

**ASSAM ELECTRICITY REGULATORY COMMISSION  
(FUEL AND POWER PURCHASE PRICE ADJUSTMENT  
FORMULA) REGULATIONS, 2010**

**Assam Electricity Regulatory Commission (Fuel and Power Purchase Price  
Adjustment Formula) Regulations, 2010**

**Notified by the Assam Electricity Regulatory Commission vide Notification No. AERC.  
28/2010 dated 28<sup>th</sup> December, 2012 and published in the Assam Gazette  
Extraordinary No. 337 in 28<sup>th</sup> December, 2010**

NO. AERC. 23/2010: In exercise of the powers conferred under Section 61(d), 62(4), 86(1)(b) sub-section (1) of section 181 and clause (zp) of sub-section (2) of section 181 of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it on that behalf, the Assam Electricity Regulatory Commission makes the following regulations :-

**1. Short title, extent and commencement:**

- (1) These regulations may be called the Assam Electricity Regulatory Commission **(Fuel and Power Purchase Price Adjustment Formula) Regulations, 2010.**
- (2) These regulations shall extend to the whole of the State of Assam.
- (3) These regulations shall come into force from the date of their publication in the Assam Gazette

**2. Introduction:** As per Section 62(4) of the Electricity Act 2003, no tariff or part of any tariff may ordinarily be amended more frequently than once in a financial year except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified. A reference can be drawn to the provisions of the Tariff Policy notified by the Government of India specifying that the uncontrollable costs be recovered speedily to ensure that the future consumers are not burdened with past costs. The uncontrollable costs include fuel cost, cost on account of inflation, variations in power purchase unit cost including on account of hydrothermal mix in case of adverse natural events etc. The AERC (Terms and conditions for determination of Tariff) Regulations, 2006 also states that “The Commission shall allow the recovery or refund; as the case may be, of additional charge for adjustment of tariff on account of change in fuel related costs of electricity generation and purchase of electricity within the period of a notified tariff order of the Commission.” In this regulation, a fuel surcharge formula is specified in order to recover the additional burden on account of changes in fuel price and power purchase cost. Accordingly, the Commission proposes to introduce the regulations to recover the change in fuel price for the approved quantity of generation and power purchase for the distribution licensee.

**3. Definitions:**

- (1) In these Regulations, unless the context otherwise requires:
  - (a) “Act” means the Electricity Act 2003 (36 of 2003);
  - (b) “Commission” means the Assam Electricity Regulatory Commission;

- (c) "Generating Company" means any company or body corporate or associating or body of individuals, whether incorporated or not, or artificial juridical person, which owns or operates or maintains a generating station;
- (d) "Licensee" means a person who has been granted a licence under section 14 of the Act, including a person deemed to be a licensee referred to under any of the provisions to Section 14 of the Act;
- (e) "Tariff" shall mean the schedule of charges for generation and bulk supply, transmission, wheeling and supply of electricity together with terms and conditions thereof;
- (f) "Unscheduled Interchange" (UI) shall mean unscheduled interchanges as defined in Indian Electricity Grid Code;
- (g) "Year" shall mean financial year ending on 31<sup>st</sup> March;
- (h) "Current Year" shall mean the year in which the statement of annual accounts or petition for determination of tariff is filed;
- (i) "Previous Year" shall mean the year immediately preceding the current year;
- (j) "Ensuing Year" shall mean the year next following the current year; and
- (k) "State" means the State of Assam.

(2) The words of expressions occurring in these regulations and not defined herein but defined in the Act shall bear the same meaning as in the Act.

#### **4. FUEL & POWER PURCHASE PRICE ADJUSTMENT (FPPPA) FORMULA**

(i) The amount of Fuel & Power Purchase Price Adjustment (FPPPA) shall be computed as under :

$$V = VF + VPP$$

Where,

V = Amount of incremental Cost in a specified period on account of Fuel & Power Purchase (₹).

VF = Amount of differential cost on account of fuels on generation by different power stations of the state generators (₹).

VPP = Amount of differential cost on account of Power purchase (₹)

(ii) The FPPPA rate shall be calculated as,

$$\text{FPPPA Recovery Rate (Paise/kWh)} = \frac{V (\text{₹})}{\text{Energy sales (KWH)}} \times 100$$

Where Energy sales consist of,

- (a) Metered sale of Energy.... (ES1)
- (b) Assessment of unmetered sale .... (ES2)

(c) Deemed sale of Energy on account of excess T&D losses ...(ES3)

Less (d) Energy sale to the Exempted categories of consumers .....(ES4)

The deemed sale of energy on account of excess T&D losses is equal to actual T&D losses minus losses allowed by the Commission. In case the figure is negative, the same may be ignored.

The recovery formula shall be as under:

$$\text{FPPPA Recovery Rate (Paise /Kwh)} = \frac{Q_C (RC2-RC1) + Q_O (R02- R01 ) + Q_G(RG2 - RG1)+ QPP (RPP2-RPP1)}{ES1 + ES2 + ES3 - ES4} \times 100$$

**FOR COAL BASED STATION:**

$Q_C$  = Quantity of coal consumed during the period in MT as per normative parameter.

$$Q_C = \frac{SHR}{NCV_O} \times \frac{USO (MU)}{(1-AUX)} \times (1+L_O) \times 10^3$$

$Q_O$  = Quantity of oil consumed during the period in KL as per normative parameter.

