

# **The Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011**

DELHI

India

## **The Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011**

### **Rule**

### **THE-DELHI-ELECTRICITY-REGULATORY-COMMISSION-TERMS-AND-OF 2011**

- Published on 19 January 2011
- Commenced on 19 January 2011
- [This is the version of this document from 19 January 2011.]
- [Note: The original publication document is not available and this content could not be verified.]

The Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 Published vide Notification No.

F.3(290)/Tariff/DERC/2011-12/C.F. 3180, dated 19th January, 2011, published in the Delhi Gazette, Extra., Pt. III, No. 1, dated 19th January, 2011

### **1. Short Title, Commencement And Extent.**

- These Regulations shall be called the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011.(2)These Regulations shall come into force on April 1, 2012 and unless reviewed earlier or extended by the Commission shall remain in force for a period of three year from the date of commencement.(3)These Regulations shall extend to the whole of National Capital Territory of Delhi.

### **2. Definitions And Interpretation.**

(1)In these Regulations, unless the context otherwise requires-(a)"Act" means the Electricity Act, 2003 (36 of 2003), including amendments thereto;(b)"Aggregate Revenue Requirement" or "ARR" means for each Financial Year, the costs pertaining to the Licensed business which are permitted, in

accordance with these Regulations, to be recovered from the tariffs and charges determined by the Commission;(c)"Allocation Statement" means for each Financial Year, a statement in respect of each of the businesses (Wheeling, Retail Supply, Other Business) of the Licensee, showing the amounts of any revenue, cost, asset, liability, reserve or provision etc, which has been either;(i)Determined by apportionment or allocation between different businesses of the Licensee including the Licensed Business, together with a description of the basis of the apportionment or allocation; or(ii)Charged from or to each such Other Business together with a description of the basis of that charge;(d)"Base Year" means the Financial Year immediately preceding first year of the Control Period;(e)"Commission" means the Delhi Electricity Regulatory Commission;(f)"Conduct of Business Regulations" means the Delhi Electricity Regulatory Commission Comprehensive (Conduct of Business) Regulations, 2001, as amended from time to time;(g)"Control Period" means a multi-year period fixed by the Commission, from 1st April 2012 and up to 31st March 2015;(h)"Financial Year" means a period commencing on 1st April of a calendar year and ending on 31st March of the subsequent calendar year;(i)"Licence" means a Licence granted under Section 14 of the Act;(j)"Licensed Business" shall mean the functions and activities, which the Licensee is required to undertake in terms of the Licence granted or being a deemed Licensee under the Act;(k)"Licensee" means a person who has been granted a Licence and shall include a deemed Licensee;(l)"Non-Tariff Income" means income relating to the Licensed business other than from tariff (Wheeling and Retail Supply), and excluding any income from Other Business, cross-subsidy surcharge and additional surcharge;(m)"Other Business" means other businesses of the Distribution Licensee under section 51 of the Electricity Act 2003;(n)"Retail Supply Business" means the business of sale of electricity by a Distribution Licensee to the category of consumers within its area of supply in accordance with the terms of the Licence for distribution and retail supply of electricity;(o)"Retail Supply Tariff" is the tariff charged by the Distribution Licensee for supply to its Customers other than open access consumer which includes charges for Wheeling and Retail Supply;(p)"Trading Business" means the business of purchase of electricity by the Distribution Licensee for resale of electricity to other Licensee or consumers or category of consumers outside the area of supply of the Distribution Licensee;(q)"Wheeling" means the operation whereby the distribution system and associated facilities of a Distribution Licensee, are used by another person for the conveyance of electricity on payment of charges to be determined under section 62;(r)"Wheeling Business" means the business of operating and maintaining a distribution system for conveyance of electricity in the area of supply of the Distribution Licensee.(2)Words and expressions used in these Regulations and not defined herein but defined in the Act shall have meaning assigned to them under the Act.(3)All proceedings under these Regulations shall be governed by the Conduct of Business Regulations.

### **3. Scope Of Regulations And Extent Of Application.**

(1)In accordance with the principles laid out in these Regulations, the Commission shall determine the tariff for (a)Wheeling of electricity, i.e. Wheeling Tariff;(b)Retail sale of electricity, i.e. Retail Supply Tariff;(c)Provided that in case of distribution of electricity in the same area by two or more Distribution Licensees, the Commission may, for promoting competition among Distribution Licensees, fix only maximum ceiling of tariff for retail sale of electricity;(d)Provided further that where the Commission has permitted open access to any category of consumers under Section 42 of

the Act, the Commission shall determine the Wheeling Tariff, cross-subsidy surcharge, additional surcharge and other open access related charges in accordance with these Regulations and Delhi Electricity Regulatory Commission (Terms and Conditions of Open Access) Regulations, 2005.(2)In accordance with the principles laid out in these Regulations, the Commission shall determine the Aggregate Revenue Requirement (ARR) and Tariff for(a)Wheeling Business; and(b)Retail Supply Business.(3)The ARR determined for the Wheeling Business shall be used to fix the Wheeling Tariff for wheeling of electricity.(4)The ARR determined for Retail Supply Business shall be used to fix the Retail Supply Tariff for retail sale of electricity.(5)These Regulations shall apply to all the Distribution Licensees in the National Capital Territory of Delhi.

