

**HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION
SHIMLA**

NOTIFICATION

Shimla, the 10th October, 2007

No.HPERC/MYT/476--In exercise of powers conferred by clauses (g), (zd), (ze) and (zf) of sub section (2) of section 181 read with Sections 32, 61, 62 and 86, of the Electricity Act 2003 (36 of 2003) and all powers enabling it in that behalf, the Himachal Pradesh Electricity Regulatory Commission, after previous publication, hereby makes the following regulations namely: -

REGULATIONS

PART-I

PRELIMINARY

1. Short Title and Commencement

- (1) These regulations shall be called the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2007.
- (2) These regulations shall come into force from the date of their publication in the Rajpatra Himachal Pradesh.

2. Scope and Extent of Application

- (1) These regulations shall be applicable where the capital cost based tariff is determined by the Commission.
- (2) Where tariff has been determined through the transparent process of bidding in accordance with the guidelines issued by the Central Government, the Commission shall adopt such tariff in accordance with the provisions of the Act.
- (3) These regulations shall extend to the whole of the State of Himachal Pradesh.

3. Definitions and interpretation

- (1) In these regulations, unless the context otherwise requires, -
 - (a) “**Act**” means the Electricity Act, 2003 (36 of 2003);

- (b) “**Aggregate Revenue Requirement**” or “ARR” means the costs pertaining to the licensed business which are permitted, in accordance with these regulations, to be recovered from the tariffs and charges determined by the Commission;
- (c) “**Allotted Transmission Capacity**” means and includes 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 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 expression "allotment of capacity" shall be construed accordingly;
- (d) “**Allocation Statement**” means for each financial year, a statement in respect of each of the businesses (transmission and SLDC business) of the licensee, showing the amounts of any revenue, cost, asset, liability, reserve or provision etc, which has been either, -
 - (i) determined by apportionment or allocation between different businesses of the licensee including the licensed business, together with a description of the basis of the apportionment or allocation; or
 - (ii) charged from or to each such other business together with a description of the basis of that charge;
- (e) “**Appendix**” means the appendix of these regulations;
- (f) “**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;
- (g) “**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;
- (h) “**Base Year**” means the financial year immediately preceding first year of the control period and used for the purposes of these regulations;
- (i) “**Beneficiary**” 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 will be required to enter into a transmission services agreement (TSA) with the transmission licensee;
- (j) “**CERC**” means the Central Electricity Regulatory Commission;

Transmission Tariff Regulations

- (k) “**Commission**” means the Himachal Pradesh Electricity Regulatory Commission;
- (l) “**Conduct of Business Regulations**” means the Himachal Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations, 2005;
- (m) “**Control Period**” means a multi-year period fixed, by the Commission, from time to time, usually 5 years for which the principles of determination of revenue requirement and tariff will be fixed. However, the first control period shall be of the duration of 3 years;
- (n) “**Date of Commercial Operation**” (COD) means the date of charging the transmission system or part thereof to its rated voltage level, which shall be certified by the SLDC;
- (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) “**Financial Year**” means a period commencing on 1st April of a calendar year and ending on 31st March of the subsequent calendar year;
- (q) “**Licence**” means a licence granted by the Commission under Section 14 of the Act;
- (r) “**Licensed Business**” means the functions and activities, which the licensee is required to undertake in terms of the licence granted by the Commission or as a deemed licensee under the Act;
- (s) “**Licensee**” means a person who has been granted a licence and shall include a deemed licensee;
- (t) “**Long Term Transmission Customer**” means a person availing or intending to avail access to the intra-State transmission system for a period of twenty five years or more;
- (u) “**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;
- (v) “**Other Business**” means any business of the transmission licensee other than the licensed business;
- (w) “**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 long-term transmission customers;

- (x) **“State Load Despatch Centre”** or **“SLDC”** means the centre established by the State Government for the purposes of exercising the powers and discharging the functions under section 31 of the Act;
 - (y) **“State”** means the State of Himachal Pradesh;
 - (z) **“Transmission Business”** means the authorised business of a transmission licensee to transmit electricity, whether for its own account or for that of any other person, through any system owned and/ or operated by such licensee;
 - (aa) **“Transmission Licensee”** means the entity, which has been granted a transmission licence or is a deemed licensee under the first, second, third or fifth provisos to section 14 of the Act;
 - (bb) **“Transmission Service Agreement”** means and includes the agreement, contract, memorandum of understanding, or any such other covenants, entered into between the transmission licensee and the beneficiaries;
 - (cc) **“Transmission System”** means the system consisting mainly of extra high voltage electric lines having design voltage of above 33 kV, owned or controlled by the transmission licensee, and used for the purposes of the conveyance of electricity between the switchyards of two generating sets or from the switchyard of a generating set to a substation, or between substations, or to or from any external interconnection and includes all bays/equipment upto 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;
 - (dd) **“User”** means the distribution licensee or open access customer, as the case may be, who uses the intra-State transmission network for the purpose of selling/procuring electricity.
- (2) The words and expressions used respectively and not defined in these regulations but defined in the Act shall have the meanings respectively assigned to them in the Act.

PART-II

GUIDING PRINCIPLES

4. General Approach

- (1) Subject to the provisions of the Act and the rules and policies made thereunder, these regulations shall be applicable to all cases of determination of transmission tariff under section 62 of the Act, but shall, however, not apply to the cases 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.

