HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION SHIMLA

NOTIFICATION

Shimla, the 10th October, 2007

No.HPERC/MYT/476------In exercise of powers conferred by clauses (zd), (ze) and (zf) of sub-section (2) of section 181 read with sections 61, 62 and 86, of the Electricity Act 2003 (36 of 2003) and all other powers enabling it in that behalf, the 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 Hydro Generation 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 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) "Appendix" means the appendix of these regulations;
- (c) "Applicant" means a generating company who has made an application for determination of tariff or an application for annual performance review in accordance with the Act and these regulations and includes a generating company whose tariff is the subject of a review by the Commission either suo motu or on a petition filed by any interested or affected person or as part of an annual performance review;
- (d) "Auxiliary Energy Consumption" or 'AUX' in relation to a period means the quantum of energy consumed by auxiliary equipment of the generating station, and shall be expressed as a percentage of the sum of gross energy generated at the generator terminals of all the units of the generating station;
- (e) "Bank Rate" shall mean the rate at which Reserve Bank of India lends to commercial banks as specified in monetary policy on April 1, of the relevant year;
- (f) "Base Year" means the financial year immediately preceding the first year of the control period;
- (g) "Beneficiary" in relation to a generating station means the person buying power generated at such a generating station on payment of annual capacity charges;
- (h) "Capacity Index" or "CI" means the average of daily capacity indices over one year;
- (i) "Commission" means the Himachal Pradesh Electricity Regulatory Commission;
- (j) "Conduct of Business Regulations" means the Himachal Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations, 2005;
- (k) "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;
- (l) "Cut off Date", in relation to a generating station, means the date of first financial year closing after one year of the date of commercial operation of the generating station;

(m) "Daily Capacity Index" means the declared capacity expressed as a percentage of the maximum available capacity for the day, and shall be mathematically expressed as: -

Declared capacity (MW) x 100/ maximum available capacity (MW)

Daily capacity index shall be limited to 100%;

(n) "Date of Commercial Operation" or "COD":

- (i) in relation to a unit, means the date declared by the generator after demonstrating the maximum continuous rating (MCR) or installed capacity (IC) through a successful trial run after notice to the beneficiaries;
- (ii) in relation to the generating station, means the date of commercial operation of the last unit of the generating station in accordance with the sub-clause (i) above;

(o) "Declared Capacity" or "DC', -

- (i) for run-of-river power stations with pondage and storage-type power stations, means the ex-bus capacity in MW expected to be available from the generating station over the peaking hours of next day, as declared by the generator, taking into account the availability of water, optimum use of water and availability of machines (peaking hours for this purpose shall not be less than 3 hours within a 24 hours period); and
- (ii) for purely run-of-river power stations, means the ex-bus capacity in MW expected to be available from the generating station during the next day, as declared by the generating station, taking into account the availability of water, optimum use of water and availability of machines;
- (p) "**Deemed Generation**" means the energy which a generating station was capable of generating but could not generate due to conditions of Grid or power system beyond the control of generating station resulting in spillage of water;
- (q) "**Design Energy**" means the quantum of energy which could be generated in a 90% dependable year with 95% installed capacity of the generating station;
- (r) "**Financial Year**" means a period commencing on 1st April of a calendar year and ending on 31st March of the subsequent calendar year;
- (s) "**Infirm Power**" means electricity generated prior to commercial operation of the unit of a generating station;

- (t) "Installed Capacity" or "IC" means the summation of the name plate capacities of all the units of the generating station or the de-rated capacity of the generating station (reckoned at the generator terminals) as approved by the Commission from time to time;
- (u) "Maximum Available Capacity" -
 - (i) for run-of-river power stations with pondage and storage-type power stations, means the maximum capacity in MW, that can be generated with all units running, under the prevailing conditions of water levels and flows, over the peaking hours of the next day (peaking hours for this purpose shall not be less than 3 hours within a 24 hours period); and
 - (ii) for purely run-of-river power stations, means the maximum capacity in MW that can be generated with all units running, under the prevailing conditions of water levels and flows over the next day;
- (v) "**Primary Energy**" means the quantum of energy generated up to the design energy on per year basis at the generating station;
- (w) "**Project**" means a hydro generating station and includes the complete hydro power generating facility covering all components such as dam, intake, water conductor system, power generating station and generating units of the scheme as apportioned to power generation;
- (x) "Run-of-river Power Station" means a hydro electric power generating station which has no upstream pondage;
- (y) "Run-of-river Power Station with Pondage" means a hydro electric power generating station with sufficient pondage for meeting the diurnal variation in power demand;
- (z) "Saleable Primary Energy" means the quantum of primary energy available for sale (ex-bus) after allowing for free energy to the State;
- (aa) "Saleable Secondary Energy" means the quantum of secondary energy available for sale (ex-bus) after allowing for free energy to the State;
- (bb) "Scheduled Energy" means the quantum of energy to be generated at the generating station over the 24 hours period, as scheduled by the State Load Despatch Centre;
- (cc) "Secondary Energy" means the quantum of energy generated in excess of the design energy on per year basis at the generating station;

- (dd) "Storage Type Power Station" means a hydro electric power generating station associated with large storage capacity to enable variation of generation of power according to demand;
- (ee) "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;
- (ff) "State" means the State of Himachal Pradesh.
- (2) The words and expressions used and not defined in these regulations but defined in the Act shall have the meanings respectively assigned to them in the Act.

