Draft Transmission Tariff Regulations

DELHI ELECTRICITY REGULATORY COMMISSION

SEPTEMBER, 2011

A1: SHORT TITLE AND EXTENT

1.1 These Regulations shall be called the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011.

1.2 These Regulations shall come into force on April 1, 2012 and unless reviewed earlier or extended by the Commission shall remain in force for a period of three year from the date of commencement.

1.3 These Regulations shall extend to the whole of National Capital Territory of Delhi.

A2: DEFINITIONS AND INTERPRETATION

2.1 In these Regulations, unless the context otherwise requires -

(a) "**Act**" means the Electricity Act, 2003 (36 of 2003), including amendments thereto;

(b) "**Aggregate Revenue Requirement**" **or "ARR"** means for each Financial Year, the costs pertaining to the Licensed Business which are permitted, in accordance with these Regulations, to be recovered from the tariffs and charges determined by the Commission;

(c) **"Allotted Transmission Capacity"** means and include the power transfer in MW between the specified point(s) of injection and point(s) of drawal allowed to a long-term customer on the intra-state transmission system under the normal circumstances and the expression "allotment of capacity" shall be construed accordingly;

Allotted Transmission Capacity to a Long Term Transmission Customer shall be sum of the generating capacities allocated to the Long Term Transmission Customer from the State Generating Stations and Inter State Generating Stations and the contracted power, if any;

(d) "**Applicant**" means a Transmission Licensee who has made an application for determination of transmission charge in accordance with these Regulations and includes a Transmission Licensee whose tariff is the subject of a review by the Commission;

(e) "**Auditor**" means an auditor appointed by the transmission licensee, in accordance with the provisions of sections 224, and 619 of the Companies Act, 1956 (1 of 1956), or any other law for the time being in force;

(f) "**Availability**" in relation to a transmission system for a given period means the time in hours during that period in which the transmission system is capable to transmit electricity at its Rated Voltage and shall be expressed in percentage of total hours in the given period, and shall be calculated as directed by the Commission;

(g) "**Base Year**" means the Financial Year immediately preceding first year of the Control Period;

(h) "**Beneficiary (ies)**" means both Long Term Transmission Customers and Long Term Open Access Customers. A Distribution Licensee shall necessarily be a Long Term Transmission Customer for which he shall be required to enter into a Transmission Services Agreement with the Transmission Licensee;

(i) "**CERC**" means the Central Electricity Regulatory Commission;

(j) "**Change in Law**" means occurrence of any of the following events:

(i) the enactment, bringing into effect, adoption, promulgation, amendment, modification or repeal of any law; or

(ii) change in interpretation of any law by a competent court, Tribunal or Indian Governmental Instrumentality which is the final authority under law for such interpretation; or

(iii) change by any competent statutory authority, in any consent, approval or licence available or obtained for the project.

(k) "**Commission**" means the Delhi Electricity Regulatory Commission;

(l) "**Conduct of Business Regulations**" means the Delhi Electricity Regulatory Commission Comprehensive (Conduct of Business) Regulations, 2001, as amended from time to time;

(m) "**Control Period**" means a multi-year period fixed by the Commission, from 1st April 2012 and up to 31st March 2015;

(n) "**Date of Commercial Operation**" **or** '**COD**' means:

in relation to the transmission system, the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful charging and trial operation:

Provided that the date shall be the first day of a calendar month and transmission charge for the element shall be payable and its availability shall be accounted for, from that date;

Provided further that in case an element of the transmission system is ready for regular service but is prevented from providing such service for reasons not attributable to the transmission licensee, its suppliers or contractors, the Commission may approve the date of commercial operation prior to the element coming into regular service;

(o) "**Distribution Licensee**" means a Licensee authorized to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply;

(p) "**Expenditure Incurred**" means the fund, whether the equity or debt or both, actually deployed and paid in cash or cash equivalent, for creation or acquisition of a useful asset and does not include commitments or liabilities for which no payment has been released;

(q) "**Financial Year**" means a period commencing on 1st April of a calendar year and ending on 31^{st} March of the subsequent calendar year;

(r) "**Implementation Agreement**" means the agreement, contract or memorandum of understanding, or any such covenant, entered into between the transmission licensee and the long-term transmission customer for construction of the transmission system;

(s) "**License**" means a License granted by the Commission under Section 14 of the Act;

(t) "**Licensed Business**" means the functions and activities, which the Licensee is required to undertake in terms of the License granted by the Commission or as a deemed Licensee under the Act;

(u) "**Licensee**" means a person who has been granted a Licence and shall include a deemed Licensee;

(v) "**Long-Term Transmission Customer**" means a person having contractual right to use the intra-state transmission system for a period of twelve years or more and less than twenty five years by paying transmission charges;

(w) "**Medium-term Transmission Customer**" means a person having contractual right to use the intra-state transmission system for a period exceeding three months and less than three years by paying transmission charges;

(x) "**Non-Tariff Income**" means income relating to the Licensed Business other than from tariff (intra-state transmission of electricity), and excluding any income from Other Business;

(y) "**Other Business**" means other business of the Transmission Licensee under section 41 of the Electricity Act 2003;

(z) "**Open Access Customer**" means a consumer permitted by the Commission to receive supply of electricity from a person, other than Distribution Licensee of his area of supply, and the expression includes a generating company and a Licensee, who has availed of or intends to avail of open access;

(aa) "**Original project cost**" means the capital expenditure incurred by the transmission licensee, within the original scope of the project up to the cut-off date as admitted by the Commission;

(bb) "**Project**" means the transmission system;

(cc) "**Rated Voltage**" means the manufacturer's design voltage at which the transmission system is designed to operate and includes such lower voltage at which any transmission line is charged or for the time being charged, in consultation with long-term transmission customers;

(dd) "**Short-term Transmission Customer**" means a person having contractual right to use the intra-state transmission system for a period up to 1 month by paying transmission charges;

