

**ORISSA ELECTRICITY REGULATORY COMMISSION  
(TERMS AND CONDITIONS FOR DETERMINATION OF  
TARIFF) REGULATIONS, 2004**

**THE ORISSA GAZETTE****EXTRA ORDINARY****PUBLISHED BY AUTHORITY**

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**ORISSA ELECTRICITY REGULATORY COMMISSION****UNIT – VIII, BHUBANESWAR – 751012****NOTIFICATION****The 9<sup>th</sup> June , 2004**

No. JD(T-ENGG)-226/2004- In exercise of powers conferred by Sections 61 and 62 of the Electricity Act, 2003 (Act 36 of 2003) and all other powers enabling it in that behalf, the Orissa Electricity Regulatory Commission hereby makes the following Regulations, namely:

**CHAPTER – I****(GENERAL)****1. Short Title, Commencement and interpretation:-**

- (a) These Regulations may be called the Orissa Electricity Regulatory Commission (Terms and conditions for determination of tariff) Regulations, 2004.
- (b) They extend to the State of Orissa.
- (c) These regulations shall come into force from the date of their publication in the official gazette.
- (d) The Orissa General Clauses Act, 1937 shall apply to the interpretation of these Regulations.

**2. Definitions:-**

In these Regulations, unless the context otherwise requires :-

- (a) ‘Act’ means the Electricity Act, 2003.
- (b) ‘Commission’ means the Orissa Electricity Regulatory Commission.

- (c) Words and expressions used and not defined in these Regulations but defined in the Electricity Act, 2003, shall have the meanings assigned to them in the said Act.

## **CHAPTER - II**

### **Principles of determination of tariff under Section 62(1) for (A) Supply of power from a generating company to a distribution company, (B) Transmission of electricity & (C) Wheeling of electricity.**

3. (a) The Commission shall be guided by nine principles as laid down in section 61(a) to 61 (i) of the Act, while determining the tariff for (a) supply of electricity by generating company to the distribution licensee; (b) transmission of electricity.
- (b) With regard to determination of tariff for wheeling of electricity in a transmission system, the principles as enumerated in para 7 (d) of these Regulations for determination of wheeling charges in respect of a distribution system shall be made applicable in addition to the nine principles as laid down in Section 61(a) to 61(i) of the Act.

## **CHAPTER – III**

### **Principles of determination of tariff under Section 62(1)(d) for retail sale of electricity.**

4. The Commission shall be guided by the nine principles as laid down in section 61(a) to 61(i) of the Act, while determining the tariff for retail sale of electricity.
- (a) The tariff for retail sale of electricity shall include cost of generation, transmission, distribution and supply of electricity.
- (b) Where tariff has been determined through the 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.
5. **General principles**
- (1) (a) The licensee shall make all filings for Annual Revenue Requirement (ARR) as per annual schedule, by November 30<sup>th</sup> of every year.
- (b) The licensee in the ARR filing for the ensuing financial year shall indicate the manner in which the gap, if any, between the charges which it is permitted to recover and the expected revenue calculated shall be filled up.
- (c) A Tariff Order shall continue to be in force for such period as may be indicated in the said order unless amended or revoked earlier.

(d) The Commission may broadly classify costs incurred by licensee as controllable and non-controllable. For all controllable costs, the Commission may set the targets for each year under review. These targets shall be used for computing revenue requirement. If required, certain controllable costs can be indexed to appropriate indices/rates like Consumer Price Index (CPI), Wholesale Price Index (WPI), Prime Lending Rate (PLR), etc.

(e) All non-controllable costs as checked by the Commission with due diligence and prudence shall be treated as pass-through.

(f) The Commission may require a long-term business plan from each licensee for adopting the multi-year tariff regime, which the licensee shall scrupulously comply.

(g) The Accounting Policy and Chart of Accounts shall be followed by the licensee, as determined by the Commission from time to time.

