

DRAFT
MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION
(MULTI YEAR TARIFF) REGULATIONS, 2013

Notification No. 1 of 2013

Meghalaya State Electricity Regulatory Commission No. MSERC/01/2013/01. The following Draft MSERC Multi-Year Tariff Regulations, 2013, which the Commission purpose to make under clauses (zc), zd) and (ze) of sub-section (2) of section 181 read with section 61 of the Electricity Act, 2003 (36 of 2003) and all powers enabling it in that behalf, are hereby previously published as required under section (3) of section 181 and notice is hereby given that any person or persons who may be interested may send their objections, suggestions or comments to the Secretary of the Commission, New Administrative Building, Lower Lachumiere, Shillong-793001 within 30 days of this notification in the Gazette of Meghalaya for consideration by the Commission.

(J B POON)
Secretary
Meghalaya State Electricity Regulatory Commission
Shillong.

CHAPTER 1
PRELIMINARY

1 Short title, extent, applicability and commencement

- 1.1 These Regulations may be called the Meghalaya State Electricity Regulatory Commission Multi Year Tariff Regulations, 2013.
- 1.2 These Regulations shall come into force on the date of their publication in the Official Gazette.
- 1.3 These Regulations shall extend to the whole of the State of Meghalaya.
- 1.4
 - (a) These Regulations shall be applicable for determination of tariff in all cases covered under these Regulations from April 1, 2014 and onwards;
 - (b) These Regulations shall be applicable to all existing and future Generating Companies, Transmission Licensees and Distribution Licensees and their successors, if any;
 - (c) These Regulations supersede the “Meghalaya State Electricity Regulatory Commission (Terms and Conditions of Determination of Tariff) Regulations, 2011”.

2 Definitions

(1) **“Accounting Statement”** means for each financial year, the following statements, namely:

- (i) balance sheet, prepared in accordance with the form contained in Part I of Schedule VI to the Companies Act, 1956 as amended from time to time;
- (ii) profit and loss account, complying with the requirements contained in Part II of Schedule VI to the Companies Act, 1956;
- (iii) cash flow statement, prepared in accordance with the Accounting Standard on Cash Flow Statement (AS-3) of the Institute of Chartered Accountants of India;
- (iv) report of the statutory auditors;
- (v) cost records prescribed by the Central Government under Section 209(1)(d) of the Companies Act, 1956;

together with notes thereto, and such other supporting statements and information as the Commission may direct from time to time:

Provided that in case of any local authority engaged in the business of distribution of electricity, the Accounting Statement shall mean the items, as mentioned above, prepared and maintained in accordance with the relevant Acts or Statutes as applicable to such local authority: Provided further that once the Commission notifies the Regulations for submission of Regulatory Accounts, the applications for tariff determination and truing up shall be based on the Regulatory Accounts.

(2) **“Act”** means the Electricity Act, 2003 (36 of 2003), as amended from time to time;

(3) **“Allocation Statement”** means for each financial year, a statement in respect of each of the separate businesses of the of the Generating Company or Transmission Licensee or Distribution Licensee, showing the amounts of any revenue, cost, asset, liability, reserve or provision etc, which has been either:

- i) charged from or to each such Other Business together with a description of the basis of that charge; or
- ii) determined by apportionment or allocation between different businesses of the licensee including the Licensed Businesses, together with a description of the basis of the apportionment or allocation:

Provided that for the purpose of this Regulation, the licensed business of the Distribution Licensee for an area of supply would be separated as Distribution Wires and Retail Supply business: Provided further that such allocation statement in respect of a generating station, owned and/or maintained and/or operated by the distribution licensee, shall be maintained in a manner so as to enable tariff determination, stage-wise, Unit wise and/or for the whole generating station.

(4) **“Allotted Transmission Capacity”** means the power transfer in MW between the specified point(s) of injection and point(s) of drawal allowed to a long-term customer or a medium-term customer on the intra-State transmission system under the normal

circumstances and the expression "allotment of transmission capacity" shall be construed accordingly:

Provided that the Allotted Transmission Capacity to a long-term transmission customer or a medium-term transmission customer shall be sum of the generating capacities allocated to the long-term transmission customer or the medium-term transmission customer from the generating stations and the contracted power, if any;

- (5) **“Applicant”** means a Generating Company or Transmission Licensee or Distribution Licensee who has made an application for determination of Aggregate Revenue Requirement and tariff in accordance with the Act and these Regulations and includes a Generating Company or Transmission Licensee or Distribution Licensee whose tariff is the subject of a review by the Commission either on suo-motu basis or on a petition filed by any interested or affected person or as part of a Truing-up exercise;
- (6) **“Aggregate Revenue Requirement”** means the requirement of the Transmission Licensee or Distribution Licensee for recovery, through tariffs, of allowable expenses and return on equity pertaining to its Licenced Business, in accordance with these Regulations;
- (7) **“Area of Supply”** means the area within which a distribution licensee is authorised by his licence to supply electricity;
- (8) **“Authority”** means Central Electricity Authority referred to in Section 70 of the Act;
- (9) **“Auxiliary Energy Consumption”** in relation to a period, means the quantum of energy consumed by auxiliary equipment of the generating station and shall be expressed as a percentage of the sum of gross energy generated at the generator terminals of all the Units of the generating station:

Provided that for the purpose of these Regulations, auxiliary energy consumption for a generating station shall include transformer losses within the generating station: Provided further that colony consumption of a generating station shall not be included as part of the auxiliary consumption for the purpose of these Regulations.

- (10) **“Availability”** in relation to a thermal generating station for any period means the average of the daily average declared capacities as certified by Meghalaya State Load Despatch Centre (SLDC) for all the days during that period expressed as a percentage of the installed capacity of the generating station minus normative auxiliary consumption as specified in these Regulations, and shall be computed in accordance with the following formula:

$$\text{Availability} = 10000 \times \frac{\sum_{i=1}^N \text{DC}_i}{N \times \text{IC} \times (100 - \text{AUX}_n)} \%$$

Where, N = number of days in the given period;

DC_i = Average Declared Capacity in MW for the ith day in such period;

IC = Installed Capacity of the generating station in MW;

AUX = Normative Auxiliary Consumption, expressed as a percentage of gross generation;

- (11) **“Availability”** in relation to a transmission system for a given period means the time in hours during that period the transmission system is capable of transmitting electricity at its rated voltage expressed in percentage of total hours in the given period and shall be calculated as provided in **Annexure III** to these Regulations;
- (12) **“Bank Rate”** shall mean the Bank Rate declared by the Reserve Bank of India from time to time;
- (13) **“Beneficiary”** in relation to a generating station means the person purchasing electricity generated at such a generating station whose tariff is determined under these Regulations;
- (14) **“Block”** in relation to a combined cycle thermal generating station includes combustion turbine-generators, associated waste heat recovery boilers, connected steam turbine-generators and auxiliaries;
- (15) **“Bulk Power Transmission Agreement”** means an executed Agreement that contains the terms and conditions under which a Transmission System User is entitled to access an intra-State transmission system of a Transmission Licensee;
- (16) **“Business Plan”** shall comprise of elements as specified in Regulation 7 of these Regulations;
- (17) **“change in law”** means occurrence of any of the following events:
 - (i) the enactment, bringing into effect, adoption, promulgation, amendment, modification or repeal of any law; or
 - (ii) change in interpretation of any law by a competent Court, Tribunal or Indian Governmental Instrumentality, which is the final authority under law for such interpretation; or
 - (iii) change by any competent statutory authority, in any consent, approval or licence.
- (18) **“Commission”** means the Meghalaya State Electricity Regulatory Commission;
- (19) **“Control Period”** means the period of three years from April 1, 2014 to March 31, 2017, and for every block of three years thereafter, for submission of forecast in accordance with **Chapter-2** of these Regulations;
- (20) **“Cut-off Date”** means 31st March of the year closing after two years of the year of commercial operation of the project, and in case the project is declared under commercial operation in the last quarter of a year, the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation;
- (21) **“Day”** means the 24 hour period starting at 0000 hour;
- (22) **“Date of Commercial Operation” (COD)** means:
 - a. in relation to a unit or block of a thermal generating station, the date declared by the generating company, after demonstrating the Maximum Continuous Rating (MCR) or the Installed Capacity (IC) through a successful trial run after notice to the beneficiaries, from 00:00 hour of which scheduling process as per the Commission's Order is fully implemented;

- b. in relation to the generating station, the date of commercial operation means the date of commercial operation of the last unit of the generating station;
- c. in relation to a unit of a hydro generating station, the date declared by the Generating Company from 00:00 hour of which, after notice to the beneficiaries, scheduling process in accordance with the Commission's Order is fully implemented, and in relation to the generating station as a whole, the date declared by the Generating Company after demonstrating peaking capability corresponding to installed capacity of the generating station through a successful trial run, after notice to the beneficiaries;

Note:

- i. In case the hydro generating station with pondage or storage is not able to demonstrate peaking capability corresponding to the installed capacity for the reasons of insufficient reservoir or pond level, the date of commercial operation of the last unit of the generating station shall be considered as the date of commercial operation of the generating station as a whole, provided that it will be mandatory for such hydro generating station to demonstrate peaking capability equivalent to installed capacity of the generating unit or the generating station as and when such reservoir/pond level is achieved.
- ii. In case of purely run-of-river hydro generating station, if the unit or the generating station is declared under commercial operation during lean inflows period when the water is not sufficient for such demonstration, it shall be mandatory for such hydro generating station or unit to demonstrate peaking capability equivalent to installed capacity as and when sufficient inflow is available.
- d. in relation to the transmission system, the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful charging and trial operation:

Provided that the date shall be the first day of a calendar month and transmission charge for the element shall be payable and its availability shall be accounted for, from that date: Provided further that in case an element of the transmission system is ready for regular service but is prevented from providing such service for reasons not attributable to the transmission licensee, its suppliers or contractors, the Commission may approve the date of commercial operation prior to the element coming into regular service.

(23) **“Declared Capacity”** means

- a. for a thermal generating station, the capability of the generating station to deliver ex-bus electricity in MW declared by such generating station in relation to any period of the day or whole of the day, duly taking into account the availability of fuel:

Provided that in case of a gas turbine generating station or a combined cycle generating station, the generating station shall declare the capacity for units and modules on gas fuel and liquid fuel separately, and these shall be scheduled separately. Total declared capacity and total scheduled generation for the generating station shall be the sum of the declared capacity and scheduled generation for gas fuel and liquid fuel for the purpose of computation of availability and Plant Load Factor, respectively;

- b. for hydro power generating stations, the ex-bus capacity in MW expected to be available from the generating station for the ith day of the month, which the station can deliver for at least three (3) hours, as certified by the Meghalaya State Load Despatch Centre after the day is over, taking into account the availability of water;
- (24) **“Design Energy”** in relation to a hydro power generating station means the quantum of energy, which could be generated in a 90 per cent dependable year with 95 per cent installed capacity of the generating station;
- (25) **“Distribution Business”** means the business of operating and maintaining a distribution system for supplying electricity in the area of supply of the Distribution Licensee;
- (26) **“Distribution Wires Business”** means the business of operating and maintaining a distribution system for wheeling of electricity in the area of supply of the Distribution Licensee;
- (27) **“Expected Revenue from Tariff and Charges”** means the revenue estimated to accrue to the Generating Company or Transmission Licensee or Distribution Licensee from the Regulated Business at the prevailing tariffs;
- (28) **“Existing Generating Unit/Station”** means a generating unit/station declared under commercial operation prior to the date of effectiveness of these Regulations;
- (29) **“Existing Project”** means a project declared under commercial operation prior to the date of effectiveness of these Regulations;
- (30) **“Event”** means an unscheduled or unplanned occurrence in the intra-State transmission system including faults, incidents and breakdowns;
- (31) **“Force Majeure Event”** means, with respect to any party, any event or circumstance, which is not within the reasonable control of, and is not due to an act of omission or commission of, that party and which, by the exercise of reasonable care and diligence, could not have been prevented, and without limiting the generality of the foregoing, would include the following events:
- a. acts of God, including but not limited to lightning, storm, action of the elements, earthquakes, flood, torrential rains, drought and natural disaster;
 - b. strikes, lockouts, go-slow, bandh or other industrial disturbances not instigated by any party;
 - c. acts of public enemy, wars (declared or undeclared), blockades, insurrections, riots, revolution, sabotage, vandalism and civil disturbance;
 - d. unavoidable accident, including but not limited to fire, explosion, radioactive contamination and toxic dangerous chemical contamination;
 - e. any shutdown or interruption of the grid, which is required or directed by the State or Central Government or by the Commission or the Meghalaya State Load Despatch Centre;
- (32) **“Generation Business”** means the business of production of electricity from a generating station for the purpose of (i) giving supply to any premises or enabling a

supply to be so given, or (ii) supply of electricity to any Licensee in accordance with the Act and the rules and Regulations made there-under and, (iii) supply of electricity to any consumer subject to the Regulations made under sub-section (2) of section 42 of the Act;

