



## **FORUM OF REGULATORS (FOR)**

### **“MODEL REGULATIONS FOR MULTIYEAR DISTRIBUTION TARIFF”**

**Secretariat: Central Electricity Regulatory Commission  
Chanderlok Building, 36 Janpath, New Delhi**

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FOR MODEL REGULATIONS FOR MULTI YEAR DISTRIBUTION TARIFF

**“STATE” ELECTRICITY REGULATORY COMMISSION  
(MULTI YEAR DISTRIBUTION & RETAIL SUPPLY TARIFF)  
REGULATIONS, “NOTIFICATION YEAR”**

In exercise of powers conferred by sub section (1) of section 181 and clauses (zd), (ze) and (zf) of sub section (2) of section 181, read with sections 61, 62, and 86, of the Electricity Act 2003 (36 of 2003) and all other powers enabling it in that behalf, the “State” Electricity Regulatory Commission hereby makes the following Regulations.

**PART-I**

**PRELIMINARY**

**1. Short Title and Commencement**

- 1.1** These regulations shall be called the “State/” Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, “Notification Year”.
- 1.2** These regulations shall come into force from the date of their notification in the Official Gazette.

**2. Scope and Extent of Application**

- 2.1** These regulations shall apply to all the Distribution Licensees in the State of [        ].
- 2.2** These Regulations shall be applicable for determination of tariff in all cases covered under these Regulations from April 1, [        ] and onwards upto FY [        ] [i.e., till March 31, (... ..)].
- 2.3** These regulations shall be applicable where the capital cost-based tariff is determined by the Commission.
- 2.4** Where tariff has been determined through the transparent process of bidding in accordance with the guidelines issued by the Central Government, the Commission shall adopt such tariff in accordance with the provisions of the Act.

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2.5 These regulations shall extend to the whole of the “State”.

3. **Definitions**

3.1 In these regulations, unless the context otherwise requires, -

- 1) “**Act**” means the Electricity Act, 2003 (36 of 2003);
- 2) “**Aggregate Revenue Requirement**” or “**ARR**” means 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;
- 3) “**Base Year**” means the financial year immediately preceding first year of the control period and used for the purposes of these regulations;
- 4) “**Commission**” means the “State” Commission;
- 5) “**Conduct of Business Regulations**” means the “State” Electricity Regulatory Commission (Conduct of Business) Regulations, “Notification Year”,
- 6) “**Control Period**” means a multi-year period comprising of..... financial years of FY - ----- to FY , and as may be extended by the Commission, for submission of forecast in accordance with these Regulations;
- 7) “**Financial Year**” means a period commencing on 1st April of a calendar year and ending on 31st March of the subsequent calendar year;
- 8) “**Licence**” means a licence granted under clause (b) of section 14 of the Act;
- 9) “**Licensed Business**” means the functions and activities, which the licensee is required to undertake in terms of the licence granted by the Commission or being a deemed licensee under the Act;
- 10) “**Licensee**” means a person who has been granted a licence and shall include a deemed licensee;
- 11) “**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;

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- 12) “**Other Business**” means any other business of the distribution licensee for optimum utilisation of its assets within the meaning of Section 51 of the Act;
- 13) “**Retail Supply Business**” means the business of sale of electricity by a distribution licensee to the consumers within the area of supply in accordance with the terms of the licence for distribution and retail supply of electricity;
- 14) “**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, or under section 42(2).
- 15) “**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.
- 3.2** The words and expressions used and not defined in these Regulations, but defined in the Act, shall have the meanings respectively assigned to them in the Act.
- 3.3** The words “Application” or “Petition” shall be interpreted synonymously.

## PART-II

### GENERAL PRINCIPLES

#### 4. Multi Year Tariff Framework

- 4.1** The Commission shall determine the tariff for distribution business under a Multi Year Tariff framework with effect from April 1, \_:
- 4.2** The Multi-Year Tariff framework shall be based on the following elements, for calculation of Aggregate Revenue Requirement and expected revenue from tariff and charges for Distribution Business:
- i. Control Period, before commencement of which a forecast of the Aggregate Revenue Requirement and expected revenue from existing tariff and charges shall be submitted by the applicant and approved by the Commission;
  - ii. A detailed Business Plan based on the Operational Norms and trajectories of

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performance parameters specified in the MYT Regulations, year wise for the Control Period, shall be submitted by the applicant for the Commission's approval;

- iii. Based on the Business Plan as approved by the Commission by Order, the applicant shall submit a petition with the forecast of Aggregate Revenue Requirement and expected revenue from existing tariff for each year of the Control Period, and the Commission shall approve the tariff for each year of the Control Period;
- iv. The mechanism for pass-through of approved gains or losses on account of uncontrollable factors will be as specified by the Commission in these Regulations;
- v. The mechanism for sharing of approved gains or losses arising out of controllable factors will be as specified by the Commission in these Regulations;

**5. Business Plan**

**5.1** The Distribution Licensee shall file a Business Plan, for the Control Period of financial years from April 1, \_\_\_\_\_ to March 31, \_\_\_\_\_ which shall comprise but not be limited to detailed category-wise sales and demand projections, financing plan power procurement plan, capital investment plan, and physical targets.

Provided that in case the Commission issues guidelines and formats from time to time, the same shall be adhered to by the Distribution Licensee.

**5.2** The capital investment plan shall show separately, on-going projects that will spill into the year \_\_\_\_\_ under review and new projects (along with justification) that will commence but may be completed within or beyond the tariff period. The Commission shall consider and approve the capital investment plan for which the Distribution Licensee shall provide relevant technical and commercial details.

**5.3** The Distribution Licensees shall project the power purchase requirement after considering effect of target set for Energy Efficiency (EE), and Demand Side Management (DSM) schemes.

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**6. Forecast**

**6.1** The applicant shall, based on the Business Plan as approved by the Commission by Order, submit the forecast of Aggregate Revenue Requirement and expected revenue from tariff, for the Control Period by way of a Petition in accordance with the [State Commission] (Conduct of Business), Regulations, [Year], by 30<sup>th</sup> November of the year prior to the commencement of the Control Period and accompanied by such fee payable, as specified in the [State Commission] (Fees and Charges), Regulations, [Year].

**6.2** The forecast of Aggregate Revenue Requirement shall be developed using the assumptions relating to the behavior of individual variables that comprise the Aggregate Revenue Requirement during the Control Period.

**6.3** The forecast of expected revenue from tariff and charges shall be developed based on the following:

(a) Estimates of quantum of electricity to be supplied to consumers and wheeled on behalf of Distribution System Users for each financial year within the Control Period; and

(b) Prevailing tariff as at the date of making the application.

