

Tariff order for Tata Steel for FY 2005-06

Jharkhand State Electricity Regulatory Commission (JSERC)

SECTION 5: TARIFF PHILOSOPHY AND DESIGN OF TARIFF STRUCTURE: COMMISSION'S APPROACH

- 5.1 The petitioner submitted the revised proposal for approval of its Annual Revenue Requirement (ARR) and determination of tariff for FY 2005-06 to the Commission on October 26, 2005. The salient features of the proposed filing are discussed in Section 2 of this Order.
- 5.2 The petitioner has submitted that it believes in having a simple and transparent tariff schedule, and has proposed to continue with the existing four categories of consumers: Domestic, Commercial, HT (HT-1, HT-2 and HT-3) and Utility. The proposal of the petitioner for each of these categories is discussed in greater detail later in this Section.
- 5.3 There are a number of conceptual issues in the tariff design that need to be discussed before analyzing the specific proposals for each tariff category. The Commission considers them to be critical in the design of tariff structure. These are listed below:
- (i) Cost based tariff and reduction of cross subsidies
 - (ii) Two part tariff structure and minimum guarantee charges
 - (iii) Time of use tariff
 - (iv) Fuel surcharge

5.4 Cost based tariff and reduction of cross subsidies

- 5.4.1 The cost of supply concept has been deliberated in Section 4 of this tariff order. The Commission has rationalised the tariff on the basis of the cost of supply estimated for various consumer categories. However, it has kept in consideration the interest of all the consumers in its tariff determination and the need to avoid sudden tariff shocks especially for the subsidised categories like domestic consumers.
- 5.4.2 The cost recovery for various consumer categories at existing tariffs and approved costs are given in Table 5.1.

Table 5.1: Consumer category wise cost recovery (FY 2005-06)

Consumer Category	Cost of Supply (Approved)	Average Tariff (Existing)	Cost Recovery
	Rs./kWh	Rs./kWh	%
Domestic	3.73	2.77	74.13%
Domestic HT	3.23	2.80	86.77%
Commercial	3.83	4.55	118.74%
HT - 1	3.10	3.71	119.73%
HT - 2	3.10	4.10	132.62%
HT - 3	3.10	3.78	122.19%
Utility	3.73	2.80	75.00%

- 5.4.3 Table 5.1 clearly brings out that HT-1, HT-2, HT-3 and commercial consumers are cross subsidising all other consumer categories in the township with HT-2 consumers paying as high as 132 % of their cost of supply.
- 5.4.4 The Commission's approach towards rationalisation of tariff has been to ensure that the cost recovery of all consumer categories gradually approaches 100%. In this process, the need is to ensure that the consumers, especially in domestic categories are not given any tariff shock.

5.5 Two part tariff structure

- 5.5.1 The existing tariff structure has a component of fixed charge for all consumers. The fixed charge for consumer categories viz. domestic, commercial (LT) and utilities is on the basis of consumer per month whereas that applicable in the HT-1, HT-2 and HT-3 categories is based on kVA per month.