= Generation (in MU) x specific oil consumption (ml/kWh) as approved by the Commission

USO = Actual unit sent out in MU.

AUX = Auxiliary Consumption Approved by the Commission (in %)

SHR = Station heat rate as approved by the Commission in Kcal./Kwh.

$NCV_O$  = Approved calorific value of coal fired in kcal/kg.

$L_O$  = Transit & storage losses of coal as approved by the Commission.

RC1 = Average rate of coal Ex. Power station coal yard as approved by the Commission for the period in ` / MT.

RC2\* = Average rate of coal Supplied Ex. Power station coal yard as per actual for the period in ` / MT.

RO1 = Average rate of oil Ex. Power Station approved by the Commission for that period in ` /K.L.

RO2 = Average rate of oil actually supplied Ex. Power station during the period in ` / K.L.

\* If the grade of coal supplied is inferior or superior to the grade considered in the last tariff order, then average rate of coal supplied (RC2) will be corresponding to the grade of coal considered by the Commission in the last tariff order.

**FOR GAS BASED STATION:**

$Q_G$  = Quantity of Natural Gas consumed as per normative parameters during the period in 1000 SCM.

$$Q_G = \frac{SHR}{NCV_G} \times \frac{USO}{(1-AUX)} \times (1+L_G) \times 10^3$$

USO = Unit sent out in MU.

AUX = Auxiliary Consumption approved in percentage.

SHR = Station heat rate as approved by the Commission in kcal/kWh.

$NCV_G$  = Approved calorific value of Gas fired in kcal/SCM.

$L_G$  = Transit & storage losses of Gas as approved by the Commission, if any.

RG1 = Average rate of Natural gas as approved by the Commission including Transportation in  $\sqrt{1000}$  SCM

RG2\* = Actual Average rate of Gas Supplied during the Period including Transportation in  $\sqrt{1000}$  SCM.

\* If the grade of Gas supplied is inferior or superior to the grade considered in the last tariff order, then average rate of Gas supplied (RG2\*) will be corresponding to the grade of Gas considered by the Commission in the last tariff order.  
[ $Q_C$  and  $Q_O$  &  $Q_G$  will have to be calculated station wise.]

#### LEGENDS:

SCM = Standard Cubic Metre

MU = Million Unit

KCal = Kilo Calorie

Kwh = Kilowatt Hour

#### FOR POWER PURCHASE:

RPP1 = Average rate of power purchase as approved by the Commission in  $\sqrt{kWh}$ .

RPP2 = Actual Average rate of power purchase during the period in  $\sqrt{kWh}$ .

QPP = Actual Quantity of power purchased during the period in kWh for sale to the Distribution Licensee's scheduled consumers.

N.B: For computation of Power Purchase, the ex-bus cost of energy from generating stations including associated transmission cost shall be considered.

#### 4. Implementation of the formula

5.1 The FPPPA will be recovered in the form of an incremental energy charge ( $\sqrt{KWh}$ ) in proportion to the energy consumption and will be forming a part of the energy bill to be served on monthly or any other periodical basis.

5.2 The FPPPA charge shall not exceed 25% of the variable component of tariff or such other ceiling as may be stipulated by the Commission from time to time, where the variable component of tariff is defined as total estimated revenue

from energy charges (EC) in a year approved in the last Tariff Order divided by total estimated sales of the year. When FPPPA charges exceed 25% of the variable component of tariff, the Licensee shall make a petition to the Commission for recovery of the charges over the specified cap which shall be recovered after Commission's scrutiny and directives.

- 5.3 The formula will be applied at the end of each quarter by Distribution Licensee without making it necessary to go through the regulatory proceedings. The Distribution Licensee shall, however, be obligated to provide all relevant information to the Commission simultaneously and in any case where the Commission observes any discrepancies, the same will be adjusted during the next quarter. This mechanism will provide administrative and regulatory simplicity.

FPPPA charge is usually incurred by the generating company which is passed on to the distribution utility who in turn recover it from the end consumers. Therefore, the generating company owned by the state shall also provide all relevant details and supporting documents at the end of each quarter to the Commission for reconciliation.

- 5.4 The Fuel and Power Purchase Price Adjustment (FPPPA) charge will be made effective from the date of publication of the Regulations in the official Gazette.

Provided further that the FPPPA charge applicable to each tariff category of consumers shall be displayed prominently at the cash collection centres and on the website of the Distribution Licensee.

Provided that the Distribution Licensee shall put up on its website such details of the additional burden on account of changes in fuel price and power purchase cost and the FPPPA charges levied to all consumers for each quarter along with detailed computations.

