The 28th April, 2006

Assam Electricity Regulatory Commission (Terms and conditions for determination of Tariff) Regulations 2006

No. AERC. 2005/19 – The object of these Regulations is to specify the terms and conditions for the determination of tariffs by the Assam Electricity Regulatory Commission for the supply of electricity by a generating company to a distribution licensee, for transmission of electricity, for wheeling of electricity and for retail sale of electricity.

In exercise of powers conferred on it by Section 61 read with Section 181(zd) of the Electricity Act 2003 (36 of 2003), and in supersession of the Assam Electricity Regulatory Commission (Terms and conditions for determination of Tariff) Regulations, 2005, except in respect of things done or omitted to be done before such supersession, the Assam Electricity Regulatory Commission hereby makes the following Regulations:

Part – I

Preliminary

1. Short Title and Commencement

1.1 These Regulations shall be called ‘The Assam Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2006’.

1.2 These Regulations apply to the following persons operating in the State of Assam:

(a) an intra-state transmission licensee,
(b) a distribution licensee,
(c) the Assam State Electricity Board (ASEB) in its function as trader, buying and selling electricity to the successor distribution licensees of the Board for the contracted generation entitlements held by the ASEB on the notification date of the Transfer Scheme; and
(d) generating companies who are not subject to the jurisdiction of the Central Electricity Regulatory Commission which include generating companies owned or controlled by the Central Government or generating companies with a composite scheme of generation and sale in more that one state.
(e) These Regulations shall extend to the whole of the State of Assam.

1.3 These Regulations shall come into force from the date of their publication in the official gazette of the Government of Assam (refer section 61 proviso 1 of the Electricity Act 2003 (36 of 2003)).

2. Definitions
2.1 In these Regulations, unless the context otherwise requires,
(a) “Act” shall mean the Electricity Act, 2003 (36 of 2003);
(b) “Assam State Electricity Board (ASEB)” means the Assam State Electricity Board constituted before the commencement of the Electricity Act 2003 under section 5 of the Electricity (Supply) Act, 1948;
(c) “Beneficiary” in relation to a generating station means the person buying power generated at such a generating station on payment of Annual Fixed Charges;
(d) “Block” in relation to a combined cycle thermal generating station includes combustion turbine – generators, associated waste heat recovery boilers, connected steam turbine – generator and auxiliaries;
(e) “Conduct of Business Regulations” means the Assam Electricity Regulatory Commission (Conduct of Business) Regulations, 2004;
(f) “Commission” means the Assam Electricity Regulatory Commission constituted under section 17 of the Electricity Regulatory Commissions Act, 1998 and which continues to be so under section 82 of the Electricity Act, 2003 (36 of 2003);
(g) “Customer” shall mean a licensee, a generating company or a person who has set up a captive generating plant or a consumer availing open access, utilizing the transmission or distribution system or both
(h) “Date of Commercial operation” (COD)
I. in case of a generating company, shall mean the date declared by the generator
   (i) in relation to a unit, after demonstrating the Maximum Continuous Rating (MCR) or Installed Capacity (IC) through a successful trial run in accordance with the Assam Electricity Grid Code / Assam Electricity Distribution Code as the case may be;
in relation to the generating station the date of commercial operation of the last unit or block of the generating station;

II. in case of a transmission licensee shall mean the date of charging the transmission system to its rated voltage level or seven days after the date on which it is declared ready for charging by the transmission licensee, but not actually charged for reasons attributable to customers,

III. in case of a distribution licensee, shall mean the date of charging the electric line or substation of a distribution licensee to its rated voltage level or seven days after the date on which it is declared ready for charging by the distribution licensee, but not charged for reasons attributable to its customers:

Provided that the date of commercial operation shall not be a date prior to the scheduled date of commercial operation mentioned in power purchase agreement or the implementation agreement or the transmission service agreement or wheeling agreement or the investment approval, as the case may be, unless mutually agreed to by all parties;

(i) “Deemed Generation” means the energy, which a generating station was capable of generating but could not generate due to the conditions of grid or power system, beyond the control of generating station;

(j) “Distribution Licence Regulations” means the Assam Electricity Regulatory Commission (Procedure, Terms and Conditions for granting a Distribution Licence and other related matters) Regulations, 2004;

(k) “generating company” means any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person, which owns or operates or maintains a generating station;

(l) “Generation Tariff” shall mean tariff for ex-bus supply of electricity from a generating station;

(m) “Licensee” shall include a person deemed to be a licensee under Section 14 of the Act but excluding any person holding an interstate or intrastate trading licence;

(n) “Open access consumer” means a consumer who is eligible to receive supply of electricity from a person other than the distribution licensee of his area of supply;

(o) “Open access customer” means a person using or intending to use the transmission system or the distribution system or both of the licensees in the state for trading or wheeling of electricity in the State;

(p) “Tariff” shall mean the schedule of charges for generation and bulk
supply, transmission, wheeling and supply of electricity together with terms and conditions for application thereof;

(q) “Tariff period” shall mean the period for which tariff or the annual revenue requirement is determined by the Commission under these Regulations;


(s) “Time Block” shall mean a block of 15 minutes starting from 00.00 hrs;

(t) “Unscheduled interchange” (UI) shall mean unscheduled interchanges as defined in Indian Electricity Grid Code;

(u) “Wheeling” shall mean the operation whereby the distribution system and associated facilities of a transmission licensee or distribution licensee, as the case may be, are used by another person for the conveyance of electricity on payment charges to be determined under section 62;

(v) “Year” shall mean financial year ending on 31st March;

(w) “Current Year” shall mean the year in which the statement of annual accounts or petition for determination of tariff is filed;

(x) “Previous Year” shall mean the year immediately preceding the current year,

(y) “Ensuing Year” shall mean the year next following the current year.

2.2 Words or expressions occurring in these Regulations and not defined shall bear the same meaning as in the Act.

3. **Determination of tariff**

3.1 The Commission shall determine the tariff in accordance with Sections 61 and 62 of the Electricity Act, 2003 (36 of 2003). As per Section 61, the Commission shall be guided by the following, namely:-

(a) the principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;

(b) the generation, transmission, distribution and supply of electricity are conducted on commercial principles;

(c) the factors which would encourage competition, efficiency, economical use of resources, good performance and optimum investment;

(d) safeguarding of consumers’ interest and at the same time, recovery of the cost of electricity in a reasonable manner;

(e) the principles rewarding efficiency of performance;

(f) multi-year tariff principles;
(g) the tariff progressively, reflects the cost of supply of electricity, and also, reduces and eliminates cross-subsidies within the period to be specified by the Commission;

(h) the promotion of cogeneration and generation of electricity from renewable sources of energy; and

(i) the National Electricity Policy and tariff policy.

3.2 Notwithstanding anything specified in this Regulation, the Commission shall adopt the tariff if such tariff has been determined through a transparent process of competitive bidding in accordance with the guidelines issued by the Central Government.

4. **Preparation & submission of Annual Accounts, Reports etc**

4.1 Every licensee and generating company shall submit audited Annual Accounts with schedules as per Company’s Act 1956 or in such other forms as the Commission may specify and also submit their Business Plan and Investment Plan in such forms as may be specified by the Commission under the conditions of licence issued by the Commission within the time allowed under the said conditions.

4.2 The accounts of the licensee or the generating company shall be closed on 31st March every year unless otherwise permitted by the Commission. Even if the licensee/generating company prepares annual accounts based on a year which closes on any other date, for example 30th September or 31st December, the Licensee shall have to submit the annual accounts to the Commission which is for the period 1st April to 31st March. This is irrespective of the requirements under any other statute or legal documents.

4.3 The Licensee or the generating company shall not normally change the basis of charge or apportionment or allocation of revenues or expenses in relation to the preparation of the Accounting Statements in respect of a financial year from those applied in respect of the previous financial year, without prior intimation to the Commission. Any change, if proposed, in the basis of charge or apportionment of revenues or expenses shall be consistent with the provisions of the Companies Act, 1956, the Accounting Standards or Rules and further any guidelines issued by the Commission in this regard. If an application for change in basis is made before the Commission, it may direct the licensee to submit a statement showing the impact of such changes in the financial statement before granting its approval.

4.4 The Licensee shall, in respect of the Licensed Business and any Other Business keep such accounting records as would be required to be kept in respect of each such business so that the revenues, costs, assets, liabilities, reserves and provisions of, or reasonably attributable to the Licensed Business are separately identifiable in the books of the Licensee, from those of Other Business in which the Licensee may be engaged.

4.5 A distribution licensee owning a generating station shall maintain and submit separate accounts of generation, its licensed business, and other business.

4.6 The Balance Sheet and Profit & Loss Accounts together with annexure thereon for the licensed business or generating company shall be prepared by the Licensee and generating company as per the formats laid down in Company’s
Act, 1956 unless alternative formats are prescribed by the Commission through Regulations. The accounts submitted to the Commission shall be duly audited by the statutory auditor of the Licensee or the generating company. The Commission may prescribe a format of the auditor’s report in which the statutory auditor will submit their report.

4.7 In the preparation of Balance Sheet and Profit & Loss Account, the Licensee or the generating company shall follow the accounting standards issued by the Institute of Chartered Accountants of India (ICAI) unless alternative standards are prescribed by the Commission through Regulations.

Provided that depreciation shall be determined in accordance with regulation 14 of these Regulations and not the requirements of the Company’s Act 1956.

4.8 In case the Licensee or the generating Company fails to submit the above information, the Commission may initiate suo moto proceedings under the Conduct of Business Regulations. Moreover, in such a situation this failure will be treated as a breach of these Regulations.

5. **Periodicity of tariff determination**

5.1 No tariff or part of any tariff may ordinarily be amended, more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified in terms of subsection (4) of Section 62 of the Act specified in regulation 9 of these Regulations.

5.2 Subject to other provisions of these Regulations, the expenses allowed to be recouped for any financial year, shall be subject to adjustments in any tariff to be fixed for the subsequent period, if the Commission is satisfied, that such adjustments for the excess amount or shortfall in the amount actually realized or expenses incurred is necessary and the same is not on account of any reason attributable to the licensee.

5.3 In accordance with the principle of multi-year tariffs, the Commission shall define the periodicity for tariff determination that will apply for a number of years during a control period as follows:

<table>
<thead>
<tr>
<th>Function</th>
<th>Control Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation</td>
<td>5 years from 1 April 2006</td>
</tr>
<tr>
<td>Transmission</td>
<td>3 years from 1 April 2006</td>
</tr>
<tr>
<td>Distribution</td>
<td>3 years from 1 April 2006</td>
</tr>
</tbody>
</table>

Note: For example if the Tariff determination period is 2006-07, the Control Period shall be 2006-07, 2007-08 and 2008-09

6. **Petition for determination of tariff**

6.1 The licensee and generating company shall file a tariff petition annually with
the Commission to determine changes to the current tariff not later than 1st December unless an extension is granted by the Commission upon application.

6.2 In the tariff petition, the licensee and generating company shall submit information for the purpose of calculating expected revenue and expenditure and for furnishing information for tariff determination in formats that will be issued separately by the Commission.

6.3 The tariff petition shall be accompanied by financial and performance information in forms specified by the Commission for the previous year/years, current year and the ensuing year. The information for the previous year should be based on audited accounts and in case audited accounts for the previous year are not available, audited accounts for the latest previous year should also be filed along with unaudited accounts for all the succeeding years.

6.4 If a person holds more than one licence and/or is deemed to be licensee for more than one area of distribution or transmission, he shall submit separate petitions in respect of each licence or area of transmission or distribution.

6.5 In its tariff petition, a generating company shall submit information to support the determination of tariff for each generating station.

7. Petition for determination of MYT

7.1 The licensee and generating company shall file petitions with the Commission six months prior to the commencement of the control period proposing the tariff determination principles to be applied by the Commission or such shorter period that the Commission may specify.

7.2 The licensee and generating company shall also submit financial information for the previous year and forecasts for current year, ensuing year and the years up to the end of the control period as given below:

(a) Actual audited data of the last financial year (e.g., 2004-05 if year one of the control period is 2006-07) and if the same is not audited the audited data of the latest financial year accompanied by unaudited data of the subsequent years.

(b) Current Year’s estimates

(c) Projections for the control period years e.g. 2006-07 and 2007-08,2008-09

8. Orders of the Commission

8.1 The Commission, after the petition has been registered as per the Assam Electricity Regulatory Commission (Conduct of Business) Regulations, 2004, may within 21 days require the licensee or generating company to furnish:

(a) any further information, particulars and documents as the Commission may consider appropriate to enable the Commission to assess the petitioner’s calculations; or

(b) a revised petition, if the Commission does not consider the petitioner’s calculation to be in accordance with the provisions of these Regulations.

8.2 After receipt of information or otherwise, the Commission may pass
appropriate orders regarding initiation of proceedings in accordance with the provisions of the Assam Electricity Regulatory Commission (Conduct of Business) Regulations, 2004.

9. **Power purchase and fuel cost adjustment**

9.1 The Commission shall allow the recovery or refund, as the case may be, of additional charge for adjustment of tariff on account of change in fuel related costs of electricity generation and purchase of electricity within the period of a notified tariff order of the Commission.

9.1.1 The additional charge for adjustment shall be recovered or refunded, as the case may be, on a quarterly basis; and shall be taken as per actuals of the last three months.

9.1.2 The licensee or generating company shall put forth a formula for such recovery or refund in their tariff petition for approval by the Commission. After approval of the formulae proposed by the licensee, with modification, if any, the licensee or generating company is not required to file separate petition for power purchase and fuel cost adjustment.

9.1.3 The licensee or generating company shall determine such charge, in accordance with the formula under regulation 9.3 above, and recover or refund the same, as the case may be, from their respective consumers/customers. The Licensee or generating company shall send detailed calculations of such charge quarterly to the Commission along with the charge actually recovered/refunded.

9.1.4 Calculation and levy of such charge shall be subject to scrutiny of the Commission. The Commission shall make available the calculations of licensee or generating company for inspection by any person. The licensee or generating company shall refund or recover, as the case may be, any difference of such charge already recovered by it and approved by the Commission.

9.1.5 In case of any reduction in power purchase and fuel cost if the licensee or generating company fails to refund the additional charge to the consumers/customers within the stipulated time, the Commission shall suo-moto order the licensee or generating company to refund the same with 10 days notice to the licensee.

9.1.6 In case of any dispute, an appropriate petition in accordance with the Assam Electricity Regulatory Commission (Conduct of Business) Regulations, 2004, as amended from time to time or any statutory re-enactment thereof, shall be made before the Commission.

10. **Refund of excess amount**

10.1 A licensee or generating company shall recover the approved charges subject to the maximum as per the tariff determined by the Commission.

10.2 If any licensee or generating company recovers any charges exceeding the tariff determined by the Commission, the net excess amount after deducting the costs involved shall be adjusted against next year’s ARR.
11. Publication of tariff order

The licensee or generating company shall within the time specified in the order of the Commission, publish the salient features of tariff, in two daily newspapers, one local language and one English having wide circulation in its area of supply and in case of a generating company or transmission licensee, having wide circulation in the State. Tariff shall come into force only after such publication and shall remain in force until any amendment to the tariff is approved by the Commission and published by the licensee or the generating company.