- 5.5.2 The petitioner has proposed to create separate categories for Domestic HT and Utilities categories. It has not proposed any fixed charge for the Utilities categories in the tariff petition, however, in the clarifications sought later by the Commission, the petitioner submitted that utilities will be charged the same fixed and meter charges as applicable to the domestic consumers.
- 5.5.3 The Commission is of the view that a rational tariff structure should be two-part incorporating fixed charges to reflect the fixed liabilities on account of capacity charges for power purchase, employee costs, interest etc and variable charge to reflect variable cost especially those related to fuel. Therefore, the Commission has approved the creation of a new Utilities category with a fixed charge for this new category. This is discussed in greater detail later in this Section.
- 5.5.4 Ideally, the fixed charges to be recovered from the consumers should be based in proportion to the demand placed by an individual consumer on the system. This is so because the connected load provides a signal of the consumer's load profile and the maximum demand to arrive at the estimates of the consumption. It thus facilitates designing of the system to cater to the supply needs of a consumer and is thus a just and fair mechanism for recovering fixed liabilities of the system. However, the petitioner does not have data on slab wise connected load. The Commission has thus not used the criteria of connected load for determining the fixed charge except for HT consumers where a demand charge based on contract demand is already in existence. ***The Commission directs the petitioner to collect and maintain data on category wise and slab wise connected load for all consumer categories.***
- 5.5.5 The difference between fixed/demand charge and minimum charges is that while fixed charges are levied on consumers irrespective of consumption, minimum charges are levied only when the consumption is less than a pre specified amount. Minimum charges, however, act as a disincentive for conserving energy and also disincentivizes the utility in maintaining a reliable supply of electricity. In view of this, there may be a case for minimum consumption charge to be abolished; however, the revenue risk that might occur to the utility due to this should be adequately considered. The petitioner has not provided the details of revenue being generated from the Annual Minimum Guaranteed Energy Charge being applied on different HT consumer categories to assess this implication. In the absence of this data, the Commission has not abolished the minimum consumption charge for FY 2005-06, and will revisit this issue in the next tariff petition. Accordingly, the Commission directs the petitioner to collect and submit data on the revenue collected on account of minimum consumption charge from various categories.

The petitioner has not proposed any change in the applicability of minimum consumption charge except for HT-1 category where it has proposed that load factor clause will not be applicable. The existing load factors applicable in

the HT industries are 25%, 40% and 55% for HT-1, HT-2 and HT-3 respectively for calculation of minimum consumption charges to be paid by the consumers. These load factors translate into 6, 10 and 13 hours of electricity usage in a day, which are the minimum hours required for these industries to sustain their operations. Also, it was learnt from the petitioner that the minimum consumption charge has rarely been used, as the actual load factors of these industries are generally higher than the ones considered for calculation of minimum charges. The Commission is of the view that these levels are reasonable for such types of industries and therefore has approved the same in this tariff order as well. The minimum charge will be applicable on monthly basis.

5.6 Time of use tariff

5.6.1 Higher demand during morning and evening hours is a typical characteristic of a load curve. Similarly, the demand during different seasons may vary depending on the climatic conditions or other factors. In order to reflect the higher cost of supply during the peak load hours it is necessary to include a time of use charge in the tariff structure which would provide correct signals to the consumers and also help the utility in maintaining a better system profile.

5.6.2 The present tariff structure, however, does not include a time of use charge. The Commission is of the view that it would be rational to apply a ToU charge for consumption during the peak load hours. However, at present the information and database required to implement this tariff structure is not available.

5.6.3 ***The Commission directs the petitioner to collect information on the demand from various consumer categories at different times of the day as well as on consumption of energy during these intervals. An average daily, weekly and monthly load profile over 24 hours of a day may be generated from the above data so that an appropriate 'Time of use' based tariff can be formulated. The petitioner should also undertake a study to estimate the cost implications of metering at sub-station level and consumer level to be able to effectively implement ToU tariff regime. This would facilitate design of a rational ToU charge and based on this the Commission would take a view in the next tariff order.***

5.7 Fuel surcharge

The existing tariff structure has a component of fuel surcharge in addition to the energy charge. This fuel surcharge is on all High Tension (HT-1, HT-2 and HT-3) and Commercial (CS) consumers to recover the increased costs of power purchase on account of fuel price variation. While estimating the aggregate revenue requirement for FY 2005-06, the Commission has forecasted the energy requirement for FY 2005-06, and has approved the power purchase costs in line with this estimate. While accounting for the power purchase costs, the Commission has considered the fuel costs, as per the Annual Budget Schedule of TPCL for FY 2005-06, which has estimated the total fuel costs at different levels of plant load factors. As regards

DVC, the Commission has duly built-in the fuel cost surcharge proposed by the petitioner while estimating the energy charges of power purchase from this source during FY 2005-06. Therefore, this tariff order reflects the fixed costs and energy costs as on the date of this order. The Commission recognizes that the licensee is required to be compensated for any change in cost due to the following items:

- (i) change in fuel costs
- (ii) change in power purchase costs
- (iii) change in statutory taxes and duties

On occurrence of change in costs due to any of the above costs, the licensee is required to approach the Commission for recovery of costs from beneficiaries or to pass on the benefits to the consumers as the case may be. The Commission is in the process of finalizing its Regulations for "Fuel and Power Purchase Cost Adjustment". The licensee shall be required to submit its petition for adjustment if the fuel and power purchase cost adjustment as per the Regulations of the Commission.