## **(2) Sales forecast**

(a) The licensee shall forecast energy sales, the number of consumers and load profile for each consumer category and for each slab for the period under consideration. The Commission shall examine the sales forecasts of the licensee for reasonableness, consistency of principles across all licensees, past trend etc., before accepting and adopting it. The licensee shall develop a robust database of all consumers with desired particulars regarding their demand to facilitate the forecasting process in accordance with the direction given by the Commission.

(b) This sales forecast shall be applied in estimating the revenue accruals.

## **(3) Distribution Loss**

(a) To set the base line of distribution loss estimate, the Commission may either require the licensee to carry out proper loss estimation studies under its supervision, or initiate a study itself.

(b) The Commission shall approve a realistic and achievable loss target for the year under review based on the opening loss levels, licensee's filings, submissions and objections raised by the stakeholders. This approved loss target will be used for computing sale of power to consumers for that year.

(c) The licensee will have to share with the consumers part of the financial gains arising from achieving higher loss reduction vis-à-vis the target. Losses on account of under achievement of loss reduction target will be entirely borne by the licensee.

**(4) Power Purchase**

- (a) The quantum of power purchase for the ensuing financial year shall be estimated on the basis of actual purchase made during the previous financial year(s), actuals to the extent available for the current year and any projections for the balance period of the current year with appropriate adjustments for any abnormal variations during the period. The licensee through appropriate documentation shall justify all the abnormal deviations. This quantity will be evaluated at the price based on the power purchase agreements, bulk supply agreements etc. consented by the Commission.
- (b) The Commission will not ordinarily consider the additional power purchases beyond the approved level of power purchases. However, if the variation in the actual purchase vis-à-vis the quantum of power as ordered by the Commission is on account of events beyond the reasonable control of the Licensee, as established to the satisfaction of the Commission, the resultant effect will be taken in to account in subsequent accounting years. To meet this additional requirement of power, the licensee shall follow the least cost combination of power procurement.
- (c) In the regime of Availability Based Tariff (ABT), the licensee shall be allowed to retain incentive of overdrawl of power under higher frequency and likewise absorb the loss for drawl of power under lower frequency as and when decided by the Commission.
- (d) In case of direct procurement of power by the distribution licensees from generators/other sources in order to optimise the cost of power procured by utilities, the Commission may lay down guidelines for power purchase mainly based on merit order dispatch. While devising these guidelines, the Commission may consider the following:
  - i) Load profiles during various seasons
  - ii) Technical constraints
  - iii) Avoidable costs (whether from own generation or power purchase) after giving due consideration to valid contractual obligations.
- (e) The power purchase expenses as determined through such optimal merit order dispatch after due consideration for contractual obligations and technical constraints, shall be considered for pass through in the Revenue Requirement.

- (f) An automatic fuel cost revision provision may be provided, and the licensee shall be required to compute changes in the fuel costs, and appropriately claim or refund the same in tariffs, on quarterly basis according to an automatic fuel cost revision provision. The fuel cost revision shall include fuel related expenses including variations in mix of power purchases.

(5) **Capital Base and Cost of Capital**

(A) **Capital Investments**

- (a) Capital investments cover spending on capital equipment that augments fixed assets, and capitalisation of corresponding interest and expenses determined as per the applicable accounting policies and guidelines. Capital investments may address a variety of needs such as, meeting load growth, refurbishment and replacement of equipment, reduction of losses, improvement of voltage profile, improvement of quality of supply and system reliability, metering, communication, computerisation, etc.
- (b) The licensee shall propose in its filing a detailed capital investment plan. The plan must separately show ongoing projects that will spill into the year under review, and new projects that will commence but may be completed within or beyond the tariff period. For the new projects, the filing must provide the justification as stipulated under relevant investment guidelines of the Commission.
- (c) The Commission shall review the licensee's investment plan for approval, and for this purpose may require the licensee to provide relevant technical and commercial details. The costs corresponding to the approved investment plan of a licensee for a given year will, normally be considered for its revenue requirement
- (d) In addition to the approved capital investment plan, the licensee can seek provision for additional capital expenditure anytime during the tariff year to meet natural calamities involving substantial investments. The Commission shall examine and if satisfied shall approve the corresponding costs for inclusion in revenue requirement in the next period.
- (e) In presenting the justification for new projects, the licensee shall detail the specific nature of the works, and outcome sought to be achieved. The detail must be shown in the form of physical parameters, e.g., new capacity added, to be added, meters replaced, customer service centres set up etc, so that it is amenable for physical verification. This is necessary to ensure that the approved investment plans are implemented and the licensee does not derive improper financial benefit by delaying or neglecting to make the proposed investment.