**7. Specific trajectory for certain variables**

**7.1** The Commission shall stipulate a trajectory while approving the Business Plan for certain variables having regard to the reorganization, restructuring and development of the electricity industry in the State:

Provided that the variables for which a trajectory may be stipulated include, but are not limited to, Operation & Maintenance expense norms, supply availability and wires availability, distribution losses, billing efficiency, collection efficiency and payment efficiency.

**7.2** The trajectory stipulated by the Commission in the Order approving the Business Plan submitted by the applicant, shall be incorporated by the applicant in its forecast of Aggregate Revenue Requirement and/or expected revenue from tariff and charges under Regulation 6.

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- 7.3** The Commission shall specify the yearly AT&C loss reduction trajectory for the control period with due regard to the AT&C loss approved in the True Up of the previous control period. The yearly AT&C loss trajectory for the control period shall not be changed/modified, other than under exceptional conditions approved by the Commission.

**8. Annual Review of Performance and True Up**

- 8.1** Where the aggregate revenue requirement and expected revenue from tariff and charges of a Distribution Licensee are covered under a Multi-Year Tariff framework, such Distribution Licensee shall be subject to an annual review of performance and True Up during the Control Period in accordance with this Regulation.

Provided that in case of an extra-ordinary circumstance, at any time notwithstanding the Annual Review, the Distribution Licensee may file appropriate application before the Commission.

**9. Uncontrollable and Controllable factors**

- 9.1** The “uncontrollable factors” shall comprise of the following factors which were beyond the control of, and could not be mitigated by the applicant:

- (a) Force Majeure events, such as war, fire, natural calamities etc ;
- (b) Change in law;
- (c) Taxes and Duties;
- (d) Variation in sales;
- (e) Inter-State & Intra-State Transmission losses and
- (f) Variation in the cost of power generation and/or power purchase due to the circumstances specified in Regulations 19.4 and 20;

- 9.2** Some illustrative variations or expected variations in the performance of the applicant, which may be attributed by the Commission to controllable factors include, but are not limited to the following:

- (a) Variations in capital expenditure on account of time and/or cost overruns/efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;

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- (b) Variations in Aggregate Technical & Commercial (AT&C) losses which shall be measured as the difference between the units input into the distribution system and the units realized (units billed and collected) wherein the units realized shall be equal to the product of units billed and collection efficiency (where Collection Efficiency shall be measured as ratio of total revenue realized to the total revenue billed for the same year);

Detailed methodology for computation of AT&C loss has been indicated at **Annexure - I** to these regulations;

- (c) Distribution Losses which is measured as the difference between total energy input for sale to all its consumers and sum of the total energy billed in its license area in the same year;
- (d) Variations in Return on Equity (RoE), depreciation and working capital requirements;
- (e) Failure to meet the standards specified in the Standards of Performance Regulations, except where exempted;
- (f) Variation in operation & maintenance expenses, except those attributable to directions of the Commission.
- (g) Variation in Wires Availability and Supply Availability.

**10. Mechanism for pass through of gains or losses on account of uncontrollable factors**

- 10.1** The approved aggregate gain or loss to the Distribution Licensee on account of uncontrollable factors shall be passed through, as an adjustment in the tariff of the Distribution Licensee, as specified in these Regulations and as may be determined in the Order of the Commission passed under these Regulations.

**11. Mechanism for sharing of gains or losses on account of controllable factors**

- 11.1** The approved aggregate gain to the Distribution Licensee on account of controllable factors shall be dealt with in the following manner:

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- (a) Two-third of the amount of such gain shall be passed on as a rebate in tariff over such period as may be stipulated in the Order of the Commission;
  - (b) The balance amount, which will amount to one--third of such gain, may be utilised at the discretion of the Distribution Licensee.
- 11.2** The approved aggregate loss to the Distribution Licensee on account of controllable factors shall be dealt with in the following manner:
- (a) One-third of the amount of such loss may be passed on as an additional charge in tariff over such period as may be stipulated in the Order of the Commission; and
  - (b) The balance amount of loss shall be absorbed by the Distribution Licensee.

Provided that losses, during any year of the control period, above the limit as approved by the Commission under AT&C loss reduction trajectory for the control period and in accordance with Regulation 7.3 above shall not be passed on to the consumers.

- 11.3** The gain or loss on account of other controllable factors, unless otherwise specifically provided by the Commission shall be to the account of the Distribution Licensee.

## PART-III

### PROCEDURE

#### **12. Procedures relating to making an application for determination of Tariff**

- 12.1** An application for approval of the Business Plan shall be made by [30th April ] of the year prior to the commencement of the Control Period, in accordance with the [State Commission] (Conduct of Business), Regulations, [Year], and accompanied by such fee payable, as specified in the [State Commission] (Fees and Charges), Regulations, [Year]”.

Provided that where no separate fees has been specified for filing of a Business Plan, the applicant shall pay fees as may be applicable for filing miscellaneous applications.

- 12.2** An application for determination of tariff shall be made by 30th November every year, in such form and in such manner as specified in this Regulation, and accompanied by such fees as may be specified under the Commission.

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Proceedings to be held by the Commission for determination of tariff shall be in accordance with the..... (Conduct of Business) Regulations, as amended from time to time.

- 12.3** The petition for determination of tariff shall be accompanied by information for the previous year, current year and the ensuing year for the entire control period capturing the expected revenue from the tariff and charges including miscellaneous charges along with detailed assumptions, parameters required in annual true-up exercise, etc.

Provided that the application shall be accompanied where relevant, by a detailed tariff revision proposal showing category-wise tariff and how such revision would meet the gap, if any, in Aggregate Revenue Requirement for each year of the Control Period.

Provided further that the information for the previous year shall be based on audited accounts and the same should be filed along with audited accounts for the previous year:

- 12.4** The Distribution Licensee shall, along with the aforesaid petition, submit a statement on the status of compliance of directives, if any, issued by the Commission in its previous tariff order.

- 12.5** The petition for determination of tariff shall include the details of actual subsidy received from the State Government vis-a-vis claimed by the Distribution Licensee and the true-up petition for the previous year:

- 12.6** The Commission may seek clarifications and additional information on inadequacies in the application, if any, within 14 (fourteen) days of filing the application for approval of the Business Plan and application for determination of tariff, as the case may be.

- 12.7** The Distribution Licensee shall respond within the next 10 (ten) days to the Commission with all clarification and information as required.