- (33) **“Gross Calorific Value”** in relation to a thermal generating station means the heat produced in kilocalories by complete combustion of one kilogram of solid fuel or one liter of liquid fuel or one standard cubic metre of gaseous fuel, as the case may be;
- (34) **“Gross Station Heat Rate”** means the heat energy input in kcal required to generate one kWh of electrical energy at generator terminals;
- (35) **“High Tension”** or **“HT”** means all voltages defined as “high” or “extra high” voltage under clause (av) of sub-rule (1) of Rule 2 of the Indian Electricity Rules, 1956 and corresponding voltage classifications as may be specified in accordance with clause (c) of sub-section (2) of Section 185 of the Act;
- (36) **“Infirm power”** means electricity injected into the grid prior to the commercial operation of a Unit or Block of the generating station;
- (37) **“Installed Capacity”** means the summation of the name plate capacities of all the units of the generating station or the capacity of the generating station (reckoned at the generator terminals) as approved by the Commission from time to time;
- (38) **“Maximum Continuous Rating”** or **“MCR”** in relation to a unit of the thermal generating station means the maximum continuous output at the generator terminals, guaranteed by the manufacturer at rated parameters, and in relation to a Block of a combined cycle thermal generating station means the maximum continuous output at the generator terminals, guaranteed by the manufacturer with water or steam injection (if applicable) and corrected to 50 Hz grid frequency and specified site conditions;
- (39) **“Mid-term Review”** means a review to be undertaken in accordance with the second proviso to Regulation 4.2 (i) and the proviso to Regulation 7.1 of these Regulations;
- (40) **“New Generating Unit/Station”** means a generating unit/station declared under commercial operation on or after the date of coming into force of these Regulations;
- (41) **“Normative Annual Plant Availability Factor”** or **“NAPAF”** in relation to a thermal generating station means the availability factor specified in **Regulation 42.1** for thermal generating stations and in relation to a hydro generating station means the availability factor specified in **Regulation 53.1** for hydro generating stations;
- (42) **“Non-Tariff Income”** means income relating to the regulated business other than from tariff, excluding any income from Other Business and, in case of the Retail Supply Business of a Distribution Licensee, excluding income from wheeling and receipts on account of cross-subsidy surcharge and additional surcharge on charges of wheeling;
- (43) **“Operation and Maintenance expenses”** or **“O&M expenses”**:
 - a) In relation to a Generating Company, the expenditure incurred on operation and maintenance of the project of a Generating Company, or part thereof, and includes the expenditure on manpower, repairs, spares, consumables, insurance and overheads;
 - b) In relation to a Transmission Licensee or Distribution Licensee, the expenditure incurred on operation and maintenance of the system by the Transmission Licensee or

Distribution Licensee, and includes the expenditure on manpower, repairs, spares, consumables, insurance and overheads;

- (44) **“Original Project Cost”** means the capital expenditure incurred by the Generating Company or the Transmission Licensee, as the case may be, within the original scope of the project up to the cut-off date as admitted by the Commission;
- (45) **“Other Business”** means any business undertaken by the Generating Company, Transmission Licensee or Distribution Licensee, other than the businesses regulated by the Commission;
- (46) **“Project”** means a generating station or the transmission system, as the case may be, and in case of a hydro generating station includes all components of generating facility such as penstocks, head and tail works, main and regulating reservoirs, dams and other hydraulic works, intake water conductor system, power generating station and generating units of the scheme, as apportioned to power generation;
- (47) **“Rated Voltage”** means the manufacturer’s design voltage at which the transmission system is designed to operate or such lower voltage at which the line is charged, for the time being, in consultation with Transmission System Users;
- (48) **“Regulated Business”** means any electricity business, which is regulated by the Commission.
- (49) **“Retail Supply Business”** means the business of sale of electricity by a Distribution Licensee to his consumers in accordance with the terms of his licence;
- (50) **“Run-of-river generating station”** means a hydro generating station, which does not have upstream pondage;
- (51) **“Run-of-river generating station with pondage”** means a hydro generating station with sufficient pondage for meeting the diurnal variation of power demand;
- (52) **“Small gas turbine generating station”** means and includes open cycle gas turbine or combined cycle generating stations with gas turbines in the capacity range of 50 MW or below;
- (53) **“Scheduled Generation” or “SG’** at any time or for any period or time block means schedule of generation in MW ex-bus given by the State Load Dispatch Centre;
- (54) **“Storage type power station”** means a hydro power generating station associated with large storage capacity to enable variation in generation of electricity according to demand;
- (55) **“Transmission System”** means a line or a group of lines with or without associated sub-station, and includes equipment associated with transmission lines and sub-stations;
- (56) **“Transmission System User”** means a person who has been allotted transmission capacity rights to access an intra-State transmission system pursuant to a Bulk Power Transmission Agreement, except as provided in the Meghalaya State Electricity Regulatory Commission (Terms & Conditions of Open Access) Regulations, 2012, as applicable and as amended from time to time;

- (57) **“Unit”** in relation to a thermal generating station other than combined cycle thermal generating station means steam generator, turbine-generator and auxiliaries, or in relation to a combined cycle thermal generating station, means turbine-generator and auxiliaries; and in relation to a hydro generating station means turbine-generator and its auxiliaries;
- (58) **“Useful life”** in relation to a unit of a generating station, transmission system and distribution system from the date of commercial operation shall mean the following, namely:
- i. Coal/Lignite based thermal generating : 25 years;
 - ii. Gas/Liquid fuel based thermal generating station : 25 years;
 - iii. Hydro generating station : 35 years;
 - iv. AC and DC sub-station : 25 years;
 - v. Transmission line : 35 years;
 - vi. Distribution line : 35 years;
- (59) **“Year”** means a financial year (FY);
- (60) The words and expressions used in these Regulations and not defined herein but defined in the Act shall have the meaning assigned to them under the Act.

3 Scope of Regulation and extent of application

3.1 The Commission shall determine tariff within the Multi-Year Tariff framework, for all matters for which the Commission has jurisdiction under the Act, including in the following cases:

(i) Supply of electricity by a Generating Company to a Distribution Licensee:

Provided that where the Commission believes that a shortage of supply of electricity exists, it may fix the minimum and maximum ceiling of tariff for sale or purchase of electricity in pursuance of an agreement, entered into between a Generating Company and a Distribution Licensee or between distribution licensees, for a period not exceeding one year to ensure reasonable prices of electricity;

(ii) Intra-State transmission of electricity;

(iii) Intra-State Wheeling of electricity;

(iv) Retail supply of electricity:

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: Provided further that where the Commission has allowed open access to certain consumers under sub-section (2) of Section 42 of the Act, such consumers, notwithstanding the provisions of clause (d) of sub-section (1) of Section 62 of the Act, may enter into an agreement with any person for supply or purchase of electricity on such terms and conditions (including tariff) as may be agreed upon by them: Provided further that the Commission, while determining tariff upon an application made to it under this Regulation, shall also have regard to the terms and conditions of tariff as may be

specified by the State Commission of such other State and/or the terms and conditions of tariff as may be specified by the Central Commission where any of the Parties to such transaction come under the jurisdiction of such State Commission or of the Central Commission.

- 3.2 The Commission may also determine the rate at which the Distribution Licensee can supply power to other Distribution Licensees in the State.
- 3.3 In accordance with the principles laid out in these Regulations, the Commission shall determine separate Aggregate Revenue Requirement (ARR) for:
 - (a) Distribution Wires Business;
- 3.4 The Distribution Licensee shall file Petition containing separate details for determination of ARR for Distribution Wires Business specified in these Regulations:

Provided that once the Commission notifies the Regulations for submission of Regulatory Accounts, the Petition containing separate details for determination of ARR for Distribution Wires Business shall be based on the Regulatory Accounts.
- 3.5 The ARR determined for the Distribution Wires Business will be the basis for the fixation of the wheeling tariff/charges.
- 3.6 The ARRs determined for the Distribution Wires Business will be the basis for the fixation of the Retail Supply Tariff for retail sale of electricity.
- 3.7 The Commission shall also determine Surcharge in addition to the charges for wheeling under the first proviso to sub-section (2) of Section 42 of the Act, in accordance with the Meghalaya State Electricity Regulatory Commission (Terms & Conditions of Open Access) Regulations, 2012, as applicable and as amended through Orders issued by the Commission from time to time.
- 3.8 The Commission shall also determine additional surcharge on the charges for wheeling under sub-section (4) of Section 42 of the Act, in accordance with the Meghalaya State Electricity Regulatory Commission (Terms & Conditions of Open Access) Regulations, 2012, as applicable and as amended through Orders issued by the Commission from time to time.
- 3.9 Notwithstanding anything contained in these Regulations, the Commission shall adopt the tariff if such tariff has been determined through a transparent process of bidding in accordance with the guidelines issued by the Central Government pursuant to Section 63 of the Act.

CHAPTER 2

GENERAL GUIDING PRINCIPLES

4. Multi-Year Tariff framework

- 4.1 The Commission shall determine the tariff for matters covered under clauses (i), (ii), (iii), and (iv) of Regulation 3.1 above, under a Multi-Year Tariff framework with effect from April 1, 2014:

Provided that the Commission may, either on *suo-motu* basis or upon application made to it by an applicant, exempt the determination of tariff of a Generating Company or Transmission Licensee or Distribution Licensee under the Multi-Year Tariff framework for such period as may be contained in the Order granting such an exemption.

- 4.2 The Multi-Year Tariff framework shall be based on the following elements, for determination of Aggregate Revenue Requirement and expected revenue from tariff and charges for Generating Company, Transmission Licensee, Distribution Wires Business and Retail Supply Business:

- (i) A detailed Business Plan based on the principles specified in these Regulations, for each year of the Control Period, shall be submitted by the applicant for the Commission's approval:
 - (i) Provided that the performance parameters, whose trajectories have been specified in the Regulations, shall form the basis of projection of these performance parameters in the Business Plan: Provided further that a Mid-term Review of the Business Plan may be sought by the Generating Company, Transmission Licensee and Distribution Licensee through an application filed three (3) months prior to the filing of Petition for truing-up for the second year of the Control Period and tariff determination for the fourth year of the Control Period;
 - (ii) Based on the Business Plan, the applicant shall submit the forecast of Aggregate Revenue Requirement (ARR) for the entire Control Period and expected revenue from existing tariffs for the first year of the Control Period, and the Commission shall determine ARR for the entire Control Period and the tariff for the first year of the Control Period for the Generating Company, Transmission Licensee, Distribution Wires Business;
 - (iii) Truing up of previous year's expenses and revenue based on Audited Accounts vis-à-vis the approved forecast and categorisation of variation in performance as those caused by factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (uncontrollable factors), shall be undertaken by the Commission:

Provided that once the Commission notifies the Regulations for submission of Regulatory Accounts, the applications for tariff determination and truing up shall be based on the Regulatory Accounts;

- (iv) The mechanism for pass-through of approved gains or losses on account of uncontrollable factors as specified by the Commission in these Regulations;
- (v) The mechanism for sharing of approved gains or losses on account of controllable factors as specified by the Commission in these Regulations;
- (vi) Annual determination of tariff for Generating Company, Transmission Licensee, Distribution Wires Business, for each financial year within the Control Period, based on the approved forecast and results of the truing up exercise.

5 Accounting statement and filing under MYT

- 5.1 The filing under MYT by the Generating Company, Transmission Licensee, and Distribution Licensee, shall be done as per the timelines specified in these Regulations and in compliance with the principles for determination of ARR as specified in these Regulations, in such form as may be prescribed by the Commission from time to time.
- 5.2 The filing for the Control Period under these Regulations shall be as under:
 - a) MYT Petition shall comprise of:
 - i. Truing up for FY 2009-10 to be carried out under Meghalaya State Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 and
 - ii. Annual Performance Review for FY 2010-11 and 2011-12 to be carried out under Meghalaya Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011;
 - iii. Multi-year Aggregate Revenue Requirement for the entire Control Period with year-wise details;
 - iv. Revenue from the sale of power at existing tariffs and charges and projected revenue gap, for the first year of the first Control Period under these Regulations, viz., FY 2014-15;
 - v. Application for determination of tariff for FY 2014-15.
 - b) From the first year of the Control Period and onwards, the Petition shall comprise of:
 - i. Truing Up for FY 2012-13 to be carried out under Meghalaya State Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 and onwards in accordance with these Regulations;
 - ii. Revenue from the sale of power at existing tariffs and charges for the ensuing year;
 - iii. Revenue gap for the ensuing year calculated based on ARR approved in the Tariff Order or MYT Order and truing up for the previous year;
 - iv. Application for determination of tariff for the ensuing year.
 - c) In case of Mid-term Review of Business Plan under Regulation 4.2 (i), the Petition shall comprise of :
 - i. Truing Up for the previous year;
 - ii. Modification of the ARR for the remaining years of the Control Period, if any, with adequate justification for the same;

- iii. Revenue from the sale of power at existing tariffs and charges for the ensuing year;
 - iv. Revenue gap for the ensuing year calculated based on ARR approved in the MYT Order and truing up for the previous year;
 - v. Application for determination of tariff for the ensuing year.
- 5.3 The Generating Company, Transmission Licensee, and Distribution Licensee for the Distribution Wires Business, shall file separate audited accounting statements with the application for determination of tariff and truing up under Regulation 10:
- 5.4 In case of a vertically integrated business, the Utility shall be required to file separate applications for determination of ARR and tariff for Generation Business, Transmission Business, Distribution Wires Business:

Provided that for the distribution business, the Distribution Licensee shall file Petitions as per Regulation 3.4 of these Regulations:

Provided further that in case complete accounting segregation has not been done amongst the various Businesses, the Utility shall have to do so within one year of notification of these Regulations. Till such time there is a complete segregation of audited accounts between Generation, Transmission, Wheeling and Supply Businesses, the application for determination ARR and tariff and truing up for each Business shall be supported by an Allocation Statement that contains the apportionment of costs and revenues to that Business. The Allocation Statement shall also contain the methodology that has been used for the apportionment.

6. Applicability

- 6.1 The Multi-Year Tariff framework shall apply to applications made for determination of tariff for a Generating Company, Transmission Licensee, and Distribution Licensee for Distribution Wires Business.

7. Business Plan

- 7.1 The Generating Company, Transmission licensee, and Distribution Licensee for Distribution Wires Business, shall file a Business Plan for the Control Period of three (3) financial years from 1st April 2014 to 31st March 2017, which shall comprise but not be limited to detailed category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets, in accordance with guidelines and formats, as may be prescribed by the Commission from time to time:

Provided that a mid-term review of the Business Plan/Petition may be sought by the Generating Company, Transmission Licensee and Distribution Licensee through an application filed three (3) months prior to the specified date of filing of Petition for truing up for the second year of the Control Period and tariff determination for the fourth year of the Control Period.

- 7.2 The capital investment plan shall show separately, on-going projects that will spill over into the Control Period, and new projects (along with justification) that will commence in the Control Period but may be completed within or beyond the Control Period. The Commission shall consider and approve the capital investment plan for which the Generating Company, Transmission Licensee, and Distribution Licensee for the

Distribution Wires Business, may be required to provide relevant technical and commercial details.

- 7.3 The Distribution Licensee shall project the power purchase requirement based on the Merit Order Despatch principles of all Generating Stations considered for power purchase, the Quantum of Renewable Purchase Obligation (RPO) under Regulation 4 of Meghalaya State Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulations, 2010 and the target set, if any, for Energy Efficiency (EE) and Demand Side Management (DSM) schemes.
- 7.4 The Generating Company, Transmission Licensee, and Distribution Licensee for the Distribution Wires Business, shall get the Business Plan approved by the Commission.