(ee) "**State Load Despatch Centre**" or 'SLDC' means the centre established by the State Government for purposes of exercising the powers and discharging the functions under Section 31 of the Act;

(ff) "**State**" means the National Capital Territory of Delhi;

(gg) "**Transmission Business**" means the business of transmission of electricity by a Transmission Licensee to a Beneficiary/(ies) and permitted open access customers;

(hh) "**Transmission Service Agreement**" means the agreement, contract, memorandum of understanding, or any such covenant, entered into between the transmission licensee and the Long-Term Transmission Customer(s) for the operation phase of Transmission System;

(ii) "**Transmission System**" means the system consisting mainly of extra high voltage electric lines and associated equipments and substations having design voltage higher than 66 KV including any other system of lower voltage as the Transfer Scheme or the Commission may specifically recognise, owned or controlled by the Transmission Licensee, and used for the purposes of the transportation of electricity between the switchyards of two Generating Stations or from the switchyard of a Generating Station to a substation, or between substations, or to or from any external interconnection and includes all bays/equipment up to the interconnection with the Distribution System, and any plant, apparatus and meters owned or used in connection with the transmission of electricity, but shall not include any part of a Distribution System.

(jj) "**Transmission System Availability Factor**" means Availability of the Transmission System as certified by the State Load Despatch Centre;

(kk) "**Useful life**" in relation to a unit of a Transmission System from the COD shall mean 25 years for sub-station and 35 years for transmission line;

2.2 Words and expressions used in these Regulations and not defined herein but defined in the Act shall have meaning assigned to them under the Act.

2.3 All proceedings under these Regulations shall be governed by the Conduct of Business Regulations.

A3: SCOPE OF REGULATIONS AND EXTENT OF APPLICATION

3.1 Subject to the provisions of the Act, Rules and Policies, these Regulations shall apply in all cases of determination of Transmission Tariff under Section 62 of the Act. It shall however, not apply in the case where tariff has been determined through a transparent process of bidding in accordance with the guidelines issued by the Central Government as per the provisions of Section 63 of the Act.

3.2 In accordance with the principles laid out in these Regulations, the Commission shall determine the Aggregate Revenue Requirement (ARR) for the Transmission Business.

A4: GENERAL APPROACH AND GUIDING PRINCIPLES

4.1 The Commission shall adopt Multi Year Tariff Framework for approval of ARR and expected revenue from tariffs and charges.

4.2 The Multi Year Tariff framework shall be based on the following:

(a) Business Plan of the Transmission Licensee for the entire Control Period to be submitted to the Commission for approval, prior to the start of the Control Period;

(b) Trajectory for specific parameters shall be stipulated by the Commission, where the performance of the Applicant is sought to be improved through incentives and disincentives;

(c) Annual review of performance shall be conducted vis-à-vis the approved forecast.

Baseline

4.3 The baseline values (operating and cost parameters) for the Control Period shall be determined by the Commission and based on the approved values by the Commission in the past, latest audited accounts, estimate of the actuals for the relevant year, prudence check and other factors considered appropriate by the Commission.

4.4 The Commission shall normally not revisit the performance targets.

Capital Investment Plan

4.5 The Commission shall approve the system augmentation plan submitted by the Transmission Licensee, based on the load growth forecast during the Control Period. The same would be considered for computation of ARR, wherein the amount of electricity transmitted by the Transmission System shall be projected considering the estimated growth plan of its Beneficiaries and any plans of new transmission system, based on network expansion plans within the State.

4.6 Capital investment plan submitted by the Licensee shall also provide details of ongoing projects that will spill into the Control Period and new projects that will commence during the Control Period but may extend beyond the Control Period.

4.7 The capital investment plan shall be in conformity with the plans made by the CEA/CTU/STU. The investment plan shall be scheme-wise and each scheme shall include:

(a) Purpose of investment (i.e. replacement of existing assets, meeting load growth, technical loss reduction, meeting reactive energy requirements, improvement in quality and reliability of supply, etc) ;

(b) Capital Structure;

(c) Capitalization Schedule;

(d) Financing Plan;

(e) Cost-benefit analysis;

(f) Performance improvement envisaged in the Control Period.

4.8 For the Annual Performance Review, Transmission Licensee shall submit the actual capital expenditure incurred and capitalisation during the year under review along with the Annual Performance Review Filing.

4.9 Capital expenditure shall normally incurred by the Transmission Licensee after approval of the Commission. The Commission shall review the actual capital expenditure incurred and capitalisation at the end of each year of the Control Period vis-à-vis the approved capital expenditure and capitalisation schedule. In the normal course, the Commission shall not revisit the approved capital investment plan (capital expenditure and capitalisation schedule) during the Control Period and adjustment to depreciation and return on capital employed for the actual capital expenditure incurred and capitalisation vis-à-vis approved capital investment plan (capital expenditure and capitalisation) shall be done at the end of Control Period.

4.10 The Commission shall also conduct a mid term review at the end of second year of the Control Period. In case, the cumulative incurred capital expenditure and/or capitalisation deviates from the approved capital expenditure / capitalisation by more than 10% (cumulative), the Commission shall make necessary changes to capital investment plan for the Control Period after consultation with Licensee and adjust depreciation and return on capital employed based on the actual capital expenditure and/or capitalisation vis-à-vis approved capital expenditure / capitalisation;

Provided that the actual capital expenditure incurred shall be only for the schemes as per the approved Capital Investment plan.

Renovation and Modernisation

4.11 The Transmission Licensee for meeting the expenditure on Renovation and Modernization (R&M) for the purpose of extension of life beyond the useful life of the Transmission System, shall make an application before the Commission for approval of the proposal with a detailed project report giving complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost including foreign exchange component, if any, consent of beneficiaries and any other information considered to be relevant by the Transmission Licensee.