12. Communication of tariff order

The Commission shall, within seven days of passing the order, send a copy of the order to the Government of Assam, the Central Electricity Authority, concerned licensees and generating company. The Commission shall also make available copy of the said order to any person on payment of a fee fixed by the Commission.

Part – II

General Principles for Capital Structure and Other Costs

13. Opening Balance Sheet of deemed licensee and existing generators

13.1 The opening Balance Sheet as per the Transfer Scheme Notification for the unbundled entities of the present Assam State Electricity Board into a Generating Company, a Transmission Company and Distribution Companies will be the capital structure for the first year of operation, subject to such modifications as may be found necessary upon audit of the accounts if such a Balance Sheet is not audited

13.2 In future, swapping of foreign currency equity and foreign currency loans and other loans shall be permitted, provided it does not affect tariff charges adversely and benefits accruing from such swapping are shared between the licensee or generating company and the customers in the year following the year of such swapping in a ratio as may be specified by the Commission.

13.3 In future, restructuring of capital cost in terms of relative shares of equity and loan shall be permitted during the tariff period provided it does not affect tariff adversely. Any benefit from such restructuring shall be shared between persons sharing the capacity charge in case of a generating company and to customers of transmission or distribution licensee or consumers in case of such licensees in a ratio as may be specified by the Commission.

13.4 In the absence of audited balance sheets, the Commission may consider any other valid documents to arrive at the capital structure of the company as it finds appropriate in addition to documents as mentioned in 13.1 above.
Note 1

Any expenditure admitted by the Commission on account of committed liabilities within the original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt-equity ratio as specified in each Part of these Regulations.

Note 2

Any expenditure on replacement of old assets shall be considered after writing off the gross value of the original assets from the original cost.

Note 3

Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio specified in each Part of these Regulations.

Note 4

Any expenditure admitted by the Commission for determination of tariff on renovation, modernization, life extension and restoration of assets damaged due to natural calamities shall be serviced on normative debt-equity ratio specified in each Part of these Regulations after writing off the original amount of the replaced assets from the original cost.

Impact of additional capitalization on tariff may be considered once in a control period in case of Multi Year Tariff.

14. Depreciation

For the purpose of tariff determination, depreciation shall be computed in the following manner:

(a) The asset value for the purpose of depreciation shall be the historical cost of the assets as approved by the Commission where:

The opening asset’s value recorded in the Balance Sheet as per the Transfer Scheme Notification shall be deemed to have been approved, subject to such modifications as may be found necessary upon audit of the accounts, if such a Balance Sheet is not audited. Consumer contribution or capital subsidy/grant etc shall be excluded from the asset value for the purpose of depreciation.

(b) For new assets, the approved/accepted cost for the asset value shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency actually availed but not later than the date of commercial operation.

(c) Depreciation shall be calculated annually as per straight-line method over the useful life of the asset as per asset register maintained at the rate of depreciation. The Rate of Depreciation shall be the same as the Rate of
Depreciation declared by CERC as laid down in the Appendix to these Regulations:

Provided that the total depreciation during the life of the asset shall not exceed 90% of the original cost.

Provided that land is not a depreciable asset and its cost shall be excluded from the capital cost while computing the historical cost of the asset.

(d) **Advance Against Depreciation**—Advance against depreciation (AAD) shall be permitted in addition to allowable depreciation, in the manner given hereunder:

(i) \( \text{AAD} = \text{Loan repayment amount subject to a ceiling of 1/10th of loan amount minus depreciation as per schedule.} \)

Provided that Advance Against Depreciation shall be permitted only if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year.

Provided further that Advance Against Depreciation in a year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation up to that year.

(e) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.

(f) Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro-rata basis.

(g) Depreciation against assets relating to environmental protection shall be allowed on case to case basis at the time of fixation of tariff subject to the condition that the environmental standards as prescribed have been complied with during the previous tariff period.

15. **Lease/Hire Purchase charges**

Lease charges for assets taken on lease by a generating company or a licensee shall be considered as per lease agreement provided the charges are considered reasonable by the Commission.

16. **Contingency reserve charge**

16.1 For the purpose of meeting any contingents that may be arises, the Commission may consider provision for a Contingency Fund to be created out of approved ARR to be invested in a separate Fund to be maintained in an approved manner. The Contingency Fund so created shall be utilized to meet cost of replacement of equipment damaged due to accident under force majeure situations.

16.2 This Fund shall be invested in a nationalised Bank approved by the Commission.
16.3 The interest on the balance in the Fund shall be added back to the Fund.

16.4 The licensee shall be entitled to draw money from this Fund only with the prior approval of the Commission.

16.5 The Commission may allow a part of the Fund to be returned back to the consumers at the end of the control period, in case of Multi Year Tariff by way of reduction in the Annual Revenue Requirement.

16.6 The amount in this Fund shall not be treated as part of the equity reserves.

17. **Interest charges on working capital**

Rate of interest on working capital to be computed as provided subsequently in these Regulations shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1st April of the financial year for which the generating station or the licensee files petition for annual Revenue Requirement and tariff proposal. The interest on working capital shall be calculated on normative basis notwithstanding that the licensee or the generating company has not taken working capital loan from any outside agency.

18. **Foreign Exchange Rate Variation (FERV)**

Any adverse variation in the foreign exchange rate at the time of foreign currency loan repayment as per the terms and conditions of the Loan Agreement to the extent liable to be borne by the licensee or generating company shall be allowed by the Commission on submission of proof of actual repayment of foreign currency loan together with calculations and other supporting documents that may be required by the Commission. The Commission may disallow FERV claim to the extent of increase in liability due to default by the borrower towards repayment of foreign currency loan as per the terms of the loan agreement and consequent penal interest liability. If there is any gain in foreign exchange rate, the resultant gain shall be passed on the consumer. During the Control period, the FERV will be estimated and the adjustment will be made as per actual calculations stated above.

19. **Core Business**

For the purpose of these Regulations, core business means the regulated activities of the licensee or the generating company and does not include any other business or activity of the licensee or the generating company, like consultancy, telecommunication, etc.

20. **Tax on income**

20.1 Tax on the income streams of the licensee or the generating company, as the case may be, from its core business, shall be computed as an expense and shall be recovered from the beneficiaries/consumers.

Provided that tax on any income stream other than the core business shall not constitute a pass through component in tariff and tax on such other income shall be payable by the licensee or the generating company as the case may be.

20.2 Any under-recoveries or over-recoveries of tax on income shall be adjusted every year on the basis of income-tax assessment under the Income-Tax Act, 1961, as certified by the statutory auditors.
20.3 The benefits of tax holiday and the credit for carrying forward losses applicable as per the provisions of the Income Tax Act, 1961 shall be passed on to the customers.

Provided further that the generating station-wise profit before tax in the case of the generating company estimated for a year in advance shall constitute the basis for distribution of the corporate tax liability to all the generating stations.

20.4 Income-tax allocated to the thermal generating station shall be charged to the beneficiaries in the same proportion as annual fixed charges, the income-tax allocated to the hydro generating station shall be charged to the beneficiaries in the same proportion as annual capacity charges and in case of intra-state transmission, the sharing of income-tax shall be in the same proportion as annual transmission charges.

20.5 Where a licensee has an exclusive transmission or distribution system or a generating company, a generating unit exclusively for a customer or group of customers, income tax liability of the licensee or the generating company, as the case may be, shall be assigned to exclusive as well as common customers in the ratio of the profit from the two groups of customers. Where profit and loss accounts are not maintained separately for such assets, the profit shall be apportioned in the ratio of capital cost of assets.

20.6 **Tax Escrow Mechanism:**

(1) The beneficiaries shall maintain an interest bearing tax escrow account in a scheduled bank, to which all amounts of interest shall be credited.

(2) The tax liability shall be estimated two months before the commencement of each year and intimated to the beneficiaries. The generating company or the transmission licensee shall endeavor to minimize its liability on account of taxes recoverable from the beneficiaries.

(3) The generating company or the transmission licensee shall be authorised to amounts for settling the income-tax liability on presentation to the escrow holder, a certificate from their statutory auditors that the amounts are immediately due and payable to the taxing authority.

(4) The generating company or the transmission licensee shall pay into the tax escrow account any refund received from the taxing authority.

(5) The refunds, if any, shall not be paid back to the beneficiaries and shall be adjusted in the escrow account. Any balance due or returnable shall be rolled over to the next year.

(6) The escrow accounts shall be reflected in the books of accounts of the beneficiaries as their bank account.

21. **Recovery of Income-tax and Foreign Exchange Rate Variation:**

Recovery of Income-tax and Foreign Exchange Rate Variation shall be done directly by the generating company or the transmission licensee, as the case may be, from the beneficiaries without making any application before the Commission.

Provided that in case of any objections by the beneficiaries to the amounts
claimed on account of income-tax or Foreign Exchange Rate Variation, the
generating company or the transmission licensee, as the case may be, may make
an appropriate application before the Commission for its decision.

22. **Unfunded liability of pension and gratuity**

The amount of unfunded liability of pension and gratuity based on actuarial
valuation on the effective date of transfer scheme in respect of existing
employees of Assam State Electricity Board and successor entities and the
manner of discharging this liability shall be specified by the Commission. The
company shall provide evidence of having deposited the amount allowed by the
Commission in the trust account monthly.

23. **Norms of operation**

Norms of operation specified in these Regulations are the threshold norms
and the generating company and the licensees and the customer may agree to
improved norms. In such a case the improved norms on the basis of their
agreement shall be considered for the purpose of tariff determination.

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**Part – III**

**General Principles for Revenues and the Sharing of Efficiency Gains**

24. **Tariff income**

Income from all charges determined by the Commission for generation, bulk supply,
transmission, wheeling or supply of electricity shall be considered as tariff income.
Tariff income shall include the following:

(a) Generating Company: Capacity charge and energy charge;
(b) Assam State Electricity Board: Bulk Supply Tariff;
(c) Transmission Licensee: Transmission charge, Connectivity charge,
Parallel Operation charge (for captive generators connected to the grid)
and State Load Dispatch Centre (SLDC) charge; and
(d) Distribution Licensee: Fixed charge, Wheeling Charge, Demand charge
and Energy charge.

25. **Other income**

All incomes including meter rental charges and miscellaneous charges for
unauthorized use of electricity, delayed payment surcharge and composition
money, other than tariff income shall be grouped as other income. In case of
Distribution Licensee all charges provided in the Schedule of Miscellaneous
Charges shall be classified under ‘Other Income’.

26. **Treatment of Income of Other Business**

26.1 Revenue from other business shall be treated as income to the extent
authorized by the Commission under Sections 41 and 51 of the Act.

26.2 In calculating the expected revenue from charges which he is permitted to
recover, the Licensee shall duly account for all costs which have been incurred
for Other Business from the Licensed Business and in the event of such costs
being incurred commonly for the Licensed Business and Other Business, the Licensee shall apportion such costs. All such costs pertaining to Other Business shall be duly adjusted by the Licensee for the benefit of the Licensed Business.

26.3 In addition to the sharing of costs under Clause 26.2 above, the Licensee shall account for and adjust in favour of the Licensed Business such percentage of the gross turnover of the Other Business as the Commission may decide, subject to maximum of 10% of the gross turnover of the Other Business.

26.4 The cost to be shared from the Other Business under Clause 26.2 above and the amount to be adjusted in favour of the Licensed Business in terms of Clause 26.3 above shall be the income of the Licensed Business of the Licensee and shall be utilized for reducing the charges of transmission or wheeling, as the case may be.

27. **Surcharge and additional surcharge**

Surcharge and additional surcharge under Sections 39, 40 and 42 of the Act shall be considered as income and treated as directed by the Commission.

28. **Late payment surcharge**

28.1 In case the payment of bills of transmission charges, wheeling charges or charges for electricity purchased by a person other than a consumer is delayed beyond a period of two months from the date of billing, a late payment surcharge at the rate determined by the Commission shall be levied by a generating company, the transmission licensee or the distribution licensee.

28.2 For delay in payment of bill by a consumer beyond a period of fifteen days a late payment surcharge at the rate determined by the Commission shall be payable to the Distribution Licensee.

28.3 The amount recovered as late payment surcharge by a generating company or a licensee shall be considered as income from tariff.

28.4 The normal principle to be followed for adjustment of any arrear payment shall be that first adjustment shall be made against the delayed payment surcharge due and adjustment against energy charges shall be made only after the full recovery of the delayed payment surcharge.

29. **Sharing of Efficiency Gains**

29.1 The financial gain or loss to the licensee or generating company shall be computed after considering any efficiency gains achieved as envisaged in the norms of operation set out in Parts IV, V, VI, and VII of these Regulations.

29.2 The profit of the licensee shall not be restricted to the amount determined under each Part of these Regulations but can exceed such amount provided that the licensee or generating company outperforms the target performance norms set by the Commission.

29.3 When the licensee or generating company earns a profit greater than the amount set in the tariff order, the licensee or generating company shall be entitled to retain fifty percent of the additional profit earned from all sources,
twenty five percent shall be credited to the licensee’s or generating company’s contingency reserve and the remaining twenty five percent shall be passed on to the consumers/users.

Provided that the Licensee shall not be entitled to retain additional profit if in the Commission’s opinion the licensee has failed to achieve the targets set in the Transmission or Distribution Licensees’ Standard of Performance Regulations, 2004.

Provided also that when the licensee fails to achieve performance standards, the Commission may direct by order that the additional profit earned by the licensee be invested in improving the performance of the transmission and distribution services to consumers.

29.4 The benefits of better performance shall be shared between the licensee or generating company and the consumers at the end of the control period in case of Multi Year Tariff when base values for the next control period are reset in a ratio to be determined by the Commission.

Provide that the share allocated to the licensee shall not be less than 25%.

29.5 If at the end of the current tariff period, the current tariff results in profits to the generating company or the licensees that exceed 20% return on equity, then the Commission may revise the tariff so as to reduce the profits to a maximum of 20% return on equity.

Part –IV

Thermal Power Generating Stations

30. Tariff determination principles for a generating company –

30.1 Tariff in respect of generating station under these Regulations shall be determined as a whole for each generating station based on the PPA submitted to the Commission for approval

30.2 A generating company shall submit annual information station wise in the format circulated by the Commission for determining Annual Revenue Requirement (ARR) by 1st December every year, and at the start of the control period in case of Multi Year Tariff and thereafter on 1st December every year unless extension is granted upon application.

30.3 The Commission shall scrutinize the annual information submitted with the annual accounts, norms achieved and tariff worked out by the generating company. The tariff worked out by the generating company shall be subject to confirmation by the Commission.

30.4 Any amount recovered in excess or any amount under recovered in any year on the basis of audited accounts shall be refunded or adjusted in bills relating to the quarter following the publication of audited accounts.
31. Definitions

31.1 Unless the context otherwise requires, for the purpose of this part:

(a) “Auxiliary Energy Consumption” (AUX) in relation to a period means the quantum of energy consumed by auxiliary equipment of the generating station and transformer losses within 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;

(b) “Availability” in relation to a thermal generating station for any period means the average of the daily average declared capacities (DCs) for all the days during that period expressed as a percentage of the installed capacity of the generating station minus normative auxiliary consumption in MW, and shall be computed in accordance with the following formula:

\[
\text{Availability} = \frac{10000 \times \sum (\text{DC}_i) / \{ N \times \text{IC} \times (100 - \text{AUX}_n) \}}{i=1 \text{to } N} \%
\]

where,

(i) \( \text{IC} \) = Installed Capacity of the generating station in MW,

(ii) \( \text{DC}_i \) = Average declared capacity for the \( i^{th} \) day of the period in MW,

(iii) \( N \) = Number of days during the period, and

(iv) \( \text{AUX}_n \) = Normative Auxiliary Energy Consumption as a percentage of gross generation;

(c) “Beneficiary” in relation to a generating station means the person buying power generated at such a generating station on payment of Annual Fixed Charges;

(d) “Declared Capacity” (DC) shall mean 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;

Note:

(i) 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.