- 12.8** The Commission shall admit the application for approval of the Business Plan and application for determination of tariff, as the case may be, within 7 (seven) days of submission of response by the Distribution Licensee.

- 12.9** On receipt of a complete application<sup>1</sup> accompanied by all requisite information, particulars

<sup>1</sup> For the purpose of this clause, "Complete application" means the application complete in all respect in the appropriate form, as required by the Commission, along with documents showing payment necessary fees and other compliances.

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and documents in compliance with all the requirements specified in these Regulations, the application for approval of the Business Plan and application for determination of tariff, as the case may be, shall deem to be received and the Commission or the Secretary or the designated Officer shall intimate the applicant that the application is ready for publication.

**12.10** The applicant shall, within 3 (three) days of an intimation given to him in accordance with Regulation 12.9, publish a notice in at least 2 (two) English and 2 (two) [ vernacular] language daily newspapers widely circulated in the area to which the application pertains , outlining the proposed Business Plan or the proposed tariff, as the case may be, and such other matters as may be stipulated by the Commission, and invite suggestions and objections from the public:

Provided that the applicant shall make available a hard copy of the complete application to any interested party, at such locations and at such rates as may be stipulated by the Commission:

Provided further that the applicant shall also put up on its website, in downloadable spreadsheet format showing detailed computations, the application made to the Commission along with all regulatory filings, information and documents in the manner so stipulated by the Commission:

Provided further that the web link to the information mentioned in the second proviso above shall be easily accessible, archived for downloading and shall be prominently displayed on the applicant's website:

Provided also that the applicant may not provide or put up any such information, particulars or documents, which are confidential in nature, with the prior approval of the Commission

*Explanation* - for the purpose of this Regulation, the term “downloadable spreadsheet format” shall mean one (or multiple, linked) spreadsheet software files containing all assumptions, formulae, calculations, software macros and outputs forming the basis of the application.

**12.11** Notwithstanding anything contained in these Regulations, in case of delay/ non-submission of the application for approval of the Business Plan and application for determination of tariff, as the case may be, the Commission may initiate suo-motu

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proceedings for the determination of Tariff by 1<sup>st</sup> December every year.

Provided that in the event of the licensee not filing the application despite the aforesaid proceeding, the Commission may on its own, decide the tariff based on previous year's tariff details and after incorporating suitable adjustments.

Provided further that the Commission may also pass directions under Section 129 and/or Section 142 of the Act, if required

**13. Order approving the Business Plan and Tariff Order**

**13.1** An Order approving or rejecting the Business Plan shall, as far as practicable, be issued within 30 (thirty) days from receipt of a complete Business Plan.

**13.2** The Commission shall, within 120 (one hundred and twenty) days from receipt of a complete application for tariff determination and after considering all suggestions and objections received from the public:

- (a) issue a Tariff Order accepting the application with such modifications or such conditions as may be specified in that Order;
- (b) reject the application for reasons to be recorded in writing if such application is not in accordance with the provisions of the Act and the rules and Regulations made thereunder or the provisions of any other law for the time being in force:

Provided that an applicant shall be given a reasonable opportunity of being heard before rejecting its application.

**13.3** The applicant shall publish the tariff approved by the Commission in at least 2 (two) English and 2 ( two ) local language daily newspapers having wide circulation in the area of supply and shall put up the approved tariff / tariff schedule on its website and make available for sale, a booklet containing such tariff or tariff, as the case may be, to any person on payment of reasonable charges.

**13.4** The tariff so published shall be in force from the date specified in the said Order and shall, unless amended or revised, continue to be in force for such period as may be stipulated therein.

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### **14. True-up Order**

- (a) The Commission shall True-up expenses either as part of the Tariff Order or issue Order/s for True-up of expenses preceding the Tariff order of ensuing year.
- (b) An Order for True-up of expenses shall be issued on annual basis.
- (c) An Order for True-up of expenses shall be on the basis of expense estimates made in the beginning of the year under consideration and actual expenses booked in the audited books of account of the Distribution Licensee for the year.
- (d) Estimates of expenses for the ensuing year shall be on the basis of corresponding figures in the order for True-up of expenses of the previous year and Tariff Order of the current year.

### **15. Adherence to Tariff Order**

- 15.1** If a Distribution Licensee recovers a price or charge exceeding the tariff determined under Section 62 of the Act and in accordance with these Regulations, the excess amount shall be payable to the person who has paid such price or charge, along with interest equivalent to State Bank of India Marginal Cost of Funds based Lending Rate (MCLR) of one year tenor, as on first April of the corresponding year without prejudice to any other liability that may be incurred by such Distribution Licensee.
- 15.2** The Distribution Licensee shall submit periodic returns as may be required by the Commission, containing operational and cost data to enable the Commission to monitor the implementation of its Order.

## **PART IV**

### **SALES, POWER PURCHASE QUANTUM AND COST**

#### **16. Sales forecast**

##### **16.1 Forecasting Methodology**

- 1) The Distribution Licensee shall submit a month-wise forecast of the expected sales of

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electricity to each Tariff category/sub-category and to each Tariff slab within such Tariff category/sub-category to the Commission for approval along with the Business plan for the Control period from ..... to..... The forecast thus approved by the Commission under the Business plan shall also be submitted under the ARR petition for the Control Period, as specified in these Regulations:

Provided that the Distribution Licensee shall submit relevant details regarding category-wise sales separately for each Distribution Franchisee area within its License area, as well as the aggregated category-wise sales in its License area.

- 2) The sales forecast shall be consistent with the load forecast prepared as part of the power procurement plan under Regulation 18 of these Regulations and shall be based on past data and reasonable assumptions regarding the future:

Provided that where the Commission has stipulated a methodology for forecasting sales to any particular Tariff category, the Distribution Licensee shall incorporate such methodology in developing the sales forecast for such Tariff category.

Provided that open access transactions shall not form part of Sales

**17. Treatment of Distribution Loss**

- 17.1 The power purchase requirement of the Distribution Licensee at the Transmission-Distribution interface point, shall be computed by grossing up the sales with the distribution losses approved by the Commission:

Provided that the Commission may stipulate the target distribution losses in accordance with Regulation 13 as part of the Order on Business Plan:

Provided further that the Distribution Licensee shall submit the details of area-wise distribution losses for the relevant years, in accordance with the formats prescribed by the Commission:

Provided also that the area-wise distribution losses shall separately indicate the distribution losses in each Distribution Franchisee area within its License area, for the relevant years.