5.8 The major changes introduced by the Commission in the approved tariff structure for the FY 2005-06 are listed below:

- (i) Reduction in cross subsidies
- (ii) Creation of a new slab of consumption of 100-400 kWh per month for domestic consumers
- (iii) Creation of a separate category for Domestic HT consumers
- (iv) Creation of a separate category for Utilities
- (v) Merger of fuel surcharge with energy charge
- (vi) Introduction of load factor rebate for HT-2 consumers
- (vii) Minimum charge to be levied on monthly basis

5.9 **The tariff schedule proposed by the petitioner and the Commission's approval is discussed in the following paragraphs. The approved tariff schedule is attached as Annexure 5.1 to this order.**

5.10 The changes made in the tariff schedule of the petitioner are described in the following sections.

5.11 Domestic Supply, (DS category)

5.11.1 The existing schedule applies to Domestic & House holds, Educational Institutions and Hostels, Religious Institutions, Charitable & Social Welfare Institutions, Govt & Industrial Hospitals, Water Supply and Sewage Installations, Streetlight and other Municipal services.

5.11.2 The petitioner has proposed to make a separate category for all utilities and services like water & waste water, sewage treatment, streetlights etc. This is discussed in detail later in this Section.

5.11.3 Tables 5.2 and 5.3 depict the changes proposed by the petitioner in the tariff for domestic consumers.

Table 5.2: Energy charge for DS category (Existing/Proposed)

Description	Energy Charge	
	(Rs/unit)	
Units/month	Existing	Proposed
0 – 100	1.70	1.70
101 – 400	2.80	2.80
Above 400	2.80	3.25

Table 5.3: Fixed charge for DS category (Existing/Proposed)

Description	Fixed Charge	
	(Rs/month or part thereof)	
	Existing	Proposed
220V single phase upto 5 kW	10	10
440V three phase above 5 kW	20	20

5.11.4 Further, the petitioner has not proposed any changes in the fixed charges and the meter hire charges for this category.

5.11.5 The petitioner has proposed the creation of a new slab of consumption above 400 kWh and has proposed an energy charge of Rs 3.25/kWh as compared to the existing charge of Rs 2.80/kWh.

5.11.6 The changes proposed by the petitioner result in an increase of Rs.2.58 Crores in the revenue generated from this category representing an increase of 12.88%.

5.11.7 The Commission is in agreement with the petitioner in its proposal to create new slabs of consumption of 100-400 kWh and consumption above 400 kWh. The Commission considers this in line with the general principle that tariffs should increasingly reflect the cost of supply; consumers above a certain consumption level should pay for such consumption at the cost of supply. The tariff for different slabs has been revised keeping in view the following considerations:

(i) All consumers should gradually pay the cost of supply

(ii) Tariff shock should be avoided.

5.11.8 The Commission is also of the view that while the tariff for domestic consumers needs to reflect the cost of supply in a progressive manner, the marginal consumers need to be protected, therefore it has not made any changes in the tariff for consumers with consumption below 100 kWh per month. The tariff approved by the Commission for domestic category is given in Table 5.4 and 5.5 below.

Table 5.4: Energy charge for DS category (Approved)

Description	Energy Charge (Rs/unit)
Units/month	Approved
0 – 100	1.70
101 – 400	2.80
Above 400	3.00

Table 5.5: Fixed charge for DS category (Existing/Proposed)

Description	Fixed Charge (Rs/month or part thereof)
	Approved
220V single phase upto 5 kW	10
440V three phase above 5 kW	20

5.11.9 The above tariff changes will bring additional revenue of Rs. 1.15 Crores in a full year from the domestic

consumers representing an increase of 5.73% over the existing revenue. The approved tariff will generate total revenue of Rs.21.40 Crores in a full year and the cost recovery will increase to 78.38%.