(ii) Declared capacity however shall be limited to Installed Capacity.

(iii) Daily average declared capacity mean the sum of capacity declared for every fifteen minutes block during the twenty four period divided by ninety six.

(e) “Gross Calorific Value” (GCV) in relation to a thermal power generating station means the heat produced in kCal by complete combustion of one kilogram of solid fuel or one litre of liquid fuel or one standard cubic meter of gaseous fuel, as the case may be;

(f) “Gross Station Heat Rate” (GHR) means the heat energy input in kCal required to generate one kWh of electrical energy at generator terminals;

(g) “Infirm Power” means electricity generated prior to commercial operation of the unit of a generating station;

(h) “Installed Capacity” (IC) means the summation of the nameplate 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;

(i) “Maximum Continuous Rating” (MCR) in relation to a unit of the thermal power generating station means the maximum continuous output at the generator terminals, guaranteed by the manufacturer at rated parameters, and in relation to a unit or block of a combined cycle thermal power generating station means the maximum continuous output at the generator terminals, guaranteed by the manufacturer with water/steam injection (if applicable) and corrected to 50 Hz grid frequency and specified site conditions;

(j) “Plant Load Factor” (PLF) for a given period, means the total sent out energy corresponding to scheduled generation during the period, expressed as a percentage of sent out energy corresponding to installed capacity in that period and shall be computed in accordance with the following formula:

\[
\text{PLF} = 10000 \times \frac{\sum (SG_i)}{N \times IC \times (100 - AUX_n)} \%
\]

where,

(i) IC = Installed Capacity of the generating station in MW,
(ii) \(SG_i\) = Scheduled Generation in MW for the \(i\)th time block of the period,

(iii) \(N\) = Number of time blocks during the period, and

(iv) \(AUX_n\) = Normative Auxiliary Energy Consumption as a percentage of gross generation;

(k) “Scheduled Generation” (SG) at any time or for any period or time block means schedule of generation in MW ex-bus given by the State Load Despatch Centre.

Note:

(i) For a gas turbine generating station or a combined cycle generating station if the average frequency for any time block, is below 49.52 Hz but not below 49.02 Hz and the scheduled generation is more than 98.5% of the declared capacity, the scheduled generation shall be deemed to have been reduced to 98.5% of the declared capacity, and if the average frequency for any time block is below 49.02 Hz and the scheduled generation is more than 96.5% of the declared capacity, the scheduled generation shall be deemed to have been reduced to 96.5% of the declared capacity.

(ii) “Unit” in relation to a thermal power generating station means steam generator, turbine-generator and auxiliaries, or in relation to a combined cycle thermal power generating station, means turbine-generator and auxiliaries.

(iii) “Year” means a financial year commencing on 1st April of each calendar year and ending on 31st March of subsequent calendar year.

32. **Debt-equity ratio**

For the purpose of determination of tariff, debt-equity ratio in the case of a new generating station commencing commercial operations after the notification of these Regulations 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 shall be treated as loan. Where actual equity employed is less than 30%, the actual equity employed shall be considered. In the case of Assam Power Generation Corporation Ltd. the debt equity ratio as per the Balance Sheet on the date of the Transfer notification will be the debt equity ratio for the first year of operation, subject to such modification as may be found necessary upon audit of the accounts if such Balance Sheet is not audited.

33. **Return on Equity**

33.1 Return on equity shall be computed on the equity base determined in
accordance with Regulations 32 and 33 and shall not exceed 14%. In the case of Assam Power Generation Corporation, Ltd this rate will be applied for the first year on the equity recorded in the balance sheet as per the Transfer notification. Provided that equity invested in a foreign currency may be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

33.2 The premium received while issuing share capital shall be treated as a part of equity provided the same is utilised for meeting capital expenditure.

33.3 Internal resources created out of free reserves and utilised for meeting capital expenditure shall also be treated as a part of equity.

33.4 Foreign equity will also attract the same rate of return.

33.5 Return on Equity shall be allowed by the Commission on achievement of a satisfactory level of performance by the generating company or the licensees as per the Transmission or Distribution Licensee’s Standards of Performance Regulations, 2004 notified by the Commission.

34. **Interest and finance charges on loan capital**

34.1 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 specified therein. Provided that the outstanding loan capital shall be adjusted to make it consistent with the loan amount determined in accordance with Regulations 32 and 33.

34.2 The interest and finance charges attributable to Capital Work in Progress shall be excluded.

34.3 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.

34.4 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.

34.5 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.

35. **Capital Cost**

35.1 The actual capital expenditure as on the date of Commercial Operation in the
case of new investment shall be subject to prudence check by the Commission.

35.2 Where PPA provides for a ceiling on capital cost, the capital cost to be considered shall not exceed the ceiling.

35.3 The capital cost may include capitalised initial spares as follows:-

(a) Up to 2.5% of original approved cost in case of coal based generating stations;
(b) Up to 4% of original approved cost in the case of gas turbine/combined cycle generating stations.

35.4 Scrutiny of the cost estimates by the Commission shall be limited to the reasonableness of the capital cost, financing plan, interest during construction, use of efficient technology and such other matters for determination of tariff.

35.5 In case of any abnormal delay in execution of the project causing cost and time overruns, attributable to the failure of the generator in executing the project the Commission may not approve the capitalisation of interest and overhead expenses in full but limit it to a reasonable amount only...

36. **Operation and Maintenance Expenses**

36.1 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; and
(c) Administration and General Expenses.

36.2 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.

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

36.4 In verifying the budget for Operations and Maintenance the Commission may be guided by the norms laid down in regulation 40.

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

37. **Petition for determination of tariff**

37.1 A generating company shall file petition for determination of tariff for supply of electricity to distribution licensees complying with the provisions of Part I of these Regulations.
37.2 In case of a new generating station, a generating company shall file petition for determination of provisional tariff in advance of the anticipated date of commissioning of a generating station 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 the generating station.

37.3 A generating company shall file a fresh petition as per these Regulations, for determination of final tariff of a generating station mentioned in regulation 36.2 above 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.

37.4 Any difference between the provisional tariff and the final tariff determined by the Commission and not attributable to the generating company may be adjusted in the tariff for the following year as directed by the Commission.

38. Components of tariff

38.1 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.

38.2 The annual capacity (fixed) charges shall consist of:

(a) Interest on Loan Capital;

(b) Interest on Working Capital;

(c) Depreciation, including Advance Against Depreciation as may be allowed.

(d) Return on equity as may be allowed

(e) Operation and maintenance expenses;

(f) Taxes on Income

Less: Other Income (Refer Regulation 44)
39. Norms of operation

39.1 The norms of operation as given hereunder shall apply:

**Target Availability for recovery of Full Capacity (Fixed) charges for thermal power stations**

<table>
<thead>
<tr>
<th>Station</th>
<th>Target Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Namrup</td>
<td>50</td>
</tr>
<tr>
<td>Lakwa</td>
<td>50</td>
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</tbody>
</table>

**Target Plant Load Factor for Incentive**

<table>
<thead>
<tr>
<th>Station</th>
<th>Target Plant Load Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Namrup</td>
<td>50</td>
</tr>
<tr>
<td>Lakwa</td>
<td>50</td>
</tr>
</tbody>
</table>

39.2 For stations commissioned on or after these Regulations come into force the factors shall be as follows:

- Target Availability for recovery of full Capacity (Fixed) charges for Thermal Power Stations: 80%
- Target Plant Load Factor for Incentive: 80%

39.3 Gross Station Heat Rate

(i) Coal-based thermal power generating stations,
For stations commissioned on or after these Regulations come into force the gross station heat rates would be as follows:
- 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

(iii) For existing stations the GSHR shall be as provided in Annexure II

39.4 Secondary fuel oil consumption

(i) Coal-based generating stations:
For Stations commissioned on or after these Regulations come into force, the secondary fuel oil consumption rates would be as follows:
- During Stabilization period: 4.5 ml/kWh
- Subsequent period: 2.0 ml/kWh
39.5 Auxiliary Energy Consumption

(i) Coal-based generating stations:
   For stations commissioned after these Regulations come into force, the auxiliary consumption rates would be as follows:
   With cooling towers: 9.0%
   Without cooling towers: 8.5%

(ii) Gas Turbine / Combined Cycle generating stations:
   Combined cycle: 3.0%
   Open cycle: 1.0%
   Where Gas Booster Compressor is utilized, the Commission may allow higher rate of auxiliary consumption due to technological requirements as per approved DPR.

(iii) For existing generating stations the AEC shall be as provided in Annexure III

39.6 Stabilization period

In relation to a unit, stabilization period shall be reckoned commencing from the date of commercial operation of that unit as follows, namely:

(a) Coal-based generating stations: 180 days
(b) Gas turbine/combined cycle generating stations: 90 days

40. Capital cost and sale of Infirm Power

40.1 The capital cost of a generating company shall be worked out in accordance with the provisions of these Regulations.

40.2 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.

41. Operation and maintenance expenses

Normative level of operation and maintenance expenses shall be as follows:

For new generating units commissioned after coming into operation of this regulation, the O&M expenses shall be 2.5% of approved capital cost for the first year of operation and thereafter increase at the rate of 4% of the amount of expenses, unless revised.

For existing generating stations the base O&M expenses including insurance shall be derived by averaging the actual O&M expenses for five years, namely 2000-01 to 2005-06 for which audited balance sheets are available after a prudent check by the Commission. The year 2002-03 shall be taken as the base year and the average O&M expenses of the five years shall be escalated at the rate of 5% per annum to arrive at the operation and maintenance expenditure to be considered by the Commission for all relevant purposes.
42. **Working capital**

Working capital shall cover:

42.1 For Coal based-fired generating stations

(a) Cost of coal for one and a half months for pit-head generating stations and two months for non-pit-head generating stations, corresponding to target availability, respectively;

(b) Cost of secondary fuel oil for two months corresponding to target availability;

(c) Operation and Maintenance expenses for one month;

(d) Maintenance spares @ 1% of the historical cost escalated @ 6% per annum from the date of commercial operation.; and

(e) Receivables equivalent to two months of fixed and variable charges for sale of electricity calculated on target availability.

42.2 For Gas Turbine/Combined Cycle generating stations

(a) Fuel cost for one month corresponding to target availability duly taking into account the mode of operation of the generating station on gas fuel and liquid fuel;

(b) Liquid fuel stock for fifteen days

(c) Operation and maintenance expenses for one month;

(d) Maintenance spares @ 1% of the historical cost escalated @ 6% per annum from the date of commercial operation.; and

(e) Receivables equivalent to two months of fixed and variable charges for sale of electricity calculated on target availability.

Rate of interest on working capital to be computed as provided subsequently in these Regulations shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1st April of the financial year for which the generating station or the licensee files petition for annual Revenue Requirement and tariff proposal. The interest on working capital shall be calculated on normative basis notwithstanding that the licensee or the generating company has not taken working capital loan from any outside agency.

43. **Connectivity Charges 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.

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 generator.
45. **Recovery of capacity charges**

45.1 Full capacity charges shall be recoverable at target availability specified in regulation 39. Recovery of capacity charges below the level of target availability will be on pro rata basis. At zero availability, no capacity charges shall be payable.

45.2 Payment of capacity charges shall be on monthly basis in proportion to allocated/contracted capacity

46. **Energy charges**

46.1 The energy (variable) charges shall cover fuel costs and shall be computed as follows:

(a) **Generating stations covered under intra state ABT**

Energy (variable) Charges shall cover fuel costs and shall be worked out on the basis of ex-bus energy scheduled to be sent out from the generating station as per the following formula:

\[
\text{Energy Charges (Rs)} = \text{Rate of Energy Charges in Rs/kWh} \times \text{Scheduled Energy (ex-bus) for the month in kWh corresponding to scheduled generation.}
\]

(b) **Generating stations other than those covered under intra state ABT**

Energy (variable) charges shall cover fuel costs (landed cost) and shall be worked out on the basis of ex-bus energy delivered from the generating station as per the following formula:

\[
\text{Energy Charges (Rs)} = \text{Rate of Energy Charges in Rs/kWh} \times \text{Energy delivered (ex-bus) for the month in kWh}
\]

(c) **Rate of Energy Charges (REC)** shall be the sum of the cost of normative quantities of primary and secondary fuel for delivering ex-bus one kWh of electricity in Rs/kWh and shall be computed as under:

\[
REC = \frac{100\{P_p \times (Q_p)n + P_s \times (Q_s)n\}}{100 - (AUXn)} \quad (Rs./kWh)
\]

Where,

\[
P_p = \text{Price of primary fuel namely coal or lignite or gas or liquid fuel in Rs/Kg or Rs/cum or Rs./litre, as the case may be} \\
(Q_p)n = \text{Quantity of primary fuel required for generation of one kWh of electricity at generator terminals in Kg or litre or cum, as the case may be, and shall be computed on the basis of normative Gross Station Heat Rate (less heat contributed by secondary fuel oil for coal/lignite based generating stations) and gross calorific value of coal/lignite or gas or liquid fuel as fired.} \\
P_s = \text{Price of Secondary fuel oil in Rs./ml, (including transportation cost)} \\
(Q_s)n = \text{Normative Quantity of Secondary fuel oil in ml/kWh as per clause 40.3, as the case may be, and}
\[ \text{AUX}_n = \text{Normative Auxiliary Energy Consumption as } \% \text{ of gross generation as per clause 40.4, as the case may be.} \]

46.2 Adjustment of rate of energy charge (REC) on account of variation in price or heat value of fuels

(a) Initially, Gross Calorific Value of coal or gas or liquid fuel shall be taken as per actuals of the preceding three months. Any variation shall be adjusted on month to month basis on the basis of average Gross Calorific Value of coal/lignite or gas or liquid fuel in stock, received and burnt and weighted average landed cost incurred by the generating company for procurement of coal/lignite, oil, or gas or liquid fuel, as the case may be, for a power station. In its bills, the generating company shall indicate rate of energy charges at base price of primary and secondary fuel specified by the Commission and the fuel price adjustment made to it separately. No separate petition need to be filed with the Commission for fuel price adjustment. In case of any dispute, an appropriate petition, in accordance with Conduct of Business Regulations, shall be filed with the Commission. If for a valid reason the gas supply cannot be availed of by the generating station, and it has to pay the guaranteed minimum charges to the gas supplier, such payment shall be allowed as a pass – through.

(b) Landed Cost of fuel

The landed cost of fuel shall include price of fuel corresponding to the grade/quality/calorific value of fuel inclusive of royalty, taxes and duties as applicable, transportation cost by rail/road/gas pipe line or any other means, and, for the purpose of computation of energy charges, shall be arrived at after considering normative transit and handling losses as percentage of the quantity of fuel dispatched by the fuel supply company during the month as given below:

(I) Coal supply

(i) Pit head generating stations : 0.3%

(ii) Non-Pithead generating stations : 0.8%

(II) Liquid Fuel or any other fuel : 0%

47. Efficiency Incentive

An Efficiency Incentive shall be payable at a flat rate of 25.0 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to target Plant Load Factor.