**18. Power Procurement Planning**

- 18.1 The Distribution Licensee shall prepare a plan for procurement of power (in MW/ MU) to serve the demand for electricity in its area of supply and submit such plan to the Commission for approval:

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Provided that such power procurement plan shall be submitted for the Control Period commencing on... , as part of the Business plan in accordance with Regulation 5 of these Regulations. The Power Purchase procurement plan approved by the Commission under the approved Business plan shall be submitted along with the ARR petition filed by the Distribution licensee for the control period;

Provided further that such power procurement plan may include long term (more than 5 years), medium-term (upto 5 years) and short-term (upto 1 year) sources of power procurement, in accordance with these Regulations.

**18.2** The power procurement plan of the Distribution Licensee shall comprise the following:

- (a) A quantitative forecast of the unrestricted base load and peak load for electricity within its area of supply;
- (b) An estimate of the quantity of electricity supply from the identified sources of power purchase, including own generation if any;
- (c) An estimate of availability of power to meet the base load and peak load requirement:  

Provided that such estimate of demand and supply shall be on month-wise basis in Mega-Watt (MW) as well as expressed in Million Units (MU);
- (d) Standards to be maintained with regard to quality and reliability of supply, in accordance with the relevant Regulations of the Commission;
- (e) Measures proposed for Renewable Purchase Obligation (RPO), energy conservation, energy efficiency, and Demand Side Management;
- (f) The requirement for new sources of power procurement, including augmentation of own generation capacity, if any, and identified new sources of supply, based on (a) to (e) above;
- (g) The impact of Open Access on load
- (h) The sources of power, quantities and cost estimates for such procurement:
- (i) Impact of Storage capacities including Batteries, Electric Vehicle charging stations etc.;

Provided that the forecast or estimates contained in the long-term procurement plan shall

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be separately stated for peak and off-peak periods, in terms of quantity of power to be procured (in MU) and maximum demand (in MW):

Provided further that the forecast or estimates for the Control Period from FY... .. to FY .... shall be prepared for each month over the Control Period:

Provided also that the medium-term / short term procurement plan shall be a least cost plan based on available information regarding costs of various sources of supply

- 18.3** The forecast or estimate shall be prepared using forecasting techniques based on past data and reasonable assumptions regarding the future:

Provided that the forecast or estimate shall take into account factors such as overall economic growth, consumption growth of electricity-intensive sectors, advent of competition in the electricity sector, trends in captive power, impact of loss reduction initiatives, improvement in Generating Station Plant Load Factors and other relevant factors.

- 18.4** Where the Commission has specified a percentage of the total consumption of electricity in the area of a Distribution Licensee to be purchased from co-generation or renewable sources of energy, the power procurement plan shall include the plan for procurement from such sources upto the specified level.

- 18.5** The Distribution Licensee shall forward a copy of its power procurement plan to the State Transmission Utility for verification of its consistency with the transmission system plan for the intra-State Transmission System, prepared in accordance with the Regulations of the Commission governing Transmission Open Access:

Provided that the Distribution Licensee shall also consult the State Transmission Utility at the time of preparation of the power procurement plan, to ensure consistency of such plan with the transmission system plan.

- 18.6** The Commission shall approve the power procurement plan for the Control Period as part of its Order on the MYT Petition.

- 18.7** The Commission may, as a result of additional information not previously known or available to the Commission at the time of approval of the procurement plan under Regulation 13, if it deems appropriate, suo - motu or on a Petition filed by the Distribution

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Licensee, modify the procurement plan of the Distribution Licensee for the remainder of the Control Period.

**19. Power Purchase Quantum and Cost**

**19.1** Based on the power procurement planning, the power purchase quantum and cost shall be calculated.

**19.2** The approved Power Purchase cost shall be net of expected revenue from sale of surplus power, if any, during lean period.

**19.3** Revenue from sale of surplus power shall be estimated at per unit weighted average price of bilateral purchases and power exchange rates for the last available three months at the time of finalization of the ARR for the ensuring year:

**20. Fuel and Power Purchase Cost Adjustment (FPPCA)**

**20.1** Identification of Incremental cost and process of recovery

(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

(b) The incremental cost on account of variation in fuel surcharge shall be computed and charged on the basis of actual variation in fuel surcharge rate vis-a-vis the cost approved in the tariff order and shall not be computed on the basis of estimated or expected variation in fuel surcharge:

(c) The incremental cost due to incremental power purchase shall be computed on the basis of formula provided in regulation 20.2 below, and shall be charged for the quarter within first 15 days of the quarter end, on the consumer from the first month of the second 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.

(d) The Distribution Licensee shall submit details of the incremental cost incurred and to be

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charged to all consumers for the entire quarter, alongwith the detailed computations and supporting documents as may be required for verification by the Commission within first 8 days of the quarter end.

- (e) The Commission shall examine the incremental cost charged by the Distribution Licensee against supporting documents as submitted:

Provided that discrepancies, if any shall be informed to the Distribution Licensee before the end of the second quarter:

Provided further that the Distribution Licensee shall adjust for the discrepancy informed by the Commission in third quarter's charge computation.

- (f) In case the Distribution Licensee is found charging an unjustified adjustment cost to the consumers on regular basis, the Commission shall adjust the unjustified additional cost alongwith interest on the same.
- (g) The interest rate shall be in accordance with the State Bank Advance Rate (SBAR) as of the date on which the application of determination of tariff is made and benefits shall be passed on to the consumers.
- (h) The Distribution Licensee shall upgrade the billing and IT systems to incorporate Incremental Costs (IC) as a component in tariff design.

### **20.2 Formula for computation of Incremental cost**

The formula for calculation of incremental charge will be as under:

Variables shall be in INR crores unless otherwise stated

$$ICq1 = Cq1 + Fq4 + Aq3$$

Where,

ICq1 = Incremental Cost incurred in Q1

Cq1 = Change in cost due to:

- 1) Variation in Fuel surcharge rate
- 2) Total cost incurred to procure power over and above the plan as approved in Regulation 13 of these regulations (capped by weighted average cost of

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bilateral purchase and power exchange price)

Fq4 = Carry forward factor for over-recovery / under-recovery of ICq3 in Quarter from previous year

Aq3 = Adjustments on the basis of the Commission's order pertaining to discrepancies, if any, in computation of ICQ3 from previous year. Similarly, IC for respective quarters will be computed.