5.12 Domestic Supply, HT category (DSHT category)

5.12.1 The existing schedule is applicable to Domestic & Households and Housing Co-operatives societies with the character of service AC 50 Hz phase at 6.6. KV, metered at single point.

5.12.2 As per the existing tariff, the energy charge applicable on these consumers is Rs 2.80/kWh. The petitioner has proposed differential rates for these consumers. It has proposed that the first 20% of the consumption will be charged at a lower rate of Rs 2/kWh and the balance 80% at higher rate of Rs 3/kWh, with the average rate of Rs 2.80/kWh being lower than the highest rate of domestic consumption to give advantage of lower losses in these societies.

5.12.3 Table 5.6 and 5.7 below depicts the changes proposed by the petitioner.

Table 5.6: Energy charge for DSHT category (Existing/Proposed)

Description	Energy Charge	
	(Rs/unit)	
Units/month	Existing	Proposed
First 20% of consumption	NA	2.00
Balance 80% consumption	NA	3.00
0-100 kWh	1.70	NA
Above 100 kWh	2.80	NA

Table 5.7: Fixed charge for DSHT category (Existing/Proposed)

Description	Fixed Charge	
	(Rs/consumer/month)	
	Existing	Proposed
All consumers	275	275

5.12.4 The petitioner has not proposed any change in the fixed charge of this category of Rs 275/consumer/month. The revenue implication of the proposed change in the energy charge has not been provided by the petitioner.

5.12.5 The Commission is in agreement with the petitioner to create a separate category for Domestic HT consumers since the cost of supply for HT consumers is evidently lower than that for LT consumers as supply at HT helps the utility to minimize T&D losses. The domestic HT cost of supply is Rs 3.23/kwh whereas that for LT domestic consumers is Rs 3.73/kWh.

5.12.6 The tariff approved by the Commission for Domestic HT consumers is given in Table 5.8 and Table 5.9.

Table 5.8: Energy charge for DSHT category (Approved)

Description	Energy Charge (Rs/unit)
Units/month	Approved
All consumption	2.70

Table 5.9: Fixed charge for DSHT category (Approved)

Description	Fixed Charge (Rs/consumer/month)
	Approved
All consumers	275

5.12.7 The total revenue that will be generated from this category at approved tariffs will be Rs 14.76 Crores in FY 2005-06.

5.13 Commercial Supply, (CS category)

5.13.1 The existing tariff schedule is applicable for Trade, Business, Shops, Cinemas, Clubs, Hotels, Public Offices, Private Hospitals, Business establishments in the premises of Educational Institutions Hostels, Religious Institutions, and any other Commercial or business establishments.

5.13.2 The petitioner has proposed a reduction of 10 paise/kWh in the energy charge with no changes proposed in the fixed charge and the meter hire charges. Table 5.10 and Table 5.11 give the existing and proposed tariffs for CS category.

Table 5.10: Energy charge for CS category (Existing/Proposed)

Description	Energy Charge	
	(Rs/unit)	
Units/month	Existing	Proposed
All consumption	4.50	4.40

Table 5.11: Fixed charge for CS category (Existing/Proposed)

Description	Fixed Charge	
	(Rs/consumer/month)	
	Existing	Proposed
220 kV single phase upto 5 kW	25	25
440 kV three phase above 5 kW	75	75

5.13.3 The proposed tariff will lead to a marginal decline in revenue of Rs 0.22 Crores from this category, i.e., a decrease of 1.48%.

5.13.4 The existing level of cost recovery from Commercial consumers is approximately 119%. These consumers are on an average paying much above the cost of supply to them. The Commission appreciates the proposal of the petitioner to reduce the tariff of these consumers. As per the proposed tariff, the cost recovery would reduce to 117%. The Commission is of the view that there is scope for further rationalisation of the tariff for commercial consumers, and has therefore approved the tariff given in Table 5.12 and Table 5.13.

