

## **SECTION 6: DESIGN OF TARIFF STRUCTURE AND ANALYSIS of TARIFF**

6.1 The JSEB submitted the petition for determination of tariffs for the FY 2006-07 to the Commission. The salient features of the petition have been discussed in Section 2 of this Order. Before discussing the proposed tariff schedule and the Commission's analysis, it is appropriate to list the major objections and suggestions received from different consumers on the tariff structure and the tariff schedule proposed by the JSEB.

- I. Since the Board did not file a tariff petition for the FY 2004-05 and FY 2005-06, there has been no further reduction in cross subsidy after FY 2003-04.
- II. High levels of tariff for industrial consumers have lead to unnecessary burdening which have a negative bearing on their sustainability and viability.
- III. Board is billing high contract demand to HTSS consumers on the basis of volume of furnace, which leads to over estimation of maximum demand and overcharging of maximum demand charges.
- IV. Tariff structure should be further simplified.
- V. Consumers should be asked to pay on the basis of number of units consumed and there should be no fixed charge or minimum bill charges. Provision of fixed charge/minimum bill charge is justified only if the connected load/ requirement of power are less than their supplying capacity, whereas in the case of JSEB, it is just opposite.
- VI. The reduction in the load factor rebate proposed by the Board goes against the law of natural justice and will disincentivize the disciplined behavior of consumers
- VII. Reliability and quality of power being delivered by Board are not up to the laid standards of performance.

6.2 The Commission gave its view on a number of conceptual issues in the tariff design in its last tariff order. These included cross subsidy and cost based tariffs, two part tariff structure and minimum charges, quality of supply and service, Fuel and Power Purchase and Cost Adjustment (FPPCA) charge, tariff for unmetered consumers and time of day tariff. While the Commission has issued a separate order on FPPCA, the other issues still very critical for the power sector of Jharkhand especially in the case of the JSEB.

### **6.3 Cross subsidy and cost based tariff**

In the last tariff order, the Commission directed the JSEB to submit the voltage wise costs so that the tariff rationalization process can be pursued further more effectively. However, the Board has not submitted any details regarding this in the tariff petition. The continual effort of the Commission to get the relevant information from the Board through repeated discussions and correspondence also failed, as the Board was not able to furnish the required information. Hence, the Commission has been unable to move forward in this direction. **The Commission therefore, directs the Board to carry out appropriate studies to determine voltage wise losses and costs and submit it to the Commission within a period of six months from this order.**

In the last order, the Commission initiated the tariff rationalization process through the following steps:

- (i) Reduction of cross subsidy
- (ii) Introduction of an optional metered tariff for unmetered rural consumers in the domestic and commercial categories.
- (iii) Merger of CS-II and CS-III consumer categories
- (iv) Merger of LTIS-I and LTIS-II consumer categories
- (v) Change in applicability of LTIS tariff by extending it to 107 HP. Correspondingly, HTS-I tariff made applicable for 107 HP and above.
- (vi) Introduction of load factor rebate and voltage rebate for HT Consumers
- (vii) Introduction of TOD tariff for HTS-I, HTS-II and EHTS consumers.
- (viii) Special tariff for Military Engineer (Defence) Services
- (ix) Abolition of minimum charge for commercial and Railway categories and linked the minimum load charge to load factor for HT industrial consumers

Since the Board did not submit any tariff petition for FY 2004-05 and FY 2005-06, no further tariff rationalization could take place after the tariff order for FY 2003-04. The Commission intends to further the steps initiated by it in FY 2003-04. The rationalization, is however, based on average cost of supply as no estimates for voltage wise costs are available.

### **6.4 Two part tariff structure and minimum guarantee charges**

The Commission had introduced a fixed charge for all categories in the last tariff order and rationalized the Annual Minimum Guarantee charges. The Commission

is of the view that the tariff rationalization process as started in the previous tariff order shall be continued further in this tariff order.

#### 6.5 **Quality of supply and service**

The Commission issued the regulations for standard of performance in August 2005. These are titled as the Jharkhand State Electricity Regulatory Commission (Distribution Licensees' Standards of Performance) Regulations, 2005 and are applicable to all licensees engaged in distribution of electricity in the State of Jharkhand, including deemed licensee. The Schedule II of the Regulations provides the guaranteed standards of performance and level of compensation to consumer for default in each case and was to be applicable from 1<sup>st</sup> November 2005. The Commission also issued the Jharkhand State Electricity Regulatory Commission (Electricity Supply Code) Regulations 2005 in July 2005.

During the study of the objections received on the tariff petition and in the public hearings, the Commission observed that many consumers objected to the quality of supply and service of the JSEB. The consumers submitted that the reliability and quality of power being delivered by Board are not up to the laid standards of performance. The Board has still not implemented the standards of performance regulations issued by the JSERC and therefore there is no check on the quality of supply of electricity to the consumers. Only supply of power is not adequate for consumers, reliable and good quality of supply is also essential. Poor quality of supply not only damages the equipments but has severe impact on industrial production and therefore on the economy of the state. **The Commission directs the JSEB to implement the Standards of Performance Regulations by 1<sup>st</sup> January 2008. If the JSEB fails to implement this, the energy charge for all categories may be reduced by 2.5% from that date.**

#### 6.6 **Fuel and Power Purchase Cost Adjustment (FPPCA) Charge**

The Commission issued its order on the approval of the formula for recovery of Fuel Price and Power Purchase Cost Adjustment charges on 15<sup>th</sup> July 2006.

As per this order, the licensee has to submit the calculations of FPPCA and with all relevant information and supporting documents to the Commission within 20 days of the start of the quarter for approval. The Commission after due scrutiny

and clarifications obtained if any from Licensee shall approve the FPPCA to be charged within 30 days of the start of the quarter. In the current tariff Order, current level of fuel charges and power purchase costs have been considered as these charges are based on actual. Hence, there arises no need for FPPCA. The Licensee may approach the Commission for FPPCA along with all details on a quarterly basis as per the order on FPPCA.

## 6.7 **Demand side measures**

In view of the increasing demand-supply gap in the state, there is an urgent need to initiate demand side measures to bridge this shortfall. Apart from measures like time of day tariff and promotion of electricity generation from renewables that are discussed below, initiatives like use of energy efficient appliances and energy conservation need to be encouraged. The Board should undertake consumer awareness programmers using various mediums for the same.

### **6.86.7.1 Time of day tariff**

The Commission had introduced ToD tariffs only for HTS-I, HTS-II and EHTS consumers in the last order. It has also suggested that the JSEB should conduct some sample studies to collect and compile information on the demand from various consumer categories at different times of the day as well as on consumption of energy during these intervals as part of the load research study. The Commission wanted to use this data to design a more rational ToD tariff. Neither has the Board taken any steps to conduct such a study nor has it collected this information. Infact, the Board does not even readily have access to data on slab wise and category wise sales, number of consumers and connected load. This situation of the Board is unacceptable. It only highlights that the Board does not want to progress and is completely oblivious of the changes that have occurred in other utilities of the country.

Most states in India have ToD tariff as part of the tariff structure for HT industrial consumers. In West Bengal, it has been made optional for HT commercial consumers and Public Utility Services. A number of Regulatory Commissions including Kerala and Delhi are contemplating ToD tariffs for categories like commercial and domestic. Delhi is considering undertaking pilot projects to introduce ToD for the domestic consumers.

A pre requisite for implementation of ToD tariff is a robust metering infrastructure capable of recording time stamped consumption. Jharkhand has still not achieved 100% metering. Also, many consumers have submitted that they are being supplied power without meters and where meters exist, no meter reading is taking place.

**The Commission directs the JSEB to conduct a study on the feasibility (including requirement of metering infrastructure) and potential savings that will accrue from the introduction of ToD tariffs for categories of LT industrial consumers.**

#### **6.86.7.2 Special tariff for electricity generation from renewable sources**

The Commission is of the view that use of renewables for electricity generation at the consumer level must be encouraged. This is essential given the severe power shortages being faced by the country and in Jharkhand. In view of this, the Commission has introduced a rebate on the monthly bill for all commercial consumers using solar water heaters.

#### **Views of State Advisory Committee (SAC) on Tariff Petition**

The meeting of the SAC was held on 4<sup>th</sup> January 2007. The SAC comprises experts from the licensees, experts nominated by the Commission, consumer groups etc. An important agenda item was the tariff petition of the JSEB. The SAC members felt that the fixed charges for HT category were being unduly increased and that JSEB must concentrate of energy charges. It was felt that billing should be based on actual metered consumption and that billing on the basis of connected load encourages corruption. Members also emphasized the need for metering all supply. The Railways submitted the statistics of other states and pointed out that the tariff charged to them by JSEB was very high. Railways further submitted that traction power should also get load factor rebate, and that there should be some consideration for the load curve of Railways and they should not be penalized for exceeding maximum demand for short periods.