*Explanation.- 1: The norms for parameters such as station heat rate, auxiliary consumption, transit loss shall be approved by the Commission for each year as controllable factor at the time of determination of generation tariff for each State generating station. The change in fuel surcharge shall be considered only for the computation of incremental cost.*

*Explanation.- 2: Fuel adjustment cost to be incorporated in subsequent quarter shall be up to 10 % of variable cost of the quarter , any difference would roll into following quarter to be adjusted as Fq.*

### **20.3 Incremental cost per unit of electricity consumption**

- (a) Calculation of IC (INR/kWh) shall be as per the following formula:

$$\text{IC (INR/kWh)} = (\text{IC}/(\text{Sales} + \text{consequential increase in distribution losses})) * 10$$

Where IC is in INR lakhs and Unit sales are in Million units

Excess distribution loss = Energy Input - Energy Sales - (distribution loss % as specified by the Commission \* Energy input)

- (b) The Licensee shall provide information related to Incremental cost per unit of electricity consumption so as to enable the Commission to expedite the process of validation of IC recovered from the consumers within a month on the basis of information furnished by end of previous month, for any discrepancy to be taken into account .
- (c) The Commission may notify ceiling of incremental charges that can be recovered from the consumers on quarterly basis.

## PART V

### FINANCIAL PRINCIPLES

#### 21. Principles for determination of ARR

The Aggregate Revenue Requirement for the Distribution Business of the Distribution Licensees for each year of the Control Period, shall contain the following financial parameters:

- A. Operation and Maintenance expenses;
- B. Capital Investment Plan;
- C. Depreciation;
- D. Interest on Loan;
- E. Interest on Working Capital;
- F. Return on Equity;
- G. Income Tax;
- H. Non-Tariff Income; and
- I. Income from Other Business

#### 22. Operation & Maintenance Expenses

- (a) The Commission shall stipulate a separate trajectory of norms for each of the components of O&M expenses viz., Employee cost, Repairs & Maintenance (R&M) expense and Administrative & General (A&G) expense.  
Provided that such norms may be specified for a specific Distribution Licensee or a class of Distribution Licensees.
- (b) Norms shall be defined in terms of combination of number of personnel per 1000 consumers and number of personnel per substation along with annual expenses per personnel for Employee expenses; combination of A&G expense per personnel and A&G expense per 1000 consumers for A&G expenses and R&M expense as percentage of gross fixed assets for estimation of R&M expenses:
- (c) One-time expenses such as expense due to change in accounting policy, arrears paid due to Pay Commissions etc., shall be excluded from the norms in the trajectory.

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- (d) The expenses beyond the control of the Distribution Licensee such as dearness allowance, terminal benefits in Employee cost etc., shall be excluded from the norms in the trajectory.
- (e) The One-time expenses and the expenses beyond the control of the Distribution Licensee shall be allowed by the Commission over and above normative Operation & Maintenance expenses after prudence check.
- (f) The norms in the trajectory shall be specified over the control period with due consideration to productivity improvements.
- (g) The norms shall be determined at constant prices of base year and escalation on account of inflation shall be over and above the baseline.
- (h) The Distribution Licensee specific trajectory of norms shall be identified by the Commission on the basis of absolute and relative analysis.
- (i) In absolute analysis, Distribution Licensee's audited accounts of operations for last three years, expenses claimed for control period, historically approved cost, and prudence check shall be used by the Commission to estimate values of norms.
- (j) In relative analysis, performance parameters of other Distribution Licensees within the same State or in other States, shall be considered by the Commission to estimate norms.

Provided that other Distribution Licensees so chosen shall have similar profile as that of the Distribution Licensee under consideration in terms of consumer mix, type of license area (city, State, etc.) type of distribution networks, viz., underground/overhead, HT-LT ratio, etc.

- (k) Suitable average of outcomes of absolute and relative analysis shall be taken by the Commission to fix the norms over the control period for the Distribution Licensee.

### **22.1 Employee Cost**

Employee cost shall be computed as per the approved norm escalated by consumer price index (CPI), adjusted by provisions for expenses beyond the control of the Distribution Licensee and one time expected expenses, such as recovery/adjustment of terminal benefits, implications of Pay Commission, arrears and Interim Relief, governed by the following formula:

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$$\text{EMPn} = (\text{EMPb} * \text{CPI inflation}) + \text{Provision}$$

Where:

EMPn: Employee expense for the year n

EMPb: Employee expense as per the norm

CPI inflation: Average increase in the Consumer Price Index (CPI) for immediately preceding three years

Provision: Provision for expenses beyond control of the Distribution Licensee and expected one-time expenses as specified above

### **22.2 Repairs and Maintenance Expense**

Repairs and Maintenance expense shall be calculated as percentage (as per the norm defined) of Opening Gross Fixed Assets for the year governed by following formula:

$$\text{R\&Mn} = \text{Kb} * \text{GFAn}$$

Where:

R&Mn: Repairs & Maintenance expense for n<sup>th</sup> year

GFAn: Opening Gross Fixed Assets for n<sup>th</sup> year

Kb: Percentage point as per the norm

### **22.3 Administrative and General Expense**

A&G expense shall be computed as per the norm escalated by wholesale price index (WPI) and adjusted by provisions for confirmed initiatives (IT initiatives as proposed by the Distribution Licensee and validated by the Commission) or other expected one-time expenses, and shall be governed by following formula:

$$\text{A\&Gn} = (\text{A\&Gb} * \text{WPI inflation}) + \text{Provision}$$

Where:

A&Gn: A&G expense for the year n

A&Gb: A&G expense as per the norm

WPI inflation: Average increase in the Wholesale Price Index (WPI) for immediately preceding three years

Provision: Cost for initiatives or other one-time expenses as proposed by the Distribution Licensee and validated by the Commission.

**23. Capital Investment Plan**

- (a) Capital expenditure shall be considered on scheme wise basis.
- (b) For capital expenditure greater than INR [.....]<sup>2</sup> Crore, the Distribution Licensee shall seek prior approval of the Commission.
- (c) The Distribution Licensee shall submit detailed supporting documents while seeking approval from the Commission.

Provided that supporting documents shall include but not be limited to purpose of investment, capital structure, capitalization schedule, financing plan and cost-benefit analysis:

- (d) The approval of capital expenditure by the Commission for the ensuing year shall be in accordance with load growth, system extension, rural electrification, distribution loss reduction or quality improvement as proposed in the Distribution Licensee's supporting documents.
- (e) The Commission may also undertake a detailed review of the actual works compared with the works approved in the previous Tariff Order while approving the capital expenditure for the ensuing year.
- (f) In case the capital expenditure is required for emergency work, the licensee shall submit an application, containing all relevant information alongwith reasons justifying the emergent nature of the proposed work, seeking post facto approval of the Commission.
- (g) The Distribution Licensee shall take up the work prior to receiving the approval from the Commission provided that the emergent nature of the scheme has been certified by its Board of Directors.
- (h) If capital expenditure is less than INR 10 Crore, the Distribution Licensee shall undertake the execution of the plan with simultaneous notification to the Commission with all the relevant supporting documents.
- (i) Consumer's contribution towards cost of capital asset shall be treated as capital

<sup>2</sup> To be determined by the respective State Commission

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receipt and credited in current liabilities until transferred to a separate account on commissioning of the assets.