- (2) In accordance with the principles laid in these regulations, the Commission shall determine the aggregate revenue requirement (ARR) for the transmission business.
- (3) Tariff determined by the Commission and the directions given in the tariff order made by the Commission shall be the quid pro quo and mutually inclusive. The tariff determined shall, within the period specified by it, be subject to the compliance of the directions to the satisfaction of the Commission and their non-compliance shall lead to such amendment, revocation, variation and alteration of the tariff, as may be ordered by the Commission.
- (4) The tariff order shall, unless amended or revoked, continue to be in force for such period as may be specified in the tariff order. In the event of failure on the part of the licensee to file the aggregate revenue requirement (ARR) under Part-VI, the tariff determined by the Commission shall cease to operate, unless allowed to be continued for a further period with such variations, or modifications, as may be ordered by the Commission.

5. Multi Year Tariff (MYT) Framework

- (1) The Commission shall adopt multi year tariff framework for approval of ARR and expected revenue from tariffs and charges. The ARR and tariffs will be determined for the control period.
- (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 beginning 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** will be conducted vis-à-vis the approved forecast.

6. Segregation of Transmission Business and SLDC Activity

- (1) The transmission licensee shall segregate its business into transmission business and SLDC activity. The transmission business revenue requirement shall be used for determining non-discriminatory transmission charges.
- (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.

7. Determination of Baseline

The baseline values (operating and cost parameters) for the control period shall be determined by the Commission and would be based on the latest audited accounts, last approved values by the Commission, estimate of the actuals for the relevant year, prudence check and other factors considered appropriate by the Commission.

8. Targets for Controllable Parameters

- (1) The Commission will set targets for the items or parameters that are deemed to be “controllable” and which will include -
 - (a) **Transmission loss** which is defined as difference between total energy input to the transmission system and the total energy output at its distribution interfaces;
 - (b) **Availability of the transmission system;**
 - (c) **Operation and Maintenance Expenses** which includes employee expenses, repairs and maintenance expenses, administration and general expenses and other miscellaneous expenses viz. audit fees, rents, legal fees etc;
 - (d) **Financing cost** which includes cost of debt including working capital (interest), cost of equity (return);
 - (e) **Depreciation.**
- (2) The Commission will normally not revisit the performance targets, once determined even if the targets are fixed on the basis of un-audited accounts.

9. True Up

- (1) The true up across various controllable parameters shall be conducted as per principles stated below: -
 - (a) any surplus and deficit on account of O&M expenses shall be to the account of the transmission licensee and shall not be trued up in ARR; and

- (b) at the end of the control period –
 - i. the Commission shall review actual capital investment vis-à-vis approved capital investment.
 - ii. depreciation and financing cost, which includes cost of debt including working capital (interest), cost of equity (return) shall be trued up on the basis of actual/audited information and prudence check by the Commission.
- (2) Notwithstanding anything contained in these regulations, the gains or losses in the controllable items of ARR on account of *force majeure* factors shall be passed on as an additional charge or rebate in ARR over such period as may be laid down in the order of the Commission.

10. Operational Norms

The Commission shall lay down 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 shall cover, among others, -

- (a) **Transmission System Availability:** The target availability for recovery of full transmission charges shall be: -
 - (i) the alternating current (AC) System: 98%;
 - (ii) the high voltage direct current (HVDC) bi-pole links and the high voltage direct current (HVDC) back-to-back stations: 95% :

Provided that recovery of fixed charges below the level of target availability shall be on pro rata basis. At zero availability, no transmission charges shall be payable;

Provided further that actual availability shall be calculated in accordance with the procedure laid down in appendix I to these regulations.

- (b) **Transmission Loss - Range of transmission losses (upper and lower) for each year of the control period for the purpose of incentive/penalties.** The transmission losses below the approved range shall earn an incentive and such incentive shall be added to the ARR relating to subsequent control period. Similarly increase in the actual transmission losses beyond the approved range shall attract a penalty and such penalty shall be deducted from the ARR relating to subsequent control period.

PART-III

PRINCIPLES FOR DETERMINATION OF AGGREGATE REVENUE REQUIREMENT (ARR)

11. ARR for Transmission Licensee

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) financing cost which includes cost of debt including working capital (interest), cost of equity (return);
- (c) depreciation;
- (d) income tax;
- (e) non-tariff income ; and
- (f) income from other business.

12. Operation and Maintenance (O&M) Expenses

- (1) Operation and Maintenance (O&M) expenses shall comprise of the following:
 - (a) salaries, wages, pension contribution and other employee costs;
 - (b) administrative and general expenses;
 - (c) repairs and maintenance expenses;
 - (d) other miscellaneous expenses, statutory levies and taxes (except corporate income tax).
- (2) The transmission licensee shall submit the O&M expenses for the control period as laid down in the multi year tariff filing procedure. The O&M expenses for the base year will be approved by the Commission taking into account the latest available audited accounts, business plan filed by the transmission licensee, estimates of the actuals for the base year, prudence check and any other factors considered appropriate by the Commission.

Transmission Tariff Regulations

- (3) The O&M expenses for the n^{th} year of the control period shall be approved based on the formula given below: -

$$\text{O\&M}_n = (\text{R\&M}_n + \text{EMP}_n + \text{A\&G}_n) * (1 - X_n)$$

Where -

(a) $\text{R\&M}_n = K * \text{GFAn-1}$ and;

(b) $\text{EMP}_n + \text{A\&G}_n = (\text{EMP}_{n-1} + \text{A\&G}_{n-1}) * (\text{INDX}_n / \text{INDX}_{n-1})$

Where -

‘K’ is a constant (could be expressed in %) governing the relationship between O&M costs and gross fixed assets (GFA) for the n^{th} year. The value of K shall be given in the MYT order of the Commission;

INDX_n – inflation factor to be used for indexing and shall be taken as a combination of the consumer price index (CPI), the wholesale price index (WPI) and any other relevant factor;

EMP_n – employee costs of the transmission licensee for the n^{th} year;

A\&G_n – administrative and general costs of the transmission licensee for the n^{th} year;

R\&M_n – repair and maintenance costs of the transmission licensee for the n^{th} year;

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 filings, benchmarking, approved cost by the Commission in past and any other factors that the Commission feels appropriate.