8 Multi-Year Tariff Application

- 8.1 The applicant shall submit the forecast of Aggregate Revenue Requirement for the entire Control Period and tariff proposal for the first year of the Control Period, in such manner, and within such time limit as provided in these Regulations and accompanied by such fee payable, as may be specified under the Meghalaya State Electricity Regulatory Commission (Fees, Fines and Charges) Regulations, 2009, as amended from time to time.
- 8.2 The applicant shall develop the forecast of Aggregate Revenue Requirement using the assumptions relating to the behaviour of individual variables that comprise the Aggregate Revenue Requirement during the Control Period.
- 8.3 The applicant shall develop the forecast of expected revenue from tariff and charges based on the following:
- (a) In the case of a Generating Company, estimates of quantum of electricity to be generated by each Unit/Station for ensuing financial year within the Control Period;
 - (b) In the case of a Transmission Licensee, estimates of transmission capacity allocated to Transmission System Users for ensuing financial year within the Control Period;
 - (c) In the case of a Distribution Licensee, estimates of quantum of electricity to be supplied to consumers and to be wheeled on behalf of Distribution System Users for ensuing financial year within the Control Period;
 - (d) Prevailing tariffs as on the date of making the application.
- 8.4 Based on the forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges, the Generating Company, Transmission Licensee, and Distribution Licensee for the Distribution Wires Business, shall propose the tariff that would meet the gap, if any, in the Aggregate Revenue Requirement.
- 8.5 The applicant shall provide full details supporting the forecast, including but not limited to details of past performance, proposed initiatives for achieving efficiency or productivity gains, technical studies, contractual arrangements and/or secondary research, to enable the Commission to assess the reasonableness of the forecast.

- 8.6 On receipt of application, the Commission shall either:
- (a) issue an Order approving the ARR for the entire Control Period and the tariff for the first year of the Control Period, subject to such modifications and conditions as it may specify in the said Order; or
 - (b) reject the application for reasons to be recorded in writing, as the Commission may deem appropriate:

Provided that the applicant shall be given a reasonable time for being heard before rejecting their application.

9. Specific trajectory for certain variables

- 9.1 While approving the Business Plan/MYT Petition, the Commission shall stipulate a trajectory for the variables, which shall include, but not be limited to Operation & Maintenance expenses, target plant load factor and distribution losses:

Provided that the Generating Company, Transmission Licensee and Distribution Licensee may seek a review of the trajectory at the time of mid-term review of Business Plan.

10 Truing Up

- 10.1 Where the Aggregate Revenue Requirement and expected revenue from tariff and charges of a Generating Company or Transmission Licensee or Distribution Licensee is covered under a Multi-Year Tariff framework, then such Generating Company or Transmission Licensee or Distribution Licensee, as the case may be, shall be subject to truing up of expenses and revenue during the Control Period in accordance with these Regulations.

- 10.2 The Generating Company or Transmission Licensee or Distribution Licensee shall file an Application for Truing up of the previous year and determination of tariff for the ensuing year, within the time limit specified in these Regulations:

Provided that the Generating Company or Transmission Licensee or Distribution Licensee, as the case may be, shall submit to the Commission information in such form as may be prescribed by the Commission, together with the Audited Accounts, extracts of books of account and such other details as the Commission may require to assess the reasons for and extent of any variation in financial performance from the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges:

Provided further that once the Commission notifies the Regulations for submission of Regulatory Accounts applications for tariff determination and truing up shall be based on the Regulatory Accounts.

- 10.3 The scope of the truing up shall be a comparison of the performance of the Generating Company or Transmission Licensee or Distribution Licensee with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise of the following:

- (a) a comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year, subject to the prudence check including pass-through of impact of uncontrollable factors;

- (b) Review of compliance with directives issued by the Commission from time to time;
 - (c) Other relevant details, if any.
- 10.4 In respect of the expenses incurred by the Generating Company, Transmission Licensee and Distribution Licensee during the year for controllable and uncontrollable parameters, the Commission shall carry out a detailed review of performance of an applicant vis-a-vis the approved forecast as part of the truing up.
- 10.5 Upon completion of the truing up under Regulation 10.4 above, the Commission shall attribute any variations or expected variations in performance for variables specified under Regulation 11 below, to factors within the control of the applicant (controllable factors) or to factors beyond the control of the applicant (uncontrollable factors):
- Provided that any variations or expected variations in performance, for variables other than those specified under Regulation 11.1 below shall be attributed entirely to controllable factors.
- 10.6 Upon completion of the Truing Up, the Commission shall pass an order recording:
- (a) the approved aggregate gain or loss to the Generating Company or Transmission Licensee or Distribution Licensee on account of controllable factors, and the amount of such gains or such losses that may be shared in accordance with Regulation 13 of these Regulations;
 - (b) Components of approved cost pertaining to the uncontrollable factors, which were not recovered during the previous year, shall be pass through as per Regulation 12 of these Regulations;
 - (c) Tariff determined for the ensuing year.

11 Controllable and uncontrollable factors

- 11.1 For the purpose of these Regulations, the term “uncontrollable factors” shall comprise of the following factors, which were beyond the control of the applicant, and could not be mitigated by the applicant:
- (a) Force Majeure events;
 - (b) Change in law, judicial pronouncements and Orders of the Central Government, State Government or Commission;
 - (c) Variation in the price of fuel and/ or price of power purchase according to the FPPPA formula approved by the Commission from time to time;
 - (d) Variation in the number or mix of consumers or quantities of electricity supplied to consumers:

Provided that where there is more than one Distribution Licensee within the area of supply of the applicant, any variation in the number or mix of consumers or in the quantities of electricity supplied to consumers within the area served by two or more such Distribution Licensees, on account of migration from one Distribution Licensee to another, shall be attributable to controllable factors: Provided further that if any consumer or category of consumers within the area of supply of the applicant is eligible for open access under sub-section (3) of Section 42 of the Act, then any variation in the number or

mix of such consumers or quantities of electricity supplied to such eligible consumers shall be attributable to controllable factors;

- (e) Transmission Loss;
- (f) Variation in market interest rates;
- (g) Taxes and Statutory levies;
- (h) Taxes on Income:

Provided that where the applicant or any interested or affected party believes, for any variable not specified above, that there is a material variation or expected variation in performance for any financial year on account of uncontrollable factors, such applicant or interested or affected party may apply to the Commission for inclusion of such variable at the Commission's discretion, under this Regulation for such financial year.

11.2 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 capitalisation 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;
- (b) Variation in Interest and Finance Charges, Return on Equity, and Depreciation on account of variation in capitalisation, as specified in clause (a) above;
- (c) Variations in technical and commercial losses of Distribution Licensee;
- (d) Variations in performance parameters;
- (e) Variations in working capital requirements;
- (f) Failure to meet the standards specified in the Meghalaya State Electricity Regulatory Commission (Standard of Performance) Regulations, 2012, except where exempted in accordance with those Regulations;
- (g) Variations in labour productivity;
- (h) Variation in operation & maintenance expenses;
- (i) Variation in Wires Availability.

12 Mechanism for pass through of gains or losses on account of uncontrollable factors

- 12.1 The approved aggregate gain or loss to the Generating Company or Transmission Licensee or Distribution Licensee on account of uncontrollable factors shall be passed through as an adjustment in the tariff of the Generating Company or Transmission Licensee or Distribution Licensee over such period as may be specified in the Order of the Commission passed under these Regulations.
- 12.2 The Generating Company or Transmission Licensee or Distribution Licensee shall submit such details of the variation between expenses incurred and revenue earned and the figures approved by the Commission, in the prescribed format to the Commission, along with the detailed computations and supporting documents as may be required for verification by the Commission.

- 12.3 Nothing contained in this **Regulation 24** shall apply in respect of any gain or loss arising out of variations in the price of fuel and power purchase, which shall be dealt with as specified by the Commission from time to time.

13 Mechanism for sharing of gains or losses on account of controllable factors

- 13.1 The approved aggregate gain to the Generating Company or Transmission Licensee or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:
- (a) One-third of the amount of such gain shall be passed on as a rebate in tariffs over such period as may be stipulated in the Order of the Commission under **Regulation 10.6**;
 - (b) The balance amount, which will amount to two-thirds of such gain, may be utilised at the discretion of the Generating Company or Transmission Licensee or Distribution Licensee.
- 13.2 The approved aggregate loss to the Generating Company or Transmission Licensee or 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 tariffs over such period as may be stipulated in the Order of the Commission under **Regulation 10.6**; and
 - (b) The balance amount of loss, which will amount to two-thirds of such loss, shall be absorbed by the Generating Company or Transmission Licensee or Distribution Licensee.

14 Determination of Tariff

- 14.1 The proceedings to be held by the Commission for determination of tariff shall be in accordance with the MSERC (Conduct of Business) Regulations, 2004, as amended from time to time.
- 14.2 Notwithstanding anything contained in these Regulations, the Commission shall at all times have the authority, either on *suo motu* basis or on a Petition filed by any interested or affected Party, to determine the tariff, including terms and conditions thereof, of any Generating Company or Transmission Licensee or Distribution Licensee:
- Provided that such determination of tariff may be pursuant to an agreement or arrangement or otherwise whether or not previously approved by the Commission and entered into at any time before or after the applicability of these Regulations.
- 14.3 Notwithstanding anything contained in these Regulations, the Commission shall adopt the tariff, if such tariff has been determined through a transparent process of bidding in accordance with the guidelines issued by the Central Government:
- Provided that the applicant shall provide such information as the Commission may satisfy itself that the guidelines issued by the Central Government have been duly followed.

15 Determination of Generation Tariff

15.1 The Commission shall determine the tariff for generation of electricity, in accordance with the terms and conditions contained in **Chapter-4** of these Regulations.

15.2 Existing generating station:

15.2.1 Where the Commission has, at any time prior to the date of effectiveness of these Regulations, approved a power purchase agreement or arrangement between a Generating Company and a Distribution Licensee or has adopted the tariff contained therein for supply of electricity from an existing generating Unit/Station, the tariff for supply of electricity by the Generating Company to the Distribution Licensee shall be in accordance with tariff mentioned in such power purchase agreement or arrangement for such period as may be so approved or adopted by the Commission.

15.2.2 Where, as on the date of effectiveness of these Regulations, the power purchase agreement or arrangement between a Generating Company and a Distribution Licensee for supply of electricity from an existing generating station has not been approved by the Commission or the tariff contained therein has not been adopted by the Commission or where there is no power purchase agreement or arrangement, the supply of electricity by such Generating Company to such Distribution Licensee after the date of effectiveness of these Regulations shall be in accordance with a power purchase agreement approved by the Commission:

Provided that an application for approval of such power purchase agreement or arrangement shall be made by the Distribution Licensee to the Commission within a period of three (3) months from the date of notification of these Regulations:

Provided further that the supply of electricity shall be allowed to continue under the present agreement or arrangement, as the case may be, until such time as the Commission approves of such power purchase agreement and shall be discontinued forthwith if the Commission rejects, for reasons recorded in writing, such power purchase agreement or arrangement.

15.3 New generating stations:

15.3.1 The tariff for the supply of electricity by a Generating Company to a Distribution Licensee from a new generating Unit/Station shall be in accordance with tariff as per power purchase agreement approved by the Commission.

15.4 Own generating stations:

15.4.1 Where the Distribution Licensee also undertakes the business of generation of electricity, the transfer price at which electricity is supplied by the Generation Business of the Distribution Licensee to his Retail Supply Business shall be determined by the Commission.

15.4.2 The Distribution Licensee shall maintain separate records for the Generation Business and shall maintain an Allocation Statement so as to enable the Commission to clearly identify the direct and indirect costs relating to such business and return on equity accruing to such business:

Provided that once the Commission notifies the Regulations for submission of Regulatory Accounts, the applications for tariff determination and truing up shall be based on the Regulatory Accounts.

- 15.5 The Distribution Licensee shall submit, along with the separate application for determination of tariff for retail supply of electricity, the information required under **Chapter-4** of these Regulations relating to the Generation Business.

16 Determination of Tariff for Transmission, Distribution Wires Business

- 16.1 The Commission shall determine the tariff for Transmission Business, Distribution Wires Business based on an application made by the Licensee in accordance with the procedure contained in these Regulations.
- 16.2 The Commission shall determine the tariff for:
- (a) Transmission of electricity, in accordance with the terms and conditions contained in **Chapter-5** of these Regulations;
 - (b) Distribution Wires Business, in accordance with the terms and conditions contained in **Chapter-6** of these Regulations; and

17 Filing Procedure

- 17.1 The applicant shall provide, based on the approved Business Plan, as part of his application to the Commission, in such form as may be prescribed by the Commission from time to time, full details of his calculation of the Aggregate Revenue Requirement and expected revenue from tariff and charges, and thereafter, he shall furnish such further information or particulars or documents as the Commission or the Secretary or any Officer designated for the purpose by the Commission may reasonably require to assess such calculation:

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 the respective year of the Control Period:

Provided further that the Commission may specify additional/alternative formats for details to be submitted by the applicant, from time to time, as it may reasonably require for assessing the Aggregate Revenue Requirement and for determining the tariff.

- 17.2 Upon receipt of a complete application accompanied by all requisite information, particulars and documents in compliance with all the requirements specified in these Regulations, the application shall be deemed to be received and the Commission or the Secretary or the designated Officer shall intimate to the applicant that the application is registered and ready for publication.
- 17.3 The application made shall be supported by affidavit of the person acquainted with the facts stated in the application.
- 17.4 The applicant shall, within 7 days after registration of the application, publish a notice of his application in at least two daily newspapers, one in English language and one in local language, having wide circulation in relevant area.