- (j) An amount equivalent to the depreciation charge on such assets for the year shall be appropriated from this account as income to the profit and loss account over the useful life of the asset.

### **24. Treatment of Depreciation**

- (a) Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year.
- (b) Depreciation shall not be allowed on assets funded by capital subsidies, consumer contributions or grants.
- (c) The Commission shall define the rate of depreciation for each of the components of the fixed assets based on the useful life of the assets, as indicated at **Annexure – II**, and after considering the salvage value of the categories of the assets.

Provided the salvage value of the category of the assets shall be as decided by the Commission taking into account the costs of removal / disposal of assets. However, the salvage value of the any category of assets defined at **Annexure - II** shall not exceed 10% of the initial cost of the asset.

- (d) The rate of depreciation should be based on Straight Line Method (SLM) over the useful life of the assets, after factoring the salvage value of the assets.

Provided that Land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset

- (e) The Commission may provide a one time option to the distribution licensees having fixed asset records for the assets procured before the cut-off date to adopt the new rates for the older assets, if opted by the distribution licensee.

Provided that, in case the distribution licensee does not have an asset record to assess the date of commissioning of assets as per the categorization provided in **Annexure – II**, the Commission may allow the existing method of depreciation on the assets already commissioned till the issue of last tariff Order.

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Provided that record of the assets being commissioned by the Distribution licensee during the ongoing FY subsequently shall be properly maintained by the Distribution licensee and the computation of depreciation of such assets shall be in accordance with Regulation 24 (c) above.

(f) Depreciation shall be charged from the first year of operation of the asset.

Provided that in case the operation of the asset is for a part of the year, depreciation shall be charged on proportionate basis:

(g) A provision of replacement of assets shall be made in the capital investment plan.

**25. Treatment of Interest on loan**

(a) The Distribution Licensee shall provide detailed loan-wise, project-wise and utilization-wise details of all the pending loans.

(b) If the equity actually deployed is more than 30 % of the capital cost, equity in excess of 30 % shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loan:

(c) Actual loan or normative loan, if any, shall be referred as gross normative loan in this Regulation.

(d) The normative loan outstanding as of 1st April of control period shall be computed by deducting the cumulative repayment as approved by the Commission (basis as mentioned below) upto 31st March of current period (a year before control period) from the gross normative loan.

(e) The repayment for the control period shall be deemed to be equal to the depreciation allowed for the year.

(f) Notwithstanding any moratorium period availed by the Distribution Licensee, the repayment of the loan shall be considered from the first year of the control period as per annual depreciation allowed.

(g) The rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year of the control period, in accordance

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with terms and conditions of relevant loan agreements, or bonds or non-convertible debentures:

Provided that if no actual loan is outstanding but normative loan is still outstanding, the last available weighted average rate of interest shall be applicable.

Provided further that the interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest:

Provided also that exception shall be made for the existing loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable and approved projects:

- (h) The Distribution Licensee shall make every effort to refinance the loan as long as it results in net benefit to the consumers.

Provided that the cost associated with such refinancing shall be eligible to be passed through in tariffs and the benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 50:50 between the Distribution Licensee and the consumers.

Provided further that the Distribution Licensee shall submit the calculation of such benefit to the Commission for its approval.

**26. Interest on Working Capital**

The Distribution Licensee shall be allowed interest on estimated level of working capital for the financial year, computed as follows:

- a) O&M expenses for one month
- b) Two months equivalent of expected revenue
- c) Maintenance spares @ 40% of R&M expenses for one month:

Less:

- d) Security deposits from consumers, if any.

Provided that the interest on working capital shall be on normative basis and rate of interest shall be equal to the State Bank Advance Rate (SBAR) as of the date on which petition for determination of tariff is accepted by the Commission.

Provided further that interest shall be allowed on consumer security deposits and security deposits from Distribution System users at the Bank Rate as on the date on which the petition for determination of tariff is accepted by the Commission.

**27. Treatment of Return on equity**

- (a) Return on equity shall be computed on 30% of the capital base or actual equity, whichever is lower:

Provided that assets funded by consumer contribution, capital subsidies/grants and corresponding depreciation shall not form part of the capital base. Actual equity infused in the Distribution Licensee as per book value shall be considered as perpetual and shall be used for computation in this Regulation:

Provided, that accumulated depreciation, over and above debt repayment, shall be used to reduce the equity base for return on equity after debt repayment is over.

- (b) The return on the equity invested in working capital shall be allowed from the date of start of commercial operation:
- (c) Distribution Licensee shall be allowed [14%]<sup>3</sup> post-tax return on equity .

**28. Income Tax**

[ ]\*

**29. Non-Tariff Income**

- a) 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, income from rent of land and buildings, delayed payment surcharge, meter rent (if any), income from investments other than contingency reserves, interest income on advance to suppliers and contractors, income from rent from staff quarters, income from rent from contractors, income from hire charges from contactors and others, supervision charges for capital works, income from consumer charges levied in accordance with Schedule of Charges approved by the Commission, income from recovery against theft and/or pilferage of electricity, income from advertisements, income from sale of tender documents, miscellaneous receipts from the consumers and income to Licensed business from the

<sup>3</sup> To be decided by the respective State Commission

\* Pass through of income tax as may be decided by the State Commission.

Suggestive provision: (Actual Tax paid or payable on income, if any, shall be limited to tax on return on the equity component of capital employed. However any tax liability on incentives due to improved performance shall not be considered.)

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Other Business of the Distribution Licensee shall constitute Non-Tariff Income of the Licensee.

- b) Interest on security deposits, in excess of the rate specified by the Commission shall be considered as Non Tariff income of the Licensees.
- c) 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.

**30. Income from Other Business**

Where the Licensee is engaged in any other business, the income from such business will be deducted from the Aggregate Revenue Requirement in calculating the revenue requirement of the Licensee in the manner and in proposition as may be specified by the Commission.

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 its application for determination of tariff;

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.

**PART-VI**

**WHEELING AND RETAIL SUPPLY BUSINESS**

**31. Segregation of Wheeling Business and Retail Supply Business**

The Distribution Licensee shall maintain separate books of accounts for Wheeling Business and Retail Supply Business.

