



# सरकारी गजट, उत्तरांचल

उत्तरांचल सरकार द्वारा प्रकाशित

रुड़की, शनिवार, दिनांक 26 जून, 2004 ई0 (आषाढ़ 05, 1926 शक सम्वत्)

भाग 1-क

नियम, कार्य-विधियां, आज्ञाएं, विज्ञप्तियां इत्यादि जिनको उत्तरांचल के राज्यपाल महोदय, विभिन्न विभागों के अध्यक्ष तथा राजस्व परिषद ने जारी किया

## UTTARANCHAL ELECTRICITY REGULATORY COMMISSION

80, Vasant Vihar, Phase-1, Dehradun-248006

### NOTIFICATION

June 15, 2004

**No. F9(6)/RG/UERC/2004/362**--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 Distribution Tariff) Regulations, 2004.
- (2) These Regulations extend to the whole of the State of Uttaranchal.
- (3) These Regulations shall come into force from 15.06.2004.

#### 2. Scope and extent of application:

These Regulations shall apply where the tariff is to be determined by the Commission for the distribution licensees in State of Uttaranchal.

#### 3. Definitions:

Unless the context otherwise requires:--

- (1) 'Act' means the Electricity Act, 2003 (36 of 2003).
- (2) 'Authority' means Central Electricity Authority referred to in section 70 of the Electricity Act, 2003.
- (3) 'Capitalisation' means the capital expenditure actually incurred and capitalised for erection, commissioning, augmentation and/or extension of the distribution system and admitted by the Commission after prudence check and "capitalise(d)" shall be construed accordingly.
- (4) 'Consumer' means any person who is supplied with electricity for his own use by a licensee or the Government or by any other person engaged in the business of supplying electricity to the public under

the Act or any other law for the time being in force and includes any person whose premises are for the time being connected for the purpose of receiving electricity with the works of a licensee, the Government or such other person, as the case may be.

- (5) 'Commission' means Uttaranchal Electricity Regulatory Commission.
- (6) 'Distribution licensee' means a licensee authorized to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply.
- (7) 'Distribution system' means the system of wires and associated facilities between the delivery points on the transmission lines or the generating station connection and the point of connection to the installation of the consumers.

Unless otherwise decided by the Commission, distribution system shall consist mainly of cable, service lines and overhead lines, electrical plant and meters having design voltage of 33 kV and under and shall also include any other system of higher or lower voltage as the Commission may specifically recognise. A distribution system shall not include any part of the transmission system including such part of 33 kV design voltage as the Commission may by order specifically include as part of the transmission system.

- (8) 'Year' means a financial year.
- (9) 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: Filing of Annual Revenue Requirement and Tariff Application

### 4. Filing of Expected Revenue & Cost of Services and Application for determination of tariff:

Every distribution licensee shall file with the Commission in the formats or in the form as may be required by the Commission, statements containing calculation for the ensuing financial year of the expected aggregate revenue from charges under its currently approved tariff and the expected cost of providing services i.e. the Annual Revenue Requirement (ARR).

### 5. Schedule and procedure of filing ARR and tariff application:

The schedule and procedure of filing the ARR and tariff application shall be as per the provisions of the Uttaranchal Electricity Regulatory Commission (Conduct of Business) Regulations, 2004.

## Chapter 3: Sales Forecast, Losses and Availability of Power

### 6. Sales Forecast:

- (1) Sales forecast for the tariff year shall be made consumer category-wise and shall be based on the past trend. Suitable adjustments shall be made to reflect the effect of known and measurable changes with respect to number of consumers, the connected load and the energy consumption, thereby removing any abnormality in the past data.
- (2) Sales shall be forecast on monthly basis to properly capture the seasonality in demand.
- (3) Sales forecast for unmetered will be validated with norms that may be approved for this purpose by the Commission from time to time.

### 7. Energy loss:

- (1) Energy loss in the distribution system shall be called Distribution Loss.
- (2) Distribution Loss above and upto a particular voltage level shall be calculated as the difference between the energy initially injected into the distribution system and the sum of energy sold upto that level and energy delivered to next voltage level. Energy sold shall be the sum of metered sales and assessment of unmetered sales based on approved norms.

% Distribution Loss above and upto a particular voltage level shall be expressed in terms of Distribution Loss upto that level as a percentage of the energy initially injected into the distribution system.