PART-II

GUIDING PRINCIPLES

4. General Approach:

- (1) These regulations shall be applicable to all cases of determination of generation tariff under section 62 of the Act, for supply of electricity to a distribution licensee by the existing generating stations, but shall not be applicable 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) Subject to the provisions of the Act and the rules and policies made thereunder, any new generating station which comes up in future and proposes to supply electricity to a distribution licensee of the State shall be subjected to the norms prescribed under these regulations by the Commission, unless it proposes to supply electricity through a transparent process of bidding in accordance with the guidelines issued by the Central Government as per provisions of section 63 of the Act.
- (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, variations and alterations 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 generating company to file the aggregate revenue requirement (ARR) under Part-V, 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. Determination of Generation Tariff

(1) Existing Generating Stations

Where the Commission has, at any time prior to the notification of these regulations, approved a power purchase agreement (PPA) or arrangement between a generating company and a beneficiary, or has adopted the tariff contained therein for supply of electricity from an existing generating station then the tariff for supply of electricity by the generating company to the distribution licensee shall be in accordance with such PPA or arrangement for such period as may be so approved or adopted by the Commission, to the extent of existing installed capacity as contained in the PPA;

Provided that in relation to the existing generating stations, where the tariffs have not been determined by the Commission on account of insufficient data or any other reason, the Commission shall determine tariff after exercising prudence check in accordance with these regulations.

(2) New Generating Station:

Where the generating station has been declared under commercial operation after date of notification of these regulations, the tariff for supply of electricity by the generating company shall be decided in accordance with these regulations.

6. Multi Year Tariff (MYT) Framework

- (1) The Commission shall adopt multi year tariff framework for determination of tariff for each year of the control period.
- (2) The multi year tariff framework shall be based on the following: -
 - (a) **Business plan** (with plant-wise details) for the entire control period, which the applicant shall submit to the Commission for approval, prior to the beginning of the control period;
 - (b) Forecast of expected tariff for sale of power which shall be submitted by the generating company (plant-wise) for each year of the control period, based on reasonable assumptions of the underlying financial and operational parameters, as submitted in the business plan;
 - (c) **Trajectory for specific parameters**, stipulated by the Commission, where the performance of the applicant is sought to be improved through incentives and disincentives;
 - (d) **Annual review of performance**, which will be conducted vis-à-vis the approved forecast.

7. Determination of Baseline

- (1) The baseline values (operating and cost parameters) for the control period shall be determined by the Commission, based on previously approved values, the latest audited accounts, estimate of the actuals for the relevant year, prudence check and other factors considered appropriate by the Commission.
- (2) The Commission shall not revisit the performance targets even if the targets are fixed on the basis of un-audited accounts.

8. Capital Investment

Subject to the provisions of the Act, and the rules and policies made thereunder, the Commission shall approve the capital investment plan of a generating company for the control period commensurate with generation capacity growth. The investment plan shall also include a capitalisation schedule and financing plan for the planned investment. The Commission shall review the actual capital investment at the end of each year of the control period. Adjustment for the actual capital investment vis-à-vis approved capital investment shall be done at the end of the control period.

9. Performance Targets

- (1) The Commission shall set targets for each year of the control period for the items or parameters that are deemed to be "controllable" and which will include;-
 - (a) Capacity index;
 - (b) Auxiliary energy consumption;
 - (c) Transformation losses;
 - (d) **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;
 - (e) **Financing cost** which includes cost of debt including working capital (interest), cost of equity (return); and
 - (f) 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.

10. 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 generating company 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.

11. Refund of Excess Amount

If a generating company recovers the charges exceeding the tariff determined by the Commission, the excess amount shall be refunded to beneficiaries, which have paid such excess charges, alongwith interest for that period, which would be calculated considering the applicable bank rate.