13. Asset Base

- (1) The Commission shall determine the asset base for each year of the control period at the beginning of the control period, which shall be -

Sum of:

The asset base of the base year as determined by the Commission considering the most recent audited accounts, estimates of actuals during the base year checked for prudence and any other factors considered appropriate by the Commission, and

Proposed capitalisation during the year, checked for prudence covering-

- (a) schemes for which Commission's approval has been granted,
- (b) schemes which have been submitted for Commission's approval, and
- (c) schemes not requiring Commission's approval.

Less:

Assets proposed to be retired during the year.

- (2) The interest on loan capital and return on equity shall be computed on the financing of the cost of the schemes included in the asset base.

14. Debt-equity ratio

For the purpose of determination of tariff, the equity and outstanding debt as determined for the base year by the Commission shall be considered as given. However, for any fresh capitalization of assets, the Commission shall apply a debt-equity ratio of 70:30 on the capitalized amount as approved by the Commission for each year of the control period:

Provided that 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 loan. The interest rate applicable on the equity in excess of 30% treated as loan has been specified in regulation 16. Where actual equity employed is less than 30%, the actual equity shall be considered.

15. Return on Equity

- (1) Return on equity shall be computed on the paid up equity capital determined in accordance with regulation 14 and shall be 14% per annum (post tax) :

Provided that return on equity invested in work in progress shall be allowed from the date of capitalization.

- (2) The premium raised by the licensee while issuing share capital and investment of internal resources created out of free reserve, if any, shall also be reckoned as equity for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting capital expenditure. For the purposes of calculation of computation of return, the portion of free reserves utilized for meeting the capital expenditure shall be considered from the date the asset created is productively deployed in the transmission business.
- (3) Equity invested in foreign currency shall be allowed a return upto 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.

16. Interest and Finance Charges

- (1) Interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the schedule of repayment, and the interest rate, in accordance with the terms and conditions of relevant agreements of loan, bond or non-convertible debentures. Exception can be made for the existing or past loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable and approved projects. For the purpose of tariff determination, the outstanding debt at the end of each year of the control period shall be taken as: -

Outstanding debt at the end of n^{th} year = Outstanding debt at the end of $(n-1)^{\text{th}}$ year + (plus) sum of amount of debt related to assets capitalized under each investment scheme during n^{th} year – (minus) debt repaid during n^{th} year;

For the first year of the control period, $(n-1)^{\text{th}}$ year shall be the base year;

Amount of debt related to assets capitalized under an investment scheme during n^{th} year = (70% or actual, whichever is higher) X (multiply) (amount of capitalisation approved by the Commission for such scheme in n^{th} year);

Provided that all loans considered for this purpose shall be identified with the assets created:

Provided further that the interest and finance charges of re-negotiated loan agreements shall not be considered, if they result in higher charges:

Provided further that the interest and finance charges on works in progress shall be excluded and shall be considered as part of the capital cost:

Provided further that neither penal interest nor overdue interest shall be allowed for computation of aggregate revenue requirement.

- (2) 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 respective years and shall be further limited to the rate of return on equity specified in these regulations.
- (3) In case any moratorium period is availed of in any loan, 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.
- (4) The transmission licensee shall make every effort to refinancing the loan as long as it results in net benefit to the consumers. The cost associated with such refinancing shall be borne by the beneficiaries and any benefit on account of refinancing of loan and interest on loan shall be shared equally between the beneficiaries and the licensee. The licensee shall submit the calculation of such benefit to the Commission for its approval.

- (5) In respect of foreign currency loans, variation in rupee liability due to foreign exchange rate variation, towards interest payment and loan repayment actually incurred, in the relevant year shall be admissible; provided it directly arises out of such foreign exchange rate variation and is not attributable to the licensee or its suppliers or contractors.

17. Working Capital

The Commission shall calculate the working capital requirement for the transmission licensee containing the following components: -

- (a) O&M expenses for one month;
- (b) Maintenance spares @ 25% of the R&M expenses for one month; and
- (c) receivables for two months based on the projected annual transmission charges.

18. Interest Charges on Working Capital

Rate of interest on working capital to be computed as provided hereinafter in these regulations shall be on normative basis and shall be equal to the short-term prime lending rate of the State Bank of India as on April 1 of the relevant year. The interest on working capital shall be payable on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures.

19. Depreciation

- (1) Depreciation shall be calculated for each year of the control period, on the amount of original cost of the fixed assets of the corresponding year:

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

- (2) Depreciation for each year of the control period shall be determined based on the methodology as specified in these regulations alongwith the rates and other terms specified in appendix IV of these regulations.
- (3) Depreciation shall be calculated annually, based on the straight line method, over the useful life of the asset. The value base for the purpose of depreciation shall be 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.
- (4) 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.

Transmission Tariff Regulations

- (5) Depreciation shall be charged from the first year of operation of the asset. In case, the operation of the asset is for the part of the year, depreciation shall be charged on a pro rata basis.
- (6) In addition to allowable depreciation, the transmission licensee shall be entitled to advance against depreciation (AAD), computed in the manner given hereunder: -

AAD = Loan (raised for capital expenditure) repayment amount based on loan repayment tenure, subject to a ceiling of 1/10th of loan amount minus depreciation as calculated on the basis of these regulations:

Provided that advance against depreciation shall be permitted only if the cumulative repayment upto a particular year exceeds the cumulative depreciation upto 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 upto that year.