4.12 Where the Transmission Licensee makes an application for approval of R&M proposal, the approval shall be granted after due consideration of reasonableness of the cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis, and such other factors as may be considered relevant by the Commission.

4.13 Any expenditure incurred or projected to be incurred as admitted by the Commission after prudent check based on the estimates of Renovation and Modernization expenditure and life extension, and after writing off the original amount of the replaced assets and deducting the accumulated depreciation including advance against depreciation already recovered from the Original project cost, shall form the basis for determination of Tariff.

Targets for Controllable parameters

4.14 The Commission shall set targets for the items or parameters that are deemed to be "controllable" and which include:

(a) Availability of the Transmission System;

(b) Operation and Maintenance Expenditure which includes employee expenses, repairs and maintenance expenses, administration and general expenses and other miscellaneous expenses viz. audit fees, rents, legal fees etc;

(c) Return on Capital Employed; and

(d) Depreciation.

Truing Up

4.15 For controllable parameters,

(a) Any surplus or deficit on account of Operation and Maintenance (O&M) expenses shall be to the account of the Licensee and shall not be trued up in ARR; and

(b) Depreciation and Return on Capital Employed shall be trued up at the end of Control Period based on the actual capital expenditure and actual capitalisation vis-à-vis capital investment plan (capital expenditure and capitalisation) approved by the Commission;

Provided that in case any change to capital investment plan for the Control Period as per the regulation 4.10, depreciation and return on capital employed shall be adjusted during the mid term review based on the actual capital expenditure, actual capitalisation and revised capital investment plan (capital expenditure and capitalisation schedule) approved by the Commission.

A5: PRINCIPLES FOR DETERMINATION OF ARR

5.1 The Transmission Licensee shall segregate its business into Transmission Business and SLDC activity. The Transmission Business revenue requirement would be used for determining non-discriminatory transmission charges.

5.2 Till such time there is a complete segregation of accounts between Transmission Business and SLDC activity, the ARR for each business shall be supported by an Allocation Statement containing the apportionment of all costs, revenues, assets, liabilities, reserves and provisions between the Transmission Business, SLDC activity and any Other Business of the Transmission Licensee. The Allocation Statement shall also contain the methodology used for the apportionment between different businesses.

Operational Norms

5.3 The Commission shall specify suitable norms of operation for the Transmission Licensee in the Multi Year Tariff Order, based on the submission of the Business Plans. The parameter which shall be considered would cover, among others:

(a) Normative Annual Transmission System Availability Factor(NATAF): The Target Availability for recovery of full annual transmission charges during the Control Period shall be as under:

AC system: 98.0%

(b) Recovery of full annual transmission charges below the target availability shall be on a *pro rata* basis.

ARR for Transmission Business

5.4 The Aggregate Revenue Requirement for the Transmission Business for each year of the Control Period shall contain the following items:

(a) Operation and Maintenance expenses;

(b) Return on Capital Employed;

(c) Depreciation;

(d) Less: Non-Tariff Income ; and

(e) Less: Income from Other Business.

Operation and Maintenance Expenses

5.5 Normative Operation and Maintenance (O&M) expenses shall include:

(a) Salaries, wages, pension contribution and other employee costs;

(b) Administrative and General expenses;

(c) Repairs and Maintenance; and

(d) Other miscellaneous expenses, statutory levies and taxes (except corporate income tax).

5.6 The Licensee shall submit the O&M expenses for the Control Period as prescribed in multiyear tariff filing procedure. The O&M expenses for the Base Year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the Licensees, estimates of the actuals for the Base Year, prudence check and any other factor considered appropriate by the Commission.

5.7 O&M expenses permissible towards ARR for each year of the Control Period shall be determined using the formula detailed below:

(a) $O\&M_n = (R\&M_n + EMP_n + A\&G_n) * (1 – X_n)$

Where,

(i) $R\&M_n = K * GFA_{n-1}$;

(ii) $EMP_n + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (INDX)$; and

(iii) $INDX = 0.55 * CPI + 0.45 * WPI$

(iv) EMP_n – Employee Costs of the Licensee for the n^{th} year;

(v) $A\&G_n$ – Administrative and General Costs of the Licensee for the n^{th} year;

(vi) $R\&M_n$ – Repair and Maintenance Costs of the Licensee for the n^{th} year;

(vii) X_n is an efficiency factor for n^{th} year. Value of X_n shall be determined by the Commission in the MYT Tariff order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor the Commission feels appropriate.

Where,

'K' is a constant (could be expressed in %). Value of K for each year of the Control Period shall be determined by the Commission in the MYT Tariff order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor considered appropriate by the Commission;

INDX - Inflation Factor to be used for indexing. Value of INDX shall be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding ten years before the base year;

Return on Capital Employed

5.8 Return on Capital Employed (RoCE) shall be used to provide a return to the Transmission Licensee, and shall cover all financing costs and taxes, without providing separate allowances for interest on loans and interest on working capital.

5.9 The Regulated Rate Base (RRB) shall be used to calculate the total capital employed which shall include the original cost of assets and working capital, less the accumulated depreciation. Capital work in progress (CWIP) shall not form part of the RRB. Capital subsidies / grants shall be deducted in arriving at the RRB.

5.10 The RRB shall be determined for each year of the Control Period at the beginning of the Control Period based on the approved capital investment plan with corresponding capitalisation schedule and normative working capital.