#### **6.8 Comparison with neighboring states**

The Commission has also compared the existing average realization for different consumer categories of Jharkhand with other neighboring states like Chattishgarh, Madhya Pradesh and Bihar. The average cost of supply proposed by the JSEB is Rs 6.47/kWh. The detailed calculation for this is provided in

Section 5 of this order. The average tariff (existing) and cost coverage based on proposed ARR is given in the table below.

**Table 6.1: Average tariff (existing) and cost coverage of JSEB**

|                   | Average tariff | Cost coverage |
|-------------------|----------------|---------------|
| Domestic          | 1.60           | 25%           |
| Non Domestic      | 4.43           | 69%           |
| Railway Traction  | 4.72           | 73%           |
| Agriculture       | 1.19           | 18%           |
| LT Industry       | 6.37           | 99%           |
| HT Industry       | 4.34           | 67%           |
| Induction furnace | 3.10           | 48%           |
| Steel Industry    | NA             | NA            |
| Cement Factories  | NA             | NA            |
| Street Lights     | 0.94           | 14%           |
| <b>Overall</b>    | <b>3.24</b>    | <b>50%</b>    |

\* Based on Net ARR= Gross ARR less Non Tariff income

The average tariff and cost coverage for Chattisgarh, Bihar and Madhya Pradesh is given in the table below.

**Table 6.2: Average tariff and cost coverage of neighbouring States**

|                   | Chattisgarh<br>ACoS = Rs 3.20/kWh |               | Madhya Pradesh<br>ACoS = Rs 3./kWh |               | Bihar<br>ACoS = Rs 5.00/kWh<br>Govt support=Rs 720 Crore |               |
|-------------------|-----------------------------------|---------------|------------------------------------|---------------|--|---------------|
|                   | 2006-07                           | 2006-07       | 2006-07                            | 2006-07       | 2006-07  | 2006-07       |
| Category          | Average tariff                    | Cost coverage | Average tariff                     | Cost coverage | Average tariff   | Cost coverage |
| Domestic          | 1.80                              | 56%           | 3.01                               | 86%           | 2.33   | 47%           |
| Non Domestic      | 4.36                              | 136%          | 5.86                               | 168%          | 5.46   | 109%          |
| Railway Traction  | 4.01                              | 125%          | 4.64                               | 133%          | 4.90   | 98%           |
| Agriculture       | 0.82                              | 26%           | 2.15                               | 62%           | 0.93   | 19%           |
| LT Industry       | 3.98                              | 124%          | 5.19                               | 149%          | 4.00   | 80%           |
| HT Industry       | 4.04                              | 126%          | 4.72                               | 135%          | 5.06   | 101%          |
| Induction furnace | NA                                | NA            | NA                                 | NA            | 3.55   | 71%           |
| Steel Industry    | 3.55                              | 111%          | NA                                 | NA            | NA   | NA            |
| Cement Factories  | 4.05                              | 126%          | NA                                 | NA            | NA   | NA            |
| Street Lights     | NA                                | NA            | 3.49                               | 101%          | 3.18   | 64%           |
| <b>Overall</b>    | <b>3.20</b>                       | <b>100%</b>   | <b>3.48</b>                        | <b>100%</b>   | <b>3.20</b>  | <b>100%</b>   |

It is evident from the above tables that the cost of supply is the highest for JSEB at Rs 6.47/kWh. The extent of cross subsidy is also very high in Jharkhand.

When the category wise average tariff is compared with the overall average tariff (Rs. 3.24/kWh), it is seen that domestic, agriculture and street light are recovering only 49%, 37% and 29% of the overall average realization. On the other hand, HT industry and LT industry categories are contributing 134% and 197% respectively. The Commission while determining tariff for various categories of consumers has kept this aspect in mind and has attempted to reduce this cross subsidy burden through rationalization of tariff.

6.9 **The major changes introduced by the Commission in the approved tariff structure are listed below:**

- (i) Rationalization of tariff
- (ii) Reduction in cross subsidy
- (iii) Introduction of a new slab in domestic category for consumption above 400 kWh
- (iv) Rebate for use of solar water heaters by commercial consumers

6.10 **The tariff schedule proposed by the JSEB and the Commission's approved tariff is discussed in the following paragraphs. The approved tariff schedule is attached as Appendix at page 172 of this order.**

6.11 Before the Commission's analysis of tariff and revenue from different consumer categories, it is highlighted that there are variations in the revenue as estimated by the Board and that estimated by the Commission. The Commission has estimated the revenue for the Board category wise and slab wise proportions as provided by the JSEB for FY 2006-07. Further, the JSEB did not provide these details as per the categories and tariff structure as approved by the JSERC in FY 2003-04. For example, no details were provided for the category of MES (Military Engineering Services) introduced by the Commission and for DS-HT consumers.

6.12 **The Commission directs the Board that in the next tariff petition, the Board should provide category-wise and slab-wise data on sales, number of consumers and connected load and detailed calculations of its revenue estimates with the petition itself. It should also ensure that these details are as per the tariff structure approved by the Commission in this tariff order.**

6.13 The Board has also not provided separate details of the revenue implication of load factor rebate, power factor surcharge & rebate, and time of day tariff. The Commission has, therefore, not been able to take these into account in its

estimates as well. **The Board is directed to submit these details to the JSERC with the next petition.**

6.14 The changes made in the schedule of tariff for various consumer categories are described in the following sections.

### **Low Tension Supply**

#### **6.126.15 Category –1: Domestic Service (DS)**

The existing schedule is applicable for use for domestic purpose including domestic pumping set and household electric appliances in private residence such as radios, televisions, desert coolers, air conditioners, motors upto 1 BHP for lifting water for domestic purposes and other household electrical appliances not covered under any other schedule. This rate is also applicable for supply to institutions such as Temples, Gurudwaras, Mosques, Church and Burial/Crematorium grounds and other recognized charitable institutions, where no rental or fees are charged whatsoever. If any fees and rentals are charged, such institutions will be charged under Non domestic category.

The existing schedule has five sub categories – DS-I (a), DS-I (b), DS-II, DS-III and DS-HT. Each of these is discussed in the following section in detail.

#### **6.12.16.15.1 Domestic Service (DS-I)**

This tariff is For Kutir Jyoti connection only for connected load upto 100 Watts for rural areas. The following table depicts the changes proposed by the Board:

**Table 6.3: Tariff for DS-I (a)-Kutir Jyoti Connections (Existing/Proposed)**

| DESCRIPTION          |  | TARIFF   |          |
|----------------------|--|----------|----------|
| Rs./connection/month |  | Existing | Proposed |
|                      |  | 27       | 50       |

**Table 6.4: Tariff for DS-I (b)- Other Rural Connections (Existing/Proposed)**

| DESCRIPTION          |  | TARIFF       |          |
|----------------------|--|--------------|----------|
|                      |  | FIXED CHARGE |          |
| Rs./connection/month |  | Existing     | Proposed |
|                      |  | 65           | 120      |

**Table 6.5: Optional metered tariff for DS-I (a) and DS-I (b) categories**

| DESCRIPTION     | OPTIONAL METERED TARIFF |          |
|-----------------|-------------------------|----------|
| KWh/month       | Rs./kWh                 |          |
| All consumption | Existing                | Proposed |
|                 | 1.00                    | 1.00     |

The Board has proposed an increase in tariff for Kutir Jyoti consumers of almost 85%. Kutir Jyoti is a single point scheme for the population Below Poverty Line (BPL). The tariff for Kutir Jyoti connections in most States in India is Rs.30/connection/month. As these are identified poorest of poor consumers, the Commission approves a concessional tariff for them at par with other states in India. The tariff approved for Kutir Jyoti is given in the table below.

**Table 6.6: Approved tariff for DS-I (a)-Kutir Jyoti Connections**

| DESCRIPTION          | TARIFF |
|----------------------|--------|
| Rs./connection/month | 30     |

The Commission recognizes that tariffs should progressively reflect the cost of supply, at the same time it is of the view that the interests of the marginal consumers need to be protected. Thus, a marginal change only has been made in the tariff approved for other rural consumers.