- 17.5 The suggestions and objections, if any, on the proposal for determination of tariff, may be filed before the Secretary, Meghalaya State Electricity Regulatory Commission, by any person within 30 days of publication of this notice with a copy to the applicant.
- 17.6 The applicant shall within 7 days from the date of publication of the notice as aforesaid submit to the Commission on affidavit the details of the notice published and shall also file copies of the newspapers wherein the notice has been published.
- 17.7 The applicant shall file his comments on the suggestions and objections, if any, received in response within the time limit specified in Meghalaya State Electricity Regulatory Commission (Conduct of Business) Regulations, 2007, as amended from time to time.
- 17.8 The applicant shall file his Petition for approval of truing up of previous year and tariff for ensuing financial year by 30th November of the current financial year:

Provided that the MYT Petition for FY 2014-15 to FY 2016-17 shall be filed along-with the Business Plan.

18 Tariff Order

- 18.1 The Commission shall, within one hundred and twenty (120) days from the date of registration of a complete application 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; or
 - (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 there-under or the provisions of any other law for the time being in force:

Provided that an applicant shall be given a reasonable time for being heard by the Commission, before rejecting his application.

- 18.2 The tariffs so published shall be in force from the date specified in the said Order and shall, unless amended or revoked, continue to be in force for such period as may be stipulated therein.

19 Adherence to Tariff Order

- 19.1 No tariff or part of any tariff may be ordinarily amended, more frequently than once in any Financial year, except FPPPA based on FPPPA formulae approved by the Commission from time to time.
- 19.2 The Commission, may, after satisfying itself for reasons to be recorded in writing, allow revision of tariff.
- 19.3 If any Generating Company or Transmission Licensee or 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 the Bank Rate of the Reserve Bank of India without prejudice to any other liability incurred by such Generating Company or Transmission Licensee or Distribution Licensee.

- 19.4 The Transmission Licensee or 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.

20 Annual determination of tariff

- 20.1 The Commission shall determine the tariff of a Generating Company or Transmission Licensee or Distribution Licensee covered under a Multi-Year Tariff framework for each financial year during the Control Period, at the commencement of such financial year, having regard to the following:
- (a) The approved forecast of Aggregate Revenue Requirement including the incentive available for the Generating Company or Transmission Licensee or Distribution Licensee and expected revenue from tariff and charges for such financial year, including modifications approved at the time of mid-term review, if any; and
 - (b) Approved gains and losses to be passed through in tariffs, following the Truing Up of previous year.

21 Subsidy Mechanism.

- 21.1 With effect from the first day of April 2014, if the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the Commission, the State Government shall, notwithstanding any direction which may be given under Section 108 of the Act, pay in advance the amount to compensate the Distribution Licensee/person affected by the grant of subsidy, as a condition for the Licensee or any other person concerned to implement the subsidy provided for by the State Government, in the manner specified in these Regulations:

Provided that no such direction of the State Government shall be operative if the payment is not made in accordance with the provisions contained in these Regulations and the tariff fixed by the Commission shall be applicable from the date of issue of orders by the Commission in this regard.

CHAPTER 3

FINANCIAL PRINCIPLE

22 Debt-Equity Ratio

- 22.1 For the purpose of determination of tariff, debt-equity ratio as on the date of commercial operation in case of a new generating station, transmission or distribution line or substation commissioned or capacity expanded after 1.4.2014, shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. Where actual equity employed is less than 30%, the actual equity shall be considered:

Provided that in case of the Generating Company, Transmission Licensee and Distribution Licensee, if any fixed asset is capitalised on account of capital expenditure project prior to April 1, 2014, debt-equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2014 shall be considered: Provided further that in case of retirement or replacement of assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of the retired or replaced asset: Provided further that for the Generating Company or the Transmission Licensee or the Distribution Licensee formed as a result of a transfer scheme, the date of the transfer scheme shall be the effective date for the determination of equity capital.

23 Capital Cost and capital structure

- 23.1 Capital cost for a project shall include:

- (a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange rate variation on the loan during construction up to the date of commercial operation of the project, as admitted by the Commission after prudence check;
- (b) capitalised initial spares subject to the ceiling rates specified in these Regulations; and
- (c) additional capitalisation determined under Regulation 12:

Provided that the assets forming part of the project but not put to use or not in use, shall be taken out of the capital cost.

- 23.2 The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:

Provided that prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff.

- 23.3 The approved Capital Cost shall be considered for determination of tariff and if sufficient justification is provided for any escalation in the Capital Cost, the same may be considered by the Commission subject to the prudence check:

Provided that in case the actual capital cost is lower than the approved capital cost, then the actual capital cost will be considered for determination of tariff of the Generating Company or Transmission Licensee or Distribution Licensee.

- 23.4 The actual capital expenditure on COD for the original scope of work based on audited accounts of the Company limited to original cost may be considered subject to the prudence check by the Commission.

- 23.5 Where the power purchase agreement or bulk power transmission agreement provides for a ceiling of capital cost, the capital cost to be considered shall not exceed such ceiling.

- 23.6 The capital cost may include capitalised initial spares:

- (a) upto 2.5% of original capital cost in case of coal based/lignite fired generating stations;
- (b) upto 4.0% of original capital cost in case of gas turbine/combined cycle generating stations;
- (c) upto 1.5% of original capital cost in case of hydro-generating stations; and
- (d) upto 1.5% of original capital cost in case of Transmission Licensee and Distribution Licensee.

- 23.7 Impact of revaluation of assets shall be permitted during the Control Period, provided it does not result in increase in tariff of Generating Company, Transmission Licensee and Distribution Licensee. Any benefit from such revaluation shall be passed on to persons sharing the capacity charge in case of a Generating Company and to long-term intra-State open access customers of transmission licensee or distribution licensee, or retail supply consumers in case of distribution licensees, at the time of annual truing up.

- 23.8 Any expenditure on replacement, renovation and modernization or extension of life of old fixed assets, as applicable to Generating Company, Transmission Licensee and Distribution Licensee, shall be considered after writing off the net value of such replaced assets from the original capital cost and will be calculated as follows:

Net Value of Replaced Assets = OCFA – AD – CC;

Where;

OCFA: Original Capital Cost of Replaced Assets;

AD: Accumulated depreciation pertaining to the Replaced Assets;

CC: Total Consumer Contribution pertaining to the Replaced Assets.

24 Additional capitalisation

- 24.1 The following capital expenditure, actually incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to the prudence check:

- (a) Due to Un-discharged liabilities within the original scope of work;
- (b) On works within the original scope of work, deferred for execution;
- (c) To meet award of arbitration and compliance of final and un-appealable order or decree of a court arising out of original scope of works;
- (d) On account of change in law;
- (e) On procurement of initial spares included in the original project costs subject to the ceiling norm specified;
- (f) Any additional works/services, which have become necessary for efficient and successful operation of a generating station or a transmission system or a distribution system but not included in the original capital cost:

Provided that original scope of work along with estimates of expenditure shall be submitted as a part of Business Plan: Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the generating Unit/Station or transmission system or distribution system. Provided further that the assets forming part of the project but not put to use, shall not be considered.

- 24.2 Impact of additional capitalization on tariff, as the case may be, shall be considered during Truing Up of each financial year of the Control Period.

25 Consumer contribution, Deposit Work and Grant

- 25.1 The following nature of work carried out by the Transmission Licensee and Distribution Licensee shall be classified under this category:

- (a) Works after obtaining a part or all of the funds from the users in the context of deposit works;
- (b) Capital works undertaken by utilising grants received from the State and Central Governments, including funds under RGGVY, APDRP, etc;
- (c) Any other grant of similar nature and such amount received without any obligation to return the same and with no interest costs attached to such subvention.

26 Return on Equity

- 26.1 Return on equity shall be computed on the paid up equity capital determined in accordance with Regulation relatable to the Generating Company or Transmission Licensee or Distribution Licensee as the case may be and shall be allowed at the rate of 14% for Generating Companies, including hydro generation stations above 25 MW, Transmission Licensee, and Distribution Licensee:

Provided that for Generating Company, Transmission Licensee and Distribution Licensee, Return on Equity shall be allowed on the amount of allowed equity capital for the assets put to use at the commencement of each financial year and on 50% of equity capital portion of the allowable capital cost for the investments put to use during the financial year:

Provided further that for the purpose of truing up for the Generating Company, Transmission Licensee and Distribution Licensee, return on equity shall be allowed on

pro-rata basis based on documentary evidence provided for the assets put to use during the year.

- 26.2 The premium raised by the Generating Company or the Transmission Licensee or Distribution Licensee while issuing share capital and investment of internal resources created out of free reserve, if any, shall also be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting capital expenditure.
- 26.3 Equity invested in foreign currency shall be converted to rupee currency based on the exchange rate prevailing on the date(s) it is subscribed.

27 Interest and finance charges on loan capital

- 27.1 The loans arrived at in the manner indicated in Regulation 22 shall be considered as gross normative loan for calculation of interest on loan:

Provided that interest and finance charges on capital works in progress shall be excluded:

Provided further that in case of retirement or replacement of assets, the loan capital approved as mentioned above, shall be reduced to the extent of outstanding loan component of the original cost of the retired or replaced assets, based on documentary evidence.

- 27.2 The normative loan outstanding as on April 1, 2014, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2014, from the gross normative loan.
- 27.3 The repayment for the year during the tariff period from FY 2014-15 to FY 2016-17 shall be deemed to be equal to the depreciation allowed for that year.
- 27.4 Notwithstanding any moratorium period availed by the Generating Company or the Transmission Licensee or the Distribution Licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.
- 27.5 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the Generating Company or the Transmission Licensee or the Distribution Licensee:
- Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:
- Provided further that if the Generating Company or the Transmission Licensee or the Distribution Licensee, as the case may be, does not have actual loan, then the weighted average rate of interest of the Generating Company or the Transmission Licensee or the Distribution Licensee as a whole shall be considered.
- 27.6 The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- 27.7 The above interest computation shall exclude interest on loan amount, normative or otherwise, to the extent of capital cost funded by Consumer Contribution, Grants or

Deposit Works carried out by Transmission Licensee or Distribution Licensee or Generating Company, as the case may be.

- 27.8 The Generating Company or the Transmission Licensee or the Distribution Licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the Generating Company or the Transmission Licensee or the Distribution Licensee, as the case may be, in the ratio of 2:1.
- 27.9 Interest shall be allowed on the amount held as security deposit held in cash from Transmission System Users, Distribution System consumers at the Bank Rate as on 1st April of the financial year in which the Petition is filed.

28. Depreciation

- 28.1 Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- 28.2 In case of the existing projects, the balance depreciable value as on April 1, 2014, shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto March 31, 2014, from the gross value of the assets.
- 28.3 In case of projected commercial operation of the asset for part of the year, depreciation shall be calculated based on the average of opening and closing value of asset, approved by the Commission:

Provided that depreciation will be re-calculated during truing-up for assets capitalised at the time of Truing Up of each year of the Control Period, based on documentary evidence of asset capitalised by the applicant, subject to the prudence check of the Commission, such that the depreciation is calculated proportionately from the date of capitalisation.

29. Interest on Working Capital

29.1 Generation:

- (a) In case of coal based/oil-based/lignite-fired generating stations, working capital shall cover:
- (i) Cost of coal or lignite for one (1) month for pit-head generating stations and one and a half (1½) months for non-pit-head generating stations, corresponding to target availability; plus
 - (ii) Cost of oil for one (1) month corresponding to target availability; plus
 - (iii) Cost of secondary fuel oil for two (2) months corresponding to target availability; plus
 - (iv) Operation and Maintenance expenses for one (1) month; plus
 - (v) Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
 - (vi) Receivables for sale of electricity equivalent to one (1) month of the sum of annual fixed charges and energy charges calculated on target availability:

Provided that in case of own generating stations, no amount shall be allowed towards receivables, to the extent of supply of power by the Generation Business to the Retail Supply Business, in the computation of working capital in accordance with these Regulations.

- (b) In case of Gas Turbine/Combined Cycle generating stations, working capital shall cover:
- (i) Fuel cost for one (1) month corresponding to target availability factor, duly taking into account the mode of operation of the generating station on gas fuel and /or liquid fuel; plus
 - (ii) Liquid fuel stock for fifteen (15) days corresponding to target availability; plus
 - (iii) Operation and maintenance expenses for one (1) month; plus
 - (iv) Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
 - (v) Receivables equivalent to one (1) month of capacity charge and energy charge for sale of electricity equivalent calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel:

Provided that in case of own generating stations, no amount shall be allowed towards receivables, to the extent of supply of power by the Generation Business to the Retail Supply Business, in the computation of working capital in accordance with these Regulations.

- (c) In case of hydro power generating stations, working capital shall cover:
- (i) Operation and maintenance expenses for one (1) month;
 - (ii) Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; and
 - (iii) Receivables equivalent to one (1) month of fixed cost:

Provided that in case of own generating stations, no amount shall be allowed towards receivables, to the extent of supply of power by the Generation Business to the Retail Supply Business, in the computation of working capital in accordance with these Regulations.

- (d) Interest on working capital shall be allowed at a rate equal to the State Bank Advance Rate (SBAR) as on 1st April of the financial year in which the Petition is filed.

29.2 **Transmission:**

- (a) The Transmission Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:
- (i) Operation and maintenance expenses for one month; plus
 - (ii) Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus

- (iii) Receivables equivalent to one (1) month of transmission charges calculated on target availability level; minus
- (iv) Amount, if any, held as security deposits except the security deposits held in the form of Bank Guarantee from Transmission System User

29.3 Distribution Wires Business

- (a) The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Distribution Wires Business for the financial year, computed as follows:
 - (i) Operation and maintenance expenses for one month; plus
 - (ii) Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
 - (iii) Receivables equivalent to one (1) month of the expected revenue from charges for use of Distribution Wires at the prevailing tariffs; minus
 - (iv) Amount, if any, held as security deposits under clause (b) of sub-section (1) of Section 47 of the Act from Distribution System Users except the security deposits held in the form of Bank Guarantees.
- (b) Interest shall be allowed at a rate equal to the State Bank Advance Rate (SBAR) as on 1st April of the financial year in which the Petition is filed.