5.11 The Regulated ate Base for the i^{th} year of the Control Period shall be computed in the following manner:

$$RRB_i = RRB_{i-1} + \Delta AB_i / 2 + \Delta WC_i;$$

Where,

'i' is the i^{th} year of the Control Period, i = 1,2,3,4 for the first Control Period;

RRB_i: Regulated Rate Base for the i^{th} year of the Control Period;

ΔAB_i: Change in the Regulated Rate Base in the i^{th} year of the Control Period. This component shall be the average of the value at the beginning and end of the year as the asset creation is spread across a year and is arrived at as follows:

$$\Delta AB_i = Inv_i - D_i$$

Where,

Inv_i: Investments projected to be capitalised during the i^{th} year of the Control Period and approved;

D_i: Amount set aside or written off on account of Depreciation of fixed assets for the i^{th} year of the Control Period;

RRB_{i-1}: Regulated Rate Base for the Financial Year preceding the i^{th} year of the Control period. For the first year of the Control Period, RRB_{i-1} shall be the Regulated Rate Base for the Base Year i.e. RRB_O;

$$RRB_O = OCFA_O - AD_O - CC_O;$$

Where;

$OCFA_O$: Original Cost of Fixed Assets at the end of the Base Year available for use and necessary for the purpose of the Licenced Business;

AD_O: Amounts written off or set aside on account of depreciation of fixed assets pertaining to the regulated business at the end of the Base Year;

CC_O: Total contributions pertaining to the OCFAo, made by the consumers towards the cost of construction of Transmission System by the Transmission Licensee and also includes the capital grants/subsidies received for this purpose;

ΔWC_i: Change in normative working capital requirement in the i^{th} year of the Control Period, from the $(i-1)^{th}$ year. For the first year of the Control Period (i=1), ΔWC_1 shall be taken as the normative working capital requirement of the first year. Working capital for wheeling of electricity shall consist of

(i) Receivables for two months towards transmission tariffs calculated on NATAF;

(ii) Maintenance spares @ 15% of operation and maintenance expenses ; and

(iii) Operation and maintenance expenses for one month.

5.12 Return on Capital Employed (RoCE) for the year ‘i’ shall be computed in the following manner:

$$RoCE = WACCi * RRBi$$

Where,

WACCi is the Weighted Average Cost of Capital (pre-tax) for each year of the Control period;

RRBi - Regulated Rate Base is the asset base for each year of the Control Period based on the capital investment plan and working capital.

5.13 The WACC (pre-tax) for each year of the Control Period shall be computed at the start of the Control Period in the following manner:

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

Where,

D/E is the Debt to Equity Ratio and for the purpose of determination of tariff, debt-equity ratio for the asset capitalized shall be 70:30. Where equity employed is in excess of 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as notional loan. The interest rate on the amount of equity in excess of 30% treated as notional loan shall be the weighted average rate of the loans of the Licensee for the respective years and shall be further limited to the prescribed rate of return on equity in the Regulations. Where actual equity employed is less than 30%, the actual equity and debt shall be considered:

Provided that the Working capital shall be considered 100% debt financed for the calculation of WACC;

Provided further that the Debt to Equity Ratio for the assets covered under Transfer Scheme, dated July 1, 2002 shall be considered as per the debt and equity in the transfer scheme;

Provided further that Debt to Equity Ratio for the assets capitalised till 1.04.2012 (other than assets covered under Transfer Scheme) shall be considered as per the debt and equity approved by the Commission at the time of capitalization.

r_d is the Cost of Debt and shall be determined at the beginning of the Control Period after considering Transmission Licensee's proposals, present cost of debt already contracted by the Transmission Licensee, credit rating, benchmarking and other relevant factors (risk free returns, risk premium, prime lending rate etc.).

r_e is the Return on Equity (pre-tax) and shall be considered at 15.5% pre-tax to be grossed up as per clause 5.14 of these Regulations.

Provided that in case of Projects commissioned on or after 1st April, 2012, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in Appendix-II to these Regulations;

Provided further that the additional return of 0.5% shall not be admissible if the Project is not completed within the timeline specified above for reasons whatsoever.

5.14 The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax rate for the year 2011-12, as per Income Tax Act, 1961 (as amended from time to time) as applicable to the Transmission Licensee.

5.15 Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where't' is the applicable tax rate in accordance with clause 5.14 of these Regulations

5.16 The Transmission Licensee shall recover the shortfall or refund the excess Aggregate Revenue Requirement for any year on account of Return on Equity due to change is applicable Minimum Alternate / Corporate Income Tax rate as per Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before Commission:

Provided further that Aggregate Revenue Requirement for any year with respect to tax rate applicable to the Transmission Licensee in line with the provisions of the relevant Finance Acts of the respective year during the Control Period shall be trued up separately for each year of the Control Period along with the tariff petition filed for the next Control Period.

5.17 The repayment of loans for the year of the tariff period 2012-15 shall be deemed to be equal to the depreciation allowed for that year.

5.18 Notwithstanding any moratorium period availed by the Transmission Licensee, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

5.19 The Transmission Licensee shall make every effort to refinance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the Transmission Licensee, in the ratio of 2:1.

Depreciation

5.20 Depreciation shall be calculated for each year of the Control Period, on the amount of Original Cost of the Fixed Assets considered for calculation of the Regulated Rate Base of the corresponding year.

Provided that depreciation shall not be allowed on assets funded by any capital subsidy / grant.

5.21 Depreciation for each year of the Control Period shall be determined based on the methodology as specified in these Regulations along with the rates and other terms specified in Appendix -I to these Regulations.

5.22 The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset. Land is not a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset:

Provided that the Transmission Licensee shall submit yearwise details of the assets which have completed its useful life;

Provided further that the Transmission Licensee shall submit yearwise details of assets retired and disposed off, which shall be removed from the Original Cost of Fixed Assets;

Provided further that the Transmission Licensee shall take prior approval of the Commission in case of retiring any asset before its useful life.

5.23 Depreciation shall be calculated annually, based on the straight line method, over the useful life of the asset. The base value for the purpose of depreciation shall be original cost of the asset.

Provided that , the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the Date of Commercial Operation shall be spread over the balance useful life of the assets.

5.24 In case of the existing Projects, the balance depreciable value as on 1.4.2012 shall be worked out by deducting the cumulative depreciation including Advance Against Depreciation as admitted by the Commission upto 31.3.2012 from the gross depreciable value of the assets. The rate of Depreciation shall be continued to be charged at the rate specified in Appendix-I of these Regulations till cumulative depreciation reaches 70%. Thereafter, the remaining depreciable value shall be spread over the remaining life of the asset such that the maximum depreciation does not exceed 90%.