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

20. Corporate Income Tax

- (1) Income tax, if any, on the licenced business of the transmission licensee shall be treated as expense and shall be recoverable from its beneficiaries. However, tax on any income other than that through its licensed business shall not be a pass through, and it shall be payable by the transmission licensee itself.
- (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:

Provided further that the benefits of tax-holiday as applicable in accordance with the provisions of the Income Tax Act, 1961 shall be passed on to the beneficiaries;

- (3) The income tax actually payable or paid shall be included in the tariff computation. The actual assessment of income tax should take into account benefits of tax holiday, and the credit for carry forward losses applicable as per the provisions of the Income Tax Act, 1961 shall be passed on to the beneficiaries.
- (4) Tax on income, if any, liable to be paid shall be limited to tax on return on equity. However, any tax liability on incentives due to improved performance shall not be considered.

21. Recovery of Corporate Income Tax

Recovery of income tax shall be done directly by the transmission licensee 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, the beneficiaries shall make the payments and can make an appropriate application before the Commission for its decision.

22. Non-Tariff Income

- (1) 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, income from investments, miscellaneous receipts from the beneficiaries excluding income to licensed business from the other business of the transmission licensee shall constitute non-tariff income of the licensee.
- (2) The amount projected by the licensee on account of non-tariff income shall be deducted from the aggregate revenue requirement in calculating the net revenue requirement of the licensee.

23. Other Income of the Transmission Licensee

Where the transmission licensee is engaged in any other business, the income from such business will be calculated in accordance with the Himachal Pradesh Electricity Regulatory Commission (Treatment of Income of Other Businesses of Transmission Licensees and Distribution Licensees) Regulations, 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 alongwith his application for determination of tariff:

Provided further that where the sum total of the direct and indirect costs of such other business exceeds 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.

24. Refund of excess amount

The licensee shall recover the charges as determined by the Commission. Where any licensee recovers charges exceeding those determined by the Commission, the excess amount shall be refunded to the person who has paid such excess charges, along with interest equal to the prevalent short term prime lending rate of the State Bank of India without prejudice to any other liability incurred by such licensee.

25. Incentive

- (1) The transmission licensee shall be entitled to incentive on achieving annual availability beyond the target availability, in accordance with the following formula: -

$$Incentive = TSC * \frac{[AA - TA]}{[TA]}$$

Where -

TSC is the annual transmission charge;

TA is the as target transmission system availability (in percent) as defined in regulation 10;

AA is the actual annual availability (in percentage) of the transmission system of the transmission licensee:

Provided that no incentive shall be payable above the availability of 99.75% for alternating current (AC) system and 98.5% for high voltage direct current (HVDC) system.

- (2) Incentive amount worked out from above in a year shall be added to the ARR of the following year and shall be spread over the beneficiaries in the ratio of their allotted transmission capacity for the year.

26. Late Payment Surcharge

In case the payment of bills of transmission charges is delayed beyond a period of one month from the date of billing, the transmission licensee may levy a late payment surcharge at the rate of 1.25% per month.

27. Rebate

For payment of bills of transmission charges 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.

28. Quality of Supply

- (1) 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.
- (2) The transmission licensee in its business plan filings shall submit and propose the trajectory for the achievement of quality targets. The Commission will lay down the targets for each parameter in the MYT order. The transmission licensee shall submit its performance on each parameter in the form and manner laid down by the Commission.

29. Safety Standards

The transmission licensee shall develop a safety manual and follow procedures to maintain atleast minimum safety standards during construction, operation, etc. in line with provisions of section 53 of the Act.

PART-IV

PRINCIPLES FOR DETERMINATION OF TRANSMISSION TARIFF / CHARGES

30. Separation of Transmission and SLDC functions

The State Transmission Utility (STU) 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 State Transmission Utility (STU) 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 State Transmission Utility (STU), shall be accompanied with an explanation of the methodology for apportionment, which should be consistent over the control period.

31. Transmission Tariff / Charges

- (1) The transmission charges payable by the beneficiaries of the transmission system shall be designed to recover the aggregate revenue requirement computed as annual transmission charges by the Commission for each year of the control period.
- (2) In addition to transmission charges, charges for reactive energy, as may be determined by the Commission in the MYT order, shall also be payable by all the beneficiaries of the system.

32. Allocation of Transmission Charges

- (1) The annual transmission charges (TSC) shall be shared by all beneficiaries of the transmission system on monthly basis based on the contracted transmission capacity.
- (2) The transmission charges payable by the beneficiaries shall be determined in accordance with the following formula: -

$$MLTC = \{[(Net\ ARR\ of\ the\ transmission\ licensee/12) - 0.75 * STI - ITFI] / TCL_LT\} * CL$$

Where -

“MLTC” means monthly long-term transmission charge in Rs./month;

“Net ARR” means net aggregate revenue requirement as determined in Part-III;

“STI” means income from short-term open access customers of the transmission network, for the month, determined under sub-regulation (3);

“ITFI” means income from provision for intervening transmission facilities, for the month, determined under regulation 33;

“CL” means contracted capacity of the transmission system by the long-term transmission customer or long term open access customer as the case may be;

“TCL_LT” means total contracted capacity of the transmission system by all long-term transmission customers and long term open access customers:

Provided that wherever it is necessary and expedient to incentivise the open access, the Commission may, by order, cap the transmission charges calculated under this sub-regulation.

Transmission Tariff Regulations

- (3) In the case of short term open access customers, charges payable shall be calculated in accordance to following methodology: -

$$ST_RATE = 0.25 \times [TSC / Av_CAP] / 365;$$

Where -

ST_RATE is the rate for short-term open access customer in Rs per MW per day;

TSC is annual transmission charge;

Av_CAP means the average capacity in MW served by the transmission system of the transmission licensee in the last financial year and shall be the sum of the generating capacities connected to the transmission system and contracted capacities of other transactions handled by the system of the transmission licensee;

- (4) The transmission charges payable by a short-term customer in case of uncongested transmission corridor shall be levied as under, namely: -

Upto 6 hours in a day in one block = 1/4th of ST_RATE;

More than 6 hours and upto 12 hours in a day in one block = 1/2 of ST_RATE;

More than 12 hours and upto 24 hours in a day in one block = ST_RATE.