- 5.5 Each control period shall be a quarter year i.e. 3 months. Accordingly, Distribution Licensee shall compute and adjust the amount as Fuel and Power Purchase Surcharge. Thus FPPPA surcharge for a quarter shall be charged from the first month of next quarter.
- 5.6 This fuel surcharge formula shall be applicable to the Distribution Licensee till it is amended either on petition or suo-moto. The FPPPA formula will be applicable for all consumers unless exempted by the Commission.
- 5.7 Distribution Licensee shall file detailed computation of actual fuel cost in ₹/kWh for each financial year for each of power stations of the state generators as well as cost of power purchase (Fixed and Variable) from each source/station based on audited accounts and a separate set of calculations with reference to permitted level of parameters as stated in the AERC (Terms and Conditions for determination of Tariff) Regulations, 2006. (audited and certified by cost accountant / chartered accountant).
- 5.8 Distribution Licensee shall file with the Commission all information including actual sales data required for calculation of the Fuel Surcharge (audited and certified by Cost Accountant/ Chartered Accountant) within 60 days of the end of the respective quarter failing which it shall forfeit any future claims on this account. It will also be incumbent upon Distribution Licensee to reconcile these figures at the end of the year based on audited accounts.

5.9 Distribution Licensee shall undertake its power procurement during the year in accordance with the power procurement plan for such year approved by the Commission in accordance with AERC (Terms and Conditions for determination of Tariff) Regulations, 2006. Any variation, during any quarter of a financial year, in the quantum or in the cost of power procured and any procurement from a source other than a previously approved source, in excess of five percent (5%) of quantum or cost, as the case may be, of power procurement for such quarter, as approved by the Commission in the power procurement plan of the Distribution Licensee, shall be only with the prior approval of the Commission.

Provided that a variation in the cost of power procured on account of changes in the price of fuel of allocated/approved generators, calculated in accordance with Regulation 4. above shall not be included in determining the need for prior approval of the Commission under this regulation 5.9.

5.10 Distribution Licensee can include a prior period expense for recovery in the subsequent quarters if it can prove to the satisfaction of AERC that the details of the expenses claimed were not available for reasons beyond the control of Distribution Licensee at the time of filing.

5.11 In the application of FPPPA formula, Distribution Licensee shall bear all costs/charges accruing on account of purchases done in contravention of the merit order principles.

5.12 The actual variable costs computed for all generating stations shall exclude transit and handling losses of all types of fuels beyond the limits specified in Commission's relevant Regulation.

5.13 Calculation and levy of such charge shall be subject to scrutiny of the Commission. The Commission shall make available the calculations of licensee or generating company for inspection by any person. The licensee or generating company shall refund or recover, as the case may be, any difference of such charge already recovered by it and approved by the Commission.

5.14 In case of any reduction in power purchase and fuel cost if the licensee or generating company fails to refund the additional charge to the consumers/customers within the stipulated time, the Commission shall suo-moto order the licensee or generating company to refund the same with 10 days notice to the licensee.

5.15 The Commission shall charge a fee in each quarter for verification of all relevant documents pertaining to FPPPA claimed by the Distribution Licensees and Generating Companies.

<sup>1</sup> [The amount of fees shall be zero point one percent (0.1%) of the claimed amount.]

5.16 In case of any dispute, an appropriate petition in accordance with the Assam Electricity Regulatory Commission (Conduct of Business) Regulations, 2004, as amended from time to time or any statutory re-enactment thereof, shall be made before the Commission.

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**1** Regulation 5.15, second para substituted by Notification No. 28.2012, dated 31<sup>st</sup> March, 2012 of the Assam Electricity Regulatory Commission and published in the Assam Gazette Extraordinary No. 168 dated 10<sup>th</sup> April, 2012. Prior to substitution the Clause stood as under –“The amount of fees shall be zero point zero five percent (0.05%) of the claimed amount”.

## **5. Overriding Effect**

Notwithstanding anything contained contrary -

- a) in the AERC (Terms and Conditions for Open Access) Regulations, 2005; and
- b) in the AERC (Terms and Conditions for Determination of Tariff) Regulations, 2006; and
- c) in the AERC (Co-generation and Generation of Electricity from Renewable Sources of Energy) Regulations 2009; and
- d) in the AERC (Fees) Regulations, 2009, framed by the Commission under section 181 of the Electricity Act 2003; these regulations will have overriding effect.

## **6. Power to remove difficulties:**

- (a) In case of any difficulty in giving effect to any of the provisions of these Regulations, the Commission may by General or special order, direct the Licensee to take suitable action not inconsistent with the provisions of Electricity Act 2003 which appears to be necessary or expedient for the purpose of removing the difficulty.
- (b) The Distribution Licensee may take an application to the Commission and seek suitable orders to remove any difficulty that may arise in implementation of these Regulations.

**7. Issue of orders and directions:**– Subject to the provisions of the Act and these regulations, the Commission may, from time to time, issue orders and practice directions with regard to the implementation of these regulations and procedure to be followed for such implementation and matters incidental or ancillary thereto.

**8. Saving of Inherent Powers of the Commission:**- Nothing contained in these Regulations shall limit or otherwise affect the inherent powers of the Commission to adopt 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.

**9. Power to Amend:**- The Commission may from time to time add, vary, alter, suspend, modify, amend or repeal any provision of these regulations.

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