**Table 6.7: Approved tariff for DS-I (b)-Other rural domestic consumers**

| DESCRIPTION          | TARIFF |
|----------------------|--------|
| Rs./connection/month | 70     |

#### **Optional metered tariff**

As discussed earlier, the Commission has approved an optional metered tariff for the rural domestic consumers. This has not been increased to encourage these consumers to get metered connection

**Table 6.8: Approved Metered tariff (Optional) for DS-I (a) and DS-I (b) categories**

| DESCRIPTION | TARIFF        |
|-------------|---------------|
|             | ENERGY CHARGE |

| KWh/month       | Rs./kWh |
|-----------------|---------|
| All consumption | 1.00    |

The approved tariff for DS-I category will generate total revenue of Rs. 23.81 Crore in a full year.

#### **6.12.26.15.2 Domestic Service (DS-II)**

The existing tariff is applicable for urban areas covered by notified Area Committee/Municipality/Municipal Corporation/All District Town/All Sub Divisional Town/All Block Headquarters/Industrial Areas/contiguous sub-urban area all market places urban or rural and for connected load not exceeding 4 kW.

JSEB has proposed to introduce a new slab for consumption between 101-200 kWh in this category. The following table depicts the changes proposed by the Board:

**Table 6.9: Tariff for DS-II Consumers (Existing/Proposed)**

| DESCRIPTION          |  | TARIFF        |          |
|----------------------|--|---------------|----------|
|                      |  | FIXED CHARGE  |          |
|                      |  | Existing      | Proposed |
| Rs./connection/month |  | 20            | 60       |
|                      |  | ENERGY CHARGE |          |
|                      |  | Rs./kWh       |          |
|                      |  | Existing      | Proposed |
| KWh/month            |  |               |          |
| 0-100 kWh            |  | 1.35          | 1.50     |
| 100-200 kWh          |  | 1.35          | 2.00     |
| Above 200 kWh        |  | 1.70          | 2.50     |

The tariff as proposed by the Board would lead to a very high increase in the tariff for this category; therefore the Commission has not approved this increase. The existing tariff structure has two slabs: 0-200 kWh and above 200 kWh. The Commission is of the view that tariff of domestic consumers with higher consumption should not be subsidized as others. It has therefore, introduced a new slab of consumption above 400 kWh.

The tariff of this category has been revised keeping in view the consideration that tariff shocks to consumers should be avoided, but at the same time there should be a gradual movement towards the cost of supply regime. The Commission also considers that though in line with the general principles, tariffs should increasingly reflect the cost of supply, consumers above a certain minimum level of consumption should pay for this consumption while smaller consumers need to be taken care of. The tariff approved by the Commission for DS-II consumers is as follows:

**Table 6.10: Approved tariff for DS-II category**

| DESCRIPTION          | TARIFF               |
|----------------------|----------------------|
|                      | <b>FIXED CHARGE</b>  |
| Rs./connection/month | 20                   |
|                      | <b>ENERGY CHARGE</b> |
| kWh/month            | Rs./kWh              |
| 0-200 kWh            | 1.35                 |
| 200-400 kWh          | 1.75                 |
| Above 400 kWh        | 1.90                 |

The approved tariff will generate total revenue of Rs.123.46 Crore in a full year comprising of Rs. 108.83 Crore through energy charges and Rs.14.63 Crore through fixed charge.

#### **6.12.3 6.15.3 Domestic Service (DS-III)**

The existing tariff of DS-III is applicable for all domestic consumers with load exceeding 4 kW and up to 75 kW. The following table depicts the changes proposed by the Board:

**Table 6.11: Tariff for DS-III Consumers (Existing/Proposed)**

| DESCRIPTION          | TARIFF               |          |
|----------------------|----------------------|----------|
|                      | <b>FIXED CHARGE</b>  |          |
|                      | Existing             | Proposed |
| Rs./connection/month | 40                   | 100      |
|                      | <b>ENERGY CHARGE</b> |          |
|                      | Rs./kWh              |          |
|                      | Existing             | Proposed |
| KWh/month            | 1.70                 | 2.50     |

The Commission is of the view that those with higher levels of consumption have a better ability to pay. The tariff has been revised keeping in view the consideration that tariff shocks to consumers should be avoided, but at the same time there should be a gradual movement towards the cost of supply regime as discussed earlier also. The tariff approved by the Commission for DS-III consumers is as follows:



**Table 6.12: Approved tariff for DS-III category**

| DESCRIPTION          | TARIFF               |
|----------------------|----------------------|
|                      | <b>FIXED CHARGE</b>  |
| Rs./connection/month | 40                   |
|                      | <b>ENERGY CHARGE</b> |
| KWh/month            | Rs./kWh              |
| All consumption      | 1.90                 |

The above tariff changes will bring additional revenue of Rs. 2.42 Crore in a full year from the DS-III category representing an increase of 24% over the existing revenue.

The approved tariff will generate total revenue of Rs.12.62 Crore in a full year comprising of Rs. 11.40 Crore through energy charges and Rs 1.22 Crore through fixed charge.

#### **6.12.46.15.4 Domestic Service – High Tension Supply (DS- HT)**

The existing tariff of DS-HT applicable for power supply at 11 kV to housing colonies and housing complex/multistoried buildings for purely residential use for load above 75 kW. The following table depicts the changes proposed by the Board:

**Table 6.13 : Tariff for DS-HT Consumers (Existing/Proposed)**

| DESCRIPTION    | TARIFF               |          |
|----------------|----------------------|----------|
|                | <b>FIXED CHARGE</b>  |          |
|                | Existing             | Proposed |
| Rs./kVA /month | 30                   | 45       |
|                | <b>ENERGY CHARGE</b> |          |
|                | Rs./kWh              |          |
|                | Existing             | Proposed |
| KWh/month      | 1.50                 | 2.40     |

The Board also proposed to change the minimum load to 45 kVA at the transformer capacity of 63 kVA for these consumers. As no rationale has been provided for this change, the Commission is keeping the applicability of this category unchanged at load above 75 KW. The JSEB has not submitted any details for this category on consumption such as load and revenue. Hence, no

revenue accrual has been considered from this category. The existing tariff for this category is much below the average cost of supply. Therefore, the Commission is of the view that the tariff for this category shall be increased to bring it closer to the cost of supply. The tariff approved by the Commission for DS-HT consumers is as follows:

**Table 6.14: Approved tariff for DS-HT category\***

| DESCRIPTION     | TARIFF               |
|-----------------|----------------------|
|                 | <b>FIXED CHARGE</b>  |
| Rs./KVA/month   | 40                   |
|                 | <b>ENERGY CHARGE</b> |
| KWh/month       | Rs./kWh              |
| All consumption | 2.00                 |

\*The above tariff changes will bring no additional revenue as no revenue has been provided from this category. It is expected that in the ensuing year, billing will be done for this category and in future revenue accruals shall occur.

#### **6.136.16 Category – 2: Non Domestic, Light, Fan, and Power Services**

The existing schedule is applicable for the use of lights, fans, and power loads- non-domestic purposes like shops, hospital (private or government), clinic, nursing homes, dispensaries, restaurants, hotels, clubs, guest house, boarding/lodging houses, marriage houses, public halls, show rooms, workshops, central air conditioning units, office (private or Central/State Governments and their undertakings), show-rooms, commercial establishments, cinemas, X-ray plants, schools and colleges (private or government), libraries (private or government), recognized research institutions, railway stations, fuel-oil stations, (including vehicle service station), all India radio/TV installations, printing presses, housing co-operative societies for availing power, common services in multi storeyed commercial office/buildings, universities, trust, museums, poultry farms, banks, dharmshala and such other installations not covered under any other category.

This category will also include hostels including privately run hostels for students. There are two sub-categories in this:

##### **a. Non Domestic Service: NDS-I**

For rural areas not covered by area indicated for NDS-II and for connected load not exceeding 2 kW.

**b. Non Domestic Service: NDS-II**

For urban areas covered by Notified Areas Committee/Municipality/ Municipal Corporation/ All District Town/All Sub-Divisional Town/All Block headquarters/Industrial Area and contiguous sub-urban area, market place rural or urban and for connected load upto 75 kW. This schedule shall also apply to commercial consumers of rural area having connected load above 2 kW.