#### **4. General Approach And Guiding Principles.**

(1)The Commission shall adopt Multi Year Tariff framework for approval of ARR and expected revenue from tariffs and charges.(2)The Multi Year Tariff framework shall be based on the following:(a)Business Plan of the Distribution Licensee for the entire Control Period to be submitted to the Commission for approval, prior to the start of the Control Period;(b)Applicant's forecast of expected Wheeling Tariff and Retail Supply Tariff for each year of the Control Period, based on reasonable assumptions of the underlying financial and operational parameters, as submitted in the Business Plan;(c)Trajectory for specific parameters shall be stipulated by the Commission, where the performance of the applicant is sought to be improved through incentives and disincentives;(d)Annual review of performance shall be conducted based on the actual vis-à-vis the approved forecast and categorization of variations in performance into controllable factors and uncontrollable factors;(e)The Distribution Licensee's performance vis-à-vis the AT&C loss targets specified by the Commission shall be appropriately incentivise/penalise; and(f)Variation in revenue / cost on account of uncontrollable factors like sales, power purchase and controllable factors - RoCE and Depreciation shall be trued up annually.Segregation of Wheeling and Retail Supply Business(3)The Distribution Licensee shall segregate the accounts of the Licensed business into Wheeling Business and Retail Supply Business.(4)For such period until accounts are segregated, the Licensees shall prepare an Allocation Statement to apportion costs and revenues to respective business. The Allocation Statement along with the methodology which should be consistent over the Control Period, as approved by the Board of Directors of the Licensee, shall be submitted for approval of the Commission.Baseline(5)The baseline values (operating and cost parameters) for the Control Period shall be determined by the Commission and based on the approved values by the Commission in the past, latest audited accounts, estimate of the actuals for the relevant year, prudence check and other factors considered appropriate by the Commission.(6)The Commission shall normally not revisit the performance targets.Targets for Controllable Parameters(7)The Commission shall set targets for each year of the Control Period for the items or parameters that are deemed to be "controllable" and which include:(a)AT&C Loss, which shall be measured as the difference between the net units input into the distribution system for sale to all its consumer and the units realised wherein the units realised shall be equal to the product of units billed and collection efficiency;(b)Provided that units billed shall include the units realised on account of theft measured on actual basis i.e. number of units against which payment of theft billing has been realised;(c)Distribution losses, which shall be measured as the difference between the net units input into the distribution system for sale to all its consumer and sum of the total energy billed in its

Licence area in the same year;(d)Collection efficiency, which shall be measured as ratio of total revenue realised to the total revenue billed in the same year:(e)Provided that revenue realisation from electricity duty and late payment surcharge shall not be included for computation of collection efficiency;(d)Operation and Maintenance Expenditure which includes employee expenses, repairs and maintenance expenses, administration and general expenses and other miscellaneous expenses viz. audit fees, rents, legal fees etc;(e)Return on Capital Employed;(f)Depreciation; and(g)Quality of Supply.(8)The target AT&C loss levels to be achieved by each Distribution Licensee during each year of the Control Period shall be determined by the Commission based upon benchmarking, past trends, business plan submitted by the Distribution Licensee and any other factor considered relevant by the Commission.(i)The Distribution Licensee will be eligible for incentive by the way of higher rate of Return on Equity (to be considered while calculating RoCE) as shown below for achieving lower AT&C loss level than specified in the loss reduction trajectory:(ii)Additional Return on Equity (%) =  $(X_i - Y_i) / (X_{i-1} - X_i)$  (iii)Where, (iv)  $X_i$  = Target AT&C loss level for  $i$ th year, (v)  $X_{i-1}$  = Target AT&C loss level for  $(i-1)$ th year, (vi)  $Y_i$  = Actual AT&C Loss level for  $i$ th year:(vii)Provided that any financial loss on account of under performance with respect to AT&C loss targets shall be to the Licensee's account.Sales Forecast(9)The Licensee shall forecast sales for each customer category and sub-categories for each year of the Control Period in their filings, for the Commission's review and approval.(10)The Commission shall examine the forecasts for their reasonableness and consistency based on growth in the number of consumers, pattern of consumption, losses and demand of electricity in previous years and anticipated growth in the next year and any other factor, which the Commission may consider relevant and approve the sales forecast with such modifications as deemed fit for each year of the Control Period.(11)Sales shall be treated as uncontrollable.(12)Sale of electricity, if any, to electricity traders or other distribution Licensee(s) shall be separately indicated;(13)The distribution Licensee(s) shall also indicate category-wise open access customers and sales. The demand and energy wheeled for them shall be shown separately for:(a)Supply within its area of supply; and(b)Supply outside its area of supply.Capital Investment(14)The Commission shall approve capital investment plan of the Licensees for the Control Period commensurate with load growth, distribution loss reduction and quality improvement proposed in the Business Plan.(15)Capital investment plan submitted by the Licensee shall also provide details of ongoing projects that will spill into the Control Period and new projects that will commence during the Control Period but may extend beyond the Control Period.(16)The investment plan shall be zone wise /scheme-wise and with respect to each zone/scheme, shall include:(a)Purpose of investment (i.e. replacement of existing assets, meeting load growth, technical loss reduction, non-technical loss reduction, meeting reactive energy requirements, customer service improvement, improvement in quality and reliability of supply, etc) ;(b)Capital Structure;(c)Capitalization Schedule;(d)Financing Plan;(e)Cost-benefit analysis;(f)Performance improvement envisaged in the Control Period.(17)The Commission shall review actual capital expenditure incurred and capitalisation at the end of each year of the Control Period vis-à-vis the approved capital expenditure and capitalisation schedule. Based on trued up capital expenditure and capitalisation, the Commission shall true up Return on Capital Employed (RoCE) and depreciation while truing up for any year of the Control Period. The Commission may also revise the capital expenditure and capitalisation for remaining years of the Control Period based on trued up capital expenditure and capitalisation for any year.(18)Capital expenditure shall normally be incurred by the Licensee after the approval of the Commission.(19)The Licensee shall quarterly

submit the details of the scheme-wise asset capitalisation along with receipt of the Electrical Inspector certificate (wherever applicable) and other documents as may be prescribed by the Commission from time to time for allowing Return on Capital Employed and Depreciation. Quality of Supply and Customer Service(20)The quality of supply and the customer service parameters shall be monitored as per the norms to be prescribed by the Commission separately from time to time. For certain parameters listed in clause 6.2, the Commission shall monitor Licensee's performance with respect to the targets specified.True Up(21)The true up across various controllable and uncontrollable parameters shall be conducted as per principle stated below:(a)Variation in revenue / expenditure on account of uncontrollable sales / power purchase respectively shall be trued up every year;(b)For controllable parameters,(i)Any surplus or deficit on account of Operation and Maintenance (O&M) expenses shall be to the account of the Licensee and shall not be trued up in ARR; and(ii)Depreciation and Return on Capital Employed shall be trued up every year based on the actual capital expenditure and actual capitalisation vis-à-vis capital investment plan (capital expenditure and capitalisation) approved by the Commission.

