Jharkhand State Electricity Regulatory Commission

Provisional
Tariff Order
on
Annual Revenue Requirement
for
Financial Years 2009-10, 2010-11 & 2011-12
and
Determination of Distribution Tariff
for
Financial Year 2011-12
for
SAIL-Bokaro

Ranchi

September 2011

List of Abbreviations

Abbreviation	Description
A&G	Administrative and General
ATE	Hon'ble Appellate Tribunal of Electricity
ARR	Annual Revenue Requirement
CWIP	Capital Work in Progress
DPS	Delayed Payment Surcharge
DNW	Distribution Network
DS	Domestic Service
DS HT	Domestic Service High Tension
DVC	Damodar Valley Corporation
ETL	Electro-Technical laboratory
FAS	Financial Accounting System
FY	Financial Year
GFA	Gross Fixed Assets
GoI	Government of India
HT	High Tension
JSEB	Jharkhand State Electricity Board
JSERC	Jharkhand State Electricity Regulatory Commission
JUSCO	Jamshedpur Utilities and Services Company Ltd
LT	Low Tension
kV	Kilovolt
kVA	Kilovolt-ampere
kW	Kilowatt
kWh	Kilowatt-hour
MMC	Monthly Minimum Charges
MU	Million Units
NTI	Non Tariff Income
O&M	Operations and Maintenance
PLR	Prime Lending Rate
PPA	Power Purchase Agreement
R&M	Repair and Maintenance
RoE	Return on Equity
SAIL	Steel Authority of India Limited
SBI	State Bank of India
SERC	State Electricity Regulatory Commission
SLM	Straight Line Method
TA	Town Administration
TSL	Tata Steel Limited

A1: INTRODUCTION

Jharkhand State Electricity Regulatory Commission

1.1 The Jharkhand State Electricity Regulatory Commission (herein after referred to as the "JSERC" or "the Commission") was established by the Government of Jharkhand under Section 17 of the Electricity Regulatory Commission Act, 1998 on August 22, 2002. The Commission became operational w.e.f. April 24, 2003. The Electricity Act, 2003 (hereinafter referred to as "the Act" or "EA, 2003") came into force w.e.f. June 10, 2003; and the Commission is now deemed to have been constituted and functioning under the provisions of the Act.

1.2 The Government of Jharkhand vide its notification dated August 22, 2002 defined the functions of JSERC as per Section 22 of the Electricity Regulatory Commission Act, 1998 to be the following, namely:-

(a) to determine the tariff for electricity, wholesale, bulk, grid or retail, as the case may be, in the manner provided in section 29;

(b) to determine the tariff payable for the use of the transmission facilities in the manner provided in Section 29;

(c) to regulate power purchase and procurement process of the transmission utilities and distribution utilities including the price at which the power shall be procured from the generating companies, generating stations or from other sources for transmission, sale, distribution and supply in the State;

(d) to promote competition, efficiency and economy in the activities of the electricity industry to achieve the objects and purposes of this Act.

1.3 With the Electricity Act, 2003 being brought into force, the earlier Electricity Regulatory Commission Act of 1998 stands repealed and the functions of JSERC are now defined as per Section 86 of the Act.

1.4 In accordance with the Act, the JSERC discharges the following functions: -

(a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State;

Provided that where open access has been permitted to a category of consumers under Section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;

(b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;

(c) facilitate intra-state transmission and wheeling of electricity;

(d) issue licences to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;

(e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;

(f) adjudicate upon the disputes between the licensees and generating companies; and to refer any dispute for arbitration;

(g) levy fee for the purposes of this Act;

(h) specify State Grid Code consistent with the Grid Code specified under Clause (h) of sub-section (1) of Section 79;

(i) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;

(j) fix the trading margin in the intra-state trading of electricity, if considered, necessary;

(k) discharge such other functions as may be assigned to it under this Act.

1.5 The Commission advises the State Government on all or any of the following matters, namely :-

(a) promotion of competition, efficiency and economy in activities of the electricity industry;

(b) promotion of investment in electricity industry;

(c) reorganisation and restructuring of electricity industry in the State;

(d) matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.

1.6 The State Commission ensures transparency while exercising its powers and discharging its functions.

1.7 In discharge of its functions, the State Commission is guided by the National Tariff Policy as brought out by GoI in compliance to Section 3 of the Act. The objectives of the National Tariff Policy are to:

(a) ensure availability of electricity to consumers at reasonable and competitive rates;

(b) ensure financial viability of the sector and attract investments;

(c) promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimize perceptions of regulatory risks;

(d) promote competition, efficiency in operations and improvement in quality of supply.

Steel Authority of India Limited, Bokaro

1.8 Steel Authority of India Limited, Bokaro (hereinafter referred to as "SAIL-Bokaro" or "the Petitioner") is a company incorporated in the year 1964 under the provisions of the Companies Act, 1956 and is a wholly owned subsidiary of Steel Authority of India Limited, New Delhi. Bokaro Steel City in the district of Bokaro, Jharkhand is the service area of SAIL-Bokaro.

1.9 SAIL-Bokaro was the sanction holder of power supply in Bokaro Steel City under section 28(1) of the erstwhile Indian Electricity Act 1910 and has been managing the power distribution in Bokaro Steel City since its inception.

1.10 Post the enactment of Electricity Act, 2003, as per the provisions of section 14 of the Act, Distribution License has been granted by the Commission to SAIL-Bokaro (No.01 of 2005-06) w.e.f. July 28, 2004 for the aforementioned area.

1.11 The Town Administration department of SAIL-Bokaro is responsible for providing various municipal services to Bokaro Steel City, including horticulture, water supply, construction and maintenance of roads etc. The Town Administration Electrical Department (TA-Electrical) manages the power distribution system of the licensed area.

Scope of the Present Order

1.12 This Order relates to the ARR and Tariff Petition filed by the Petitioner before the Commission for approval of the ARR for FY 2009-10, FY 2010-11 and FY 2011-12 and determination of distribution tariff for FY 2011-12.

1.13 In issuance of this Order the Commission has been guided by:-

(a) Sections 61, 62 and 64 of the Act;

(b) Provisions of Section 86 of the Act;

(c) Provisions of the National Electricity Policy;

(d) Provisions of the National Tariff Policy;

(e) Provisions of the JSERC (Terms and Conditions for Distribution Tariff) Regulation, 2004 (hereinafter referred to as 'Distribution Tariff Regulations, 2004'); and

(f) Provisions of the JSERC (Terms and Conditions for Distribution Tariff) Regulation, 2010 (hereinafter referred to as 'Distribution Tariff Regulations, 2010').

A2: PROCEDURAL HISTORY

Background

2.1 The Petitioner had filed its first ARR and tariff petition in February 2007 for FY 2007-08. After examining the petition, the Commission directed the Petitioner to submit its tariff petition for the licensed area as per the Tariff Regulations of the Commission, after separating the accounts of electricity distribution business from the consolidated audited accounts of the company. However, the Petitioner was unable to segregate the accounts of the electricity distribution business from the consolidated audited accounts of company. The Petitioner was also not able to provide the requisite data to the Commission for determining the ARR and Tariff for FY 2007-08.

2.2 Consequently, the Commission vide its order dated November 2, 2007, decided to allow a provisional tariff for FY 2007-08 for the licensed area of the Petitioner. The approved tariff was the same as was approved for Jharkhand State Electricity Board (JSEB) in FY 2006-07.

2.3 The Commission further directed the Petitioner to submit the tariff petition for determination of the ARR for FY 2008-09 after segregating accounts of its electricity distribution business from the consolidated accounts of the company. However, the Petitioner requested the Commission, vide SAIL-BSL letter no. DGM I/c(TE-Elect)/2009-840 dated August 13, 2009, to give it three months to file the ARR for FY 2008-09. The Commission vide its letter no. JSERC/51/209 dated August 19, 2009 accepted the Petitioner's plea.

2.4 The Petitioner was again unable to file the ARR and Tariff Petition by the said date. It was submitted by the Petitioner that as the cost of power purchased from DVC, which is the only source of power to the Petitioner, was under dispute at the Appellate Tribunal for Electricity (ATE), New Delhi, it would be not be possible for it to file a petition. It thus requested the Commission, vide SAIL-BSL letter no TA/DGM/ (Elect Maint)/860 dated November 19, 2009, for further eight weeks to submit the tariff petition which was accepted by the Commission vide letter no. JSERC/51/347 dated November 24, 2009.

2.5 Since the judgement of the Hon'ble ATE was still pending by the said date, the Petitioner requested further extension till May 15, 2010 for filing the ARR and Tariff Petition. Considering it to be a special case, the Commission accepted the Petitioner's plea vide letter no. JSERC/51/43 dated April 23, 2010.

2.6 The Petitioner submitted the ARR and Tariff Petition for determination of ARR for FY 2008-09, FY 2009-10 and FY 2010-11 and determination of retail tariff for FY 2010-11 on May 14, 2010. The Tariff Order for the same was issued by the Commission on October 9, 2010.

2.7 The Petitioner has filed a petition for determination of ARR for FY 2009-10, FY 2010-11 and FY 2011-12 and determination of retail tariff for FY 2011-12 on March 30, 2011. The Commission undertook a detailed examination of the petition and observed major data gaps in the petition, which were communicated to the Petitioner. The Petitioner submitted the additional data and the revised petition with the corrected figures for approval of the Commission on August 11, 2011, which has now been considered by the Commission for the purpose of this Tariff Order.

2.8 Since the tariff petition was incomplete in many respects, as discussed in the Section 5 of this Tariff Order, and there has also been a delay on the part of the Petitioner in submitting the additional information, this Tariff Order is issued after 120 days of the filing of petition by the Petitioner.

2.9 Further discrepancies were noticed by the Commission in the data submitted and were communicated to the Petitioner vide letter no:

(a) JSERC/11/2011/SAIL/265 dated July 12, 2011

(b) JSERC/11/2011/SAIL/393 dated September 7, 2011

(c) JSERC/11/2011/SAIL/419 dated September 16, 2011.

2.10 The Commission's representatives interacted with the Petitioner to obtain clarifications regarding the submissions made by the Petitioner; and also visited the office of the Petitioner in Bokaro to validate the data submitted in the tariff petition and observe the functioning of the distribution system in the licensed area. The data provided by the Petitioner during the validation sessions has also been considered for the purpose of this Order.

2.11 It is pertinent to mention that the Petitioner has not been able to submit the audited, segregated annual accounts for the electricity distribution business. The annual accounts for FY 2009-10 submitted by the Petitioner have been merely extracted from the main accounts of Bokaro Steel Plant on basis on certain norms and assumptions. As such the Commission believes that such extraction of expenses, on a normative basis, does not represent the complete picture of expenses of the distribution business. This method of preparation of accounts has not been accepted by the Commission even in its previous Tariff Order for FY 2010-11. The Commission in its Order for FY 2010-11 had stated that:

"2.9 It is pertinent to mention that the Petitioner has not been able to submit the audited segregated data for the electricity distribution business. Moreover, the Commission has observed many discrepancies in the information provided by the Petitioner. In view of this, the Commission has decided to only provisionally approve the ARR for FY 2008- 09, FY 2009-10, FY 2010-11 and Tariff for FY 2010-11 till the time the Petitioner is able to give audited information for each of the ARR components."

2.12 In view of the above, and the various discrepancies observed in the information provided by the Petitioner, the Commission has decided to continue with the approach adopted by it in its previous Tariff Order and has approved the ARR for FY 2009-10, FY 2010-11 and FY 2011-12 on a provisional basis; till such time the Petitioner is able to provide segregated, audited accounts for its electricity distribution business for each component of the ARR.

Inviting Public Response

2.13 After scrutinizing the information furnished by the Petitioner, the Commission directed the Petitioner to issue a public notice for inviting comments/suggestions from the public and to make available copies of the ARR and tariff petition to the general public. The public notice was subsequently issued by the Petitioner in various newspapers, as detailed below:

Table 1: List of Newspapers and Dates on which the Public Notice Appeared

Newspaper	Date
Hindustan	31.07.2011
Dainik Bhaskar	31.07.2011
The Telegraph	31.07.2011
The Hindustan Times	31.07.2011
The Times of India	01.08.2011
Prabhat Khabar	01.08.2011
Dainik Jagran	01.08.2011
Pioneer	01.08.2011

2.14 A period of 21 days was provided for submitting the comments/suggestions. Six persons filed written suggestions/comments on the tariff petition; and their comments have been dealt with in the chapter on public consultation process.

2.15 The Commission subsequently issued an advertisement on its website, www.jserc.org, and various newspapers for conducting the public hearing on the petition filed by the Petitioner. The newspapers in which the advertisement for public hearing was issued by the Commission are detailed hereunder:

Table 2: List of Newspapers and Dates on which the Public Hearing Notice of JSERC appeared

Newspaper	Date
AAJ	14.09.2011
Hindustan	14.09.2011
Prabhat Khabar	14.09.2011
Ranchi Express	14.09.2011
Dainik Jagran	14.09.2011
Sanmarg	14.09.2011
The Hindustan Times	14.09.2011
The Times of India	14.09.2011

Submission of Objections and Conduct of Public Hearing

2.16 The public hearing was held on Sunday, September 18, 2011 at Kala Kendra, Bokaro and many respondents gave their comments and suggestions on the ARR and Tariff filing for FY 2011-12 by the Petitioner. The comments/suggestions of the public as well as Petitioner's response to them are detailed in the section dealing with the public consultation process.

A3: SUMMARY OF ARR AND TARIFF PETITION

3.1 The Petitioner has filed the present petition for determination of ARR for FY 2009-10, FY 2010-11 and FY 2011-12 and tariff determination for FY 2011-12.

3.2 The Petitioner has submitted that it has attempted to segregate the accounts of the electricity distribution business from the consolidated accounts of the steel plant. Since it is not maintaining separate accounts for the electricity business at present, it has extracted accounts for the electricity distribution business from the consolidated accounts of the steel plant on the basis of certain norms and assumptions.

3.3 The Petitioner has submitted that the cost of power purchased from DVC is under dispute and it is not clear at present what will be the final cost of power.