PART-III

PRINCIPLES FOR DETERMINATION OF HYDRO GENERATION TARIFF

12. Capital Cost of the Project

(1) Subject to prudence check by the Commission, the actual expenditure incurred on completion of the project shall form the basis for determination of tariff. The tariff shall be determined based on the admitted capital expenditure actually incurred up to the date of commercial operation of the generating station and shall include capitalised initial spares subject to a ceiling norm of 1.5 % of the original project cost as on the cut off date:

Provided that where the power purchase agreement entered into between the generating company and the beneficiaries provides a ceiling of actual expenditure, the capital expenditure shall not exceed such ceiling for determination of tariff:

Provided further that the project cost already admitted by the Commission for the purpose of tariff fixation in previous years, shall be considered as the original project cost.

(2) For multi-unit projects, the capital cost of the project shall be broken up into stages and by distinct units forming part of the project. In case the stage-wise or unit-wise break up of the capital cost of the project is not available and in case of on-going projects, the common facilities shall be apportioned on the basis of the installed capacity of the units.

13. Additional Capitalisation

- (1) The Commission shall include, subject to prudence check, the following capital expenditure, incurred after the date of commercial operation of a project and upto the cut off date, to its original project cost, provided the same was part of the original scope of work of the project: -
 - (a) deferred liabilities;
 - (b) works deferred for execution;
 - (c) procurement of initial capital spares in the original scope of work, subject to ceiling specified above;
 - (d) liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
 - (e) on account of change of law:

Provided that original scope of work alongwith estimates of expenditure shall be submitted alongwith the application for determination of tariff:

Provided further that a list of the deferred liabilities and works, deferred for execution, shall be submitted alongwith the application for determination of tariff after the date of commercial operation of the generating station.

- (2) The following capital expenditure, actually incurred after the cut off date shall be admitted by the Commission, subject to prudence check, to the original project cost: -
 - (a) deferred liabilities, related to works/ services within the original scope of work of the project;
 - (b) liabilities to meet award of arbitration or for compliance of the order or decree of a court;
 - (c) on account of change of law; and
 - (d) any additional work/ service, which has become necessary for efficient and successful operation of the plant, but not included in the original project cost.

- **Note 1.-** Any expenditure admitted on account of committed liabilities within the original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt equity ratio as specified in these regulations.
- **Note 2.-** Any expenditure on replacement of old assets shall be considered, subject to prudence check by the Commission, after writing off the gross value of the original assets from the original capital cost.
- **Note 3.-** Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio as specified in these regulations.
- **Note 4.-** Any expenditure admitted on renovation and modernization and life extension shall be serviced on normative debt-equity ratio specified in these regulations after writing off the original amount of the replaced assets from the original capital cost.

14. Sale of Infirm Power

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

15. Debt-Equity Ratio

(1) Existing Stations:

- (a) For existing generating stations, the amount of loan capital shall be equal to the sum of the outstanding balance of all long term loans taken to finance the generating station, at the commencement of the financial year for which tariff is to be determined, as reflected in the tariff orders of the Commission.
- (b) The equity capital shall be taken as specified by the generating company, subject to prudence check by the Commission.
- (c) Any fresh infusion of capital in the existing generating stations shall be considered only after prior approval by the Commission, and would have a debt-equity ratio of 70:30.

(2) New Stations:

(a) The normative debt-equity ratio shall be considered to be 70:30 for determination of tariff.

- (b) In case of a generating station where equity employed is more than 30%, the amount of equity for determination of tariff shall be limited to 30% and the balance amount shall be considered as the normative loan.
- (c) In case of a generating station where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff.

(3) Renovation and Modernisation:

Any approved capital expenditure incurred on renovation, modernisation, replacement or extension of life of existing generating assets, after the issue of these regulations, shall be considered to be financed at a normative debt-equity ratio of 70:30. In case the amount of equity is less than 30%, the actual debt-equity ratio shall be considered.

(4) The debt and equity amounts arrived at in accordance with sub-regulations (1), (2) and (3) shall be used for calculating interest on loan, return on equity, advance against depreciation and foreign exchange rate variation.

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 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.
- (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:

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 tariff.

(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 notional repayment

of loan during those years and interest on loan capital shall be calculated accordingly.

- (4) The generating station shall make every effort to refinance the loan as long as it results in net benefit to the beneficiaries. The costs 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 passed on to the beneficiaries. Refinancing may also include restructuring of debt.
- (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 generating company or its suppliers or contractors.

17. Working Capital

The Commission shall calculate the working capital requirement for hydro electric power stations containing the following components: -

- (a) Operation and Maintenance Expenses for one month;
- (b) Maintenance spares equivalent to 40% of R&M expenses for one month;
- (c) receivables equivalent to two months of fixed and variable charges for sale of electricity calculated on the normative capacity index.

18. Interest on Working Capital

Rate of interest on working capital shall be on normative basis and shall be equal to the short-term prime lending rate of the State Bank of India as on 1st April of the relevant year. The interest on working capital shall be payable on normative basis notwithstanding that the generating station 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:
 - Provided that depreciation shall not be allowed on assets funded by any capital subsidy / grant.
- (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-1 of these regulations.