## 5. Principles For Determination Of ARR.

-Arr For Wheeling Business(1)The Aggregate Revenue Requirement for the Wheeling Business of the Distribution Licensees for each year of the Control Period, shall contain the following items;(a)Operation and Maintenance expenses;(b)Return on Capital Employed;(c)Depreciation;(d)Income Tax;(e)Interest on Consumer Security Deposit;(f)Less: Non-Tariff Income;(g)Less: Income from Other Business; and(h)Less: Income from wheeling of electricity.ARR for Retail Supply Business(2)The Aggregate Revenue Requirement for the Retail Supply Business of the Distribution Licensee, for each year of the Control Period, shall contain the following items;(a)Cost of power procurement;(i)Transmission & Load Dispatch charges;(ii)Operation and Maintenance expenses;(iii)Return on Capital Employed;(iv)Depreciation;(v)Income Tax;(vi)Interest on Consumer Security Deposit;(vii)Less: Non-Tariff Income;(viii)Less: Income from Other Business; and(ix)Less: Receipts on account of cross subsidy surcharge and additional surcharge from open access customers.Operation and Maintenance Expenses(3)Operation and Maintenance (O&M) expenses shall include:(a)Salaries, wages, pension contribution and other employee costs;(b)Administrative and General expenses;(c)Repairs and Maintenance; and(d)Other miscellaneous expenses, statutory levies and taxes (except corporate income tax).(4)The Licensee shall submit the O&M expenses for the Control Period as prescribed in Multi Tear Tariff filing procedure. 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.(5)O&M expenses permissible towards ARR for each year of the Control Period shall be determined using the formula detailed below:(a) $O\&M_n = (R\&M_n + EMP_n + A\&G_n) * (1 - X_n)$ Where,(i) $R\&M_n = K * GFAn-1$ ;(ii) $EMP_n + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (INDX)$ ;(iii) $INDX = 0.55 * CPI + 0.45 * WPI$ ;(iv) $X_n$  is an efficiency factor for nth year. Value of  $X_n$  shall be determined by the Commission in the MYT Tariff order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor the Commission feels appropriate;(v) $EMP_n$  Employee Costs of the Licensee for the nth year;(vi) $A\&G_n$  Administrative and General Costs of the Licensee for the nth year; and(vii) $R\&M_n$  Repair and

Maintenance Costs of the Licensee for the nth year. Where, (i) 'K' is a constant (could be expressed in %). Value of K for each year of the Control Period shall be determined by the Commission in the MYT Tariff order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor considered appropriate by the Commission; (ii) INDX - Inflation Factor to be used for indexing. Value of INDX shall be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding ten years before the base year. Return on Capital Employed (6) Return on Capital Employed (RoCE) shall be used to provide a return to the Distribution Licensee, and shall cover all financing costs, without providing separate allowances for interest on loans and interest on working capital. (7) The Regulated Rate Base (RRB) shall be used to calculate the total capital employed which shall include the original cost of assets and working capital, less the accumulated depreciation. Capital work in progress (CWIP) shall not form part of the RRB. Consumer Contribution, capital subsidies / grants shall be deducted in arriving at the RRB. (8) The RRB shall be determined for each year of the Control Period at the beginning of the Control Period based on the approved capital investment plan with corresponding capitalisation schedule and normative working capital. (9) The Regulated Rate Base for the ith year of the Control Period shall be computed in the following manner:  $RRBi = RRB_{n-1} + \Delta ABi / 2 + \Delta WCi$ ; Where, 'i' is the ith year of the Control Period, i = 1, 2, 3, 4 for the first Control Period; RRB<sub>i</sub>: Regulated Rate Base for the ith year of the Control Period;  $\Delta ABi$ : Change in the Regulated Rate Base in the ith year of the Control Period. This component shall be the average of the value at the beginning and end of the year as the asset creation is spread across a year and is arrived at as follows:  $\Delta ABi = \frac{Invi - Di}{2}$ ; Where, Invi: Investments projected to be capitalised during the ith year of the Control Period and approved; Di: Amount set aside or written off on account of Depreciation of fixed assets for the ith year of the Control Period; CCo: Consumer Contributions pertaining to the  $\Delta RRBi$  and capital grants/subsidies received during ith year of the Control Period for construction of service lines or creation of fixed assets; RRB<sub>i-1</sub>: Regulated Rate Base for the Financial Year preceding the ith year of the Control period. For the first year of the Control Period, RRB<sub>i-1</sub> shall be the Regulated Rate Base for the Base Year i.e. RRB<sub>0</sub>; RRB<sub>0</sub> = OCFA<sub>0</sub> - ADo - CCo; Where; OCFA<sub>0</sub>: Original Cost of Fixed Assets at the end of the Base Year available for use and necessary for the purpose of the Licensed business; ADo: Amounts written off or set aside on account of depreciation of fixed assets pertaining to the regulated business at the end of the Base Year; CCo: Total contributions pertaining to the OCFA<sub>0</sub>, made by the consumers towards the cost of construction of distribution/service lines by the Distribution Licensee and also includes the capital grants/subsidies received for this purpose;  $\Delta WCi$ : Change in normative working capital requirement in the ith year of the Control Period, from the (i-1)th year. For the first year of the Control Period (i=1),  $\Delta WCi$  shall be taken as the normative working capital requirement of the first year. (10) Return on Capital Employed (RoCE) for the year i? shall be computed in the following manner: Where, WACC<sub>i</sub> is the Weighted Average Cost of Capital for each year of the Control Period;  $RoCE = WACC_i \times RRB_i$  - Regulated Rate Base is the asset base for each year of the Control Period based on the capitalisation and working capital. (11) The WACC for each year of the Control Period shall be computed at the start of the Control Period in the following manner: Where,

$$WACC = \left[ \frac{D/E}{1 + D/E} \right] \times r_d + \left[ \frac{1}{1 + D/E} \right] \times r_e$$