3.4 The summary of ARR as submitted by the Petitioner is detailed in the table below.

Table 3: ARR submitted by the Petitioner (Rs. Cr)

Costs	FY 2009-10	FY 2010-11	FY 2011-12
Power Purchase Cost	338.25	397.09	414.41
Employee Cost	16.68	22.71	24.98
R&M Expenditure	3.13	4.22	14.40
A&G Expenditure	1.41	1.41	1.41
Interest on Loan	0.66	0.66	0.66
Interest and Finance Charges	0.41	0.41	0.41
Depreciation	0.22	0.22	0.22
Return on Equity	0.53	0.53	0.53
Interest on Working Capital	19.15	25.34	38.36
Total	380.44	452.59	495.39
Revenue at Existing Tariff	291.82	373.37	419.21
Revenue (Gap)/Surplus	**(88.62)**	**(79.21)**	**(76.17)**

3.5 It is pertinent to mention that during scrutiny of the petition, the Commission sought additional information and clarification on various components of the ARR for FY 2009-10, FY 2010-11 and FY 2011-12. As per the clarification and corrections made by the Petitioner, the petition figures have undergone change as is reflected in the relevant sections of this Order.

3.6 The Petitioner has also proposed changes in the existing tariff schedule to meet the revenue gap projected by it. The new tariff schedule, as proposed in the petition, is given in table below.

Table 4: Tariff proposed by the Petitioner for FY 2010-11

Consumer category	Fixed Charge		Energy Charge		
	Existing	*Proposed*	*Unit*	*Existing*	*Proposed*
DS – II	Rs. 25 per connection per month	Rs. 30 per connection per month	Rs./ kWh (0-200 Units)	1.50	2.50
	Rs. 30 per connection per month	Rs. 40 per connection per month	Rs./ kWh (>200 Units)	1.90	3.00
DS HT	Rs. 40 per kVA per month	Rs. 60 per kVA per month	Rs./ kWh	1.65	3.00
NDS II	Rs. 110/kWh/ Month	Rs. 120/kWh/ Month	Rs./ kWh	3.95	5.00
LTIS	Rs. 75/HP/ month Or part thereof	Rs. 100/HP/ month Or part thereof	Rs./ kWh	3.50	4.50
HTS	Rs. 165 per kVA per month	Rs. 200 per kVA per month	Rs./ kWh	4.35	5.00
HT/LT Utilities	-	-	Rs./ kWh	-	2.00

A4: PUBLIC CONSULTATION PROCESS

Submission of Comments/Suggestions and Conduct of Public Hearing

4.1 The tariff petition evoked response from several consumers. A public hearing was held on September 18, 2011 at Kala Kendra, Bokaro to ensure maximum participation by the public. Many respondents put forth their comments and suggestions before the Commission in the presence of the Petitioner. Eighty nine members of the public took part in the public hearing process. The list of the attendees is attached in Annexure-I.

4.2 Further, there were seven persons who filed written suggestions/comments on the tariff petition filed by the Petitioner, as listed hereunder:

Table 5 : List of persons who filed written suggestions/comments during the Public Hearing

S. No.	Objector/Organization	Represented by
1	Steel City Upbhokta Sanraksha Samiti	Mr.B Ojha
2	Mr.J.C.Sinha	Self
3	Bokaro Vyavasaik Plot Holders Welfare Association	Mr.Rajendra Kumar Vishwakarma
4	Bokaro Chamber of Commerce	Mr. Jagdish Choudhary
5	Senior Citizen Welfare Society	Mr. Ashraf Ali
6	Bokaro Employees Lease House Welfare Society (BELHWS)	Mr. Ram Deo Prasad

4.3 During the course of the public hearing, the Commission also allowed persons/ representatives of entities who had not submitted prior written representations but attended the public hearing to express their views regarding the ARR and tariff petition filed by the Petitioner for FY 2011-12.

4.4 The issues raised by the participants, along with the reply of the Petitioner and views of the Commission thereon are discussed hereinafter in this chapter.

Use of Power from BPSCL Power Plant

Public Comments/Suggestions

4.5 Power is supplied to Bokaro not only by DVC but also by a power plant owned by Bokaro Power Supply Co. Ltd. (BPSCL), a joint venture of DVC and the Petitioner. The plant has an installed capacity of 302 MW and provides power to the steel plant and also to Bokaro Steel City. The residual power requirements of the plant are met by power purchase from DVC and as such the burden of power purchase from DVC should not be borne by the consumers. Members of the public have opined that the supply from DVC is diverted to the steel plant whenever supply of power to the steel plant falls below 100 MW. Such diversion seriously affects residents of the township.

4.6 The stake holders have further submitted that the power purchased from DVC by Bokaro Steel Plant is utilized for operating plant units and the demand charges and fixed charges levied by DVC should not be reimbursed from the township consumers.

Petitioner's Response

4.7 The power plant run by BPSCL is a captive power plant of the steel plant and caters only to the power requirements of the steel plant. All electricity required for Bokaro Steel City is sourced from DVC only.

Views of the Commission

4.8 The Commission has observed that power from the BPSCL power plant is being used only to meet power requirements of the steel plant and the power cannot flow from Power Plant to the town distribution system due to lack of connectivity. Therefore, the power purchased from DVC is the only source to meet the electricity demand of the licensed area and the additional power requirements of the steel plant.

Excessive O&M costs claimed by the Petitioner

Public Comments/Suggestions

4.9 Members of the public have opined that the Petitioner has claimed very steep O&M charges in their petition. They have mentioned that the provision for repair and maintenance has increased drastically for FY 2011-12 on account of underground cabling to be done during the year. However, very little time is left during the year for such work to be done thus the Commission should disallow such high R&M Costs claimed by the Petitioner.

4.10 Further, the stakeholders have said that employee costs should be reduced by disallowing the apportionment of indirect costs claimed by the Petitioner towards the distribution business. Thus the O&M costs claimed in the petition are unjustifiable.

Petitioner's Response

4.11 The Petitioner has stated that they are making best efforts for continued improvement of Power supply at most affordable and efficient charges, duly approved by the Commission. Further, they have made a transparent petition showing all the necessities of revenue and expenditure.

Views of the Commission

4.12 After carrying out a prudence check on the expenses claimed by the Petitioner, the Commission has provisionally approved O&M costs.

4.13 Further, the Commission has allowed the R&M expenses for FY 2010-11 and FY 2011-12 to the Petitioner only as a notional percentage of the GFA in absence of details of the expenses being claimed by them. The employee costs have also been allowed only after projecting the number of employees and taking into account the reduction in work force and the average salaries being paid to employees at present.

Segregation of Accounts of the Electricity Distribution Business

Public Comments/Suggestions

4.14 No separate accounts are being maintained by the Petitioner for the business of distribution of electricity and thus the information in the tariff petition should not be accepted. The financial statements provided by the Petitioner cannot be relied upon and the capital mentioned in the balance sheet is a balancing figure which is incorrect declaration of the source of funds of the business.

4.15 No costs incurred on account of DNW/ETL should be included in the calculation of ARR as the DNW/ETL works almost exclusively for the steel plant and not for the distribution of electricity to the township.

4.16 Further, the apportionment of 12.12% indirect costs to the direct costs incurred by the TA Electrical department is not justified and is an arbitrary calculation. The data provided on account of stores, spares, consumables as well as repair and maintenance and power and fuel is unjustifiable.

Petitioner's Response

4.17 The accounts for the electricity business have been segregated from the consolidated audited accounts of the steel plant from FY 2009-10.

4.18 On the matter of costs incurred on account of DNW/ETL, the Commission should allow the charges after prudence check of the accounts and functioning of the system.

4.19 Only the employee cost, R&M charges and A&G expenses related to electricity business have been taken into account.

Views of the Commission

4.20 The Commission has given its views on the above matters in its analysis of various cost components in the relevant sections of this Tariff Order.

Quality of Supply

Public Comments/Suggestions

4.21 The quality of supply in the licensed area has deteriorated over the last couple of years. Power supply is erratic, with frequent power cuts and fluctuation in voltage levels.

4.22 The Petitioner does not have a proper complaint redressal system in place and complaints often go unheeded.

Petitioner's Response

4.23 All measures are being taken to provide uninterrupted power supply to all consumers.

Views of the Commission

4.24 The Commission views that there is an immediate need to improve the quality of power supply in the licensed area and to have a proper complaint redressal system. The Commission has passed relevant directions in the Directives section of this Tariff Order.

High Distribution Losses

Public Comments/Suggestions

4.25 The distribution loss in the township area claimed by the Petitioner is to the tune of 30% and such high distribution losses are unjustified.

4.26 The power distribution system of the Bokaro Steel Township is quite effective and as such the distribution loss cannot be over 2.5% of the total energy supplied to the township. The losses incurred by the Petitioner due to theft or pilferage should not be passed on to the consumers who are being billed for electricity

Petitioner's Response

4.27 The Petitioner has stated that they are making continuous efforts to reduce their distribution losses, however, the matter regarding the quantum of losses to be allowed shall be decided as deemed fit by the Commission.

Views of the Commission

4.28 The Commission takes a serious view of the high level of distribution loss reported by the Petitioner and does not find any justification to pass on the inefficiencies of the Petitioner to the consumers. Accordingly, the Commission has approved distribution losses at 22% and 19% for FY 2009-10 and FY 2010-11 in its previous Tariff Order and 17% for FY 2011-12 in line with the trajectory set in the Distribution Tariff Regulations, 2010.

Categorization of Consumers and High Fixed Charges

Public Comments/Suggestions

4.29 Bokaro Steel Plant has allotted plants for commercial cum residential purposes. The nature of consumers in the individual plots on the ground floor is commercial in nature whereas on the first floor is residential in nature. The Petitioner should install separate meters for both commercial and residential consumers to bifurcate the quantum of consumption on different heads as per the categories of consumers.

4.30 Further, the fixed charges proposed by the Petitioner are on the higher side and this should not be allowed.

Petitioner's Response

4.31 The Petitioner has stated that commercial premises may have some residential space however, the commercial space shall be charged at the commercial tariff.

Views of the Commission

4.32 The Commission takes a serious view of the situation and is of the opinion that the Petitioner should make all efforts to ensure that consumers are put in appropriate categories with appropriate tariff is charged from them.

Electricity Supply to the Co-operative Colony

Public Comments/Suggestions

4.33 The Bokaro Steel Co-operative House Construction Society Ltd (BSECHCS) was formed with the help of the Bokaro Steel Plant. The Co-operative Colony, within Bokaro Steel City, belongs to BSECHCS and its residents are primarily employees/ex-employees of the Petitioner. The society has its own electrical distribution network and substation, power to which is received at 11kV from the Petitioner. The society is treated as an HT consumer by the Petitioner even though it primarily has a mix of residential and commercial consumers with only three industrial consumers.

4.34 In 2007, a member of the co-operative society appealed to the Commission vide case no 10/2007-08 for getting an individual connection from the Petitioner; following which the Commission in its order dated 17.08.2007 and 4.12.2007 directed the Petitioner to provide individual connections to residents of the colony who apply for it. These orders were not challenged by the Petitioner. But at the same time, the applications for providing individual connections remain pending before the Petitioner and no individual connections have been provided so far.

4.35 The Commission also imposed a penalty at the rate of Rs. 21,000 per day in case of non compliance of its orders. The penalty has, however, been challenged by the Petitioner in the Jharkhand High Court and the case is pending before the court.

Petitioner's Response

4.36 The matter shall be decided as deemed fit by the Commission.

Views of the Commission

4.37 The Commission notes that para two of The Electricity (Removal of Difficulties) Eighth Order, 2005 states:

> *"**2. Supply of electricity at single point by the distribution licensee to a Co-operative Group Housing Society** – A distribution licensee shall give supply of the electricity for residential purposes on an application by a Co-operative Group Housing Society which owns the premises at a single point for making electricity available to the members of such Society residing in the same premises on such terms and conditions as may be specified by the State Commission:*
>
> *Provided that the provisions of this clause shall not in any way affect the right of a person residing in the housing unit sold or leased by such a Co-operative Group Housing Society to demand supply of electricity directly from the distribution licensee of the area on such terms and conditions as may be specified by the State Commission."*

4.38 The Commission thus directs the Petitioner to provide individual commercial/residential connections to all residents of the Co-operative Colony who have applied for it (or apply for it in the future) without further delay.

A5: DETERMINATION OF ARR

5.1 This section deals with the Commission's analysis of the petition filed by the Petitioner for determination of Annual Revenue Requirement for FY 2009-10, FY 2010-11 and FY 2011-12.

5.2 The tariff petition submitted by the Petitioner was found to be incomplete in many respects. The Commission asked the Petitioner to furnish additional information at various times regarding sales, power purchase, O&M cost, capital expenses and revenue to supplement the petition data provided by them at the outset. Further the information provided by the Petitioner was not as per the regulatory formats prescribed by the Commission.

5.3 The Commission asked the Petitioner to submit information with respect to category wise sales, connected load, number of consumers for FY 2008-09, FY 2009-10, FY 2010-11 and FY 2011-12. Further, the Petitioner was asked to submit data regarding power purchase, distribution loss, and item wise break up of other costs such as administrative and general expense and repair and maintenance expenses and details regarding employee cost for FY 2009-10 and FY 2010-11 as per the prescribed regulatory formats. The Petitioner was also asked to submit the basis for projecting employee cost, A&G expenses and R&M expenses for FY 2011-12 and detailed calculation of return on equity, working capital and interest and finance charges. Also the Commission asked the Petitioner to submit a compliance report for the directives issued in the previous Tariff Order.

5.4 While the Petitioner provided additional data in response to the queries raised by the Commission, the same was also found to be incomplete. The Commission yet again asked the Petitioner to furnish further information/clarifications including additional data regarding sales, actual payments made to DVC, the complete list of employees along with the total emoluments/salaries paid to them for the year 2010-11, actual A&G and R&M expenses for FY 2010-11, the details of capital investment plan for FY 2011-12 etc.

5.5 The Petitioner was, however, unable to provide the complete information and replies to the various queries raised by the Commission.