- (5) 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 beneficiaries.

33. Charges for intervening transmission facilities

- (1) The rates and charges for intervening transmission facilities, if any, provided by the licensee shall be as mutually agreed upon between the licensee and the users of such facilities:

Provided that the rates and charges agreed upon shall be fair and reasonable and may be allocated in proportion to the use of the transmission facilities.

- (2) Mutual agreement on these matters would be in the best interest of the parties. In case, such agreement cannot be reached within a reasonable period of time, either party shall be entitled to approach the Commission for determination under the proviso to sub-section (1) of section 36 of the Act and the Commission would expect evidence that negotiations were held in good faith and all reasonable efforts were made to arrive at a mutual agreement.

- (3) The parties shall be at liberty to approach the Commission in case of any dispute regarding the extent of surplus capacity available, as provided for in section 35 of the Act.
- (4) An application shall be made to the Commission for an order requiring any other licensee owning or operating intervening transmission facilities to provide their use to the extent of surplus capacity available with it.
- (5) After an order is passed under sub-regulation (4), read with section 35 of the act, the concerned licensee shall provide his intervening transmission facilities at rates, charges and on terms and conditions as may be mutually agreed upon, under section 36 of the Act.

PART-V

STATE LOAD DESPATCH CENTRE (SLDC) FEES AND CHARGES

34. Annual Fee and Operating Charges

- (1) Users shall pay to State Load Despatch Centre (SLDC) an annual fee and monthly operation charges leviable on the electricity transmitted, in MWs (mega-watts), subject to the charges for a minimum of one MW:

Provided that for the purpose of billing and collection the above-mentioned fee and charges, a fraction of a MW shall be treated as one full MW:

Provided further that the operating charges shall be leviable for a minimum period of one month, a fraction of a month being rounded off to a full month.

- (2) The basis for determination of the annual fee shall be the capital cost to cover the repayment of principal and payment of interest on investments in a year, plus any residual capital cost of past investments.
- (3) The fee will be revised only on the basis of a filing made to the Commission by State Load Despatch Centre (SLDC) to cover any investments for up gradation and/or modernization of State Load Despatch Centre (SLDC) that may be required.
- (4) The annual fee shall be computed as follows:

$$\text{Annual SLDC Fee (Rs/MW/per annum)} = \frac{\text{Capital cost (in Rs)}}{\text{Total Contracted Capacity}}$$

Transmission Tariff Regulations

Where -

Capital cost for a given year shall be computed as follows: -

$$\text{Capital cost (in Rs.)} = \text{Investment} \times \frac{r}{1 - \frac{1}{(1+r)^t}}$$

Where -

Investment = Actual investment made in an year plus any residual value of previous investment (s);

r = Actual rate of interest on borrowed capital;

t = Number of years in which the investment is proposed to be recovered; for software, it would be 5 years and 10 years for other investments.

Total contracted capacity = means contracted capacity of all long-term transmission customers and long term open access customers.

- (5) The operating charges shall be fixed year-wise on the basis of the annual operating charges of the State Load Despatch Centre (SLDC), which shall be arrived at in accordance with the aggregate revenue requirement (other than interest and finance charges, loan repayment) calculations detailed in regulation 11.
- (6) Annual operating charges will include O&M expenses and any other expenses which have not been covered under capital cost and O&M expenses.
- (7) The monthly operating charges per MW shall be computed as per following formula: -

$$\text{Operating charges (Rs/MW/per month)} = \frac{\text{Annual Operating Charges}}{\text{Total Contracted Capacity (MW)} \times 12}$$

- (8) Variations in recovery of capital cost and operating charges over the fee and charges fixed for control period year on account of variations in State Load Despatch Centre (SLDC) usage shall be adjusted in the subsequent control period, or earlier in case the variations are considered to be significant by the Commission warranting adjustment thereof before the commencement of the subsequent control period, with financing cost at the average rate(s) of borrowing during the year(s) to which the variations relate.

35. Application for connection to State Grid

- (1) The generating companies and licensees engaged in intra-State transmission of electricity, intending to get connected to the state grid, shall submit an application to the State Load Despatch Centre (SLDC) in the specified format given in annexure-V at least one month before the proposed date of connection to the State Grid, alongwith a fee of Rs. one lakh.
- (2) The State Load Despatch Centre (SLDC), after scrutinising the application and after being satisfied of the completeness and correctness of the information furnished in the application, shall register the application in the State Load Despatch Centre (SLDC) records duly intimating the applicant regarding the acceptance and file a copy with the Commission. The State Load Despatch Centre (SLDC) shall file information about the generating companies and licensees engaged in the intra-State transmission of electricity connected to the State Grid and being monitored/ serviced by them, to the Commission every year by the 15th November.

36. Levy and Collection of SLDC Fee and Charges

- (1) The State Load Despatch Centre (SLDC) charges (Annual Fee and Operating charges) shall be payable by the generating companies (including captive generating plants), distribution licensees and trading licensees using the intra-State transmission network under any agreement or arrangement with the transmission licensee in proportion to the capacity contracted.
- (2) **Fees:** The annual fee as specified by the Commission shall be paid by all Users in advance in two equal instalments, by the 10th of April and the 10th of October of every financial year:

Provided that in case where the usage of intra-State transmission system commences after the 10th of April or the 10th October of a year, the fee for the period upto the 30th September of the year and the 31st March of the subsequent year respectively shall be required to be paid before the commencement of intra-State transmission.

