

**JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION
RANCHI**

ORDER
(16.12.2006)

As per the formula given in Regulation 18 of JSERC (Open Access in Intra-State Transmission and Distribution) Regulations 2005, the computation of cross-subsidy surcharge is given below:

Computation of Cross-Subsidy Surcharge

1. According to "Open Access" Regulations:

Cross-Subsidy Surcharge=(A) Tariff applicable to relevant category of Consumers
(B) The cost of supply electricity to applicable category of consumers.

2. As per "Open Access Regulations" Open Access has been allowed for consumers having load of 1 M.W. or above. Therefore Open Access is applicable to H.T.S. II (33 KV) and EHTS (132 KV) consumers only.

3. Average cost of supply electricity has been taken for computation of Cross-subsidy Surcharge as J.S.E.B. has not supplied data pertaining to category-wise cost of supply and accordingly Tariff has been fixed on the basis of Average Cost of supply only.

As per Tariff Order:

Average of Cost of Supply electricity = Rs. 3.66 /Unit

4. As per Tariff Order:

Tariff Charges:

(i) For HTS II (33 KV) category -

- (a) Demand charge - Rs. 140 / KVA / month
- (b) Energy charge - Rs. 4.0 / Unit
- (c) Voltage Rebate - 5% on Energy Charge
- (d) Load Factor Rebate- 5% on Energy Charge on consumption between 40% L.F to 60% L.F.
- (e) Power Factor Rebate- 1% on Demand Charge and Energy Charge for PF between 0.85 to 0.90

Tariff Charge per Unit assuming 60% L.F. and 0.90 PF –
(Calculated on 1 KVA load base)

$$140.00 \text{ (Demand Charge)} + 0.9 \times 720 \times 0.6 \times 4.0 \text{ (Energy Charge)} - 0.9 \times 720 \times 0.6 \times 4.0 \times \frac{5}{100} \text{ (Voltage Rebate)} - 0.9 \times 720 \times 0.2 \times 4.0 \times \frac{5}{100} \text{ (L.F. Rebate)} - \frac{1}{100} (140.00 + 0.9 \times 720 \times 0.6 \times 4.0) \text{ (P.F. Rebate)}$$

$$\text{Rs.} \frac{\quad}{0.9 \times 720 \times 0.6}$$

$$\text{Rs.} \frac{140.00 + 1555.20 - 77.76 - 25.92 - 16.95}{0.9 \times 720 \times 0.6}$$

$$\text{Rs.} \frac{1574.57}{388.80} = \text{Rs. } 4.05 / \text{Unit}$$

(ii) For EHTS (132KV) Category -

- (a) Demand Charge - Rs. 140.00 / KVA / month
- (b) Energy Charge - Rs. 4.0 / Unit
- (c) Voltage Rebate - 7.5% on Energy charge
- (d) Load Factor Rebate - 5% on Energy charge on consumption between 40% LF and 60% LF
- (e) Power Factor Rebate - 1% on Demand charge and Energy charge for P.F. between 0.85 to 0.90

Tariff Charge per unit assuming 60% L.F. and 0.90 P.F. –
(Calculated on 1 KVA load base)

$$140.00 \text{ (Demand Charge)} + 0.9 \times 720 \times 0.6 \times 4.0 \text{ (Energy Charge)} - 0.9 \times 720 \times 0.6 \times 4.0 \times \frac{7.5}{100} \text{ (Voltage Rebate)} - 0.9 \times 720 \times 0.2 \times 4.0 \times \frac{5}{100} \text{ (LF Rebate)} - \frac{1}{100} (140.00 + 0.9 \times 720 \times 0.6 \times 4.0) \text{ (P.F. Rebate)}$$

$$\text{Rs.} \frac{\quad}{0.9 \times 720 \times 0.6}$$

$$\text{Rs.} \frac{140.00 + 1555.20 - 116.64 - 25.92 - 16.95}{388.80}$$

$$\text{Rs.} \frac{1535.69}{388.80} = \text{Rs. } 3.95 / \text{Unit}$$

5. Applicable Cross-subsidy Surcharge:

(i) For HTS II (33 KV) Category -

Cross-subsidy Surcharge = Rs. 4.05 (Per Unit Tariff Charge) – Rs. 3.66 (Per unit Average cost of supply) = Rs. 0.39 / Unit

(ii) For EHTS (132 KV) Category -

Cross-subsidy Surcharge = Rs. 3.95 (Per Unit Tariff Charge) – Rs. 3.66 (Per unit
Average cost of supply) = Rs. 0.29 / Unit

Note: Though Average cost of supply has been taken in the computation but its impact has been minimized because Average Cost of Purchase/Generation of power has been taken instead of marginal cost.

Sd/-
(S. Sinha)
Member (Legal)
16.12.06

Sd/-
(P.C. Verma)
Member (Tech)
16.12.06

Sd/-
(S.K.F. Kujur)
Chairman
16.12.06