

Uttaranchal Electricity Regulatory Commission

80, Vasant Vihar, Phase-I, Dehradun - 248006

Notification Regulation No. 3

May 14, 2004

No. F-9(3)/RG/UERC/2004/254 - In exercise of powers conferred under section 181 of the Electricity Act, 2003, and all other powers enabling it in this behalf, and after previous publication, the Uttaranchal Electricity Regulatory Commission hereby makes the following regulations, namely.

Chapter 1: Preliminary

1. Short Title, Commencement and Interpretation

- (1) These Regulations may be called the Uttaranchal Electricity Regulatory Commission (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2004.
- (2) These Regulations extend to the whole of the State of Uttaranchal.
- (3) These shall come into force on the date of their publication in the official Gazette, and unless reviewed earlier or extended by the Commission, shall remain in force for a period of 5 years.

2. Scope and extent of application

- (1) 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 Electricity Act, 2003.
- (2) These regulations shall apply in all other cases where tariff for the hydro generating stations located in Uttaranchal is to be determined by the Commission based on capital cost, except Small Hydro Power Stations with installed capacity upto 25 MW and those covered under clauses (a) and (b) of sub-section (1) of section 79 of the Electricity Act, 2003.

3. Definitions

- (1) 'Act' means the Electricity Act, 2003 (36 of 2003).
- (2) 'Additional Capitalisation' means the capital expenditure actually incurred after the date of commercial operation of the station and admitted by the Commission after prudence check.
- (3) 'Authority' means Central Electricity Authority referred to in section 70 of the Electricity Act, 2003.

- (4) 'Auxiliary Energy Consumption' in relation to a period means the quantum of energy consumed by auxiliary equipment of the generating station and shall be expressed as a percentage of the sum of gross energy generated at generator terminals of all the units of the generating station.
- (5) 'Beneficiary' in relation to a generating station means the person buying power generated at such a generating station on payment of annual capacity charges.
- (6) 'Capacity Index' means the average of the daily capacity indices over one year.
- (7) 'Commission' means Uttaranchal Electricity Regulatory Commission.
- (8) 'Core business' means the regulated activities of generation of electricity and does not include any other business or activities of the generating company like consultancy, telecommunication, etc.
- (9) 'Cut off Date' means after one year of the date of commercial operation of the generating station.
- (10) 'Date of Commercial Operation or COD' in relation to a unit means 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, and in relation to the generating station the date of commercial operation means the date of commercial operation of the last unit of the generating station.
- (11) 'Daily Capacity Index' means the declared capacity expressed as a percentage of the maximum available capacity for the day and shall be mathematically expressed as hereunder.

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

Daily Capacity Index shall be limited to 100%.

- (12) 'Declared capacity'
 - (a) For run-of-river power station with pondage and storage-type power stations, declared capacity means the ex-bus capacity in MW expected to be available from the generating station over the peaking hours of next day, as declared by the generator, taking into

account the availability of water, optimum use of water and availability of machines and for this purpose, the peaking hours shall not be less than 3 hours within 24 hour period, and

- (b) In case of purely run-of-river power stations, declared capacity means the ex-bus capacity in MW expected to be available from the generating station during the next day, as declared by the generating station, taking into account the availability of water, optimum use of water and availability of machines;
- (13) 'Deemed Generation' means the energy which a generating station was capable of generating but could not generate due to the conditions of grid or power system beyond the control of generating station resulting in spillage of water.
- (14) 'Design Energy' means the quantum of energy which could be generated in a 90 percent dependable year with 95 percent installed capacity of the generating station.
- (15) 'Existing Generating Station' means a generating station declared under commercial operation from a date prior to 1.4.2004.
- (16) 'Infirm power' means electricity generated prior to commercial operation of the unit of a generating station.
- (17) 'Installed Capacity' means the summation of the name plate capacities of the units in the generating station or the capacity of the generating station (reckoned at the generator terminals) as approved by the Commission from time to time.
- (18) 'Maximum available capacity' means the following:
- (a) Run-of-river power station with pondage and storage type power stations:

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

Explanation: The peaking hours for this purpose shall not be less than 3 hours within a 24 hours period.
 - (b) Purely run-of-river power stations:

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

- (19) 'Operation and Maintenance Expenses' or 'O&M Expenses' means the expenditure incurred in operation and maintenance of the generating station, including part thereof, including the expenditure on manpower, repairs, spares, consumables, insurance and overheads.
- (20) 'Original Project Cost' means the actual expenditure incurred by the generating company, as per the original scope of project up to first financial year closing after one year of the date of commercial operation of the last unit as admitted by the Commission for determination of tariff.
- (21) 'Primary energy' means the quantum of energy generated up to design energy on per year basis at the generating station.
- (22) 'Project' means a generating station and includes the complete hydro power generating facility covering all components such as dam, intake, water conductor systems, power generating station and generating units of the scheme as apportioned to power generation.
- (23) 'Run-of-river power station' means a hydro electric power generating station which has no upstream pondage.
- (24) 'Run-of-river power station with pondage' means a hydro electric power generating station with sufficient pondage for meeting the diurnal variation of power demand.
- (25) '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.
- (26) 'Saleable Primary energy' means the quantum of primary energy available for sale (ex-bus) after allowing for free energy to the home state, if any.
- (27) 'Saleable Secondary energy' means the quantum of secondary energy available for sale (ex-bus) after allowing for free energy to the home state, if any.
- (28) 'Scheduled energy' means the quantum of energy to be generated at the generating station over the next 24-hour period, as scheduled by the State Load Dispatch Centre.
- (29) 'Secondary energy' means the quantum of energy generated in excess of the design energy on per year basis at the station.

(30) 'State Government' means the Government of Uttaranchal.

(31) 'Year' means a financial year.

(32) Words or expressions used in these regulations and not defined herein but defined in the Electricity Act, 2003 shall have the meaning assigned to them under the Electricity Act, 2003.

Chapter 2: General Terms and Conditions for Determination of Hydro Generation Tariff

4. Application for determination of tariff

(1) The generating company may make an application for fixation of tariff in respect of the completed units of the generating station in such formats and alongwith such information which the Commission may require from time to time.

(2) In case of a generating station declared under commercial operation on or after 1.4.2004, an application for fixation of tariff shall be made in two stages, namely:

(a) A generating company may make an application for determination of provisional tariff in advance of the anticipated date of completion of project based on the capital expenditure actually incurred up to the date of making the application or a date prior to making of the application, duly audited and certified by the statutory auditors and the provisional tariff shall be charged from the date of commercial operation of the respective unit of the generating station.

(b) A generating company shall make a fresh application for determination of final tariff based on actual capital expenditure incurred up to the date of commercial operation of the generating station, duly audited and certified by the statutory auditors.

(3) The generating company shall file with application for determination of tariff duly validated projected annual data for as many years for which it wants the tariff to be fixed but not exceeding 5 years.

5. Tariff determination

(1) The tariff in respect of a generating station under these regulations shall be determined stage-wise, unit-wise or for the whole generating station.

- (2) For the purpose of tariff, the capital cost of the project shall be broken up into stages and by distinct units forming part of the project. Where the stage-wise or unit-wise break-up of the capital cost 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. In relation to multi-purpose hydro electric projects, with irrigation, flood control and power components, the capital cost chargeable to power component to the project only shall be considered for determination of tariff.

6. Norms of operation to be ceiling norms

For removal of doubts, it is clarified that the norms of operation specified under these regulations are the ceiling norms and this shall not preclude the Generating Company and the beneficiaries from agreeing to improved norms of operation and in case the improved norms are agreed to, such norms shall be applicable for determination of tariff.

7. Tax on Income

- (1) Tax on the income streams of the generating company from its core business shall be computed as an expense and shall be recovered from the beneficiaries.
- (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 tax on any income stream other than the core business shall not constitute a pass through component in the tariff and tax on such other income shall be payable by the generating company.

Provided further 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 carried forward losses and unabsorbed depreciation shall be given in the proportion as provided in the second proviso to this regulation.

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

8. Tax Escrow Mechanism

- (1) The beneficiaries shall maintain an interest bearing tax escrow account in a scheduled bank, to which all amounts of interest shall be credited.
- (2) The tax liability shall be estimated two months before the commencement of each year and intimated to the beneficiaries. The generating company shall endeavour to minimize its liability on account of taxes recoverable from the beneficiaries.
- (3) The generating company shall be authorised to withdraw the amounts for settling the tax liability on presentation to the escrow holder of a certificate from their statutory auditors that such amounts are immediately due and payable to the taxing authority.
- (4) The generating company shall pay into the tax escrow account any refund received from the taxing authority.
- (5) The refunds, if any, shall not be paid back to the beneficiaries and shall be adjusted in the escrow account. Any balance due or returnable shall be rolled over to the next year.
- (6) The Escrow Accounts shall be reflected in the books of the beneficiaries as their bank account.