5.6 The Commission also notes that the Petitioner has been unable to segregate the accounts of the electricity distribution business from the accounts of the Bokaro Steel Plant. The annual accounts for FY 2009-10 submitted by the Petitioner have been merely extracted from the main accounts of Bokaro Steel Plant on basis on certain norms and assumptions. As such the Commission believes that such extraction of expenses, on a normative basis, does not represent the complete picture of expenses of the distribution business. Therefore, for the purpose of issuance of this Tariff Order the Commission has decided to carry out a provisional truing-up exercise for FY 2009-10 and final true-up will done when the segregated, audited accounts for the electricity distribution business for the same year are made available to the Commission.

5.7 The figures for FY 2010-11 and FY 2011-12 have been approved on the basis of past performance, expected growth and information made available by the Petitioner. However, as mentioned earlier, since many discrepancies were observed in the data provided by the Petitioner, the Commission has decided to only provisionally approve the ARR for FY 2010-11 and FY 2011-12 as well as the Tariff for FY 2011-12.

Energy Sales

Petitioner's submission

5.8 The Petitioner has categorized the energy sales in its licensed area in two parts – sales on account of 'Own Consumption' and Sales to Other Consumers.

5.9 Sales to Other Consumers include sales to LT/HT consumers such as domestic consumers (including employees of SAIL), non-domestic consumers, LTIS consumers and HT consumers. The Petitioner has submitted category wise sales for FY 2009-10, FY 2010-11 and FY 2011-12 as shown in Table 6.

5.10 Further, with respect to sales to domestic consumers, the Petitioner has submitted that in many of the residential quarters meters are either not working or are malfunctioning due to which billing is being done on assessment basis (fixed number of units consumed for each type of quarter). The Petitioner has stated that it has decided to replace all non-functional meters in a phased manner.

5.11 The tables below summarise the category-wise number of consumers, connected load and sales for 'Other Consumers' for FY 2009-10, FY 2010-11 and FY 2011-12 as submitted by the Petitioner in the additional information submitted to the Commission.

Table 6: Submitted Energy Sales (MU) for Other Consumers*

	FY 2009-10	FY 2010-11	FY 2011-12
Domestic	81.15	81.91	85.21
DS HT	5.28	6.14	5.55
LTIS	-	0.18	0.37
NDS	19.46	19.09	16.28
HTS -11 KV	-	2.23	3.78
Total	**105.90**	**109.55**	**111.19**

*As per additional information

Table 7: Submitted Number of Consumers for Other Consumers*

Category	FY 2009-10	FY 2010-11	FY 2011-12
Domestic	37445	37445	37441
DS-HT	4	4	4
HT-DS Composite			
LTIS	-	37	41
NDS	1423	1621	1621
HTS-11 KV		5	5

Category	FY 2009-10	FY 2010-11	FY 2011-12
Total	38872	39112	39112

*As per additional information

Table 8: Submitted Connected Load for Other Consumers*

Category	Unit	FY 2009-10	FY 2010-11	FY 2011-12
Domestic	kW	93080	93580	93580
DS-HT	kVA	3322	5086	5086
HT-DS Composite				
LTIS	HP		824	824
NDS	kW	10615	14660	14660
HTS-11 KV	kVA	0	3057	3057

*As per additional information

5.12 'Own Consumption' consists of energy consumption by utilities such as schools, hospitals, street lighting, pump houses, administration buildings and offices. The Petitioner has submitted that electricity consumed for such purposes is not metered or billed and the expense for the same is to be borne by the steel plant administration. The energy consumed for such purposes has been estimated on assessment basis.

5.13 In its tariff petition, the Petitioner had submitted sales on account of 'Own Consumption' as 98.80 MU for each year from FY 2009-10 to FY 2011-12. The Commission directed the Petitioner to provide a detailed break-up of the estimated 'Own Consumption' and the basis of estimation in the additional information to be provided by the Petitioner. In its subsequent submissions, the Petitioner submitted that the "*earlier assessment of estimated load of Street Lights* (which is a part of Own Consumption) *was based on actual connected load whereas later on, because of non-functioning / functioning at low load of Street Lights, reassessment has been made.*" The energy sales, as per the revised assessment, on account of 'Own Consumption' have been submitted as 74.49 MU for FY 2009-10, FY 2010-11 and FY 2011-12.

Table 9: No of consumers, Load and Energy Consumed for 'Own Consumption'*

Consumption of HT/LT Utilities or 'Own Consumption'				
Description of Premises	Unit for Connected Load	No.of Premises/ Installations	Connected Load	Total Units Consumed (MU)
Offices	kW	8	6051	15.55
Pump Houses	HP	4	15390	23.64
Medical Services	kW	11	3640	12.43
Schools & Area illumination	kW	88	572	1.64
Street / Area lighting	kW	10685	1633	6.09
Others (Sports Club, Bokaro Club, yoga Kendra, bokaro Niwas, City Park, etc.	kW	19	3514	15.14
TOTAL		**10815**		**74.49**

*As per additional information

Commission's analysis

5.14 The Commission has scrutinized the commercial information in relation to the number of consumers, connected load and category-wise units sold, as submitted by the Petitioner.

5.15 The Petitioner has submitted that in many of the residential quarters meters are either not working or are malfunctioning due to which billing is being done on assessment basis (fixed number of units consumed for each type of quarter). It even announced during the public hearing that at least 13,000 quarters did not have a fully functional meter in FY 2010-11. During the finalisation of this Tariff Order, the Commission directed the Petitioner to submit the break-up of category-wise sales into metered and unmetered sales and the basis of assessment for unmetered sales. However, the same has not been submitted by the Petitioner.

5.16 Further, during the technical validation sessions, the Commission pointed out to the Petitioner that the sales to DS-II (0-200 units) category, as submitted by the Petitioner, have increased greatly between FY 2009-10 and FY 2010-11 while the number of consumers has remained the same. However, no satisfactory explanation was given by the Petitioner regarding this trend.

5.17 The Petitioner has created a category of 'Own Consumption' or 'HT/LT Utilities' for energy supplied to utilities such as schools, hospitals, street lighting, pump houses, administration buildings and offices. The consumption for such purposes is not being metered and has been estimated on assessment basis. However, the Commission in its previous Tariff Orders has not approved any such separate category of consumers.

5.18 During the data validation sessions, the Commission asked the Petitioner to submit the category wise details of consumption clubbed under the head of HT/LT Utilities (or Own Consumption) including the basis of assessment of energy consumption of these consumers, which was submitted by the Petitioner in the subsequent submissions made by it.

5.19 The Commission was also informed during the technical validation sessions that the basis of assessment of sales has been used for quite some time. Since the sales to these utilities contributes to about 40% of overall sales of the Petitioner, correct estimation of these sales is essential. The Petitioner must meter the consumption of these consumers so that the actual level of energy sales, revenues and distribution losses in the licensed area can be determined. The Petitioner is directed to carry out the installation of meters for such consumers on priority. Since most of the sales included under the head of 'Own Consumption' are on account of a few large utilities, the Commission expects that the same should be completed within the current financial year.

5.20 For the time being, the Commission has considered the information provided by the Petitioner regarding 'Own Consumption' to re-categorize the consumption of office and maintenance posts, schools, recreation, hospitals and health care, pump-houses into Street Light Service, NDS, HTS and LTIS categories.

5.21 In absence of audited sales and revenue data, lack of metering and even the basis of estimation of sales for unmetered sales, the Commission has only provisionally considered the no. of consumers, connected load and sales for FY 2009-10 and FY 2010-11 as submitted by the Petitioner and shown in Table 6 to Table 9 above. The same shall be trued up, along with the no. of consumers, connected load and sales of FY 2008-09, when the audited sales data, the scientific basis of assessment of the unmetered sales and the audited, segregated accounts are made available by the Petitioner.

5.22 For FY 2011-12, the Commission has approved the projected number of consumers and connected load based on the projections made by the Petitioner. Since there is no reliable data regarding historic/long term increase in sales in the licensed area, the Commission, in line with the approach adopted by it in its previous Tariff Order, has projected the sales for FY 2011-12 at the same level as that provisionally approved for FY 2010-11.

5.23 The table below summarises the number of consumers, connected load and energy sales approved by the Commission for FY 2011-12.

Table 10: Approved Number of Consumers, Connected Load and Energy Sales for FY 2011-12

Category	Unit for Load	No. Of Consumers	Connected Load	Energy Sales (in MU)
DS-II	kW	37441	93580	81.91
DS-HT	kVA	4	5086	6.14
LTIS	HP	41	824	0.18
NDS	kW	1621	14660	19.09
HTS-11 KV	kVA	5	3057	2.23
Utilities*	kW	10815	28910	74.49
Total		**49927**		**184.04**

* For the purpose of comparison sales to Utilities have been shown separately. However, no such category has been approved by the Commission and the sales under this head have been reclassified into HTS, NDS, LTIS and SS for the purpose of calculation of revenue.

Distribution Losses

Petitioner's submission

5.24 In its initial submission for determination of ARR for FY 2011-12, the Petitioner had submitted energy sales on for FY 2009-10, FY 2010-11 and FY 2011-12 as 204.70 MU, 202.90 MU and 206.21 MU respectively including 98.80 MU of sales account of 'Own Consumption'. The distribution loss corresponding to these sales was submitted as 23.52%, 21.05% and 19.76% for FY 2009-10, FY 2010-11 and FY 2011-12 respectively.

5.25 However, the sales on account of 'Own Consumption' were revised in the subsequent submissions by the Petitioner to 74.49 MU. The total sales corresponding to the revised sales on account of 'Own Consumption' are 180.39 MU, 184.04 MU and 185.68 MU respectively. The distribution loss, as per the revised submission, works out to be 32.60%, 28.39% and 27.75% for FY 2009-10, FY 2010-11 and FY 2011-12 respectively.

Commission's analysis

5.26 The distribution losses reported by the Petitioner are very high as compared to other licensees of comparable size. The table below details the sales and distribution losses of the Petitioner and some other utilities.

Table 11 : Comparison of Distribution losses

Particulars	Sales (in MUs)	Distribution Loss (in %)
SAIL (for FY 2009-10)*	180.39	32.60
JUSCO (Provisional for FY 2009-10)**	126.65	0.96
JSPL, Raigarh (Actual for FY 2007-08)***	570.50	4.65

Source: * SAIL-BSL Tariff Petition for FY 2011-12, ** JUSCO Tariff Order for FY 2010-11
*** JSPL Tariff Order for FY 2009-10

5.27 As can be seen from the above table, other utilities with comparable sales have lower distribution losses as compared to that of the Petitioner. The Commission is of the view that the consumer and sales base of the licensed area of the Petitioner is comparatively small and it does not find any merit in approving such high losses. The high level of losses is a result of the Petitioner's own inefficiency, the burden of which cannot be passed on to the consumers.

5.28 Therefore, the Commission has approved distribution losses at 22% and 19% for FY 2009-10 and FY 2010-11 in the previous Tariff Order and 17% for FY 2011-12 in the Distribution Tariff Regulations, 2010. The Commission has set a time bound distribution loss reduction trajectory for Petitioner such that it achieves the benchmark distribution loss level of 10% by the end of FY 2015-16.

5.29 The table below summarises the trajectory set by the Commission for reduction of distribution losses over a period of time such that the Petitioner is able to reach at least 10% loss level by FY 2015-16.

Table 12: Approved Distribution Loss Trajectory

Particulars	Distribution loss
FY 2008-09	25%
FY 2009-10	22%
FY 2010-11	19%
FY 2011-12	17%
FY 2012-13	15%

Particulars	Distribution loss
FY 2013-14	13%
FY 2014-15	11%
FY 2015-16	10%

Energy Balance

Petitioner's submission

5.30 The quantum of power purchase required to meet the energy sales (including the energy lost as distribution losses) in the township has been submitted by the Petitioner as 267.64 MU, 284.06 MU and 289.64 MU for FY 2009-10, FY 2010-11 and FY 2011-12 respectively. This was, however, revised to 267.64 MU, 257.00 MU and 257.00 MU for FY 2009-10, FY 2010-11 and FY 2011-12 respectively in the subsequent submissions made to the Commission.

5.31 The table below details the energy balance submitted by the Petitioner for FY 2009-10, FY 2010-11 and FY 2011-12 respectively.

Table 13: Submitted Energy Balance*

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
Energy Sales (MU)	180.39	184.04	185.68
Distribution Losses (%)	32.60%	28.39%	27.75%
Distribution Losses (MU)	87.26	72.97	71.32
Total Energy Required (MU)	267.64	257.00	257.00

* As submitted in the Additional Information; corresponding to 'Own Consumption' sales of 74.49 MU

Commission's analysis

5.32 The Commission's estimation of energy requirement takes into consideration the approved energy sales level and approved distribution loss level for respective years. The table below summarises the approved energy requirement of the licensed area:

Table 14: Approved Energy Requirement

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
Energy Sales (MU)	180.39	184.04	184.04
Distribution Losses (%)	22.00%	19.00%	17.00%
Distribution Losses (MU)	50.88	43.17	37.69
Total Energy Required (MU)	231.27	227.21	221.73

5.33 With regards to availability of power, as was mentioned in the previous Tariff Order, the Petitioner has submitted that it has only one source of power purchase - Damodar Valley Corporation (DVC). The Power Purchase Agreement (PPA) has been entered into with DVC in April, 2001 with a contract demand of 200 MVA. A portion of the power procured from DVC is used to meet the energy requirement of the Bokaro township while the rest of power is consumed in the Bokaro Steel Plant. In line with the approach adopted in its previous Tariff Order, the Commission has only considered the quantum of power sent to the township for calculating the power purchase cost of the Petitioner.

5.34 While, the energy requirement of the licensed area was met by power purchase from DVC in FY 2009-10 and FY 2010-11, during FY 2011-12, the energy requirement of the area is projected to be met by power purchase from DVC and also from renewable sources.

5.35 As a distribution licensee, as per the JSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010, the Petitioner is obligated to meet 3% of its total power requirement in FY 2011-12 from renewable energy sources including 0.50% from solar energy sources and 2.50% from non-solar energy sources. The Commission has considered the same while approving the energy availability for the Petitioner for FY 2011-12. As per the provisions of the said Regulations, if any licensee fails to comply with the obligation to purchase the required percentage of power from renewable energy sources or the renewable energy certificates, it may be liable for penalty as may be decided by the Commission.