Table 5.12: Energy charge for CS category (Approved)

Description	Energy Charge	
	(Rs/unit)	
Units/month	Approved	
All consumption	4.30	

Table 5.13: Fixed charge for CS category (Existing/Proposed)

Description	Fixed Charge	
	(Rs/consumer/month)	
	Approved	
220 kV single phase upto 5 kW	25	
440 kV three phase above 5 kW	75	

The above tariff will lead to a fall in revenue of the petitioner to the extent of Rs. 0.66 Crores, representing a decline of 4.40% from revenue at existing tariff for this category.

5.14 High Tension Supply, (HT category)

5.14.1 The HT consumers are divided into sub-categories given in Table 5.14.

Table 5.14: Categories of HT consumers

Category	Demand (kVA)	Voltage of supply
HT-1	For demand upto 500 KVA	6.6 KV as per availability and discretion of TISCO
HT-2	For demand more than 500 KVA but less than 5000 KVA	6.6KV as per availability and discretion of TISCO
HT-3	For demand 5000 KVA or more	33KV

5.14.2 The tariff design of the HT-1, HT-2 and HT-3 categories is discussed in detail below.

5.15 HT-1 Category

5.15.1 The existing schedule is applicable to industrial and commercial establishments and where contract demand agreement is more than 100 kVA but less than 500 kVA.

5.15.2 The petitioner has neither proposed a change in the applicability of this category nor in the maximum demand charges. The existing tariff has a component of fuel surcharge of Rs 0.30/kWh. The existing and proposed tariffs for this category are given in the Table 5.13 and Table 5.14.

Table 5.15: Energy charge for HT-1 category (Existing/Proposed)

Description	Energy Charge	
	(Rs/unit)	
Units/month	Existing	Proposed
All consumption	3.55*	3.25

*Includes fuel surcharge of Rs 0.30/kWh

Table 5.16: Maximum Demand charge for HT-1 category (Existing/Proposed)

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Description	Fixed Charge	
	(Rs/kVA/month)	
	Existing	Proposed
All consumers	200	200

5.15.3 The tariff proposed by the petitioner will lead to a fall in revenue of Rs 0.35 Crores, i.e., a 5.45% decline from the existing tariff.

5.15.4 The Commission agrees with the petitioner that these consumers are paying a tariff much higher than the cost of supply. The cost recovery from this category is approximately 148%. Keeping this in view, the Commission has approved the following tariff for HT-1 category.

Table 5.17: Energy charge for HT-1category (Approved)

Description	Energy Charge
	(Rs/unit)
Units/month	Approved
All consumption	3.30

Table 5.18: Maximum Demand charge for HT-1 category (Approved)

Description	Fixed Charge
	(Rs/kVA/month)
	Approved
All consumers	200

5.15.5 The Commission has merged the fuel surcharge in the energy charge due to reasons explained earlier.

5.15.6 The approved tariffs will generate revenue of Rs 6.03 Crores in the entire year. The cost recovery falls down to 140%. The reduction in tariff is to the extent of 5.45%. The Commission maintains that this trend of reducing cross subsidy in the tariff structure shall be continued in future as well.

5.16 HT- 2 Category

5.16.1 The existing tariff schedule of this category is applicable to industrial and commercial establishments and

where contract demand agreement is more than 500 kVA but less than 5000 kVA.

5.16.2 The petitioner has neither proposed a change in the applicability of this category nor in the maximum demand charges. The existing tariff has a component of fuel surcharge of Rs 0.30/kWh. The existing and proposed tariffs for this category are given in Table 5.19 and Table 5.20.

Table 5.19: Energy charge for HT-2 category (Existing/Proposed)

Description	Energy Charge	
	(Rs/unit)	
Units/month	Existing	Proposed
All consumption	3.55*	3.25

*Includes fuel surcharge of Rs 0.30/kWh

Table 5.20: Maximum Demand charge for HT-2 category (Existing/Proposed)

Description	Fixed Charge	
	(Rs/kVA/month)	
	Existing	Proposed
All consumers	200	200

5.16.3 The tariff proposed by the petitioner will lead to a fall in revenue of Rs 1.24 Crores, i.e., a 6.37% decline from the existing tariff.