In case of any significant shortfall in physical implementation, the Commission shall require the licensee to explain the reasons, and may proportionately reduce the provision, including the interest and the return component, made towards revenue requirement, in the next period.

**(B) Financing Costs**

- (a) The costs corresponding to the approved investment plan of a licensee for a given year will, normally, be considered for its revenue requirement. For the past investments, actual values will be considered. Depreciation reserves to the extent available shall be utilised for financing the investments. The licensee shall not earn return from the assets created through this depreciation reserve.
- (b) In case of all new projects, debt-equity ratio shall be 70:30 for determination of tariff. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as the normative loan.

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

- (c) The licensee shall demonstrate that financing and investment requirements match. Thus, financing cost considered for revenue requirement is matched with what is needed for the approved level of capital expenditure and working capital.
- (d) For loans outstanding at the beginning of the year on the revenue account, the licensee shall indicate in its filing the expected interest outgo for each year. This will be considered towards revenue requirement of the licensee for such years. The licensee shall make efforts to reduce the cost of the outstanding loans, in case of declining interest rates, by way of swapping. The licensee, till the next tariff review, may retain the benefit of such savings, when the actual cost of interest will be considered as the base for subsequent years.
- (e) For all loans, the permitted interest cost will be linked to the Prime Lending Rate of a Scheduled Bank plus a predetermined margin that realistically reflects the rate at which the licensee can raise debt from the market.
- (f) In its filing, licensee may individually propose its choice of PLR reference (Indian Loans) and the margin, for the Commission's approval. In proposing this, the licensee must keep in view the suitability of PLR reference to its business, prevailing market conditions, its financial position, etc. To ensure consistency, the Commission will use one single benchmark PLR, which may be of a bank that is commonly acceptable.

**(C) Rate Base**

- (a) The Commission may determine appropriate rate base for computing returns either considering debt and equity separately for the present and may adopt the principle of return on capital employed at appropriate time.
- (b) The Commission shall provide a reasonable return to the investors to attract capital. In case of foreign currency brought as capital, the Commission may consider a separate rate of return if foreign exchange variation is allowed as a passthrough.
- (c) The return on equity may be linked to the RBI Bank Rate plus a margin for the investment risk in the power sector. The Commission may allow a fixed rate of return on capital base to be decided by it. The Commission may provide post tax returns and shall ensure that tax only to the extent of the tax on return is provided as passthrough.

**(D) Working Capital**

Working capital shall include

- (a) Operation and maintenance expenses for one month;
- (b) Amount equivalent to one sixth of approved Annual Revenue Requirement.

**(E) O&M Expenditure**

This component of the revenue requirement consists of employee costs, administration and general expenses, repair and maintenance expenses and other miscellaneous expenses. These costs shall be recognised at actual or as allowed by the Commission, whichever is lower, for the first period of review and shall be taken as base values. The Commission may endeavour to fix these costs on normative basis.

These approved base values may be indexed to pre-determined indices viz. Consumer Price Index, Wholesale Price Index or a combination of both the indices for the subsequent years. For example, the base value of O&M can be indexed to CPI and WPI.

**(F) Provision for bad debts**

The Commission shall allow a provision for bad debts as a prudent commercial practice in the revenue requirement of the licensee. This provision for bad debts will be established as a percentage of sales revenue. Before establishing a provision for bad debts, the Commission may direct the licensee to audit the receivables so that there will be no financial burden on genuine consumers due to inappropriate provision.