The tariff for Wheeling Business and Retail Supply Business of a Distribution Licensee shall be determined by the Commission on the basis of segregated accounts of Wheeling Business and Retail Supply Business

## **PART-VII**

### **SUBSIDY, CROSS SUBSIDY AND TARIFF DESIGN**

#### **32. Subsidy**

- (a) The Commission shall determine the ARR and Tariff without considering subsidy.

Provided further that in case the State Government declares subsidy in advance or during tariff filing proceedings and the licensee incorporates the subsidy in the petition, the Commission shall notify two tariff schedules, one with subsidy and the other without subsidy:

Provided also that the Government's subsidy provided for or declared shall be supported by documentary evidence of time schedule of payment, mode of the payment of the subsidy and categorization of the subsidy amount into subsidized consumer categories:

- (b) The Commission may clarify in the tariff order, post the declaration from the Government, the quantum of Government's subsidy as applicable to the fuel cost adjustment along with the range (%) of variable cost up to which the fuel adjustment cost shall not be passed to the consumers, category wise classification, mode of payment and schedule of payment etc.
- (c) In case of no disbursement or delayed disbursement of subsidy by the Government, the licensee shall charge consumers as per the tariff schedule which is approved by the Commission , without consideration of subsidy.
- (d) The distribution licensee(s) shall submit to the Commission on quarterly basis the information on subsidy due, subsidy overdue and subsidy realized based on actual energy supplied to subsidized categories of consumer. The report on subsidy status shall be hosted on the distribution licensee's website.

#### **33. Cross Subsidy surcharge, and Tariff Design**

- (a) **Cross-subsidy surcharge and additional surcharge in Open Access**

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- (1) 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 Regulations specified by the Commission, shall be shown separately against the consumer category that is permitted open access as per the phasing plan.
- (2) Cross-subsidy surcharge and additional surcharge shall be shown as revenue from the tariff from the consumer categories who have been permitted open access and such amount shall be utilized to meet the cross-subsidy requirements of subsidized categories and fixed costs of the Distribution Licensee arising out of his obligation to supply.

Provided that the licensee shall provide such details in its annual filings.

### **(b) Tariff Design**

- 1) The Commission will categorize consumers on the basis of their Load Factor, Power Factor, Voltage, total consumption of electricity during any specified period, or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required.
- 2) The retail supply Tariff for different consumer categories will be determined on the basis of the Cost of Supply. While determining the Tariff, the cost of supply at different voltage levels and the need to minimise tariff shock to consumers may be kept in mind.
- 3) The tariff may be designed based on the following principles:

**(a) Functionalization of Cost** - Total cost shall be divided on the basis of functions performed such as power purchase, distribution etc.

**(b) Classification of Cost** –Each of the functionalized costs shall be further classified, based on its intrinsic nature into Demand related cost, Energy related cost and Customer related cost. Demand related costs shall generally be of fixed nature, related to capacity creation and shall include interest on capital borrowing, depreciation etc. Energy cost shall be related to quantum of electricity consumption of consumer, such as fuel cost, interest on working capital, etc. Consumer related cost shall include operating expenses associated with meter reading, billing and accounting.

**(c) Allocation of Cost**

i. **Allocation of Demand Costs:** Demand costs of all three functions shall be allocated among consumer categories on the basis of average coincident peak demand of the tariff categories (average of past 12 months). To facilitate determination of average coincident peak demand for the various tariff categories, load research shall be made an integral part of the operations of the DISCOMs and systematic load research exercises shall be initiated.

ii. **Allocation of Energy Costs:** Energy related costs of Distribution functions shall be allocated to consumer categories on the basis of ratio of electricity consumption of each consumer category to the total electricity consumption under the purview of the Distribution Licensee. Energy related costs of Power purchase shall be allocated to various tariff categories on the basis of block approach on merit order dispatch and incremental principle, where each tariff category shall be allocated the incremental (energy related) power purchase cost on the basis of their respective share in the incremental power purchase. For the purpose of operationalising the block approach and incremental principle, the Commission shall identify and notify a suitable year as the "base year".

iii. **Allocation of Customer Costs:** Customer related costs shall be allocated to consumer categories on the basis of the ratio of number of consumers in each category to total number of consumers under the purview of the Distribution Licensee.

**(d)** Summation of allocated Demand cost, Energy cost and Customer cost across functions shall be total Cost to serve for respective consumer categories. Cost to serve reduced by revenue from a consumer category shall give total subsidy for that category. Total subsidy for a consumer category reduced by Government subsidy, if any, shall be cross-subsidy for that consumer category.

**(e)** The consumers below poverty line who consume power below a specified level, say 30 units per month, shall receive a special support through cross subsidy.

**PART VIII**  
**MISCELLANEOUS**

**34. Power to amend**

The Commission may, at any time, amend any provisions of these Regulations.

**35. Power to remove difficulties**

If any difficulty arises in giving effect to the provisions of these Regulations, the Commission may, by general or specific Order, make such provisions not inconsistent with the provisions of the Act, as may appear to be necessary for removing the difficulty.

**36. Repeal and savings**

- (a) Save as otherwise provided in these Regulations, the [State Commission] (Terms and Conditions of Determination of Tariff) Regulations [ year], are hereby repealed.
- (b) Notwithstanding such repeal, any proceedings before the Commission pertaining to the period prior to the commencement of the Control Period, including Petitions for True up of expenses, annual performance review, etc. shall be governed by [State Commission] (Terms and Conditions of Determination of Tariff) Regulations [----- year].