5.16.4 The existing cost recovery from this category is approximately 127%. Keeping in view the need to reduce the cross subsidy present in the existing tariff structure, the Commission has approved the following tariff for HT-2 category.

Table 5.21: Energy charge for HT-2category (Approved)

Description	Energy Charge	
	(Rs/unit)	
Units/month	Approved	
All consumption	3.25	

Table 5.22: Maximum Demand charge for HT-2 category (Approved)

Description	Fixed Charge
	(Rs/kVA/month)
	Approved
All consumers	200

5.16.5 The Commission has also introduced a load factor rebate for HT-2 consumers as given in Table 5.23.

Table 5.23: Load factor incentive structure for HT-2 category (Approved)

Description	Rebate
	Approved
	%
For all energy consumption above 65% and upto 70% load factor	5%
For all energy consumption above 70% load factor	7.5%

5.16.6 The consumers with arrears shall not be eligible for above rebates. In case the consumer has obtained an order of stay from a court or any other statutory authority, the amount of load factor rebate for which the consumer is eligible in respect of the amount of the bill shall be calculated and the same shall accrue to the account of the consumer. However, the actual credit thereof shall not be given to the consumer in his monthly bill until the case relating to the dispute regarding arrear is finally decided by the competent court / statutory authority. The consumer shall be eligible for load factor rebate only when it is established through an order of Court/Statutory body/out of Court settlement with the licensee that there were no arrears pending with the consumer.

5.16.7 The Commission has merged the fuel surcharge in the energy charge due to reasons explained earlier.

The approved tariffs will generate revenue of Rs 17.99 Crores in the entire year. The cost recovery falls down to 117%. The reduction in tariff is to the extent of 7.64%.

5.17 HT-3 Category

5.17.1 The existing tariff schedule of this category is applicable to all industrial establishments and where contract demand agreement is 5000 kVA or more.

5.17.2 The petitioner has neither proposed a change in the applicability of this category nor in the maximum demand charges. The existing tariff has a component of fuel surcharge of Rs 0.25/kWh. The existing and

proposed tariffs for this category are given in Table 5.24 and Table 5.25.

Table 5.24: Energy charge for HT-3 category (Existing/Proposed)

Description	Energy Charge	
	(Rs/unit)	
Units/month	Existing	Proposed
All consumption	3.45*	3.20

*Includes fuel surcharge of Rs 0.25/kWh

Table 5.25: Maximum Demand charge for HT-3 category (Existing/Proposed)

Description	Fixed Charge	
	(Rs/kVA/month)	
	Existing	Proposed
All consumers	180	180

5.17.3 The petitioner has proposed a change in the load factor incentive available to HT consumers. This incentive is available to consumers for maintaining a higher load factor and is applicable only on energy charges (excluding demand charges, fuel surcharge etc) for a billing month. The existing and proposed incentive structure is given in Table 5.26.

Table 5.26: Load factor incentive structure for HT-3 category

Description	Rebate	
	Existing	Proposed
	Rs./kWh	Rs./kWh
For all energy consumption above 55% and upto 70% load factor	0.10	0.15
For all energy consumption above 70% load factor	0.25	0.35

5.17.4 The Commission has approved the following tariff for HT-3 consumers.

Table 5.27: Energy charge for HT-3category (Approved)

Description	Energy Charge
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	(Rs/unit)
Units/month	Approved
All consumption	3.20

Table 5.28: Maximum Demand charge for HT-3 category (Approved)

Description	Fixed Charge
	(Rs/kVA/month)
	Approved
All consumers	180

Table 5.29: Load factor incentive structure for HT-3 category (Approved)

Description	Rebate
	Approved
	%
For all energy consumption above 70% load factor	7.5%

5.17.5 Further, the consumers with arrears shall not be eligible for above rebates. In case the consumer has obtained an order of stay from a court or any other statutory authority, the amount of load factor rebate for which the consumer is eligible in respect of the amount of the bill shall be calculated and the same shall accrue to the account of the consumer. However, the actual credit thereof shall not be given to the consumer in his monthly bill until the case relating to the dispute regarding arrear is finally decided by the competent court / statutory authority. The consumer shall be eligible for load factor rebate only when it is established through an order of Court/Statutory body/out of Court settlement with the licensee that there were no arrears pending with the consumer.