**(G) Depreciation**

For the purpose of tariff determination, the rate of depreciation will be linked to the useful life of the asset, calculated on straight-line method. However, a higher rate of depreciation may be permitted by the Commission, in case of inadequacy of cash for debt repayment. The Commission may also consider allowing advance against depreciation subject to the following constraints:

- (a) In any year, the Advance against depreciation and depreciation together do not exceed 1/12<sup>th</sup> of the original loan amount.
- (b) Total depreciation allowed during the life of the project shall not exceed 90% of the original project cost.

**(H) Profit Sharing**

- (a) The licensee will be provided with an approved return at the beginning of the period under review.
- (b) However, the licensee, if it makes more profit than the approved return on account of improved performance, the Commission shall treat the profit beyond the approved return in the following manner:
  - (i) In case, one-third amount to be declared by the licensee as dividends to the shareholders, is not paid out as dividend, it shall be eligible to be treated as part of equity to that extent and earn returns on the same. Any future declaration of dividend from this shall lead to commensurate decrease in the equity base for the purpose of returns.
  - (ii) One-third amount to be returned back to consumers by way of reduction in the consumer bills as rebate.
  - (iii) One-third amount shall be kept as tariff balancing reserve, which shall be used to reduce sharp rise in ARR in future years. The Commission may allow a part of the total reserve to be returned back to the consumers every 3 years by way of reduction in ARR. The amount in tariff balancing reserve shall not be eligible to be treated as part of equity and would not earn any return for the shareholders. Any return earned on this reserve shall be added back to this reserve.

**(I) Regulatory Asset**

Depending on the amount of Regulatory Asset submitted by the licensee and accepted by the Commission, the Commission shall stipulate the amortisation and financing rules of such assets. Creation of Regulatory Asset only for the purposes of avoiding tariff increase should not be allowed and it shall only be created to take care of force majeure or cost variations due to uncontrollable factors or major tariff shocks because of these reasons. The Commission shall have the discretion of providing regulatory assets.

**6. Quality of Services**

The Commission has laid down Overall Standards of Performance of licensee by way of separate Regulations. Depending on the performance of the licensee, the Commission may allow either incentive or disincentive.

**7. Tariff Principles****(a) Peak and Off-peak Tariff**

- (i) A differential tariff for peak and off-peak hours is necessary to promote demand side management. The Commission may encourage the distribution licensees to move towards separate peak and off-peak tariffs.
- (ii) The Commission shall stipulate the broad classification of consumers and time frame for implementation. While stipulating differential tariffs, the Commission may also indicate the periods for peak, off-peak and normal consumption.

**(b) Power Factor and Load Factor Related Tariff**

The Commission may provide rebates to the consumers for maintaining high power factor and load factor to promote efficiency of operation and optimum capacity utilisation. To achieve this, the Commission may at a future date consider switching over to kVAh tariff from kWh tariff for consumers having appropriate meters. However, even after switching to kVAh tariff demand charges shall continue to apply. This will take care of incentive for better power factor as well as curb the tendency of not improving the power factor beyond a point determined for penalty, to avail of the rebate for high load factor.

**(c) Surcharge**

- (i) Surcharge to be levied on wheeling consumers shall be determined by the Commission keeping in view the loss of cross-subsidy from the consumers or category of consumers who have opted for open access to take supply from a person other than the incumbent distribution licensee.

- (ii) The Commission may adopt requisite principle for computing surcharge, which shall compensate for the entire loss of cross subsidy for any given consumer category for which supply is given, as the Act clearly states that such surcharges shall be utilised to meet the requirements of current level of cross-subsidy. The entire amount of cross-subsidy lost by the incumbent licensee needs to be compensated.
- (iii) For the purpose of computing cross-subsidy, the difference between cost-to-serve of that category and average tariff realisation of that category shall be considered.