48. Scheduling

The procedures for availability declarations and scheduling shall be as specified in the Assam Electricity Grid Code approved by the Commission. The generator shall intimate
the declared capacity (MW) for the next day either as one figure for the whole day or
different figures for different periods of the day along with maximum available capacity
(MW) and total energy (Mwh) ex-bus to the State Load Dispatch Centre

49. Unscheduled Interchange (UI) charges

49.1 U/I charges for intra-state transactions will arise after intra-state ABT is
notified by the Commission and becomes effective.

49.2 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.

49.3 Any generation up to 105% of the declared capacity in any time block of 15
minutes and averaging up to 101% of the average declared capacity over a day
shall not be construed as gaming, and the generator shall be entitled to UI
charges for such excess generation above the scheduled generation (SG).

49.4 For any generation beyond the prescribed limits, the State Load Despatch
Centre shall carry out an investigation to ascertain if there is any gaming, and
if gaming is found by the State Load Despatch Centre, the corresponding UI
charges due to the generating station on account of such extra generation shall
be reduced to zero and the amount shall be adjusted in UI account of
beneficiaries in the ratio of their capacity share in the generating station.

50. Demonstration of declared capability

50.1 The generating company may be required to demonstrate the declared
capability of its generating station as and when asked by the State Load
Despatch Centre. In the event of the generating company failing to
demonstrate the declared capability, the capacity charges due to the generator
shall be reduced as a measure of penalty

50.2 The quantum of penalty for the first intentional wrong declaration for any
duration/block in a day shall be the charges corresponding to two days fixed
charges. For the second intentional wrong declaration the penalty shall be
equivalent to fixed charges for four days and for subsequent intentional wrong
declarations in the year, the penalty shall be multiplied in geometrical
progression.

50.3 The operating logbooks of the generating station shall be available for review
by the SLDC, as the case may be. These books shall keep records of machine
operation and maintenance.

51. Metering and Accounting

51.1 Metering arrangements, including installation, testing and operation and
maintenance of meters and collection, transportation and processing of data
required for accounting of energy exchanges and average frequency on 15 minutes time block basis shall be organised by the State Transmission Utility/ State Load Despatch Centres. All concerned entities (in whose premises the special energy meters are installed), shall fully cooperate with the State Transmission Utility/ State Load Despatch Centre and extend the necessary assistance by taking weekly meter readings and transmitting them to the State Load Despatch Centre. The State Load Despatch Centre shall issue the Accounts for energy on monthly basis as well as UI charges on weekly basis. UI accounting procedures shall be governed by the orders of the Commission.

51.2 The cost of additional investment required for metering and metering equipment for the purpose of implementing intra state ABT shall be allowed to be passed through.

52. Billing and payment of capacity charges

52.1 Billing and payment of capacity charges shall be done on a monthly basis in the following manner:

(a) Each beneficiary shall pay the capacity charges in proportion to his percentage share in Installed Capacity of the generating station.

(b) A beneficiary may surrender his share in the installed capacity in favour of another beneficiary within the State. In such a circumstance, the capacity charges payable shall be revised in accordance with capacity surrendered and additional capacity acquired. Any such reallocation shall be notified by the SLDC in advance, at least 3 days prior to such reallocation taking effect.

(c) If any capacity remains un-requisitioned during any period, the generating company shall be free to sell electricity to any person including a person outside the State.

(d) The capacity charges shall be paid by the persons covered under (a) above including those outside the State to the generating company every month in accordance with the following formula:

(i) Total Capacity charges payable to the thermal power generating company for the:

1\text{st} \text{ month} = \frac{(1 \times \text{ACC}_1)}{12} \\
2\text{nd} \text{ month} = \frac{(2 \times \text{ACC}_2 - \text{ACC}_1)}{12} \\
3\text{rd} \text{ month} = \frac{(3 \times \text{ACC}_3 - 2 \times \text{ACC}_2)}{12} \\
4\text{th} \text{ month} = \frac{(4 \times \text{ACC}_4 - 3 \times \text{ACC}_3)}{12} \\
5\text{th} \text{ month} = \frac{(5 \times \text{ACC}_5 - 4 \times \text{ACC}_4)}{12} \\
6\text{th} \text{ month} = \frac{(6 \times \text{ACC}_6 - 5 \times \text{ACC}_5)}{12} \\
7\text{th} \text{ month} = \frac{(7 \times \text{ACC}_7 - 6 \times \text{ACC}_6)}{12} \\
8\text{th} \text{ month} = \frac{(8 \times \text{ACC}_8 - 7 \times \text{ACC}_7)}{12} \\
9\text{th} \text{ month} = \frac{(9 \times \text{ACC}_9 - 8 \times \text{ACC}_8)}{12}
10\text{th} \text{ month} = \frac{(10 \times ACC10 - 9 \times ACC9)}{12} \\
11\text{th} \text{ month} = \frac{(11 \times ACC11 - 10 \times ACC10)}{12} \\
12\text{th} \text{ month} = \frac{(12 \times ACC12 - 11 \times ACC11)}{12} \\

(ii) Each person with a firm share in capacity of the generating station shall pay for the:

1\text{st} \text{ month} = \frac{[ ACC1 \times WB1 ]}{1200} \\
2\text{nd} \text{ month} = \frac{[2 \times ACC2 \times WB2 - 1 \times ACC1 \times WB1]}{1200} \\
3\text{rd} \text{ month} = \frac{[3 \times ACC3 \times WB3 - 2 \times ACC2 \times WB2]}{1200} \\
4\text{th} \text{ month} = \frac{[4 \times ACC4 \times WB4 - 3 \times ACC3 \times WB3]}{1200} \\
5\text{th} \text{ month} = \frac{[5 \times ACC5 \times WB5 - 4 \times ACC4 \times WB4]}{1200} \\
6\text{th} \text{ month} = \frac{[6 \times ACC5 \times WB6 - 5 \times ACC5 \times WB5]}{1200} \\
7\text{th} \text{ month} = \frac{[7 \times ACC7 \times WB7 - 6 \times ACC6 \times WB6]}{1200} \\
8\text{th} \text{ month} = \frac{[8 \times ACC8 \times WB8 - 7 \times ACC7 \times WB7]}{1200} \\
9\text{th} \text{ month} = \frac{[9 \times ACC9 \times WB9 - 8 \times ACC8 \times WB8]}{1200} \\
10\text{th} \text{ month} = \frac{[10 \times ACC10 \times WB10 - 9 \times ACC9 \times WB9]}{1200} \\
11\text{th} \text{ month} = \frac{(11 \times ACC11 \times WB11 - 10 \times ACC10 \times WB10)}{1200} \\
12\text{th} \text{ month} = \frac{(12 \times ACC12 \times WB12 - 11 \times ACC11 \times WB11)}{1200} \\

Where, \\
ACC1, ACC2, ACC3, ACC4, ACC5, ACC6, ACC7, ACC8, ACC9, ACC10, ACC11 and ACC12 are the amount of Annual Capacity Charge corresponding to ‘Target Availability’ for the cumulative period up to the end of 1\text{st}, 2\text{nd}, 3\text{rd}, 4\text{th}, 5\text{th}, 6\text{th}, 7\text{th}, 8\text{th}, 9\text{th}, 10\text{th}, 11\text{th} and 12\text{th} months respectively.

And, WB1, WB2, WB3, WB4, WB5, WB6, WB7, WB8, WB9, WB10, WB11 and WB12 are the weighted average of percentage of shared capacity during the cumulative period up to 1\text{st}, 2\text{nd} 3\text{rd}, 4\text{th}, 5\text{th}, 6\text{th}, 7\text{th}, 8\text{th}, 9\text{th}, 10\text{th} 11\text{th} and 12\text{th} month respectively.
Part – V

Hydro Power Generating Stations

53. Tariff determination principles

53.1 Tariff in respect of generating stations under these Regulations shall be determined as a whole for each generating station based on the PPA submitted to the Commission for approval.

53.2 A generating company shall submit annual information station wise in the format circulated by the Commission for determining Annual Revenue Requirement (ARR) by 1st December every year, and at the start of the control period in case of Multi Year Tariff and thereafter on 1st December every year, unless extension is granted upon application.

53.3 The Commission shall scrutinize the annual accounts, norms achieved and tariff worked out by the generating company. The tariff worked out by the generating company shall be subject to confirmation by the Commission.

53.4 Any amount recovered in excess or any amount under recovered during any year on the basis of audited accounts shall be refunded or adjusted in bills relating to the quarter following the publication of audited accounts.

54. Definitions

54.1 Unless the context otherwise requires for the purpose of this part

(a) “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 generator terminals of all the units of the generating station;

(b) “Capacity Index” means the average of the daily capacity indices over one year;

(c) “Daily Capacity Index” means the declared capacity expressed as a percentage of the maximum available capacity for the day and shall be mathematically expressed as hereunder:

\[
\text{Daily Capacity Index} = \frac{\text{Declared capacity (MW)}}{\text{Maximum Available Capacity (MW)}} \times 100
\]

(d) “Declared Capacity” (DC)

For run-of-river power station with pondage and storage-type power stations, declared capacity means the ex-bus capacity in MW expected to be available from the generating station over the peaking hours of next day, as declared by the generator, taking into account the availability of water, optimum use of water and availability of
machines and for this purpose, the peaking hours shall not be less than 3 hours within a 24 hours period, and

In case of purely run-of–river power stations, declared capacity means the ex-bus capacity in MW expected to be available from the generating station during the next day, as declared by the generating station, taking into account the availability of water, optimum use of water and availability of machines;

(e) “Deemed Generation” is defined in accordance with the provisions of regulation 73;

(f) “Design Energy” shall mean the quantum of energy which could be generated in a 90% dependable year with 95% installed capacity of the generating station.

(g) “Maximum Available Capacity” shall mean the following:

(i) Run-of-river power station with pondage and storage type power stations:

The maximum capacity in MW, the generating station can generate with all units running, under the prevailing conditions of water levels and flows, over the peaking hours of next day,

Provided that the peaking hours for this purpose shall not be less than 3 hours within a 24 hours period.

(ii) Purely run-of-river power stations:

The maximum capacity in MW, the generating station can generate with all units running, under the prevailing conditions of water levels and flows over the next day.

(h) “Primary Energy” means the quantum of energy generated up to the design energy on per year basis at the generating station;

(i) “Run-of-river power station” means a hydro electric power generating station which has no upstream pondage;

(j) “Run–of-river power station” with pondage means a hydro electric power generating station with sufficient pondage for meeting the diurnal variation of power demand;

(k) “Storage Type power station” means a hydro electric power generating station associated with large storage capacity to enable variation of generation of power according to demand;

(l) “Saleable Primary Energy” means the quantum of primary energy available for sale (ex-bus)

(m) “Secondary Energy” means the quantum of energy generated in excess of the design energy on per year basis at the generating station;

(n) “Saleable Secondary Energy” means the quantum of secondary energy available for sale (ex-bus)

(o) “Scheduled Energy” means the quantum of energy to be
generated at the generating station over the 24-hours period, as scheduled by the State Load Dispatch Centre;

(p) “Infirm power”, “installed capacity or IC”, “operation and maintenance expenses” or O & M expenses shall have the same meaning as defined elsewhere in these Regulations.

55. **Debt-equity ratio**

For the purpose of determination of tariff, debt-equity ratio in the case of a new generating station commencing commercial operation after notification of these Regulations 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 shall be treated as loan. Where actual equity employed is less than 30%, the actual equity employed shall be considered.

56. **Capital Cost**

56.1 The actual capital expenditure on the date of Commercial Operation in the case of new investment shall be subject to prudence check by the commission.

56.2 Scrutiny of cost estimates by the Commission shall be limited to the reasonableness of the capital cost, financial plan, and interest during construction period, use of efficient technology, and such other matters for determination of tariff.

56.3 In case of any abnormal delay in execution of the project causing cost and time overruns attributable due to the failure of the utility, the Commission may not approve the full capitalisation of interest and overhead expenses.

56.4 Where power purchase agreement provides for a ceiling of capital cost, the capital cost to be considered shall not exceed such ceiling.

56.5 The capital cost may include capitalised initial spares up to 1.5% of original Project cost.

57. **Return on Equity**

57.1 Return on equity shall be computed on the equity base determined in accordance with regulation 56 and shall not exceed 14%.

Provided that equity invested in a foreign currency may be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

57.2 The premium received while issuing share capital shall be treated as a part of equity provided the same is utilised for meeting capital expenditure.

57.3 Internal resources created out of free reserves and utilised for meeting the capital expenditure shall also be treated as a part of equity.

57.4 Foreign equity will also attract the same rate of return.
57.5 Return on Equity shall be allowed by the Commission on achievement of a satisfactory level of performance by the generating company

58. **Interest and finance charges on loan capital**

58.1 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 57.

58.2 The interest and finance charges attributable to Capital Work in Progress shall be excluded.

58.3 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.

58.4 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.

58.5 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.

59. **Petition for determination of tariff**

Unless otherwise specified below, the provisions of regulation as laid down in Thermal Generation shall apply *mutatis mutandis*, to a petition for determination of tariff of hydro generating stations.

60. **Components of tariff**

Tariff for sale of electricity from a hydro power generating station shall comprise of two parts, namely, the computation and recovery of annual capacity charges and energy charges to be worked out in the manner provided hereinafter.

61. **Norms of operation**

The norms of operation shall be as under:

61.1 Normative capacity index for recovery of full capacity charges

During first year of commercial operation of the generating station

(a) Purely Run-of-river power stations - 85%

(b) Storage type and Run-of-river power stations with pondage - 80%

After first year of commercial operation of the generating station
(a) Purely Run-of-river power stations - 90%
(b) Storage type and Run-of-river power stations with pondage - 85%

61.2 Auxiliary energy consumption:
(a) Surface hydro electric power generating stations with rotating exciters mounted on the generator shaft - 0.2% of energy generated
(b) Surface hydro electric power generating stations with static excitation system - 0.5% of energy generated
(c) Underground hydro electric power generating stations with rotating exciters mounted on the generator shaft - 0.4% of energy generated
(d) Underground hydro electric power generating stations with static excitation system - 0.7% of energy generated

61.3 Transformation losses
From generation voltage to transmission voltage - 0.5% of energy generated. The Commission shall specify operational norms for each year of the control period after scrutinizing the information submitted by the generating company at the beginning of the control period.

62. Capital Cost and sale of infirm power

62.1 Capital cost of hydro power generating stations, including the complete hydro power generating facility covering all components such as dam, intake, water conductor system, power generating station and generating units of the scheme as apportioned to power generation, shall be determined in accordance with Part II of these Regulations.

62.2 Any revenue earned by the generating company from sale of infirm power, shall be taken as reduction in capital cost of the generating station and shall not be treated as revenue. The rate for infirm power shall be same as the primary energy rate of the generating station.

63. Operation and maintenance expenses

63.1 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.

63.2 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 application.
63.3 The Commission shall verify the budget estimates and projections and allow
the expenditure depending on its views about the reasonableness of the
projections.