- (3) The Commission may require information on Circle-wise and/or month-wise Distribution loss calculation.
- (4) To substantiate the Distribution Loss calculations, the Commission may require the distribution licensee to conduct proper and reliable energy audit.
- (5) The Commission may segregate voltage-wise Distribution Loss into Technical loss (i.e. Ohmic/Core loss in the lines, substations and equipment) and Commercial Loss (i.e. unaccounted energy due to metering inaccuracies/inadequacies, pilferage of energy etc.).
- (6) The Commission may fix targets, both long term and short term, for loss reduction to bring down the Distribution loss levels (both technical and commercial) gradually to acceptable norms of efficiency.
- (7) The Commission may segregate Distribution Loss reduction for the tariff year into Technical Loss reduction and Commercial Loss reduction and accordingly make adjustments for the same in power purchase requirement and sales.

#### 8. Availability of Power:

- (1) For the tariff year, monthly availability of power shall be ascertained on the basis of the following:--
  - (a) From Central/State Sector Generating Stations:--
    - (i) Distribution licensee's share in the allocated and unallocated capacity, if any, of the Station; and
    - (ii) Likely availability of energy from each generating station based on projections given the generators and the historical data of supply from the generators; or
    - (iii) The PLF/Generation targets for the Station fixed by Central Electricity Authority; or
    - (iv) The historical performance of the Station adjusted for any planned maintenance or shut-downs.
  - (b) From other sources:--
    - (i) Distribution licensee's banking arrangement with any other distribution licensee, Board or trading licensee.
    - (ii) Distribution licensee's agreement with any other distribution licensee, Board, generating company or trading licensee regarding purchase of power.

### Chapter 4: Annual Expenditure

#### 9. Components of Annual Expenditure:

- (1) The Annual Expenditure of the distribution licensee shall comprise of the following components:--
  - (a) Power Purchase Cost
  - (b) Employees Cost
  - (c) Administration and General (A&G) Expenses
  - (d) Repair and Maintenance (R&M) Expenses
  - (e) Depreciation
  - (f) Interest Costs
  - (g) Bad and Doubtful Debts
  - (h) Return on Equity
  - (i) Taxes on Income
  - (j) Other expenses

#### 10. Power Purchase Cost:

- (1) The existing and proposed power purchase/banking/trading agreements approved by the Commission shall be considered for the power purchase cost.
- (2) For the tariff year, the distribution licensee's requirement of power purchase for sale to its consumers shall be estimated based on the sales forecast, the transmission loss and target distribution loss level for the tariff year.

- (3) For the tariff year, the cost of energy available from State Generating Stations shall be taken as that approved by the Commission for purchase from the Station and that of energy from Central Sector Station shall be taken as per the Central Electricity Regulatory Commission orders. The cost of energy from other sources shall be as per the power purchase/banking/trading agreements as may be approved by the Commission.
- (4) For the tariff year, the power purchase cost for distribution licensee's requirement for sale to its consumers shall be estimated on the basis of merit order principle.
- (5) The Inter-state transmission charges shall be estimated as per orders of the Central Electricity Regulatory Commission, while the Intra-state transmission and wheeling charge shall be estimated as per orders of the Commission.

#### **11. Employee costs, Administration and General (A&G) Expenses and Repair and Maintenance (R&M) Expenses:**

- (1) Employee costs, A&G expenses and R&M expenses for the tariff year shall be calculated on the basis of historical costs and the prevailing norms with appropriate validated changes in the same subject to prudence check by the Commission.
- (2) The norms of employee costs, A&G expenses and R&M expenses shall be brought up to an efficient level within such span of time as may be determined by the Commission.

#### **12. Bad and Doubtful Debts:**

Bad and Doubtful Debts shall be allowed as a legitimate business expense only if it is within the norms fixed by the Commission and to the extent the distribution licensee has identified and actually written off bad debts according to a transparent policy approved by the Commission.

#### **13. Capital Expenditure:**

- (1) Only such capital expenditure as is incurred or proposed to be incurred with the approval of the Commission, including that exempted from prior approval, as per the procedure specified in Uttaranchal Electricity Regulatory Commission (Conduct of Business) Regulations, 2004 shall be considered for tariff purposes.
- (2) The capital expenditure within the original scope of work approved by the Commission relating to following nature actually incurred or proposed to be incurred may be admitted by the Commission subject to prudence check:--

- (a) Deferred liabilities relating to works/services within the original scope of work,
- (b) Works deferred for execution,
- (c) Liabilities to meet award of arbitration or in satisfaction of the order or decree of a court, and
- (d) On account of change in law:

Provided that original scope of works along with estimates of expenditure shall be submitted alongwith the application for approval of investments:

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted alongwith the application for approval of the investment.