D/E is the Debt to Equity Ratio and for the purpose of determination of tariff, debt-equity ratio for the asset capitalized shall be 70:30. Where equity employed is in excess of 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as notional loan. The interest rate on the amount of equity in excess of 30% treated as notional loan shall be the weighted average rate of the loans of the Licensee for the respective years and shall be further limited to the prescribed rate of return on equity in the Regulations. Where actual equity employed is less than 30%, the actual equity and debt shall be considered: Provided that the Working capital shall be considered 100% debt financed for the calculation of WACC; Provided further that the Debt to Equity Ratio for the assets covered under Transfer Scheme, dated July 1, 2002 shall be considered as per the debt and equity in the transfer scheme; Provided further that Debt to Equity Ratio for the assets capitalised till 1.04.2012 (other than assets covered under Transfer Scheme) shall be considered as per the debt and equity approved by the Commission at the time of capitalization.  $r_d$  is the Cost of Debt and shall be determined at the beginning of the Control Period after considering Licensee's proposals, present cost of debt already contracted by the Licensee, credit rating, benchmarking and other relevant factors (risk free returns, risk premium, prime lending rate etc.);  $r_e$  is the Return on Equity and shall be considered at 16% post tax: Provided further that any additional investment made by the Licensee other than in the fixed asset of the distribution business, shall not qualify for the return on equity. (12) The Distribution Licensee shall make every effort to refinance the loan as long as it results in net benefit to the consumers. The cost associated with such refinancing shall be borne by the consumers and any benefit on account of refinancing of loan and interest on loan shall be passed on to the consumers. Refinancing may also include restructuring of debt. (13) In case any moratorium period is availed by the Licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as notional repayment of loan during those years and interest on loan shall be calculated accordingly. Working Capital (14) Working capital for wheeling business of electricity shall consist of (a) Receivables for two months of Wheeling Charges. (15) Working capital for retail supply of electricity shall consist of (a) Receivables for two months of revenue from sale of electricity; (b) Less: Power purchase costs for one month; (c) Less: Transmission charges for one month; and (d) Less: Wheeling charges for two month. Depreciation (16) Depreciation shall be calculated for each year of the Control Period, on the amount of Original Cost of the Fixed Assets considered for calculation of the Regulated Rate Base of the corresponding year: Provided that depreciation shall not be allowed on assets funded by consumer contribution (i.e., any receipts from consumers that are not treated as revenue) and capital subsidies/grants. Provision for replacement of such assets shall be made in the Capital Investment plan. (17) Depreciation for each year of the Control Period shall be determined based on the methodology as specified in these Regulations along with the rates and other terms specified in Appendix 1 of these Regulations. (18) Depreciation shall be calculated annually, based on the straight line method, over the useful life of the asset. The base value for the purpose of depreciation shall be original cost of the asset. (19) The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset. Land is not a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset. (20) Provided that the Licensee shall submit yearwise details of the assets which have completed its useful life; (21) Provided further that the Licensee shall submit yearwise details of assets retired and disposed off, which shall be removed from the Original Cost of Fixed Assets; (22) Provided further that assets shall normally be not retired before completion of the useful

life and the Licensee shall take prior approval of the Commission in case of retiring any asset before its useful life.(23)Depreciation shall be charged from the first year of operation of the asset. In case, the operation of the asset is for a part of the year, depreciation shall be charged on a pro rata basis.(24)In addition to allowable depreciation, the Distribution Licensee shall be entitled to Advance Against Depreciation, computed in the manner given hereunder:(25)AAD = Loan (raised for capital expenditure) repayment amount based on loan repayment tenure, subject to a ceiling of 1/10th of loan amount minus depreciation as calculated on the basis of these Regulations;(26)Provided that Advance Against Depreciation shall be permitted only if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year;(27)Provided further that Advance Against Depreciation in a year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation up to that year.(28)On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.Cost of Power Procurement(29)Quantum of Power Purchase - The Commission approved category-wise sales forecast shall be applied along with Distribution loss trajectory for estimating the Licensees' power procurement requirement for each year of the Control Period.(30)Distribution Licensee shall be allowed to recover the net cost of power it procures from sources approved by the Commission, viz. Intra-state and Inter-state Trading Licensees, Bilateral Purchases, Bulk Suppliers, State generators, Independent Power Producers, Central generating stations, non-conventional energy generators, generation business of the Distribution Licensee and others, assuming maximum normative rebate available from each source for payment of bills through letter of credit on presentation of bills for supply to consumers of Retail Supply Business;(i)Provided that the Distribution Licensee shall propose the cost of power procurement taking into account the fuel adjustment formula specified for the generating stations and net revenues through bilateral exchanges and Unscheduled Interchange (UI) transactions;(ii)Provided further that where the Licensee utilises a part of the power purchase approved or bulk supply allocated or contracted for the Retail Supply Business for its Trading Business, the Distribution Licensee shall provide an Allocation Statement clearly specifying the cost of power purchase that is attributable to such trading activity.(31)While approving the cost of power purchase, the Commission shall determine the quantum of power to be purchased from various sources in accordance with the principles of merit order schedule and despatch based on a ranking of all approved sources of supply in the order of their variable cost of power purchase. All power purchase costs shall be considered legitimate unless it is established that the merit order principle has been violated or power has been purchased at unreasonable rates or the power procurement guidelines as laid down by the Commission from time to time has not been followed.(32)To promote economical procurement of power as well as maximizing revenue from sale of surplus power, the Commission may evolve an appropriate mechanism to incentivise / penalise the Distribution Licensee.(33)The Renewable Purchase Obligation of the Distribution Licensee shall be as per the order issued by the Commission from time to time.AT&C Losses(34)The Licensee shall propose AT&C loss reduction trajectory for each year of the Control Period. For any year of the Control Period, loss reduction should be at least 30% of the total AT&C loss reduction target for the Control Period. The Commission shall examine the filings made by the Licensee for the AT&C loss trajectory for each year of the Control Period and approve the same with modification as considered necessary.(35)The Distribution Licensee shall also propose voltage-wise losses for each year of the Control Period for the determination of voltage-wise cost of supply and determination of