9. Extra Rupee Liability

Extra rupee liability towards interest payment and loan repayment actually incurred, in the relevant year shall be permissible; provided it directly arises out of foreign exchange rate variation and is not attributable to the generating company or its suppliers or contractors. Every generating company shall recover Foreign Exchange Rate Variation, to the extent risk is not hedged or unless cost of hedging risk has not been considered, on a year to year basis as income or expense in the period in which they arise and shall be adjusted on a year to year basis.

10. Recovery of Income Tax and Foreign Exchange Rate Variation

Recovery of Income Tax and Foreign Exchange Rate Variation shall be done directly by the generating company from the beneficiaries without making any application before the Commission.

Provided that in case of any objection by the beneficiaries to the amounts claimed on account of income tax and Foreign Exchange Rate Variation, the generating company may make an appropriate Application before the Commission for its decision.

11. Deviation from norms

- (1) Tariff for sale of electricity by a generating company may also be determined in deviation of the norms specified in these regulations subject to the conditions that:
 - (a) The overall per unit tariff of electricity over the entire life of the asset, calculated on the basis of the norms in deviation does not exceed the per unit tariff calculated on the basis of the norms specified in these regulations; and
 - (b) Any such deviation shall come into effect only after approval by the Commission.

Chapter 3: Norms of Operation

12. Capacity Index

- (1) Normative Capacity Index for recovery of full capacity charges
 - (a) During the 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%
 - (b) After first year of operation of the generating station
 - Purely run-of-river power stations = 90 %
 - Storage type and Run-of-river power stations with pondage = 85%

Note

There shall be *pro rata* recovery of capacity charges in case the generating station achieves capacity index below the prescribed normative levels. At Zero capacity index, no capacity charges shall be payable to the generating station.

13. Auxiliary consumption

- (1) Surface hydro electric power generating stations with rotating exciters mounted on the generator shaft = 0.2% of energy generated
- (2) Surface hydro electric power generating stations with static excitation system = 0.5% of energy generated
- (3) Underground hydro electric power generating stations with rotating exciters mounted on the generator shaft = 0.4% of energy generated
- (4) Underground hydro electric power generating stations with static excitation system = 0.7% of energy generated

14. Transformation losses

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

15. Capital Cost

- (1) Subject to prudence check by the Commission, the actual expenditure incurred on completion of the project shall form the basis for determination of final tariff. The final 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 initial capital spares subject to a ceiling norm of 1.5% of the original project cost as on the cut off date.

Provided further 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.

- (2) In case of existing generating stations, the project cost first admitted by the Appropriate Commission shall form the basis for determination of tariff.

Note

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

16. Additional capitalisation

- (1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation up to the cut off date may be admitted by the Commission subject to prudence check.
 - (i) Deferred liabilities,
 - (ii) Works deferred for execution,
 - (iii) Procurement of initial capital spares in the original scope of works subject to ceiling specified in regulation 15,
 - (iv) Liabilities to meet award of arbitration or in compliance of the order or decree of a court, and
 - (v) On account of change in law.

Provided that original scope of works along with estimates of expenditure shall be submitted along with the application for provisional tariff.

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

- (2) Subject to the provision of sub-regulation (3) of this regulation, the capital expenditure of the following nature actually incurred after the cut off date may be admitted by the Commission subject to prudence check:
 - (i) Deferred liabilities relating to works/services within the original scope of work,
 - (ii) Liabilities to meet award of arbitration or in compliance of the order or decree of a court,
 - (iii) On account of change in law, and

- (vi) Any additional works/service which has become necessary for efficient and successful operation of plant but not included in the original capital cost.
- (3) Any expenditure incurred on acquiring minor items/assets like tools and tackles, personal computers, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, T.V, washing machine, heat-convectors, mattresses, carpets, etc brought after the cut off date shall not be considered for additional capitalization for determination of tariff with effect from 1.4.2004.

Note

The list of items is illustrative and not exhaustive.

- (4) Impact of additional capitalisation in tariff revision may be considered by the Commission twice in a tariff period, including revision of tariff after the cut off date.

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 arrived at in the manner indicated in regulation 18.

Note 2

Any expenditure on replacement of old assets shall be considered after writing off the gross value of the original assets from the original capital cost, except such items as are listed in sub-regulation (3) of this regulation.

Note 3

Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 18.