5.17.6 The Commission has merged the fuel surcharge in the energy charge due to reasons explained earlier.

5.17.7 The approved tariffs will generate revenue of Rs 238.43 Crores in the entire year. The cost recovery falls down to 114%. The reduction in tariff is to the extent of 6.61%.

5.18 Utilities Category

5.18.1 In the existing tariff structure, these consumers are included in the schedule for domestic category. The

petitioner has proposed to separate these consumers into a new category of Utilities. The proposed schedule is applicable to all utilities and municipal services like water and waste water, sewage treatment, streetlights etc.

5.18.2 The Commission is in agreement with the petitioner in creating a new category for these consumers, since the nature of use of electricity of these consumers is different from electricity used by domestic consumers.

5.18.3 The existing and proposed tariff for the consumers of this category is given in Table 5.30 and Table 5.31.

Table 5.30: Energy charge for Utilities category (Existing/Proposed)

Description	Energy Charge	
	(Rs/unit)	
Units/month	Existing	Proposed
0 – 100	1.70	2.80
101 – 400	2.80	2.80

Table 5.31: Fixed charge for Utilities category (Existing/Proposed)

Description	Fixed Charge	
	(Rs/month or part thereof)	
	Existing	Proposed
220V single phase upto 5 kW	10	10
440V three phase above 5 kW	20	20

5.18.4 The revenue implication of this change proposed by the petitioner is negligible.

5.18.5 As per the analysis of the Commission, the petitioner is only recovering about 75% of its cost in supplying electricity to these consumers. The Commission has therefore approved a marginal increase in the tariff for these consumers to bring the cost recovery to 78%. The approved tariffs are given in Table 5.32 and Table 5.33.

Table 5.32: Energy charge for Utilities category (Approved)

Description	Energy Charge	
	(Rs/unit)	

Units/month	Approved
All consumption	2.90

Table 5.33: Fixed charge for Utilities category (Approved)

Description	Fixed Charge (Rs/month or part thereof)
	Approved
All consumers	20

5.19 Temporary Supply

- 5.19.1 As per the proposed tariff schedule, temporary supply connections are to be provided on request for an initial period of 3 (three) months maximum from the date of payment of estimated amount in advance and thereafter on discretion of the petitioner.
- 5.19.2 The applicable energy charge is Rs 4.40/kWh. However, for Durga Puja and other religious functions, it shall be charged at the highest slab of the prevailing domestic tariff.
- 5.19.3 This schedule is applicable to all loads of temporary nature including exhibitions, touring talkies, circuses, fairs, melas, marriages, festivals, temporary agricultural loads such as wheat thrashers, paddy thrashers, temporary supply for construction purposes including civil works by Government departments and other similar purposes for temporary needs only. This is not an exhaustive list and the petitioner may give temporary connections after studying the nature of load applied for.
- 5.19.4 The Commission is of the view that supply in this category is of sudden and unforeseen nature. Further, the demand is for a short time period only and may arise in different locations at different points in time. It is hence not possible to accurately forecast the demand and provide facilities for such supply as in case of permanent consumers. A flat energy rate has been fixed for all consumers under this category as the nature of use by all consumers is of temporary irrespective of the works carried out by them. Similarly a flat fixed charge has also been approved, **which is more of a consumer service charge since the utility has to make special arrangements to provide temporary connections**. The tariff approved by the Commission is given in Table 5.34 and Table 5.35.

Table 5.34: Fixed charge for Temporary supply

Description	Fixed Charge (Rs/month)
All consumers	30

Table 5.35: Energy Charge for Temporary supply

Description	Energy Charge (Rs/unit)
All consumption	5.00

NOTE: For Durga Puja and other religious functions, energy charge for temporary connections will be the highest slab of the prevailing domestic tariff, i.e, Rs. 3.00/kWh.