5.25 Depreciation shall be charged from the first year of operation of the asset. In case, of commercial operation of the asset for part of the year, depreciation shall be charged on a pro rata basis.

Tax on Income

5.26 Tax on the income streams of the Transmission Licensee shall not be recovered from the Beneficiaries and the long-term customers:

Provided that the deferred tax liability, excluding Fringe Benefit Tax, for the period up to 31st March, 2012 whenever it materializes, shall be recoverable directly from the Beneficiaries and the long-term customers;

Provided further that any tax liability on incentives and savings due to improved performance on any parameter, if any, shall be considered for passing onto the Beneficiaries in the ratio of the sharing of the gains as prescribed under these Regulations.

Non-Tariff Income

5.27 All incomes being incidental to electricity business and derived by the Licensee from sources, including but not limited to profit derived from disposal of assets, rents, delayed payment surcharge and miscellaneous receipts from the Beneficiaries shall constitute Non-Tariff Income of the Licensee.

5.28 The amount received by the Licensee on account of Non-Tariff Income shall be deducted from the Aggregate Revenue Requirement in calculating the net revenue requirement of such Licensee.

Other Income of the Transmission Licensee

5.29 Where the Transmission Licensee is engaged in any other business, the income from such business shall be calculated as per "DERC Treatment of Income from Other Business of Transmission Licensee and Distribution Licensee Regulation 2005"and shall be deducted from the Aggregate Revenue Requirement in calculating the revenue requirement of the Transmission Licensee;

Provided that the Transmission Licensee shall follow a reasonable basis for allocation of all joint and common costs between the Transmission Business and the Other Business and shall submit the Allocation Statement as approved by the Board of Directors to the Commission along with his application for determination of tariff;

Provided further that where the sum total of the direct and indirect costs of such Other Business exceed the revenues from such Other Business or for any other reason, no amount shall be allowed to be added to the Aggregate Revenue Requirement of the Transmission Licensee on account of such Other Business.

Late Payment Surcharge

5.30 In case the payment of any bills for charges payable under these Regulations is delayed by a beneficiary beyond a period of 60 days from the date of billing a late payment surcharge at the rate of 1.25% per month shall be levied by the Transmission Licensee.

Rebate

5.31 For payment of bills of the Transmission Licensee through a letter of credit on presentation, a rebate of 2% shall be allowed. If the payment is made by any other mode but within a period of one month of presentation of bills by the Transmission Licensee, a rebate of 1% shall be allowed.

Quality of Supply

5.32 The Commission shall monitor the following Quality of Supply parameters during the Control Period:

(a) Transmission System Availability

(b) Transformer Failure, across various capacities which represents the number of transformer failures as a percentage of the total number of transformers in that specified capacity within the Transmission System, over a specified period of time.

5.33 The Transmission Licensee in its Business Plan filings shall submit and propose the trajectory for the achievement of quality targets. The Commission shall specify the targets for each parameter. The Transmission Licensee shall submit its performance on each parameter in the form and manner specified by the Commission.

Safety Standards

5.34 The Transmission Licensee shall develop a Safety Manual and follow procedures to maintain atleast minimum safety standards during construction, operation, etc. in line with the provisions of Section 53 of the Act.

A6: PRINCIPLES FOR DETERMINATION OF TARIFF

6.1 The Licensee shall keep in view the following principles while filing application for transmission tariff.

Separation of Transmission and SLDC functions

6.2 The Transmission Licensee shall separate its business into transmission and SLDC functions, and segregate its accounts between these two businesses. Till the segregation of the accounts is completed, the Transmission Licensee shall submit an Allocation Statement that contains the apportionment of costs and revenues to that business. The Allocation Statement, approved by the Board of Directors of the Licensee, shall be accompanied with an explanation of the methodology for apportionment which should be consistent over the Control Period.

Transmission Tariff

6.3 The Transmission Tariff payable by the Beneficiaries of the Transmission System shall be designed to recover the Aggregate Revenue Requirement approved by the Commission for each year of the Control Period.

6.4 In addition to transmission tariff, charges for reactive energy as may be specified by the Commission in the MYT order shall also be payable by all the Beneficiaries of the system.

SLDC Charges

6.5 SLDC charges shall be payable by various utilities as may be determined by the Commission.

Annual Transmission Service Charge

6.6 The fixed cost of the transmission system shall be computed on annual basis, in accordance with norms contained in these regulations, aggregated as appropriate, and recovered on monthly basis as transmission charge from the users.

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

ARR x (NDM / NDY) x (TAFM / NATAF)

Where,

ARR = Aggregate Revenue Requirement specified for the year, in Rupees;

NATAF = Normative annual transmission availability factor, in per cent specified in clause 5.3(a) of these Regulations;

NDM = Number of days in the month;

NDY = Number of days in the year; and

TAFM = Transmission system availability factor for the month, in Percent, computed in accordance with Appendix –III to these Regulations.

6.8 The Transmission Licensee shall raise the bill for the transmission charge (inclusive of incentive) for a month based on its estimate of TAFM. Adjustments, if any, shall be made on the basis of the TAFM to be certified by the SLDC within 30 days from the last day of the relevant month.

Allocation of Transmission Service Charge

6.9 The Annual Transmission Service Charge (ATSC) shall be shared between the long and medium term customers of the transmission system on monthly basis based on the allotted transmission capacity or contracted capacity, as the case may be.

6.10 Transmission charges corresponding to any plant capacity for which a Beneficiary has not been identified and contracted shall be paid by the concerned generating company.

6.11 No distinction in charges shall exist in terms of long term, medium term or short term access to the intra-State Transmission System.