Power Purchase Cost

Petitioner's submission

5.36 The Petitioner has submitted that power for distribution is purchased from DVC, whose generation and transmission tariff is determined by the CERC. The cost of power purchase from DVC is, however, under dispute.

5.37 The Petitioner has explained in its petition that the CERC determined and notified the tariff for DVC on October 3, 2006 which was effective from April 1, 2006. The order of the CERC was challenged by DVC before the Appellate Tribunal for Electricity (ATE) and the order was remanded to CERC for limited de-novo consideration. The revised order and tariff, after de-novo consideration, was notified by CERC on August 6, 2009, which was again challenged by DVC in the ATE. The ATE pronounced and published order in Appeal No 146 of 2009 on May 10, 2010. DVC thereafter challenged the said order in the Hon'ble Supreme Court of India vide Civil Appeal No 4881 of 2010. While the Hon'ble Supreme Court granted stay on the issue of refund of excess charges collected by DVC vide its order dated July 9, 2010, the tariff determined by the CERC remained effective and operative.

5.38 Further, during the technical validation sessions, the Petitioner informed the Commission that the CERC through its order in June 2010 increased the capacity charges payable to DVC. However, this tariff was challenged by the consumers of DVC in the Hon'ble Ranchi High Court and Hon'ble Kolkata High Court, following which a stay has been granted on the increased tariff. The rate of power purchase from DVC has however increased in FY 2011-12 due to increase in fuel cost surcharge (FCS) charged by DVC.

5.39 The details of energy procured from DVC and the corresponding costs are summarized in Table 15:

Table 15: Power Purchase Cost

	FY 2009-10	FY 2010-11	FY 2011-12
Power Purchase Costs (Rs. Cr)			
Total Power Purchase	338.25	397.09	414.41
Transfer to Steel plant	246.88	322.08	332.23
Licensed area Supply	91.37	75.01	82.18
Total Average Power Purchase Cost (in Rs/unit)	3.38	2.94	2.94

Commission's analysis

5.40 As was mentioned in the previous Tariff Order for FY 2010-11, the Commission has considered and approved power purchase cost and revenue of only the energy supplied for the distribution business and not for the power which is used in the steel plant.

5.41 During the technical validation sessions, the Petitioner submitted that during FY 2009-10, from November 2009 onwards, it did not make payments to DVC for the entire amount billed by the DVC during each month. However, the Petitioner has submitted that during FY 2010-11 it paid the entire amount as has been billed by DVC during each month.

5.42 The Commission has verified the power purchase cost billed by the DVC to the Petitioner from the bills raised by DVC. For FY 2009-10 and FY 2010-11, the Commission has approved the total quantum of power purchase as per the bills raised by DVC and power purchase cost as per the actual payments made by the Petitioner to DVC. The Commission has then calculated the power purchase cost per unit and used the same to arrive at the power purchase cost for the approved energy required for distribution in the township.

5.43 The Commission has calculated the power purchase cost for power to be procured from DVC during FY 2011-12 by considering the average rate of power procured from DVC during April-June 2011 i.e. Rs 3.09/unit.

5.44 The Commission has also projected purchase of power from renewable sources in line with the renewable purchase obligation (RPO) of the Petitioner for FY 2011-12 i.e. 3% of total energy requirement of its licensed area. The price of power from solar energy sources has been taken equal to Rs 14.98 per unit as per the rate approved by the Commission in JSERC Tariff Order for solar plants, 2010 and the rate of energy from non-solar sources has been estimated at a cost of Rs 5.00 per unit in line with the rate approved for other licensees in the state.

5.45 Based on the above, the approved average power purchase cost is summarized in the table below

Table 16: Approved Power Purchase Cost (Licensed area Supply)

	FY 2009-10	FY 2010-11	FY 2011-12			
	DVC	DVC	DVC	Solar Renewable	Non-Solar Renewable	Total
Power Purchase Quantum (MU)	231.27	227.21	215.08	1.11	5.54	221.73
Power Purchase Cost (Rs Cr)	63.57	66.39	66.42	1.66	2.77	70.86
Average Power Purchase Cost (Rs/unit)	2.75	2.92	3.09	14.98	5.00	3.20

Employee Cost

Petitioner's submission

5.46 The Petitioner has submitted that the employee cost for FY 2009-10, 2010-11 and 2011-12 has been calculated considering the total expenses on account of payments made to employees of the TA – Electrical department and 12.12% of the total expenses for Distribution network (DNW) as well as for electro-technical laboratory (ETL). The rate of 12.12% has been derived from the ratio of energy sold to distribution licensed area to the total energy handled by SAIL-Bokaro.

5.47 The amount claimed by the Petitioner on account of employee cost includes direct employee cost related to licensee operations and 12.12% of the indirect common employee cost allocated from various back office operations of SAIL, Bokaro.

5.48 The Petitioner has further submitted that the number of employees directly engaged in the business of distribution of electricity for FY 2009-10 was 180.

5.49 The Petitioner has submitted that the employee cost is estimated to increase in FY 2010-11 and 2011-12 in comparison to the cost submitted for FY 2009-10 on account of wage revision and allocated costs. The employee cost claimed by the Petitioner for FY 2009-10 and 2010-11 and that projected for FY 2011-12 is summarized in the table below.

Table 17: Submitted Employee Cost (Rs in Cr)

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
Employee Cost	16.68	22.71	24.98
Number of employees	180	-	-

Commission's View

5.50 The Commission has considered the submissions made by the Petitioner as regards employee cost and has approved employee cost to the Petitioner on account of only employees directly involved in the distribution business.

5.51 The Commission rejects the rationale submitted by the Petitioner for inclusion of cost of employees who are not directly involved in the distribution business. Accordingly, for FY 2009-10, the Commission for the purpose of calculating the employee cost asked the Petitioner to furnish the total number of employees and associated salaries working in TA-Electrical department and also for the employees who are a part of DNW and ETL but are associated with the distribution business. The Petitioner submitted that 180 employees across the three departments i.e. TA-Electrical, DNW and ETL are employed specifically for the distribution business. However, the Petitioner submitted salary data for only 172 out of these 180 employees. Accordingly, in approving the employee cost for FY 2009-10, the Commission has considered employee cost for only 172 employees for whom the data has been submitted. The Commission shall consider the employee cost for the remaining 8 employees in the tariff order for the next year if the data pertaining to the same is made available by the Petitioner.

5.52 Therefore, for the time being, the Commission has provisionally allowed only the employee cost which is attributable to employees of TA-electrical department, DNW and ETL working full time for the electricity distribution business. The employee cost shall be trued-up when the relevant information is made available by the Petitioner.

5.53 The Commission computed the average salary paid to the employees in FY 2009-10 and has used the same average basis to project and approve employee cost for the years FY 2010-11 and FY 2011-12. The Petitioner has not provided the number of employees engaged in the distribution business in FY 2010-11 or the projected number of employees estimated to be engaged in the distribution business in FY 2011-12. In absence of such information, the Commission has maintained the number of employees for FY 2010-11 at the same level as approved in the previous tariff order for FY 2010-11 which was 158 employees. The Commission has accordingly estimated the number of employees for FY 2011-12 as 145; this estimation has been done by maintaining the same rate of reduction in the number of employees from FY 2009-10 to 2010-11 and from FY 2010-11 to 2011-12. In other words, the Commission has assumed that the number of employees shall decrease from FY 2009-10 to 2010-11 and from FY 2010-11 to 2011-12 at a uniform rate of reduction.

5.54 The average salary per employee directly engaged in the distribution business computed for FY 2009-10 has been used to estimate the employee cost for FY 2010-11 and 2011-12. Such employee cost approved for FY 2009-10, 2010-11 and 2011-12 shall be trued up by the Commission in the next tariff order if data and information pertaining to employee cost and number of employees directly engaged in the distribution business is made available by the Petitioner in the next tariff petition.

5.55 The table below provides a summary of the number of employees and the employee cost provisionally approved by the Commission for FY 2009-10, 2010-11 and 2011-12.

Table 18: Approved Employee Cost (Rs in Cr)

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
Employee Cost	9.51	8.74	7.62
Number of employees	172	158	145

Repair & Maintenance Expenses

Petitioner's submission

5.56 The Petitioner has submitted repair & maintenance (R&M) expenses of Rs 3.13 Cr for FY 2009-10 and Rs 4.22 Cr for FY 2010-11 and projected R&M expenses for FY 2011-12 at Rs. 14.40 Cr.

5.57 The Petitioner has projected the R&M expenses of Rs 14.40 Cr for FY 2011-12 and stated that the reason for such increase is due to under-ground cabling and metering to be done during the year.

5.58 The table below provides a summary of the R&M cost submitted by the Petitioner.

Table 19: Submitted Repair & Maintenance Cost (Rs in Cr)

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
R&M Cost	3.13	4.22	14.40

Commission's View

5.59 As per 'JSERC Distribution Regulations 2004', the R&M expenses shall be based on certain percentage of opening balance of Gross Fixed Assets of distribution works.

5.60 The Commission has observed that the gross fixed assets submitted by the Petitioner is only Rs 7.90 Cr and is subject to change when an assessment of the fixed asset base of the distribution system will be carried out by the Petitioner. Meanwhile, the Commission has provisionally approved the R&M expenses of Rs 2.06 Cr for FY 2009-10 based on the details submitted by the Petitioner for TA-Electrical department in the additional information.

The Commission has observed that R&M expenses incurred on account of direct expenses incurred for the distribution business for FY 2009-10 shall be allowed to the Petitioner.

5.61 For FY 2010-11 and FY 2011-12, the Commission has provisionally approved R&M expenses @ 2.50 % of opening GFA keeping in mind the rate approved for other utilities in the state. The R&M expenses worked out by the Commission are Rs 0.20 Cr each for FY 2010-11 and FY 2011-12. However, the same would be trued-up when the actual expenses along with the audited accounts are submitted by the Petitioner.

5.62 The Petitioner has projected that the R&M expenses for FY 2011-12 are estimated to be around Rs.14.40 Cr, they have further mentioned that such substantial increase is on account of under-ground cabling and metering to be carried out during the year. The Commission finds that the Petitioner had provided the same reasoning for an increase in R&M expenses in the previous tariff petition submitted by them. However, the Petitioner has not made available any details regarding the status of such R&M activities and neither they have provided any details regarding the estimated expenditure. The Commission has decided to approve R&M expenses for FY 2011-12 on a normative basis as a percentage of opening GFA which is the treatment prescribed by the 'JSERC Distribution Regulations 2010'.

5.63 The table below provides a summary of the R&M cost provisionally approved by the Commission.

Table 20: Approved Repair & Maintenance Cost (Rs in Cr)

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
R&M Cost	2.06	0.20	0.20

Administrative & General Expenses

Petitioner's submission

5.64 The Petitioner has submitted that the administrative and general expenses (A&G) incurred directly on account of the distribution business was to the tune of Rs.1.41 Cr for FY 2009-10 and the Petitioner has further estimated that the A&G expenses for FY 2010-11 and 2011-12 are likely to Rs.1.41 Cr for each of the two years.

5.65 The table below provides a summary of the A&G cost submitted by the Petitioner.

Table 21: Submitted Administrative & General Expenses (Rs in Cr)

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
A&G expenses	1.41	1.41	1.41

Commission's View

5.66 The Commission has approved A&G expenses based on the additional information submitted by the Petitioner and has considered only those expenses which are directly attributable to TA-Electrical department. The Commission states that the same will be trued-up when the segregated, audited accounts are made available to the Commission along with the next Tariff Petition.

5.67 The Commission has provisionally approved the A&G Expenses of Rs. 1.34 Cr for FY 2009-10 and 2010-11.

5.68 For FY 2011-12, the Commission has calculated the A&G expenses of Rs 1.34 Cr and has provisionally approved Rs 1.27 Cr which is net of capitalisation of 5%.

5.69 The table below provides a summary of the A&G cost provisionally approved by the Commission.

Table 22: Submitted Administrative & General Expenses (Rs in Cr)

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
A&G expenses	1.34	1.34	1.27

5.70 The below table summarizes the O&M expenses provisionally approved by the Commission for FY 2009-10, 2010-11 and 2011-12.

Table 23: Approved O&M Expenses (Rs Cr)

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
Employee Cost	9.51	8.74	7.62
R&M expenses	2.06	0.20	0.20
A&G expenses	1.34	1.34	1.27
Total	**12.91**	**10.27**	**9.09**

Capital Investment Plan

Petitioner's submission

5.71 The Petitioner has submitted that there has been no change in the value of gross fixed assets in the years 2009-10 and 2010-11, therefore, there has been no capital expenditure in the two years. The Petitioner has further submitted that they shall be under taking some expenditure for enhancement of the asset base in the year 2011-12 for improvement of capacity of transformers, replacement of service cables, feeders and also replacement of meters.

5.72 The Petitioner has provided the following details regarding the capital expenditure due to be undertaken by them in the FY 2011-12.

Table 24: Proposed Capital Investment plan for FY 2011-12

S No.	Particulars	Unit	Amount (Rs Cr)
1.	Capacity enhancement of transformers	20	1.20
2.	Replacement of service cable in Bokaro Steel City	-	1.50
3.	Replacement of energy meters	8000	0.50
4.	Route diversion of railway feeders	-	1.50
	Total		**4.70**

Commission's View

5.73 The Commission observes that the Petitioner has submitted insufficient details as regards the capital investment plans proposed by them for FY 2011-12. The Petitioner has not claimed any additional capital expenditure/capitalisation for the past years, thus past trend of expenditure incurred on such account cannot be derived. Constrained with this lack of detailed information, the Commission has provisionally approved 50% of the capital expenditure and capitalisation proposed to be carried out during FY 2011-12.

5.74 The Commission is of the opinion that the Petitioner should submit detailed project reports regarding the capital expenditure planned by them. Relevant details in terms of cost of project, approval of project schemes by the board of the company, status of initiation/implementation of project and detailed break up regarding the costs estimated to be incurred should be provided by the Petitioner. In the absence of such information, the Commission has provisionally approved only 50% of the estimated capital expenditure and capitalisation which is Rs.2.35 Cr and such amount has been included in the gross fixed assets for the year 2011-12 to arrive at the closing GFA for the year. Such additional capitalisation shall be trued up in the next tariff order on submission of relevant details regarding the capital works carried out by the Petitioner.