63.4 The generating company shall provide adequate explanation of the basis of
allocation of Operation and Maintenance expenses among the generating
stations.

64. Working capital

Working Capital shall cover:

(a) Operation and Maintenance expenses for one month;

(b) Budget for maintenance spares at the rate of 1% of the historical cost
    escalated at the rate of 6% per annum from the date of commercial
    operation and

(c) Receivables equivalent to two months of fixed charges for sale of
electricity, calculated on normative capacity index.

Rate of interest on working capital to be computed as provided subsequently in these
Regulations shall be on normative basis and shall be equal to the short-term Prime
Lending Rate of State Bank of India as on 1st April of the financial year for which
the generating station or the licensee files petition for annual Revenue Requirement
and tariff proposal. The interest on working capital shall be calculated on normative
basis notwithstanding that the licensee or the generating company has not taken
working capital loan from any outside agency.

65. 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.

66. 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. Net U I
loss shall not be netted off from other income.

67. Computation of annual capacity charges

The two-part tariff for sale of electricity from a hydro power generating station shall
comprise of recovery of annual capacity charge and primary energy charges:

(a) Capacity Charge: The capacity charge shall be computed in accordance
with the following formula:

\[ \text{Capacity Charge} = (\text{Annual Fixed Charge} - \text{Primary Energy Charge}) \]

Note: Recovery through Primary energy charge shall not be more than
Annual Fixed Charge.

(b) Annual Fixed Charges: Annual Fixed Charges shall consist of:

(i) Interest on loan capital
(ii) Depreciation including Advance Against Depreciation as may be allowed
(iii) Return on Equity as may be allowed
(iv) Operation and Maintenance expenses
(v) Interest on working capital

68. Recovery of capacity charges

68.1 Full capacity charges shall be recoverable at normative capacity index specified in regulation 61 above. Recovery of capacity (fixed) charges below the level of target availability shall be on pro rata basis. At zero availability, no capacity charges shall be payable.

68.2 The payment of capacity charges shall be on monthly basis in proportion to the allocated/contracted capacity as specified in regulation 78.

69. Primary and secondary energy charges

69.1 Rate of primary energy for all hydro electric power generating stations shall be equal to the lowest variable charges of the central sector thermal power generating stations in the north east region. The primary energy charge shall be computed based on the primary energy rate and saleable energy of the station.

Provided that in case the primary energy charge recoverable by applying the above primary energy rate exceeds the Annual Fixed Charge of a generating station, the primary energy rate for such generating station shall be calculated by the following formula:

\[
\text{Primary Energy Rate} = \frac{\text{Annual Fixed Charge}}{\text{Saleable Primary Energy}}
\]

Primary Energy Charge = Saleable Primary Energy x Primary Energy Rate

Secondary Energy Rate shall be equal to Primary Energy Rate.

Secondary Energy Charge = Saleable Secondary Energy x Secondary Energy Rate

70. Efficiency Incentive

70.1 An Efficiency Incentive shall be payable in case of all the generating stations, including new generating stations from the first year of operation, when the capacity index (CI) exceeds 90% for purely run-of-river power generating stations and 85% for run-of-river power station with pondage or storage type power generating stations and incentive shall accrue up to a maximum capacity index of 100%.

70.2 The Efficiency Incentive shall be payable to the generating company in accordance with the following formula:
Incentive = 0.65 x Annual Fixed Charge x (CI_A – CI_N) / 100
(If incentive is negative, it shall be set to zero.)

Where, CI_A is the Capacity Index achieved and CI_N is the normative capacity index whose values are 90% for purely run of the river hydro stations and 85% for pondage/storage type hydro generating stations.

70.3 The incentives on account of capacity index and payment for secondary energy shall be payable on monthly basis, subject to cumulative adjustment in each month of the financial year, separately in respect of each item, and final adjustment shall be made at the end of the financial year.

70.4 The total incentive payment calculated on annual basis shall be payable pro-rata by the beneficiaries based on the allocated capacity.

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

In case of commissioning of a hydro electric power generating station or part thereof ahead of schedule, the generating station shall become eligible for incentive for an amount equal to pro rata reduction in interest during construction, achieved on commissioning ahead of the schedule. The incentive shall be recovered through tariff in twelve equal monthly instalments during the first year of operation of the generating station. In case of delay in commissioning, interest during construction for the period of delay shall not be allowed to be capitalised for determination of tariff, unless the delay is not attributable to the generating Company.

72. Deemed generation

72.1 In case of reduced generation due to the reasons beyond the control of the generating company or on account of non-availability of transmission licensee's transmission lines or on receipt of backing down instructions from the concerned State Load Despatch Centre resulting in spillage of water, the energy charges on account of such spillage shall be payable to the generating company. Apportionment of energy charges for such spillage among the beneficiaries shall be in proportion of their shares in allocated capacity of the generating station.

72.2 Energy charges on the above account shall not be admissible if the energy generated during the year is equal to or more than the design energy.

73. Scheduling

The procedures for availability declarations and scheduling shall be as specified in the Assam Electricity Grid Code approved by the Commission, as in regulation 48.

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

The provisions of regulation 49 for UI charges shall apply to all hydro generating stations owned by the generating company successor to the ASEB and any new hydro generating station commencing commercial operations after the notification date of these Regulations unless otherwise granted an exemption by the Commission.
75. **Demonstration of Declared Capability**

The provisions of regulation 50 shall be applicable for hydro power stations which shall be subject to scheduling as per the Assam Electricity Grid Code.

76. **Metering and Accounting**

The provisions of regulation 51 shall apply for hydro power stations also.

77. **Billing and Payment of Capacity Charges**

Billing and payment of capacity charges shall be done on a monthly basis,

(a) Each beneficiary shall pay the capacity charges in proportion to his percentage share in Installed Capacity of the generating station.

(b) A beneficiary may surrender his share in the installed capacity in favour of another beneficiary within the State. In such a circumstance, the capacity charges payable shall be revised in accordance with capacity surrendered and additional capacity acquired. Any such reallocation shall be notified by the SLDC in advance, at least 3 days prior to such reallocation taking effect.

(c) If any capacity remains un-requisitioned during any period, the generating company shall be free to sell electricity to any person including a person outside the State.

The capacity charges shall be paid by the persons covered under (a) above including those outside the State to the generating company every month in accordance with the following formulae and in proportion to their respective shares in the concerned generating station:

\[
\begin{align*}
\text{ACC}_1 &= \text{AFC} - (\text{SPE}_1 + \text{DE}_2) \times \text{Primary Energy Rate} \\
\text{ACC}_2 &= \text{AFC} - (\text{SPE}_2 + \text{DE}_3) \times \text{Primary Energy Rate} \\
\text{ACC}_3 &= \text{AFC} - (\text{SPE}_3 + \text{DE}_4) \times \text{Primary Energy Rate} \\
\text{ACC}_4 &= \text{AFC} - (\text{SPE}_4 + \text{DE}_5) \times \text{Primary Energy Rate} \\
\text{ACC}_5 &= \text{AFC} - (\text{SPE}_5 + \text{DE}_6) \times \text{Primary Energy Rate} \\
\text{ACC}_6 &= \text{AFC} - (\text{SPE}_6 + \text{DE}_7) \times \text{Primary Energy Rate} \\
\text{ACC}_7 &= \text{AFC} - (\text{SPE}_7 + \text{DE}_8) \times \text{Primary Energy Rate} \\
\text{ACC}_8 &= \text{AFC} - (\text{SPE}_8 + \text{DE}_9) \times \text{Primary Energy Rate} \\
\text{ACC}_9 &= \text{AFC} - (\text{SPE}_9 + \text{DE}_{10}) \times \text{Primary Energy Rate} \\
\text{ACC}_{10} &= \text{AFC} - (\text{SPE}_{10} + \text{DE}_{11}) \times \text{Primary Energy Rate}
\end{align*}
\]
ACC_{11} = AFC - (SPE_{11} + DE_{12\text{th month}}) \times \text{Primary Energy Rate}

ACC_{12} = (AFC - SPE_{12}) \times \text{Primary Energy Rate}

Where,

AFC = \text{Annual Fixed Charges}

ACC_1, ACC_2, ACC_3, ACC_4, ACC_5, ACC_6, ACC_7, ACC_8, ACC_9, ACC_{10}, ACC_{11} and ACC_{12} are the amount of \text{Annual Capacity Charge} for the cumulative period up to the end of 1^{\text{st}}, 2^{\text{nd}}, 3^{\text{rd}}, 4^{\text{th}}, 5^{\text{th}}, 6^{\text{th}}, 7^{\text{th}}, 8^{\text{th}}, 9^{\text{th}}, 10^{\text{th}}, 11^{\text{th}} and 12^{\text{th}} months respectively.

SPE_1, SPE_2, SPE_3, \ldots \ldots \ldots \ldots SPE_{12} are the ex-bus scheduled primary energy values up to 1^{\text{st}}, 2^{\text{nd}}, 3^{\text{rd}} \ldots \ldots 12^{\text{th}} months of the year respectively.

CC_1, CC_2, CC_3, \ldots \ldots CC_{12} is the monthly capacity charge up to 1^{\text{st}}, 2^{\text{nd}}, 3^{\text{rd}} \ldots \ldots 12^{\text{th}} months of the year respectively determined as under:

DE = \text{Annual Design Energy}

DE_1, DE_2, DE_3, \ldots \ldots DE_{12} are the ex-bus design energy values up to 1^{\text{st}}, 2^{\text{nd}}, 3^{\text{rd}} \ldots \ldots 12^{\text{th}} months of the year respectively.

CC_1 = ACC_1 \times DE_1

\quad \text{DE}

CC_2 = ACC_2 \times DE_2

\quad \text{DE}

CC_3 = ACC_3 \times DE_3

\quad \text{DE}

CC_4 = ACC_4 \times DE_4

\quad \text{DE}

CC_5 = ACC_5 \times DE_5

\quad \text{DE}

CC_6 = ACC_6 \times DE_6

\quad \text{DE}

CC_7 = ACC_7 \times DE_7

\quad \text{DE}

CC_8 = ACC_8 \times DE_8

\quad \text{DE}

CC_9 = ACC_9 \times DE_9

\quad \text{DE}

CC_{10} = ACC_{10} \times DE_{10}

\quad \text{DE}
CC11 = ACC11 x DE11
DE

CC12 = ACC12 x DE12
DE

Total capacity charges payable to the generator for the:

1\textsuperscript{st} month = (CC1)
2\textsuperscript{nd} month = (CC2 - CC1)
3\textsuperscript{rd} month = (CC3 - CC2)
4\textsuperscript{th} month = (CC4 - CC3)
5\textsuperscript{th} month = (CC5 - CC4)
6\textsuperscript{th} month = (CC6 - CC5)
7\textsuperscript{th} month = (CC7 - CC6)
8\textsuperscript{th} month = (CC8 - CC7)
9\textsuperscript{th} month = (CC9 - CC8)
10\textsuperscript{th} month = (CC10 - CC9)
11\textsuperscript{th} month = (CC11 - CC10)
12\textsuperscript{th} month = (CC12 - CC11)

and, each beneficiary having firm allocation in capacity of the generating station shall pay for the:

1\textsuperscript{st} month = [CC1 x WB1]/100
2\textsuperscript{nd} month = [CC2 x WB2 - CC1 x WB1]/100
3\textsuperscript{rd} month = [CC3 x WB3 - CC2 x WB2]/100
4\textsuperscript{th} month = [CC4 x WB4 - CC3 x WB3]/100
5\textsuperscript{th} month = [CC5 x WB5 - CC4 x WB4]/100
6\textsuperscript{th} month = [CC6 x WB6 - CC5 x WB5]/100
7\textsuperscript{th} month = [CC7 x WB7 - CC6 x WB6]/100
8\textsuperscript{th} month = [CC8 x WB8 - CC7 x WB7]/100
9\textsuperscript{th} month = [CC9 x WB9 - CC8 x WB8]/100
10\textsuperscript{th} month = [CC10 x WB10 - CC9 x WB9]/100
11\textsuperscript{th} month = [CC11 x WB11 - CC10 x WB10]/100
12\textsuperscript{th} month = [CC12 x WB12 - CC11 x WB11]/100

Where,

And, WB1, WB2, WB3, WB4, WB5, WB6, WB7, WB8, WB9, WB10, WB11 and WB12 are the weighted average of percentage allocated capacity share of the beneficiary during the cumulative period up to 1\textsuperscript{st}, 2\textsuperscript{nd}, 3\textsuperscript{rd}, 4\textsuperscript{th}, 5\textsuperscript{th}, 6\textsuperscript{th}, 7\textsuperscript{th}, 8\textsuperscript{th}, 9\textsuperscript{th}, 10\textsuperscript{th}, 11\textsuperscript{th} and 12\textsuperscript{th} month respectively.
Part – VI
Transmission Tariff and State Load Dispatch Centre Charges

78. Tariff determination principles

78.1 Transmission licensee shall submit annual information in the format circulated by the Commission for determining Annual Revenue Requirement (ARR) by 1st December every year, and at the start of the control period in case of Multi Year Tariff and thereafter on 1st December every year, unless extension is granted upon application.

78.2 The State Load Dispatch Centre shall submit annual information in the format circulated by the Commission for determining Annual Revenue Requirement (ARR) by 1st December every year and at the start of the control period in case of Multi Year Tariff and thereafter on 1st December every year.

78.3 The Commission shall scrutinize the annual accounts, norms achieved and the information submitted under Annual Revenue Requirement (ARR).

78.4 The cost of the transmission licensee as determined by the Commission as annual revenue requirement shall be recovered in the form of Transmission and connectivity charges.

78.5 The cost of the State Load Dispatch Centre as determined by the Commission as annual revenue requirement shall be recovered in the form of SLDC charges.

78.6 The Commission may ask for additional information and documents after the scrutiny of ARR submitted to the Commission.

78.7 Unless otherwise noted, all Regulations in this Part apply to both transmission licensees and the SLDC.

79. Definitions

79.1 Unless the context otherwise requires,

(a) “Availability” in relation to a transmission system for a given period shall mean the time in hours during that period in which the transmission system is capable of transmitting electricity at its rated voltage to the delivery point and shall be expressed in percentage of total hours in the given period.

(b) “Connectivity” means arrangement to facilitate interconnection of a licensee point, open access customer point and generating station point with arrangement to control the circuit with suitable switchgear including protection, communication and metering arrangement.
(c) “Connectivity Charge’ means charge to be recovered for cost of arranging connectivity from concerned agency for availing the connection.

(d) “Contracted Power” shall mean the power in MW which the transmission licensee has agreed to carry for the customer as per transmission service agreements or otherwise.

(e) “Rated Voltage” means the 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 customers.

(f) “Parallel Operation’ means simultaneous operation of two or more generator in a common electrical network

(g) “Parallel Operation Charge’ means charge to be recovered for cost of arranging the parallel operation from the concerned agency for availing the parallel operation.

(h) “Transmission” means conveyance of electricity by means of transmission lines.

(i) “Transmission Services Agreement” means an agreement entered into between a transmission licensee and the open access customer to avail access to the licensee’s transmission system for the transmission of electricity.