voltage-wise Wheeling Tariff. Transmission, Load Despatch & Wheeling Charges(36)The Distribution Licensee shall be allowed to recover net transmission and load despatch charges payable to the Transmission Licensees (Central Transmission Utility, State Transmission Utility etc.) and System Operators (Regional Load Despatch Centre, State Load Despatch Centre etc.) for access to and use of the inter-state transmission system, intra-state transmission system and availing load despatch services assuming maximum normative rebate available from each source for payment of bills through letter of credit on presentation of bills in accordance with the tariffs approved from time to time by CERC and appropriate State Commissions, as the case may be.(37)The Distribution Licensee shall also be allowed to recover the Wheeling Charges in case the distribution network of other Distribution Licensee is used for procurement of power for the Retail Supply Business. Corporate Income Tax(38)Tax on income, if any, liable to be paid on the Licensed business of the Distribution Licensee shall be limited to tax on return on the equity component of capital employed. Any additional tax other than this shall not be a pass through, and it shall be payable by the Distribution Licensee itself.(39)The actual assessment of income tax should take into account benefits of tax holiday, and the credit for carry forward losses applicable as per the provisions of the Income Tax Act 1961 shall be passed on to the consumers. Interest on Consumer Security Deposits(40)Interest paid on consumer security deposits shall be based on the rate specified by the Commission in the "Delhi Electricity Supply Code and Performance Standards Regulations, 2007", and shall be a pass through in the ARR. Non-Tariff Income(41)All incomes being incidental to electricity business and derived by the Licensee from sources, including but not limited to profit derived from disposal of assets, rents, late payment surcharge, meter rent (if any), income from investments, income on investment of consumer security deposit and miscellaneous receipts from the consumers shall constitute Non-Tariff Income of the Licensee:(42)Provided that income arising from investment of shareholder's funds, if any, shall not be included in Non Tariff Income subject to prudence check of requisite detailed information submitted by the Licensee to the Commission.(43)The amount received by the Licensee on account of Non-Tariff Income shall be deducted from the aggregate revenue requirement in calculating the net revenue requirement of such Licensee. Other Income of Licensee(44)Where the Licensee is engaged in any other business, the income from such business shall be calculated as per "DERC Treatment of Income from Other Business of Transmission Licensee and Distribution Licensee Regulation, 2005"and shall be deducted from the Aggregate Revenue Requirement in calculating the revenue requirement of the Licensee;(45)Provided that the Licensee shall follow a reasonable basis for allocation of all joint and common costs between the Distribution Business and the Other Business and shall submit the Allocation Statement as approved by the Board of Directors to the Commission along with his application for determination of tariff;(46)Provided further that where the sum total of the direct and indirect costs of such Other Business exceed the revenues from such Other Business or for any other reason, no amount shall be allowed to be added to the aggregate revenue requirement of the Licensee on account of such Other Business. Income from cross-subsidy surcharge and additional surcharge on charges of wheeling(47)The amount received or to be received by the Licensee on account of cross-subsidy surcharge and additional surcharge, as approved by the Commission from time to time in accordance with the Delhi Electricity Regulatory Commission (Terms and Conditions of Open Access) Regulations 2005 shall be shown separately against the consumer category that is permitted open access as per the phasing plan.(48)Cross-subsidy surcharge and additional surcharge shall be shown as revenue from tariff from the consumer categories permitted open access

in accordance with the Delhi Electricity Regulatory Commission (Terms and Conditions of Open Access) Regulations 2005 and such amount shall be utilized to meet the cross-subsidy requirements of subsidised categories and fixed costs of the Licensee arising out of his obligation to supply. The Licensee shall provide such details in its annual filings. Truing Up Mechanism(49)Truing-up shall be carried out in accordance with Regulation 4.21, for each year based on the actual/audited information and prudence check by the Commission;(i)Provided that if such variations are large, and it is not feasible to recover in one year alone, the Commission may take a view to create a regulatory asset, as per the guidelines provided in clause 8.2.2 of the National Tariff Policy.(ii)Provided further that under business as usual conditions, the Commission, to ensure tariff stability, may include the opening balances of uncovered gap / trued-up costs in the subsequent Control Period's ARR instead of including in the year succeeding the relevant year of the control period after providing for transition financing arrangement or capital restructuring.

## **6. Quality Of Supply And Services.**

(1)The quality of supply and the customer service parameters shall be monitored as per the norms specified by the Commission from time to time.(2)The Licensee shall propose baseline and performance trajectory for all quality parameters as specified in the Delhi Electricity Supply Code and Performance Standards Regulations, 2007 including amendments thereto.(3)The Commission shall make an assessment on reliability of baseline data and may prescribe the performance trajectory for each identified parameter for the Control Period. The Commission shall develop a performance framework to encourage Licensees to improve quality of supply and services.(4)The Licensee shall submit the performance on each parameter in the form and manner directed by the Commission. The Commission shall conduct periodic reviews on the performance of the Licensee with respect to quality parameters.

## **7. Multi Year Tariff Process.**

(1)The Multi Year Tariff filing shall be in such form and in such manner as may be decided by the Commission and as per the provisions of Conduct of Business Regulations.(2)The Licensee shall also submit the Multi Year Tariff filing in electronic format to the Commission. Multi-Year Filings for the Control Period Business Plan Filings(3)The Distribution Licensee shall file for the Commission's approval, on 1st April of the year preceding the first year of the Control Period or any other date as may be directed by the Commission, a Business Plan approved by the Board of Directors. The Business Plan shall be for the entire Control Period and shall, inter alia, contain;(a)Sales/Demand Forecast for each customer category and sub-categories for each year of the Control Period;(b)AT&C loss reduction trajectory and collection efficiency for each year of the Business Plan;(c)Power Procurement Plan based on the sales forecast and distribution loss trajectory for each year of the business plan period. The power procurement plan should also include Energy Efficiency and Demand Side Management measures;(d)The Capital Investment Plan shall take into account the sales/demand forecast, power procurement plan, distribution loss trajectory, targets for quality of supply, etc. The investment plan shall be consistent with the perspective plan drawn by the State Transmission Utility, and shall include the corresponding capitalisation schedule and financing plan;(e)The appropriate capital structure and cost of financing (interest on debt) and return on