5.75 The year wise GFA and capitalisation as approved by the Commission is shown in the table below:

Table 25: Approved GFA and Capitalisation (Rs Cr)

	FY 2009-10	FY 2010-11	FY 2011-12
Opening GFA	7.90	7.90	7.90
Capitalisation during the year	-	-	2.35
Closing GFA	**7.90**	**7.90**	**10.25**

Depreciation

Petitioner's submission

5.76 The Petitioner has submitted the depreciation of Rs 0.22 Cr each for FY 2009-10, 2010-11 and 2011-12.

Commission's View

5.77 The 'Distribution Tariff Regulations, 2004' (applicable for FY 2009-10 and FY 2010-11) and 'Distribution Tariff Regulations, 2010' (applicable for FY 2011-12) specify that depreciation shall be calculated annually as per SLM at the rates of depreciation prescribed in the schedule attached to the Regulations in Appendix-II. Further, it is provided that capital base for the purpose of depreciation shall be the historical cost of the asset and the residual life of the asset shall be 10% of approved historical cost.

5.78 Accordingly, the Commission has computed the depreciation for FY 2009-10, 2010-11 and 2011-12 based on the details submitted by the Petitioner regarding the classification of assets and the respective rates specified in the said regulations.

5.79 The Commission has included the value of additional capital expenditure provisionally approved during FY 2011-12 to the tune of Rs.2.35 Cr and has provisionally allowed depreciation on such additional capitalization to the tune of Rs.0.10 Cr. This is subject to true up on the availability of relevant information regarding the capital expenditure incurred by the Petitioner in the next tariff petition.

5.80 Table 26 provides details regarding depreciation provisionally approved for FY 2009-10, 2010-11 and 2011-12.

Table 26: Approved Depreciation (Rs Cr)

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
Depreciation	0.15	0.14	0.14
Depreciation on assets added during the year	-	-	0.10
Total depreciation	0.15	0.14	0.24

Interest on loan

Petitioner's submission

5.81 The Petitioner submitted that the capital structure of the electricity business of the Petitioner consists of assets valued at Rs 7.90 Cr which has been put in place after SAIL-Bokaro provided Rs 28.86 Cr as loan.

5.82 The Petitioner further submitted that the entire capital expenditure incurred by SAIL- Bokaro has been funded through its own sources i.e. through equity infusion of Rs 28.86 Cr. Therefore, the normative loan has been considered as 70% of capital employed. Based on the normative debt, the interest on loan is calculated as Rs.0.66 Cr for FY 2009-10, 2010-11 and 2011-12.

5.83 The following table summarises the interest on loan submitted by the Petitioner.

Table 27: Submitted Return on Equity (Rs Cr)

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
Interest on loan	0.66	0.66	0.66

Commission's View

5.84 The 'Distribution Tariff Regulations, 2004 states that:

> *"Debt Equity ratio for the purpose of determination of tariff shall be 70:30.Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30%. Where actual equity employed is less than 30%, the actual equity shall be considered."*

5.85 Accordingly, the Commission has determined the normative debt and equity in the ratio of 70:30 of the value of GFA approved by the Commission.

5.86 In accordance with the generally accepted accounting principles and norms, interest on loan is computed on the average loan outstanding during the year. Accordingly, the interest on normative loan is computed on the average balance during FY 2009-10 and FY 2010-11 by applying an interest rate of 12.75%.

5.87 Interest on Loan for FY 2011-12 has been computed in accordance with clause 6.24 of the 'Distribution Tariff Regulations, 2010'. Seventy percent of the additional capitalisation provisionally approved for FY 2011-12 has been included as deemed debt capital infused during the year. The rate of interest used for calculating the interest on normative debt for FY 2011-12, in accordance with the said regulations, is the SBI PLR as on 1st April 2011.

5.88 The following table summarises provisionally approved normative interest on loan for FY 2009-10, FY 2010-11 and FY 2011-12.

Table 28: Approved Interest on Normative Loan (Rs Cr)

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
Opening Balance	0.67	0.58	0.49
Deemed Additions	0	0	1.65
Deemed Repayment	0.10	0.08	0.21
Closing Balance	0.57	0.49	1.93
Average balance during the year	0.62	0.53	1.21
Interest Rate	12.75%	12.75%	13.25%
Interest on Loan	0.08	0.07	0.16

Interest & Finance Charges

Petitioner's submission

5.89 The Petitioner has submitted that the interest and finance charges for FY 2009-10, FY 2010-11 and FY 2011-12 are to the tune of Rs.0.41 Cr for each of the three years.

Commission's View

5.90 The Commission has observed that there is no provision for allowance of interest and finance charges to the Petitioner in the 'JSERC Distribution Regulations 2004' and 'JSERC Distribution Regulations 2010' and has thereby disallowed the Petitioner's claim for the same.

Interest on Working Capital

Petitioner's submission

5.91 The Petitioner has submitted that the interest on working capital for FY 2009-10 is Rs.19.15 Cr and has estimated that the interest on working capital for FY 2010-11 is Rs.25.34 Cr and for FY 2011-12 is Rs.38.36 Cr.

5.92 The following table summarises the interest on working capital submitted by the Petitioner.

Table 29: Submitted interest on working capital (Rs Cr)

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
Interest on working capital	19.15	25.34	38.36

Commission's View

5.93 In accordance with Regulation 13 of 'Distribution Tariff Regulations, 2004' the interest on working capital shall be allowed to meet the shortfall in collection over and above the target approved by the Commission. The rate of interest on working capital shall be the short-term Prime Lending Rate of State Bank of India as on 1st April of the relevant financial year.

5.94 For FY 2009-10 the Commission has calculated interest on working capital based on the bad debts of Rs 0.57 Cr as submitted by the Petitioner. For FY 2010-11, the Commission has considered the shortfall in revenues as 3% of the existing revenue for FY 2010-11, as had been approved by the Commission in its previous Tariff Order.

5.95 Interest on working capital for FY 2011-12 has been computed in accordance with clause 6.2 of 'Distribution Tariff Regulations, 2010'.

5.96 The following tables summarize the interest on working capital provisionally approved by the Commission for FY 2009-10, FY 2010-11 and FY 2011-12.

Table 30: Approved Interest on Working capital (Rs Cr) for FY 2009-10 and 2010-11

Particulars	FY 2009-10	FY 2010-11
Bad debt as a % of revenue	1.05%	3.00%
Revenue at existing tariff	54.46	59.17
Bad debt (in Rs Cr)	0.57	1.78
Rate of interest	12.25%	11.75%

Particulars	FY 2009-10	FY 2010-11
Interest on Working Capital	0.07	0.21

Table 31: Approved Interest on Working capital (Rs Cr) for FY 2011-12

Particulars	FY 2011-12
1/12th of O&M Expenses	0.76
Maintenance spares @1% of opening GFA	0.08
2 months of expected revenue	10.66
Less: Security Deposits	0.00
Less: 1 month of power purchase cost	5.90
Working Capital	5.59
Rate of interest on working capital	13.25%
Interest on working capital	0.74

Return on Equity

Petitioner's submission

5.97 The Petitioner has considered normative equity to be equal to 30% of capital employed, the rate of return on equity as 15.5% and accordingly submitted return on equity (RoE) of Rs 0.53 Cr each for FY 2009-10, FY 2010-11 and FY 2011-12.

5.98 The following table summarises the return on equity submitted by the Petitioner.

Table 32: Submitted Return on Equity (Rs Cr)

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
Return on Equity	0.53	0.53	0.53

Commission's View

5.99 The Commission determined RoE on the approved average equity base for the years FY 2009-10 and FY 2010-11 at the rate of 14% as specified by Clause 20.1 of the 'Distribution Tariff Regulations, 2004'.

5.100 The RoE for FY 2011-12 has been computed at a post tax rate of 15.50% in accordance with Clause 6.1 of 'Distribution Tariff Regulations, 2010'. The Commission has included the additional capitalisation provisionally approved for FY 2011-12 in arriving at the closing capital base for the year. The opening and closing values of equity have been calculated on the normative basis of 30% of capital base for FY 2011-12. The return on equity has been computed on the average equity base for FY 2011-12 by applying the rate of 15.50% as specified in the regulations.

5.101 As per the Distribution Tariff Regulations, 2010, the rate of return on equity for the transition period shall be considered at post-tax rate of 15.50% p.a. Further the regulations also provide that the normative income tax shall be limited to return on equity. The rate of Income tax applicable for FY 2011-12 is 32.45%. Thus the rate of return on equity has been grossed up by the tax rate and allowed at the rate of 22.94% for FY 2011-12.

5.102 The RoE approved by the Commission for FY 2011-12 is higher than that claimed by the Petitioner because the Petitioner has not considered RoE on the additional capitalisation done during the year. The Commission has computed and approves RoE for FY 2011-12 on the average equity balance for the year in line with the approach followed in the previous Tariff Order.

5.103 The following table summarizes the return on equity provisionally approved by the Commission for FY 2009-10, 2010-11 and 2011-12.

Table 33: Approved Return on Equity (Rs Cr)

Particulars	FY 2009-10	FY 2010-11	FY 2011-12
Opening Equity	2.37	2.37	2.37
Deemed Additions	0	0	0.71
Closing Equity	2.37	2.37	3.08
ROE (%)	14%	14%	22.94%
Return on Equity	0.33	0.33	0.62

Revenue from Existing Tariff

Petitioner's submission

5.104 The Petitioner has submitted the consumer category-wise revenue from existing tariffs for FY 2009-10, FY 2010-11 and FY 2011-12 on the basis of the number of consumers, connected load and sales for each category of consumer. The revenues from existing tariff for distribution business (excluding sale on account of Own Consumption) amounts to Rs 20.36 Cr, Rs 22.21 Cr and Rs 26.03 Cr for the FY 2009-10, FY 2010-11 and FY 2011-12 respectively.

5.105 The revenue from 'Own Consumption' and the electricity transferred to the plant has been estimated on the basis of the average power purchase cost for the year. The total revenue including the imputed revenue from sales to plant and 'Own Consumption' has been submitted as Rs 291.82 Cr, Rs 373.37 Cr and Rs 419.21 Cr.

Commission's Analysis

5.106 The Commission has calculated the revenue at existing tariff on the basis of approved sales, no. of consumers and connected load for various categories of consumers.

5.107 As mentioned earlier, for the time being, the Commission has considered the information provided by the Petitioner regarding 'Own Consumption' to re-categorize the consumption of office and maintenance posts, schools, recreation, hospitals and health care, pump-houses into Street Light Service, NDS, HTS and LTIS categories. As was mentioned in the previous Tariff Order, the Commission has considered and approved power purchase cost and revenue of only the energy supplied for the distribution business and not for the power which is used in the steel plant.

5.108 The Commission has calculated the revenue from sale of power at existing tariff as Rs 54.46 Cr, Rs 59.17 Cr and Rs 63.94 Cr for FY 2009-10, FY 2010-11 and FY 2011-12 respectively.

Summary of ARR

5.109 The table below details the summary of components of ARR as submitted by the Petitioner in the petition and provisionally approved by the Commission for FY 2009-10, 2010-11 and 2011-12.

Table 34: Summary of Annual Revenue Requirement for FY 2009-10, FY 2010-11 and FY 2011-12 (Rs Cr)

	FY 2009-10		FY 2010-11		FY 2011-12	
Particulars	Submitted by the Petitioner	Approved by the Commission	Submitted by the Petitioner	Approved by the Commission	Submitted by the Petitioner	Approved by the Commission
Total Cost of Power Purchased	338.25	-	397.09	-	414.41	-
Cost of power purchased for distribution business	91.37	63.57	75.01	66.39	82.18	70.86
Employee Cost	16.68	9.51	22.71	8.74	24.98	7.62
A&G Expenses	1.41	1.34	1.41	1.34	1.41	1.27
R&M Expenses	3.13	2.06	4.22	0.20	14.40	0.20
Depreciation	0.22	0.15	0.22	0.14	0.22	0.24
Interest on Loan	0.66	0.08	0.66	0.07	0.66	0.16
Interest and Financing charges	0.41	-	0.41	-	0.41	-
Interest on working capital	19.15	0.07	25.34	0.21	38.36	0.74
Return on Equity	0.53	0.33	0.53	0.33	0.53	0.62
ARR	380.44	77.11	452.59	77.41	495.39	81.71
Total Revenue at existing tariff (including plant)	291.82	-	373.37	-	419.21	-
Revenue at existing tariff from Distribution Business	-	54.46	-	59.17	-	63.94
Revenue (gap)/surplus	(88.62)	(22.65)	(79.21)	(18.24)	(76.17)	(17.77)

A6: TREATMENT OF REVENUE GAP

6.1 The Commission has conducted a detailed analysis of the various components submitted by the Petitioner for FY 2009-10, FY 2010-11 and FY 2011-12.

6.2 The summary of revenue gap approved by the Commission for FY 2009-10, FY 2010-11 and FY 2011-12 is given in the table below:

Table 35: Approved revenue gap (in Rs Cr)

Particulars	Approved by the Commission
Annual Revenue Requirement for FY 2011-12	81.71
Revenue Gap for FY 2010-11	18.24
Revenue Gap for FY 2009-10	22.65
Revenue Gap for FY 2008-09 as per Tariff Order for FY 2010-11	49.58
Total Revenue Requirement up to FY 2011-12	172.18
Revenue at existing tariff	63.94
Cumulative Revenue Gap	108.24

6.3 The cumulative ARR for FY 2011-12 and revenue gap from FY 2008-09 to FY 2010-11 approved by the Commission amounts to Rs 172.18 Cr at the existing tariff.

6.4 The Petitioner will be able to generate revenue of Rs 63.94 Cr during FY 2011-12 at existing tariff leaving a resultant gap of Rs 108.24 Cr.