30 Tax on income

- 30.1 The Commission in its MYT Order shall provisionally approve Income Tax payable for each year of the Control Period, if any, based on the actual income tax paid as per latest Audited Accounts available for the applicant, subject to prudence check.
- 30.2 Variation between Income Tax actually paid and approved, if any, on the income stream of the regulated business of Generating Companies, Transmission Licensees and Distribution Licensees shall be reimbursed to/recovered from the Generating Companies, Transmission Licensees and Distribution Licensees, based on the documentary evidence submitted at the time of truing up of each year of the Control Period, subject to prudence check.
- 30.3 Under-recovery or over-recovery of any amount from the beneficiaries or the consumers on account of such tax having been passed on to them shall be adjusted every year on the basis of income-tax assessment under the Income-Tax Act, 1961, as certified by the statutory auditors. The Generating Company, or the Transmission Licensee or Distribution Licensee, as the case may be, may include this variation in its truing up Petition:

Provided that tax on any income stream other than the core business shall not be a pass through component in tariff and tax on such other income shall be borne by the Generating Company or Transmission Licensee or the Distribution Licensee, as the case may be.

31. Rebate

- 31.1 For payment of bills of generation tariff or transmission charges through Letter of Credit or otherwise, within 7 days of presentation of bills, by the Generating Company or the Transmission Licensee, as the case may be, a rebate of 2% on billed amount, excluding the taxes, cess, duties, etc., shall be allowed. Where payments are made subsequently through opening of Letter of Credit or otherwise, but within a period of one month of presentation of bills by the Generating Company or the Transmission Licensee, as the case may be, a rebate of 1% on billed amount, excluding the taxes, cess, duties, etc., shall be allowed.

32 Delayed Payment Surcharge

- 32.1 In case the payment of bills of generation tariff or transmission charges by the beneficiary or beneficiaries is delayed beyond a period of 30 days from the date of billing, late payment surcharge at the rate of 1.25% per month on billed amount shall be levied for the period of delay by the Generating Company or the Transmission Licensee, as the case may be.

33 Foreign Exchange Rate Variation

- 33.1 The Generating Company or the Transmission Licensee or the Distribution Licensee, as the case may be, may hedge foreign exchange exposure in respect of the interest on foreign currency loan and repayment of foreign loan acquired for the generating station or the transmission system or distribution system, in part or full, at the discretion of the Generating Company or the Transmission Licensee or the Distribution Licensee.
- 33.2 Every Generating Company and Transmission Licensee and Distribution Licensee shall recover the cost of hedging of foreign exchange rate variation corresponding to the normative foreign debt, in the relevant year on year-to-year basis as expense in the period in which it arises and extra rupee liability corresponding to such foreign exchange rate variation shall not be allowed against the hedged foreign debt.
- 33.3 To the extent the Generating Company or the Transmission Licensee or the Distribution Licensee is not able to hedge the foreign exchange exposure, the extra rupee liability towards interest payment and loan repayment corresponding to the normative foreign currency loan in the relevant year shall be permissible provided it is not attributable to the Generating Company or the Transmission Licensee or the Distribution Licensee or its suppliers or contractors.

34 Recovery of cost of hedging Foreign Exchange Rate Variation

- 34.1 Every Generating Company and the Transmission Licensee and the Distribution Licensee shall recover the cost of hedging and foreign exchange rate variation on year-to-year basis as income or expense in the period in which it arises.

CHAPTER 4

GENERATION

A: THERMAL POWER GENERATING STATION

35. Applicability

- 35.1 The Regulations specified in this Chapter shall apply for determining the tariff for supply of electricity to a Distribution Licensee from conventional sources of generation and hydro generation stations of capacity more than 25 MW:

Provided that determination of tariff for supply of electricity to a Distribution Licensee from Renewable Energy sources of generation shall be in accordance with terms and conditions as stipulated in the relevant Regulations/Orders of the Commission.

- 35.2 The Commission shall be guided by the Regulations contained in this Chapter in determining the tariff for supply of electricity by a Generating Company to a Distribution Licensee in the following cases:

- a) where such tariff is pursuant to a power purchase agreement or arrangement entered into subsequent to the date of effectiveness of these Regulations; or
- b) where such tariff is pursuant to a power purchase agreement or arrangement entered into prior to the date of effectiveness of these Regulations and either the Commission has not previously approved such agreement/arrangement or the agreement/arrangement envisages that the tariff shall be based on the MSERC Tariff Regulations; or
- c) where the Distribution Licensee is engaged in the business of generation of electricity, in determining the transfer price at which electricity is supplied by the Generation Business of the Distribution Licensee to its Retail Supply Business:

Provided that the Commission may deviate from the norms contained in this Chapter or specify alternative norms for particular cases, where it so deems appropriate, having regard to the circumstances of the case: Provided further that the reasons for such deviation(s) shall be recorded in writing.

- 35.3 Notwithstanding anything contained in this Chapter 4, the Commission shall adopt the tariff if such tariff has been determined through a transparent process of bidding in accordance with the guidelines issued by the Central Government.

36. Petition for determination of generation tariff

- 36.1 A Generating Company is required to file a Petition for determination of tariff for supply of electricity to Distribution Licensees in accordance with the provisions of Chapter 2 of these Regulations.
- 36.2 Tariff in respect of a Generating Station under these Regulations may be determined Stage-wise, Unit-wise or for the whole Generating Station. The terms and conditions for determination of tariff for Generating Stations specified in this Part shall apply in like manner to Stages or Units, as the case may be, as to Generating Stations.
- 36.3 Where the tariff is being determined for a Stage or Unit of a Generating Station, the Generating Company shall adopt a reasonable basis for allocation of capital cost relating

to common facilities and allocation of joint and common costs across all Stages or Units, as the case may be:

Provided that the Generating Company shall maintain an Allocation Statement providing the basis for allocation of such costs, which shall be duly audited and certified by the statutory auditors, and submit such audited and certified statement to the Commission along with the application for determination of tariff.

- 36.4 A Generating Company may file a Petition for determination of provisional tariff in advance of the anticipated Date of Commercial Operation of the Unit or Stage or Generating Station as a whole, as the case may be, based on the capital expenditure actually incurred up to the date of making the Petition or a date prior to making of the Petition, duly audited and certified by the statutory auditors and the provisional tariff shall be charged from the date of commercial operation of such Unit or Stage or Generating Station, as the case may be.
- 36.5 A Generating Company shall file a fresh Petition in accordance with these Regulations, for determination of final tariff based on actual capital expenditure incurred up to the date of commercial operation of the Generating Station duly certified by the statutory auditors based on Annual Audited Accounts.
- 36.6 Any difference in provisional tariff and the final tariff determined by the Commission and not attributable to the Generating Company may be adjusted at the time of determination of final tariff for the following year as directed by the Commission.
- 36.7 In relation to multi-purpose hydroelectric Projects, with irrigation, flood control and power components, the capital cost chargeable to the power component of the Project only shall be considered for determination of tariff.

37 Renovation and Modernisation

- 1) The generating company for meeting the expenditure on renovation and modernization (R&M) for the purpose of extension of life beyond the useful life of the generating station or a unit thereof, shall make an application before the Commission for approval of the proposal with a detailed project report giving complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost (including foreign exchange component, if any) record of consultation with beneficiaries and any other information considered to be relevant by the generating company.
- 1) In case of a coal based / lignite based fired thermal generating station, the generating company may, at its discretion, avail of a 'special allowance' in accordance with norms specified in clause(5), as a compensation for meeting the requirement of expenses including renovation and modernization beyond the useful life of the generation station or a unit thereof. In such an event, revision of capital cost shall not be considered and the applicable operational norms shall not be relaxed but the special allowance shall be included in the annual fixed cost.

Note:

The above option shall not be available for a generating station or a unit for which renovation and modernization has been undertaken and the expenditure has been admitted by the Commission before commencement of these regulations or for a generating station or unit which is in a depleted condition or operating under relaxed operational and performance norms.

- 2) Where generating company makes an application for approval of its proposal for renovation and modernization the Commission shall give its approval after due consideration of reasonableness of cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis and such other factors which the Commission may consider relevant.
- 3) Any expenditure incurred or projected to be incurred and admitted by the Commission after prudent check, based on estimates for renovation and modernization already recovered from original project cost, shall form the basis for determination of tariff.
- 4) A generating company, opting for sub-regulation (2) above, for a coal based / lignite fired thermal station shall be allowed special allowance @ Rs. 5 lakhs / MW / year in 2013-14 and thereafter escalated @ 5.72% every year during the tariff period 2014-2017, unit wise from the next financial year from the respective date of completion of useful life with reference to the date of commercial operation of the respective unit of generating station:

38. Components of Tariff

- i. Tariff for sale of electricity from a thermal power generating station shall comprise of two parts, namely, the recovery of annual capacity (fixed) charges and energy (variable) charges to be worked out in the manner provided hereinafter.
- ii. The fixed cost of a generating station eligible for recovery through annual capacity charges shall consist of:
 - a) Return on equity as may be allowed
 - a) Interest on Loan Capital;
 - b) Operation and maintenance expenses;
 - d) Interest on Working Capital;
 - e) Depreciation, including Advance Against Depreciation as may be allowed.
 - f) Taxes on Income
 - g) Cost of secondary fuel oil (for coal based and lignite fired generating stations only)
- iii. The energy charges shall cover primary fuel charges
- iv. The annual capacity charges recoverable shall be worked out by deducting other income from the total annual expenses.

39. Operation & Maintenance Expenses

(1) Operation and Maintenance Expenses (O&M Expenses) shall mean the total of all expenditure under the following heads:-

- (a) Employee Cost;
- (b) Repairs and Maintenance; and
- (c) Administration and General Expenses.

(2) The generating company shall prepare a budget for Operation and Maintenance Expenses indicating for each head of account actual expenditure of the last year, estimate for the current year and projection for the next year and submit it to the Commission along with the tariff petition.

(1) The generating company shall provide adequate explanations for the basis of allocation of Operation and Maintenance expenditure among the generating stations.

(2) The Commission shall verify the budget estimates and projections and allow the amount depending on its views about the reasonableness of the projections.

(3) In verifying the budget for operation and maintenance the generating company may be guided by the following norms laid down in **CERC Tariff Regulations, 2009**.

Normative operation and maintenance expenses shall be as follows, namely:

(a) Coal based and lignite fired generating stations

(Rs. lakh / MW)

Year	200/210/250 MW sets upto 4 Units	300/330/350 MW sets upto 3 Units	500 MW sets upto 2 units	600 MW and above sets upto 2 units
2009-10	18.20	16.00	13.00	11.70
2010-11	19.24	16.92	13.74	12.37
2011-12	20.34	17.88	14.53	13.08
2012-13	21.51	18.91	15.36	13.82
2013-14	22.74	19.99	16.24	14.62

Provided that the above norms shall be multiplied by the following factors for additional units in respective unit sizes for the units whose COD occurs on or after 1-4-2014 in the same station

200/210/250 MW	Additional 5 th & 6 th Units	0.9
	Additional 7 th & more Units	0.85
300/330/350 MW	Additional 4 th & 5 th Units	0.9
	Additional 6 th & more Units	0.85
500 MW and above	Additional 3 rd & 4 th Units	0.9
	Additional 5 th Units	0.85

(b) Open Cycle Gas Turbine / Combined cycle generating station

(Rs. lakh / MW)

Year	Gas Turbine / Combined Cycle generating stations other than small gas turbine power generating stations	Small gas turbine power generating station
2009-10	14.80	22.90
2010-11	15.65	24.21
2011-12	16.54	25.59
2012-13	17.49	27.06
2013-14	18.49	28.61

(c) Lignite Fired generating stations

(Rs. lakh / MW)

Year	125 MW sets
2009-10	24.00
2010-11	25.37
2011-12	26.82
2012-13	28.36
2013-14	29.98

Incase of coal – based or lignite fired thermal generating station, a separate compensation allowance unit wise shall be admissible to meet expenses on new assets of capital nature including the nature of minor assets, in the following manner, from the year following the year of completion of 10,15 or 20 years of useful life:

Year of operation	Compensation Allowance (Rs. lakh / MW / year)
0-10	Nil
11-15	0.15
16-20	0.35
21-25	0.65

40. Expenses on secondary fuel oil consumption for coal-based, lignite-fired generating station

- (1) Expenses on secondary fuel oil in Rupees shall be computed corresponding to normative secondary fuel oil consumption (SFC) specified in clause (3) of Regulation 39, in accordance with the following formula:

$$\text{SFC} \times \text{LPSFi} \times \text{NAPAF} \times 24 \times \text{NDY} \times \text{IC} \times 10$$

Where,

SFC – Normative Specific Fuel Oil consumption in ml/kWh

LPSFi – Weighted Average Landed Price of Secondary Fuel in Rs./ml considered initially

NAPAF– Normative Annual Plant Availability Factor in percentage

NDY – Number of days in a year

IC - Installed Capacity in MW.

- (2) Initially, the landed cost incurred by the generating company on secondary fuel oil shall be taken based on actuals of the weighted average price of the three preceding months and in the absence of landed costs for the three preceding months, latest procurement price for the generating station, before the start of the year.
- (3) The secondary fuel oil expenses shall be subject to fuel price adjustment at the end of the each year of tariff period as per following formula:

$$\text{SFC} \times \text{NAPAF} \times 24 \times \text{NDY} \times \text{IC} \times 10 \times (\text{LPSFy} - \text{LPSFi})$$

Where,

LPSFy = The weighted average landed price of secondary fuel oil for the year in Rs. /ml

41. Computation and payment of capacity charge and energy charge for thermal generating stations

(A) Capacity Charge:

- (1) The fixed cost of a thermal generating station shall be computed on annual basis, based on norms specified under these regulations, and recovered on monthly basis under capacity charge.

The total capacity charge payable for a generating station shall be shared by its beneficiaries as per their respective percentage share / allocation in the capacity of the generating station.

- (2) The capacity charge (inclusive of incentive) payable to a thermal generating station for a calendar month shall be calculated in accordance with the following formulae :

- (a) Generating stations in commercial operation for less than ten (10) years on 1st April of the financial year :

$$AFC \times (NDM / NDY) \times (0.5 + 0.5 \times PAFM / NAPAF) \text{ (in Rupees);}$$

Provided that in case the plant availability factor achieved during a financial year (PAFY) is less than 70%, the total capacity charge for the year shall be restricted to

$$AFC \times (0.5 + 35 / NAPAF) \times (PAFY / 70) \text{ (in Rupees).}$$

- (b) For generating stations in commercial operation for ten (10) years or more on 1st April of the year:

$$AFC \times (NDM / NDY) \times (PAFM / NAPAF) \text{ (in Rupees).}$$

Where,

AFC = Annual fixed cost specified for the year, in Rupees.