equity, terms of the existing loan agreements, etc; (f) The Operation and Maintenance (O&M) costs estimated for the Base Year and two years prior to the Base Year with complete details, together with the forecast for each year of the Business Plan Period based on the proposed efficiency in operating costs, norms for O&M cost allowance including indexation and other appropriate mechanism; (g) Details of depreciation based on the fair life of the asset and capitalisation schedules for each year of the Control Period; (h) A set of targets proposed for other controllable items such as working capital, quality of supply targets, etc. The targets shall be consistent with the capital investment plan proposed by the Licensee; (i) Proposals for other items such as external parameters used for indexation (inflation, etc); (j) The filings in addition to the Business Plan period shall also contain the data for the cost and revenue parameters for the 2002 – 2012 period.

**Tariff Filing**

(4) The Distribution Licensee shall file an application for approval of Wheeling Tariff and Retail Supply Tariff for each year of the Control Period, not less than 120 days before the commencement of the first year of the Control Period or such other date as may be directed by the Commission.

(5) The Licensee shall propose capacity based Wheeling Tariff. The Licensee shall also specify the distribution losses voltage-wise to provide for adjustment of losses in the system.

(6) The filings for Wheeling Tariff shall contain the following: (a) The Distribution system or network usage forecast for each year of the Control Period consistent with the Business Plan; (b) Proposals for computation of tariffs for Wheeling of electricity for each of the years of the Control Period, including the losses and the procedure thereof; (c) Proposals for Non-Tariff Income with item-wise description and details; (d) Proposals in respect of income from Other Businesses like Consultancy Services, Convergence, Training Facilities, etc; (e) The proposed Wheeling Tariff shall be voltage-wise; (f) Expected Revenue from the proposed Wheeling Tariff including additional surcharge, etc.

(7) The filings for Retail Supply Tariff shall contain the following: (a) Licensee shall submit proposal for retail sale of electricity for the consumers pertaining to Retail Supply Business, which shall include tariffs for each consumer category, slab-wise and voltage wise. The proposed tariff may also be based on energy charges, demand charges, minimum charges, etc along with the tariff rationalization measures; (b) Proposals for Non-Tariff Income with item-wise description and details; (c) Each tariff proposal submitted by the Distribution Licensee shall be supported with a cost-of-service model allocating the costs of the Licensed business to each category of consumers based on voltage-wise costs and losses; (d) The tariff proposals of the Licensee should demonstrate that the tariffs are progressively reflecting the cost of supply; (e) Expected Revenue from the proposed Retail Supply Tariff, and other matters considered appropriate by the Distribution Licensee, including incentive schemes to consumers, cross subsidy surcharge, etc.

**Annual Performance Review (APR) during the Control Period**

(8) The Distribution Licensee shall submit information as part of annual review on actual performance to assess its performance vis-à-vis performance targets approved by the Commission at the beginning of the Control Period. The Licensee shall submit information on performance on uncontrollable parameters (Sales, Power Purchase, Non-Tariff Income, etc) and controllable parameters (AT&C Losses, Distribution Losses, Collection Efficiency, O&M Expenses, capital investment, capitalisation, depreciation, RoCE, etc).

(9) The Licensee shall submit the revised ARR and corresponding tariff adjustments 120 days before the commencement of the Financial Year. The revised estimates shall be required because of true-up costs on account of uncontrollable variations, revised sales and power purchase estimates, depreciation, Return on Capital Employed, incentive mechanism for exceeding the targets, and implementation of performance framework for quality of supply targets as per the prescribed

formats. Review at the end of the Control Period (10) Towards the end of the Control Period, the Commission shall seek to review if the implementation of the principles laid down in these Regulations has achieved their intended objectives. While doing this, the Commission shall take into account, among other things, the industry structure, sector requirements, consumer and other stakeholder expectations and Licensee's requirements at that point in time. Depending on the requirements of the sector to meet the objects of the Act, the Commission may revise the principles for the next Control Period. (11) The end of the Control Period shall be the beginning of the next Control Period and the Licensee shall follow the same procedure unless required otherwise by the Commission. The Commission shall analyse the performance of the Licensee with respect to the targets set out at the beginning of the Control Period and based on the actual performance, expected efficiency improvements and other factors prevalent, determine the initial values for the next Control Period.

## **8. Government Support For Social Causes.**

(1) Any class of consumers, be it a consumer below the poverty line, school, hospital etc, desirous of seeking Government support by way of subsidy, shall approach the Government of NCT of Delhi for this purpose. It would be the discretion of the Government of NCT of Delhi to consider giving subsidy to any class of consumers it so desires; Provided that the amount towards social causes and subsidy for a particular year of the Control Period shall be paid at least in four equal quarterly instalments and in advance to the period to which it is applicable; (2) Provided further that no such direction of the State Government shall be operative if the subsidy payment is not made in accordance with the provisions contained in this section and the tariff fixed by the Commission shall be applicable from the date of issue of orders.

## **9. Disposal Of Application.**

(1) The Commission shall process the filings made by the Distribution Licensee in accordance with these Regulations and the Conduct of Business Regulations. (2) Based on the Distribution Licensee's filings, objections/ suggestions from public and other stakeholders, the Commission may accept the application with such modifications and/or such conditions as may be deemed just and appropriate and issue, within 120 days of the receipt of the application and after considering all suggestions and objections from public and other stakeholders, an Order containing, inter alia targets for controllable items and the approved ARR for the Wheeling Business and the ARR for the Retail Supply Business along with the Wheeling Tariff and Retail Supply Tariff.