6.5 The Commission has decided to revise the tariff for various categories on the basis of the following:

a) Revenue Gap as calculated by the Commission;

b) The tariff proposal of Petitioner for various categories;

c) Provisions of section 61(g) of the Electricity Act, 2003 for reducing the cross-subsidies;

d) National Tariff Policy;

e) National Electricity Policy;

6.6 In view of the unreliability of the information provided by the Petitioner in the petition and the additional information, the dispute regarding the power purchase cost from DVC, and the absence of segregated, audited annual accounts for the electricity distribution business of the Petitioner, the Commission has decided to revise the tariff for various categories in line with the tariff rates approved for JSEB in FY 2011-12. It is pertinent to mention that the tariff so approved for the Petitioner shall remain as provisional till the time complete information is provided by the Petitioner.

6.7 In view of the tariffs approved for FY 2011-12, the proposed tariff from various consumer categories is estimated to generate additional revenue of about Rs 11.88 Cr. The Commission shall take a view on the balance revenue gap of Rs 96.36 Cr only after the accurate/reliable information regarding sales, and segregated audited accounts for electricity distribution business is provided by the Petitioner and the dispute regarding the power purchase cost from DVC has gained finality.

A7: TARIFF APPROVED BY THE COMMISSION FOR FY 2011-12

7.1 The category-wise existing retail supply tariff and the revised tariff approved by the Commission for FY 2011-12 is depicted in the table below.

Table 36: Existing and Revised Tariff

Category	Units for Fixed Charge	Existing Fixed Charge	Revised Fixed Charge	Existing Energy Charge (Rs/kWh)	Revised Energy Charge (Rs/kWh)
Domestic					
DS-II, <= 4 KW					
0-200	Rs/ Conn/Month	25	35	1.50	1.90
201 & above	Rs/ Conn/Month	30	50	1.90	2.40
DS-III, Above 4 KW	Rs/ Conn/Month	50	90	1.90	2.40
DS HT	Rs/KVA/Month	40	65	1.65	2.00
Non-Domestic					
NDS-II	Rs/KW/Month	110	Rs. 120 per KW per Month or part thereof	3.95	4.80
Low Tension					
LTIS	Rs/HP/Month	75	100	3.50	4.10
HTS					
11 KV & 33 KV	Rs/kVA/Month	165	205	4.35	4.90
132 KV	Rs/kVA/Month	165	205	4.35	4.90
Street Light Service					
SS-I	Rs/ Conn/Month	25	30	3.50	3.85
SS-II (unmetered)	Rs/ Conn/Month	110	Rs. 125 per 100 watt lamp and Rs. 30 for every additional 50 watt	0	0

The above tariffs will be applicable from October 1, 2011

A8: TARIFF RELATED OTHER ISSUES

Tariff Rationalization and Load Management

Petitioner's submission

8.1 The Petitioner has submitted that in order to encourage efficient use of electricity by consumers and reduce wastage, it has proposed different slabs of electricity charges for domestic consumers, with higher consumption being charged at higher rates.

8.2 The Petitioner has proposed the following method for classification of consumers:

(a) Domestic Services, Slab I : Consumption between 0-200 units

(b) Domestic Services, Slab II : Consumption more than 200 units

(c) Domestic Services. High Tension

(d) Low Tension Industrial Supply

(e) HT/LT Utilities

(f) High Tension Supply

View's of the Commission

8.3 The Commission has decided to update the tariff for various categories on the basis of the following:

(a) Revenue Gap calculated by the Commission;

(b) The Tariff proposal of the Petitioner for various categories;

(c) Tariff approved for JSEB in its Tariff Order for FY 2011-12.

(d) Provisions of section 61(g) of the Act, for reducing the cross subsidies

(e) The National Tariff Policy; and

(f) National Electricity Policy.

8.4 The Petitioner has proposed a new category – HT/LT Utilities to cater to its consumer base. The Commission, however, believes that there is no rational to create separate categories and has decided to approve the tariff structure that is in line with the tariff structure approved for other Jharkhand State Electricity Board (JSEB).

8.5 The Commission takes cognizance of provisions of Section 61 (g) of the Act and the National Tariff Policy for ensuring that the tariffs progressively reflect the cost of supply of electricity. In this regard, the Commission feels that it is important for the Petitioner to determine the cost of supply for each category and then compare the same with the revenue recovered from the respective categories.

8.6 The Commission has increased the tariff for domestic consumer category in this Tariff Order to help reduce under recoveries by the distribution company on account of these consumers and gradually move towards a cost of supply model of power supply.

A9: TARIFF SCHEDULE FY 2011-12

APPLICABLE FROM OCTOBER 1, 2011[1]

Domestic Service (DS)
Applicability:

Domestic Service–II, Domestic Service–III and Domestic Service HT

This schedule shall apply to private residential premises for domestic use for household electric appliances such as Radios, Fans, Televisions, Desert Coolers, Air Conditioner, etc. and including Motors pumps for lifting water up to 1 BHP for domestic purposes and other household electrical appliances not covered under any other schedule.

This rate is also applicable for supply to religious institutions such as Temples, Gurudwaras, Mosques, Church and Burial/Crematorium grounds and other recognised charitable institutions, where no rental or fees are charged whatsoever. If any fee or rentals are charged, such institution will be charged under Non domestic category.

Category of Services:

(a) Domestic Service – (DS-II): - For Urban areas covered by notified Area Committee / municipality / Municipal Corporation / All District Town / All sub-divisional Town / All Block Headquarters / Industrial Area / contiguous sub-urban area all market places urban or rural and for connected load not exceeding 4KW.

(b) Domestic Service – (DS – III):-For Urban areas covered by notified Area Committee / municipality / municipal Corporation / All District Town / All sub-divisional Town / All Block Headquarters / Industrial Area / contiguous sub-urban area all market places urban or rural and for connected load exceeding 4KW. Rural Drinking Water supply managed by panchayats' users associations etc. will also be covered in this category.

(c) Domestic service – HT (DS – HT) (Optional): - This Schedule shall apply for Domestic Connection in Housing Colonies / Housing Complex / Houses of multi storied buildings purely for residential use for single point metered supply, with power supply at 11KV voltage level and load upto 75 KW.

Service Character:

For DS-II: AC, 50 Cycles, Single Phase at 230 Volts for installed load up to 4 KW.

For DS-III: AC, 50 Cycles, three phase at 400 Volts for installed load exceeding 4 KW.

[1] This schedule shall remain in force till March 31, 2012 or till the next tariff schedule is issued by the Commission, whichever is later.

For DS-HT: AC, 50 Cycles, at 11 kV Volts for installed load up to 75 KW.

Tariff:

Consumer Category	Fixed Charges		Energy Charges
Domestic	Unit	Rate	Rate (Rs/kWh)
DS-II, <= 4KW Total			
0-200	Rs/ Conn/Month	35	1.90
201 & above	Rs/ Conn/Month	50	2.40
DS-III, Above 4 KW	Rs/ Conn/Month	90	2.40
DS HT	Rs/kVA/Month	65	2.00

Delayed Payment Surcharge:

For Domestic Service category, the delayed payment surcharge will be at the rate of 1.5% per month and part thereof. The due date for making payment of energy bills or other charges shall be fifteen days from the date of serving of bill. The bill should be generated and delivered on monthly basis. In case, the licensee defaults in generating and delivering bills on monthly basis, DPS will not be charged for the period of default by licensee.

Non–Domestic Service (NDS)
Applicability:

This schedule shall apply to all consumers, using electrical energy for light, fan and power loads for non-domestic purposes like shops, hospitals (govt. or private), nursing homes, clinics, dispensaries, restaurants, hotels, clubs, guest houses, marriage houses, public halls, show rooms, workshops, central air-conditioning units, offices (govt. or private), commercial establishments, cinemas, X-ray plants, schools and colleges (govt. or private), boarding/ lodging houses, libraries (govt. or private), research institutes (govt. or private), railway stations, fuel – oil stations, service stations (including vehicle service stations), All India Radio / T.V. installations, printing presses, commercial trusts / societies, Museums, poultry farms, banks, theatres, common facilities in multi-storied commercial office/buildings, Dharmshala, and such other installations not covered under any other tariff schedule.

Service Category:

Non-Domestic Service (NDS) – II, Urban. For Urban Areas covered by Notified Areas Committee / municipality / Municipal Corporation / All District Town / All Sub-divisional Town / All Block Hqrs. / Industrial Area and Contiguous Sub-urban area, market place rural or urban and for connected load up to 75KW. This schedule shall also apply to commercial consumer of rural area having connected load above 2 KW.

Service Character:

NDS-II: - AC 50 Cycles, Single phase at 230 Volts or Three Phase at 400 Volts for load exceeding 2 kW and up to 4 kW

Tariff:

Consumer Category	Fixed Charges		Energy Charges
Non-Domestic	Unit	Rate	Rate (Rs/kWh)
NDS-II	Rs/kW/Month	Rs 120 per KW per Month or part thereof	4.80

Delayed Payment Surcharge:

For Non Domestic Category, the Delayed Payment Surcharge will at the rate of 1.5% per month and part thereof. The due date for making payment of energy bills or other charges shall be fifteen days from the date of serving of bill. The bill should be generated and delivered on monthly basis. In case, the licensee defaults in generating and delivering bills on monthly basis, DPS will not be charged for the period of default by licensee.

Installation of Shunt capacitors

All consumers having aggregate inductive load greater than 5 HP/ 4 kW and above (except domestic and street lights), shall install capacitors of required KVAR rating provided in the following table:

Rating of individual Inductive Load in HP	kVAR rating of LT capacitors
3 to 5	1
5 to7.5	2
7.5 to10	3
10 to 15	4
15 to 20	6
20 to 30	7
30 to 40	100
40 to 50	10 – 15
50 to 100	20 – 30

For existing consumer, the Petitioner should first serve one month's notice to all such consumers who do not have or have defective shunt capacitors. In case the consumers does not get the capacitor installed/replaced within the notice period, the consumer shall be levied a surcharge at 5% on the total billed amount charge (metered or flat), till they have installed the required capacitors.

No connection shall be released on any LT connections having aggregate inductive load greater than 5 HP/ 4 KW unless the capacitors of suitable rating are installed.

Low Tension Industrial & Medium Power Service (LTIS)
Applicability:

This schedule shall apply to all industrial units applying for a load of less than or equal to 100 KVA (or equivalent in terms of HP or KW).

The equivalent HP for 100 KVA shall be 114 HP and the equivalent KW for 100 KVA shall be 85.044 KW.

Service Character:

LTIS – AC, 50 Cycles, Single Phase supply at 230 Volts or 3 Phase Supply at 400 volts for use of electricity energy Demand Based tariff upto 100 KVA and under Installation based tariff for sanctioned load upto equivalent HP of 100 KVA.

Tariff:

Installation Based Tariff: All consumers under this category and opting for Installation based tariff shall be required to pay fixed charges per HP as per the applicable tariff rates for this category. If the inspecting officer during the inspection of a premises finds excess load (more than 114 HP) then the inspecting officer has to serve one month notice to the consumer for regularisation of excess load (above 114 HP). After the expiry of the said one month, the inspecting officer will inspect the premises again and if he still finds unregularized load in the premises, action may be taken as per law.

Consumer Category	Fixed Charges		Energy Charges
LTIS	Unit	Rate	Rate (Rs/kWh)
LTIS (Installation based Tariff)	Rs/HP/Month	100	4.10

Demand Based Tariff: All consumers under this category and opting for Demand Based tariff shall be required to pay Demand charges per KVA at the rate applicable to HT consumers drawing power at 11 KV. The restriction of connected load will not apply to consumers opting for Demand Based Tariff.

Consumer Category	Demand Charges		Energy Charges
LTIS	Unit	Rate	Rate (Rs/kWh)
LTIS (Demand based Tariff)	Rs/kVA/Month	205	4.10

The billing demand shall be the maximum demand recorded during the month or 50% of contract demand whichever is higher. In case actual demand is recorded at more than 100 KVA in any month, the same shall be treated as the new contract demand for the purpose of billing of future months and the consumer will have to get into a new Agreement under the HTS category for the revised contracted demand with the Petitioner as per the terms and conditions of HT supply.

Delayed Payment Surcharge:

For Low tension industrial and medium power category, the Delayed Payment Surcharge will at the rate of 1.5% per month and part thereof. The due date for making payment of energy bills or other charges shall be fifteen days from the date of serving of bill. The bill should be generated and delivered on monthly basis. In case, the licensee defaults in generating and delivering bills on monthly basis, DPS will not be charged for the period of default by licensee.

Power Factor Penalty:

Power Factor Penalty will be applicable in case of maximum demand meters.

In case average power factor in a month for a consumer falls below 0.85, a penalty @ 1% for every 0.01 fall in power factor from 0.85 to 0.60; plus 2% for every 0.1 fall below 0.60 to 0.30 (up to and including 0.30) shall be levied on demand and energy charges.

Power Factor Rebate:

Power Factor rebate will be applicable in case of maximum demand meters.

In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is more than 95%, a rebate of 2% on demand and energy charges shall be applicable.

Installation of Shunt capacitors

All consumers having aggregate inductive load greater than 5 HP/ 4 kW and above (except domestic and street lights), shall install capacitors of required KVAR rating provided in the following table:-

Rating of individual Inductive Load in HP	kVAR rating of LT capacitors
3 to 5	1
5 to7.5	2
7.5 to10	3
10 to 15	4
15 to 20	6
20 to 30	7
30 to 40	100
40 to 50	10 – 15
50 to 100	20 – 30

For existing consumer, the Petitioner should first serve one month's notice to all such consumers who do not have or have defective shunt capacitors. In case the consumers does not get the capacitor installed/replaced within the notice period, the consumer shall be levied a surcharge at 5% on the total billed amount charge (metered or flat), till they have installed the required capacitors.

No connection shall be released on any LT/LTIS connections having aggregate inductive load greater than 5 HP/ 4 KW unless the capacitors of suitable rating are installed.

High Tension Voltage Supply Service (HTS)
Applicability:

The schedule shall apply for consumers having contract demand above 100 KVA.

Service Character:

50 Cycles, 3 Phase at 6.6 KV / 11 KV / 33 KV or 132 KV

Tariff:

Consumer Category	Demand Charges		Energy Charges
HTS	Unit	Rate	Rate (Rs/kWh)
11 KV & 33 KV	Rs/kVA/Month	205	4.90
132 KV	Rs/kVA/Month	205	4.90

The billing demand shall be the maximum demand recorded during the month or 75% of contract demand whichever is higher. In case higher actual demand is recorded for three continuous months, the same shall be treated as the new contract demand for the purpose of billing of future months and the consumer will get into a new Agreement for the revised contracted demand with the Petitioner.