- (3) The capital expenditure actually incurred for any additional works/service which has become necessary for efficient and successful operation of plant but not included in the original capital cost may be admitted by the Commission subject to prudence check.
- (4) Debt Equity Ratio:
  - (a) 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.

- (b) The debt and equity amounts arrived at in accordance with clause (a) shall be used for calculating interest on loan, return on equity, Advance Against Depreciation.

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 above.

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.

NOTE 3-- Any expenditure admitted on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio specified above.

NOTE 4-- Any expenditure admitted on renovation and modernization and life extension shall be serviced on normative debt-equity ratio specified above after writing off the original amount of the replaced assets from the original capital cost.

NOTE 5-- 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.

#### 14. Interest Costs:

##### (1) Interest on loans

- (a) Interest on loan capital shall be computed loan-wise including on the loans arrived at in the manner indicated in regulation 13(4).
- (b) The loan outstanding as on 1.4.2004 shall be worked out as the gross loan as per clause (a) above minus cumulative repayment as admitted by the Commission up to 31.3.2004. Future repayments shall be worked out on normative basis.
- (c) In case any moratorium period is availed of by the distribution licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and the interest on loan capital shall be calculated accordingly.

##### (2) Interest on working capital

- (a) Working capital shall be worked out to cover
- Operation and Maintenance expenses, which includes Employee costs, R&M expenses and A&G expenses, for one month; (estimated spares cost for a period approved as minimum inventory period but normally not exceeding one quarter shall be allowed in R&M expenses)
  - Capital required to finance such shortfall in collection of current dues as may be allowed by the Commission.
  - Receivables for sale of electricity for a period equivalent to billing cycle plus one month suitably adjusted for security given by consumers and credit given by suppliers.
- (b) Rate of interest on working capital shall be the short-term Prime Lending Rate of State Bank of India as on 1st April of the tariff period.
- (c) The revenue collection against current dues and past dues shall be shown separately and expressed as a percentage of the current dues and past dues respectively. These percentages shall be brought to an efficient level within a time period as may be directed by the Commission.

##### (3) Interest on Consumer security deposits

Interest on Consumer security deposits shall be at the rate as may be directed by the Commission from time to time.

#### 15. Depreciation including Advance Against Depreciation:

##### (1) Depreciation

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

- (a) The value base for the purpose of depreciation shall be the historical cost, excluding consumer contribution or capital subsidy/grant, of the asset capitalised.
- (b) Depreciation shall be calculated annually as per straight line method over the useful life of the asset given in the Schedule attached to these regulations as Appendix-I.

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.

- (c) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.
  - (d) 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.
- (2) Advance against depreciation (AAD)

In addition to allowable depreciation, the distribution licensee may claim an advance against depreciation (AAD), computed in the manner given hereunder:

AAD = loan repayment amount as referred above in Regulation 13(1)(a) subject to a ceiling of 1/10th of the loan amount as per Regulation 12(4) 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.

## 16. Return on Equity:

- (1) Return on equity shall be computed on the equity base determined in accordance with Regulation 13(4) and shall be @ 14% per annum.

*Explanation:* The premium raised by the distribution licensee while issuing share capital and investment of internal resources created out of free reserve, 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 distribution system and forms part of the approved financial package.

(As and when the National Electricity Policy and National Tariff Policy is issued by the Central Government, the Commission shall consider the same and may suitably amend this Regulation, if deemed necessary.)

- (2) Return on equity shall be chargeable from the first year of operation. In case of infusion of equity during the year, return on equity shall be charged on *pro-rata* basis.

## 17. Tax on Income:

- (1) Tax on the income streams of the distribution licensee from core business shall be computed as an expense and shall be recovered in tariff.
- (2) Any under-recoveries or over-recoveries of tax on income shall be adjusted every year on the basis of return filed and 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 benefits of tax-holiday as applicable in accordance with the provisions of the Income Tax Act, 1961 shall be suitably accounted for.

## Chapter 5: Revenue Forecast and Revenue Gap

### 18. Forecast of Revenues:

- (1) The revenues of the distribution licensee from the business of the distribution of electricity shall comprise of the following four components:
  - (a) Revenue from sale of power i.e. tariff income,
  - (b) Non-tariff income,
  - (c) Other Revenue from grants etc.
- (2) The non-tariff income shall comprise of:
  - (a) Delayed Payment Surcharge,
  - (b) Meter Rent,
  - (c) Income from investments,
  - (d) Miscellaneous receipts from consumers,
  - (e) Trading income, and
  - (f) Any other income.