Note 4

Any expenditure admitted on renovation and modernization and life extension shall be serviced on normative debt-equity ratio specified in regulation 18 after writing off the original amount of the replaced assets from the original capital cost.

17. 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 for infirm power shall be the same as the primary energy rate of the generating station.

18. Debt-Equity Ratio

(1) In case of all generating stations, debt–equity ratio as on the date of commercial operation shall be 70:30 for determination of tariff. 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.

Provided that in case actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff.

(2) The debt and equity amounts arrived at in accordance with sub-regulation (1) shall be used for calculating interest on loan, return on equity, Advance Against Depreciation and Foreign Exchange Rate Variation.

Chapter 4: Computation of Annual Charges

19. Two part Tariff

The two-part tariff for sale of electricity from a hydro power station shall comprise of recovery of Annual Capacity Charges and Primary Energy Charges.

20. Capacity Charges

(1) The Capacity Charges shall be computed in accordance with the following formula:

$$\text{Capacity Charges} = (\text{Annual Fixed Charges} - \text{Primary Energy Charges})$$

Note

Recovery through Primary Energy Charges shall not be more than Annual Fixed Charges.

(2) 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 home state(s) if any.

Provided that in cases where share of saleable capacity, which is the committed or earmarked capacity for any beneficiary through an agreement or otherwise, is not available, the apportionment shall be on the basis of proportion of energy sales to different beneficiaries.

21. Annual Fixed Charges

- (1) Annual Fixed Charges (AFC) shall consist of:
 - (a) Interest on Loan Capital
 - (b) Depreciation including Advance against depreciation
 - (c) Return on equity
 - (d) Operation & Maintenance expenses
 - (e) Interest on working capital
- (2) Income, other than that through charges permitted by the Commission, and involving utilisation of the generating company's assets may be suitably accounted for by the Commission while determining the tariff.

22. Interest on loan capital

- (1) Interest on loan capital shall be computed loan-wise including on the loans arrived at in the manner indicated in regulation 18.
- (2) The loan outstanding as on 1.4.2004 shall be worked out as the gross loan as per sub-regulation (1) above minus cumulative repayment as admitted by the Commission up to 31.3.2004. Future repayments shall be worked out on normative basis.
- (3) The generating company shall make every effort to swap the loan as long as it results in net benefit to the beneficiaries. The costs associated with such swapping shall be borne by the beneficiaries.
- (4) The changes to the loan terms and conditions shall be reflected from the date of such swapping and benefit passed on to the beneficiaries.
- (5) In case of any dispute, any of the parties may approach the Commission with proper application. However, the beneficiaries shall not withhold any payment as ordered by the

Commission to the generating company during pendency of any dispute relating to swapping of loan.

- (6) In case any moratorium period is availed of by the generating company, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and the interest on loan capital shall be calculated accordingly.
- (7) The generating company shall not make any profit on account of swapping of loan and interest on loan.

23. Depreciation

- (1) The value base for the purpose of depreciation shall be the historical cost of the asset.
- (2) Depreciation shall be calculated annually based on straight line method over the useful life of the asset and at the rates prescribed in Appendix I to these regulations.

The residual life of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the historical capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of the historical cost of the asset. The historical capital cost of the asset shall include additional capitalisation on account of Foreign Exchange Rate Variation up to 31.3.2004 already allowed by the Central or State Government/Commission.

- (3) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.
- (4) Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on *pro-rata* basis.

24. Advance against depreciation (AAD)

In addition to allowable depreciation, generating company shall be entitled to an advance against depreciation, computed in the manner given hereunder.

AAD = Loan repayment amount as per regulation 22 subject to a ceiling of 1/10th of loan amount as per regulation 18 minus depreciation as per schedule.

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

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

25. Return on Equity

Return on equity shall be computed on the equity base determined in accordance with regulation 18 and shall be @ 14% per annum.

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

Explanation:

The premium raised by the generating company while issuing share capital and investment of internal resources created out of free reserve of the existing generating station, if any, for the funding of the project, shall also be reckoned as paid up capital for the purpose of computing return on equity, provided such share capital, premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station and forms part of the approved financial package.

26. Operation and Maintenance expenses

(1) For plants more than 5 years age:

- (a) The operation and maintenance expenses including insurance, for the existing generating stations which have been in operation for 5 years or more in the base year of 2003-04, shall be derived on the basis of actual operation and maintenance expenses for the years 1998-99 to 2002-03, based on the audited balance sheets, excluding abnormal operation and maintenance expenses, if any, after prudence check by the Commission.
- (b) The average of such normalised operation and maintenance expenses after prudence check, for the years 1998-99 to 2002-03 considered as operation and maintenance expenses for the year 2000-01 shall be escalated at the rate of 4% per annum to arrive at operation and maintenance expenses for the base year 2003-04.