- (3) **Operating charges:** The operating charges of State Load Despatch Centre (SLDC) shall be paid monthly.
- (4) If the fee and charges as the case may be are not paid by the due date(s), surcharge at the rate of 1.25 percent per month shall be levied on the unpaid amounts.
- (5) An amount equivalent to two months' operating charges shall have to be deposited in advance by every User as security against default in payment of operating charges

- (6) The short-term open access customer shall also pay to the State Load Despatch Centre (SLDC) the operating charges as per the provisions of the Himachal Pradesh Regulatory Commission (Terms and Conditions for Open Access) Regulations, 2005.
- (7) Disputes arising out of delay/ non-payment of the State Load Despatch Centre (SLDC) Charges shall be, as far as possible, settled by mutual negotiations. If the disputes are not resolved through mutual negotiations within ninety days, the matter shall be referred to the Commission through a petition by either of the parties. The decision of the Commission shall be binding on both the parties.

37. Compliance with the directions by Transmission Licensee

- (1) Subject to the directions issued by the National Load Despatch Centre or the Regional Load Despatch Centre, the State Load Despatch Centre (SLDC) may, under sub-section (2) of section 32 and sub-section (1) of section 33, read with clause (b) of section 40 of the Act, give such directions as it may consider appropriate, for maintaining the availability of the transmission system and the transmission licensee shall duly comply with all such directions.
- (2) The Commission, on an application filed by the State Load Despatch Centre (SLDC) and after hearing the transmission licensee, if satisfied that the transmission licensee has persistently failed to maintain the availability of the transmission system, may issue such directions to the State Load Despatch Centre (SLDC) to take control of the operations of the transmission system of such transmission licensee, for such period and on such terms, as the Commission may decide.
- (3) The directions under sub-regulations (1) and (2) shall be without prejudice to any action which may be taken against the transmission licensee under other provisions of the Act.

PART-VI

MULTI YEAR TARIFF FILING PROCEDURE

38. Multi-Year Filings for the Control Period

- (1) The multi year tariff filing shall be in such form and in such manner as may be specified by the Commission in these regulations and also as per the provisions of the conduct of business regulations.
- (2) The transmission licensee shall also submit the multi year tariff filing in electronic format to the Commission.

39. Beginning of the Control Period - Business Plan Filings

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 / whole time members. The business plan shall be for the entire control period and shall, inter alia, 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; The Commission shall approve the system augmentation/expansion plan submitted by the transmission licensee, based on the load growth forecast/generation evacuation requirement during the control period. The capital investment plan shall be in conformity with the plans made by the CEA/CTU/STU/distribution licensee.
- (b) **Capital Structure:** The appropriate capital structure of each scheme proposed 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 two years 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 mechanism;
- (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 range of transmission losses (upper and lower), availability of transmission system, transformer failure rate, and any other parameters for quality of supply for each year of the control period for the purpose of incentive / penalties. The targets shall be consistent with the capital investment plan proposed by the transmission licensee;
- (f) **Other Information:** This shall include any other details considered appropriate by the transmission licensee for consideration during determination of tariff; and
- (g) **State Load Despatch Centre (SLDC) fees and charges**

40. Annual Filings during the Control Period – ARR and Tariff Filings

- (1) 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

Transmission Tariff Regulations

commencement of the first year of the control period or such other date as may be directed by the Commission.

- (2) 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 State Load Despatch Centre (SLDC) fees and charges;
 - (f) expected revenue from the licensed business, non-tariff income and income from other business and other matters considered appropriate by the transmission licensee.

41. Review at the end of the Control Period

- (1) Towards the end of the control period, the Commission shall 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 the 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 second control period.
- (2) The end of the first control period shall be the beginning of the second 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 first control period and based on the actual performance, expected efficiency improvements and other factors prevalent, determine the initial values for the next control period.

42. Disposal of Application

- (1) The Commission will process the filings made by the transmission licensee in accordance with these regulations and the conduct of business regulations.
- (2) Based on the transmission licensee's filings, objections/ suggestions from public and other stakeholders, the Commission may, within 120 days of the receipt of the

application, complete in all respects, and after considering all suggestions and objections from public and other stakeholders, -

- (a) issue, a tariff order with such modifications and/or such conditions, as may be deemed just and appropriate containing, inter alia targets for controllable items, transmission tariffs State Load Despatch Centre (SLDC) fees and charges for each year of the control period; or
- (b) reject the application for reasons to be recorded in writing if such application is not in accordance with the provisions of the Act and the rules and regulations made thereunder or the provisions of any other law for the time being in force.

43. Periodic Reviews

- (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.
- (2) The transmission licensee shall submit information as part of annual review on actual performance vis-à-vis the targets approved by the Commission at the beginning of the control period. This shall include annual statements of its performance and accounts including the latest available audited/actual accounts and the tariff worked out in accordance with these regulations.
- (3) 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.

44. Publication

The transmission licensee shall publish the tariff approved by the Commission in the newspapers, having circulation in the area of supply, as the Commission may direct. The publication shall, besides such other things as the Commission may require, include a general description of the tariff changes.

PART-VII

MISCELLANEOUS

45. Issue of Orders and Practice Directions

- (1) Subject to the provision of the Act and these regulations, the Commission may, from time to time, issue orders and practice directions, prescribe formats in regard to the implementation of these regulations and procedure to be followed on various

Transmission Tariff Regulations

matters, which the Commission has been empowered by these regulations to direct, and matters incidental or ancillary thereto.

- (2) Notwithstanding anything contained in these regulations, the Commission shall have the authority, either suo motu or on a petition filed by any interested or affected person, to determine the tariff of any licensee.