## **10. Periodic Reviews.**

(1) To ensure smooth implementation of the Multi Year Tariff (MYT) Framework, the Commission may undertake periodic reviews of Licensee's performance during the Control Period, to address any practical issues, concerns or unexpected outcomes that may arise. (2) The Distribution Licensee shall submit information as part of annual review on actual performance to assess the performance vis-à-vis the targets approved by the Commission at the beginning of the Control Period. This shall include annual statements of its performance and accounts including latest available audited

accounts as well as the regulatory accounts in the prescribed formats and the tariff worked out in accordance with these Regulations.(3)The Licensee shall submit the revised Aggregate Revenue Requirement and corresponding tariff adjustments 120 days before the commencement of the Financial Year.(4)The Commission may also specify any modifications to the forecast of the Distribution Licensee for the remainder of the Control Period, with detailed reasons for the same.

## 11. Truing Up For The Previous Control Period.

(1)Performance review and adjustment of variations of the Distribution Licensees for year FY 2011-12 shall be considered during the Control Period in accordance with the applicable MYT Regulations for that period.

## 12. Miscellaneous.

-Issue of Orders and Practice Directions(1)Subject to the provision of the Act and these Regulations, the Commission may, from time to time, issue Orders and Practice directions in regard to the implementation of these Regulations and procedure to be followed on various matters, which the Commission has been empowered by these Regulations to direct, and matters incidental or ancillary thereto.(2)Notwithstanding anything contained in these Regulations, the Commission shall have the authority, either suo motu or on a petition filed by any interested or affected party, to determine the tariff of any Licensee.Powers to remove difficulties(3)If any difficulty arises in giving effect to any of the provisions of these Regulations, the Commission may, by a general or special order, not being inconsistent with the provisions of these Regulations or the Act, do or undertake to do things or direct the Licensee to do or undertake such things which appear to be necessary or expedient for the purpose of removing the difficulties.Power of Relaxation(4)The Commission may in public interest and for reasons to be recorded in writing, relax any of the provision of these Regulations.Interpretation(5)If a question arises relating to the interpretation of any provision of these Regulations, the decision of the Commission shall be final.Saving of Inherent Powers of the Commission(6)Nothing contained in these Regulations shall limit or otherwise affect the inherent powers of the Commission from adopting a procedure, which is at variance with any of the provisions of these Regulations, if the Commission, in view of the special circumstances of the matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient to depart from the procedure specified in these Regulations.Enquiry and Investigation(7)All enquiries, investigations and adjudications under these Regulations shall be done by the Commission through the proceedings in accordance with the provisions of the Conduct of Business Regulations.Power to Amend(8)The Commission, for reasons to be recorded in writing, may at any time vary, alter or modify any of the provision of these Regulations by amendment.Appendix 1Depreciation Schedule

S. No	Asset Class	Useful Life (Years)	Rate (%)
(1)	(2)	(3)	(4)
1.	Land owned under full title	Infinity	0

2. Land held under lease

(A) For investment in land	The period of lease or the period remaining unexpired on the Assignment of the lease	0
(B) For cost of clearing site	The period of lease remaining unexpired at the date of clearing the site	0

3. Assets Purchased New

(A) Plant and machinery in generating stations including plant foundations		
(i) Hydro-electric	35	2.57
(ii) Steam-electric NHRS & Waste Heat Recovery Boilers / Plants	25	3.60
(iii) Diesel electric & gas plant	15	6.00
(B) Cooling towers and circulating water systems	25	3.60
(C) Hydraulic works forming part of hydro-electric system including:		
(i) Dams, spillways weirs, canals, reinforced concrete flumes & siphons	50	1.80
(ii) Reinforced concrete pipelines and surge tanks, steel pipelines, sluice gates, steel surge (tanks) hydraulic control valves and other hydraulic works	35	2.57
(D) Building & civil engineering works of a permanent character, not mentioned above:		
(i) Offices & showrooms	50	1.80
(ii) Containing thermo-electric generating plant	25	3.60
(iii) Containing hydro-electric generating plant	35	2.57
(iv) Temporary erection such as wooden structures	5	18.00
(v) Roads other than kutchra roads	50	1.80
(vi) Others	50	1.80
(E) Transformers, transformer (kiosk) sub-station equipment & other fixed apparatus (including plant foundations)		
(i) Transformers (including foundations) having a rating of 100 kilo volt amperes and over	25	3.60

(ii) Others	25	3.60
(F) Switchgear, including cable connections	25	3.60
(G) Lightning arrestors:		
(i) Station type	25	3.60
(ii) Pole type	15	6.00
(iii) Synchronous condenser	35	2.57
(H) Batteries	5	18.00
(I) Underground cable including joint boxes and disconnected boxes	35	2.57
(J) Cable duct system	50	1.80
(K) Overhead lines including supports:		
(i) Lines on fabricated steel operating at nominal voltages higher than 66 kV	35	2.57
(ii) Lines on steel supports operating at nominal voltages higher than 13.2 kV but not exceeding 66 kV	25	3.60
(iii) Lines on steel or reinforced concrete supports	25	3.60
(iv) Lines on treated wood supports	25	3.60
(L) Meters	15	6.00
(M) Self propelled vehicles	5	18.00
(N) Air conditioning plants:		
(i) Static	15	6.00
(ii) Portable	5	18.00
(O)		
(i) Office furniture and fittings	15	6.00
(ii) Office equipments	15	6.00
(iii) Internal wirings including fittings and apparatus	15	36.00
(iv) Street Light fittings	15	36.00
(P) Apparatus let on hire:		
(i) Other than motors	5	18.00
(ii) Motors	15	6.00
(Q) Communication equipment		
(i) Radio and higher frequency carrier systems	15	6.00
(ii) Telephone lines and telephones	15	6.00
(R) Assets purchased in second hand and	Such reasonable period as the	

assets not otherwise provided for in the schedule

Commission determines in each case having regard to the nature, age and conditions of assets at the time of its acquisition by the owner

Appendix 2 SEGREGATION OF COST BETWEEN WHEELING AND RETAIL SUPPLY BUSINESS  
The typical role of a Distribution company is:

**1. Distribution Wheeling function involves transporting of electricity from transmission systems (transmission ends at 66kV) to customers. Traditionally described as "customers end" part of wires business (transmission is the "generator end"). This involves setting up of network consisting of the poles, wires, transformers etc. to reach the electricity physically to the consumer. Main activities are:**

(a) Setting of physical network-poles, wires, transmission etc., to provide electricity to consumer; (b) obtaining the 'right-to-way' - in order to set-up network poles, distribution wires company company should the local authorities for obtaining permission; (c) new connection - extension or erection, of network, so that new area loads are added to the system - either a pull or push growth phenomenon; (d) maintenance of network - ensuring that the network, so that the network is in good condition, available to dispatch electricity (instability); (e) quality of supply - maintaining proper conductor, transformer loading transformer maintenance such that the consumer is assured of quality power-assured voltage, assured ampere and frequency.