**6.16.1 The changes as proposed by the Board in the tariff for NDS-I are given in the table below.**

**Table 6.15: Tariff for NDS-I (Existing/Proposed)**

| <b>TARIFF</b>  |  |
|--|--|
| <b>Existing</b>  | <b>Proposed</b>  |
| Rs.110/kW/month or part thereof for connected load upto 1 KW | Rs.150/kW/month or part thereof for connected load upto 1 KW |
| Rs.50/KW/month for each additional 1 kW or part thereof      |  |

**Table 6.16: Metered tariff (Optional) for NDS-I category (Existing/Proposed)**

|                      | <b>TARIFF</b>   |                 |
|----------------------|-----------------|-----------------|
| <b>ENERGY CHARGE</b> | <b>Existing</b> | <b>Proposed</b> |
| KWh/month            | Rs./kWh         | Rs./kWh         |
| All consumption      | 1.25            | 2.50            |

The above changes proposed by the Board would lead to an increase of 36% over the existing revenue base for the un-metered consumers. The Commission has not approved the level of increase as proposed by the Board; as such an increase is not sustainable and would lead to a huge increase in the tariffs for commercial consumers, especially in rural areas. No change has been made in the optional metered tariff to incentivize metering.

However, since there has to be a gradual movement towards the cost of supply, the Commission has approved the following tariff for these consumers.

**Table 6.17: Approved tariff for NDS-I**

| <b>DESCRIPTION</b> | <b>TARIFF</b>  |
|--------------------|--|
|                    |  |
|                    | <p>Rs.125/kW/month or part thereof for connected load upto 1 KW</p> <p>Rs.50/KW/month for each additional 1 kW or part thereof</p> |

**Table 6.18: Approved optional Metered tariff for NDS-I category**

| DESCRIPTION     | TARIFF        |
|-----------------|---------------|
|                 | ENERGY CHARGE |
| KWh/month       | Rs./kWh       |
| All consumption | 1.25          |

As seen there has been no change in metered category to primarily to incentivise switchover to metered category. The above tariff will generate additional revenue of Rs. 0.17 Crore in a full year for the Board, representing an increase of 14% over the existing revenue base of this category.

At this point, the Commission would like to highlight the importance of undertaking a cost of supply study for rural consumers. There is a need for a distinct rural tariff to provide correct signals to consumers and to attribute specific subsidies provided to rural consumers. This is important keeping in view the difference in quality of power supply between urban and rural areas and the thrust of the Government on rural electrification and to get all households electrified. **The Commission directs the JSEB to undertake a cost of service study specifically for rural consumers.**

#### **6.16.2 The changes as proposed by the Board in the tariff for NDS-II is given in the table below.**

**Table 6.19: Tariff for NDS-II Consumers (Existing/Proposed)**

| DESCRIPTION                  | TARIFF        |          |
|------------------------------|---------------|----------|
|                              | FIXED CHARGE  |          |
|                              | Existing      | Proposed |
| Rs./kW/month or part thereof | 100           | 150      |
|                              | ENERGY CHARGE |          |
|                              | Rs./kWh       |          |
|                              | Existing      | Proposed |
| KWh/month                    |               |          |
| 0-150 kWh                    | 3.60          | 4.25     |

The above changes proposed by the Board would yield Rs. 20.50 Crore of additional revenue representing an increase of 28% over the existing revenue base of this category. The Commission has not approved the increase proposed by the Board. The changes proposed would result in a very high tariff increase for this category and they are already paying higher than the average cost of supply as determined by the Commission. Hence, their tariff has been reduced so that the tariff moves towards cost of supply and cross subsidy is reduced. The tariff approved by the Commission is given below.

**Table 6.20: Approved tariff for NDS-II category**

| <b>TARIFF</b>               |                |
|-----------------------------|----------------|
| <b>FIXED CHARGE</b>         |                |
| <b>Rs./connection/month</b> | 100            |
| <b>ENERGY CHARGE</b>        |                |
| <b>KWh/month</b>            | <b>Rs./kWh</b> |
| All consumption             | 3.40           |

The above tariff changes will lead to a fall in revenue from this category to the extent of Rs 2.88 Crore representing a decline of 3.89% over the existing revenue.

The approved tariff will generate total revenue of Rs.71.24 Crore in a full year comprising of Rs. 48.96 Crore through energy charges and Rs 22.28 Crore through fixed charge.

#### **6.146.17 Category 3: Low Tension Industrial and Medium Power**

The existing schedule for this category is applicable for electrical motors and other industrial appliances and medium power upto 107 HP or 100 kVA or 80 kW. The use of arc welding set, electric motors in public water works, flour mills, oil mills, dal mills, atta chakki, haulers, spellers etc. will also be covered under this category.

The changes proposed by the Board in the tariff for this category are given below.

**Table 6.21: Tariff for LTIS consumers (Existing/Proposed)**

| DESCRIPTION                  |          | TARIFF   |  |
|------------------------------|----------|----------|--|
| <b>FIXED CHARGE</b>          |          |          |  |
| Rs./HP/month or part thereof | Existing | Proposed |  |
| LTIS-                        | 60       | 100      |  |
| <b>ENERGY CHARGE</b>         |          |          |  |
| Rs./kWh                      |          |          |  |
|                              | Existing | Proposed |  |
| KWh/month                    |          |          |  |
| All consumption              |          |          |  |
| LTIS                         | 3.50     | 4.00     |  |

The above changes proposed by the Board would bring in additional revenue of Rs.28.75 Crore for the Board, representing an increase of 38% in revenue over the revenue from existing tariffs. The Commission has not approved this increase in tariff proposed by the Board, as the average tariff would be higher than the average cost of supply of the Board. The Commission has highlighted this in the last tariff order also and has rationalized the tariff for this category. The Commission has rationalized the tariff further this year. At the same time, the Commission would like to highlight that the load factor for this category is very low at 4%. Such a situation implies that there is large-scale leakage of power and revenue on account of these consumers. **The board is directed carry out a study considering the contract demand, the actual consumption, load factor, billing, collection, reasons for low load factor and submit it to the Commission within a period of six months from the date of tariff order.** Strict action needs to be taken by the Board against consumers indulging in practices leading to such leakages. The tariff approved by the Commission for LTIS consumers is as follows:

**Table 6.22: Approved tariff for LTIS category**

| TARIFF                       |                     |
|------------------------------|---------------------|
| Rs./HP/month or part thereof | <b>FIXED CHARGE</b> |
| LTIS                         | 60                  |

| KWh/month       | ENERGY CHARGE |
|-----------------|---------------|
| All consumption | Rs./kWh       |
| LTIS            | 3.40          |

The above tariff changes will lead to decline in the revenue by Rs. 1.19 Crore in a full year, representing a reduction of 1.57% over the existing revenue. The approved tariff will generate total revenue of Rs.74.66 Crore in a full year comprising of Rs. 40.46 Crore through energy charges and Rs 34.20 Crore through fixed charge.

As stated in the tariff order for FY 2003-04, according to the Jharkhand Industrial Policy 2001, the concept of maximum connected load has to be changed to the concept of maximum demand load. In this respect, the Commission approved the following:

- Contract load of LTIS consumer shall be 75% of the connected load in case the number of motors/appliances/electrical equipments is more than one. If there is only one motor/appliance/electrical equipment then the connected load would be treated as contract load.
- The maximum demand recorded in a year will be treated as contract load for that year for the consumer who opts for maximum demand meters. This option shall be availed only after installation of maximum demand meters and executing an agreement with the Board for this option of tariff. In case, the consumer supply their own meters, these will be installed after testing and sealing by the Board and no meter rent will be charged.

Hence, the Commission is of the view that the same shall be maintained for FY 2006-07.

#### **6.156.18 Category - 4: Irrigation and Agriculture service (IAS)**

The existing schedule is applicable for the use of electrical energy for agriculture purposes including processing of agricultural produce, confined to Chaff-Cutter, Thresher, Cane crusher and Rice-Hauler, when operated by the agriculturist in the field or farm and does not include rice mills, flour mills, oil mills, dal mills or expellers.



The changes proposed by the Board in the tariff structure are given in the table below.

**Table 6.23: Tariff for IAS consumers (Existing/Proposed)**

| <b>DESCRIPTION</b> | <b>TARIFF</b>       |                   |
|--------------------|---------------------|-------------------|
|                    | <b>FIXED CHARGE</b> |                   |
|                    | Existing            | Proposed          |
| IAS –I             | Rs.50/BHP/month     | Rs.60/BHP/month   |
| IAS-II             | Rs. 200/BHP/month   | Rs. 250/BHP/month |

The above changes proposed by the Board result in an increase of Rs.28.75 Crore in the revenue generated from this category, representing an increase of 38% over the existing revenue base.