46. Powers to remove difficulties

In case of any difficulty in giving effect to any of the provisions of these regulations, the Commission may, either suo motu or on an application made to it, do or undertake to do things, or by general or special order direct the licensee to take suitable action, not being inconsistent with the Act, which appears to the Commission to be necessary or expedient for the purpose of removing the difficulty.

47. Power of Relaxation

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

48. Interpretation

All issues arising in relation to interpretation of these regulations shall be determined by the Commission and the decision of the Commission on such issues shall be final.

49. Saving of Inherent Powers of the Commission

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.

50. Enquiry and Investigation

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.

51. Power to Amend

The Commission, for reasons to be recorded in writing, may at any time amend, vary, alter or modify any of the provisions of these regulations.

52. Repeal & Savings

- (1) The H.P. Electricity Regulatory Commission (Charges for Transmission, Wheeling and Intervening facilities and Fee and Charges to be collected by the State Load Despatch Centre) Regulations, 2006 are hereby repealed.
- (2) Notwithstanding such repeal, anything done or any action already taken under the repealed regulations, shall, in so far as it is not inconsistent with these regulations, be deemed to have been done or taken under the corresponding provisions of these regulations.

By Order of the Commission,

Sd/-
Secretary

Appendix I (See regulation 10(a))

Procedure for calculation of Transmission System Availability

1. Availability shall be calculated and declared separately for each voltage level.
2. The transmission elements shall be grouped into following categories for the purpose of calculation of availability of Transmission Systems:-
 - (a) AC transmission lines: Each circuit of AC transmission line shall be considered as one element.
 - (b) Inter-Connecting Transformers (ICTs): Each ICT bank (three single phase transformer together) shall form one element.
 - (c) Static VAR Compensator (SVC): SVC along with SVC transformer shall form one element. However, 50% credit to inductive and 50% to capacitive rating shall be given.
 - (d) Switched Bus Reactor: Each Switched Bus Reactor shall be considered as one element.
3. The Availability of AC Transmission system shall be calculated as under:-

% System Availability for AC system

$$= \frac{(o \times AV_o + p \times AV_p + q \times AV_q + r \times AV_r)}{(o + p + q + r)} \times 100$$

Where -

o is Total number of AC lines.

AV_o is Availability of o number of AC lines.

p is Total number of switched bus reactors.

AV_p is Availability of p number of Switched bus Reactors.

q is Total number of ICTs.

AV_q is Availability of q number of ICTs.

r is Total number of SVCs.

AV_r is Availability of r number of SVCs.

4. The weightage factor for each category of transmission elements shall be as under:-

Transmission Tariff Regulations

- (a) For each circuit of AC line - Surge Impedance Loading for Uncompensated line (SIL) multiplied by Circuit Km. SIL rating for various voltage level and conductor configuration is given in Appendix-II. However, for the voltage levels and/or conductor configurations not listed in Appendix-II, appropriate SIL based on technical considerations may be used for availability calculation under intimation to long-term transmission customers.
 - (b) For each ICT bank - The rated MVA capacity.
 - (c) For SVC - The rated MVAR capacity (inductive & capacitive).
 - (d) For Switched Bus Reactor - The rated MVAR capacity.
5. The availability for each category of transmission elements shall be calculated based on the weight-age factor, total hours under consideration and non-available hours for each element of that category. The formulae for calculation of Availability of each category of the Transmission elements are as per Appendix-III.
6. The transmission elements under outage due to following reasons not attributable to the Transmission Licensee shall be deemed to be available: -
 - (a) Shut down of transmission elements availed by other agency/agencies for maintenance or construction of their transmission system.
 - (b) Manual tripping of line due to over voltage and manual tripping of Switched Bus Reactor as per the directions of RLDC / SLDC.
7. 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.
 - (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, tripping of lines, ICTs, etc. due to grid disturbance. However, if the element is not restored on receipt of direction from RLDC / SLDC while normalizing the system following grid incident/disturbance within reasonable time, the element will be considered not available for whole period of outage and outage time shall be attributable to the Transmission Licensee.
8. If the outage of any element causes loss of generation at the generating station, outage period for that element shall be deemed to be twice the actual outage period for the day(s) on which such of generation has taken place.

(See para (4)(a) of Appendix-I)**SURGE IMPEDANCE LOADING (SIL) OF AC LINES**

S.No.	Line voltage (kv)	Conductor Configuration	SIL (MW)
1	400	Quad Bersimis	691
2	400	Twin Moose	515
3	400	Twin AAAC	425
4	400	Quad Zebra	647
5	400	Quad AAAC	646
6	400	Tripple Snowbird	605
7	400	ACKC(500/26)	556
8	400	Twin ACAR	557
9	220	Twin Zebra	175
10	220	Single Zebra	132
11	132	Single Panther	50
12	66	Single Dog	10

Formulae for calculation of Availability of each category of transmission elements

$$\text{Avo (Availability of } o \text{ no. of AC lines)} = \frac{\sum_{i=1}^o \frac{W_i(T_i - T_{NAi})}{T_i}}{\sum_{i=1}^o W_i}$$

$$\text{AVq (Availability of } q \text{ no. of ICTs)} = \frac{\sum_{k=1}^q \frac{W_k(T_k - T_{NAk})}{T_k}}{\sum_{k=1}^q W_k}$$

$$\text{AVr (Availability of } r \text{ no. of SVCs)} = \frac{\left[\sum_{l=1}^r 0.5 \frac{W_{lI}(T_{lI} - T_{NAIl})}{T_{lI}} + \sum_{l=1}^r 0.5 \frac{W_{lC}(T_{lC} - T_{NACl})}{T_{lC}} \right]}{\left[\sum_{l=1}^r 0.5 W_{lI} + \sum_{l=1}^r 0.5 W_{lC} \right]}$$

$$\text{Avs (Availability of } s \text{ no. of Switched BusReactors)} = \frac{\sum_{m=1}^s \frac{W_m(T_m - T_{NAM})}{T_m}}{\sum_{m=1}^s W_m}$$

Where –

W_i = Weightage factor for i^{th} transmission line

W_k = Weightage factor for k^{th} ICT

W_{lI} & W_{lC} = Weightage factors for inductive & capacitive operation of for l^{th} SVC

W_m = Weightage factor for m^{th} bus reactor.