**(d) Wheeling**

- (i) The licensee shall provide non-discriminatory open access to the consumers within the period as stipulated by the Commission. For the purpose of tariff for wheeling, the person utilizing wheeling services shall be charged on both cash and kind basis.
- (ii) The wheeling charge in cash for a consumer category for the present shall be based on postage stamp method for the present, which includes cost of distribution system.
- (iii) Wheeling charge shall be computed taking into account, projected units to be sold and wheeled through distribution licensee network in the ensuing tariff period.
- (iv) With regard to charges in kind, the normative distribution system loss to be borne by the consumer in the case of wheeling transactions and it shall be based on the voltage levels.

**(e) Additional Surcharge**

Where a consumer avails open access, the Commission may determine the additional surcharge to meet the fixed costs of distribution licensee arising out of his obligation to supply and permit collection of such additional surcharge for the period the fixed cost remains stranded. If the capacity released on account of a consumer changing from his existing distribution licensee to another person is productively utilized then no stranded cost is involved.

**(f) Bulk Supply Tariff**

- (i) As per the provisions of the Act, the distribution licensees may buy power directly from a generating station or a trader. The Commission may continue to adopt a differential Bulk Supply Tariff mechanism to address the issues of uniform retail tariffs and different level of cross-subsidies that exist on account of the consumer mix, which however will be reviewed by the Commission from time to time.

- (ii) The Commission shall, while designing the differential bulk supply tariff, ensure bulk supply tariff predictability, protect efficiency gains and lay down a clear formula for the calculation of bulk supply tariff.

**(g) Provision of Subsidy**

- i) The Commission, while determining the tariff, shall see that the tariff progressively, reflects the cost of supply of electricity and also reduces and eliminates cross-subsidy within a period as stipulated by the Commission.
- ii) If the State Govt. decides to subsidise any consumer or class of consumers in the tariff determined by the Commission, the State Govt. shall pay the amount to compensate the licensee affected by grant of such subsidy in advance.
- iii) The Government shall, by notification, declare the consumers or class of consumers to be subsidised.
- iv) The licensee shall make an estimate of subsidy to be provided to the consumers or class of consumers as per the Govt. notification and file the same with the Commission for approval.
- v) The Commission shall scrutinize the estimate and may require further details, data, documents in support of the estimates, which the licensees are required to file with the Commission within the stipulated time.
- vi) The Commission, on according approval forward the same to the State Govt. with a direction to pay the amount in full with a copy of the approval to the licensee.
- vii) On receipt of the approval of the Commission, the Govt. shall pay the amount to the licensees or the affected person within one month of receipt of such approval.
- viii) The amount of subsidies shall be available to the licensees in the form of cash only.
- ix) The licensee shall pay the subsidy received from the Govt. to the entitled class of consumers in proportion to their energy consumption on actual basis by way of adjustment in the energy bill.
- x) The licensee shall keep proper accounts of subsidy in such manner as approved by the Commission, and render the same to the Commission within 30 days of the closure of the Year of account.
- xi) The difference between the subsidy received from the Govt. and actual disbursement to the entitled class of consumers shall be adjusted in the next year.

Provided that no such direction of the State Govt. to grant subsidy shall be operative if the payment is not made in accordance with the relevant provisions contained in these Regulations. In such a case the tariff fixed by the Commission shall be applicable to the consumers from the date of issue of tariff orders by the Commission.

#### **CHAPTER- IV**

##### **( Miscellaneous )**

**8. Procedure for Filing**

For the purpose of determination of Annual Revenue Requirement (ARR) and calculation of tariff, the licensee/generating company shall furnish the required information with regard to technical, commercial and financial parameters in the formats as approved by the Commission from time to time.

**9. Issue of orders and practice directions**

Subject to the provisions of the Act and these Regulations, the Commission may, from time to time, issue orders and practice directions in regard to the implementation of these Regulations.

**10. Power 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, do anything not being inconsistent with the provisions of the Act, which appears to it to be necessary or expedient for the purpose of removing the difficulties.

**By order of the Commission**

**(M.R. Hazra)**  
**Secretary**

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