The Commission recognizes that these consumers are paying below the average cost of supply and the average tariff, especially for IAS-I. The Commission therefore, has increased the tariff for IAS-I marginally so that the tariff gradually moved towards the cost.

The tariff approved by the Commission for IAS consumers is as follows:

**Table 6.24: Approved tariff for IAS category**

| <b>DESCRIPTION</b> | <b>TARIFF</b>       |
|--------------------|---------------------|
|                    | <b>FIXED CHARGE</b> |
| Rs./HP/month       |                     |
| IAS-I              | 65                  |
| IAS-II             | 250                 |

The above tariff changes will bring additional revenue of Rs. 2.05 Crore in a full year from the agricultural consumers representing an increase of 26.92% over the existing revenue. The approved tariff will generate total revenue of Rs.9.68 Crore in a full year.

**Approved metered tariff (optional) for IAS I & II category**

In order to incentives metering the Commission has approved an optional metered tariff for agricultural consumer. It has been summarized in the table below.

**Table 25: Approved metered tariff (optional) for IAS I & II category**

| DESCRIPTION | TARIFF               |
|-------------|----------------------|
|             | <b>ENERGY CHARGE</b> |
|             | Rs. /kWh             |
| IAS-I       | 0.50                 |
| IAS-II      | 0.85                 |

**6.16.19 Category: High Tension Service (HTS)**

The tariff for this category is applicable to consumers having contract demand above 100 kVA. The changes proposed by the Board are given below.

**Table 6.26: Tariff for HTS (Existing/Proposed)**

| DESCRIPTION                  | TARIFF               |  |
|------------------------------|----------------------|--|
| Rs./kVA/month                | <b>DEMAND CHARGE</b> |  |
|                              | Existing             | Proposed                                 |
| HTS                          | 140                  | 200                                      |
| <b>ENERGY CHARGE</b>         |                      |  |
| KWh/month                    | Rs./KWh              | Rs./KWh                                  |
| All consumption              | 4.00                 | 4.00                                     |
| <b>MONTLY MINIMUM CHARGE</b> |                      |  |
| For Supply at 11 and 33 kV   | Rs.250/kVA           | Rs 400/kVA (11 KV)<br>Rs 810/kVA (33 KV) |
| For Supply at 132 KV         | Rs.400/kVA           | Rs 810/kVA                               |

**Table 6.27: Voltage rebate for HTS consumers**

| Load Factor      | Voltage rebate |          |
|------------------|----------------|----------|
|                  | Existing       | Proposed |
| Supply at 33 kV  | 5%             | 3%       |
| Supply at 132 kV | 7.5%           | 5%       |



**Table 6.28: Load factor rebate for HTS consumers (Existing)**

| Load Factor   | Load factor rebate |
|---------------|--------------------|
| Above 40-60%  | 5%                 |
| Above 60-70%  | 7.5%               |
| 70% and above | 10%                |

The JSEB has proposed to change the load factor rebate as given below:

**Table 6.29: Load factor rebate for HTS consumers (Proposed)**

| Load Factor | Load factor rebate   |
|-------------|--|
| Upto 50%    | Nil  |
| Above 50%   | For every 1% increase in LF, rebate shall be 0.5% on energy charges on units consumed above load factor of 50% |

**Table 6.30: TOD tariff for HTS consumers (Existing/Proposed)**

| Description                          | TOD Tariff |      |
|--------------------------------------|------------|------|
| Rs./KWh/month                        |            |      |
| Peak Hour<br>06.00 AM - 10.00 AM     | 4.60       | 5.00 |
| 06.00 PM - 10.00 PM                  |            |      |
| Off Peak Hour<br>10.00 PM – 06.00 AM | 3.60       | 3.00 |
| 10.00 AM – 06.00 PM                  |            |      |

The proposal of the Board to increase the tariff of these HTS consumers has not been accepted. The existing tariff of this category is 141% of the average cost of supply. As is known, the cost of supplying at HTS is significantly lower than that at LT. Thus, any increase in the tariff for this category will lead to further increase in cross subsidy and impact the industrial consumption in the state.

The consumers have objected to the minimum charges applicable in this category. The existing minimum charge assumes 10% load factor, i.e., 2.5 hours

of supply for HTS consumers (11 kV and 33 kV), while the data provided by the Board shows the load factor to be more than 60% and 55% for these two respectively. There is an apparent dichotomy in these figures and it appears that the existing minimum charges are not on the higher side. This change of assuming 10% load factor to estimate the minimum charge was made by the Commission in the last tariff order keeping in view the consumer's objections at that time. However, there is no basis of reducing the minimum charges any further as in any case the load factor of these industries should typically be as approximately 75-80%. The load factor for Extra High Tension Supply (at 132 kV) consumers was taken at 20% in the last order and the numbers provided by the Board show it is 6.65% in FY 2006-07. This does not seem to be reasonable and the JSEB needs to undertake a detailed analysis of this. There could be three main reasons for this – (a) either the consumers have taken much higher load than required or, (b) there is large scale leakage taking place in this category, or (c) there is inadequate supply of power to these consumers. All these situations need to be carefully examined and requisite action must be taken to rectify this.

**The Commission directs the JSEB to provide details of number of consumers, connected/sanctioned load, number of hours of supply and revenue generated through minimum charges for Extra High Tension Supply (at 132 kV) category in 2004-05, 2005-06, 2006-07 and 2007-08 (April-June 2007) within two months of the issue of this order. The Commission may revise the applicable minimum charge to this category thereafter.** Keeping in view the actual load factor as per data of the JSEB, the Commission has also revised the load factor rebate.

A number of consumers have raised the objection in respect of levy of demand charges. The Commission would like taking this opportunity to reflect the meaning of demand charge in the context of retail tariff. Demand charge covers the cost associated with maintaining sufficient electrical facilities at all times to meet each customer's highest demand for energy. Demand charge is a fixed charge measured in Rs/kW or Rs/kVA and is set to recover some of the cost of providing the utility's infrastructure cost like poles, distribution lines, sub stations, transformers etc. While energy charge is a charge measured in Rs/kilowatt hour (kWh) and is based on the amount of electricity that a customer purchases from the utility and is used to offset infrastructure as well as operational cost. A utility has to provide a system that meets the needs of the customers in terms of being

able to provide electricity as required. Depending on the customer, the demand that a customer places on the utility's infrastructure varies. By their very nature, industrial consumers place the highest demand on the system. Thus, in an effort to share the cost of infrastructure capacity fairly, industrial consumers are therefore billed a demand charge that reflects the demand that their business/use places on the utility's infrastructure. The tariff approved by the Commission for HTS consumers is as follows:

**Table 6.31: Approved tariff for HTS consumers**

| DESCRIPTION                    | TARIFF                               |
|--------------------------------|--------------------------------------|
| Rs./kVA/month of billed demand | <b>DEMAND CHARGE</b>                 |
| HTS                            | 140                                  |
|                                | <b>ENERGY CHARGE</b>                 |
| Rs./KWh/month                  |                                      |
| HTS                            | 3.80                                 |
|                                | <b>Minimum Monthly Charge (MMC)*</b> |
| HTS (11 and 33 kV)             | Rs.250/kVA/month                     |
| HTS (132 kV)                   | Rs.400/kVA/month                     |

\*Applicable only when the billed consumption is below the monthly minimum charge.

**Table 6.32: Voltage rebate for HTS consumers\*\***

| Load Factor      | Voltage rebate |
|------------------|----------------|
| Supply at 33 kV  | 5%             |
| Supply at 132 kV | 7.5%           |

**Table 6.33: Load factor rebate for HTS consumers\*\***

| Load Factor   | Load factor rebate |
|---------------|--------------------|
| 0%-50%        | Nil                |
| Above 50%-65% | 5%                 |
| Above 65%-75% | 7.5%               |
| 75% and above | 10%                |

\*\*The above rebate will be available only on monthly basis and consumer with arrears shall not be eligible for the above rebates.

Apart from the above, the Commission has also approved an optional TOD tariff for these consumers.

**Table 6.34: Approved optional TOD tariff for HTS consumers**

| Description                          | TOD Tariff |
|--------------------------------------|------------|
| Rs./KWh/month                        | HTS-I      |
| Peak Hour<br>06.00 AM - 10.00 AM     | 4.35       |
| 06.00 PM - 10.00 PM                  |            |
| Off Peak Hour<br>10.00 PM – 06.00 AM | 3.40       |
| 10.00 AM – 06.00 PM                  |            |

**6.19 6.20 Category – 8: HT Special Service (HTSS) (HT consumer with Induction furnace and arc furnace)**

This tariff schedule shall apply to all consumers who have a contracted demand of 300 kVA and more for induction furnace /arc furnace; however, it will not apply to casting units having induction furnace/arc furnace of melting capacity of 500 kg or below. The changes proposed by the Board in the tariff for the HTSS category are given in the table below.