5.20 Miscellaneous charges

No charges other than those specified in the Tariff Schedule at Annexure 5.1 of this order will be levied by the petitioner without the approval of the Commission. The Petitioner has not submitted any schedule of miscellaneous charges like checking and testing of meters, replacement of meters, service of wiremen, checking of capacitor etc. The petitioner should submit its proposal in this regard before applying these charges on the consumers.

5.21 The petitioner will follow the Jharkhand State Electricity Regulatory Commission (Electricity Supply Code) Regulation 2005, while preparing the schedule of miscellaneous charges for the approval of the Commission.

5.22 Overall revenue –expenditure position

5.22.1 The overall revenue–expenditure position of Tata Steel after the revision in tariff is given in Table 5.36:

Table 5.36: Overall revenue - expenditure position

Description	Rs. Crores
Net Revenue Requirement	302.97
Revenue at existing tariff	344.77
Revenue at approved tariff	326.48
Surplus revenue	23.51

5.22.2 As indicated in Table 5.36, the total revenue from approved tariffs is estimated to be Rs. 326.48 crores for FY 2005-06. This translates into a revenue surplus of Rs. 23.51 given the net revenue requirement of Rs. 302.97 crores.

5.22.3 In view of lack of clarity on some issues especially the nature of sale transaction between the petitioner and the Steel works, and non-availability of audited accounts of the petitioner, the Commission has not aligned tariffs with the net revenue requirement completely while allowing a revenue surplus of Rs. 23.51 to be maintained for FY 2005-06, which would be adjusted in future tariff revisions. This has been resorted to as the Commission is not in favour of frequent tariff revisions or creating instability by first lowering the rates and then increasing them suddenly subject to removal of information uncertainties that exist as of now.

5.23 Reduction in cross subsidy

The cost recovery for various categories as per the approved cost of supply and tariffs for FY 2005-06 is given in Table 5.37.

Table 5.37: Cost recovery for various categories at approved tariffs

Category	Cost of supply	Average Tariff	Cost recovery
	Rs/kWh	Rs/kWh	%
Domestic	3.73	2.93	78.55%
Domestic HT	3.22	2.81	83.86%
Commercial	3.82	4.35	113.77%
HT 1	3.09	4.34	140.42%
HT 2	3.09	3.63	117.38%
HT 3	3.09	3.53	114.37%
Utility	3.73	2.90	77.68%

5.23.2 The break-up of revenue generated from the existing and approved tariff is presented in Table 5.38:

Table 5.38: Break up of revenue from existing and approved tariff

Category	Revenue at existing tariff	Revenue at approved tariff	Change
	Rs Crores	Rs Crores	%
Domestic	20.06	21.21	5.73%
Domestic HT	15.30	14.76	-3.57%
Commercial	14.91	14.25	-4.40%
HT 1	6.37	6.03	-5.45%
HT 2	19.48	17.99	-7.64%
HT 3	255.30	238.43	-6.61%
Utility	13.34	13.82	3.58%
Total	344.77	326.48	-5.30%

5.24 Convergence index

5.24r.1 The above category wise increases in tariff have been designed so that the average realization from each category converges towards the overall average realization. To measure the extent to which this has been done the following index has been used:

$$CI = \sqrt{\{\Sigma[(AR_c/OA_r)-1]^2 \cdot S_c\} / \Sigma S_c}$$

Where CI = Convergence Index

AR_c = Average realization of each category

OA_r = Overall average realization

S_c = Category wise consumption

5.24.2 The above index ideally should converge to zero over the years. The convergence towards zero would reflect alignment of average realisation of each category with overall average realisation. The convergence index has been calculated at the existing tariffs and also at the revised tariffs approved by the Commission. The results are Table 5.39.

Table 5.39: Convergence Index

CI at existing tariffs	0.1205
CI at revised tariffs	0.1095

Percentage improvement	9.10%
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5.24.3 Table 5.39 clearly highlights a reduction of 9.10% in the cross subsidy level after rationalization of tariff in FY 2005-06.