- (c) The base operation and maintenance expenses for the year 2003-04 shall be escalated further at the rate of 4% per annum to arrive at permissible operation and maintenance expenses for the relevant year of tariff period.
- (2) For plants less than 5 years age:
- (a) In case of the hydro electric generating stations, which have not been in existence for a period of five years, the operation and maintenance 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 operation and maintenance expenses for the base year 2003-04. The base operation and maintenance expenses shall be further escalated at the rate of 4% per annum to arrive at permissible operation and maintenance expenses for the relevant year.
 - (b) In case of the hydro electric generating stations declared under commercial operation on or after 1.4.2004, the base operation and maintenance 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.
- (3) In case of multi-purpose hydroelectric stations, with irrigation, flood control and power components, the O&M expenses chargeable to power component of the station only shall be considered for determination of tariff.

27. Interest on Working Capital

- (1) Working Capital shall cover:
- (a) Operation and Maintenance expenses for one month;
 - (b) Maintenance spares @ 1% of the historical cost escalated @ 6% per annum from the date of commercial operation (in case of UJVNL's stations transferred from UPIVNL, historical cost shall be the cost as on the date of unbundling of UPSEB to be escalated @ 6% p.a. thereafter), and
 - (c) Receivables equivalent to two months of fixed charges for sale of electricity calculated on normative capacity index.

- (2) Rate of interest on working capital shall be the short-term Prime Lending Rate of State Bank of India as on 1.4.2004 or on 1st April of the year in which the generating unit/station is declared under commercial operation, whichever is later. The interest on working capital shall be payable on normative basis notwithstanding that the generating company has not taken working capital loan from any outside agency.

28. Primary and Secondary Energy Charges

- (1) Primary Energy Charges shall be worked out on the basis of paise per kWh rate on ex-bus energy scheduled to be sent out from the hydro power generating station after adjusting for the free power delivered to the home state.
- (2) Rate of primary energy for all hydro electric power 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 concerned region. The primary energy charge shall be computed based on the primary energy rate and saleable energy of the station.

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

$$\text{Primary energy rate} = \frac{\text{Annual Fixed Charges}}{\text{Saleable Primary Energy}}$$

- (3) Primary Energy Charges = Saleable Primary Energy x Primary Energy Rate

Secondary energy rate shall be equal to primary energy rate.

Secondary Energy Charges = Saleable Secondary Energy x Secondary Energy Rate

Chapter 5: Miscellaneous

29. 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:

$$\text{Incentive} = 0.65 \times \text{Annual Fixed Charge} \times (\text{CI}_A - \text{CI}_N) / 100$$

(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 total incentive payment calculated on an annual basis shall be shared by the beneficiaries based on the allocated capacity.

Provided that in cases where allocated capacity, which is the committed or earmarked capacity for any beneficiary through an agreement or otherwise, is not available, the apportionment shall be on the basis of proportion of energy sales to different beneficiaries.

30. Incentive for completion of hydro power generating stations ahead of schedule

In case of commissioning of a hydro power generating station or part thereof ahead of schedule, as set out in the first approval of the Central/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 Central/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.

31. Deemed Generation

- (1) In case of reduced generation due to the reasons beyond the control of Generating Company such as on account of non-availability of transmission lines for supply to any beneficiary or on receipt of backing down instructions from the State Load Dispatch 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 affected beneficiaries shall be in proportion to their shares in saleable capacity of the station.

Provided that in cases where share of saleable capacity, which is the committed or earmarked capacity for any beneficiary through an agreement or otherwise, is not available, the apportionment shall be on the basis of proportion of energy sales to different beneficiaries.

- (2) Energy charges on the above account shall not be admissible if the energy generated during the year is equal to or more than Design Energy.

32. Demonstration of Declared Capacity

- (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. In the event of Generating Company failing to demonstrate the declared capacity within a tolerance limit specified by State Transmission Utility, the capacity charges due to the Generating Company shall be reduced as a measure of penalty.
- (2) The quantum of penalty for the first mis-declaration for 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 made available for review by the State Load Despatch Centre or State Transmission Utility, as the case may be. These books keep record of machine operation and maintenance, reservoir level and spillway gate operation.