**Table 6.35: Tariff for HTSS consumers (Existing/Proposed)**

| DESCRIPTION          |          | TARIFF   |
|----------------------|----------|----------|
| <b>DEMAND CHARGE</b> |          |          |
|                      | Existing | Proposed |
| Rs./kVA/month        | 300      | 350      |
| <b>ENERGY CHARGE</b> |          |          |
| Rs./KWh/month        | Existing | Proposed |

|                        |      |      |
|------------------------|------|------|
| All consumption        | 2.50 | 2.50 |
|                        |      |      |
| MONTHLY MINIMUM CHARGE |      |      |
| Rs./kVA                | 400  | 960  |

The existing average realization from HTSS category is Rs. 3.10/kWh. The Commission is of the view that the tariffs for this category shall be rationalized further to reflect the average cost of supply. The Commission therefore, approves the following tariff for HTSS category.

**Table 6.36: Approved tariff for HTSS consumers**

| DESCRIPTION   | TARIFF                         |
|---------------|--------------------------------|
| Rs./kVA/month | <b>DEMAND CHARGE</b>           |
| HTSS          | 275                            |
|               | <b>ENERGY CHARGE</b>           |
| Rs./KWh/month |                                |
| HTSS          | 2.60                           |
|               |                                |
|               | <b>Minimum monthly charge*</b> |
| HTSS          | Rs.400/kVA/month               |

\*Applicable only when the billed consumption is below the monthly minimum charge.

The rebate as per voltage of supply and load factor will be applicable to these consumers as given for HT consumers above. The above tariff changes will generate total revenue of Rs.103.02 Crore in a year.

Apart from the above, the Commission has also approved an optional TOD tariff for these consumers.

**Table 6.37: Approved optional TOD tariff for HTSS consumers**

| Description                      | TOD Tariff |
|----------------------------------|------------|
| Rs./KWh/month                    | HTSS       |
| Peak Hour<br>06.00 AM - 10.00 AM | 3.00       |

|                     |      |
|---------------------|------|
| 06.00 PM - 10.00 PM |      |
| Off Peak Hour       |      |
| 10.00 PM – 06.00 AM | 2.35 |
| 10.00 AM – 06.00 PM |      |

#### 6.21 General conditions of supply to HTS and HTSS

- (a) For billing, the demand shall be the maximum demand recorded during the month or 75% of the contract demand, which ever is higher.
- (b) For billing, the demand shall be rounded off to the nearest integral figure, the fraction of 0.5 or above will be rounded to the next higher figure and the fraction of less than 0.5 shall be ignored.

**Additional charges for maximum demand in excess of the contracted demand:** If in any month the recorded maximum demand of the consumer exceeds his contracted demand (with Licensee), the entire consumption shall be billed at:

##### For HT Consumers

1. Demand charge = Rs. 150/kVA
2. Energy charge = Rs. 3.90 per KWh per month

##### For HTSS Consumers

1. Demand charge = Rs. 290/kVA
2. Energy charge = Rs. 2.70 per KWh

Further, the consumer shall not be eligible for LF rebate and Voltage rebate during the month in which his demand exceeded the contract demand.

#### 6.20 6.22 Category – 9: Railway Traction Service (RTS)

As per the existing schedule, this tariff is applicable for railway traction only. There are two sub-categories within this category. These are RTS-I (supply at 25kV) and RTS-II (supply at 132 kV).

The changes proposed by the Board in the tariff for the RTS category are given in the table below.

**Table 6.38: Tariff for RTS category (Existing/Proposed)**

| <b>DESCRIPTION</b>   |          | <b>TARIFF</b> |  |
|----------------------|----------|---------------|--|
| <b>DEMAND CHARGE</b> |          |               |  |
| Rs./kVA/month        | Existing | Proposed      |  |
| RTS                  | 140      | 200           |  |
| <b>ENERGY CHARGE</b> |          |               |  |
| Rs./KWh/month        | Existing | Proposed      |  |
| RTS                  | 4.30     | 4.50          |  |

The above changes will yield additional revenue of Rs.21 Crore, representing an increase of 8% over the existing revenue base. The Commission has not agreed with the proposal of the Board, as the tariff for this category is already 124% of the cost of supply.

The Commission has approved a tariff that will lead to a marginal reduction in the revenue generated from this category to align it with the cost of supply. Nature of the railway category consumption is as such that it put forth only a voltage surge on the system, which then stabilizes. The Commission therefore, is of the view that no penalty should be imposed on this category.

The approved tariff is given in the table below.

**Table 6.39: Approved tariff for RTS consumers**

| <b>DESCRIPTION</b> | <b>TARIFF</b>        |
|--------------------|----------------------|
| Rs./kVA/month      | <b>DEMAND CHARGE</b> |
|                    | 140                  |
| Rs./KWh/month      | <b>ENERGY CHARGE</b> |
| All Consumption    | 4.20                 |

**Table 6.40: Voltage rebate for RTS consumers**

| <b>Load Factor</b> | <b>Voltage rebate</b> |
|--------------------|-----------------------|
| Supply at 132 kV   | 7.5%                  |

The above tariff changes will lead to a decline in the revenue for RTS category by Rs. 6 Crore in a full year, representing a reduction of 2% over the existing

revenue. The approved tariff will generate total revenue of Rs.257 Crore in a full year comprising of Rs. 233.52 Crore through energy charges and Rs 23.12 Crore through fixed charge

#### **6.216.23 Category - 10: Street Light Service (SS)**

The existing tariff schedule is applicable for use for street light system, including single system in Corporation, Municipality, Notified Area Committee and Panchayats etc. and also in areas not covered by Municipalities and Notified Area Committee provided the number of lamps served from a point of supply is not less than 5.

In the last tariff order, the Commission had emphasized that the JSEB should take immediate steps to meter all consumers at the earliest including street lighting systems. However, the Board in the petition has still shown un-metered consumers.

**The Commission directs the Board to meter all consumers at the earliest and submit its metering plan to the Commission within a period of three months from the date of issue of this order.**

The changes proposed by the Board are given below.

**Table 6.41: Tariff for SS-I category –metered (Existing/Proposed)**

| Description          | <b>MAINTANANCE CHARGE</b> |                 |
|----------------------|---------------------------|-----------------|
|                      | <b>EXISTING</b>           | <b>PROPSOED</b> |
| Rs./connection/month | 20                        | 40              |
| <b>ENERGY CHARGE</b> |                           |                 |
| All consumption      | 3.50                      | 4.00            |

**Table 6.42: Tariff for SS-II category (Existing/Proposed)**

| <b>Existing</b>   | <b>Proposed</b>   |
|---|---|
| Rs/lamp/month   |   |
| Rs.100 per 100-watt lamp. In addition, Rs.25 would be charged for each additional 50 watt | Rs.120 per 100-watt lamp. In addition, Rs.25 would be charged for each additional 50 watt |

The total revenue that this proposed tariff structure would generate for the Board has not been estimated due to lack of adequate data.

The average tariff for this category is Rs.0.94 per unit at the existing tariff, which is far less than the cost of supply. This is based on the data provided by the JSEB on the revenue generated from this category. The Commission has increased the tariff for this category by approximately 20% taking into account the inflation rate over the last three years. Keeping this in view, the Commission has approved the following tariff for Street Lights.

**Table 6.43: Approved tariff for SS-II category (un metered category)**

|   |
|---|
| <i>Approved</i>   |
| Rs./lamp/month  |
| Rs.120 per 100-watt lamp. In addition, Rs.25 would be charged for each additional 50 watt |

Based on the data submitted by the JSEB, it is estimated that the revised tariffs would generate additional revenue of Rs. 1.57 Crore.

No change has been made in the tariff for metered category as no data on this has been provided by the JSEB. The approved tariff is as follows:

**Table 6.44 : Approved tariff for SS-I category (Metered category)**

| <b>DESCRIPTION</b>   |  | <b>TARIFF</b>             |
|----------------------|--|---------------------------|
|                      |  | <b>MAINTANANCE CHARGE</b> |
| Rs./connection/month |  | 20                        |
| Rs./KWh/month        |  | <b>ENERGY CHARGE</b>      |
| All consumption      |  | 3.50                      |

**6.226.24 Category - 11: Rural Electric Co-operative (Bulk Supply) – REC**

The existing tariff schedule is applicable for use of electricity in Rural Electric Co-operatives (licensee) for supply at 33 kV or 11 kV.