- (3) 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.
- (4) The residual value of assets shall be considered as 10% and depreciation shall be allowed upto 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. In the event of renovation and modernisation expenditure affecting the life of the asset, the depreciation shall be allowed upto a maximum of 90% of the cost of the asset within the enhanced life span of the asset.
- (5) Depreciation shall be charged from the first year of operation of the asset. In case, the operation of the asset is for a part of the year, depreciation shall be charged on a pro rata basis.
- (6) In addition to allowable depreciation, the generating company 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. Return on Equity

(1) Return on equity shall be computed on the equity determined in accordance with regulation 15 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 commercial operation:

Provided further that 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.

(2) The premium raised by the generating company 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 utilized for meeting capital expenditure and forms part of the approved financial package. 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 generation business.

21. Corporate Income Tax

- (1) Income tax, if any, on the generation business of the generating company shall be treated as expense and shall be recoverable from its beneficiaries. However, tax on any income other than that through the generation business shall not be a pass through in tariff, and it shall be payable by the generating company 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 that the generating station-wise profit before tax as estimated for a year in advance shall constitute the basis for distribution of the corporate tax liability to all the generating stations:

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:

Provided further that in the absence of any other equitable basis the credit for carry forward of losses and unabsorbed depreciation shall be given in the proportion as provided in the first proviso to these regulations:

Provided further that income tax allocated to the generating station shall be charged to the beneficiaries in the same proportion as annual fixed charges.

- (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 of losses applicable in accordance with 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 the equity component of capital deployed. However, any tax liability on incentives and savings due to improved performance and Unscheduled Interchange (UI) earnings, if any, shall not be considered for passing on to the beneficiaries.

22. Recovery of Corporate Income Tax

Recovery of income tax shall be done directly by the generating company 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 may make an appropriate application before the Commission for its decision.

23. 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 costs;
 - (c) repairs and maintenance; and
 - (d) other miscellaneous expenses including insurance costs, statutory levies and taxes (except corporate income tax).
- (2) The O&M expenses including insurance, for the existing generating stations which have been in operation for 5 or more years, shall be derived on the basis of actual operation and maintenance expenses in the last five years based on the audited balance sheets, excluding abnormal operation and maintenance expenses, if any, after prudence check by the Commission.
- (3) The average of such normalised O&M expenses after prudence check, for the last 5 years (n-5 to n-1, considering base year as nth year) shall be considered as O&M expenses for the (n-3)th year, which shall be escalated at the rate of 4% per annum to arrive at O&M expenses for the base year. The base O&M expenses shall be escalated further at the rate of 4% per annum to arrive at permissible O&M expenses for the relevant year of the control period.
- (4) In case of the hydro electric generating stations, which have not been in existence for a period of five years, the O&M expenses shall be fixed at 1.5% of the capital cost as admitted by the Commission and shall be escalated at the rate of 4% per annum from the subsequent year to arrive at O&M expenses for the base year. The base O&M expenses shall be further escalated at the rate of 4% per annum to arrive at permissible O&M expenses for the relevant year.
- (5) In case of the generating stations declared under commercial operation on or after date of notification of these regulations, the base O&M expenses shall be fixed at 1.5% of the actual capital cost as admitted by the Commission, in the year of commissioning and shall be subject to an annual escalation of 4% per annum for the subsequent years.

PART-IV

HYDRO ELECTRIC POWER GENERATING STATIONS

24. Operational Norms

- (1) The values for different operational norms for the existing generating plants shall be decided, considering the vintage and current operations of these plants, based on the submissions made by the applicant, subject to prudence checks by the Commission.
- (2) The Commission may modify these norms of operations after considering the capital investments approved for any renovation and modernisation activities in these plants.
- (3) The norms of operation for generating stations shall be as under: -

(a) Normative Capacity Index for recovery of full capacity charges:

During first year of commercial operation of the generating station	Purely run-of-river power stations	85%
	Storage type and run-of-river power stations with pondage	80%
After first year of commercial operation of the generating station	Purely run-of-river power stations	90%
	Storage type and run-of-river power stations with pondage	85%

Note 1.- There shall be *pro rata* recovery of capacity charges in case the generating station achieves capacity index below the laid down normative levels. At zero capacity index no capacity charges shall be payable to the generating station.

(b) Auxiliary Energy Consumption:

Surface hydro electric power generating station	With rotating exciters mounted on the generator shaft	0.2%
	With static excitation system	0.5 %
Underground hydro electric power generating station	With rotating exciters mounted on the generator shaft	0.4 %
	With static excitation system	0.7 %

(c) Transformation Losses:

From generation voltage to transmission voltage -0.5 % of energy generated.