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Annexure - I

**METHODOLOGY FOR COMPUTATION OF AT&C LOSS**

| Name of State                 |  |             |      |      |
|-------------------------------|--|-------------|------|------|
| Name of Distribution licensee |  |             |      |      |
| S. No.                        | Particulars  | Calculation | Unit | Year |
| 1                             | Generation (own as well as any other connected generation net after deducting auxiliary consumption) within area of supply of Distribution licensee. | A           | MU   |      |
| 2                             | Input energy (metered Import) received at interface point of Distribution licensee's network   | B           | MU   |      |
| 3                             | Input energy (metered Export) by the Distribution licensee at interface points of Distribution licensee .network                                     | C           | MU   |      |
| 4                             | Total Energy available for sale within the licensed area to the consumers of the Distribution licensee.  | $D=A+B-C$   | MU   |      |
| 5                             | Energy billed to metered consumers within the licensed area of the Distribution licensee.  | E           | MU   |      |
| 6                             | Total Energy Billed  | $G=E$       | MU   |      |
| 7                             | Amount billed to consumer within the licensed area of the Distribution licensee.   | H           | Rs   |      |
| 8                             | Late payment Surcharge   | I           | Rs.  |      |
| 9                             | Amount realized by the Distribution licensee out of the amount Billed at H#  | J           | Rs   |      |

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|    |   |  |     |  |
|----|---|--|-----|--|
| 10 | Subsidy Amount Received                       | K  | Rs. |  |
| 11 | Amount Realised on account of theft cases     | L  | Rs. |  |
| 12 | Energy Realized on account of theft cases     | $M = (L \times G) / H$                             | MU  |  |
| 13 | Collection Efficiency (%)                     | $N = \frac{(J - I + K + L)}{H + K + L} \times 100$ | %   |  |
| 14 | Energy Realized by the Distribution licensee. | $P = N \times G$                                   | MU  |  |
| 15 | Distribution Loss (%)                         | $Q = \frac{(D - G)}{D} \times 100$                 | %   |  |
| 16 | AT&C Loss (%)                                 | $R = \frac{(D - (P + M))}{D} \times 100$           | %   |  |

# Amount received in the current year for the amount billed in the previous years should not be excluded in this head. However, subsidy received against the current year's sale should be considered in this head.

Note: Audited figures must be taken from the Commercial Department of the utility (Billing and Revenue Section) for computing the AT&C losses.

**Annexure - II****Useful life of distribution assets**

The useful life of the various categories of the assets shall be as indicated below. However, the Commissions will define a reduced asset life given the manner of its usage, prevailing local conditions and maintenance practices, provided the same is justified by the Distribution licensee.

## 1) Transformer

| <b>Sl.</b> | <b>Particulars</b>        | <b>Useful Life<br/>(in years)</b> |
|------------|---------------------------|-----------------------------------|
| 1          | Power Transformers        | 25                                |
| 2          | Distribution Transformers |                                   |
| <b>i</b>   | <100 kVA                  | 15                                |
| <b>ii</b>  | >=100 KVA                 | 20                                |

## 2) Substation Switchgear

| <b>Sl.</b> | <b>Particulars</b>           | <b>Useful Life<br/>(in years)</b> |
|------------|------------------------------|-----------------------------------|
| <b>1.</b>  | Circuit Breakers (33kv S/s), | 15                                |
| <b>2.</b>  | Circuit Breakers (LV)        | 10                                |
| <b>3.</b>  | Isolators                    | 10                                |
| <b>4.</b>  | Bus couplers                 | 15                                |
| <b>5.</b>  | Lightning Arrestor           | 10                                |

## 3) Other sub-station components

| <b>Sl.</b> | <b>Particulars</b>     | <b>Useful Life<br/>(in years)</b> |
|------------|------------------------|-----------------------------------|
| <b>1.</b>  | Instrument Transformer | 15                                |
| <b>2.</b>  | Insulators             | 10                                |
| <b>3.</b>  | Ring Main Unit         | 10                                |
| <b>4.</b>  | SCADA                  | 20                                |

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4) Capacitor Bank

| <b>Sl.</b> | <b>Particulars</b> | <b>Useful Life<br/>(in years)</b> |
|------------|--------------------|-----------------------------------|
| 1.         | Capacitor Banks    | 20                                |

5) Batteries

| <b>Sl.</b> | <b>Particulars</b> | <b>Useful Life<br/>(in years)</b> |
|------------|--------------------|-----------------------------------|
| 1.         | Batteries          | 5                                 |

6) Wires and cables with support structure

| <b>Sl.</b> | <b>Particulars</b>  | <b>Useful Life<br/>(in years)</b> |
|------------|---|-----------------------------------|
| 1.         | Overhead lines including supports:                          |                                   |
| i.         | 11kV and above  | 25                                |
| ii.        | LT lines  | 20                                |
| 2          | Underground lines including join box and disconnected boxes | 25                                |

7) Meters

| <b>Sl.</b> | <b>Particulars</b>             | <b>Useful Life<br/>(in years)</b> |
|------------|--------------------------------|-----------------------------------|
| 1.         | Consumer Meters                |                                   |
| i.         | Electronic meters              | 10                                |
| ii.        | Smart meters                   | 10                                |
| 2          | Interface/ Energy Audit Meters | 10                                |

8) IT equipment including software etc.

| <b>Sl.</b> | <b>Particulars</b>  | <b>Useful Life<br/>(in years)</b> |
|------------|---|-----------------------------------|
| 1.         | I. T Equipment including software                                     |                                   |
| i.         | Information and Communication system including communication hardware | 7                                 |
| ii.        | IT hardware (server equipment)  | 6                                 |

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| Sl.  | Particulars   | Useful Life (in years) |
|------|---|------------------------|
| iii. | IT hardware (end use i.e. desktops / laptops)   | 3                      |
| iv.  | IT software (amortization of software licensing costs OR in house developed software) | 5                      |

9) Safety equipment and tools

| Sl. | Particulars  | Useful Life (in years) |
|-----|--|------------------------|
| 1.  | Safety and Tools   |                        |
| i.  | Tools and Tackles (wire strippers, pliers, flash arc equipment, drill, hammer etc) | 10                     |
| ii. | Personal protective equipment PPE (shoes, gloves, glasses, protective gear etc)    | 5                      |

10) Buildings and civil engineering works

| Sl.  | Particulars   | Useful Life (in years) |
|------|---|------------------------|
| 1.   | Buildings and Civil Engineering Works of permanent nature |                        |
| i.   | Office and showrooms                                      | 60                     |
| ii.  | Buildings other than Offices & showrooms                  | 30                     |
| iii. | Others  | 30                     |
| 2.   | Temporary structures and erections                        | 1                      |

11) Office furniture equipment and fixtures:

| Sl.  | Particulars                                      | Useful Life (in years) |
|------|--|------------------------|
| 1.   | Office furniture, equipment, fixtures, etc.      |                        |
| i.   | Office furniture and fittings                    | 10                     |
| ii.  | Office equipment                                 | 10                     |
| iii. | Internal wiring including fittings and apparatus | 10                     |
| iv.  | Street Light fittings                            | 10                     |

FOR MODEL REGULATIONS FOR MULTI YEAR DISTRIBUTION TARIFF

12) Self propelled vehicles

| <b>Sl.</b> | <b>Particulars</b>      | <b>Useful Life<br/>(in years)</b> |
|------------|-------------------------|-----------------------------------|
| <b>1.</b>  | Self propelled vehicles | 5                                 |