The tariff changes proposed by the Board for this are given in the table below.

**Table 6.45: Tariff for RECs (Existing/Proposed)**

| <b>DESCRIPTION</b> |          | <b>TARIFF</b> |
|--------------------|----------|---------------|
|                    |          |               |
| KWh/month          | Existing | Proposed      |
| All consumption    | Rs.0.70  | 1.25          |

In the last tariff order, the Commission has noticed that no consumers were taking supply in the state under this category. The same situation exists now also. In the last petition, the Board had submitted that it was expecting consumers in this category in due course of time. The Commission had also continued with this category to give an opportunity to the rural consumers to form such cooperatives and take supply under this category. However, there appears to be no progress made on this front. This could either be because of no interest from such consumers or lack of information in the rural areas about such an option. The Commission directs the Board to send the details of this to all potential rural consumers especially Village Panchayats and then assess whether this category should be continued in future or not. Till such time, the Commission continues with this category at the tariff existing at present. **The approved tariff is Rs. 0.70/kWh.**

**6.226.25 Category - 12: Bulk Supply to Military Engineering Services (MES)**

The tariff for this category is applicable for bulk supply to Military Engineering Services (MES) for mixed load in defence cantonment area.

The changes proposed by the Board are given below.

**Table 6.46: Tariff for MES category (Existing/Proposed)**

| Description     | TARIFF        |          |
|-----------------|---------------|----------|
|                 | EXISTING      | PROPSOED |
| FIXED CHARGE    |               |          |
| Rs./kVA/month   | 150           | 180      |
| Rs./KWh/month   | ENERGY CHARGE |          |
| All consumption | 2.50          | 3.50     |

This category is paying below the cost of supply. The Commission has increased the tariff for this category marginally and the tariff approved for this category is given below.

**Table 6.47: Approved tariff for MES**

| DESCRIPTION     | TARIFF        |
|-----------------|---------------|
|                 | FIXED CHARGE  |
| Rs./kVA/month   | 150           |
| Rs./KWh/month   | ENERGY CHARGE |
| All consumption | 2.70          |

#### 6.26 **Temporary supply**

This tariff is for connections of temporary nature including construction work, social or marriage purposes and religious functions. The applicability shall be as given in the respective category rate schedule.

The applicable tariff will be the fixed charge and energy charge to be billed at one and half times the normal tariff as applicable to the corresponding categories.

The other terms and conditions applicable in the case of temporary supply are given below:

- (a) Temporary connections shall be given for a period not exceeding one year initially and can be renewed for one more year
- (b) Estimated energy consumption charge is payable in advance before serving the temporary connection subject to replenishment from time to time and adjustment in the last bill after disconnection.
- (c) No temporary connection shall be served without meter.
- (d) Meter hire shall be charged as per the schedule of miscellaneous charges
- (e) Connection and disconnection charge shall be paid as per the schedule of miscellaneous charges.
- (f) FPPCA charge, if any, shall be levied at one and half times the prevailing rate in addition to above rates.
- (g) No rebates/concessions under any head shall be applicable to temporary connections.
- (h) Month for the purpose of billing of temporary supply shall mean 30 days from the date of connection or for further part thereof.
- (i) For billing, the demand shall be the demand requisitioned by the consumer or the highest recorded maximum demand during the period of supply commencing from the month of connection ending with billing month, whichever is higher.
- (j) Any expenditure made by the licensee for providing temporary supply upto the point of supply, shall be paid by the consumer as per prescribed procedure.
- (k) Other terms and conditions of the relevant category tariff shall also be applicable

#### **(h)6.27 Terms and conditions of supply**

The JSEB has submitted a number of clauses of the existing terms and conditions of supply for the consideration of the Commission. The Commission has already dealt with the load factor rebate and voltage rebate earlier in this section. All the terms and conditions of supply will be applicable as per the Supply Code issued by the Commission.

#### **6.28 Non tariff income**

The JSEB has proposed revenue of Rs. 63.73 Crore as non-tariff income for FY 2006-07. The JSEB did not take into account the revenue from sale of Power as

UI. The details of the proposed and approved non-tariff income are given in table below.

**Table 6.48: Non tariff income (Proposed/Approved)**

| (Rs. Crore)  | FY 2006-07   | FY 2006-07    |
|--|--------------|---------------|
|  | Proposed     | Approved      |
| Delayed Payment Surcharge(DPS)                             | 402.00       | 0.00          |
| Realizable Delayed Payment Surcharge @ 10% of DPS          | 40.20        | 40.20         |
| <b>Total DPS from Consumer</b>                             | <b>40.20</b> | 40.20         |
| Sale of Water  | 3.09         | 3.09          |
| Meter Rent   | 3.02         | 2.87          |
| Sale of Tender Paper                                       | 0.54         | 0.27          |
| Other  | 6.88         | 5.50          |
| Connection/disconnection and other charge excluding rebate |              | 0.00          |
| <i>Less: Rebate for timely payment</i>                     |              | 1.60          |
| Miscellaneous Receipt (Incl sale of scrap)                 | 10.00        | 10.00         |
| UI Payable   |              | 1.95          |
| UI Receivable  |              | 213.09        |
| Net UI receivable  |              | 211.13        |
| <b>Total</b>   | <b>63.73</b> | <b>273.26</b> |

As highlighted in section 5, the Commission is of the view that in a power shortage scenario the Board should not resort to trading under UI. The Commission has thus approved Rs. 273.26 Crore as non-tariff income for FY 2006-07.

**5.146.29 Overall revenue –expenditure position of the JSEB**

The resource gap provided by the Government of Jharkhand for FY 2006-07 to the Board was much more than the revenue gap of Rs. 101.17 Crore. The overall revenue –expenditure position of the JSEB is given in the table below:

**Table 6.49: Overall revenue -expenditure position  
(Based on approved tariff for FY 2006-07)**

| Description   | Rs. Crore |
|---|-----------|
| Revenue requirement (including contingency reserve) | 1533.68   |
| Revenue from tariff (at 95% collection efficiency)  | 1159.25   |
| Non-tariff income*                                  | 273.26    |
| Total Revenue                                       | 1432.51   |

|             |        |
|-------------|--------|
| Revenue Gap | 101.17 |
|-------------|--------|

\*Non-tariff income for FY 2006-07 has already been realized and includes the amount realized under the UI.

### 6.30 Consumer category wise revenue

The category wise revenue generated through tariff (at 95% collection efficiency) given in the table below:

**Table 6.50: Category wise revenue through tariff**

| Category              | Existing    |                               | Approved       |                               | Difference    |               |
|-----------------------|-------------|-------------------------------|----------------|-------------------------------|---------------|---------------|
|                       | (Rs Crore)  | Average realization (Rs/kWh)* | (Rs Crore)     | Average realization (Rs/kWh)* | (Rs Crore)    | %             |
| DS-1 unmetered        | 22          | 0.57                          | 22.62          | 0.62                          | 0.85          | 3.89%         |
| DS-2                  | 117         | 1.49                          | 117.28         | 1.50                          | 0.37          | 0.32%         |
| DS-3                  | 11          | 1.81                          | 11.99          | 2.00                          | 1.14          | 10.51%        |
| <b>Total Domestic</b> | <b>150</b>  | <b>1.23</b>                   | <b>151.89</b>  | <b>1.26</b>                   | <b>2.36</b>   | <b>1.58%</b>  |
| <b>Street light</b>   | <b>7</b>    | <b>0.89</b>                   | <b>8.96</b>    | <b>1.07</b>                   | <b>1.49</b>   | <b>20.00%</b> |
| NDS-I                 | 1           | 0.45                          | 1.32           | 0.51                          | 0.16          | 13.64%        |
| NDS-II                | 70          | 4.89                          | 67.68          | 4.70                          | -4.10         | -3.89%        |
| <b>Total NDS</b>      | <b>72</b>   | <b>4.21</b>                   | <b>69.00</b>   | <b>4.70</b>                   | <b>-3.95</b>  | <b>-3.60%</b> |
| <b>IAS</b>            | <b>7</b>    | <b>1.13</b>                   | <b>9.19</b>    | <b>1.44</b>                   | <b>0.84</b>   | <b>26.92%</b> |
| LTIS                  | 72          | 6.06                          | 70.93          | 5.96                          | -6.55         | -1.57%        |
| HTS                   | 524         | 4.13                          | 500.59         | 3.94                          | -23.60        | -4.50%        |
| HTSS                  | 96          | 2.95                          | 97.87          | 2.99                          | -0.62         | 1.61%         |
| <b>Total HTS</b>      | <b>621</b>  | <b>3.88</b>                   | <b>598.46</b>  | <b>3.75</b>                   | <b>-24.23</b> | <b>-3.55%</b> |
| <b>RTS</b>            | <b>249</b>  | <b>4.48</b>                   | <b>244</b>     | <b>4.39</b>                   | <b>-5.28</b>  | <b>-2.12%</b> |
| <b>MES</b>            | <b>7</b>    | <b>2.77</b>                   | <b>7</b>       | <b>2.96</b>                   | <b>0.45</b>   | <b>6.86%</b>  |
| <b>TOTAL</b>          | <b>1184</b> | <b>3.10</b>                   | <b>1159.25</b> | <b>3.03</b>                   | <b>-34.86</b> | <b>-2.09%</b> |