### 19. Revenue Gap:

- (1) For the tariff year, the difference between the Expenditure and the Forecast Revenue at prevailing tariff shall be called the Revenue Gap.
- (2) The revenue gap shall be bridged by measures such as improvements in efficiency, utilisation of reserves, tariff changes etc. as may be approved by the Commission.

## Chapter 6: Tariff Design

### 20. Cost standard:

The tariffs for various categories/voltages shall be benchmarked with and shall progressively reflect the cost of supply based on costs that are prudently incurred by the distribution licensee in its operations. Pending the availability of information that reasonably establishes the category-wise/voltage-wise cost to supply, average cost of supply shall be used as the benchmark for determining tariffs. The category-wise/voltage-wise cost to supply may factor in such characteristics as the load factor, voltage, extent of technical and commercial losses etc.

### 21. Rationalization of the tariff structure:

Suitable mergers of categories and of sub-categories may be done to evolve a simple, easy to comprehend and logical tariff structure.

### 22. Peak and Off-peak Tariffs:

A differential tariff for peak and off-peak hours may be designed to promote demand side management.

## Chapter 7: Miscellaneous

### 23. Savings:

- (1) Nothing in these Regulations shall be deemed to limit or otherwise affect the power of the Commission to make such orders as may be necessary to meet the ends of justice.
- (2) Nothing in these Regulations shall bar the Commission from adopting in conformity with provisions of the Act, a procedure which is at variance with any of the provisions of these Regulations, if the Commission, in view of the special circumstances of a matter or a class of matters, deems it just or expedient for deciding such matter or class of matters.
- (3) Nothing in these Regulations shall, expressly or impliedly, bar the Commission dealing with any matter or exercising any power under the Act for which no regulations have been framed, and the Commission may deal with such matters, powers and functions in a manner, as it considers just and appropriate.

**24. Powers to Remove Difficulties:**

If any difficulty arises in giving effect to any of the provisions of these Regulations, the Commission may by general or special order give directions, not being inconsistent with the Act, which appears to the Commission to be necessary or expedient for the purpose of removing difficulties.

**25. Power to Amend:**

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

**Appendix-I****Depreciation Schedule**

Description of Assets	Useful Life (yrs)
1	2
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
(ii) Steam-electric NHRS & Waste Heat Recovery Boilers/Plants	25
(iii) Diesel-electric & gas plant	15
(b) Cooling towers and circulating water systems	25
(c) Hydraulic works forming part of hydro-electric system including:	
(i) Dams, Spilways weirs, canals reinforced concrete Flumes & syphons	50
(ii) Reinforced concrete pipelines and surge tanks, steel pipelines, sluice gates, steel surge (tanks) hydraulic control valves and other hydraulic works.	35
(d) Building & civil engineering works of a Permanent character, not mentioned above :	
(i) Offices & showrooms	50
(ii) Containing thermo- electric generating plant	25
(iii) Containing hydro- electric generating plant	35
(iv) Temporary erection such as wooden structures	5
(v) Roads other than kutchra roads	50
(vi) Others	50
(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
(ii) Others	25
(f) Switchgear, including cable connections	25
(g) Lightening arrestors:	
(i) Station type	25
(ii) Pole type	15
(iii) Synchronous condensor	35



1	2
(h) Batteries:	5
(i) Underground Cable including joint boxes and disconnected boxes	35
(ii) Cable duct system	50
(i) Overhead lines including supports:	
(i) Lines on fabricated steel operating at nominal voltages higher than 66 KV	35
(ii) Lines on steel supports operating at nominal voltages higher than 13.2 Kilo volts but not exceeding 66 Kilo volts	25
(iii) Lines on steel or reinforced concrete supports	25
(iv) Lines on treated wood supports	25
(j) Meters	15
(k) Self propelled vehicles	5
(l) Air conditioning plants:	
(i) Static	15
(ii) Portable	5
(m) (i) Office furniture and fittings	15
(ii) Office equipments:	15
(iii) Internal wiring including fittings and apparatus	15
(iv) Street light fittings	15
(n) Apparatus let on hire:	
(i) Other than motors	5
(ii) Motors	15
(o) Communication equipment:	
(i) Radio and higher frequency carrier system	15
(ii) Telephone lines and telephones	15
(p) Assets purchased 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 condition of the assets at the time of its acquisition by the owner.

NOTE : Life of assets based on Central Electricity Regulatory Commission notification no. L-7/25(5)/2003-CERC, dated 26th March, 2004.

By Order of the Commission,

ANAND KUMAR,

Secretary,

Uttaranchal Electricity Regulatory Commission.