- (4) The Commission may lay down relaxed operational norms including the norms of capacity index and auxiliary consumption contained in these regulations for a generating station, and these relaxed norms shall be applicable for determination of tariff for such generating station during the control period.
- (5) The norms of operation under these regulations shall be ceiling norms and shall not preclude generating companies and the beneficiaries from agreeing to improve norms of the operation. If PPA stipulates better norms of operation then such norms provided in the PPA shall be considered.
- (6) In case of renovation and modernisation, de-rating or re-rating of the generating station, norms of operation shall be reviewed and modified accordingly.

25. Computation of Annual Charges

- (1) The tariff for sale of electricity from generating station shall comprise of recovery of annual capacity (fixed) charge and primary energy (variable) charges.
- (2) Capacity Charges: The capacity charges shall be computed in accordance with the following formula: -

Capacity Charges = (Annual Fixed Charge - Primary Energy Charges)

Note.-Recovery through primary energy charges shall not be more than the annual fixed charge.

- (3) The annual fixed charge of generating station shall include the following elements:
 - (a) operation and maintenance expenses;
 - (b) depreciation;
 - (c) interest on loans;
 - (d) interest on working capital; and
 - (e) return on equity.
 - (f) Income, other than that through charges permitted by the Commission, and involving utilization of the applicant's assets may be suitably accounted for by the Commission while determining the tariff.

26. Primary and Secondary Energy Charges

- (1) Primary energy charge shall be worked out on the basis of paise per kWh rate on ex-bus energy scheduled to be sent out from the hydro electric power generating station after adjusting for free power delivered to the State.
- (2) Rate of primary energy for all generating stations, except for pumped storage generating stations, shall be equal to the lowest variable charges of the central sector thermal power generating station of the northern region. The primary energy charge shall be computed based on the primary energy rate and saleable energy of the station:

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

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

Primary Energy Charge = Saleable Primary Energy x Primary Energy Rate

(3) Secondary Energy Rate shall be equal to Primary Energy Rate;

Secondary Energy Charge = Saleable Secondary Energy x Secondary Energy Rate.

27. Incentive

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

Incentive = 0.65 x Annual Fixed Charge x $(CI_A - CI_N)/100$

(If incentive is negative, it shall be set to zero.)

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

- (3) The incentives on account of capacity index and payment for secondary energy shall be payable on monthly basis, subject to cumulative adjustment in each month of the financial year, separately in respect of each item, and final adjustment shall be made at the end of the financial year.
- (4) The total incentive payment calculated on annual basis shall be shared by the beneficiaries based on the allocated capacity.

28. Incentive for Completion of Hydro Power Generating Stations ahead of Schedule

In case of commissioning of generating station or part thereof ahead of schedule, as set out in the first approval of the State Government or the techno-economic clearance of the Authority, as applicable, the generating station shall become eligible for incentive for an amount equal to pro rata reduction in interest during construction, achieved on commissioning ahead of the schedule. The incentive shall be recovered through tariff in twelve equal monthly installments during the first year of operation of the generating station. In case of delay in commissioning as set out in the first approval of the State Government or the techno-economic clearance of the Authority, as applicable, interest during construction for the period of delay shall not be allowed to be capitalised for determination of tariff, unless the delay is on account of natural calamities or geological surprises.

29. Deemed Generation

- (1) In case of reduced generation due to the reasons beyond the control of the generating company or on account of non-availability of the transmission licensee's transmission lines or on receipt of backing down instructions from the State Load Despatch Centre resulting in spillage of water, the energy charges on account of such spillage shall be payable to the generating company. Apportionment of energy charges for such spillage among the beneficiaries shall be in proportion of their shares in saleable capacity of the generating station.
- (2) Energy charges on the above account shall not be admissible if the energy generated during the year is equal to or more than the design energy.

30. Unscheduled Interchange (UI) Charges

The generating station may be entitled to receive or shall be required to bear, as the case may be, the charges for deviations between energy sent-out corresponding to scheduled generation and actual energy sent-out shall be accounted for through Unscheduled Interchange (UI) charges, as per the rate approved by the Central Commission/ State Commission.

31. Late Payment Surcharge

In case the payment of bills of capacity charges and energy charges by the beneficiary is delayed beyond a period of one month from the date of billing, the generating company may levy a late payment surcharge at the rate of 1.25% per month.

32. Rebate

For payment of bills of capacity charges and energy 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 generating company, a rebate of 1% shall be allowed.

