<u>STAKEHOLDER'S COMMENTS/SUGGESTIONS</u>**

**1. <u>TPDDL:</u>**

a) Rithala CCPP is an existing plant operating within Delhi under the jurisdiction of the Commission similar to IPGCL and PPCL. The Commission has specified the Operating Norms for Delhi Gencos, i.e., IPGCL and PPCL. The Commission while notifying the operational norms and normative expenses for existing Generating stations has not provided the norms applicable for the Rithala Generation Plant.

**<u>COMMISSION'S VIEW</u>**

1. The Commission has considered the submissions of the stakeholder and has included the provision for various parameters for Rithala Combined Cycle Power Plant in its Business Plan Regulations, 2017 as follows:

*"**11.** Operational Norms for Rithala Combined Cycle Power Plant shall be the norms specified in Regulation 7.3 of the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2007 for E/EA/EC/E2 Class Machine.**"***