(j) “Transmission System” means the system consisting of extra high voltage electric lines being operated at EHV (excluding generator interconnection facilities) owned and/or operated by the Transmission Licensee/Board for purposes of transmission of electricity from one power station to a sub-station or to another power station or between sub-stations or to or from any external interconnection equipment up to the interconnection with the distribution system, any plant and apparatus and meters owned or used by the Transmission Licensee or Board in connection with the transmission of electricity, but shall not include any part of the Licensee distribution system.

80. Debt-equity ratio

80.1 For the purpose of determination of tariff, debt-equity ratio in the case of a new generating station commencing commercial operations after the notification of these Regulations 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 shall be treated as loan. Where actual equity employed is less than 30%, the actual equity employed shall be considered. In the case of Assam Electricity Grid Corporation Ltd. the debt equity ratio as per the Balance Sheet on the date of the Transfer notification will be the debt equity ratio for the first year of operation.

80.2 For the purpose of the determination of SLDC charges, no debt equity ratio will be applied since the SLDC will not be permitted to earn a return on equity.
81. Capital Cost and Capital Structure

81.1 The actual expenditure in the case of new investment shall be subject to prudence check by the Commission with reference to the DPR and such other documents.

81.2 Scrutiny of the cost estimates by the Commission shall be limited to the reasonableness of the capital cost, financial plan, and interest during construction period, use of efficient technology and such other matters for determination of tariff.

81.3 In case of any abnormal delay in execution of the project causing cost and time overruns attributable to the failure of the Licensee, the Commission may not approve the full capitalisation of interest and overhead expenses but may limit it to a reasonable amount.

81.4 Where the transmission or wheeling agreement provides for a ceiling on capital cost, the capital cost shall not exceed such ceiling.

81.5 The capital cost may include capitalised initial spares up to 1.5% of the original capital cost.

82. Return on Equity

82.1 Return on equity shall be computed on the equity base determined in accordance with regulation 81 and shall not exceed 14%.

Provided that equity invested in a foreign currency may be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

82.2 No return on equity will be computed for the State Load Dispatch Centre.

82.3 The equity amount appearing in the Balance Sheet as per Transfer scheme notification will be considered for the purpose of considering the return for the first year of operation.

82.4 The premium received while issuing share capital shall be treated as a part of equity provided the same is utilised for meeting capital expenditure.

82.5 Internal resources created out of free reserves and utilised for meeting the capital expenditure shall also be treated as a part of equity.

82.6 Foreign equity will also attract the same rate of return.

82.7 Return on Equity shall be allowed by the Commission on achievement of a satisfactory level of performance by the generating company or the licensees as per the Transmission or Distribution Licensee’s Standards of Performance Regulations, 2004 notified by the Commission.

83. Interest and finance charges on loan capital
83.1 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 prevailing lending rate of bank and financial institution specified therein.

Provided that the outstanding loan capital shall be adjusted to be consistent with the loan amount determined in accordance with regulation 80 and 82.

83.2 The interest and finance charges attributable to Capital Work in Progress shall be excluded.

83.3 The transmission licensee 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.

83.4 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.

83.5 In case any moratorium period is availed of by the transmission licensee, 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.

84. **Operation and Maintenance Expenses**

84.1 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.

84.2 The Licensee shall prepare O&M Expenses Budget every year 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.

84.3 The norms for O&M expenses shall be fixed on the basis of circuit kilometres of transmission lines, transformation capacity and number of bays in substations. Till complete data regarding length of transmission lines, transformation capacity and substation bays is available, the Operations and Maintenance budget will be set based on the Commission’s assessment of the estimates submitted by the licensee.

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

85. **Business Plan and Capital Investment**

The Commission will take into account the Business Plan and Capital Investment
plan submitted by the transmission licensee in accordance with the Transmission Licence Regulations in determining the annual revenue requirement.

86. Norms of operation – Transmission Licensee

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

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

The cost of auxiliary consumption in the sub-station for the purpose of air-conditioning, lighting, maintenance related consumption etc. shall be 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 Target Availability of the Transmission System shall be 98% and shall be calculated substation wise and integrated for all substations effecting supply to a customer in the manner as may be laid down by the Commission in the Transmission Licensee’s Standards of Performance Regulations 2004. Recovery of fixed charges below the level of target availability shall be on a pro rata basis.

87. Working Capital – Transmission Licensee

87.1 Working capital shall cover,

(a) Operation and maintenance expenses for one month;

(b) Budget for maintenance spares at the rate of 1% of the historical cost escalated at the rate of 6% per annum from the date of commercial operation and

(c) Receivables equivalent to two months transmission charges calculated on target availability level.

Rate of interest on working capital to be computed as provided subsequently in these Regulations shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1st April of the financial year for which the licensee files petition for annual Revenue Requirement and tariff proposal. The interest on working capital shall be calculated on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency.

88. Annual Revenue Requirement – Transmission Licensee

88.1 The annual expenses of Licensee shall comprise of the following :-

(a) Operation and Maintenance Expenses

(b) Depreciation as may be allowed

(c) Interest on Loan

(d) Interest on Working Capital

(e) Annual Licence Fee

(f) Return on Equity as may be allowed
The annual revenue requirement of a transmission licensee shall consist of the annual expenses of the licensee adjusted for income received from:

(a) Transmission charges recovered from beneficiaries of special treatment under the State Government’s policy directives in respect of generation of electricity from non-conventional energy sources or captive power plants.

(b) Revenue apportioned from income of other business of the Licensee in accordance with regulation 26.

(c) Revenue earned from interstate energy transactions i.e., de-pooling of energy.

The annual transmission charges payable by an open access customer or distribution licensee for use of the transmission system shall be determined based on the ARR for the transmission licensee.

### 89. Payment of transmission charges by customers

89.1 A transmission licensee shall be allowed to recover his annual revenue requirement of 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.

89.2 Annual transmission charges shall be recoverable in full at the target availability stipulated in regulation 87. Payment of transmission charges below the target availability shall be on a pro rata basis.

89.3 Transmission charges shall be calculated on a monthly basis.

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

### 90. Working capital – SLDC

Working capital shall cover:

(a) Operational and maintenance expenses for one month; and

(b) Receivables equivalent to two months of SLDC charges.

### 91. Annual Revenue Requirement – SLDC

91.1 The annual expenses of the SLDC shall comprise of the following :-
(a) Operation and Maintenance Expenses  
(b) Depreciation as may be allowed  
(c) Interest on Loan  
(d) Interest on Working Capital  

91.2 The annual revenue requirement of the SLDC shall consist of the annual expenses of the SLDC licensee adjusted for income received from:

(a) SLDC charges recovered from beneficiaries of special treatment under the State Government’s policy directives in respect of generation of electricity from non-conventional energy sources or captive power plants.  
(b) Revenue earned from SLDC charges recovered from short term open access customers where the transmission licensee shall be entitled retain 25% these revenues and the balance shall be used to reduce the ARR.

92. Payment of SLDC charges by customers

92.1 The SDLC shall be allowed to recover its annual revenue requirement of SLDC charges as one or combination of fixed or variable charges.  

92.2 SLDC charges may be recovered from distribution licensees and open access customers as determined by the Commission.

93. Transmission losses and treatment thereof

93.1 The Commission shall fix the norm for transmission losses the loss reduction plan provided by the licensee. The Commission shall not approve the loss above the norm fixed by it.  

93.2 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.

93.3 Transmission losses at different voltage levels shall be calculated as the difference between the sum of all energy initially (X) injected into the Transmission system from different interface points and the sum of energy transmitted to all Distribution Companies and consumers (Y) connected with the Transmission system of the State. Percentage Transmission losses at different voltage levels shall be expressed in terms of Transmission Loss up to that voltage level as a percentage of the energy initially injected into the Transmission system.

\[
\text{Percentage Transmission loss} = \frac{(X - Y) \times 100}{X}
\]

*(Transmission losses occurring outside the Assam system shall not be considered for the determination of Transmission Losses)*

93.4 Only Transmission Losses fixed as provided for in regulation 94.1 above shall be debited to energy account of customers of the transmission system.
94. **Assessment of System Availability**

For each year of the control period in case of Multi Year tariff, the system availability shall be ascertained on the basis of parameters defined in the Transmission Performance Standard Regulations approved by the Commission.

95. **Incentive**

95.1 A transmission licensee shall be entitled to incentive on achieving weighted annual availability beyond the target availability as per regulation 86, in accordance with the following formula:

\[
\text{Incentive} = \text{Annual Transmission Charges} \times \frac{\text{Annual availability achieved} - \text{Target Availability}}{\text{Target Availability}};
\]

Where,

Annual transmission Charges shall be the charges worked out under Regulations 89 and 90.

Provided that no incentive shall be payable for availability above 99.75%.

95.2 The amount of incentive payment due to the transmission licensee worked out as above shall be payable by the distribution licensees and open access customers in the ratio of their average allotted/contracted transmission capacity for the year.

96. **Billing**

96.1 Monthly bills will be raised by the transmission licensee upon distribution licensees and open access customers for the transmission charges and SLDC charges approved by the Commission.

96.2 Until otherwise notified by the GOA, transmission and SLDC charges for the successor distribution licensees of the ASEB shall be billed to the ASEB Trader who will pass these charges onto the distribution licensees in the bulk supply tariffs determined in accordance with regulation 117.

97. **Rebate and delayed payment surcharge**

97.1 For payment of bills of transmission charges and SLDC charges through letter of credit on presentation, a rebate of 2% shall be allowed. Where payments are made subsequently within a period of one month of presentation of bills by the Transmission licensee, a rebate of 1% shall be allowed.

97.2 In case the payment of bills of transmission charges and SLDC charges by the distribution licensees and open access customers is delayed beyond a period of 1 month from the date of billing a late payment surcharge at the rate of 1.25% per month shall be levied by the transmission licensee.
Part – VII

Bulk Supply Tariffs for Assam State Electricity Board

98. Principles for determination of bulk supply tariffs

98.1 The Commission shall regulate the bulk supply tariffs for the sale of power from the ASEB Trader to each successor distribution licensee until such time as the GOA issues a notification that the power purchase agreements held by the ASEB are to be re-vested to each distribution licensee.

98.2 The bulk supply tariff shall consist of following separate components

   a. fixed and variable charge for electricity purchased by the distribution licensees from the ASEB Trader;
   b. inter-state transmission charge;
   c. intra-state transmission charge;
   d. Regional Load Dispatch Centre (RLDC) charge; and
   e. SLDC charge.

98.3 The ASEB Trader shall submit annual information in the format circulated by the Commission for determining Annual Revenue Requirement (ARR) by 1st December every year, and at the start of the control period in case of MYT and thereafter by 1st December every year, unless an extension is granted upon petition.

98.4 The Commission shall scrutinize the annual accounts, norms achieved and the information submitted under Annual Revenue Requirement (ARR).

98.5 In fixation of the bulk supply tariff the Commission has to balance the interests of consumers and the Licensees.

98.6 The Commission may rationalise the bulk supply tariff structure so that it is beneficial to consumer and the licensee.

98.7 The Commission may ask for additional information and documents after the scrutiny of ARR submitted to the Commission.

99. Debt-equity ratio

99.1 The debt equity ratio of the ASEB Trader during the first year of its operation shall be determined as per the opening balance sheet notified under the transfer scheme subject to a maximum equity limit of 30%.

Provided that the equity only relates to the capital structure required to support the trading activities and not any residual activities of the ASEB.

99.2 Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance shall be treated as
loan. Where actual equity employed is less than 30%, the actual equity employed shall be considered.

100. **Return on Equity**

100.1 Return on equity shall be computed on the equity base determined in accordance with regulation 102 and shall not exceed 14%.

Provided that equity invested in a foreign currency may be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

100.2 The premium received while issuing share capital shall be treated as a part of equity provided the same is utilised for meeting capital expenditure.

100.3 Internal resources created out of free reserves and utilised for meeting the capital expenditure shall also be treated as a part of equity.

100.4 Foreign equity will also attract the same rate of return.

100.5 Return on Equity shall be allowed by the Commission on achievement of a satisfactory level of performance by the generating company or the licensees as per the Transmission or Distribution Licensee’s Standards of Performance Regulations, 2004 notified by the Commission.

101. **Capital Cost**

101.1 The actual capital expenditure till the date of commercial operation of new investment shall be subject to prudence check by the Commission.

101.2 Scrutiny of the cost estimates by the Commission shall be limited to the reasonableness of the capital cost, financial plan, interest during construction, use of efficient technology and such other matters for determination of tariff.

101.3 The capital costs include capitalised initial spares up to 1.5% of original cost of assets.

102. **Interest and finance charges on loan capital**

102.1 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 lending rate specified therein.

Provided that the outstanding loan capital shall be adjusted to be consistent with the loan amount determined in accordance with regulation 100 and 101.

102.2 The interest and finance charges attributable to Capital Work in Progress shall be excluded.
102.3 The ASEB Trader shall make every effort to swap loans as long as it results in net benefit to the distribution licensees. The costs associated with such swapping shall be borne by the beneficiaries.

102.4 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 transmission company in a ratio as may be specified by the Commission as envisaged in regulation 13.2.

102.5 In case any moratorium period is availed of by the ASEB Trader, 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.

103. **Operation and Maintenance Expenses**

103.1 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.

103.2 The ASEB Trader shall submit to the Commission a budget for O&M Expenses which under each head shows the actuals of last year, estimates for the current year and projections for the next year.

103.3 O&M expenses shall be determined for the tariff period based on the level approved by the Commission.

104. **Bad Debts**

The Commission shall allow a provision of 1% of total revenue of every financial year to be set aside and transferred to a reserve called Reserve for Bad and Doubtful Debts. The ASEB Trader can utilise this reserve when actual bad debts occur. The Commission will not allow any write off over and above the amount standing at the credit of Bad and Doubtful Debt Reserve subject to a Ceiling of 3% of last three years average revenue.

105. **Petition for determination of tariff**

The ASEB Trader shall submit a petition for determination of tariff in the manner and format for determination of tariff by 1st December every year, and at the start of the control period in case of Multi Year tariff and thereafter on 1st December every year in accordance with the Conduct of Business Regulations and of the terms and conditions of these Regulations.

106. **Capital investments**

106.1 The ASEB Trader shall not make any capital investment without the approval of the Commission. The ASEB Trader shall submit an annual capital investment plan in conjunction with the tariff petition.
106.2 The Commission shall consider and approve the ASEB Trader’s capital investment plan. The costs corresponding to the approved investment plan of the ASEB Trader for a given year shall be considered for its revenue requirement.

107. **Estimation of sales by Distribution Licensees**

107.1 The Distribution Licensee shall submit restricted demand (in MW) cause due to limitations in there own network or transmission licensee network, unrestricted demand (in MW) and sale of electricity (in MU) for different categories of consumers in his area of supply for previous year and forecasts for the current year and next two years to the ASEB Trader at the beginning of the previous year for which approval for the ARR will be filed before the Commission.

107.2 The forecast for the ensuing year shall be on monthly basis. The licensee shall also provide actual monthly load curves for previous two years and forecasts for monthly load curves for the current year in support of its assertions.

107.3 The ASEB Trader shall examine the forecasts for reasonableness based on growth in number of consumers and consumption and demand of electricity in previous years and anticipated growth in the next year and any other factor, which the ASEB Trader may consider relevant.