NAPAF = Normative annual plant availability factor in percentage

NDM = Number of days in the month

NDY = Number of days in the year

PAFM = Plant availability factor achieved during the month, in percent:

PAFY = Plant availability factor achieved during the year, in percent

- (3) The PAFM and PAFY shall be computed in accordance with the following formula:

$$N$$

$$PAFM \text{ or } PAFY = 10000 \times \sum DC_i / \{ N \times IC \times (100 - AUX) \} \%$$

$$i = 1$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

DC_i = Average declared capacity (in ex-bus MW)

IC = Installed Capacity (in MW) of the generating station

N = Number of days during the period i.e. the month or the year as the case may be.

Note : DCi and IC shall exclude the capacity of generating units not declared under commercial operation. In case of a change in IC during the concerned period, its average value shall be taken.

(B) Energy Charge:

- (1) The energy charge shall cover the primary fuel cost and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the energy charge rate of the month (with fuel price adjustment). Total Energy charge payable to the generating company for a month shall be:

$$=(\text{Energy charge rate in Rs./kWh}) \times \{\text{Scheduled energy (ex-bus) for the month in kWh.}\}$$

- (2) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:

- (a) For coal based and lignite fired stations

$$\text{ECR} = \{ (\text{GHR} - \text{SFC} \times \text{CVSF}) \times \text{LPPF} / \text{CVPF} + \text{LC} \times \text{LPL} \} \times 100 / (100 - \text{AUX})$$

- (b) For gas and liquid fuel based stations

$$\text{ECR} = \text{GHR} \times \text{LPPF} \times 100 / \{ \text{CVPF} \times (100 - \text{AUX}) \}$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = Gross calorific value of primary fuel as fired, in kCal per kg, per Litre or per standard cubic metre, as applicable.

CVSF = Calorific value of secondary fuel, in kCal per ml.

ECR = Energy charge rate, in Rupees per kWh sent out.

GHR = Gross station heat rate, in kCal per kWh.

LC = Normative limestone consumption in kg per kWh.

LPL = Weighted average landed price of limestone in Rupees per kg.

LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month.

SFC = Specific fuel oil consumption, in ml per kWh.

- (3) The landed cost of fuel for the month shall include price of fuel corresponding to the grade and quality of fuel inclusive of royalty, taxes and duties as applicable, transportation cost by rail / road or any other means, and, for the purpose of computation of energy charge, and in case of coal/lignite shall be arrived at after considering normative transit and handling losses as percentage of the quantity of coal or lignite dispatched by the coal or lignite supply company during the month as given below :

Pit head generating stations	:	0.2%
Non-pit head generating stations	:	0.8%

42. Norms of Operation

Recovery of capacity charge, energy charge and incentive by the generating company shall be based on the achievement of the operational norms

The norms of operation as given below shall apply to thermal generating stations

(1) Normative Annual Plant Availability Factor (NAPAF)

(a) All Thermal generating station	85 %
(b) Lignite fired generating station using Circulatory Fluidized Bed Combustion (CFBC) Technology	
(i) First three years from COD	75 %
(ii) From next year after completion of 3 years of COD	80 %

(2) Gross Station Heat Rate

- i. Coal-based thermal power generating stations,

During stabilization period	2600 kCal / kWh
Subsequent period	2500 kCal / kWh
- ii. Gas Turbine / Combined Cycle generating stations

Open cycle	2830 kCal / kWh
Combined cycle	1950 kCal / kWh

(c) Secondary fuel oil consumption

(i) Coal-based generating stations	-	1.0 ml / kWh
(ii) Lignite fired generating stations	-	2.0 ml/kWh

(d) Auxiliary Energy Consumption

(a) Coal-based generating stations with natural draft cooling tower or without cooling tower:

(i) 200 MW series	-	8.5%
(ii) 500 MW and above		

Steam driven boiler feed pumps	-	6.0%
Electricity driven boiler feed pumps	-	8.5%

Provided that for thermal generating stations with induced draft cooling towers, the norm shall be further increased by - 0.5%

(b) Gas turbine / combined cycle generating stations:

(i) Combined cycle	-	3.0%
(ii) Open cycle	-	1.0%

(c) Lignite fired thermal generating stations:

iii. All generating stations with 200 MW sets and above:

The auxiliary energy consumption norms shall be 0.5% more than the auxiliary consumption norms of coal-based generating stations as in (d) (a) above

For lignite fired stations using CFBC technology the auxiliary consumption norm shall be 1.5% more than the auxiliary consumption norms of coal based generating stations as in (iv) (a) above.

43. SLDC and Connectivity Charges

(1) SLDC and Connectivity charges are determined by the Commission and payable by the generating companies shall be considered as expenses.

(2) SLDC and Transmission charges paid for the energy sold outside the state shall not be considered as expenses for determining generation tariff.

44. Other Income

Income other than income from sale of energy and UI charges gained (after introduction of intra state ABT) shall be grouped as other income. UI penalties shall not be netted off from other income. The UI penalties shall be borne by the generating company.

1. Sale of Infirm Power

Any revenue other than the recovery of fuel cost earned by the generating company from sale of infirm power shall be taken as reduction in capital cost and shall not be treated as revenue.

2. Unscheduled Interchange Charges

(1) Variation between actual generation or actual drawal and scheduled generation or scheduled drawal shall be accounted for through Unscheduled Interchange (UI) Charges. UI for a generating station shall be equal to its actual generation minus its scheduled generation. UI shall be worked out for each 15 minutes time block. Charges for all UI transactions shall be based on average frequency of the time block and rates as specified by CERC from time to time.

(2) UI charges for intra-state transactions will arise after intra-state ABT is notified by the Commission and becomes effective.

45. Rebate

(1) For payment of bills of generating company through letter of credit on presentation, a rebate of 2% shall be allowed.

(2) Where payments are made subsequently within a period of one month of presentation of bills by the generating company, a rebate of 1% shall be allowed.

46. Late Payment surcharge

In case the payment of any bill for charges payable under these regulations is delayed by a beneficiaries beyond a period of two months from the date of billing a late payment surcharge at the rate of 1.25% per month shall be levied by the generating company.

B: HYDRO POWER GENERATING STATION

47 Annual Fixed Charges

47.1 Components of Annual Fixed charges:

The Annual Fixed Charges shall comprise of the following elements:

- (a) Depreciation;
- (b) Operation & Maintenance Expenses;
- (c) Return on Equity;
- (d) Interest and Finance Charges on Loan Capital;
- (e) Interest on Working Capital;

minus:

- (f) Non-Tariff Income:

Provided that Depreciation, Interest and finance charges on Loan Capital, Interest on Working Capital and Return on Equity for Thermal and Hydro Generating Stations shall be allowed in accordance with the provision specified in Chapter 3 of these Regulations.

48. Renovation and Modernisation

- 1) The generating company for meeting the expenditure on renovation and modernization (R&M) for the purpose of extension of life beyond the useful life of the generating station or a unit thereof, shall make an application before the Commission for approval of the proposal with a detailed project report giving complete scope, justification, cost benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost including foreign exchange component, if any) record of consultation with beneficiaries and any other information considered to be relevant by the generating company.
- 2) Where generating company makes an application for approval of its proposal for renovation and modernization the Commission shall give its approval after due consideration of reasonableness of cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost benefit analysis and such other factors which the Commission may consider relevant.
- 3) Any expenditure incurred or projected to be incurred and admitted by the Commission after prudent check, based on estimates for renovation and modernization already recovered from original project cost, shall form the basis for determination of tariff.

49. Components of tariff

- (1) Tariff for supply of electricity from a hydro power generating station shall comprise of two parts, namely, annual capacity charges and energy charges to be in the manner provided hereinafter.
- (2) The fixed cost of a generating station eligible for recovery through annual capacity charges shall consist of:

- (a) Return on equity as may be allowed
 - (b) Interest on Loan Capital;
 - i. Operation and maintenance expenses;
 - (d) Interest on Working Capital;
 - (e) Depreciation as may be allowed by the Commission.
 - (f) Taxes on Income
- (3) The annual capacity charges recoverable shall be worked out by deducting other income from the total expenses.

50. Interest and finance charges on loan capital

- (1) Interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the schedule of loan repayment, terms and conditions of loan agreements, bond or debenture and the lending rate prevailing therein.

Provided that the outstanding loan capital shall be adjusted to be consistent with the loan amount determined in accordance with Regulation 51.

- (2) The interest and finance charges attributable to Capital Work in Progress shall be excluded.
- (3) The generating company shall make every effort to swap loans as long as it results in net benefit to the beneficiaries. The costs associated with such swapping shall be borne by the beneficiaries.
- (4) The changes to the loan terms and conditions shall be reflected from the date of such swapping and benefit shared between the beneficiaries and the generating company in a ratio as may be specified by the Commission as envisaged in Regulation 13.2.
- (5) In case any moratorium period is availed of by the generating company, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

51. Operation and maintenance expenses

- (1) Operation and Maintenance Expenses (O & M Expenses) shall mean the total of all expenditure under the following heads: -
- (a) Employee Cost
 - (b) Repairs and Maintenance
 - (c) Administration and General Expenses.
- (2) Operation and maintenance expenses (O&M Expenses) for the existing generating stations, which have been in operation for 5 years or more in the base year 2007-08 shall be derived on the basis of actual operation and maintenance expenses for the year 2003-04 to 2007-08, based on the audited accounts, excluding abnormal operation and maintenance expenses, if any, after prudent check by the Commission.
- (3) The normalized operation and maintenance expenses after prudent check, for the years 2003-04 to 2007-08, shall be escalated at the rate of 5.17% to arrive at the

- normalized operation and maintenance expenses at the 2007-08 price level and then averaged to arrive at normalized O&M expenses for 2003-04 to 2007-08 price level. The average normal O&M expenses at 2007-08 price level shall be escalated at the rate of 5.72% to arrive at the O&M expenses for the year 2009-10.
- (4) The O&M expenses for the year 2009-10 shall be further rationalized considering 50% increase in employee cost on account of pay revision of employees to arrive at the permissible O&M expenses for the year 2009-10.
 - (5) The O&M expenses for 2009-10 shall be escalated further at the rate of 5.72% per annum as arrive at the operation and maintenance expenses for the subsequent years of the tariff period.
 - (6) In case of the hydro generating stations, which have not been in commercial operation for a period of five years as on 1.4.2009, operation and maintenance expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation & resettlement works). Further, in such case, operation and maintenance expenses in first year of commercial operation shall be escalated @5.17% per annum up to the year 2007-08 and then averaged to arrive at the O&M expenses at 2007-08 price level. It shall be thereafter escalated @ 5.72% per annum to arrive at operation and maintenance expenses in respective year of the tariff period. (The impact of pay revision on employee cost for arriving at the operation and maintenance expenses for the year 2009-10 shall be considered in accordance with the procedure given in proviso to sub-clause (ii) of clause (f) of this regulation).
 - (7) In case of hydro generating stations declared under commercial operation on or after 01/04/2009, O&M expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation and resettlement works) and shall be subject to annual escalation at 5.72% for the subsequent years.

52. Computation and payment of capacity charge and energy charge for Hydro generating stations.

(A) Capacity Charges:

- (1) The fixed cost of a hydro generating station shall be computed on annual basis, based on norms specified under these regulations, and recovered on monthly basis under capacity charge (inclusive of incentive) and energy charge, which shall be payable by the beneficiaries in proportion to their respective allocation in the saleable capacity of the generating station, that is to say, in the capacity excluding the free power to the home State:

Provided that during the period between the date of commercial operation of the first unit of the generating station and the date of commercial operation of the generating station, the annual fixed cost shall provisionally be worked out based on the latest estimate of the completion cost for the generating station, for the purpose of determining the capacity charge and energy charge payment during such period.

- (2) The capacity charge (inclusive of incentive) payable to a hydro generating station for a calendar month shall be

$$= AFC \times 0.5 \times NDM / NDY \times (PAFM / NAPAF) \text{ (in Rupees)}$$

Where,

AFC = Annual fixed cost specified for the year, in Rupees.

NAPAF= Normative plant availability factor in percentage

NDM = Number of days in the month

NDY = Number of days in the year

PAFM = Plant availability factor achieved during the month, in percentage

(3) The PAFM shall be computed in accordance with the following formula:

N

PAFM = $10000 \times \sum_{i=1}^N DC_i / \{ N \times IC \times (100 - AUX) \} \%$

i=1

Where,

AUX = Normative auxiliary energy consumption in percentage

DC_i = Declared capacity (in ex-bus MW) for the ith day of the

Month which the station can deliver for at least three (3) hours, as certified by the nodal load dispatch centre after the day is over.

IC = Installed capacity (in MW) of the complete generating station

N = Number of days in the month

(B) Energy Charges:

(1) The energy charge shall be payable by every beneficiary for the total energy scheduled to be supplied to the beneficiary, excluding free energy, if any, during the calendar month, on ex power plant basis, at the computed energy charge rate. Total Energy charge payable to the generating company for a month shall be :

= (Energy charge rate in Rs. / kWh) x {Scheduled energy (ex-bus) for the month in kWh} x (100 – FEHS) / 100.

(2) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis, for a hydro generating station, shall be determined up to three decimal places based on the following formula, subject to the provisions of clause (4) :

ECR = $AFC \times 0.5 \times 10 / \{ DE \times (100 - AUX) \times (100 - FEHS) \}$

Where,

DE = Annual design energy specified for the hydro generating station, In MWh, subject to the provision in clause (6) below.

FEHS = Free energy for home State as fixed from time to time, by competent authority.