The penalty on exceeding contract demand shall be 1.5 times the normal charges for actual demand exceeding 110% of the contracted demand; the penal charges shall be applicable on exceeded demand only.

Voltage Rebate: Voltage rebate to the HTS consumers will be applicable as given below:

Consumer Category	Voltage Rebate
HTS - 33 kV	3.00%
HTS - 132 kV	5.00%
HTS - 220 kV	5.50%
HTS - 400 kV	6.00%

Note: The above rebate will be available only on monthly basis and consumer with arrears shall not be eligible for the above rebates. However, the applicable rebates shall be allowed to consumers with outstanding dues, wherein such dues have been stayed by the appropriate authority/Courts.

Load Factor Rebate: Load Factor rebate to the HT Consumers is proposed as given below:

Load Factor	Load Factor Rebate
40-60%	Nil
60-70%	7.5%
70-100%	10%

Note: The above rebate will be available only on monthly basis and consumer with arrears shall not be eligible for the above rebates. However, the applicable rebates shall be allowed to consumers with outstanding dues, wherein such dues have been stayed by the appropriate authority/Courts.

Delayed Payment Surcharge:

For High tension service category, the Delayed Payment Surcharge will be charged on a weekly basis at the rate of 0.4% per week. The due date for making payment of energy bills or other charges shall be fifteen days from the date of serving of bill. The bill should be generated and delivered on monthly basis. In case, the licensee defaults in generating and delivering bills on monthly basis, DPS will not be charged for the period of default by licensee.

Power Factor Penalty:

In case average power factor in a month for a consumer falls below 0.85, a penalty @ 1% for every 0.01 fall in power factor from 0.85 to 0.60; plus 2% for every 0.1 fall below 0.60 to 0.30 (up to and including 0.30) shall be levied on demand and energy charges.

Power Factor Rebate:

In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is more than 95%, a rebate of 2% on demand and energy charges shall be applicable.

TOD Tariff for HTS Consumers: TOD tariff proposed for HTS Consumers is given below-

Off Peak Hours: 10:00 PM to 06:00 AM: 85% of normal rate of energy charge.

Peak Hours: 06:00 AM to 10:00 AM & 06:00 PM to 10:00 PM: 120% of normal rate of energy charge

Street Light Service (SS)
Applicability

This tariff schedule shall apply for use of Street Lighting system, including single system in corporation, municipality, notified area committee, 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.

Service Character: AC, 50 cycles, Single phase at 230 Volts or three phase at 400 Volts.

Category of Service:

S.S-I: Metered Street Light Service

S.S-II: Unmetered Street Light Service

Tariff:

Consumer Category	Demand Charges		Energy Charges
Street Light Service	**Unit**	**Rate**	**Rate(Rs/Kwh)**
SS-I	Rs/ Conn/Month	30	3.85
SS-II (unmetered)	Rs/ Conn/Month	Rs. 125 per 100 watt lamp and Rs. 30 for every additional 50 watt	0.00

Delayed Payment Surcharge:

For Street Light service category, the Delayed Payment Surcharge will at the rate of 1.5% per month and part thereof. The due date for making payment of energy bills or other charges shall be fifteen days from the date of serving of bill. The bill should be generated and delivered on monthly basis. In case, the licensee defaults in generating and delivering bills on monthly basis, DPS will not be charged for the period of default by licensee.

Schedule for Miscellaneous Charges

S.No.	Purpose	Scale of Charges	Manner in which payment will be realized
1	**Application fee**		
			Application should be given in standard requisition form of the licensee which will be provided free of cost. Payable in cash in advance along with the intimation
	Street light	20	
	Domestic	20	
	Non Domestic	20	
	Other LT categories	50	
	HTS	100	
	HTSS, EHTS	100	
2	**Revision of estimate when a consumer intimates changes in his requirement subsequent to the preparation of service connection estimate based on his original application**		
			Payable in cash in advance along with the intimation for revision
	Domestic	30	
	Non Domestic	30	
	Other LT categories	50	
	HT Supply	150	
3	**Testing of consumers Installation**		
	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	100	(Payable in cash in advance along with the request for testing)
4	**Meter test when accuracy disputed by consumer**		
	Single phase	40	To be deposited in cash in advance. 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 not be refunded.
	Three phase	100	
	Trivector of special type meter	650	
5	**Removing/ Refixing of meter**		
	Single phase	50	Payable in cash in advance along with the intimation for revision
	Three phase	100	
	Trivector of special type meter	300	
6	**Changing of meter /meter equipment/fixing of sub meter on the request of the consumer/fixing of sub meter**		
	Single phase	50	Payable in cash in advance along with the intimation for revision
	Three phase	100	
	Trivector of special type meter	300	
7	**Resealing of meter when seals are found broken**		
	Single phase	25	Payable with energy bill
	Three phase	50	

S.No.	Purpose	Scale of Charges	Manner in which payment will be realized
	Trivector of special type meter	100	
8	**Replacement of meter card, if lost or damaged by consumer**	**10**	Payable with energy bill
9	**Fuse call – Replacement**		
	Board fuse due to fault of consumer	15	Payable with energy bill
	Consumer fuse	15	
10	**Disconnection/ Reconnection**		
	Single phase	30	Payable in cash in advance along with the request by the consumer. If the same consumer is reconnected/ disconnected within 12 months of the last disconnection/ reconnection, 50% will be added to the charges
	Three phase	75	
	LT Industrial Supply	300	
	HT Supply	500	
11	**Security Deposit**		**As per clause 10.0 of the JSERC (Electricity Supply code) Regulations, 2005**

A10: TERMS AND CONDITIONS OF SUPPLY

The Commission has approved the following terms and conditions of supply after scrutinizing the proposal of the Petitioner and after due consideration of the terms and conditions of supply prevalent in other licensed areas in the State of Jharkhand.

Point of Supply

The Power supply shall normally be provided at a single point for the entire premises.

Tariff for Temporary Connections

(a) The Temporary tariff shall be applicable as per the following conditions:

(b) Temporary tariff is proposed to be equivalent to 1.5 times of the applicable fixed and energy charges for temporary connections falling in each prescribed tariff category with all other terms and conditions of tariff remaining the same.

(c) Temporary connections shall be made to pay consumption security deposit equivalent to 30 days of sale of power which shall be based on the assessment formula (LDHF) prescribed by the Commission.

(d) Temporary connections shall initially be provided for a period of up to 30 days which can be extended on month to month basis upto six months.

Minimum Contract Demand requirements

The Billing demand should be the maximum demand recorded during the month or 75% of the contract demand, whichever is higher. In case higher actual demand is recorded for three continuous months, the same shall be treated as the new contract demand for the purpose of billing of future months and the consumer will get into a new agreement for the revised contracted demand with the Petitioner.

Penalty for exceeding Contract Demand

The charges shall be 1.5 times the normal charges for actual demand exceeding 110% of the contracted demand; the penal charges shall be applicable on exceeded demand only.

Power Factor Penalty

Power Factor Penalty will be applicable in case of maximum demand meters. In case average power factor in a month for a consumer falls below 0.85, a penalty @ 1% for every 0.01 fall in power factor from 0.85 to 0.60; plus 2% for every 0.1 fall below 0.60 to 0.30 (up to and including 0.30) shall be levied on demand and energy charges.

Power Factor Rebate

Power Factor rebate will be applicable in case of maximum demand meters. In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is more than 95%, a rebate of 2% on demand and energy charges shall be applicable.

Delayed Payment Surcharge

The delayed payment surcharge will be at the rate of 1.5% per month and part thereof. The due date for making payment of energy bills or other charges shall be fifteen days from the date of serving of bill. The bill should be generated and delivered on monthly basis. In case, the licensee defaults in generating and delivering bills on monthly basis, DPS will not be charged for the period of default by licensee.

Dishonoured Cheques

In the event of dishonored cheque for payment against a particular bill, the Licensee shall charge a minimum of 300 Rs or 0.5% of the billed amount, whichever is higher. The DPS shall be levied extra as per the applicable terms and conditions of DPS for the respective category.

Stopped/ defective meters

In case of existing consumers with previous consumption pattern, the provisional average bill shall be issued on the basis of average of previous twelve months consumption.

In case of meter being out of order from the period before which no pattern of consumption is available, the provisional average bill shall be issued on the basis of sanctioned/ contract load on following load factor applicable to respective categories**,** as shown below:

Category	Load Factor
Domestic & Religious Institution	0.10
Non-Domestic	0.20
LTIS	0.15
DS-HT	0.15
HTS	
11 KV	0.25
33 KV	0.30
132/220/400 KV	0.50

Resale of energy

No consumer shall be allowed to resell the electricity purchased from the Licensee to any other person/ entity. Defaulters shall be subject to immediate disconnection of supply.

Release of new connections

No new connections shall be provided without appropriate meter. The tariff for un-metered connections shall be applicable only to the existing un-metered connections, until they are metered.

Installation of Circuit Breaker & ELCB

No new connection to the type of installation indicated below shall be given unless a linked switch or circuit breaker and Earth leakage Circuit breaker of appropriate ratings are installed. The consumer shall install ELCB + MCB device (with sealing arrangement) manufactured by Standard Manufacturers and approved by the concerned licensee official. Appropriate ratings of ELCB + MCBs for the different type of loads are as follows:

Load	Rating of ELCB + MCB devise to be installed
Upto 6 KW	16A, 3 Ph. 4 Wire
Upto 9 KW	20A, 3 Ph. 4 Wire
Upto 10 KW	25A, 3 Ph. 4 Wire
Upto 11 KW	32A, 3 Ph. 4 Wire
Upto 15 KW	40A, 3 Ph. 4 Wire
Upto 37.5 KW	63A, 3 Ph. 4 Wire
Above 37.5 KW	As per direction of Licensee official/ in-charge of power Supply of the Area.

The following shall be the applicability of installation of MCB and ELCB:

Consumers with a load of above 5 kW connected at 250/ 230 volts LT supply;

Consumers connected at 400/ 440 volts; and

On all installation of 3.3 KV/6.6 KV or exceeding 6.6 KV voltage, VCB with over current and earth fault relays of appropriate rating as per direction of Licensee.

Electricity Duty

Applicable as per the notification of Government of Jharkhand

Conversion factors

The following shall be the conversion factors, as and where applicable**:** (PF=0.85):

1 Kilowatt (KW) = 1.176 Kilovolt ampere (kVA)

1 Kilowatt (KW) = 1 / 0.746 Horse Power (HP)

1 Horse Power (1 HP) = 0.878 Kilovolt ampere (KVA)

Fuel & Power Purchase Cost Adjustment (FPPCA)

Applicable as per the appropriate Regulations issued by the Commission from time to time

A11: STATUS OF EARLIER DIRECTIVES

Directives as per TO 2010-11	Status submitted by the Petitioner	Views of the Commission
Segregation of Accounts of the Electricity Distribution Business and Audit of Accounts The Commission directed the Petitioner (a) to undertake an exercise for full and final segregation of accounts of electricity distribution business and the main accounts of the Company and get them certified.	(a) The accounts of the electricity business has been, to the extent possible, got separated from the main A/c of SAIL/BSL and has been got audited for the FY 2009-10.	(a) The annual accounts submitted by the Petitioner have been merely extracted from the main accounts of Bokaro Steel Plant on basis on certain norms and assumptions. Such extraction of expenses, on a normative basis, does not represent the complete picture of expenses of the distribution business and does not meet the requirement of the law as per Section 51 of the Act. The directive has not been complied with. This directive has been reiterated in the Directives section of this Order.
(b) maintain and submit to the Commission separate lists of all the employees that are engaged partially and wholly engaged in the electricity distribution business, along with their role and responsibility and salary drawn as on 1st April 2010.	(b) List of employees engaged partially or fully in electricity business has been submitted along with the tariff petition 2011-12.	(b) The Petitioner has partially complied with the directive. Though the Petitioner has submitted the list of employees, the segregation of employee cost as submitted by the Petitioner does not meet the statutory requirement.
Maintenance of Fixed Asset Register The Commission directed the Petitioner to carry out, either on its own or via an expert agency, an assessment of the fixed asset base of the distribution system of its licensed area.	The appointment of consultant for assessment of fixed asset base is still under process and unfortunately has not been finalized so far. However, it being expedited.	The Petitioner must expedite the process and submit the report of the exercise within six months of issue of this Order. This directive has been reiterated in the Directives section of this Order.
Timeliness and Data Adequacy in Next Tariff Petition The Commission directed the licensee to file the tariff petition for FY 2011-12, after removing the various data deficiencies highlighted in this Tariff Order. The Commission also directed the licensee to ensure submission of subsequent ARR & Tariff filings on time.	No response has been submitted by the Petitioner.	The Commission has noticed many data gaps in the Petition and the additional information submitted by the Petitioner. The same have been noted in the relevant sections of this Order. The Petitioner must ensure that the next tariff petition is free from errors, is made in a professional manner and contains information in the requisite regulatory formats as prescribed by the Commission.

Sales Estimates and Projections The Commission directed the Petitioner to undertake a detailed study for load research and demand forecast in order to correctly work out its short term and long term energy requirement.	CET has been assigned the work of study and preparation of feasibility report for up-gradation of both sub-stations and distribution network side based on future requirement of energy. This whole thing is under process.	The Petitioner should submit a status report regarding the study within six months of issuance of this Order.
Distribution Losses The Commission directed the Petitioner to formulate a task force for supervising distribution loss mitigation efforts in its licensed area. The Petitioner must also prepare a detailed, five year plan for reduction of distribution losses	For reduction in T&D losses, the matter of replacing overhead lines by underground cabling is under study and shall be taken up shortly at strategic/theft prone locations.	The Commission is concerned that not much progress has been made by the Petitioner in controlling the distribution losses. This directive has been reiterated in the Directives section of this Order.
Complaint Redressal Mechanism The Petitioner was directed to implement a complaint redressal mechanism within six months of the issue of the previous Tariff Order and submit a compliance report within one month of implementing the mechanism.	A Consumer Grievance Redressal Forum was constituted on January 1, 2006 and is functional.	Apart from the CGRF, the Petitioner should also put in place an effective complaint redressal cell where the consumers shall first approach for resolution of complaints regarding billing, outages etc. This directive has been reiterated in the Directives section of this Order.
Capital Investments The Petitioner was directed to prepare a comprehensive capital investment plan for any investment that it wishes to make in the distribution network.	Capital Investment Schemes to be undertaken during FY 2011-12 have been submitted in the petition.	The Petitioner did not submit sufficient details regarding the capital investment plan for FY 2011-12. The directive has thus not been complied with. This directive has been reiterated in the Directives section of this Order.