Provided that, the transactions for long term and medium term shall be denominated in Rs/kW/month or any suitable denomination as may be stipulated by the Commission.

6.12 For short term bilateral transactions and short term collective transactions through power exchanges, the transmission tariff shall be denominated in Rs/kWh/hr.

6.13 25% of the charges collected from the short term open access customer shall be retained by the transmission licensee and the balance 75% shall be considered as non-tariff income and adjusted towards reduction in the transmission service charges payable by the long term and medium term users.

6.14 Notwithstanding anything contained in these regulations, the Commission after conducting study and due regulatory process may notify the revised sharing and recovery of annual transmission service charge of the transmission licensee.

A7: MULTI YEAR TARIFF FILING PROCEDURE

7.1 The Multi Year Tariff filing shall be in such form and in such manner as may be decided by the Commission and as per the provisions of Conduct of Business Regulations.

7.2 The Transmission Licensee shall also submit the Multi Year Tariff filing in electronic format to the Commission.

Multi-Year Filings for the Control Period

Business Plan Filings

7.3 The Transmission Licensee shall file for the Commission's approval, on 1st April of the year preceding the first year of the Control Period or any other date as may be directed by the Commission, a Business Plan approved by the Board of Directors. The Business Plan shall be for the entire Control Period and shall, interalia, contain;

(a) Capital Investment Plan: This should be commensurate with load growth and quality improvement proposed in the Business Plan. The investment plan should also include corresponding capitalisation schedule and financing plan;

(b) The appropriate capital structure and cost of financing (interest on debt) and return on equity, terms of the existing loan agreements, etc;

(c) Operation and Maintenance (O&M) expenses: This shall include the costs estimated for the Base Year, the actual expenses incurred in the previous control period and the projected values for each year of the Control Period based on the proposed norms for O&M cost, including indexation and other appropriate mechanisms;

(d) Depreciation: Based on the fair life of the asset and capitalisation schedules for each year of the Control Period;

(e) Performance Targets: A set of targets proposed for controllable items such as Availability of transmission system, transformer failure rate, and any other parameters for quality of supply. The targets shall be consistent with the Capital Investment Plan proposed by the Transmission Licensee;

(f) Proposals for Non-Tariff Income with item-wise description and details;

(g) Proposals in respect of income from Other Business;

(h) Other Information: This shall include any other details considered appropriate by the Transmission Licensee for consideration during determination of tariff; and

(i) SLDC Charges.

Tariff Filing

7.4 The Transmission Licensee shall file an application for approval of Transmission Tariff for each year of the Control Period, not less than 120 days before the commencement of the first year of the Control Period or such other date as may be directed by the Commission.

7.5 The filings for Transmission Tariff shall contain the following:

(a) The Transmission System or network usage forecast for each year of the Control Period, consistent with the Business Plan;

(b) Proposals for transmission tariff design for each year of the Control Period, including the losses to be charged and the procedure thereof;

(c) Proposal for transmission tariff rate for the each year of the Control Period supported by adequate justification;

(d) Proposal for reactive energy charges;

(e) Proposal for SLDC charges; and

(f) Expected Revenue from the Licensed Business, Non-Tariff Income and income from Other Business and other matters considered appropriate by the Transmission Licensee.

7.6 The Transmission Licensee shall continue to provisionally bill beneficiaries with the tariff approved by the Commission and applicable as on 31.3.2012 for the period starting from 1.4.2012 till approval of tariff by the Commission in accordance these regulations:

Provided that where the tariff provisionally billed exceeds or falls short of the final tariff approved by the Commission under these regulations, the Transmission Licensee shall refund to or recover from the beneficiaries within six months along with simple interest at the rate equal to Base Rate of State Bank of India plus 150 basis points on the 1st April of the concerned/respective year.

Review during the Control Period

7.7 The Transmission Licensee shall submit information as part of annual review on actual performance to assess its performance vis-à-vis performance targets approved by the Commission at the beginning of the Control Period.

7.8 The Licensee shall submit the actual capital expenditure and capitalisation during the review period vis-à-vis capital investment plan (capital expenditure and capitalisation) approved by the Commission.

Review at the end of the Control Period

7.9 Towards the end of the Control Period, the Commission shall seek to review if the implementation of the principles laid down in these Regulations has achieved their intended objectives. While doing this, the Commission shall take into account, among other things, the industry structure, sector requirements, consumer and other stakeholder expectations and Licensee’s requirements at that point in time. Depending on the requirements of the sector to meet the objects of the Act, the Commission may revise the principles for the third Control Period.

7.10 The end of the second Control Period shall be the beginning of the third Control Period and the Licensee shall follow the same procedure unless required otherwise by the Commission. The Commission shall analyse the performance of the Licensee with respect to the targets set out at the beginning of the second Control Period and based on the actual performance, expected efficiency improvements and other factors prevalent, determine the initial values for the next Control Period.

7.11 The Commission shall carry out truing up exercise along with the tariff petition filed for the next Control Period, with respect to the capital expenditure incurred up to 31.3.2015, as admitted by the Commission after prudence check at the time of truing up.

7.12 The Transmission Licensee shall make an application in accordance with these regulations for carrying out truing up exercise by 31.10.2015;

7.13 The Transmission Licensee shall submit for the purpose of truing up, details of capital expenditure incurred for the period from 1.4.2012 to 31.3.2015, duly audited and certified by the auditors;

7.14 Where after the truing up the tariff recovered exceeds the tariff approved by the Commission under these regulations the Transmission Licensee shall refund to the beneficiaries excess amount so recovered along with simple interest at the rate equal to Base Rate of State Bank of India plus 150 basis points as on 1st April of the respective year.

7.15 Where after the truing up the tariff recovered is less than the tariff approved by the Commission under these regulations the Transmission Licensee shall recover from the beneficiaries under-recovered amount along with simple interest at the rate equal to the Base Rate of State Bank of India plus 150 basis points as on 1st April of the respective year.