33. Scheduling

- (1) Read with the provisions of the State Grid Code/the Indian Electricity Grid Code, the methodology of scheduling and calculating capacity index shall be provided in the succeeding sub-regulations.
- (2) The generator shall make an advance declaration of capacity of its generating station. The declaration shall be for that capacity which can be actually made available for a period of time not less than 3 hours within a 24 hours period for pondage and storage type of stations and for the entire day for purely run-of-river type stations.
- (3) The generator shall intimate the declared capacity (MW), for the next day, either as one figure for the whole day or different figures for different periods of the day alongwith maximum available capacity (MW) and total energy (MWh) ex-bus to the State Load Despatch Centre (SLDC). The declaration should also include limitation on generation during specific time periods, if any, on account of restriction(s) on water use due to irrigation, drinking water, industrial, environmental considerations etc.
- (4) While making or revising his declaration of capability, the generator shall ensure that the declared capacity during peak hours is not less than that during other hours. However, exception to this rule shall be allowed in case of tripping/resynchronisation of units as a result of forced outage of units.
- (5) Generation scheduling shall be done in accordance with the operating procedure, as stipulated in the State Grid Code/the Indian Electricity Grid Code.
- (6) Based on the declaration of the generator, the State Load Despatch Centre (SLDC) shall communicate their shares to the beneficiaries out of which they shall give their requisitions.
- (7) Based on the requisitions given by the beneficiaries and taking into account technical limitations on varying the generation and also taking into account

transmission system constraints, if any, the State Load Despatch Centre (SLDC) shall prepare the economically optimal generation schedules and drawal schedules and communicate the same to the generator and the beneficiaries. The State Load Despatch Centre (SLDC) also formulate the procedure for meeting contingencies both in the long run and in the short run (daily scheduling).

- (8) The scheduled generation and actual generation shall be ex-bus at the generating station. For beneficiaries, the scheduled and actual net drawals shall be at their respective receiving points.
- (9) For calculating the net drawal schedules of beneficiaries, the transmission losses shall be apportioned to their drawal schedule for the time being. However, a refinement may be specified by the Commission in future, depending upon the preparedness of the State Load Despatch Centre (SLDC).
- (10) In case of forced outage of a unit, the State Load Despatch Centre (SLDC) shall revise the schedules on the basis of revised declared capability. The revised declared capability and the revised schedules shall become effective from the 4th time block, counting the time block in which the revision is advised by the generator to be the first one.
- (11) In the event of bottleneck in evacuation of power due to any constraint, outage, failure or limitation in the transmission system, associated switchyard and substations owned by the State Transmission Utility (as certified by the State Load Despatch Centre) necessitating reduction in generation, the State Load Despatch Centre (SLDC) shall revise the schedules which shall become effective from the 4th time block, counting the time block in which the bottleneck in evacuation of power has taken place to be the first one. Also, during the first, second and third time blocks of such an event, the scheduled generation of the generating station shall be deemed to have been revised to be equal to actual generation, and the scheduled drawals of the beneficiaries shall be deemed to have been revised to be equal to their actual drawals.
- (12) In case of any grid disturbance, scheduled generation of all the generating stations and scheduled drawal of all the beneficiaries shall be deemed to have been revised to be equal to their actual generation/drawal for all the time blocks affected by the grid disturbance. Certification of Grid disturbance and its duration shall be done by the State Load Despatch Centre (SLDC).
- (13) Revision of declared capability by the generator(s) and requisition by beneficiary (ies) for the remaining period of the day shall also be permitted with advance notice. Revised schedules/declared capability in such cases shall become effective from the 6th time block, counting the time block in which the request for revision has been received in the State Load Despatch Centre (SLDC) to be the first one.
- (14) If, at any point of time, the State Load Despatch Centre (SLDC) observes that there is need for revision of the schedules in the interest of better system operation, it

- may do so on its own and in such cases, the revised schedules shall become effective from the 4th time block, counting the time block in which the revised schedule is issued by the State Load Despatch Centre (SLDC) to be the first one.
- (15) Generation schedules and drawal schedules issued/revised by the State Load Despatch Centre (SLDC) shall become effective from designated time block irrespective of communication success.
- (16) For any revision of scheduled generation, including post facto deemed revision, there shall be a corresponding revision of scheduled drawals of the beneficiaries.
- (17) A procedure for recording the communication regarding changes to schedules duly taking into account the time factor shall be evolved by the State Transmission Utility.
- (18) Purely run-of-river power stations: Since variation of generation in such stations may lead to spillage, these shall be treated as must run stations. The maximum available capacity, duly taking into account the over load capability, must be equal to or greater than that required to make full use of the available water.
- (19) Run-of-river power station with pondage and storage type power stations: These hydro stations are designed to operate during peak hours to meet system peak demand. Maximum available capacity of the station declared for the day shall be equal to the installed capacity including overload capability, minus auxiliary consumption and transformation losses, corrected for the reservoir level. The State Load Despatch Centre (SLDC) shall ensure that generation schedules of such type of stations are prepared and the stations dispatched for optimum utilization of available hydro energy except in the event of specific system requirements/constraints.