(3) In case actual total energy generated by a hydro generating station during a year is less than the design energy for reasons beyond the control of the generating company, the following treatment shall be applied on a rolling basis:

- (i) in case the energy shortfall occurs within ten years from the date of commercial operation of a generating station, the ECR for the year following the year of energy shortfall shall be computed based on the formula specified in clause (2) with the modification that the DE for the year shall be considered as equal to the actual energy generated during the year of the shortfall, till the energy charge shortfall of the previous year has been made up, after which normal ECR shall be applicable;
- (ii) in case the energy shortfall occurs after ten years from the date of commercial operation of a generating station, the following shall apply:

Suppose the specified annual design energy for the station is DE MWh, and the actual energy generated during the concerned (first) and the following (second) financial years is A1 and A2 MWh respectively, A1 being less than DE. Then, the design energy to be considered in the formula in clause (5) of this Regulation for calculating the ECR for the third financial year shall be moderated as $(A1 + A2 - DE)$ MWh, subject to a maximum of DE MWh and a minimum of A1 MWh.
- (iii) Actual energy generated (e.g. A1, A2) shall be arrived at by multiplying the net metered energy sent out from the station by $100 / (100 - AUX)$.
- (4) In case the energy charge rate (ECR) for a hydro generating station, as computed in clause (5) above, exceeds eighty paise per kWh, and the actual saleable energy in a year exceeds $\{ DE \times (100 - AUX) \times (100 - FEHS) / 10000 \}$ MWh, the Energy charge for the energy in excess of the above shall be billed at eighty paise per kWh only:

Provided that in a year following a year in which total energy generated was less than the design energy for reasons beyond the control of the generating company, the energy charge rate shall be reduced to eighty paise per kWh after the energy charge shortfall of the previous year has been made up.
- (6) The concerned Load Despatch Centre shall finalise the schedules for the hydro generating stations, in consultation with the beneficiaries, for optimal utilization of all the energy declared to be available, which shall be scheduled for all beneficiaries in proportion to their respective allocations in the generating station.

53.

Norms of operation

The norms of operation shall be as under:

(1) Normative annual plant availability factor (NAPAF)

- (a) Storage and pondage type plants where plant availability is not affected by silt and
 - (i) with head variation between Full Reservoir Level (FRL) and Minimum Draw Down Level (MDDL) of upto 8 % 90 %
 - (ii) with head variation between FRL and MDDL of more than 8%
 $= (\text{Head at MDDL} / \text{Rated Head}) \times 0.5 + 0.2$

- (b) Pondage type plant where plant availability is significantly affected by silt 85%
- (c) Run –of– River type plants: NAPAF to be determined plant-wise, based on 10-day design energy data, moderated by past experience where available / relevant.

Note:

- (i) *A further allowance may be made by the Commission under special circumstances, eg. Abnormal silt problem or other operating conditions, and known plant limitations.*
- (ii) *A further allowance of 5 % may be allowed for difficulties in the North East Region.*
- (iii) *In case of new hydro electric project the developer shall have the option of approaching the Commission in advance for further above norms.*

(2) Auxiliary energy consumption:

- (a) Surface hydro electric power generating stations with rotating exciters mounted on the generator shaft 0.7% of energy generated.
- (b) Surface hydro electric power generating stations with static excitation system.....1.0% of energy generated.
- (c) Underground hydro electric power generating stations with rotating exciters mounted on the generator shaft0.9% of energy generated.
- (d) Underground hydro electric power generating stations with static excitation system1.2% of energy generated.

(3) Transformation losses

From generation voltage to transmission voltage0.5% of energy generated.

54. Connectivity and SLDC Charges

Connectivity charges and SLDC charges as determined by the Commission shall be considered as expenses. SLDC and transmission charges paid for energy sold outside the state shall not be considered as expenses for determining generation tariff.

55. Other income

All Income other than income from sale of energy and net U I charges gained (after introduction of intra-state ABT) shall be grouped as other income. UI penalties shall not be netted off from other income. The UI penalties shall be borne by the generating company.

56. Sale of Infirm Power

Supply of infirm power shall be accounted as Unscheduled Interchange (UI) and paid for from the regional or State UI pool account at the applicable frequency-linked UI rate:

Provided that any revenue earned by the generating company from sale of infirm power after accounting for the fuel expenses shall be applied for reduction in capital cost:

57. Incentive for completion of hydro electric power generating stations ahead of schedule

- (1) In case of commissioning of a hydro electric power generating station or an unit thereof ahead of schedule, the generating station shall become eligible for incentive of an amount equal to the pro-rata amount of reduction in interest during construction achieved by such commissioning, ahead of schedule.

Provided the hydro generating station shall obtain the Commission's approval of project calendar, prior to its implementation for the purpose of claiming the incentive (s).

- (2) The incentive shall be recovered through tariff in twelve equal monthly installments during the first year of operation of the generating station.
- (3) In case of delay in commissioning, interest during construction for the period of delay shall not be allowed to be capitalized for determination of tariff, unless the delay is not attributable to the generating Company.

58. Unscheduled Interchange (UI) charges (Intra State ABT scenario)

- (1) Variation between actual generation or actual drawal and scheduled generation or scheduled drawal shall be accounted for through Unscheduled Interchange (UI) Charges. UI for a generating station shall be equal to its actual generation minus its scheduled generation. UI shall be worked out for each 15 minutes time block. Charges for all UI transactions shall be based on average frequency of the time block and rates as specified by CERC from time to time.
- (2) UI charges for intra-state transactions will arise after intra-state ABT is notified by the Commission and becomes effective.

59. Rebate

- (1) For payment of bills of the generating company through letter of credit on presentation, a rebate of 2% shall be allowed.
- (2) Where payments are made subsequently within a period of one month of presentation of bills by the generating company, a rebate of 1% shall be allowed.

60. Late payment surcharge

In case the payment of any bills for charges payable under these regulations is delayed by a beneficiary beyond a period of two month from the date of billing a late payment surcharge at the rate of 1.25% per month shall be levied by generating company.

CHAPTER 5

TRANSMISSION

67. Applicability

- 67.1 The Regulations contained in this Chapter shall apply to determination of tariff for access and use of the intra-State transmission system in the State of Meghalaya:

Provided that the Commission may deviate from the norms contained in this Part or stipulate alternative norms for particular cases, where it so deems appropriate, having regard to the circumstances of the case: Provided further that the reasons for such deviation shall be recorded in writing.

- 67.2 The Commission shall be guided by the Regulations contained in this Chapter in specifying the rates, charges, terms and conditions for use of intervening transmission facilities pursuant to an application made in this regard by a Licensee under the proviso to Section 36 of the Act.

68. Components of tariff

Annual Transmission Charges for each year of the Control Period:

- 68.1 The Annual Transmission Charges for each financial year of the Control Period shall provide for the recovery of the Aggregate Revenue Requirement of the Transmission Licensee for the respective financial year of the Control Period, as reduced by the amount of Non-Tariff Income, income from Other Business and short-term transmission charges of the previous year, as approved by the Commission:

Provided that in case of competitively awarded transmission system projects in pursuance of Section 63 of the Act and in accordance with guidelines for competitive bidding for transmission, the annual transmission charges shall be as per the annual Transmission Service Charges (TSC) quoted by such competitively awarded transmission projects.

- 68.2 The Annual Transmission Charges of the Transmission Licensee shall be determined by the Commission on the basis of an application for determination of Aggregate Revenue Requirement made by the Transmission Licensee in accordance with **Chapter-2** of these Regulations.

69. Business Plan

- 69.1 Each Transmission Licensee shall submit a Business Plan in the manner specified in **Chapter-2** of these Regulations.

70. Capital Investment Plan

- 70.1 The Transmission Licensee shall submit a detailed capital investment plan, financing plan and physical targets for each year of the Control Period for meeting the requirement of load growth, improvement in quality of supply, reliability, metering, reduction in congestion, etc., to the Commission for approval, as a part of the Business Plan:

Provided that the Capital Investment Plan shall be submitted for each year of the Control Period:

Provided further that the Capital Investment Plan shall be accompanied by such information, particulars and documents as may be required including but not limited to the information such as number of bays, name, configuration and location of grid substations, substation capacity (MVA), transmission line length (ckt-km) showing the need for the proposed investments, alternatives considered, cost/benefit analysis and other aspects that may have a bearing on the transmission charges.

- 70.2 The Capital Investment Plan of the Transmission Licensee shall be consistent with the transmission system plan for the intra-State transmission system.

71. Renovation and Modernisation

- (1) A transmission licensee shall make an application before the commission for approval of a proposal for meeting expenditure on renovation and modernization (R&M) for the purpose of extension of life of a unit or the transmission system along with a detailed project report giving complete scope, justification, cost benefit analysis, estimated life extension from a reference date, financing package, phasing of expenditure, schedule of completion, reference price level, estimated completed cost including foreign exchange component, if any, record of consultation with beneficiaries and any other information considered to be relevant by the transmission licensee.
- (2) Where the transmission licensee makes an application for approval of its proposal for renovation and modernization, the Commission shall accord approval after due consideration of the reasonableness of the cost estimates, financing package, schedule of completion, interest during construction, use of efficient technology, cost benefit analysis and such other factors as may be considered necessary.
- (3) Any expenditure incurred or projected to be incurred and admitted by the Commission after prudent check based on estimate for renovation and modernization and life extension, and after deducting accumulated depreciation already recovered from the original project cost, shall form the basis for determination of tariff.

72. Operation and Maintenance Expenses

- (1) Operation and Maintenance Expenses or O&M Expenses shall mean the total of all expenditure under the following heads:-
 - (a) Employee Cost
 - (b) Repairs and Maintenance
 - (c) Administration and General Expenses.
- (2) The Licensee shall submit O&M expenses budget indicating the expenditure under each head of account showing actuals of the last financial year, estimates for the current year and projections for the next financial year.
- (3) The norms for O&M expenses on the basis of circuit kilometers of transmission lines, transformation capacity and number of bays in substations shall be submitted for approval of the Commission.
- (4) The Commission shall verify the budget estimates and projections and allow the expenditure depending on its views about the reasonableness of the projections.

- (5) Increase in O& M expenses due to natural calamities or insurgency or other factors not within its control may be approved by the Commission.

73. Norms of operation

The norms of operation for the transmission licensee, subject to modifications thereof from time to time shall be as under:

(a) Auxiliary Energy Consumption in the Sub-Station.

The cost of auxiliary consumption in the sub-station for the purpose of air-conditioning, lighting, and consumption in other equipment shall be borne by the transmission licensee and considered as part of Operation and Maintenance expenses under the head General and Administration Overhead.

(b) Target Availability of the Transmission System for recovery of full transmission charges.

The Normative Annual Transmission Availability Factor (NATAF) of the Transmission System shall be 98%.

74. Payment of transmission charges by customers

- (1) A transmission licensee shall be allowed to recover his net annual revenue requirement for financial year through transmission charges as one or combination of the following charges:

- (a) Transmission charges which may consist of a fixed charge, demand charge and an energy charge or a combination of these;
- (b) Connectivity charge, which shall be levied to meet the cost of connecting the customer to the licensee's transmission system;
- (c) Parallel operation charge shall be levied for Captive Power Plant if the plant is connected with the grid.

- (2) Transmission charges shall be calculated on a monthly basis.

Transmission charges shall be recovered from distribution licensees and open access customers.

75. Sharing of Transmission Charges

In case of more than one beneficiaries of the transmission system, the monthly transmission charges leviable on each beneficiary shall be computed as per the following formula:

Transmission charges for transmission system payable for a month by the beneficiary of that transmission system = $\left[\frac{TC}{12} - \frac{TRSC}{SC} \right] \times CL$

Where,

TC = Annual Transmission Charges computed in accordance with **Regulation 73**.

CL = Allotted Transmission Capacity to the beneficiary.

SCL = Sum of the Allotted Transmission Capacities to all the beneficiaries of the State transmission system.

TRSC = Total recovery of transmission charges for the month from short-term transmission customers.

76. Transmission losses and treatment thereof

(1) The Commission shall fix the norm for transmission losses based on the loss reduction plan provided by the licensee.

The Commission shall make a periodical review of the reduction in transmission losses with reference to the norms fixed by it.

(2) In the case of failure to achieve the target for loss reduction, the Commission will not allow the excess over the norm as a pass through.

(3) Only Transmission Losses fixed as provided for in clause (1) above shall be debited to energy account of customers of the transmission system.

77. Computation and payment of transmission charge for Intra-State Transmission system.

(1) The fixed cost of the transmission system shall be computed on annual basis, in accordance with norms contained in these regulations, aggregated as appropriate, and recovered on monthly basis as transmission charge from the users, who shall share these charges in the manner specified in **Regulation 82**.

(2) The transmission charge (inclusive of incentive) payable for a calendar month for a transmission system or part thereof shall be

$$\text{AFC} \times (\text{NDM} / \text{NDY}) \times (\text{TAFM} / \text{NATAF})$$

Where,

AFC = Annual fixed cost specified for the year, in Rupees

NATAF = Normative annual transmission availability factor, in per cent

NDM = Number of days in the month

NDY = Number of days in the year

TAFM = Transmission system availability factor for the month, in

Percent, (Refer Annexure-III)

(3) The transmission licensee shall raise the bill for the transmission charge (inclusive of incentive) for a month based on its estimate of TAFM.

78. Billing

Monthly bills shall be raised by the transmission licensee upon distribution licensees and open access customers for the transmission charges approved by the Commission and payments shall be made by the transmission customers directed to the transmission licensee.

79. Rebate

- 1) For payment of bills of transmission charges through letter of credit on presentation, a rebate of 2% shall be allowed.
- 2) Where payments are made without letter of credit within a period of one month of presentation of bills by the Transmission licensee, a rebate of 1% shall be allowed.

80. Late payment surcharge

In case the payment of bills of transmission charges by the distribution licensees and open access customers is delayed beyond a period of two months from the date of billing a late payment surcharge at the rate of 1.25% per month shall be levied by the transmission licensee.

81. Scheduling and Metering

- 81.1 All the provisions, including the methodology for scheduling, dispatch and metering for the generating station shall be as specified in the Commission's Order issued from time to time.

CHAPTER 6: DISTRIBUTION

82 Applicability

82.1 The Regulations contained in this Chapter shall apply to the determination of tariff payable for usage of distribution wires of a Distribution Licensee.