7.16 The amount under-recovered or over-recovered, along with simple interest at the rate equal to the Base Rate of State Bank of India plus 150 basis points as on 1st April of the respective year, shall be recovered or refunded by the Transmission Licensee in six equal monthly installments starting within three months from the date of the tariff order issued by the Commission after the truing up exercise.

A8: DISPOSAL OF APPLICATION

8.1 The Commission shall process the filings made by the Transmission Licensee in accordance with these Regulations and the Conduct of Business Regulations.

8.2 Based on the Transmission Licensees' filings, objections/ suggestions from public and other stakeholders, the Commission may accept an application with such modifications and/or such conditions as may be deemed just and appropriate and issue, within 120 days of the receipt of the application and considering all suggestions and objections from public and other stakeholders, an Order containing inter alia targets for controllable items and the approved Aggregate Revenue Requirement for the Transmission Business for each year of the Control Period.

A9: PERIODIC REVIEWS

9.1 To ensure smooth implementation of the Multi Year Tariff (MYT) framework, the Commission may undertake periodic reviews of Transmission Licensees' performance during the Control Period, to address any practical issues, concerns or unexpected outcomes that may arise.

9.2 The Transmission Licensee shall submit information as part of annual performance review on actual performance to assess the performance vis-à-vis the targets approved by the Commission at the beginning of the Control Period. This shall include annual statements of its performance and and accounts including latest available audited accounts as well as the regulatory accounts in the prescribed formats and the tariff worked out in accordance with these Regulations.

9.3 During the Annual Performance Review, the Commission shall monitor the year wise progress of the actual capital expenditure incurred by the Licensee vis-à-vis the approved capital expenditure. The Transmission Licensee shall submit the actual capital expenditure incurred along with the Annual Performance Review Filing.

9.4 In case during the Annual Performance Review, the cumulative (up to the current year starting from first year of the control period) actual capital expenditure incurred is less than by 10% of the cumulative approved capital expenditure, the Commission shall true-up the costs incidental to the actual capital expenditure in the current year and remaining years of the control period.

9.5 The Commission may also direct any modifications to the forecast of the Transmission Licensee for the remainder of the Control Period, with detailed reasons for the same.

A10: MISCELLANEOUS

Issue of Orders and Practice Directions

10.1 Subject to the provision of the Act and these Regulations, the Commission may, from time to time, issue Orders and Practice directions in regard to the implementation of these Regulations and procedure to be followed on various matters, which the Commission has been empowered by these Regulations to direct, and matters incidental or ancillary thereto.

10.2 Notwithstanding anything contained in these Regulations, the Commission shall have the authority, either suo motu or on a petition filed by any interested or affected party, to determine the tariff of any Licensee.

Powers to remove difficulties

10.3 If any difficulty arises in giving effect to any of the provisions of these Regulations, the Commission may, by a general or special order, not being inconsistent with the provisions of these Regulations or the Act, do or undertake to do things or direct the Licensee to do or undertake such things which appear to be necessary or expedient for the purpose of removing the difficulties.

Power of Relaxation

10.4 The Commission may in public interest and for reasons to be recorded in writing, relax any of the provision of these Regulations.

Interpretation

10.5 If a question arises relating to the interpretation of any provision of these Regulations, the decision of the Commission shall be final.

Saving of Inherent Powers of the Commission

10.6 Nothing contained in these Regulations shall limit or otherwise affect the inherent powers of the Commission from adopting a procedure, which is at variance with any of the provisions of these Regulations, if the Commission, in view of the special circumstances of the matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient to depart from the procedure specified in these Regulations.

Enquiry and Investigation

10.7 All enquiries, investigations and adjudications under these Regulations shall be done by the Commission through the proceedings in accordance with the provisions of the Conduct of Business Regulations.

Power to Amend

10.8 The Commission, for reasons to be recorded in writing, may at any time vary, alter or modify any of the provision of these Regulations by amendment.

Appendix-I: Depreciation Schedule

S. No	Asset Particulars	Depreciation Rate (Salvage value=10%)
		SLM
A	Land owned under full ownership	0.00%
B	Land under lease	
(a)	For investment in land	3.34%
(b)	For cost of clearing site	3.34%
C	Assets Purchased New	
a.	PI & machinery in generating stations	
(i)	Hydro-electric	5.28%
(ii)	Steam-electric NHRB & Waste Heat Recovery Boilers	5.28%
(iii)	Diesel electric & gas plant	5.28%
b.	Cooling towers and circulating water systems	5.28%
c.	Hydraulic works forming part of hydro-electric system including:	
(i)	Dams, spillways weirs, canals, reinforced concrete flumes & syphons	5.28%
(ii)	Reinforced concrete pipelines and surge tanks, steel pipelines, sluice gates, steel surge (tanks) hydraulic control valves and hydraulic works	5.28%
d.	Building & civil engineering works of a permanent character, not mentioned above:	
(i)	Offices & showrooms	3.34%
(ii)	Containing thermo-electric generating plant	3.34%
(iii)	Containing hydro-electric generating plant	3.34%
(iv)	Temporary erection such as wooden structures	100.00%
(v)	Roads other than kutcha roads	3.34%
(vi)	Others	3.34%
e.	Transformers, kiosk sub-station equipment & other fixed apparatus (including plant foundations)	
(i)	Transformers (including foundations) having a rating of 100 kilo volt amperes and over	5.28%
(ii)	Others	5.28%
f.	Switchgear, including cable connections	5.28%