34. Demonstration of Declared Capability:

- (1) The generating company may be required to demonstrate the declared capacity of its generating station as and when asked by the State Load Despatch Centre (SLDC). In the event of the generating company failing to demonstrate the declared capacity, the capacity charges due to the generating company shall be reduced as a measure of penalty, the quantum of which shall be determined by the Commission.
- (2) The quantum of penalty for the first mis-declaration for any duration or block in a day shall be the charges corresponding to two days fixed charges. For the second mis-declaration the penalty shall be equivalent to fixed charges for four days and for subsequent mis-declarations, the penalty shall be multiplied in the geometrical progression.

(3) The operating log books of the generating station shall be available for review by the State Load Despatch Centre (SLDC). These books shall keep record of machine operation and maintenance, reservoir level and spillway gate operation.

35. Metering and Accounting:

Metering arrangements, including installation, testing and operation and maintenance of meters and collection, transportation and processing of data required for accounting of energy exchanges and average frequency on 15 minute time block basis shall be provided by the State Transmission Utility/State Load Despatch Centre. All concerned entities (in whose premises the special energy meters are installed), shall fully cooperate with the State Transmission Utility/State Load Despatch Centre and extend the necessary assistance by taking weekly meter readings and transmitting them to the State Load Despatch Centre. Processed data of the meters along with data relating to declared capacity and schedules etc. shall be supplied by the State Load Despatch Centre to State Transmission Utility, which shall issue the state accounts for energy on monthly basis as well as Unscheduled Interchange (UI) charges on weekly basis. UI accounting procedures shall be governed by the orders of the Commission.

36. Billing and Payment of Capacity charges

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

- (1) Each beneficiary shall pay the capacity charges in proportion to its percentage share in total saleable capacity of the generating station. Saleable capacity shall mean total capacity minus free capacity to the State.
- (2) The beneficiaries shall have full freedom for negotiating any transaction for utilisation of their capacity shares. In such cases, the beneficiary having allocation in the capacity of the generating station shall be liable for full payment of capacity charges and energy charges (including that for sale of power under the transaction negotiated by him) corresponding to his total allocation and schedule respectively.
- (3) If any capacity remains un-requisitioned during day-to-day operation, the State Load Despatch Centre shall advise all beneficiaries in the state so that such capacity may be requisitioned through bilateral arrangements either with the concerned generating company or the concerned beneficiaries under intimation to the State Load Despatch Centre. The information regarding un-requisitioned capacity shall also be made available by the State Load Despatch Centre through its website.
- (4) The capacity charges shall be paid by the beneficiaries including those outside the state to the generating company every month in accordance with the following formulas and in proportion to their respective shares in the concerned generating station: -

```
ACC_1 = AFC - (SPE_1 + DE_{2nd to 12th months})
                                               * Primary Energy Rate
ACC_2 = AFC - (SPE_2 + DE_{3rd to 12th months})
                                               * Primary Energy Rate
ACC_3 = AFC - (SPE_3 + DE_{4th to 12th months})
                                               * Primary Energy Rate
ACC_4 = AFC - (SPE_4 + DE_{5th to 12th months})
                                               * Primary Energy Rate
ACC_5 = AFC - (SPE_5 + DE_{6th to 12th months})
                                               * Primary Energy Rate
ACC_6 = AFC - (SPE_6 + DE_{7th to 12th months})
                                               * Primary Energy Rate
ACC_7 = AFC - (SPE_7 + DE_{8th to 12th months})
                                               * Primary Energy Rate
                                               * Primary Energy Rate
ACC_8 = AFC - (SPE_8 + DE_{9th to 12th months})
ACC_9 = AFC - (SPE_9 + DE_{10th to 12th months})
                                               * Primary Energy Rate
ACC_{10} = AFC - (SPE_{10} + DE_{11th to 12th months}) *Primary Energy Rate
ACC_{11} = AFC - (SPE_{11} + DE_{12th month})
                                               * Primary Energy Rate
ACC_{12} = (AFC - SPE_{12})
                                               * Primary Energy Rate
```

Where -

AFC = Annual Fixed Charges

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

SPE₁, SPE₂, SPE₃, SPE₄, ... SPE₁₂ are the ex-bus scheduled primary energy values up to 1^{st} , 2^{nd} , 3^{rd} , ... 12^{th} months of the year respectively.

$$CC1 = ACC_{1} * \frac{DE1}{DE}$$

$$CC2 = ACC_{2} * \frac{DE2}{DE}$$

$$CC3 = ACC_{3} * \frac{DE3}{DE}$$

$$CC4 = ACC_{4} * \frac{DE4}{DE}$$

$$CC5 = ACC_{5} * \frac{DE5}{DE}$$

$$CC6 = ACC_{6} * \frac{DE6}{DE}$$

$$CC7 = ACC_{7} * \frac{DE7}{DE}$$

$$CC8 = ACC_{8} * \frac{DE8}{DE}$$

$$CC9 = ACC_{9} * \frac{DE9}{DE}$$

$$CC10 = ACC_{10} * \frac{DE10}{DE}$$

$$CC11 = ACC_{11} * \frac{DE11}{DE}$$

$$CC12 = ACC_{12} * \frac{DE12}{DE}$$

Where -

CC1, CC2, CC3,...,CC12 is the monthly capacity charge up to 1st, 2nd, 3rd,..., 12th months of the year respectively.