Billing and Metering Related Issues (a) The Commission directed the Petitioner to develop a **comprehensive metering plan** and strengthen its metering, billing and collection mechanism to ensure 100 per cent billing and collection. (b) The Commission directed the Petitioner to either raise separate bills for electricity supply or ensure that the combined bill is sufficient in detail. It was directed that billing should be carried out on a monthly basis and the Petitioner should avoid raising combined bills for several months.	(a) 8000 meters are being procured and shall be installed during current financial year. (b) The separate monthly billing for electricity shall be started from this financial year. The format for electricity bills is also being revised to match the guidelines as directed by the Commission.	(a) The Commission re-iterates that Petitioner should achieve 100% metering and submit a comprehensive plan for achieving the same. (b) The Petitioner has prepared the new format for bills for separate monthly billing for electricity and has informed the Commission that the same shall be implemented from October 2011. The Commission expects the Petitioner to meet this deadline.
Cost of Supply Study (CoS) The Commission directed the Petitioner to conduct a CoS study for each category of consumers.	No cost of supply study has been carried out so far.	The Petitioner has not complied with the directive. This directive has been reiterated in the Directives section of this Order.

A12: DIRECTIVES

Segregation of Accounts of the Electricity Distribution Business and Audit of Accounts

12.1 As per the provisions under Section 51 of the Act, a distribution licensee has to maintain separate accounts for each business so as to ensure that the power supply business does not subsidize or burden its distribution assets to support other business activities of the licensee.

12.2 The annual accounts submitted by the Petitioner have been merely extracted from the main accounts of Bokaro Steel Plant on basis on certain norms and assumptions. Such extraction of expenses, on a normative basis, does not represent the complete picture of expenses of the distribution business. The Petitioner must undertake an exercise for full and final segregation of accounts and get it certified.

12.3 The Petitioner must also maintain and submit to the Commission separate lists of all the employees that are engaged partially and wholly engaged in the electricity distribution business, along with their role and responsibility and salary drawn during the past financial year as on 1st April 2011 with the next tariff petition.

Maintenance of Fixed Asset Register

12.4 The Commission has noted that the Petitioner does not maintain a separate fixed asset register for its electricity distribution business and has only been able to identify fixed assets worth Rs. 7.90 Cr in use in its licensed area, in its books of accounts. An accurate assessment of GFA is essential for calculating the ARR. Therefore, the Commission directs the Petitioner to carry out, either on its own or via an expert agency, an assessment of the fixed asset base of the distribution system of its licensed area and submit the findings of the same to the Commission for approval within six months of the issue of this Order.

12.5 The Petitioner must maintain at least the following information in the Fixed asset register for the distribution assets

(a) Description of Item

(b) Quantity

(c) Acquisition date/Accounting year

(d) Bill date

(e) Voucher no/date

(f) Purchased/sold

(g) Date of sale and amount (for assets sold)

(h) Location/identification

(i) Depreciation rate

(j) Depreciation amount

(k) Salvage Value

12.6 The Commission also directs the Petitioner to maintain, and regularly update, the fixed assets register for its electricity distribution business.

Timeliness and Data Adequacy in Next Tariff Petition

12.7 The Commission directs the licensee to come up with the next tariff petition for FY 2012-13, after removing the various data deficiencies highlighted in this Tariff Order. The Petitioner should prepare the petition in a professional manner and ensure that the data submitted to the Commission is accurate. The Commission also directs the licensee to ensure submission of subsequent ARR and Tariff filings for the ensuing years by 1st November of every year.

Sales Estimates and Projections

12.8 The Commission directs the Petitioner to undertake a detailed study for load and demand forecast in order to correctly work out its short term and long term energy requirement and submit a status report within six months of the issue of this order.

Distribution Losses

12.9 The Commission considers the high level of distribution losses reported by the Petitioner to be unacceptable and directs the Petitioner to constitute a task force for supervising distribution loss mitigation efforts in its licensed area.

12.10 The Petitioner must also prepare a detailed, five year plan for reduction of distribution losses which should include, among others, the following initiatives:

(a) *Establishing Measurement and Control Mechanisms* like Feeder Metering, DT Metering, Feeder wise Energy Audit, DT wise Energy Audit and Consumer indexing.

(b) *Metering and Associated Infrastructure Improvements* like Metering of un-metered consumers, LT CT Meter & Service line Replacement, LT Meter & Service line Replacement and AMI for LT Consumers.

(c) *Network Infrastructure Improvements* like Re-enforcement of feeders, Feeder bifurcation/ Segregation, Transformer Augmentation, Load Balancing, Reduction of HT/LT Ratio – HVDS (in High loss areas), LT ABC (in High loss DT's) and Capacitor installation.

(d) *Commercial & Administrative Measures* like Disconnection of defaulters and Consumer education drives.

The Petitioner must submit this plan to the Commission within six months of issuance of this Tariff Order.

12.11 During the Public Hearing several consumers reported that theft of electricity is widespread in the licensed area. The Commission directs the Petitioner to make all efforts for *Prevention and Reduction of Theft of Electricity*. All such consumers who are indulging in theft of electricity for want of a connection must be provided with a connection at the earliest. It should carry out Anti-theft enforcement drives and should involve and encourage the consumers in the theft prone areas to report theft of electricity. The task force to be constituted for supervising distribution loss should draft an Action Plan for tackling the theft of electricity and should submit the same to the Commission within two months of issue of this Tariff Order.

12.12 The Petitioner should also study the practices followed by other similarly placed utilities to control distribution losses and adopt the best practices available.

Complaint Redressal Mechanism

12.13 The Commission observed during the public hearing that many respondents complained about the lack of promptness and accessibility for registering the complaints for speedy redressal of their complaints. The Commission also views that the licensee needs to have a robust complaint redressal mechanism at the grass root level so that the licensee is in a position to address the complaints of all consumers in a speedy manner. The Petitioner should study the complaint redressal mechanism put in place by other utilities in the state/country and work out a model suited to the needs of the Bokaro township and implement a complaint redressal mechanism within six months of the issue of this Order. The Petitioner must also submit a compliance report to the Commission within one month of implementing the mechanism.

12.14 The Commission also directs the Consumer Grievance Redressal Forum (C.G.R.F) to set up camps in various parts of the township at least once every month so as to make the forum more accessible to the consumers. The date, time and venue of the camps should be well advertised in at least two of the local newspapers (one each of English and Hindi).

Capital Investments

12.15 The Petitioner is directed to prepare, and submit to the Commission, a comprehensive capital investment plan for any investment that it wishes to make in the distribution network.

Billing and Metering Related Issues

12.16 The Commission has observed that one of the major reasons for higher distribution losses is the inability of the licensee to bill its consumers. Despite selling energy on regular basis there are cases where the Petitioner has failed to meter the consumption and bill the consumers. The Commission directs the Petitioner to develop a **comprehensive metering plan**. The Petitioner should also ensure that it strengthens its metering, billing and collection mechanism to ensure 100 per cent billing and collection.

12.17 The energy supplied to utilities such as schools, hospitals, street lighting, pump houses, administration buildings and offices of SAIL are not being metered and the consumption of these consumers has been submitted on assessment basis. The Petitioner must meter the consumption of these consumers so that the actual level of energy sales, revenues and distribution losses in the licensed area can be determined. The Petitioner is directed to carry out the installation of meters for **such consumers on priority**.

Cost of Supply Study (CoS)

12.18 In view of the provisions of Section 61(g) and National Tariff Policy which state that the tariffs should reflect the CoS of electricity, the Commission directs the Petitioner to conduct the CoS study for each category of consumers within one year of the issue of this order and submit it to the Commission for review and finalization. The Petitioner should also submit the scope of work and the methodology to be followed for conducting the CoS Study.

Separate Connections to Consumers of the Cooperative Housing Society

12.19 As noted in the section dealing with the Public Consultation Process, in view of the para two of The Electricity (Removal of Difficulties) Eighth Order, 2005, the Commission directs the Petitioner to provide individual commercial/residential connections to all residents of the Co-operative Colony who have applied for it (or apply for it in the future) without further delay.

Quality of Supply

12.20 The Petitioner should ensure continuous and reliable supply of electricity to all consumers in the licensed area and adhere to the performance standards set by the Commission in the JSERC (Distribution Licensees' Standards of Performance) Regulations, 2005.

12.21 The Petitioner should ensure that power outages do not occur due to over loading of transformers and should augment the capacity of the transformers to meet the load in an area.

Presentation during the Public Hearing

12.22 The Petitioner should ensure that the presentation made on the tariff petition during the Public Hearing is informative, contains accurate information and is clearly visible and comparative.

This Order is signed and issued by the Jharkhand State Electricity Regulatory Commission on this 28th day of September 2011.

Date: 28th September, 2011
Place: Ranchi

Sd/-	Sd/-
(T.MUNIKRISHNAIAH)	(MUKHTIAR SINGH)
MEMBER (E)	CHAIRPERSON

A13: ANNEXURE I

List of participating members of public in the public hearing

Sl. No.	Name	Address / Organisation if any
1	B. N. Jha, Member (Finance), GRF	4-F-2038
2	S. Sinha, Member (Tech.), GRF	4-C/1011
3	V. K. Sinha	3D/JS, B.S. City
4	BNP Singh	Consultant/BSL
5	D. Madhukar	AGM (TE-Elect)/BSL
6	P.K. Mishra	DGM (TE - Elec)/BSL
7	L. K. Sharma	PRO, BSL
8	Deepak Kumar	PRO, BSL
9	D. K. Singh	Sr. Manager, (TE - Elect) BSL
10	Braham Deo Prasad	Sector VIII B QN 2581 B.S. City
11	Rajendra Singh	4E – 3178
12	Ram Deo Prasad	Gen. Sec., BELHWS
13	Raj Mohan Singh	4/A, 3002
14	Md. Nasir	II A, 2-061
15	S. M. Singh	VI A/2-067
16	B. Singh	IIB, 3-002
17	M. Ram	IIA/ 2-050
18	Surya Nath Sah	GE 5 City Centre Sect. IV
19	Harihar Rai	III A 770
20	Om Prakash Narayan	3-027-II B
21	Kailash Prasad	3 E 363
22	R.P. Singh	II D 1-004
23	R. Puspak	II E 2-145
24	Abdhesh Kumar Singh	4 F/7091
25	R.P Chouhan	2/C2-050
26	B. D. Singh	12/F/1103
27	OP Singh	12F/2002
28	S.M. Pandey	II B/3-015
29	Y.L. Sharma	II/C 2-025
30	Amit	4F 1125
31	Byas Ojha	406, Co-operative Colony
32	K. N. Prasad	24/2-020
33	Ram Lakhar Rai	GE18 City Centre
34	A. Kumar	I (C) /44
35	D. L. Choudhary	II C 1-132
36	A. K. Singh	Plot No. GAA City Centre
37	Lalan Prasad	HE 22 City Centre
38	R.S. Rai	III F 2074
39	Anil Kr. Singh	GC - 10, City Centre
40	Harkishan Lal	1187, 6/A - Bokaro Steel City

41	Shambhu Nath Prasad Gupt	2151, 6/A - Bokaro Steel City
42	Bala Gosai	T. H (E)
43	Ravindra Kumar	Bokaro Chamber of Commerce
44	R. K. Sharma	Bokaro Chamber of Commerce
45	B. C. Roy	Bokaro Chamber of Commerce
46	C. P. Jaiswal	Bokaro Chamber of Commerce
47	Sunil Kumar	Bokaro Chamber of Commerce
48	B. N. Sahay	3 CD, Co-operative Colony, B.S. City
49	R. K. Vishwakarma	Plot Holder Welfare Association
50	Jeewan Kumar	HF - 14 City Centre
51	Manoj Kumar	B.S. City
52	A. K. Ray	HE/15 City Centre
53	S. Sharma	HE - 14 City Centre
54	Md. Ibran	2-136
55	S. P. Singh	Kailash Nagar, Chas
56	S. B. Singh	I C-273, B. S. City
57	M. P. Sah	12 A - 2118 B. S. City
58	Anil Kumar	Dainik Jagran
59	Pravin Sharma	Plot Holder Association H F - 12
60	R. S. Prasad	B.S. City
61	A. N. Singh	Sec-II C, 2- 274 B.S. City
62	R. P. Gupta	Sect. -4G/3139
63	Pravin Kumar	HA - 10 City Centre
64	P. Kumar	The Telegraph
65	Raj Kumar Singh	Prabhat Khabar, Bokaro
66	S. C. Agarwal	City Centre GF 1
67	A. Singh	VI G - 2094
68	T. K. Das	TA (Elect.)
69	Sanjay Kumar	City Centre
70	R. K. Singh	II B 3-170
71	N. K. Singh	F/5, City Centre, B.S. City
72	Mukesh Jha	Aaj, Press
73	Jai	Mahua News
74	Ajit Kumar	City Halchal
75	Himansu Kumar	AAJ, Press
76	Kundan Kumar Upadhyay	President - JSTSBEA-Bokaro
77	Vikash Kumar	President-NJS-Bokaro
78	Ripu Sudan Pathak	News 11
79	Sanjay Sahay	Press
80	Krishna Choudhary	Hindustan Press
81	J. Chandra	Balidin
82	Ashok Ashl	Sadhana News
83	D. Kumar	The Times of India
84	Satish Kumar	Sector II D Qno. 1-035

85	Ajay Ashok	Sahara Samay TV
86	Akshay	Prabhat Khabar
87	A.P. Lakra	AGM/ Revenue
88	D. N. Rai	Sec. II C - 2- 017
89	B. P. Sharma	Sec.II/D 2-273