S. No	Asset Particulars	Depreciation Rate (Salvage value=10%)
g.	Lightning arrestors:	
(i)	Station type	5.28%
(ii)	Pole type	5.28%
(iii)	Synchronous condenser	5.28%
h.	Batteries	5.28%
(i)	Underground cable including joint boxes and disconnected boxes	5.28%
(ii)	Cable duct system	5.28%
i.	Overhead lines including cable support	
(i)	Lines on fabricated steel operating at terminals voltages higher than 66 kV	5.28%
(ii)	Lines on steel supports operating at terminal voltages higher than 13.2 kV but not exceeding 66 kV	5.28%
(iii)	Lines on steel or reinforced concrete supports	5.28%
(iv)	Lines on treated wood supports	5.28%
j.	Meters	5.28%
k.	Self propelled vehicles	9.50%
l.	Air conditioning plants:	
(i)	Static	5.28%
(ii)	Portable	9.50%
m.		
(i)	Office furniture and furnishings	6.33%
(ii)	Office equipments	6.33%
(iii)	Internal wirings including fittings and apparatus	6.33%
(iv)	Street Light fittings	5.28%
n.	Apparatus let on hire:	
(i)	Other than motors	9.50%
(ii)	Motors	6.33%
o.	Communication equipment	
(i)	Radio and higher frequency carrier systems	6.33%

S. No	Asset Particulars	Depreciation Rate (Salvage value=10%)
(ii)	Telephone lines and telephones	6.33%
p.	IT Equipments	15.00%
q.	Any other assets not covered above	5.28%

Appendix-II: Timeline for completion of Projects

1. The completion time schedule shall be reckoned from the date of investment approval by the Board (of the Transmission Licensee), up to the Date of Commercial Operation of the Units or block or elements of transmission project.

2. The time schedule has been indicated in months in the following paragraphs and tables:

S. No.	Transmission work	Plain area (months)	Hilly Terrain (months)
1	765 kV S/C Transmission line	30	**36**
2	+/- 500 kV HVDC Transmission line	24	**30**
3	400 KV D/C Quad Transmission line	32	**38**
4	400 KV D/C Triple Transmission line	30	**36**
5	400 KV D/C Twin Transmission line	28	**34**
6	400 KV S/C Twin Transmission line	24	**30**
7	220 KV D/C Twin Transmission line	28	**34**
8	220 KV D/C Transmission line	24	**30**
9	220 KV S/C Transmission line	20	**26**
10	New 220 KV AC Sub-Station	18	**21**
11	New 400 KV AC Sub-Station	24	**27**
12	**New 765 KV AC Sub-Station**	**30**	**34**

Notes:

(i). In case a scheme having combination of the above mentioned types of Projects, the qualifying time schedule of the activity having maximum time period shall be considered for the scheme as a whole.

(ii). In case a transmission line falls in plain as well as hilly terrain/ very difficult terrain, the composite qualifying time schedule shall be calculated giving proportional weightage to the line length falling in each area.

Appendix-III: Procedure for Calculation of Transmission System Availability Factor for a Month

1. Transmission system Availability factor for a calendar month (TAFM) shall be calculated by the respective Transmission Licensee, got verified and certified by the SLDC and separately for each AC transmission system and grouped according to sharing of transmission charges.

2. TAFM, in percent, shall be equal to (100 – 100 x NAFM), where NAFM is the non-availability factor in per unit for the month, for the transmission system / subsystem.

3. NAFM for A.C. systems / sub-systems shall be calculated as follows :

$$NAFM = \left[\sum_{l=1}^{L} (OH_l \times Ckt.\,km_l \times NSC_l) + \sum_{t=1}^{T} (OH_t \times MVA_t \times 2.5) + \sum_{r=1}^{R} (OH_r \times MVAR_r \times 4)\right] / THM \times \left[\sum_{l=1}^{L} (Ckt.\,km_l \times NSC_l) + \sum_{t=1}^{T} (MVA_t \times 2.5) + \sum_{r=1}^{R} (MVAR_r \times 4)\right]$$

Where,

l identifies a transmission line circuit;

t identifies a transformer / Inter connecting transformer (ICT);

r identifies a bus reactor, switchable line reactor or Static VAR Compensation(SVC);

L = total number of line circuits;

T = total number of transformers and ICTs;

R = total number of bus reactors, switchable line reactors and SVCs;

OH = Outage hours or hours of non-availability in the month, excluding the duration of outages not attributable to the Transmission Licensee, if any, as per clause 5;

Ckt. km = Length of a transmission line circuit in km;

NSC = Number of sub-conductors per phase;

MVA = MVA rating of a transformer / ICT;

MVAR = MVAR rating of a bus reactor, switchable line reactor or an SVC (in which case it would be the sum of inductive and capacitive capabilities);

THM = Total hours in the month;

4. The transmission elements under outage due to following reasons shall be deemed to be available:

    (a) Shut down availed for maintenance or construction of elements of another transmission scheme. If the other transmission scheme belongs to the Transmission Licensee, the SLDC may restrict the deemed availability period to that considered reasonable by him for the work involved.

    (b) Switching off of a transmission line to restrict over voltage and manual tripping of switched reactors as per the directions of SLDC.

5. Outage time of transmission elements for the following contingencies shall be excluded from the total time of the element under period of consideration.

    (a) Outage of elements due to acts of God and force majeure events beyond the control of the Transmission Licensee. However, onus of satisfying the SLDC that element outage was due to aforesaid events and not due to design failure shall rest with the Transmission Licensee. A reasonable restoration time for the element shall be considered by SLDC and any additional time taken by the Transmission Licensee for restoration of the element beyond the reasonable time shall be treated as outage time attributable to the Transmission Licensee. SLDC may consult the Transmission Licensee or any expert for estimation of reasonable restoration time. Circuits restored through ERS (Emergency Restoration System) shall be considered as available.

    (b) Outage caused by grid incident/disturbance not attributable to the Transmission Licensee, e.g. faults in substation or bays owned by other agency causing outage of the Transmission Licensee's elements, and tripping of lines, ICTs, etc. due to grid disturbance. However, if the element is not restored on receipt of direction from SLDC while normalizing the system following grid incident/disturbance within reasonable time, the element shall be considered not available for the period of outage after issuance of SLDC's direction for restoration.