33. 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. Processed data of the meters along with data

relating to declared capability and schedules etc., shall be supplied by State Load Despatch Centres to State Transmission Utility and State Transmission Utility shall issue the State Accounts for energy on monthly basis.

34. Savings

(1) Nothing in these regulations shall, expressly or impliedly, bar the Commission dealing with any matter or exercising any power under the Act for which no regulations have been framed, and the Commission may deal with such matters, powers and functions in a manner, as it considers just and appropriate.

(2) Powers to Remove Difficulties

If any difficulty arises in giving effect to these regulations, the Commission may, of its own motion or otherwise, by an order and after giving reasonable opportunity to those likely to be affected by such order, make such provisions, not inconsistent with these regulations, as may appear to be necessary for removing the difficulty.

(3) Powers to Relax

The Commission, for reasons to be recorded in writing, may relax or vary any of the provisions of these regulations on its own motion or on an application made before it by an interested person.

By order of the Commission

(Anand Kumar)

Secretary

Uttaranchal Electricity Regulatory Commission

Appendix 1

Depreciation Schedule

Description of Assets	Useful Life (yrs)	Rate (Calculated w.r.t. 90%)	Allowed Depreciation (%)
1	2	3	4=2*3
A. Land owned under full title	Infinity	---	
B. Land held under lease:			
(a) For investment in land.	The period of lease or the period remaining unexpired on the Assignment of the lease.	---	
(b) For cost of clearing site	The period of lease remaining unexpired at the date of clearing the site.	---	
C. Assets:			
Purchased new :			
(a) Plant and machinery in generating Stations including plant foundations			
(i) Hydro-electric	35	2.57	90
(ii) Steam-electric NHRS & Waste Heat Recovery Boilers/Plants	25	3.60	90
(iii) Diesel-electric & gas plant	15	6.00	90
(b) Cooling towers and circulating water systems	25	3.60	90
(c) Hydraulic works forming part of hydro-electric system including:			
(i) Dams, Spilways weirs, canals reinforced concrete Flumes & syphons	50	1.80	90
(ii) Reinforced concrete pipelines and surge tanks, steel pipelines, sluice gates, steel surge (tanks) hydraulic control valves and other hydraulic works.	35	2.57	90
(d) Building & civil engineering works of a Permanent character, not mentioned above :-			
(i) Offices & showrooms	50	1.80	90
(ii) Containing thermo- electric generating plant	25	3.60	90
(iii) Containing hydro- electric generating plant	35	2.57	90
(iv) Temporary erection such as wooden structures	5	18.00	90
(v) Roads other than kutchha roads	50	1.80	90
(vi) Others	50	1.80	90
(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	90
(ii) Others	25	3.60	90

Description of Assets	Useful Life (yrs)	Rate (Calculated w.r.t. 90%)	Allowed Depreciation (%)
(f) Switchgear, including cable connections	25	3.60	90
(g) Lightning arrestors:			
(i) Station type	25	3.60	90
(ii) Pole type	15	6.00	90
(iii) Synchronous condenser	35	2.57	90
(h) Batteries:	5	18.00	90
(i) Underground Cable including joint boxes and disconnected boxes	35	2.57	90
(ii) Cable duct system	50	1.80	90
(i) Overhead lines including supports:			
(i) Lines on fabricated steel operating at nominal voltages higher than 66 KV	35	2.57	90
(ii) Lines on steel supports operating at nominal voltages higher than 13.2 Kilo volts but not exceeding 66 Kilo volts	25	3.60	90
(iii) Lines on steel or reinforced concrete supports	25	3.60	90
(iv) Lines on treated wood supports	25	3.60	90
(j) Meters	15	6.00	90
(k) Self propelled vehicles	5	18.00	90
(l) Air conditioning plants:			
(i) Static	15	6.00	90
(ii) Portable	5	18.00	90
(m) (i) Office furniture and fittings	15	6.00	90
(ii) Office equipments:	15	6.00	90
(iii) Internal wiring including fittings and apparatus	15	6.00	90
(i) Street light fittings	15	6.00	90
(n) Apparatus let on hire:			
(i) Other than motors	5	18.00	90
(ii) Motors	15	6.00	90
(o) Communication equipment:			
(i) Radio and higher frequency carrier system	15	6.00	90
(ii) Telephone lines and telephones	15	6.00	90
(p) Assets purchased second hand and assets not otherwise provided for in the schedule	Such reasonable period as the competent Government determines in each case having regard to the nature, age and condition of the assets at the time of its acquisition by the owner.		