83. Annual Revenue Requirement

- 1) The annual expenses of the Distribution Licensee shall comprise of the following, :
 - (a) Power Purchase Cost
 - (b) Capital Cost
 - (c) Debt-equity
 - (d) Return on equity
 - (e) Interest on Loan Capital
 - (f) Operation and Maintenance Expenses
 - (g) Interest on working capital
 - (h) Income Tax
 - (i) Depreciation
 - (j) Bad and doubtful debts
 - (k) Depreciation as may be allowed
- 2) The net annual revenue requirement of a distribution licensee shall be by deducting the following from its total expenses:
 - (a) Amount of other income (Non tariff income)
 - (b) Income from surcharge & additional surcharge from open access customers,
 - (c) Wheeling charges recovered from open access consumers,
 - (d) Net income from other business apportioned as per License conditions.
 - (e) Any grant received from the State Government other than the subsidy meant for any consumer or class of consumers.
- 3) Adjustments if any, due to natural calamities or insurgency or other factors not within the control of Licensee may be approved by the Commission for inclusion in Annual Revenue Requirement of the Licensee.

84 Business Plan

84.1 The Distribution Licensee shall submit a Business Plan in the manner as specified in **Chapter-2** of these Regulations.

85 Capital Investment Plan

- 85.1 The Distribution Licensee shall submit detailed capital investment plan, financing plan and physical targets for each year of the Control Period for meeting the requirement of load growth, reduction in distribution losses, improvement in quality of supply, reliability, metering, consumer services, etc., to the Commission for approval, as a part of the Business Plan:
- 85.2 The Distribution Licensee shall be required to ensure optimum investments to enhance efficiency, productivity and meet performance standards prescribed by the Commission.

86 Capital cost

- 86.1 The approved Business Plan of the Distribution Licensee shall be the basis for determining the annual allowable capital cost for each financial year for any capital expenditure project initiated on or after April 1, 2014.
- 86.2 For each capital expenditure project, the sum total of annual allowable capital cost from the date of commencement of such project till the date of commissioning shall be the original cost of such project.
- 86.3 The capital cost shall be allowed as specified in Regulation 23.

87. Operation and Maintenance Expenses

- (1) Operation and Maintenance Expenses or O&M Expenses shall mean the total of all expenditure under the following heads:-
- (a) Employee Cost
 - (b) Repairs and Maintenance
 - (c) Administration and General Expenses.
- (2) The distribution Licensee shall submit to the Commission a statement for O&M expenses indicating under each head of account the actuals of last year, estimates for the current year and projections for the next year.
- (1) The Commission shall ensure that the O&M expense are in accordance with the norms fixed by the Commission, and any excess or shortage over the norm shall have to be justified by the licensee.
- (2) In the absence of any norms for O&M expenses, the Commission shall determine operation and maintenance expenses based on prudent check of the estimates submitted by the licensee.
- (3) Increase in O& M expenses due to natural calamities or insurgency or other factors not within the control of the distribution licensee may be considered by the Commission for determination of tariff.

88 Calculation of Aggregate Revenue Requirement

- 88.1 Return on Equity:
- 88.1.1 The Distribution Licensee shall be allowed a return on equity for Distribution Wires Business, as specified in Regulation 26 of these Regulations.

88.2 Interest and Finance Charges on Loan Capital:

88.2.1 The Distribution Licensee shall be allowed Interest and Finance Charges on loan capital for Distribution Wires Business, as specified in Regulation 27 of these Regulations.

89 Bad and Doubtful Debts

- (1) The Commission may after the distribution licensee gets the receivables audited, allow a provision for bad debts not exceeding an amount equal to 1 percent receivables in the revenue requirement of the licensee. (Information to be furnished in Format D-6).

90. Operation and Maintenance expenses:

- a) The Operation and Maintenance expenses shall be derived on the basis of the average of the actual Operation and Maintenance expenses for the three (3) years ending March 31, 2010, subject to prudence check by the Commission.
- b) The average of such operation and maintenance expenses shall be considered as operation and maintenance expenses for the financial year ended March 31, 2009 and shall be escalated at the escalation factor of 4% to arrive at operation and maintenance expenses for FY 2011-12.
- c) The O&M expenses for each subsequent year will be determined by escalating the base expenses determined above for FY 2011-12, at the escalation factor of 5.72 % to arrive at permissible O&M expenses for each year of the Control Period:

Provided that in case, the Distribution Licensee has been in operation for less than three (3) years as on the date of effectiveness of these Regulations, the O&M Expenses shall be determined on case to case basis.

91 Wheeling Losses

- (1) Wheeling charges of a distribution licensee for its distribution system shall be computed by deducting the following amounts from its annual revenue requirement worked out under **Regulation 90**.
 - (a) Cost of power purchase
 - (b) Interest payable on security deposits of consumers.
- (2) Wheeling charges so worked out shall be apportioned supply voltage wise.
- (3) The normative distribution system loss at the voltage at which open access transaction is under taken shall be borne by the consumer in kind.
- (1) Wheeling charges shall be single part tariff chargeable in Rs. per kWh; however the Commission may approve two-part tariff at a later stage.

The two-part charges may consist of the following or any one or combination there of:

- (a) Fixed charge in Rs. per month per kW of contracted power.
- (b) A charge in Rs. per KWh of energy wheeled separately for:
 - (i) wire business

- (ii) Installation, operation and maintenance of meters, metering system and any other equipment at consumer's premises.
- (iii) billing & collection of payment
- (iv) consumer services
- (c) Connectivity fee
- (d) Reactive energy charge / incentive:

Generator and consumers shall be required to maintain power factor (or reactive energy generation/drawal) of generation / load as specified. Power factor surcharge/incentive or reactive energy charge shall be applicable separately on generator and consumer as per licensee's tariff, as approved by the Commission.

92. Segregation of Wheeling and Retail supply Business

- (1) The Distribution Licensee shall segregate the accounts of the Licensed business into wheeling Business and Retail supply Business. The ARR for Wheeling Business shall be used to determine wheeling charges and the ARR for Retail supply Business to determine Retail Supply Tariff,
- (2) For such period until accounts are segregated, the licensee shall prepare an allocation statement to apportion costs and revenues to respective business. The Allocation statement, approved by the Board of Directors of the Licensee, shall be accompanied with an explanation of the methodology, which should be consistent over the Control Period.

93. Surcharge

- 1) The Commission will determine annually the surcharge payable by the open access consumers to meet the current level of cross subsidy level according to proviso 1 section 42 (2) of the Act. Provided that:
 - (a) The voltage based cost of supply to the category of consumers for the purpose of tariff to which the open access consumer belongs and the total realization from that category of consumers shall be the basis of calculating the extent of cross subsidy provided by such category of consumers.
 - (b) The amount of surcharge shall be so calculated as to meet the current level of cross subsidy from that category of consumers and shall be paid to the distribution licensee of the area of supply where the consumer is located.
 - (c) The surcharge shall be reduced in the same manner as the Commission may lay down for reduction and elimination of cross subsidies in its regulations relating to terms and conditions of tariff of distribution licensees.
- 2) The open access consumers availing exclusively intra-state transmission system shall pay the same amount of surcharge as determined under these regulations.
- 3) The cross subsidy surcharge is not payable if open access is provided to a person who has established a captive generating plant for carrying the generated electricity to the destination of his own use.

94. Additional Surcharge

- 1) The Commission will determine an additional surcharge that is payable by the open access consumer to meet the fixed cost of such distribution licensee arising out of his obligation to supply according to section 42 (4) of the Act.
- 2) The distribution licensee whose consumer intends to avail the facility of open access shall submit to the Commission within fifteen days of receipt of application an account of the fixed cost associated with the generation capacity entitlement in MW which the licensee is incurring towards his obligation to supply, the amount of income that may be earned by selling that entitlement to other persons, and the time required to relinquish the generation capacity MW entitlement amount associated with open access consumer.
- 3) The Commission shall scrutinize the statement of account submitted by the licensee and after giving the open access consumer an opportunity for filing objections, if any, determine the amount of additional surcharge payable by the consumer to the licensee. The additional surcharge shall not be more than the capacity charge [applicable in the bulk supply tariff for generation to the distribution licensee.
- 4) The additional surcharge shall be imposed for a maximum period as may be specified by the Commission may determine and the amount of the additional surcharge will be adjusted annually by the Commission.
- 5) At the end of the financial year, the licensee shall be required to demonstrate that the net fixed costs incurred for the MW generation capacity entitlement and the additional surcharges paid by the open access consumer will be adjusted either by a rebate to or an additional payment by the open access consumer to reflect the actual costs incurred. Net fixed costs shall be determined by deducting from the fixed costs any income earned by the licensee with the generation capacity entitlement.

95. Forecast of Revenues

- 1) The revenues of the distribution licensee from the business of the distribution of electricity shall comprise of the following components.
 - a) Revenue from sale of power i.e., tariff income
 - b) Non-tariff income
 - c) Income from surcharge and additional surcharge from open access customer
 - d) Wheeling charges recovered from open access consumers.
 - e) Any grant received from the State Government, other than the subsidy meant for any consumer or class of consumers.
 - f) Net income from other business apportioned as per licensee conditions.
- 2) The non-tariff income shall comprise of:
 - a) Delayed Payment Surcharge
 - b) Meter Rent
 - c) Customer Charges

- d) Income from investments
- e) Miscellaneous receipts from consumers
- f) Trading income
- g) Prior period income
- h) Interest on staff loans and advances
- i) Recovery of theft and pilferage of energy
- j) Any other income

96. Revenue Gap

- 1) For the tariff year, the difference between the net Annual Revenue Requirement and the expected Revenue at the prevailing tariff shall be the 'Revenue Gap'.
- 2) The revenue gap shall be bridged by measures such as improvements in internal efficiency, utilization of reserves, tariff changes etc. as may be approved by the Commission.

97. Provision of Subsidy

If the State Government decides to grant any subsidy to any consumer or class of consumers in the tariff determined by the Commission under Section 62 of the Act, the State Government shall, notwithstanding any direction which may be given under Section 108 of the Act, pay in advance and in such manner as may be specified by the Commission, to the party affected by grant of subsidy, such amount as to fully compensate the loss in revenue due to grant of such subsidy..

Provided 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 regulation and the tariff fixed by the Commission shall be applicable from the date of issue of orders by the Commission in this regard.

98. Non-Tariff Income

98.1 The amount of Non-Tariff Income relating to the Distribution Wires Business as approved by the Commission shall be deducted from the Aggregate Revenue Requirement in determining the wheeling charges of Distribution Wires Business of the Distribution Licensee:

Provided that the Distribution Licensee shall submit full details of its forecast of Non-Tariff Income to the Commission along with its application for determination of wheeling charges.

The indicative list of various heads to be considered for Non-Tariff Income shall be as under:

- a) Income from rent of land or buildings;
- b) Income from sale of scrap;
- c) Income from statutory investments;
- d) Interest on delayed or deferred payment on bills;

- e) Interest on advances to suppliers/contractors;
- f) Rental from staff quarters;
- g) Rental from contractors;
- h) Income from hire charges from contractors and others;
- i) Income from advertisements, etc.;
- j) Miscellaneous receipts;
- k) Interest on advances to suppliers;
- l) Excess found on physical verification;
- m) Prior period income.

Provided that the interest earned from investments made out of Return on Equity corresponding to the Distribution Wires Business of the Distribution Licensee shall not be included in Non-Tariff Income.

99. Income from Other Business

99.1 Where the Distribution Licensee has engaged in any Other Business, an amount equal to one-third of the revenues from such Other Business after deduction of all direct and indirect costs attributed to such Other Business shall be deducted from the Aggregate Revenue Requirement in determining the wheeling charges of Distribution Wires Business of the Distribution Licensee:

Provided that the Distribution Licensee shall follow a reasonable basis for allocation of all joint and common costs between the Distribution Wires Business and the Other Business and shall submit the Allocation Statement to the Commission, duly audited and certified by the statutory auditors, along with his application for determination of wheeling charges:

Provided further that once the Commission notifies the Regulations for submission of Regulatory Accounts, the applications for tariff determination and truing up shall be based on the Regulatory Accounts:

Provided further that where the sum total of the direct and indirect costs of such Other Business exceed the revenues from such Other Business, no amount shall be allowed to be added to the Aggregate Revenue Requirement of the Distribution Licensee on account of such Other Business:

Provided further that nothing contained in these Regulations shall apply to a local authority engaged, before the commencement of the Act, in the business of distribution of electricity.

CHAPTER - 7

MISCELLANEOUS

100. Power to remove difficulties

If any difficulty arises in giving effect to any of the provisions of these regulations, the Commission may, by general or special order, do or undertake or direct the licensees to do or undertake things, which in the opinion of the Commission is necessary or expedient for the purpose of removing the difficulties.

101. Power to Amend

The Commission may, at any time add, vary, alter, modify or amend any provisions of these regulations.

102. Power of relaxation

The Commission may in public interest and for reason recorded in writing, relax any of the provision of these regulations

103. Interpretation

If a question arises relating to the interpretation of the provisions of these regulations, the decision of the Commission shall be final.

103. Review of Regulations

The Commission at the end of three years from the date of publishing these regulations or even earlier, if considered just, proper and desirable by it considering the circumstances then prevailing shall undertake a comprehensive review of these regulations with the objective of improvement in the principles, procedures and methodologies.

104. Savings

- (1) Nothing in these regulations shall be deemed to limit or otherwise affect the inherent power of the Commission to make such orders as may be necessary for ends of justice to meet or to prevent abuses of the process of the Commission.
- (2) Nothing in these regulations shall bar the Commission from adopting, in conformity with the provisions of the Act, a procedure, which is at variance with any of the provisions of these regulations, if the Commission, in view of the special circumstances of a matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient for dealing with such a matter or class of matters.
- (3) Nothing in these regulations shall, expressly or impliedly, bar the Commission dealing with any matter or exercising any power under the Act for which no regulations or codes have been framed, and the Commission may deal with such matters, powers and functions in a manner it thinks fit in the public interest.

105. Sharing of CDM Benefits. The proceeds of carbon credit from approved CDM project shall be shared in the following manner, namely –

- (a). 100% of the gross proceeds on account of CDM to be retained by the project developer in the first year after the date of commercial operation of the generating station or the transmission system, as the case may be;
- (b). in the second year, the share of the beneficiaries shall be 10% which shall be progressively increased by 10% every year till it reaches 50%, where after the proceeds shall be shared in equal proportion, by the generating company or the transmission licensee, as the case may be, and the beneficiaries.

Sd/-

(J B POON)

Secretary

**Meghalaya State Electricity Regulatory Commission
Shillong.**