DE = Annual Design Energy

DE1, DE2, DE3, ..., DE12 are the ex-bus design energy values up to 1st, 2nd, 3rd, ..., 12th months of the year respectively.

Total capacity charges payable to the generator for the -

```
1<sup>st</sup> month
                  =(CC1)
2<sup>nd</sup> month
                  =(CC2 - CC1)
3<sup>rd</sup> month
                  =(CC3 - CC2)
4<sup>th</sup> month
                  =(CC4 - CC3)
5<sup>th</sup> month
                  =(CC5 - CC4)
6<sup>th</sup> month
                  =(CC6 - CC5)
7<sup>th</sup> month
                  =(CC7 - CC6)
8<sup>th</sup> month
                  =(CC8 - CC7)
9<sup>th</sup> month
                  =(CC9 - CC8)
10<sup>th</sup> month
                  =(CC10 - CC9)
11<sup>th</sup> month
                  =(CC11 - CC10)
12th month
                  =(CC12 - CC11)
```

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

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

Where –

WB1, WB2, WB3, WB4, WB5, WB6, WB7, WB8, WB9, WB10, WB11 and WB12 are the weighted average of percentage allocated capacity share of the beneficiary during the cumulative period up to 1st, 2nd 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th and 12th month respectively.

37. Safety Standards

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

PART-V

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 applicant shall also submit the multi year tariff filing in electronic format to the Commission.

39. Beginning of the Control Period - Business Plan Filings

The generating company 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 its Board of Directors. The business plan shall be for the entire control period and shall, interalia, contain -

- (a) Capital Investment Plan: This shall include details of the investments planned by the generating company, alongwith the corresponding capitalisation schedule and financing plan. This plan shall be commensurate with capacity enhancement and proposed efficiency improvements for various plants of the company;
- (b) Capital Structure: The generating company shall submit plant-wise details of the capital structure and cost of financing (interest on debt and return on equity), after considering the existing market conditions, terms of the existing loan agreements, risks associated in generation business and creditworthiness;

- (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:** This shall include details of 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 other controllable items such as capacity index, auxiliary consumption, and transformation loss. The targets shall be consistent with the capital investment plan proposed by the generating company;
- (f) **Other Information:** This shall include any other details considered appropriate by the generating company for consideration during determination of tariff.

40. 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 applicant'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 generating company shall follow the same procedure, unless required otherwise by the Commission. The Commission shall analyse the performance of the generating company 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.

41. Disposal of Application

- (1) The Commission shall process the filings made by the generating company in accordance with these regulations and the conduct of business regulations.
- (2) Based on the generating company'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 and the generation tariffs 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.

42. Periodic Reviews

- (1) To ensure smooth implementation of the multi year tariff (MYT) framework, the Commission may undertake periodic reviews of generating company's performance during the control period, to address any practical issues, concerns or unexpected outcomes that may arise.
- (2) The generating company 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, norms achieved and the tariff worked out in accordance with these regulations.
- (3) The Commission may also direct any modifications to the forecast of the generating company for the remainder of the control period, with detailed reasons for the same.

43. Publication

The generating company 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-VI

MISCELLANEOUS

44. 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

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 applicant.
- (3) Notwithstanding anything to the contrary contained in the HPERC (Approval of Hydro Electric Projects in the State of HP) Directions, 2005, issued by the Commission, these regulations will have the overriding effect.

45. Powers to remove difficulties

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 generating company to do or undertake such things which appear to be necessary or expedient for the purpose of removing the difficulties.

46. 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.

47. Interpretation

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

48. 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.

49. 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.

50. 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.

By Order of the Commission,

Sd/-Secretary

Appendix 1: Depreciation Schedule (see regulation 19(2))

S. No	Asset Class	Useful Life	Rate
1	Land owned under full title	(Years) Infinity	(%) 0
2	Land held under lease	Illillity	U
(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 kutcha 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) (G)	Switchgear, including cable connections Lightning arrestors:	25	3.60
(U)	Lighting affestors.		

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
(I)	Cable duct system	50	1.80
(J) (K)	Overhead lines including supports:	30	1.00
(K)	Lines on fabricated steel operating at		
(i)	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)	**	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	