$T_i, T_k, T_{lI}, T_{lC},$ & T_m = The total hours of i^{th} AC line, k^{th} ICT, l^{th} SVC (Inductive Operation), l^{th} SVC (Capacitive Operation) & m^{th} Switched Bus Reactor block during the period

under consideration (excluding time period for outages not attributable to Transmission Licensee for reasons given in Para 7 of the procedure in appendix-I).

T_{NAi} , T_{NAk} , $T_{NAi,l}$, & T_{NAcl} , T_{NAM} = The non-availability hours (excluding the time period for outages not attributable to Transmission Licensee taken as deemed availability as per Para 6 of the procedure in appendix-III) for i^{th} AC line, k^{th} ICT, l^{th} SVC (Inductive Operation), l^{th} SVC (Capacitive Operation) & m^{th} Switched Bus Reactor block .

Transmission Tariff Regulations

Appendix IV: Depreciation Schedule (see regulation 19(2))

S. No	Asset Class	Useful Life (Years)	Rate (%)
1	Land owned under full title	Infinity	0
2	Land held under lease		
(A)	For investment in land	period of lease or the period remaining unexpired on the assignment of the lease	0
(B)	For cost of clearing site	period of lease remaining unexpired at the date of clearing the site	0
3	Assets Purchased New		
(A)	Plant and machinery in generating stations including plant foundations		
(i)	Hydro-electric	35	2.57
(ii)	Steam-electric NHRS & Waste Heat Recovery Boilers / Plants	25	3.60
(iii)	Diesel electric & gas plant	15	6.00
(B)	Cooling towers and circulating water systems	25	3.60
(C)	Hydraulic works forming part of hydro-electric system including:		
(i)	Dams, spillways weirs, canals, reinforced concrete flumes & siphons	50	1.80
(ii)	Reinforced concrete pipelines and surge tanks, steel pipelines, sluice gates, steel surge (tanks) hydraulic control valves and other hydraulic works	35	2.57
(D)	Buildings and civil engineering works of a permanent character, not mentioned above:		
(i)	Offices & showrooms	50	1.80
(ii)	Containing thermo-electric generating plant	25	3.60
(iii)	Containing hydro-electric generating plant	35	2.57
(iv)	Temporary erection such as wooden structures	5	18.00
(v)	Roads other than kutchha roads	50	1.80
(vi)	Others	50	1.80
(E)	Transformers, transformer (kiosk) sub-station equipment & other fixed apparatus (including plant foundations)		
(i)	Transformers (including foundations) having a rating of 100 kilo volt amperes and over	25	3.60
(ii)	Others	25	3.60
(F)	Switchgear, including cable connections	25	3.60
(G)	Lightning arrestors:		

Transmission Tariff Regulations

S. No	Asset Class	Useful Life (Years)	Rate (%)
(i)	Station type	25	3.60
(ii)	Pole type	15	6.00
(iii)	Synchronous condenser	35	2.57
(H)	Batteries	5	18.00
(I)	Underground cable including joint boxes and disconnected boxes	35	2.57
(J)	Cable duct system	50	1.80
(K)	Overhead lines including supports:		
(i)	Lines on fabricated steel operating at nominal voltages higher than 66 kV	35	2.57
(ii)	Lines on steel supports operating at nominal voltages higher than 13.2 kV but not exceeding 66 kV	25	3.60
(iii)	Lines on steel or reinforced concrete supports	25	3.60
(iv)	Lines on treated wood supports	25	3.60
(L)	Meters	15	6.00
(M)	Self propelled vehicles	5	18.00
(N)	Air conditioning plants:		
(i)	Static	15	6.00
(ii)	Portable	5	18.00
(O)			
(i)	Office furniture and fittings	15	6.00
(ii)	Office equipments	15	6.00
(iii)	Internal wirings including fittings and apparatus	15	6.00
(iv)	Street Light fittings	15	6.00
(P)	Apparatus let on hire:		
(i)	Other than motors	5	18.00
(ii)	Motors	15	6.00
(Q)	Communication equipment		
(i)	Radio and higher frequency carrier systems	15	6.00
(ii)	Telephone lines and telephones	15	6.00
(R)	Assets purchased in second hand and assets not otherwise provided for in the schedule	Such reasonable period as the Commission determines in each case having regard to the nature, age and conditions of assets at the time of its acquisition by the owner	

Appendix V: (See regulation 35)

APPLICATION FOR REGISTRATION FOR CONNECTION WITH THE STATE GRID

S. No	Particulars
-------	-------------

- | | |
|-------|--|
| i. | Name of the Generating Company/ Licensee |
| ii. | Registered Address |
| iii. | Phone No./Fax/E-mail Id |
| iv. | Generating Capacity: In case of Generating Station Installed Capacity (in MWs) |
| v. | Transmission Capacity: In case of Transmission Network the volume of energy handled (in MUs) |
| vi. | Proposed date of Connection with the State Grid |
| vii. | Details of Inter-connection point (enclose separate sheet if necessary) |
| viii. | DD No. and Date towards Registration Fee payable to State Load Despatch Centre |
| ix. | Undertaking: |

We hereby undertake to abide by the instructions issued by the State Load Dispatch Centre for Grid Management.

Signature of the Authorised Officer

Note: The State Load Dispatch Centre may prescribe and collect necessary technical details from the Generating Companies and Transmission Companies separately.