**2. Retail supply function is also called as merchant function (not physical function). Retailing is sale of electricity to the final consumer and till recently thought of as part of distribution business. The main activities involves are-**

(a) Procurement of electricity from wholesaler or bulk supplier (as mentioned earlier, the electricity generated, flows directly to consumer through wires at various voltages). (b) Pricing of electricity. (c) Selling of electricity including the following commercial functions. (d) Connection of consumer to the network - on payment of certain charges and signing up to consume energy equivalent of 'x' kw of load - categorization depending on the type of service (LT - Domestic, commercial, industry of certain voltage and HT - Colonies, industries, Railways etc.). (e) metering of energy used by consumer - setting up meter in consumer premises, their maintenance, reading the meters at regular intervals and ensuring that energy accounting tallies up. (f) commercial losses - meaning that energy has been consumed but not billed, either because the consumer is not accountant or because the meters are not read properly or not working or simply theft of energy by consumer. (g) billing of electricity supplied - usually on variety of factors such as connected load, load factors energy demand, energy supplied consumer service etc., and approved by regulator at periodic intervals. (h) Collection of bills - setting up infrastructure of collecting the dues from consumers such as 'section offices, kiosks, mobiles vans, internet, cheque drop boxes, auto-debit to accounts' etc. (i) Disconnection of service - as per the contract with the consumer, the supplier is



allowed to discontinue services to the consumer. Reconnection is possible with clearing of dues and payment of re-connecting charges. Segregation of Distribution in Wheeling Retail Supply  
The Total cost of a Distribution company includes:

## **1. Purchase of Electricity**

(a) Capacity Charge (b) Energy charge

## **2. Operation and Maintenance Expenses**

(a) Employee Cost (b) Administration Cost (c) R and M Cost

## **3. Capital Cost**

(a) Depreciation (b) Interest charges (c) Return  
Cost Allocation  
The proposed allocation is based on the premises distribution infrastructure up to the consumer's meter is part of the wires business and the distribution infrastructure from meter to consumer premises is part of the Retail Supply business. The approach proposed for allocation of expenditure between Wheeling and Retail Supply is discussed below:

### **1. Purchased of Electricity**

The entire power purchase cost including transmission charges will be allowed to the Retail Supply business.

### **2. Allocation of Capital Cost**

To allocate the capital cost, it is important to split the total assets under the distribution company into Wheeling and Retail Supply business. The Distribution Company shall identify the assets pertaining to Retail Supply (since the retail supply assets would be lesser in number) and allocate the balance assets to the Distribution business. The major components that would form part in the Asset Book (GFA) of a Retail Supply company would be Meters and billing equipments (computer etc.) Most of the Plant and Machinery and Lines and Cables based assets would form part of the Distribution Assets the same can be allocated to Distribution business. Other fixed assets like building, office equipments, furniture and fixtures, vehicles etc. can be apportioned on the basis of predominant usage concept. (a) Depreciation: Based on the allocation of fixed assets to each function, depreciation for each asset sub-group can be proportionately allocated. (b) Interest and Finance Charges: Distribution company shall either identify specific loan taken for each of the business (wheeling and Retail Supply) depending on the nature of the business or allocate based upon the ratio of asset allocation. The interest and finance charges can be charge to the respective function based on the loans identified. (c) Return: Returns shall be allocated on the proposed ratio of fixed assets between Wheeling and Retail Supply business.

### **3. Operation and Maintenance (O&M) Expenses**

The proposed allocation for O&M expenses is discussed below:

(a) Employee Cost: To segregate the employee cost on the basis of employee requirement to undertake the Retail Supply business. Distribution Company could do an evaluation on the number of employees that could be allocated to the Retail Supply business. This evaluation could be done on a thumb rule basis:

(i) The power purchase team/division could be allocated to the Retail Supply

(ii) The number of employee involves in metering, billing and collection could be allocated to Retail Supply business, and

(iii) Any other which the Distribution Company may feel relevant. The rest of the employees would be considered in the Wheeling business. The distribution licensee shall compile the list employee at different levels and distribution licensee shall compile the list of employees at different levels allocate the same of the approach mentioned above. The employee cost shall then be automatically be allocated between Wheeling and Retail Supply based on the employee allocated to the respective business. The employee capitalisation should be considered in the ARR of the Wheeling business.

(b) A&G Cost: A&G expenses relates to power purchase, metering, billing and collection, financing expenses on loan related to Retail Supply business shall be allocated to Retail Supply business. Office expenses like telephone, stationary, electricity, lease rent etc., shall be apportioned between Wheeling and Rental Supply business on the basis of predominant usage concept.

(c) R&C Expenses: R&M expenses shall be allocated on the proposed ration of fixed assets between Wheeling and Retail Supply business. For the purpose of getting more accuracy, the allocation should be done by allocating the R&M sub-heads related to specify asset category in the ratio of the respective classified under Wheeling and Retail Supply business i.e., R&M (Plant and Machinery) could be allocated in the ration of Gross fixed assets value of Plant and Machinery classified under Wheeling and Retail Supply business.

Other/Miscellaneous Expense Other than the expense discussed above, the Retail Supply business would also be liable for the expense for interest on Consumer Security Deposit, UI Charges, Financing of LPSC.