108. **Estimate of power purchase requirement and sales of surplus power**

108.1 The ASEB Trader shall submit to the Commission a budget showing the power purchase planned and sale of surplus power planned based on the estimated energy sales by the Distribution Licensees and the estimated transmission losses and distribution losses for the tariff period as per 108 above.

108.2 Based on the estimated energy sales by the Distribution licensee and the approved distribution losses for the ensuing year and the transmission losses approved by the Commission for the transmission licensee, the approved requirement of electricity to be purchased and sold will be determined by the Commission.

108.3 The Commission shall scrutinize and approve the power purchase requirement with such modifications as deemed fit for the ensuing year and for the tariff period in case of MYT.

109. **Cost of power purchase**

109.1 The ASEB Trader shall procure electricity on a least cost basis in accordance with provisions of the Regulations made by the Commission in this regard.

109.2 The ASEB Trader shall purchase power from the generating companies at the tariff approved by the Commission under Part IV and Part V of these Regulations.
109.3 The ASEB Trader may purchase power from other sources with the approval of the Commission.

110. Variation in power purchase

110.1 Any power purchased by the ASEB Trader over and above the requirement of power approved by the Commission or variation in the mix of power purchased in any year shall be considered by the Commission if it is for reasons beyond the reasonable control of the ASEB Trader and the resultant financial loss or gain as approved by the Commission shall be adjusted in next years’ tariff.

110.2 Any financial gain or loss on account of power purchased by the ASEB Trader in any year over and above the approved level and not covered by the clause above shall be borne by the ASEB Trader.

111. Transmission and Load Dispatch Centre charges

Inter-state and intra-state Transmission charges and RLDC and SLDC charges to be paid by a distribution licensee for transmission of power purchased by the ASEB Trader shall be considered as per tariff determined by the appropriate Commission. Transmission & wheeling charges paid for energy sold outside the state shall not be considered as expenses.

112. Working capital

Working capital for supply of electricity shall consist of:

(a) Operation and maintenance expenses for one month,

(b) Receivables equivalent to 60 days average billing of Distribution Licensees.

Rate of interest on working capital to be computed as provided subsequently in these Regulations shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1st April of the financial year for which the licensee files petition for annual Revenue Requirement and tariff proposal. The interest on working capital shall be calculated on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency.

113. Other Costs

The other costs shall be calculated according to the principles stated in Part II of these Regulations.

114. Annual Revenue Requirement

114.1 The annual revenue requirement of ASEB Trader shall comprise of the following:-

(a) Power Purchase Cost

(b) Operation and Maintenance Expenses

(c) Depreciation as may be allowed

(d) Interest on Loan
114.2 The total annual expenses and return on equity of the licensee, if any shall be worked out on the basis of expenses and return allowed.

114.3 The annual revenue requirement of the ASEB Trader shall be worked out by deducting the following from its total expenses and return worked out under the clause above:

(a) Amount of other income.
(b) Income from other business apportioned as per regulation 26.

114.4 Necessary corrections on account of reasons beyond the control of the ASEB Trader shall be made to the annual revenue requirement.

115. **Determination and payment of bulk supply tariffs**

115.1 The bulk supply tariffs shall consist of following separate tariffs:

(a) fixed and variable charge for electricity purchases by the distribution licensees from the ASEB Trader or any other source where the Commission may set tariffs;
(b) inter-state transmission charges as set by the CERC;
(c) intra-state transmission charges as set by the Commission under Part VI of these Regulations;
(d) Regional Load Dispatch Centre (RLDC) charges as set by the CERC; and
(e) SLDC charge as set by the Commission under Part VI of these Regulations.

115.2 While determining bulk supply tariff for supply of electricity, the Commission shall be guided by the provisions of Section 61 and 62 of the Act and these Regulations.

116. **Billing**

Monthly bills will be raised by the ASEB Trader or any other agency on the distribution licensees.

117. **Rebate and delayed payment surcharge**

117.1 For payment of bills of bulk supply charges through letter of credit on presentation, a rebate of 2% shall be allowed. Where payments are made subsequently, but within a period of one month of presentation of bills by the ASEB Trader, a rebate of 1% shall be allowed.

117.2 In case the payment of bills of bulk supply charges by the distribution licensees 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 commencing from the date of billing shall be levied by the ASEB Trader.
118. **Principles for determination of tariff**

118.1 A Distribution Licensee shall submit annual information in the format circulated by the Commission for determining Annual Revenue Requirement (ARR) by 1st December every year, and at the start of the control period in case of Multi Year Tariff and thereafter on 1st December every year, unless extension is granted upon application.

118.2 The Commission shall scrutinize the annual accounts, norms achieved and the information submitted under Annual Revenue Requirement (ARR).

118.3 In fixation of tariffs the Commission has to balance the interests of consumers and the Licensee.

118.4 Distribution tariff will be two part tariff comprising fixed charge and energy charge.

118.5 Tariff shall be applicable to consumer categories and as per slabs as will be determined by the Commission.

118.6 The Commission may rationalise the tariff structure so that it is beneficial to consumers and the licensee.

118.7 The Commission may ask for additional information and documents after the scrutiny of ARR submitted to the Commission.

119. **Definitions**

119.1 Unless the context otherwise requires,

(a) “Contracted Power” shall mean the power in MW which the distribution licensee has agreed to wheel on his distribution system.

(b) “Rated Voltage” shall mean the design voltage at which the distribution system is designed to operate or such lower voltage at which the line is charged.

(c) “Distribution loss” shall mean distribution system losses of a distribution licensee.

(d) “Customers” shall mean a generating company or a person who has set up a captive generating plant or a licensee or a consumer availing open access, utilizing the transmission and distribution system of a transmission distribution licensee.

120. **Debt-equity ratio**

For the purpose of determination of tariff, the debt-equity ratio of 70:30 will be applied for all new investments during the financial year. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall
be limited to 30% and the balance shall be treated as loan. Where actual equity employed is less than 30%, the actual equity shall be considered.

121. Return on Equity

121.1 Return on equity shall be computed on the equity base determined in accordance with regulation 121 and shall not exceed 16%.

Provided that equity invested in a foreign currency may be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

121.2 The equity amount appearing in the audited Balance Sheet or as per Transfer Scheme Notification will be taken into account for the purpose of calculating the return on equity for the first year of operation, subject to such modifications as may be found necessary upon audit of the accounts if such a Balance Sheet was not audited.

121.3 The premium received while issuing share capital shall be treated as a part of equity provided the same is utilised for meeting capital expenditure.

121.4 Internal resources created out of free reserves and utilised for meeting the capital expenditure shall also be treated as a part of equity.

121.5 Foreign equity will also attract the same rate of return.

121.6 Return on Equity shall be allowed by the Commission on achievement of a satisfactory level of performance by the generating company or the licensees as per the Transmission or Distribution Licensee’s Standards of Performance Regulations, 2004 notified by the Commission.

122. Capital Cost

122.1 The actual capital expenditure till the date of commercial operation of new investment shall be subject to prudence check by the Commission.

122.2 Scrutiny of the cost estimates by the Commission shall be limited to the reasonableness of the capital cost, financial plan, interest during construction, use of efficient technology and such other matters for determination of tariff.

122.3 In case of any abnormal delay in execution of the project causing cost and time overrun attributable to the failure of the utility the Commission may not approve the full capitalisation of interest and overhead expenses.

122.4 The capital costs include capitalised initial spares up to 1.5% of cost of assets as on the date of commercial operation.

123. Interest and finance charges on loan capital

123.1 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 prevailing lending rate of bank and financial institution.

Provided that the outstanding loan capital shall be adjusted to be to be
consistent with the loan amount determined in accordance with regulation 120 and 121.

123.2 The interest and finance charges attributable to Capital Work in Progress shall be excluded.

123.3 The distribution licensee shall make every effort to swap loans as long as it results in net benefit to the distribution licensees. The costs associated with such swapping shall be borne by consumers.

123.4 Any change to the terms and conditions of a loan shall be reflected from the date of such swapping and benefit's shared between the beneficiaries and the distribution company in a ratio as may be specified by the Commission as envisaged in regulation 13.2

123.5 In case any moratorium period is availed of by the distribution licensee, 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.

124. **Operation and Maintenance Expenses**

124.1 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.

124.2 O&M expenses shall be determined for the tariff period based on normative level of O&M Expenses specified by the Commission.

124.3 The norms for O&M expenses shall be fixed on the basis of circuit kilometres of Distribution lines and Substation Capacity.

124.4 The Distribution Licensee shall submit to the Commission budget 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.

124.5 The Commission will verify the O&M expense budget by comparing it with the norms fixed by the Commission. Any excess over the norm in the budget shall have to be justified by the Licensee.

124.6 Increase in O&M expenses due to natural calamities or insurgency or other factors not within the control of the Distribution Licensee may be approved by the Commission.

125. **Bad Debts**

The Commission shall allow a provision of 1% of total revenue of every financial year to be set aside and transferred to a reserve called Reserve for Bad
and Doubtful Debts. The licensee can utilise this reserve when actual bad debts occur. The Commission will not allow any write off over and above the amount standing at the credit Bad and Doubtful Debt Reserve, subject to a Ceiling of 3% of last three years average revenue.

126. Petition for determination of tariff

126.1 A distribution licensee shall submit a petition for determination of tariff in the manner and format for determination of tariff by 1st December every year, and at the start of the control period and thereafter on 1st December every year in case of MYT, and by December 1 in case of ARR in accordance with the Conduct of Business Regulations and of the terms and conditions of these Regulations, unless extension is granted upon application.

126.2 The Commission shall specify operational norms, in case of Multi Year Tariff, for each year of the control period after scrutinizing the information submitted by the distribution licensee at the beginning of the control period.

127. Capital investment

127.1 The licensee as part of licence condition shall file a detailed capital investment plan coupled with a financing plan for the ensuing year and subsequent four years for meeting the requirement of load growth, reduction in distribution losses, improvement in quality of supply, reliability, metering, consumer services etc.

127.2 The Commission shall consider and approve the licensee’s capital investment plan. The costs corresponding to the approved investment plan of the licensee for a given year shall be considered for its revenue requirement.

128. Estimation of sales

128.1 The licensee shall submit restricted demand due to system constraints (in MW), unrestricted demand (in MW) and sale of electricity (in MU) for different categories of consumers in his area of supply for previous year and forecasts for current year and next two years.

128.2 The forecast for the ensuing year shall be on monthly basis. The licensee shall also provide actual monthly load curves for previous two years and forecasts for monthly load curves for the current year in support of its assertions.

128.3 The Commission shall examine the forecasts for reasonableness based on growth in number of consumers and consumption and demand of electricity in previous years and anticipated growth in the next year and any other factor, which the Commission may consider relevant and approve sale of electricity to consumers with such modifications as deemed fit.

128.4 For the purpose of such estimation distribution licensee shall also indicate:
- The particulars of open access consumers, traders and other licensees category wise using its system. The demand and energy wheeled for them shall be shown separately for
  (a) supply within the area of supply and
  (b) supply outside the area of supply.

128.5 Sale of electricity, if any, to electricity traders or other distribution licensees shall be separately indicated.

128.6 The forecast would not be annually revised except in the case of variations in excess of 10% due to force majeure conditions such as abnormal weather, cyclones, earthquake, changes in law etc and changes in the conditions of supply. The licensee would be required to satisfy the Commission that the revision is necessary due to conditions beyond its control. In case, additional supply is required to meet any exigencies of the situation, the licensee can submit an application to the Commission that year for approval. The application will demonstrate the need and indicate how the licensee would meet the cost for such additional supply.

129. Elimination of Cross Subsidy

129.1 The tariff shall progressively reflect the cost of supply of electricity, according to the consumer’s load factor, power factor, voltage, total consumption of electricity during any specified period of time in which supply is required, or the geographical position of any area, the nature of supply and the purpose for which the supply is required, and also reduce and eliminate cross subsidies within the period to be specified by the Commission.

129.2 Each Distribution Licensee shall submit to the Commission the state of their present accounting system and the efforts needed to generate cost data for serving each category of consumer on a voltage basis.

129.3 On the basis of the above information, the Commission shall fix the target for submission of information on cost to serve.

129.4 The Commission may direct the Licensee to take such steps in this direction as it may consider appropriate.

130. Monitoring of sale of electricity to consumers

130.1 On the basis of approved sales forecast, the licensee shall work out requirement of monthly sales to different consumer categories, taking into account seasonal variations in demand in a year.

130.2 The licensee shall monitor the sales to different consumer categories and ensure that sale to any category of consumer is not unduly restricted.

130.3 If for any abnormal situation like drought, supply to any category of consumer is to be varied, the licensee shall obtain approval of the Commission.
131. Distribution Losses

131.1 The Commission shall fix the norm for distribution losses for the distribution licensee for the ensuing year and for the next four years after that.

131.2 The Commission shall not approve any loss above the norm fixed by it in the determination of the annual revenue requirement of the licensee.

131.3 The distribution licensee shall bear the losses on account of its failure to achieve the target set by the Commission.

131.4 The distribution licensee shall be allowed to retain 50% of the gains arising out of higher loss reduction than the target fixed for any year by the Commission and 50% shall be passed on to the consumers.

131.5 For this purpose, the licensee shall provide the loss reduction plan for the ensuing year as well as for the next four years giving details of the measures proposed to be taken for achieving the same.

131.6 Distribution loss at a particular voltage level shall be calculated as the difference between the energy initially injected (X) into the distribution system at that level and the sum of energy sold to all its consumers (Y) at that level and energy delivered at voltage level below that particular level (Z). Energy sold shall be the sum of metered sales and assessment of un-metered sales based on approved norms. The percentage distribution loss shall be as follows:

$$\text{Percentage Distribution Loss} = \frac{(X - (Y + Z))}{X} \times 100$$

131.7 The licensee shall substantiate its claim on distribution losses through a reliable energy audit/ sample surveys. A sample survey shall be conducted by the licensee for categories such as agriculture where a significant proportion of power consumption is un-metered. The licensee shall submit the sample survey plan before undertaking such a survey to the Commission. The plan shall include sample size, survey methodology, analysis techniques and such other factors that are crucial to the reliability of the survey. The survey shall be conducted after the Commission is satisfied with the survey methodology.

131.8 In the absence of such energy audit/ sample surveys the Commission may not accept the claim of the licensee and may proceed to fix the loss levels on the basis of the information available with it.

131.9 The distribution licensee shall furnish within 6 months of coming into force of these Regulations, computation of technical and commercial distribution losses supply voltage wise, consumer category wise and propose a loss reduction trajectory for each year of the control period in case of Multi Year Tariff. The licensee shall provide a detailed justification for the way the proposed reduction in losses will be achieved by giving details of proposed
improvements in billing and metering systems and capital investments for improvements in the distribution system.

131.10 The Commission may undertake a mid-term review in case of Multi Year Tariff of the initial assumptions of losses and if the divergence is found to be more than 10%, the Commission may undertake a review based on a study undertaken by an independent third party specified by the Commission for this purpose. Based on the results of the study, suitable adjustments may be incorporated.

132. Estimate of power purchase requirement

132.1 Based on the estimated energy sales by the licensee and the approved distribution losses for the ensuing year and the transmission losses assumed by the Commission for the transmission licensee, the requirement of electricity to be purchased shall be determined.

132.2 The Commission shall scrutinize and approve the power purchase requirement with such modifications as deemed fit for the ensuing year and for the tariff period.