\* At 95% collection efficiency

### Schedule of Miscellaneous charges

| S. No.    | Purpose                | Scale of charges          | Scale of charges | Scale of charges                | Manner in which payment will be realized   |
|-----------|------------------------|---------------------------|------------------|---------------------------------|--|
|           |                        | Existing                  | Proposed         | Approved                        |  |
| <u>1.</u> | <u>Application fee</u> | <b>Rs per application</b> |                  |                                 |  |
|           | Agriculture            | 10                        | 15               | 10                              | Application should be given in standard requisition form of the Board which will be provided free of cost. |
|           | Street light           | Not specified             | 15               | 20                              |  |
|           | Domestic               | 15                        | 20               | 15 (Kutir Jyoti)<br>20 (others) |  |
|           | Commercial             | 15                        | 25               | 20                              |  |
|           | Other LT categories    | 20                        | 200              | 50                              |  |
|           | HTS                    | 50                        | 1000             | 100                             | Payable in cash in advance along with the intimation   |

|           |   |   |   |   |   |
|-----------|---|---|---|---|---|
|           | HTSS, EHTS, RTS   | 50  | 2000  | 100   |   |
| <u>2.</u> | <u>Revision of estimate when a consumer intimates changes in his requirement subsequent to the preparation of service connection estimate based on his original application</u> | <b>Rs per application</b>   |   |   |   |
|           | Agriculture   | 10  | 25  | 10  | Payable in cash in advance along with the intimation for revision |
|           | Domestic  | 20  | 50  | 30  |   |
|           | Commercial  | 20  | 50  | 30  |   |
|           | Other LT categories   | 25  | 100   | 50  |   |
|           | HT Supply   | 70  | 300   | 150   |   |
| <u>3.</u> | <u>Testing of consumers installation</u>  |   |   |   |   |
|           |   | (i) First test and inspection free of charge but should any further test and inspection be necessitated by faults in the installation or by not compliance with the conditions of supply for each extra test or inspection Rs 100<br><br>(ii) Periodic inspection and testing per installation under Rule 46 of Indian Electricity Rules, 1956 in respect of:-<br><br>(a) Medium pressure agricultural pumps upto and including 5 kW – Rs 10<br>(b) Exceeding 5 kW but not exceeding 10 kW – Rs 50<br>(c) Exceeding 20 kW but not exceeding 50 kW – Rs 60<br><br>(iii) Low pressure installation up to 1 kW Rs 10 plus for every additional kW Rs 50<br><br>(iv) Any testing at | First test and inspection fee Rs 100 but should any further test and inspection be necessitated by faults in the installation or by not compliance with the conditions of supply for each extra test or inspection Rs 100 | First test and inspection free of charge but should any further test and inspection be necessitated by faults in the installation or by not compliance with the conditions of supply for each extra test or inspection Rs 100 | Payable in cash in advance along with the request for testing     |

|           |  |   |               |     |   |
|-----------|--|---|---------------|-----|---|
|           |  | consumer request per test Rs 40                                     |               |     |   |
| <b>4.</b> | <b>Meter test when accuracy disputed by consumer</b>   | <b>Rs per testing</b>   |               |     |   |
|           | Single phase   | 30  | 200           | 40  | To be deposited in cash in advance.<br><br>If the meter is found defective within the meaning of the Indian Electricity Rules 1956, the amount of advance will be refunded and if it is proved to be correct within the permissible limits laid down in the Rules, the amount will no be refunded |
|           | Three phase  | 75  | 500           | 100 |   |
|           | Trivector of special type meter  | 300   | 2000          | 650 |   |
| <b>5.</b> | <b>Removing/ Refixing of meter</b>   | <b>Rs. Per removal/re fixation</b>                                  |               |     |   |
|           |  | Actual cost plus 15% subject to a minimum of:                       |               |     |   |
|           | Single phase   | 15  | 100           | 50  | Payable in cash in advance along with the intimation for revision   |
|           | Three phase  | 30  | 200           | 100 |   |
|           | Trivector of special type meter  | 150   | 1000          | 300 |   |
| <b>6.</b> | <b>Changing of meter /meter equipment/fixing of sub meter on the request of the consumer/fixing of sub meter</b> | <b>Rs per change of meter/meter equipment/fixation of sub meter</b> |               |     |   |
|           |  | Actual cost plus 15% subject to a minimum of:                       |               |     |   |
|           | Single phase   | 15  | 100           | 50  | Payable in cash in advance along with the intimation for revision   |
|           | Three phase  | 30  | 500           | 100 |   |
|           | Trivector of special type meter  | 150   | 2000          | 300 |   |
| <b>7.</b> | <b>Researching of meter when seals are found broken</b>  | <b>Rs per researching of meter</b>                                  |               |     |   |
|           |  |   |               |     |   |
|           | Single phase   | 15  | Not specified | 25  | Payable with energy bill  |
|           | Three phase  | 30  |               | 50  |   |
|           | Trivector of special type meter  | 60  |               | 100 |   |
| <b>8.</b> | <b>Replacement of meter</b>  | <b>Rs per card</b>  |               |     |   |
|           |  | 5   | Not           | 10  |   |

|            |   |  |   |   |   |
|------------|---|--|---|---|---|
|            | <b>card, if lost or damaged by consumer</b> |  | specified   |   | Payable with energy bill  |
|            |   |  |   |   |   |
| <b>9.</b>  | <b>Fuse call - Replacement</b>              |  | <b>Rs</b>   |   |   |
|            | Board fuse due to fault of consumer         | 15   | Rs 50 per call for Single phase and Rs 100 per call for three phase   | 15  |   |
|            | Consumer fuse                               | 10   |   | 15  | Payable with energy bill  |
| <b>10.</b> | <b>Disconnection/ Reconnection</b>          |  |   |   |   |
|            |   | (1) Cut outs:<br>(a) Single phase-<br>Rs 15<br>(b) Three phase –<br>Rs 30<br><br>(2) Overhead mains:<br>(a) Single phase-<br>Rs 15<br>(b) Three phase –<br>Rs 30<br><br>(3) Underground mains:<br>(a) Single phase-<br>Rs 30<br>(b) Three phase –<br>Rs 60 | DS<br>Single Phase-<br>Rs 50<br>Three phase-<br>Rs 100<br><br>NDS<br>Single Phase-<br>Rs 200<br>Three phase-<br>Rs 400<br><br>SS<br>Single Phase or<br>Three phase-<br>Rs 500<br><br>IAS<br>Single Phase-<br>Rs 50<br><br>LTIS<br>Single Phase-<br>Rs 500<br>Three phase-<br>Rs 1,000<br><br>HT/EHT<br>Three phase-<br>Rs 5,000<br><br>HTSS phase-<br>Rs 10,000 | Single phase-<br>Rs 30<br><br>Three phase –<br>Rs 75<br><br>LT industrial supply –<br>Rs 300<br><br>HT supply –<br>Rs 500 | Payable in cash in advance along with the request by the consumer<br><br>If the same consumer is reconnected/disconnected within 12 months of the last disconnection/reconnection, 50% will be added to the charges |
|            |   |  |   |   |   |

### **Security Deposit Charges:**

The Licensee has not provided details of existing Security Deposit. The Licensee shall submit to the Commission within one month, the details of existing Security Deposit Charges for each category of consumer for approval by the Commission.