133. Cost of power purchase

133.1 The licensee shall procure electricity, over and above the allocated shares from CSGS and APGCL and IPP as approved by the Commission on a least cost basis in accordance with provisions of the Regulations made by the Commission in this regard.

133.2 The Licensee shall purchase power from the ASEB Trader at the bulk supply tariff approved by the Commission

133.3 The Licensee shall have the right to purchase power from other sources as approved by the Commission in the power purchase budget.

133.4 The cost of power generated by a distribution licensee and sold by it to consumers shall be worked out based on transfer price determined by the Commission.

133.5 In case of short-term power shortage, the licensee may procure electricity from any source at a tariff as may be approved by the Commission.

134. Variation in power purchase

134.1 Any other power purchased by licensee over and above the requirement of power approved by the Commission or variation in the mix of power purchased in any year shall be considered by the Commission if it is for reasons beyond the reasonable control of the licensee and the resultant financial loss or gain shall be adjusted in next years’ tariff.

134.2 Any financial gain or loss on account of power purchased by the licensee in any year over and above the approved level and not covered by the Regulations above shall be borne by the licensee.
135. Transmission and wheeling charges

Transmission and wheeling charges and other charges to be paid by a licensee for transmission or wheeling of power purchased by it shall be considered as per tariff determined by the appropriate Commission. Transmission & wheeling charges paid for energy sold outside the state shall not be considered as expenses.

136. RLDC and SLDC Charges

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

137. Scheduling of Drawals

137.1 The procedures for scheduling of the distribution licensee’s drawals shall be as specified in the Assam Electricity Grid Code approved by the Commission. On a daily basis, the distribution licensee shall submit a day ahead drawal schedule for each receiving point to the State Load Dispatch Centre. For calculating the net drawal schedule of each licensee, the transmission losses shall be apportioned to their drawal schedules until otherwise changed by the Commission.

137.2 Revisions of the requisitions by distribution licensees, after commencement of drawal for the day, for the remaining period of the day shall also be permitted with advance notice. Revised schedules in such cases shall become effective from the 6th time block, counting the time block in which the request for revision has been received in the SDLC to be the first one.

138. Unscheduled Interchange (UI) Charges

138.1 Variation between actual drawal and scheduled drawal shall be accounted for through Unscheduled Interchange (UI) Charges. UI for a distribution licensee shall be equal to its actual drawal minus scheduled drawal. UI shall be worked out for each 15 minute time block.

138.2 All charges for UI shall be on net basis, and shall be based on average frequency of the time block and rates as specified by CERC.

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

138.4 Any amount payable and receivable on the UI account of respective distribution licensee shall be separately accounted for. Any claim on ARR on this account over and above the approved power purchase cost will be considered only after establishment of such claim.

139. Operation and Maintenance expenses

139.1 The Commission may specify normative O&M expenses, as a percentage of Capital cost of distribution system and may specify separate norms for difficult terrain.

139.2 The O&M expenses in respect of Multi Year Tariff shall be worked out for
each year of the tariff period by escalating the O&M expenses for the first year of tariff in accordance with CPI.

In the absence of any norms for O&M expenses, the Commission shall determine operations and maintenance expenses based on an assessment of the estimates submitted by the licensee.

140. Working capital

140.1 Working capital for supply of electricity shall consist of:

(a) Operation and maintenance expenses for one month,

(b) Budget for maintenance spares at the rate of 1% of the historical cost escalated at the rate of 6% per annum from the date of commercial operation.

(c) Receivables equivalent to 60 days average billing of consumers less security deposits of consumers.

140.2 Working capital for wheeling of electricity shall consist of:

(a) Operation and maintenance expenses for one month,

(b) Budget for maintenance spares at the rate of 1% of the historical cost escalated at the rate of 6% per annum from the date of commercial operation.

(c) Receivables equivalent to 60 days of wheeling charges.

Rate of interest on working capital to be computed as provided subsequently in these Regulations shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1st April of the financial year for which the licensee files petition for annual Revenue Requirement and tariff proposal. The interest on working capital shall be calculated on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency.

141. Other Costs

The other costs shall be calculated according to the Regulations in Part II of these Regulations.

142. Annual Revenue Requirement

142.1 The annual expenses of the Licensee shall comprise of the following:-

(a) Power Purchase Cost

(b) Operation and Maintenance Expenses

(c) Depreciation as may be allowed

(d) Interest on Loan

(e) Interest on Working Capital

(f) Annual License Fee

(g) Return on Equity as may be allowed
142.2 The total annual expenses and return on equity of the licensee shall be worked out on the basis of expenses and return allowed.

142.3 The annual revenue requirement of a distribution licensee shall be worked out by deducting the following from its total expenses and return worked out under the clause above:

(a) Amount of other income.
(b) Income from surcharge & additional surcharge from open access customers,
(c) Wheeling charges recovered from open access consumers, and
(d) Net income from other business apportioned as per License conditions.
(e) Any grant received from the State Government other than the subsidy under section 65 of the Act meant for any consumer or class of consumers.

142.4 Necessary adjustments due to natural calamities or insurgency or other factors not within its control may be approved by the Commission.

143. **Determination of tariff**

While determining tariff for supply of electricity, the Commission shall be guided by the provisions of Section 61 and 62 of the Act and these Regulations.

144. **Rebate and Delayed payment**

The Commission in its tariff order shall specify the percentage of rebate if any allowable for payment within the due date and percentage of delayed payment surcharge if any for payment beyond the due date.

145. **Wheeling charges**

145.1 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 clause (2) of regulation 143:

(a) Cost of power purchase as per regulation 134, and
(b) Interest payable on security deposits of consumers.
(c) Transmission charges

145.2 Wheeling charges so worked out shall be apportioned supply voltage wise.

145.3 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 thereof:

(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.

146. Surcharge

146.1 The Commission will determine annually the surcharge payable by the open access consumers to meet the current level of cross subsidy level according to section 42 (2) proviso 1 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 realisation 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 and eliminated 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.

146.2 The open access consumers availing exclusively interstate transmission system shall pay the same amount of surcharge as determined under these Regulations.

146.3 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.

147. Additional Surcharge

147.1 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.

147.2 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.

147.3 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.

147.4 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.

147.5 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.

148. **Annual Review**

148.1 Even when the annual revenue requirement has been determined by the Commission on long-term tariff principles for a period of 3 years, the distribution licensee may file statements of annual revenue requirement and proposals for tariff every year in accordance with provisions of these Regulations.

148.2 Consequences of any variation in capital investment approved by the Commission for any year shall be considered for the purpose of tariff in the following year, subject to the total capital expenditure remaining within the approved limit.

148.3 The Commission shall consider variations in forecasts and actual of sale of electricity, income and expenditure in any year and may permit necessary corrections in the following year in case such variations are for reasons beyond the reasonable control of the licensee.

148.4 The corrections to be allowed in the following year shall be based on provisional accounts of the previous year and the latest audited accounts of the licensee.

148.5 Where the effect of such variation on the annual revenue requirement is large, caused by factors such as natural calamities and in the opinion of the Commission, it is not feasible to recover it in the following year alone, the Commission may allow it to be recovered over more than one year. The Commission may also allow financial costs incurred by the licensee for meeting the revenue gap on this account.

149. **Three Year Review**

149.1 Before the end of the period stated in regulation 6 in case of Multi Year Tariff, the Commission shall undertake a comprehensive review of norms
and the long term tariff principles for annual revenue requirement of Distribution Licensees, contained in these Regulations.

149.2 Such review shall be with the objective of analysing implementation of the long term principles and making modification or improvement in the principles, procedures and methodology.

149.3 The benefits of better performance realised by the distribution licensee and not passed on to the consumers during the preceding three years shall also be transferred to consumers in a ratio as approved by the Commission. For this purpose, the Commission may reset the base values and targets keeping in view the actual performance of the licensee providing incentives for improved efficiency in the next tariff period.

150. Performance of licensee

150.1 The quality of service provided by the distribution licensee to its consumers shall be an important consideration and shall be judged by the extent of adherence by the licensee to the standards of performance laid down by the Commission.

150.2 The Commission may by a separate order, lay down long term targets for technical improvement of the distribution system like reducing transformer failure rate, reducing voltage imbalance, reducing non-working / defective meters etc.

Part-IX

Miscellaneous

151. 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.

152. Power to Amend

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

153. Savings

153.1 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.

153.2 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.

153.3 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.

Sd/- (Smti Neelima Dewri Dutta, ACS)
Secretary,
Assam Electricity Regulatory Commission
## Annexure I

### Depreciation Schedule

<table>
<thead>
<tr>
<th>Description of Assets</th>
<th>Useful Life (yrs)</th>
<th>Rate (Calculated w.r.t. 90%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Land owned under full title</td>
<td>Infinity</td>
<td>---</td>
</tr>
<tr>
<td>B. Land held under lease:</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>(a) for investment in land.</td>
<td>The period of lease or the period remaining unexpired on the Assignment of the lease.</td>
<td>---</td>
</tr>
<tr>
<td>(b) for cost of clearing site</td>
<td>The period of lease remaining unexpired at the date of clearing the site.</td>
<td>---</td>
</tr>
<tr>
<td>C. Assets:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchased new:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Plant and machinery in generating Stations including plant foundations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Hydro-electric</td>
<td>35</td>
<td>2.57</td>
</tr>
<tr>
<td>(ii) Steam-electric NHRS &amp; Waste Heat Recovery Boilers/Plants</td>
<td>25</td>
<td>3.60</td>
</tr>
<tr>
<td>(iii) Diesel-electric &amp; gas plant</td>
<td>15</td>
<td>6.00</td>
</tr>
<tr>
<td>(b) Cooling towers and circulating water systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Hydraulic works forming Part of hydro-electric system including:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Dams, Spillways weirs, canals reinforced concrete Flumes &amp; syphons</td>
<td>50</td>
<td>1.80</td>
</tr>
<tr>
<td>(ii) Reinforced concrete pipelines and surge tanks, steel pipelines, sluice gates,</td>
<td>35</td>
<td>2.57</td>
</tr>
<tr>
<td>steel surge (tanks) hydraulic control valves and other hydraulic works.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(d) Building & civil engineering works of a Permanent character, not mentioned above:-

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
<th>Unit Rate</th>
<th>Total Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Offices &amp; showrooms</td>
<td>50</td>
<td>1.80</td>
<td>90</td>
</tr>
<tr>
<td>(ii) Containing thermo-electric generating plant</td>
<td>25</td>
<td>3.60</td>
<td>90</td>
</tr>
<tr>
<td>(iii) Containing hydro-electric generating plant</td>
<td>35</td>
<td>2.57</td>
<td>90</td>
</tr>
<tr>
<td>(iv) Temporary erection such as wooden structures</td>
<td>5</td>
<td>18.00</td>
<td>90</td>
</tr>
<tr>
<td>(v) Roads other than kutcha roads</td>
<td>50</td>
<td>1.80</td>
<td>90</td>
</tr>
<tr>
<td>(vi) Others</td>
<td>50</td>
<td>1.80</td>
<td>90</td>
</tr>
</tbody>
</table>

(e) Transformers, transformer (Kiosk) sub-station equipment & other fixed apparatus (including plant foundations)

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
<th>Unit Rate</th>
<th>Total Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Transformers (including foundations) having a rating of 100 kilo volt amperes and over</td>
<td>25</td>
<td>3.60</td>
<td>90</td>
</tr>
<tr>
<td>(ii) Others</td>
<td>25</td>
<td>3.60</td>
<td>90</td>
</tr>
</tbody>
</table>

(f) Switchgear, including cable connections

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
<th>Unit Rate</th>
<th>Total Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Station type</td>
<td>25</td>
<td>3.60</td>
<td>90</td>
</tr>
<tr>
<td>(ii) Pole type</td>
<td>15</td>
<td>6.00</td>
<td>90</td>
</tr>
<tr>
<td>(iii) Synchronous condensor</td>
<td>35</td>
<td>2.57</td>
<td>90</td>
</tr>
</tbody>
</table>

(g) Lightning arrestors:

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
<th>Unit Rate</th>
<th>Total Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Station type</td>
<td>25</td>
<td>3.60</td>
<td>90</td>
</tr>
<tr>
<td>(ii) Pole type</td>
<td>15</td>
<td>6.00</td>
<td>90</td>
</tr>
<tr>
<td>(iii) Synchronous condensor</td>
<td>35</td>
<td>2.57</td>
<td>90</td>
</tr>
</tbody>
</table>

(h) Batteries:

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
<th>Unit Rate</th>
<th>Total Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Underground Cable</td>
<td>35</td>
<td>2.57</td>
<td>90</td>
</tr>
<tr>
<td>Including joint boxes and disconnected boxes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) Cable duct system</td>
<td>50</td>
<td>1.80</td>
<td>90</td>
</tr>
</tbody>
</table>

(i) Overhead lines including supports:

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
<th>Unit Rate</th>
<th>Total Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Lines on fabricated steel operating at nominal voltages higher than 66 KV</td>
<td>35</td>
<td>2.57</td>
<td>90</td>
</tr>
<tr>
<td>(ii) Lines on steel supports operating at nominal voltages higher than 13.2 Kilo volts but not exceeding 66 Kilo vols</td>
<td>25</td>
<td>3.60</td>
<td>90</td>
</tr>
</tbody>
</table>
(iii) Lines on steel or reinforced concrete supports  |  25  |  3.60  |  90  
(iv) Lines on treated wood supports  |  25  |  3.60  |  90  

(j) Meters  |  15  |  6.00  |  90  

(k) Self propelled vehicles  |  5  |  18.00  |  90  

(l) Air conditioning plants:
   (i) Static  |  15  |  6.00  |  90  
   (ii) Portable  |  5  |  18.00  |  90  

(m) (i) Office furniture and fittings  |  15  |  6.00  |  90  
   (ii) Office equipments:
       (iii) Internal wiring  |  15  |  6.00  |  90  
       including fittings and apparatus
   (iv) Street light fittings  |  15  |  6.00  |  90  

(n) Apparatus let on hire:
   (i) Other than motors  |  5  |  18.00  |  90  
   (ii) Motors  |  15  |  6.00  |  90  

(o) Communication equipment:
   (i) Radio and higher frequency carrier system  |  15  |  6.00  |  90  
   (ii) Telephone lines and telephones  |  15  |  6.00  |  90  

(p) Assets purchased second hand and assets not otherwise provided for in the schedule  |  Such reasonable period as the competent Government determines in each case having regard to the nature, age and condition of the assets at the time of its acquisition by the owner.  

## Annexure II

**Gross Station Heat Rate**

<table>
<thead>
<tr>
<th>Station</th>
<th>Approved GSHR (Kcal/kwh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTPS</td>
<td>3266</td>
</tr>
<tr>
<td>LTPS</td>
<td>3658</td>
</tr>
<tr>
<td>For new gas turbine – Open cycle</td>
<td>2830</td>
</tr>
<tr>
<td>For new gas turbine – Combined cycle</td>
<td>1950</td>
</tr>
</tbody>
</table>

## Annexure-III

**Auxiliary Consumption Rate**

<table>
<thead>
<tr>
<th>Station</th>
<th>Approved Auxiliary Consumption Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTPS</td>
<td>4.5</td>
</tr>
<tr>
<td>LTPS</td>
<td>5.5</td>
</tr>
</tbody>
</table>